Furbearer Management Outreach Project

Pilot States Report

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International Association of Fish and Wildlife Agencies

Submitted by:

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Executive Summary

Recently, trapping has become a focal point for anti-animal-use efforts that attempt to convince the non-trapping public that trapping should be restricted or eliminated. In states where trapping has been restricted, there has been an increase in negative human-wildlife interactions, yet fewer tools for agencies to use to deal with the problems.

In 1999, the International Association of Fish and Wildlife Agencies (IAFWA) initiated an integrated education and outreach strategy to more effectively communicate with the public about trapping and furbearer management. The purpose of this project was to identify a host of potential furbearer management outreach strategies, actions, products, and approaches; test them for effectiveness and practicality in three pilot states (Connecticut, Indiana, and Wisconsin); and then report the results to all other state agencies and their partners so as to improve outreach efforts nationwide.

The entire effort was built around and upon a team approach—the involvement of multiple people with diverse backgrounds and expertise. In each pilot state, project facilitators worked with agency personnel to develop the diverse outreach team (from inside *and* outside the agency) that would guide and implement the effort.

Each team was given a model outreach strategy to customize and implement. The model strategy was based on market research and experience gained in previous furbearer management outreach efforts.

The following guidelines for developing and implementing effective outreach efforts were identified:

1. Be strategic – it's critical that outreach efforts be based on a foundation of market research and identification of target audiences, objectives, messages and actions.
2. Consider the context – research conducted by Responsive Management pointed out that there are three fundamental issues regarding public attitudes toward trapping that must be considered in the development/implementation of all outreach efforts:
   - The public cares deeply about America's wildlife resources;
   - The public does not take lightly the killing of animals;
   - The public is highly uninformed about trapping.
3. Use key messages consistently – Extensive market research has identified the key messages that are important to be communicated to all audiences, including wildlife professionals:
   - The kinds of wildlife that are trapped are abundant–regulated trapping does not cause wildlife to become endangered.
   - Trapping is managed through scientifically-based regulations that are strictly enforced by conservation officers.
   - Our agency continually reviews and develops rules, regulations, education programs, and capture methods to ensure the humaneness of trapping.

- Regulated trapping provides many benefits to wildlife and people in our state, such as reduced nuisance animal complaints, food, fur, and other products (perfume, soap, construction materials, etc.), and reduced incidence of animal disease, starvation, etc.
- Show you care – communicate and demonstrate that your agency and your staff genuinely care about the welfare of wildlife.
- Build agency support – outreach efforts will be successful only to the degree to which agency staff at all levels understand and support furbearer management.
- Use wildlife professionals as spokespeople – market research clearly demonstrates they are the most credible spokespeople on furbearer management and trapping.
- To the degree possible, make direct/face-to-face contact with the target audiences.
- Don't "oversell" the benefits – the benefits of regulated trapping are many and varied. However, it's critical that the benefits be consistently and factually portrayed.
- Outreach must be two-way – listening to concerns and issues as well as "communicating" about them.

Summary recommendations identified through evaluation of the pilot state efforts:

Do it now. Put together an outreach team, customize the model outreach strategy, and implement it. Results of the pilot state projects show it will work.
Assemble a diverse outreach team. Venture outside the walls of the agency headquarters and include diverse interests—wildlife, I&E, hunter education, upper administration, law enforcement, the trapping community, the legislative arena, etc.
Start with the model outreach strategy. The model outreach strategy has already been developed and tested. Customize it to fit your state's particular needs.
Include an administrator on the team. There is no substitute for having involvement (buy-in) and participation from agency administration.
Refer to the strategy. After customizing the outreach strategy, use it to guide day-to-day efforts, especially those involving communicating with the media or with constituents. Use the key messages in every communication.
Piggyback wherever possible. Focus on incorporating actions from the outreach strategy into programs and activities that you are already doing, not creating new programs.
Strike a balance. Balance a sense of urgency with the long-term view. Begin as soon as possible to create momentum; but set up the outreach program to be a long-term, cumulative process. Let it mature over time. Build, evaluate, learn and adapt.
Work within the agency first. Ensure that agency staff are "on board" with trapping and furbearer management in general, and then expand to reach external audiences. It will be very difficult to convince external audiences if internal audiences are sending mixed messages.
Customize the outreach materials. Use the materials developed in this project as a place to start, but customize them to your particular needs.

This report provides state agencies and their partners a healthy supply of tools they can use to improve or enhance their existing outreach efforts and to develop new ones. It is crammed full of strategies, tools, and ideas to help state agencies engage partners, customize strategies, and set implementation in motion.

Dedication

This report is dedicated to Larry Lehman, Furbearer Biologist for the Indiana Department of Natural Resources. Larry dedicated more than 35 years of his life to furbearer conservation and served on the Indiana Pilot Outreach Team. He lost his battle with cancer in January 2001.

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Introduction

Furbearer management is one of the most challenging issues facing wildlife agencies today. As society becomes more urbanized, Americans are increasingly disconnected from nature. The accompanying shift in attitudes toward wildlife creates an atmosphere wherein wildlife professionals are faced with complex and often paradoxical management issues. Habitat encroachment and the adaptability of certain wildlife species contribute to a continued increase in the number of human/wildlife conflicts, notably among certain species of furbearers. At the same time reported wildlife conflicts are on the rise, the increasing activism of some segments of society are putting pressure on state wildlife agencies to significantly reduce or alter their management methodologies.

Specifically, regulated trapping has come under fire. Despite the importance of this activity for the benefits it provides to society, the majority of the public is unfamiliar with these benefits. Public perception and knowledge of the subject has been shaped principally by groups opposed to trapping and animal use in general. To maintain regulated trapping as a method for managing wildlife, wildlife professionals are faced with the need to enhance communications among their constituents while simultaneously continuing to improve trapping techniques.

In 1999, the International Association of Fish and Wildlife Agencies (IAFWA) began addressing these challenges by implementing a two-pronged approach coordinated by its Furbearer Resources Technical Work Group. First, to systematically evaluate and improve trapping technologies used in the United States ("Best Management Practices for Trapping" or BMPs). The methods and results of this project will be released in a separate report. The second prong of the two-pronged approach was to develop and test an integrated education and outreach strategy to more effectively communicate to the public the difficult choices that wildlife professionals face concerning furbearer management. Numerous specific outreach strategies and actions were identified, implemented, and evaluated in three pilot states. This document presents the results of these pilot state efforts. Funding for this outreach project was provided by a U.S. Fish and Wildlife Service Sport Fish and Wildlife Administrative Grant (14-48-98210-98-G0-840).

A Call To Action

Fewer resources, fewer staff, yet more demands; this formula seems all too common for state wildlife agencies today, especially when it comes to outreach and communications. So why should an agency invest the time and effort to undertake the recommendations that follow in this report?

Critically Important Management Tool

State wildlife agencies have been entrusted with the management of wildlife resources, and all of them recognize the benefits of trapping as a wildlife management tool. In states where trapping has been curtailed or eliminated, wildlife overpopulation problems such as unwanted human-wildlife interactions have often followed close behind. Maintaining the use of regulated trapping seasons offers state agencies more options for dealing with the wildlife populations entrusted to their care.

Critically Important Activity

Because trapping is one of the tools that state agencies use to manage wildlife populations, trappers are in essence performing an important service to society. Wildlife management problems being encountered by states where trapping has been curtailed or eliminated give some indication of the value of this service. Increased negative human-wildlife interactions are often a direct result when trapping is prohibited. An indirect result may be reduced agency credibility with the public resulting from the agency's inability to utilize all the tools at its disposal to solve management problems.

Trappers also provide an important mechanism by which the public is able to utilize furbearer resources. Fur garments and many household products such as soap, paint, and construction materials are directly or indirectly derived from trapping.

Trapping is a safe, legal activity that includes thousands of participants throughout most of the United States. For many, it is a way of life—an opportunity to spend time in the outdoors, to interact with nature, to put food on the table, and to spend time with friends and family. And trappers, along with hunters and anglers, are some of the strongest advocates for habitat conservation.

Because trapping is a consumptive use of wildlife that is little understood by the public, and because it does not have as many participants as hunting or fishing, trapping has become the target or focal point for many anti-animal use efforts. These efforts often employ misinformation in an attempt to convince the non-trapping public that trapping is inhumane, unnecessary, damaging to wildlife, and has no place in modern society. In this project, strategies and actions were designed, implemented, and evaluated to counteract the misinformation campaigns through outreach.

Outreach Will Work

The outreach efforts tested as part of this project clearly demonstrate that outreach will work—it will increase understanding and acceptance of trapping and furbearer management.

Market research indicates that most of the concerns that the public has about trapping are based on a lack of information and/or misunderstanding of what trapping is and what it is not. One of the most compelling examples of the impact that information about trapping can have on people comes from a telephone survey conducted in Illinois (Duda and Young 1994). When asked at the beginning of the survey, 22 percent of respondents expressed approval of trapping, while 71 percent disapproved. At the end of the survey, the same question was asked again and approval increased to 46 percent while disapproval declined to 46 percent. A 24 percent increase in approval based only on information gleaned from a 10-minute phone conversation with a neutral survey technician! This is dramatic evidence that: 1) the negative opinions people have toward trapping are not as strongly held as agencies often assume, and 2) accurate information presented in a straightforward manner can change the opinions of a substantial portion of the public.

Given that outreach can have a dramatic effect on public understanding and acceptance of trapping, and given that an entire package of effective, tested outreach strategies and materials is now available for states and their partners to use, it would be irresponsible to lose trapping simply because agencies could not or did not communicate with the public.

A Road Map—That Has Been Ground-Truthed

In simplest terms, the purpose of this project was to identify a host of potential furbearer management outreach strategies, actions, products, and approaches; test them for effectiveness and practicality in three pilot states; and then report the results to all other state agencies and their partners (other wildlife management agencies, trappers, conservation organizations, etc.) so as to improve outreach efforts nationwide. The intent is to provide state agencies and their partners a healthy supply of tools they can use to improve or enhance their existing outreach efforts, and to develop new ones. The "road map" for these efforts is the Outreach Strategy, which is described on page ten and included in Appendix A.

For any given agency, some of these tools will be applicable and some will not; some will dovetail right into existing agency efforts and some won't; some will be easy and inexpensive to implement and some will require significant resources. The bottom line is that there is something here for every agency, and that most of it has been tested (and found to be effective!) by real people in the real world.

This report consists of a relatively short narrative portion followed by numerous detailed appendices. This narrative gives a broad overview of what was undertaken, what was accomplished, and what it means to other state agencies and their partners who wish to expand or enhance furbearer management outreach efforts. Each section in the narrative then refers to one or more appendices that provide the details needed to implement the various actions. Quotes and testimonials from people directly related to these efforts are included in *italics* throughout this document. Most of these comments are from detailed evaluation interviews conducted with members of the outreach teams in the three pilot states. A list of outreach team members is included in Appendix B and readers are encouraged to contact them for additional insights.

Although many of these strategies are relatively easy to implement, they certainly will not implement themselves. It is critical that state agencies invest time and effort to engage partners, customize strategies, and set implementation in motion. This report is crammed full of strategies, tools, and ideas to help do just that.

I think this program is tailored to the strengths of state agencies. It's not asking states to go out and create a bunch of high profile stuff from scratch. It capitalizes on existing programs, such as hunter education, Project WILD, talks that their staff and their wardens give already. It's tailor made to fit their infrastructure. This program moves the topic of trapping forward in a planned, controlled forum. I would encourage states to implement this into their programs department-wide. It helps to build a more well-rounded understanding of the issue before it becomes a hot topic. The survey results show that the public expects the state to inform them about this issue, and that the state agencies have credibility. (CT)

Being on the other end of getting new programs and recommendations all the time, my initial response to this effort was not too positive. But, what we did in Indiana did not take too much extra time. We just worked trapping into what we were already doing. This will greatly increase its use in other states. (IN)

Even though it was a structured pilot, we don't see it as ending now. We will continue to look at the action items and keep working on things as we go about our regular business. This is a key to making this stuff work for other states. (IN)

First, look at what others have done and build on their efforts. There are good materials out there and they shouldn't reinvent the wheel. (WI)

Procedure

Pilot States

Three pilot states (Connecticut, Indiana, and Wisconsin) were selected by the IAFWA based first and foremost on their willingness to commit to this project. A second criterion for selection was to maximize both geographic and demographic variability.

A Team Approach

Below is an overview of the process that was followed in each of the three pilot states. In all three states, the entire effort was built around and upon a team approach—the involvement of multiple people with diverse backgrounds and expertise. Based on the effectiveness of the efforts and the positive reviews given to this approach in the pilot state evaluations, this approach is highly recommended to other states and their partners.

After the pilot states were selected, project facilitators worked with agency personnel in each pilot state to develop the diverse outreach teams that would guide and implement the effort. The model outreach strategy (Appendix A) was provided to team members in advance of the first meeting to bring them up to speed on the project. The outreach teams were critical to the success of the projects (see Appendix B, Effective Outreach Teams). Diverse members engendered "thinking outside the box."

Other states should create a steering committee or outreach team. If a state does this, they should look outside the agency—get key people from different walks of life. It can be cumbersome at times, but it produces results they could never get otherwise. (WI)

Assemble a team to help. Include experts who can address the target audiences you identify. Include the hunter education administrator if hunter education students are an audience. Include high-level administrators so they buy into the project and keep it a priority. Consider getting outside help. Some states might consider including I&E people on the team. (CT)

Using the model outreach strategy (Appendix A) as a place to start, the first outreach team meeting focused on identifying:

- furbearer management issues in each state to be addressed by the outreach efforts;
- objectives; and
- target audiences

Subsequent team meetings focused on reviewing key messages and identifying specific actions, timetables, and assignments. The teams looked for ways to piggyback actions onto existing outreach efforts, and identified new actions. Some were short-term actions that could be implemented immediately; some were long-term actions that will remain in the action plan for years.

Some of the actions identified by the teams required additional budget to complete. If these actions were of high enough priority, and if they could be utilized by other states after the pilot projects were completed, they were considered for funding by the IAFWA. Through this process, the pilot states were able to work with IAFWA to develop a series of new products, efforts, programs, and approaches that are now available for other states to customize and use.

Once the outreach strategies were in place, the teams focused on implementation. Project facilitators periodically assessed progress and provided reminders of deadlines. It is critical that every state outreach team appoint a person or persons to play this role and make everyone accountable for their actions, or the entire effort is likely to be swallowed up by other priorities.

If we had not had the structure of the committee, with assignments, follow-up, etc, things would not have happened. (WI)

An evaluation component was included in each of the pilot state outreach strategies, to help determine which actions were most efficient and effective. In addition, a significant evaluation of the overall outreach project was conducted, in which pilot state team members were interviewed, accomplishments were documented, programs and materials evaluated, and Outreach Strategy objectives assessed for achievement. Pilot state team members felt that most of the objectives had been achieved or were in the process of being achieved. The objectives that were least achieved were those that required long-term application of strategies. Most team members felt that they had laid a good foundation to achieve these long-term objectives, but that it would require more time and effort to realize full completion.

Most of this report is based on the evaluation efforts mentioned above. In particular, agencies and their partners are encouraged to review the results of the outreach team interviews (see Appendix C), which contain great insights into which actions worked well and which actions could use improvement in these outreach efforts.

Guidelines for Effective Outreach

Following are guidelines for effective outreach relating to furbearer management and trapping. These guidelines summarize the "lessons learned" from the pilot state projects and market research and are the critical elements to consider in developing outreach efforts.

1. Be strategic.

Given limited time and financial resources, it's critical that outreach efforts be based on a foundation of market research and careful analyses and identification of target audiences, objectives, messages and actions. With this in mind, it is recommended that states implement a research program every 2-3 years to identify attitudes and opinions using the standardized surveys provided by IAFWA (Responsive Management 2001). The model outreach strategy in Appendix A provides a foundation on which to build state-specific strategies.

2. Consider the context.

Market research conducted as part of this project (Responsive Management 2001) identified three underlying, fundamental issues regarding public attitudes toward trapping that must be considered in the development/implementation of all outreach efforts:

- The public cares deeply about America's wildlife resources;
- The public does not take lightly the killing of animals;
- The public is highly uninformed about trapping.

All outreach efforts (internal and external) should take these into account.

3. Use key messages consistently.

Extensive market research (Duda 1998, Duda and Young 1994, Duda and Case 1996, Responsive Management 2001) has identified the key messages that are important to be communicated to all audiences, including wildlife professionals. Given limited time, space, and/or budget, these messages should be the priorities (the *first* things that are mentioned in any outreach event):

1. The kinds of wildlife that are trapped are abundant–regulated trapping does not cause wildlife to become endangered.
2. Trapping is managed through scientifically-based regulations that are strictly enforced by conservation officers.
3. Our agency continually reviews and develops rules, regulations, education programs, and capture methods to ensure the humaneness of trapping.
4. Regulated trapping provides many benefits to wildlife and people in our state, especially in helping maintain a balance between wildlife and people.

Supporting messages for these key messages are included in the model outreach strategy (Appendix A).

4. Show you care.

Communicate and demonstrate that your agency and your staff genuinely care about the welfare of wildlife and take their role in managing wildlife very seriously. The fact is, agencies and wildlife professionals care deeply, but often fail to communicate it because they try to be too "scientific" (Case 1989).

5. Build agency support.

Furbearer management outreach efforts will be successful only to the degree to which agency staff at all levels understand and support furbearer management. Encourage your agency and your staff to become more involved in the challenges facing furbearer management, and to continue to support the benefits of regulated trapping to society and the environment. The focus should be on insuring that the differences in opinion that may exist within your agency are *not* based on a lack of awareness, information, or understanding of trapping or furbearer management.

6. Use wildlife professionals as the primary spokespeople.

Market research clearly demonstrates that wildlife professionals are the most credible spokespeople on furbearer management and trapping (Duda 1998; Duda and Case 1996; Duda and Young 1994*a,b*; Responsive Management 2001).

7. To the degree possible, make direct/face-to-face contact with the target audiences.

"People change not because of something they read, but because someone they know and trust says it's a good idea." -Jack Pyle (Pyle 1998).

Agency employees and wildlife professionals are the ones who have (or should have) the day-to-day, face-to-face contact with local town councils, school boards, zoning commissions, community leaders and media. Relationships with these and other opinion leaders are important.

8. Don't "oversell" the benefits of regulated trapping.

The benefits of regulated trapping are many and varied. However, it's critical that the biological and management benefits be consistently and factually portrayed. For example, population and disease control–two often-cited benefits–are only true for certain species under certain situations. By communicating only factual information, conservationists can both maintain and increase their credibility (Case and Seng 1999, Young 1996).

9. Outreach must be two-way.

Effective outreach efforts are built on two-way communications—listening attentively to concerns and issues as well as "communicating" about them (Ettorre 1996, Harwood et. al. 1993, Peppers and Rogers 1997).

Products and Programs for States to Use

Following are descriptions of the major products or programs that were developed as part of the pilot state projects. Each description includes a summary of results, recommendations for implementation by state agencies and their partners, and references to one or more appendices that provide more detail.

There are a number of state-specific actions that were implemented but are not summarized here. Appendix D includes a list of these by state. Appendix D also includes a list of action items that were included in state outreach strategies but for one reason or another were not implemented at the time this report was prepared.

Model Outreach Strategy

Prior to the selection of the pilot states, a team of outreach specialists (Dave Case and Phil Seng, D.J. Case & Associates; Stephanie Kenyon and Carol Wynne, Point to Point Communications; Judy Stokes, New Hampshire Fish and Game Department; and Mary Jeanne Packer, Ghostwriters Communications) working with Tom Decker, Vermont Fish and Wildlife Department and Samara Trusso, International Association of Fish and Wildlife Agencies, under the direction of the IAFWA's Furbearer Resources Technical Work Group, developed a national outreach strategy to guide the overall project. This national outreach strategy was built on a solid foundation of market research pertaining to trapping and furbearer management and on the most recent research and thinking from the marketing and public relations fields on influencing and understanding public knowledge and opinion about important societal issues. This national strategy was then customized to each state as described above.

Based on the experience gained in each of the three pilot states and on the market research conducted as part of this project, a model outreach strategy has been developed and is available for states to use (see Appendix A).

This model outreach strategy contains a lot of careful thinking, planning, testing, and evaluation. Nothing in this strategy is there (or NOT there) "by accident." Changes to the model strategy can and should be made to customize the strategy to specific states. However, these changes should be made only after careful review of the market research conducted on furbearer management and trapping. For example, state agencies and trappers have often used the arguments that "trapping is part of our heritage," and that "trapping provides economic benefits" as reasons for maintaining trapping. However, these messages are NOT included in the key messages of the model outreach strategy because the market research clearly shows that these messages do not work well with the target audiences that agencies and trappers are trying to reach. It's not that these messages are "bad," it's just that, given limited time, budget, and exposure, there are other messages that are much more convincing. State agencies and their partners should use Appendix A as the place to start.

Development of the overall outreach strategy was the most important, because it got everyone on the same page. It ensured that we used the right messages and in a consistent, effective manner. (CT)

Having the key messages from the strategy in the back of your mind when discussing things with people and reporters was critical. I wouldn't have come up with these messages without the project. I leaned on economic impact arguments like other natural resource professionals. (CT)

Just going through this process was very beneficial. It forced us to look at what we were doing and why we were doing it in a systematic way. (CT)

We used it a lot to guide the direction of the trapper education program. The whole effort has given us a target for how we will change it over time. It opened our eyes to a greater need to communicate with the different user groups we have. (WI)

Follow the outreach strategy. It has been tested. It is better than doing stuff from the seat of your pants. The materials will really help your efforts. (IN)

Attitude/Opinion Survey

There have been several market research and human dimensions studies conducted on the subject of trapping in recent years (Illinois Department of Natural Resources 1994, Case and Duda 1996, Duda 1998). Results of these studies are insightful and have been used in the development and implementation of this outreach project. However, results from these studies are not directly comparable to each other because each study employed different research methodologies. This limits researchers' abilities to compare results among states or regions or over time.

Telephone surveys and focus groups were conducted as part of this project, and results are summarized in a separate document entitled *Attitudes toward and awareness of trapping issues in Connecticut, Indiana, and Wisconsin* (Responsive Management 2001). This document provides baseline results from the three pilot states that can be used to give other states a good idea about the messages and approaches that will resonate with their constituents.

Perhaps even more importantly, during this project, a research methodology and survey instruments were developed that states should use in future studies so the results can be directly compared (among themselves and/or over time). **States are strongly urged to use one of the three survey instruments described in the Responsive Management 2001 report**.

Everyone who serves in an outreach capacity on the trapping/furbearer management issue should review this market research report. It is full of useful information and gives great insight into the minds and hearts of the target audiences that the states and their partners are trying to reach.

I would encourage other state agencies to review the final report, adopt the model outreach plan, and take a long, hard look at the research done as part of this project. There are some critical elements in there that states must understand in order to be effective. The messages we

as agencies have traditionally used are not effective—or not as effective as they could be. Agencies need to stop, look, and learn. (CT Team Member)

Results of the market research (previous studies as well as the work done as part of this project) have been incorporated into the model outreach strategy described above. Therefore, if a state outreach team does nothing more than customize and implement the outreach strategy, it will benefit from the market research. However, a careful review of the market research report will give team members a much better understanding of their target audiences and how to communicate more effectively with them.

Key Overall Market Research Results

A few of the key overall results from the market research include:

- The public may be becoming less negative about trapping in general. Approval of trapping was quite a bit higher in this survey than reported in several previous surveys. (Results are not directly comparable, but similar.)
- Use of the term "renewable" when referring to wildlife resources (e.g., wildlife is a renewable resource) may have negative connotations. The concept that wildlife resources can be managed and used by humans and sustained over time is not the issue. Rather, the term renewable seems to indicate to some people the idea that individual wildlife animals do not need protection.
- Confidence in the respective pilot state agencies (Connecticut, Indiana, and Wisconsin) was significantly related to approval of trapping. That is, as confidence in the agency increased, so did approval of trapping.
- Women are more likely to oppose trapping than men (64% opposed vs. 36% opposed, respectively), suggesting that outreach teams need to find ways to effectively reach women with their efforts.
- More than half the respondents in each state strongly or moderately agreed with the statement: "Even though trapping is regulated by the state, regulated trapping can still cause wildlife species to become endangered or extinct." This indicates a lack of understanding of the wildlife management and regulation-setting process.
- The more information that respondents had about issues related to trapping (awareness that it occurred, that is was regulated, familiarity with the state agency responsible for regulating it, familiarity with trappers, knowledge of beneficial uses of trapped animals, etc.), the more approval they had for trapping.

Key Results by Pilot State

Following are some of the key findings from each of the pilot state surveys:

Question 8. Are you aware trapping is regulated by the state of [respondent's state]?

	Connecticut	Indiana	Wisconsin
Not Aware	40%	38%	27%

Question 11. Would you say you are very confident, somewhat confident, or not at all confident that the [Designated State Agency] is properly managing the state's wildlife?

	Connecticut	Indiana	Wisconsin
Somewhat/Very Confident	62%	67%	71%

Question 26. In general, do you approve or disapprove of regulated trapping?

	Connecticut	Indiana	Wisconsin
Strong/Moderately Approve	58%	68%	73%

Question 27 to 36. Ranking of trapping approval by trapping purposes.

	Connecticut	Indiana	Wisconsin
Relocate for restoration	90%	94%	94%
Trapping for population control	72%	84%	88%
Subsistence trapping	72%	79%	84%
Part of biological study	64%	70%	78%
Trapping for food	60%	82%	82%
Reduce crop/garden damage	55%	74%	77%
Reduce property damage	49%	71%	74%
Trapping to make money	23%	36%	43%
Trapping for clothing	15%	25%	36%
Trapping for recreation	14%	22%	34%

Question 43. Even though trapping is regulated by the state, regulated trapping can still cause wildlife species to become endangered or extinct.

	Connecticut	Indiana	Wisconsin
Strongly/Moderately Agree	61%	59%	54%

Question 47. Do you support or oppose the idea of state fish and wildlife agencies working on ways to make trapping more humane?

	Connecticut	Indiana	Wisconsin
Strongly/Moderately Support	67%	75%	80%

Question 73. Sources of information considered to be the most credible for information about trapping.

	Connecticut	Indiana	Wisconsin
State Fish and Wildlife Agency	54%	63%	61%

The formal focus groups were very insightful. They were a powerful example of the level of public knowledge and positive opinion. They reinforced our strong efforts toward more public education – getting more information out to the public. (WI)

These results were very eye opening. We changed the way we communicate and the actions we pursued based on the research results. We thought everything we were doing was great, but after seeing the results, we changed a lot of things. This made a big difference and made us more effective. (WI)

"Regulated Trapping and Furbearer Management in the United States" Video

One of the products developed as part of this outreach project was a video on trapping and furbearer management. This 15-minute video is intended to provide accurate information about trapping and furbearer management. It answers many of the questions and counters the misinformation that the public has about trapping.

The national video is based on the "Fur Hunting and Trapping in Illinois" video (Illinois Department of Natural Resources 1994), which was first produced in 1994. The Illinois production was tested in focus groups to ensure that its messages were effective with target audiences. Since its release, thousands of copies of the Illinois video have been distributed, both in Illinois and throughout the nation.

To create the national video, the Illinois version was updated with information from the market research that was conducted as part of this outreach project, and with interviews with wildlife agency spokespersons from across the country. The national version can be customized in the opening and closing with state agency logos and other pertinent information.

"Trapping Matters" Hunter Education Video

The Connecticut Outreach Team identified the need for a video about trapping for use in the agency hunter education program. Like many state hunter education programs, Connecticut is required to cover trapping in its basic course. However, the accuracy and reliability of the coverage that trapping receives in any given course is largely dependent upon the knowledge and interest of the volunteer instructors. Sometimes the coverage is excellent; sometimes it is marginal; sometimes it is incomplete or absent altogether. The Connecticut Team developed the concept of having a 15-minute video to present accurate, consistent information about trapping and furbearer management to hunter education students.

This video is not intended to replace live lectures or hands-on demonstrations of trapping in the hunter education course, and volunteer instructors are always encouraged to work with trappers and trapper education instructors to provide the best possible teaching to their students. However, this video can be a significant resource for instructors who have little knowledge of trapping and/or no trappers to work with in their area, or as an introduction to the topic that can then be reinforced by instructors.

The IAFWA developed a "generic" version of the video that is general enough to be used in nearly any state. The video script was reviewed by experts from the International Hunter Education Association and Connecticut Outreach Team. These experts made comments and suggestions to increase its effectiveness and usefulness to instructors. The generic version is now available for use by states. It also can be customized to make it better address a specific state's needs.

Below are some of the comments received from reviewers of the Draft Hunter Education Video.

The video provides a rational and balanced view of the important role that trapping plays in this country. Agency personnel and the public should take the opportunity to see trapping portrayed as a legitimate component of wildlife management and our natural heritage. I encourage agencies and their partners to consider using this video as part of their hunter education programs. –Steve Williams, Secretary, Kansas Wildlife and Parks and Chair, IAFWA Hunting and Shooting Sports Committee

Trapping is an extremely important, though often misunderstood and controversial, aspect of wildlife management. Even members of the hunting community often do not understand the relationship of trapping to wildlife management and have difficulty communicating this relationship to others. This video is a critical communication tool, which provides a consistent message in an easy to use format that explains the importance of trapping to wildlife conservation, as well as provides a basic introduction to the equipment and sets used for various furbearers –Bob Byrne, Wildlife Management Institute

The video appeared very professionally done and in my opinion would benefit any Trapper Education program. It is also a video that would put forward the facts about trapping to the public if needed. -Mike Streeter, Hunter Education Coordinator, Nebraska Game and Parks Commission

Furbearer Management Outreach Workshop

The cooperation and participation of agency staff and other wildlife professionals is critical to achieving effective outreach on furbearer management issues. Many agency staff have had little or no exposure to trappers or furbearer management issues in their careers, and they may hold some of the same misconceptions about trapping as the general public. Yet these same staff may be placed in situations where they must represent the agency's position on trapping to the public. The Furbearer Management Outreach Workshop was designed to address this issue.

The one-day workshop includes a detailed explanation of furbearer management, harvest techniques, best management practices, communication tips and techniques, and current issues. It also includes a field component in which participants get to handle trapping equipment, fur products, pelts, and other trapping-related materials.

The workshop was designed for delivery to wildlife agency staff, from secretaries and receptionists to managers and administrators. Forty-seven people attended the pilot workshop in Connecticut. It was so popular and effective, two additional workshops were added. In all, 114 people participated, including administrators, conservation officers, hunter education staff, information and education staff, fisheries and wildlife biologists/administrators, forestry personnel, and secretaries.

Information on how the workshops were conducted, recommendations for implementing the workshops in other states, and materials for customizing to other states are included in Appendix E.

Based on the evaluation forms completed by participants, the workshops were very effective (see Appendix F for complete evaluation results):

- Objectives were achieved:
    A. 97% said that as a result of the workshop, they know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife.
    B. 97% said that as a result of the workshop, they understand trapping issues and know how to communicate with the public about trapping.
    C. 90% said that as a result of the workshop, they will communicate effectively on the issue of trapping—both proactively and reactively.
- Workshops were successful in addressing the information needs of diverse agency personnel—from wildlife biologists to conservation officers to secretarial staff. This was an important guideline in developing the workshop.
- All topics were considered important by participants, although different people thought different things were most helpful. This reflects the diversity of participants and their varying levels of knowledge and understanding of furbearer management issues.
- When asked whether they felt this type of workshop would be useful to other state wildlife agencies, participants overwhelmingly said yes (99% said yes; 1% said not sure).

Wisconsin also has an ongoing program called the Furbearer Ecology and Management Workshop, also known as the "Fur School." It covers much of the same material, although it lasts an entire week and includes evening sessions. A follow-up survey of Fur School graduates was conducted as part of this project, and these results are at the end of Appendix F.

It should be noted that the pilot outreach workshops and the Wisconsin Fur School were both delivered by professional trainers and instructors experienced in furbearer management and outreach.

The professional workshops were extremely effective. I may not have been involved with as many of the other efforts as the rest of the team, but the workshops were definitely the most important thing I was involved in. The fact that we had a whole day with a wide range of agency people, and were able to deliver a lot of information to them—and they told us they thought it was valuable in the evaluations. I think this kind of action will have impacts far beyond the people who were in the workshops. (CT Team member)

What attendees in Connecticut had to say about the workshop:

I had significant concerns about the humane treatment of animals issue. I believed that pain and maiming were common. The newer foot-hold designs, and kill trapping in proper sets, and the info on how those work out has significantly changed my perception and comfort level. (Administrator)

The kinds of traps I've seen have changed. I'm used to seeing big traps with big teeth, breaking bones. That's not the case any more. (Wildlife Biologist/Manager)

I would say the section on communication was very important to me. To effectively communicate this topic is not easy. I came out of this workshop with more useful tools to communicate our position. (College professor)

I give many slide shows/lectures and interact with a large segment of the public. This workshop has reaffirmed my dedication and increased my knowledge of communicating to the public using various techniques. (Wildlife biologist/manager)

I learned quite a bit at the field session where different traps and techniques were demonstrated. It was interesting to learn how much knowledge of the animal's behavior is needed to be a successful trapper. (Forestry staff)

This was the most helpful class I have had in a long time. I got a lot out given the allotted time. (Conservation Officer)

Wildlife Heritage School Program

The Indiana Outreach Team identified the need to communicate to schoolchildren the benefits that wildlife and wildlife products have provided and continue to provide to Indiana=s economy and culture, and the role that trapping, hunting, and wildlife management play in securing those benefits for people. The Indiana Wildlife Heritage Program was developed to address this need.

The program involved making a 1.5-hour presentation to fourth grade schoolchildren at their school site. The presentation covered the consumptive use of wildlife from pioneer times to the present day. The presenter shared many artifacts made from wildlife and other natural sources with the students to engage their natural curiosity and enthusiasm.

Pre- and post-activity packets were sent to each participating school. These packets included an evaluation of students= knowledge and attitudes about wildlife, hunting, and trapping. Teachers were asked to administer the pre-evaluation and then prepare students for the presentation using the activities in the packet. After the presentation, the teachers were asked to administer the post-evaluation and to use post-presentation activities to expand upon the presentation. The presenter collected both sets of evaluations, which were analyzed to determine whether the presentation had any influence on the students' knowledge of or attitudes toward wildlife, trapping, hunting, and other topics. (See Appendix G for more detail on the program).

With funding from the Furbearer Management Outreach Project, the Indiana Division of Fish & Wildlife implemented this pilot program in 12 rural, urban, and suburban schools in 2000. Initial results were extremely positive.

- 60% (n=325) of students in the pretest thought that trapping was harmful to wildlife. This was reduced to 14% (n=75) in the posttest.

- 42% (n=228) of students in the pretest thought that hunting was harmful to wildlife. This was reduced to 14% (n=74) in the posttest.
- 31% (n=166) of students in the pretest thought that building houses/development was harmful to wildlife. This increased to 74% (n=407) in the posttest.
- 48% (n=265) knew that the number of animals in an area can sometimes get so high that they cause problems for people. This increased to 75% (n=414) in the posttest.
- 20% (n=109) of students in the pretest knew that trapping is allowed in Indiana. This went up to 72% (n=401) in the posttest.
- 54% (n=302) of the students knew in the pretest that scientists can use traps to catch animals and release them unharmed in new areas. This went up to 73% (n=404) in the posttest.

(See Appendix H. *Wildlife Heritage Program Results* for more detailed results and statistical analyses).

Because of its effectiveness and popularity, the Indiana Division of Fish & Wildlife plans to deliver the program to up to 40 classrooms again during the 2001-2002 school year.

It is important to note that the classroom programs were delivered by a very experienced instructor capable of handling challenging classroom situations on a potentially divisive/emotional issue. The instructor was a lifelong hunter and trapper who has worked over twenty years in the conservation education field conducting countless programs for teachers and students of all ages. States should take care when selecting an instructor so as to ensure that the messages are consistent, the information accurate, and the presenter can follow up questions with a broad base of experience and knowledge.

Furbearer Management Brochure

Early in the process, the pilot states identified a need to have a high-quality brochure about trapping and furbearer management that they could distribute through multiple venues—state fairs, public presentations, booths, hunter education courses, trappers association meetings, etc. The state teams used a template of basic information based on the key messages from the outreach strategy, and then customized the text to make it specific to their state needs.

As part of the Outreach Project, the IAFWA made funding available for design and limited printing of brochures for the pilot states. However, to make the basic design applicable to all states, professional designers modified the text submitted by the state teams to create a more ubiquitous brochure that contained customizable inserts. The pilot states were then asked to draft text for the inserts that would address state-specific concerns.

The Indiana and Wisconsin Teams each received 1,000 copies of the brochure (with customized inserts) from an initial printing. (The Connecticut Team developed a different brochure that was entirely customized to their needs). Indiana and Wisconsin distributed sample copies of the brochure to target audiences throughout the state, along with an evaluation form for feedback. Based on reviewer comments, IAFWA revised the brochure, which is now available for state agencies and their partners to print as-is, or to customize and print to meet their specific needs.

Wallet Card for Trappers

The Wisconsin Outreach Team identified a need for a small card that contained key messages that trappers could carry with them and refer to in the field in order to help them be more effective communicators about trapping. The card lists five key messages and four tips for communicating effectively. The text was printed on water-resistant, coated stock as a fold-over wallet card that was distributed to trappers throughout the state.

> *I think the wallet card is an innovative idea. Get the messages to people who may have the most opportunity to speak to the public.* (WI)

Summary Recommendations

This report is filled with recommendations. All are tested, all are effective, and all are deserving of consideration. However, along with closely reviewing the summary of the Pilot Team evaluations (Appendix C), following are some points worth emphasizing:

Do it now. The most important recommendation is to put together an outreach team, customize the model outreach strategy, and implement it. There are challenges and obstacles to be sure—influencing human behavior is no easy task. But, the results of the pilot state projects show it will work.

Assemble a diverse outreach team. Venture outside the walls of the agency headquarters and include diverse interests—wildlife, I&E, hunter education, upper administration, law enforcement, the trapping community, the legislative arena, etc. Don't pad the team with too many agency people. Seek some outside influences and welcome their input.

Start with the model outreach strategy. Why reinvent the wheel? The model outreach strategy has already been developed and tested. Customize it to fit your state's particular needs. Use it to help you look at your current efforts in a critical, systematic way. Don't rush this step. Build support within the team—members will be more willing to invest their time, energy, and money to go the extra mile for something they understand and have helped craft.

Include an administrator on the team. There is no substitute for having involvement (buy-in) and participation from agency administration—someone to tell the team that this work is a priority—to push them to complete their assigned tasks.

Refer to the strategy. After customizing the outreach strategy, use it to guide day-to-day efforts, especially those involving communicating with the media or with constituents. Use the key messages in every communication. All appropriate agency and partner personnel should keep the strategy close at hand so it can be used to help guide communications efforts. With a little practice this becomes second nature, and it makes talking to reporters and the public so much easier—the messages are already formulated!

Piggyback wherever possible. Focus on incorporating actions from the outreach strategy into programs and activities that you are already doing, not creating new or stand-alone outreach programs. Look ahead to help you weave new actions into your existing programs and schedule. Make certain all team members are doing likewise.

Strike a balance. Balance a sense of urgency (this is important to have!) with the long-term view. Get out of the blocks as soon as possible and implement short-term actions right away to create momentum; but set up the outreach program to be a long-term, cumulative process. Let it mature over time. Build, evaluate, learn and adapt.

Lay the foundation within the agency first. Do whatever it takes (workshops, meetings, memos, etc.) to ensure that agency staff are "on board" with trapping and furbearer management in general (and with your outreach strategy too, if possible), and then expand to reach external

audiences. It will be very difficult to convince external audiences if you have internal audiences sending mixed messages.

Customize the outreach materials. Use the brochure, videos, and all materials provided as part of this project as a place to start, but customize them to make them as specific as possible for your particular needs.

Wade through this report. It contains a lot of information, but it will be well worth it in the long run.

It was a good pilot, but it was just a pilot—now we need to share what we've learned and keep the whole thing moving forward. (WI)

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Appendix A. Model Outreach Strategy

Introduction

This model outreach strategy is provided as a template for state wildlife agencies and partners to customize to their specific agencies or organizations.

This strategy was built on a solid foundation of human dimensions research, implementation through the pilot projects, and evaluation. This strategy relies on the most recent research and thinking from the marketing and public relations fields on influencing and understanding public knowledge and opinion about important societal issues. In the interest of brevity and clarity, specific details of that research/thinking have not been articulated in this document.

Purpose

The purpose of this outreach strategy is:

> ***To maintain the regulated use of trapping as a safe, efficient, and acceptable means of managing and harvesting wildlife for the benefits it provides to the public, while ensuring the welfare of wildlife.***

Target Audiences and Objectives

Listed below are outreach objectives for each of five target audiences (or groups of audiences) that have been identified. A partial list of specific audiences included within the five target audiences is included at the end of this strategy under *Examples of Target Audiences*.

Trappers

Through implementation of this outreach strategy, we want trappers in our state to:

1. Know that what they say about trapping (and how they say it) and how they practice trapping are very important to the future of trapping;
2. Recognize the need to identify and provide proactive, positive messages to effective communicators within their ranks;
3. Know about the BMP process currently underway;
4. Support and participate in the process of developing the BMPs by providing their feedback, opinions, and experience;
5. Support the use of the BMPs.

Our Agency

Through implementation of this outreach strategy, we want our agency to:

1. Develop and implement outreach strategies that will build both the external support and the support within the agency needed to maintain regulated trapping as an important part of agency management programs for furbearers;
2. Know about the BMP process currently underway;
3. Incorporate BMP information into trapping (education) programs and public communications.

Wildlife Professionals

Through implementation of this outreach strategy, we want wildlife professionals in our state to:

1. Understand the need for regulated trapping – recognize the value of trapping to society and the environment (trapping is an acceptable use of renewable resources *and* a valuable management tool);
   Note: Use of the term "renewable" when referring to wildlife resources may have negative connotations with the general public. Market research showed that the concept (wildlife resources can be managed and used by humans and sustained over time) is not the issue. Rather, the term renewable seems to indicate to some people the idea that individual wildlife animals do not need protection. The term should be avoided with general audiences.
2. Proactively pursue opportunities to communicate to the public the difficult choices that wildlife professionals face related to furbearer management, the benefits of regulated trapping, and BMPs with the non-trapping public;
3. Know about the BMP process currently underway;
4. Support and participate in the process of developing the BMPs by providing their feedback, opinions, and experience;
5. Support the use of the BMPs.

Natural Resource Professionals

Through implementation of this outreach strategy, we want natural resource professionals in our state to:

1. Recognize the connection between the continued use of regulated trapping and their business, organizational mission/objectives, and healthy, diverse wildlife populations;
2. Formally recognize regulated trapping as an acceptable, appropriate, and legal activity that plays an important role in maintaining ecosystems
3. Know about the BMP process, and communicate internally (and externally, where appropriate), that this is going on;
4. Formally recognize and support the development and implementation of BMPs.

General Public

Through implementation of this outreach strategy, we want the public in our state to:

1. Accept regulated trapping as a legitimate activity;
2. Accept that regulated trapping is consistent with their existing values; and
3. Feel confident that our agency properly regulates trapping activities and does what is right to protect and conserve wildlife.

Guiding Principles

1. There are three underlying, fundamental issues regarding public attitudes toward trapping that must be considered in the development/implementation of all outreach efforts:
   - The public cares deeply about America's wildlife resources;
   - The public does not take lightly the killing of animals;
   - The public is highly uninformed about trapping.

   All outreach efforts should take these into account.

2. Integrate outreach efforts into existing communications and education programs of our agency and our partner organizations.

3. Communicate and demonstrate that our agency and our staff genuinely care about the welfare of wildlife and take our role very seriously.

4. Encourage our agency and our staff to become more involved in the challenges facing furbearer management, and to continue to support the benefits of regulated trapping to society and the environment.
   The focus should be on insuring that the differences in opinion that may exist within our agency are *not* based on a lack of awareness, information, or understanding of trapping or furbearer management.

5. Use wildlife professionals as the primary outreach spokespersons. Create recognizable personalities.
   Make key field staff (district biologists, etc.) more effective communicators. They are the key to success. Our agency employees, wildlife professionals, and trappers are the ones who have (or should have) the day-to-day, face-to-face contact with local town councils, school boards, zoning commissions, community leaders and media.

6. Provide the communicators (agency employees, other professionals, partners, etc.) with support for their outreach efforts – research, training, guidance, and tools (products, etc.).

7. To the degree possible, make direct/face-to-face contact with the target audiences. Develop relationships with opinion leaders who will affect trapping directly or indirectly.
   "People change not because of something they read, but because someone they know and trust says it's a good idea." (Pyle 1998)

8. Within all audiences, direct communications toward opinion leaders and highly informed individuals.

9. Recognize that women are more likely to oppose trapping than men. Direct outreach efforts toward women, as appropriate.

10. Recognize the legitimacy of other viewpoints.

11. Don't "oversell" the benefits of regulated trapping.
    The benefits of regulated trapping are many and varied. However, it's critical that the biological and management benefits be consistently and factually portrayed. For example, population and disease control–two often-cited benefits–are only true for certain species under certain situations. By communicating only factual information, conservationists can both maintain and increase their credibility.

12. Among the general public, focus on people who *do not* hold extreme animal rights or animal use philosophies.

Messages

A critical component of an effective outreach effort is the consistent use of messages that "ring true" with the target audiences.

Below are:
- Priority messages
- Supporting messages
- Priority messages for specific audiences

The messages that will be most effective in achieving outreach objectives will vary, depending on who the target audience is, the medium of communication used, the source of the information, the context, and many other variables. Therefore, specific objectives require specific messages. However, considerable research has shown that the "Priority" and "Supporting" messages listed below are effective with a broad cross-section of the public. That is not to say that other messages (e.g., "trapping is our heritage" or "trapping provides economic benefits") can't work, but simply that other messages have been proven to be more effective in most situations.

Priority Messages

Given limited time, space, and/or budget, these messages are the priorities (the *first* things that should be mentioned in any communication event):

1. The kinds of wildlife that are trapped are abundant–regulated trapping does not cause wildlife to become endangered.
   Note: In the pilot state market research, more than half the respondents in each state strongly or moderately agreed with the statement: "Even though trapping is regulated by the state, regulated trapping can still cause wildlife species to become endangered or extinct." Agencies need to make it clear what "regulated" means.

2. Trapping is managed through scientifically-based regulations that are strictly enforced by conservation officers.

3. Our agency continually reviews and develops rules, regulations, education programs, and capture methods to ensure the humaneness of trapping.

4. Regulated trapping provides many benefits to wildlife and people in our state, especially in helping maintain a balance between wildlife and people.

Supporting Messages

Following are supporting messages that can be used to expand on and *explain* the key messages if needed and if time and/or space is available.

It is important to keep in mind that these messages can help explain and support the priority messages, but they are not necessarily by themselves reasons why trapping should be allowed to continue. For example, the fact that nature produces a "surplus" of animals each year helps explain why regulated trapping does not cause wildlife to become endangered. However, by itself, it's not a reason why trapping should be allowed to continue – robins, cardinals, and other species produce surpluses, but we don't trap them.

The priority messages are listed below (#s 1-4), with appropriate supporting messages listed beneath each one.

1. The kinds of wildlife that are trapped are abundant–regulated trapping does not cause wildlife to become endangered.

   A. Only a few species of wildlife can be legally trapped by licensed trappers.
   B. No threatened or endangered animals are legally trapped in our state, except to relocate them for protection or restocking.
   C. Many wildlife populations naturally produce a surplus of animals each year that can be removed from the wild without harming the populations.
   D. The environment contains only enough food, water, and habitat for a certain number of animals of each species (carrying capacity).
   E. Without the regulated capture and removal of some animals, a wildlife population may exceed its habitat's carrying capacity. Potential results include:
      i Threats to human health and safety;
      ii Damage to the animals' habitat;
      iii Damage to agricultural crops or other human structures;
      iv Death from starvation or disease outbreaks.

2. Trapping is managed through scientifically-based regulations that are strictly enforced by conservation officers.

   A. Trapping is endorsed and controlled by trained wildlife professionals who dedicate their lives to ensuring

the welfare of animals. (The Wildlife Society recently reaffirmed its position on the value of trapping to wildlife management.)

B. Trapping is not allowed year-round (except for nuisance control). It is limited to short seasons which help to prevent the capture of females with dependent young.

C. Our agency provides trapper education courses.

3. Our agency continually reviews and develops rules, regulations, education programs, and capture methods to ensure the humaneness of trapping.

   A. Our agency is currently involved in a major national study in cooperation with other states, the U.S. Department of Agriculture, State Trappers Association, and experienced veterinarians to evaluate various traps.
   B. Wildlife professionals support the use of the best available technology.
   C. Trappers and wildlife management professionals support these efforts because they care about the welfare of wildlife and realize the benefit regulated trapping has in wildlife management.

4. Regulated trapping provides many benefits to wildlife and people in our state, especially in helping maintain a balance between wildlife and people.

   A. As a way to maintain a balance between wildlife and people:
      i. By reducing or preventing damage to agricultural crops and human property
      ii. In certain situations, reducing or preventing threats to human and pet health and safety (e.g. minimizing exposure to diseases such as rabies).
   B. Managing and protecting endangered species;
   C. As a way to collect important ecological information about wildlife;
   D. Funding for wildlife conservation–trapping license fees paid by trappers are used for the protection of wildlife habitat and populations.
   E. In our state, some people rely on trapping of wildlife for food or a source of supplemental income.
   F. Most of the animal can be used: the fur to make coats, gloves, mittens, trim on coats and sweaters; the meat for human food; and the rest of the animal for other by-products such as soap, tires, and lubricants.

Priority Messages for Specific Target Audiences

Trappers

- Our agency, as reflected in our mission statement, is committed to maintaining and improving wildlife management techniques, including trapping.
- BMPs will help trappers by showing the public their commitment to improving or maintaining the efficiency and selectivity of their traps while ensuring animal welfare.
- Trappers can assist in this outreach effort by learning to effectively communicate the priority messages.

Our Agency

- Successful implementation of the BMPs and this outreach project are critical to the future of maintaining regulated trapping as a tool for wildlife management.
- Successful (or unsuccessful) implementation of this outreach project has implications far beyond the issue of trapping or the prohibition of certain traps (e.g. trapping is on the front line of other controversial issues such as bow hunting and even fishing).

Wildlife Professionals

- Regulated trapping is an integral part of modern wildlife management and a critical tool in managing for biodiversity:
  - endangered species protection
  - habitat management
  - scientific research
  - reintroduction efforts

- The removal of some animals that cause damage problems helps to improve landowner tolerance of wildlife and wildlife habitat.
- BMPs will provide valuable information about how to improve the effectiveness and humaneness of commercially available traps.
- Consumptive users of wildlife, including trappers, provide funding for wildlife conservation through license fees, habitat stamp fees, and special taxes.
- Wildlife professionals can assist with this outreach effort by effectively communicating the priority messages.

Natural Resource Professionals
- The capture and removal of some furbearers can help maintain healthy ecosystems.
- Regulated trapping is an integral part of modern wildlife management and a critical tool in managing for biodiversity:
    - endangered species protection
    - habitat management
    - scientific research
    - reintroduction efforts Natural resource professionals can assist with this outreach effort by effectively communicating the priority messages.

Hunters and Anglers
- Consumptive users share an interest in the conservation and humane use of wildlife and habitat.
- Trapping, hunting, and fishing are all consumptive uses of wildlife that are opposed by some segments of society.

Actions

Listed below are major actions/products that were developed as part of the pilot state projects, and are available to our agency and partners. Additional action items will be developed based on the specific needs in our state/agency.

- Model Outreach Strategy
- Furbearer Management Brochure
- Hunter Education Video
- Wallet Card for Trappers
- Furbearer Management Outreach Workshop
- Wildlife Heritage School Program
- National Furbearer Management Video
- Market Research Reports

For details on each action/product see the narrative portion of this report.

The specific tasks, assignments, schedules, and budgets will be developed for completing each action.

Additional actions completed or contemplated through the pilot state projects are listed in Appendix D.

Evaluation

This strategy provides the framework for a long-term approach to building the support necessary to maintain and improve wildlife management techniques, including regulated trapping.

The success of all outreach efforts should be evaluated against the established objectives. For example, are wildlife professionals more effective and proactive communicators after project implementation than before (Objective 3).

Evaluation should be conducted at three levels:

- A standardized human dimensions survey focusing on furbearer management has been developed for use by all state wildlife agencies. Use of this uniform questionnaire by all states will allow for more accurate comparisons of human dimensions data across demographic and regional boundaries. This survey instrument has already been used within each of the pilot states to identify opinions and knowledge of furbearer management among the various target audiences. Other states should follow suit as budget allows.

- To get at long-term attitude data on a national level, a few questions about trapping will be included in a new or existing national, annual (or bi-annual) omnibus survey. This will be used to assess basic public opinion about furbearer management and track it over time. This type of survey is designed to measure the objectives set forth in this outreach strategy over the long-term.

- Evaluation should be built into each state work plan. Not all objectives in all states can or should be quantitatively evaluated. However, states should customize evaluation efforts that will maximize what they learn, while minimizing the overall cost. Having human dimensions research specialists serve on the state outreach team will assist in carrying-out the formal evaluation of objectives.

Examples of Target Audiences

Trappers
- trappers
- friends and family of trappers

Wildlife Agencies
- state wildlife agencies
- state natural resource/environmental agencies
- federal fish and wildlife agencies

Wildlife Professionals--includes present and future (educators and students) professionals
- wildlife and fisheries biologists
- conservation biologists
- I&E specialists
- interpreters
- zoo and museum staff
- animal damage control specialists
- wildlife rehabilitators

Natural Resource Professionals
- farmers/ranchers
- aquaculturists
- people with animal damage problems
- timber industry
- forest landowners
- foresters
- soil conservationists
- conservation and habitat protection organizations
- extension specialists
- local/regional animal control agencies

“General Public”
- decision-makers
- people who care about wildlife
- hunters/anglers and their friends/families
- outdoor media (including writers, nature television/documentary producers, etc.)
- veterinarians
- educators
- transportation industry (county road depts., etc.)
- medical research community
- fur industry

Appendix B. Effective Outreach Teams

This appendix provides recommendations to states for developing effective teams to conduct furbearer management outreach efforts. This appendix includes:

- Recommendations for setting-up effective Outreach Teams
- Pilot State Outreach Team Members
- Pilot State Time/Effort Summary

Recommendations for Team

Identification and recruitment of representatives to serve on the Pilot State Outreach Teams was the first action taken in each of the three pilot state projects. Project facilitators worked with state agency representatives to brainstorm a list of potential participants. Based on pilot state results, it is recommended that the agency invite a diverse array of professionals from many different fields and disciplines to serve on the Team. It is important to have benefit of different perspectives and different expertise when considering how best to conduct outreach activities. Following is a list of potential members that state agencies should consider including on their Teams:
State furbearer biologist
State public affairs/I&E coordinator
State hunter education administrator
State agency administrator (representative from the Executive Office)
State outdoor education (Project WILD, WET, Learning Tree, etc.) coordinator
State law enforcement officer
State naturalist or outdoor recreation coordinator
Political representative (conservation congress, general assembly, staffer, aid, clerk, etc.)
Trappers Association representative
Furbuyer representative
University representative
Media representative

Pilot State Outreach Team Members

Following are the names and titles of all pilot state outreach team members:

Connecticut Outreach Team
Peter Good, Wildlife Division Outreach, CT Department of Environmental Protection
Bob Kalinowski, Firearms Safety Coordinator, CT Department of Environmental Protection
Paul Rego, Leader Furbearer Program, CT Department of Environmental Protection
Tom Decker, Vermont Fish and Wildlife Department
Greg Chasko, Assistant Director, CT Department of Environmental Protection
Ed Parker, Chief, Bureau of Natural Resources, CT Department of Environmental Protection
Mark Clavette, CT Department of Environmental Protection

Indiana Outreach Team
Warren Gartner, Project WILD Coordinator, Indiana DNR Division of Fish and Wildlife
Jon Marshall, Public Affairs Director, Indiana DNR, Division of Fish and Wildlife
Richard McIlvaine, Vice-president, Indiana State Trapper's Association
Michael Crider, Outdoor Education Officer, Indiana DNR, Division of Law Enforcement
John Olson, Wildlife Staff Specialist, Indiana DNR, Division of Fish and Wildlife
Glenn Lange, Chief, Wildlife Section, Indiana DNR, Division of Fish and Wildlife
Larry Lehman, Furbearer Biologist, Indiana DNR, Division of Fish and Wildlife (deceased)

Wisconsin Outreach Team
Keith Warnke, Upland Wildlife Ecologist, Wisconsin DNR
John Olson, Furbearer Ecologist, Wisconsin DNR
Jeremy S. Peery, Conservation Warden, Wisconsin DNR

Deborah Beringer, Chief Naturalist, Wisconsin DNR
Rick Tischaefer, President, Wisconsin Trappers Association
Scott Loomans, Aid for state legislator
Scott Craven, University of Wisconsin-Madison
Susan Gilchrist, Wildlife Education Research Specialist, Wisconsin DNR
Ed Harvey, Chairman, Fur Harvest Committee, Wisconsin Conservation Congress
Brian MacMillan, Manager, U.S. Wild Fur, North American Fur Auctions
Tom Hauge, Director of Bureau of Wildlife Management, Wisconsin DNR
Paul Holtan, Editor of DNR News and Outdoor Report, Wisconsin DNR

Pilot State Time/Effort Summary

Listed below is a summary for each pilot project. It will give states and partners a sense of the effort that went into the pilot state outreach projects. It's important to keep in mind that pilot state team members were heavily involved in developing the outreach products. Those products are now ready for customization and use—and, the development work is already done!

Connecticut
Held six, half- to full-day meetings over an 18 month period, with at least 5 members present for each meeting.

Indiana
Held six, half- to full-day meetings over a 12 month period, with at least 4 members present for each meeting.

Wisconsin
Held five, half- to full-day meetings over a 17 month period, with 6 to 10 members present for each meeting.

As one would expect, individual efforts varied considerably from person to person and from state to state, depending on the availability of time, interest, and responsibilities. For example in Wisconsin, the furbearer biologist (John Olson) took the lead in developing and reviewing most outreach products and efforts within the state. In Indiana by contrast, the Public Affairs Director for the Division of Fish and Wildlife (Jon Marshall) took the lead. In all three states, the effectiveness of the outreach efforts was a function of the time and commitment made by agency staff and their partners.

Appendix C. Pilot Team Evaluation Interview Responses

Near the end of the Furbearer Management Outreach Project, members of each pilot state outreach team were interviewed by phone as part of the evaluation of the effectiveness of the project. All respondents were asked the same 18 questions. Some questions were quantitative, while others were open-ended. Following are summaries of these interviews. For each state, the questions are listed in bold, followed by every response received. Interviews were completed April 25, 2001.

Connecticut Outreach Team

Peter Good, Wildlife Division Outreach, CT Department of Environmental Protection
Bob Kalinowski, Firearms Safety Coordinator, CT Department of Environmental Protection
Paul Rego, Leader Furbearer Program, CT Department of Environmental Protection
Tom Decker, Vermont Fish and Wildlife Department
Greg Chasko, Assistant Director, CT Department of Environmental Protection [no interview]
Ed Parker, Chief, Bureau of Natural Resources, CT Department of Environmental Protection [no interview]
Mark Clavette, CT Department of Environmental Protection [no interview]

Question 1. What is your level of involvement in furbearer management issues in general?

I was the supervisor of the furbearer program biologist, so I was involved in discussions and strategies dealing with furbearer-related issues. Was involved in other senior staff level decisions as well.

I am an educator in the trapping course and hunter education course. I write the outlines for the trapping program. I used to trap myself, too, many years ago.

I am responsible for the furbearer program in CT. Nearly any issue dealing with furbearers receives my attention.

I have high involvement. I participate in the in state trap standards group. I review BMP trap testing procedures. I coordinate trap testing in 6 northeastern states for IAFWA.

Question 2. What was your level of involvement in this outreach effort?

I was on the Outreach Team for CT, and was a participant in several task items assigned as part of the outreach plan.

I was on the Team. I didn't really do anything different because I was on the Team than I would have otherwise. I'm an educator, not a biologist. I have 18 years experience as an educator. The Director asked me to serve on the Team, and I think is was very worthwhile.

I was a member of the Team, and was one of the primary presenters for the workshops. I did most of the planning related to this project; helping to ID target audiences, interactions relative to slide show/video, etc.

I gave segments of the workshops, reviewed the CT brochure, attended 2 Team meetings that discussed projects and development, and reviewed the draft outreach plan for CT. I was also on the working group that guided development of the overall project.

Question 3. To what extent did you and the other members of your Team use the [state] Outreach Strategy to guide your day-to-day efforts?

We used it quite extensively. Whenever we were dealing with furbearer issues, we consulted the strategy to make sure we were using the right messages, etc.

We took the basic suggestions and ran with them. We used the strategy as a guide.

This is tough to answer. Many days, the things I work on aren't appropriate to apply the strategy to. But within the last year, we've been more aware of the strategies and have used them in forums where they are appropriate, such as talking to reporters, preparing for court cases, etc. For appropriate issues, we use it a lot.

It totally guided my participation in the Team, like my work in the workshop and my review of the brochure. My role was a bit different from other Team members because I'm out of state, but I think the others used it, too.

Question 4. Would you recommend that other states use the "model" outreach strategy to help guide their furbearer management outreach efforts? Why or why not?

Definitely would recommend it. It is very helpful to direct and focus all participants in a common direction. Many people may have the knowledge they need, but they may go in different directions with it, or not get full benefit of the synergy that's possible when working together. Everyone needs to focus on major messages-consistency.

Yes. A plan is very important, and the model strategy is a good plan. You need a starting point, and this one worked well.

Yes. Having a plan and an outline to follow is better than not. The messages in the strategy have been tested and a lot of thought has been put into it, so why reinvent the wheel?

Yes. 100 percent. It's well thought-out, well researched, and it's been tested and improved by the pilot states. It's not very often a state agency has this kind of opportunity.

Question 5. Of all the things you and your Team did during this project, which actions stand out in your mind as being particularly effective? Why?

Development of the overall outreach strategy was the most important, because it got everyone on the same page. It ensured that we used the right messages and in a consistent, effective manner.

Nothing really stands out overall. For me as a hunter education instructor, the slide/video program will be very important. I'm getting requests for it already.

The workshops we presented to our division staff and to conservation officers were very effective. These ensured that the agency representatives are aware of the issues and have a familiarity with trapping. Many of them regularly interact with the public, and hopefully they are better communicators now.

The professional workshops were extremely effective. I may not have been involved with as many of the other efforts as the rest of the team, but the workshops were definitely the most important thing I was involved in. The fact that we had a whole day with a wide range of agency people, and were able to deliver a lot of information to them—and they told us they thought it was valuable in the evaluations. I think this kind of action will have impacts far beyond the people who were in the workshops. I also think the hunter education video will be very valuable, for the same reason—it will impact a lot of people for a long time.

Question 6. What specific actions (if any) would you recommend that other states NOT implement? Why?

I don't know of any actions to avoid, but I can tell you that a pitfall to avoid is not communicating with other parts of the agency, especially in a super-agency. Need to engage the division of parks, fisheries, law enforcement, etc. Need to make the appointed and elected officials aware of it.

I can't think of anything in particular NOT to do, but we've put a lot of effort into developing a brochure, and I think that greater thought should be given to where it will be distributed. When the group sits down to develop a product, they should set realistic goals as to where it will be used. What is the objective? How to best achieve it? (Rego)

I don't know of any thing we implemented that failed. Of all the actions that were identified, I thought some would be of low utility, so I wouldn't necessarily recommend them, but of the things we did, I thought they all worked. (Decker)

Question 7. Amount to which you agree or disagree: The [State] agency and its partners produced and distributed more outreach materials on furbearer management during this project than it would have if it had not been a pilot state. 1 2 3 4 5 (Where 1 = strongly disagree and 5 = strongly agree)
Mean = 4.8

Comments:
CT is a small state with a very small staff. There are a lot of things we wanted to do, but couldn't because of limited time and budget. Being a pilot state forced us to do more with furbearer management issues than we would have otherwise. Wish we could do these things for other issues as well.

The slide show and the brochure would never have been produced in CT if it weren't for this project.

We would not have had the impetus to undertake many of the actions we did if we had not been a pilot state. It made furbearer outreach a higher priority.

I'm sure the state could have produced a brochure on its own, but it probably wouldn't have been as good. And they wouldn't have done the video. A big part of this project is the cheerleader effect. The Team did bigger and better things because they were part of the pilot effort.

Question 8. Amount to which you agree or disagree: The [State] agency and its partners were able to raise the awareness of furbearer management issues within the agency because of participation in this project as a pilot state. 1 2 3 4 5
Mean = 4.0

Comments:
I think the workshops for the agency staff were well received and useful, but there are limitations within the CT wildlife division because we are in a super-agency. There is not enough interaction with other parts of the agency. Our activities receive a low priority in other parts of the agency. No way around it.

We need to reach other divisions within the agency. We did pretty well within the conservation bureau, but not the other bureau.

Our agency is quite broad, and we were able to reach the portion of it that is traditionally close to wildlife issues, but not the other portions nor the agency overall. The agency includes environmental conservation and environmental quality. The quality half is concerned with pollution issues, etc. They don't have much to do with conservation issues.

Question 9. Amount to which you agree or disagree: The quality of the outreach materials produced and distributed by the [State] agency and its partners was improved as a result of participation in this project. 1 2 3 4 5
Mean = 5.0

Comments:
This project allowed us to put more time and effort into these things that we would not have done otherwise.

By being involved in this project, we were able to do better work.

Question 10. What advice would you give another state agency that was preparing to increase its furbearer management outreach efforts?

I would advise other states to get buy-in and support from as high up the chain of command in their agency as possible, so they can implement things without restrictions. They should be willing to commit or dedicate a half- or full-time person to accomplish the objectives of the program--at least in the startup phase.

Work hard at communication within the agency. Stress the importance of furbearer management. Try to relate it to endangered species management. Be sure that your hunter education administrator is on the Outreach Team. We do more with the public than almost any other program in the agency. We need to be engaged in this. We reach about 4,000 students a year in CT. I spoke to Tim Lawhern (WI administrator), and he didn't even know this effort was going on in WI.

Assemble a team to help. Include experts who can address the target audiences you identify. Include the hunter education administrator if hunter education students are an audience. Include high-level administrators so they buy into the project and keep it a priority. Consider getting outside help such as DJCA. Identify target audiences. Some states might consider including I&E people on the Team. We have a curious arrangement in this department, which led us to not ask them to participate, but other states should probably include them.

I would encourage other state agencies to review the final report, adopt the model outreach plan, and take a long, hard look at the research done as part of this project. There are some critical elements in there that states must understand in order to be effective. The messages we as agencies have traditionally used are not effective—or not as effective as they could be. Agencies need to stop, look and learn.

Question 11. Overall, was participation in the Furbearer Management Outreach Pilot Project a positive experience? How did it help/benefit [state]?

Yes. Pulling together and organizing thoughts and actions into the strategy and getting people working together.

Yes. I would have liked to see more work done by the Team, but with the little time we had, what we were able to accomplish was worth it. It might need to be mandated by the higher-ups. It means extra work, and nobody has time for more work, but it is worth it.

Yes. It was beneficial. We achieved some of the goals.

Yes, I know it was. I went and asked everyone on the CT Team this same question on my own. They gave me positive feedback. They told me it was a positive experience.

Question 12. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want trappers, the state trappers association, and furbuyers to know about the BMP process currently underway.
1 2 3 4 5 (Where 1 = not achieved at all, and 5 = completely achieved)
Mean = 2.8
[Note: The Outreach Team spent relatively little effort on this objective, concentrating instead on higher priority actions. Therefore, the low ranking does not indicate that the actions identified do not work, but rather that not enough of the actions were implemented to achieve the objective.]

Comments:
The info was communicated to the leadership of the trapper interests, but I'm not sure how much was it distributed throughout their memberships.

We could have done more with the trappers, but we did pretty well. We didn't do much at all with the furbuyers.

This may have been described as a goal, but limited action has been taken to this point. It may be acted on eventually, but so far, not too much. Staff limitations have prevented it.

We didn't directly target those people in our strategy.

Question 13. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want trappers, the state trappers association, and furbuyers to support the use of the BMPs.
1 2 3 4 5
Mean = 3.3
[Note: The Outreach Team spent relatively little effort on this objective, concentrating instead on higher priority actions. Therefore, the low ranking does not indicate that the actions identified do not work, but rather that not enough of the actions were implemented to achieve the objective.]

Comments:
Communication with the leadership of trapping organizations was done. I'm pretty sure the leadership would support the use of BMPs.

Furbuyers may not be supportive, but trappers are. At first, trappers were suspicious of the BMP process—thought it would eliminate the use of certain traps. But once they heard about it and what it really was about, they came around and now they support it.

Same as #12 above. We haven't communicated with them much yet.

We didn't target them, but the trappers I talked to all supported the BMP process.

Question 14. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want the state agency to develop and implement outreach strategies that will build both the external support and the internal support needed to maintain regulated trapping as an important part of agency management programs for furbearers. 1 2 3 4 5
Mean = 3.4

Comments:
We have the materials, knowledge, and strategies in place to do this, but not everyone in the super-agency holds it as a high priority.

I fear the ball will probably be dropped. This needs to be an ongoing effort, but we do mostly crisis management. If IAFWA thinks it is important, they should keep hounding the directors to do more of this work.

Certain levels of the agency are hard to reach. Our efforts contributed, but we still have a ways to go. Need to have upper-level people participate.

Internally, we got a five, but externally, we probably only got a 3. I don't know how much we gained.

Question 15. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want wildlife professionals in the state to understand the need for regulated trapping—recognize the value of trapping to society and the environment. 1 2 3 4 5
Mean = 4.5

Comments:
Because CT is a small state, our staff makes up a high percentage of the wildlife professionals in the state. Because of the outreach workshops we held, we have done a fairly good job of this.

We did that very well.

We didn't reach wildlife professionals outside the agency (our agency has about 75% of them). Need to broaden.

Question 16. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want wildlife professionals in the state to proactively pursue opportunities to communicate to the public the difficult choices that wildlife professionals face related to furbearer management, the benefits of regulated trapping, and BMPs with the non-trapping public. 1 2 3 4 5
Mean = 3.1

Comments:
Most of our professionals were reached, but they have a lot of other things on their plates, so they may not be out there pushing it with the public.

We did a little of this, but not very much. We have limited time and personnel. Some people drag their feet, because they have too much to do already. I feel strongly that trapping is a big part of what we do--must protect it.

I can't imagine a lot of the professionals doing it formally, because it is not their role. But informally, they probably do a lot of that. They are much better equipped to do this now.

Question 17. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want the "general public" in the state to accept regulated trapping as a legitimate activity—a humane use of renewable resources and a valuable management to that benefits society in many ways.
1 2 3 4 5
Mean = 2.5
[Note: The Outreach Team spent relatively little effort on this objective, concentrating instead on higher priority actions. Therefore, the low ranking does not indicate that the actions identified do not work, but rather that not enough of the actions were implemented to achieve the objective.]

Comments:
This would be very difficult to achieve, even if the outreach strategy was fully implemented. It's hard to know what the specific expectations of the Team were at the beginning of the project, but this is aiming very high.

We did a tiny bit, but not nearly enough.

It's hard to evaluate. There has not been broad communication with the people of the state. There was increased communication with the standard audiences (game wardens, trappers, etc), so there may be a ripple effect there, but the circles aren't very large. There wasn't a strategy for broad public information campaigns.

Question 18. To what degree do you think the overall purpose of the Outreach Strategy was achieved?
To maintain the regulated use of trapping as a safe, efficient, and acceptable means of managing and harvesting wildlife for the benefits it provides to the public, while ensuring the welfare of wildlife.
1 2 3 4 5
Mean = 3.0

Comments:
I'll be able to answer this question a lot better in a year or so. There are several big trapping-related issues coming up. Right now, I'm optimistic about the outcome, but we'll have to see.

We didn't do enough. I think that probably 90% of CT residents oppose trapping. Only 3% of CT pop has a hunting license, and there is a lot of misinformation about trapping.

There are some very large forces at work that affect that goal (established public opinion; political pressures; etc.) This project, although beneficial, could not really have much impact on those forces.

It's an excellent start, but that's a huge goal statement. It's as good a start as you can hope for, but we need to assess it 7 to 10 years out. We've planted some seeds, but now it needs to grow. It's too early to tell.

Other comments from Connecticut Team:

The process that CT went through regarding this project would definitely benefit any state with a furbearer management program. Agencies need to communicate with the public about these issues, and this process will help them do it more effectively and efficiently.

This was a great project. We're going in the right direction. Outreach is a hard thing. It must be ongoing. We must reach the youngsters; must get into the school systems. This was a good start. Dave did a great job. Need to keep it going.

It's a valuable process. There were no negatives, other than the time I had to devote to it. There are opportunities for outreach actions that are not too costly to implement. By just having a team do some brainstorming, those can be identified. Some of the strategies can be worked into existing programs. Others require more of a commitment. But the state has to commit to doing it at some level. Some of these questions just asked should be asked of other states before they attempt to do this kind of work, to get them to recognize the realities of their situation and to decide if this is the best place for their energies. Help them think of other approaches.

I think this program is tailored to the strengths of state agencies. It's not asking states to go out and create a bunch of high profile stuff from scratch. It capitalizes on existing programs, such as hunter education, Project WILD, talks that their staff and their wardens give already. It's tailor made to fit their infrastructure. This program moves the topic of trapping forward in a planned, controlled forum. I would encourage states to implement this into their programs department-wide. It helps to build a more well-rounded understanding of the issue before it becomes a hot topic. The survey results show that the public expects the state to inform them about this issue, and that the state agencies have credibility.

Indiana Outreach Team

Warren Gartner, Project WILD Coordinator, Indiana DNR Division of Fish and Wildlife
Jon Marshall, Public Affairs Director, Indiana DNR, Division of Fish and Wildlife
Richard McIlvaine, Vice-president, Indiana State Trapper's Association
Michael Crider, Outdoor Education Officer, Indiana DNR, Division of Law Enforcement
John Olson, Wildlife Staff Specialist, Indiana DNR, Division of Fish and Wildlife
Glenn Lange, Chief, Wildlife Section, Indiana DNR, Division of Fish and Wildlife
Larry Lehman, Furbearer Biologist, Indiana DNR, Division of Fish and Wildlife (deceased)

Question 1. What is your level of involvement in furbearer management issues in general?

It was minimal at the start of the project. This was just one of many issues I deal with. With the start of this project it grew immensely. It was not separated out at the beginning, but it has become that way because of this project. Trapping came up occasionally in WILD activities, or sometimes I would give talks about trapping at national conferences.

Public relations in dealing with issues that come up. Handling questions from reporters, public, trappers, nuisance control people. I tended to get questions about trapping and I took quite an interest in finding out the best answers because of personal interest and concern for how trapping has been depicted. My perceptions before I understood trapping were bad. I want people to know that this is not the case. Recently, they've had a lot of interest in the coyote problem.

I'm in both the state and National Trapper's Associations, instrumental in forming the Indiana Sportsman's Roundtable. I'm on the Conservation Committee that meets with DNR quarterly (in their 5th year). It's a consortium of 12-14 conservation groups that meet with DNR LE and F&W. I also meet regularly with state legislators on furbearer mgt and trapping issues.

Not very much except for the education program. I am administrator of the trapper ed program in Indiana. It is taught by volunteers. I make sure the instructors have the materials they need. The trapper organizations support it heavily, but there is no official connection.

Not too much. I am a fed aid coordinator. I do grants on furbearer stuff.

Question 2. What was your level of involvement in this outreach effort?

Making connections with people about the project. I have really done a lot with the Indiana Wildlife Heritage Program—getting it ready and implementing it. I have worked with WOW magazine, am writing an article for them. Have made a presentation at the Project WILD national conference.

My involvement was not much different to before the project. The project provided more info and allowed them to include more info in what they distribute. Officially, my role has not changed much. Larry's death has caused more change than the project has.

Not as much as I would like; mostly because I work a 40-hour week.

I participated from the beginning. It was very interesting. I wasn't aware of the BMP studies and other things going on. There was a good exchange of information. I found it interesting that Indiana paralleled the other pilot states. The project spurred me on to bring some of my long-term goals more short term. Things like involving trapper education people in the hunter education instructor's academy.

I was on the committee. Met with Dave and the Team. I didn't do much outside the committee meetings except for a couple of assignments.

Question 3. To what extent did you and the other members of your Team use the [state] Outreach Strategy to guide your day-to-day efforts?

The Team used the key messages a lot. Influenced the way I spoke to groups about it. Very conscious of them. Increased the visibility and priority of the project. I have occasionally looked at the action plan to see the status of my tasks.

I didn't consider the strategy every day, but used it at a broader scale, to look ahead at things we could plan into our schedule. Primarily, the emphasis was to keep these issues at the forefront, and to include trapping information in what we were doing already when opportunities arose.

I and trappers have different viewpoints than the state people. I don't feel the outreach was as good as it could have been. F&W was doing mostly in-house things, I think it should be to general public.

We used it a lot. We implemented the items we felt were most important. We did the brochures, sent it to the key people we identified. He referred to the strategy in order to guide his efforts.

I didn't personally use the strategy, but the Division used it--especially the key messages. Through the strategy, we realized that the messages we were stressing (such as the economic benefits) weren't very effective with the general public, so we switched to other messages. We got trapping onto the cover of Hunting regulations Guide.

Question 4. Would you recommend that other states use the "model" outreach strategy to help guide their furbearer management outreach efforts? Why or why not?

It would be helpful. It organizes you better—focus on target audiences and key strategies.

Yes. Being on the other end of getting new programs and recommendations all the time, my initial response to this effort was not too positive. But, what we did in Indiana did not take too much extra time. We just worked trapping into what we were already doing. This will greatly increase its use in other states.

Yes, it was a good starting point, but states should carry it out a lot further.

Yes, other states should use it as a starting point. It is well thought-out. There may be some regional issues that other states would need to include, but they can use the model and go from there. It is a good boiler plate to follow.

Yes. It was quite valuable. Figure out how to promote trapping. Need to use the right messages. Take advantage of the focus group and survey research that has already been done.

Question 5. Of all the things you and your Team did during this project, which actions stand out in your mind as being particularly effective? Why?

The Heritage Program will be very effective for education aspect. Working with our own biologists and making sure the messages get through will be helpful. We didn't consciously focus on this in the past. Connections with trappers were very helpful—they appreciated being listened to.

The key messages. Having those in the back of your mind when discussing things with people and reporters. I wouldn't have come up with these without the project. I leaned on economic impact stuff like other nat. resource professionals. These have been definitely worthwhile. The messages are well received. The brochure is nice to have to follow up on conversations.

I don't know of anything. Most actions were repetitive of other actions already done. NTA has already done most of it. Everyone wants to do a brochure or slide show, but how do you get the materials to the general public? We lack the ability to get it out there.

Just going through this process was very beneficial. Forced us to look at what we were doing and why we were doing it in a systematic way. We looked at how to improve public perception. I wish there could be more phone surveying. I'd love to see that input. This is area that hasn't been addressed much.

Getting Larry to go to Purdue to teach at a vet course. Got John on TV with key messages about trapping. Using the messages in all their communication efforts. In the past, the Division stressed the economic value of trapping. Changed this based on the focus groups.

Question 6. What specific actions (if any) would you recommend that other states NOT implement? Why?

Can't think of any (2).

I can't think of any. Some of the things we talked about might have been risky, but we didn't have time to get into them. Look at cost-benefit of the proposed actions..

I don't know of anything. Its all good, it's just that it could be better.

Nothing, really. About the only thing I am critical of is the brochure—it should be more state-specific and should be a little more "user-friendly." The current design (the inserts especially) will require a lot of maintenance, and knowing state government, it will be difficult to make it work efficiently.

Question 7. Amount to which you agree or disagree: The DNR and its partners produced and distributed more outreach materials on furbearer management during this project than it would have if it had not been a pilot state.
1 2 3 4 5 (Where 1 = strongly disagree and 5 = strongly agree)
Mean = 4.4

Comments:
They would not have produced a brochure. Articles in the Focus magazine, BOW article.

The brochure we would not have produced. The messages were good. It gave us some impetus to make trapping more prominent in our guide than before.

The state got 1,000 brochures, and I have seen 4 of them so far. I never got them. I just e-mailed Jon Marshall a day ago to remind him again.

Without being involved in this project, we would not have produced anything. Participation in trapping is down, and the squeaky wheel gets the grease.

We put out some stuff.

Question 8. Amount to which you agree or disagree: The [State] agency and its partners were able to raise the awareness of furbearer management issues within the agency because of participation in this project as a pilot state.
1 2 3 4 5
Mean = 4.0

Comments:
They reached certain people that wouldn't have been reached otherwise. Hopefully this trend will continue.

The folks directly involved got a tremendous rise in awareness, but across the agency, there was not even recognition that we were involved. But the info that has flowed out is higher, so there is more awareness. Larry' passing had an impact..

They were able to raise awareness within the agency just fine. But that's not where we need it most.

We've made great strides in this arena. At the agency meetings I have attended, people do bring up the trapping issue now.

We've got good ideas that we haven't implemented yet, but we will. I was able to use this info to help get people to go to the trapper college.

Question 9. Amount to which you agree or disagree: The quality of the outreach materials produced and distributed by the [State] agency and its partners was improved as a result of participation in this project.
1 2 3 4 5
Mean = 3.6

Comments:
There weren't any before, so I agree with this statement. Other stuff was outdated.

The inserts were not IN-specific. What is that turtle doing on there?

It was better than nothing, but there is room for improvement.

The Team had good input in the stuff we produced. Made it better.

Question 10. What advice would you give another state agency that was preparing to increase its furbearer management outreach efforts?

They should look at the target audiences and design specific messages and use media that are most appropriate for each audience. These are the most important aspects.

Consider all the research on message testing and if you think your constituents might differ, do your own testing before launching an involved campaign.

The outreach team should at least have a third of it by trappers with actual trapping experience, and preferably more than that. Ours in IN was weighted way too heavy with agency people.

Get as large of a group as possible to participate on the committee from the start. Involve the Furtakers, trappers associations, educators, agency people, enforcement, etc. Even the more radical groups, so to speak, because they tend to spur you on sometimes. Get everyone involved from the very beginning. A committee of 7-8 committed people would be great.

Follow the outreach strategy. It has been tested. It is better than doing stuff from the seat of your pants. The materials will really help your efforts.

Question 11. Overall, was participation in the Furbearer Management Outreach Pilot Project a positive experience? How did it help/benefit [state]?

The Heritage Program is biggest benefit from an educational perspective. I can't wait to see the results.

It was very positive. In the short term, it has raised awareness. That will benefit us as we review our furbearer mgt program since Larry passed away. We will reevaluate the program. We have not determined what we will do with his position. This project will help us determine what to do with the program.

It was positive, but it was too little, and didn't meet its potential for reasons I've already mentioned.

Yes. 5. I liked the discussions and working with other members. Anything that is done to give this issue attention is good. It benefits everyone. It s great that IAFWA is interested—gives it legitimacy at the upper levels of the agency.

It was very positive. It opened my eyes to a lot of things I didn't realize before. We have some quality materials to put out because of it. We have better info when we're called upon to talk to the public.

Question 12. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want trappers, the state trappers association, and furbuyers to know about the BMP process currently underway.
1 2 3 4 5 (Where 1 = not achieved at all, and 5 = completely achieved)
Mean = 2.6
[Note: The Outreach Team spent relatively little effort on this objective, concentrating instead on higher priority actions. Therefore, the low ranking does not indicate that the actions identified do not work, but rather that not enough of the actions were implemented to achieve the objective.]

Don't know

There is an awareness probably, but maybe not a result of this effort. The trapping orgs have done this, not the DNR. Larry was the only one who understood the BMP stuff.

It was not achieved. Trappers are still totally in the dark about BMPs.

We tried to achieve it, but I'm not sure how well we did so far. A lot will be based on our follow through after the formal project is over.

We could have achieved this better if McIlvaine had showed up more at the end of the project. We also lost momentum when Larry passed away. He handled the BMP stuff.

Question 13. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want trappers, the state trappers association, and furbuyers to support the use of the BMPs. 1 2 3 4 5
Mean = 2.2
[Note: The Outreach Team spent relatively little effort on this objective, concentrating instead on higher priority actions. Therefore, the low ranking does not indicate that the actions identified do not work, but rather that not enough of the actions were implemented to achieve the objective.]

Don't Know

Same as #12 (2).

We've made it known and laid some groundwork, but haven't completed it yet. This will depend on future efforts.

I didn't think that McIlvaine really supported BMPs, or at least he didn't want to support BMPs until he knew more about them. After Larry passed away, we lost our ability to bring him around.

Question 14. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want the state agency to develop and implement outreach strategies that will build both the external support and the internal support needed to maintain regulated trapping as an important part of agency management programs for furbearers. 1 2 3 4 5
Mean = 3.6

We're not complete, but we've made a lot of progress.

We've had some impact on awareness within the agency. It came up at our annual conference – a few folks came up and asked about it—wanted to keep it going. I spoke about it at the annual conference..

The internal support is being achieved, but not external.

We've made progress, but we're not there yet.

We are a lot more aware at central office of what we need to do in the future. We will implement a lot of this stuff by sending their people to the trapper college. Realize it is important stuff.

Question 15. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want wildlife professionals in the state to understand the need for regulated trapping—recognize the value of trapping to society and the environment. 1 2 3 4 5
Mean = 3.8

They've been supportive in the past—don't know how much we've moved them from previous position.

We did a good job with internal wildlife people, but maybe not with external audiences. Reviewing the brochure was good outreach

Agency people are hearing the messages.

We directed a lot of effort toward them. They will make or break the whole program. It's critical.

Same as #14.

Question 16. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want wildlife professionals in the state to proactively pursue opportunities to communicate to the public the difficult choices that wildlife professionals face related to furbearer management, the benefits of regulated trapping, and BMPs with the non-trapping public. 1 2 3 4 5
Mean = 3.25

They haven't done much. This has gotten worse since Larry passed away.

I don't know there has been a big increase in that communication right now, but I think we are laying the groundwork for that, especially as issues and hotspots come up. It will have a positive effect over time.

I'm not in the DNR, so I can't say. They probably will be encouraged to do more than they have in the past.

The people who got the brochures know what we want of them, and they are probably more likely to pursue activities. Were not all the way there, but we're moving in that direction.

We've done it through the Trapper's College, and with Marshall, educating property managers as to what trapping is and how it's done.

Question 17. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want the "general public" in the state to accept regulated trapping as a legitimate activity—a humane use of renewable resources and a valuable management to that benefits society in many ways.
1 2 3 4 5
Mean = 2.4
[Note: The Outreach Team spent relatively little effort on this objective, concentrating instead on higher priority actions. Therefore, the low ranking does not indicate that the actions identified do not work, but rather that not enough of the actions were implemented to achieve the objective.]

They haven't done much with the public except with the heritage program.

It will be a cumulative process. IT will need to mature over time. One pilot project is not going to have a whole lot of impact immediately, but over time we should see improvement.

Not achieved at all.

We didn't direct too much effort at the general public, but we're laying the foundation with our agency people first.

Marshall has done some stuff – as best he can. We could do a lot more with the general public, but a lot of our people wouldn't want to work with the general public. They'd rather just work with hunters because they pay the bills.

Question 18. To what degree do you think the overall purpose of the Outreach Strategy was achieved?
To maintain the regulated use of trapping as a safe, efficient, and acceptable means of managing and harvesting wildlife for the benefits it provides to the public, while ensuring the welfare of wildlife.
1 2 3 4 5

Mean = 2.8

We made some progress and opened some communications. But still have a long way to go.

It's hard to say or to measure in a short period of time. We didn't really deal with the BMPs issue. We don't have an understanding of it internally, especially now that Larry is gone.

It's basically the same as it was before.

We took steps forward, but we have not achieved this purpose. This is a tough question.

We've done a lot, and will continue to work on it in the future.

Other Comments from the Indiana Team:

There was a group in MI that did urban deer video. Pro and con. Well done. Shane Mahoney narrated it. Maybe work with them on a furbearer mgt piece.

Even though it was a structured pilot, we don't see it as ending now. We will continue to look at the action items and keep working on things as we go about our regular business. This is a key to making this stuff work for other states. This will also help in strategic planning efforts. When we do have someone come into Larry's position, this will really help give direction.

I brought up a proposal early on, that I thought we should compare trappers to animal control agents in cities. City folk understand cat and dog control; this would help people understand trapping. This idea was never pursued. Most people that are against trapping are city dwellers—this comparison would help them understand. The team had not tested it to see if it was acceptable, and I think they dropped the ball on it.

Glad I got to participate. It was time well spent. Helps me with ideas on direction to go with trapper ed program. I hope that we will follow through on these strategies. Maybe there should be national standards for trapper education like there is for hunter ed and boater ed. In the future, I hope to have alternative delivery and all the other tools that we have for hunter ed. There may be more opportunity for trapper ed applications than for any other of the courses. We need a standard, acceptable way to get this info out.

Appreciate the opportunity to participate in the Pilot project.

Note:
Glenn Lange was on the Team but did not feel qualified to give an interview. He said he came to the first meeting, but after that, he had the other staff handle the project. Overall, based on reading the materials that we have sent out during the project, his assessment is that we have laid some groundwork and are planning to continue working toward implementation of the outreach strategy, but he doesn't think we've made too much progress yet.

Wisconsin Outreach Team

Keith Warnke, Upland Wildlife Ecologist, Wisconsin DNR
John Olson, Furbearer Ecologist, Wisconsin DNR
Jeremy S. Peery, Conservation Warden, Wisconsin DNR
Deborah Beringer, Chief Naturalist, Wisconsin DNR
Rick Tischaefer, President, Wisconsin Trappers Association
Scott Loomans, Aid for state legislator
Scott Craven, University of Wisconsin-Madison
Susan Gilchrist, Wildlife Education Research Specialist, Wisconsin DNR
Ed Harvey, Chairman, Fur Harvest Committee, Wisconsin Conservation Congress [no interview]
Brian MacMillan, Manager, U.S. Wild Fur, North American Fur Auctions, [no interview]
Tom Hauge, Director of Bureau of Wildlife Management, Wisconsin DNR [no interview]
Paul Holtan, Editor of DNR News and Outdoor Report, Wisconsin DNR [no interview]

Question 1. What is your level of involvement in furbearer management issues in general?

I had only minor involvement.

I was highly involved in furbearer management issues even before the project. I am the furbearer specialist for the state. I coordinate the management and research efforts of furbearers. I also work with harvest data and the trapper education program. I am the liaison with WTA—work very closely with them.

I'm the liaison for the DNR law enforcement bureau. In other words I'm a game warden.

I'm not in the wildlife dept per se. I'm in state parks. The way I'm involved is in the state park association, part of the DNR, and these issues can be woven into what we do.

As president of the state trapper's association, I was involved in the cooperative trapper-ed program with the DNR, sat on the wildlife policy teams that the DNR has (They talk about furbearer mgt program in specificity). I was also the conduit between the trappers and the DNR.

I was highly involved, as a trapper and a former DNR employee. I was the assistant furbearer ecologist 4 years ago.

Very low. As an extension specialist, I can tell you that people don't call extension specialists regarding those issues that are perceived to be close to the DNR. They make their contact with the DNR instead. He gets 20x the number of calls on mice than he does on deer or trapping. Trapping has been a low profile issue in WI. Part of this was on purpose. He got very few calls on trapping issues. He got plenty of calls on furbearers, like coyotes or muskrats in dikes, etc.

I had only minimal involvement. Several years ago I conducted focus groups of teachers. What are you willing to use in schools related to hunting/fishing/trapping, vs. what DNR wants you to do. I have also done storytelling in period clothing at rendezvous in my personal life.

Question 2. What was your level of involvement in this outreach effort?

Only minor involvement.

I was a committee member on the pilot team. I was the person who recommended which other people to bring onto the committee, and I got commitments from those people. I was heavily involved.

Basically, to oversee and make sure that the laws were being enforced and some of the suggestions we came up with were consistent to our law enforcement goals and objectives.

I was more of a source of information rather than a doer; more of a coordinator. I provided some leads for training and conference opportunities for the furbearer folks and my own naturalist staff.

I was on the Outreach Team. I informed the trapping community of the BMP and the outreach efforts. I had a lot of interaction with the others on the team, and got the information back to the trapping community.

I was on the committee. Participated in discussions with DNR prior to the project and went to 1 Team meeting.

I participated in the first few meetings when we put together the strategies. I enjoyed it and got a lot of benefit out of it. The things that were tasked to me were relatively few. I didn't have much involvement. I tried to comment on drafts, etc., but not much more than that.

Not as intense as some others. I went to Team meetings and reviewed things. I tried to help John Olson reach educators by helping him apply to make presentations at conferences where educators were present. It didn't work out. Teachers weren't interested. The teachers I talked to were supportive of fishing, mixed on hunting, and almost all opposed to trapping. The only way they would include it would be as part of WI history. They also said they might present it as a controversial issue-and present both sides.

Question 3. To what extent did you and the other members of your Team use the Outreach Strategy to guide your day-to-day efforts?

The day-to-day efforts of the Outreach strategy are important because the messages developed thru this effort are important to me in doing the entire outreach effort.

We used it a lot to guide the direction of the trapper education program. The whole effort has given us a target for how we will change it over time. Opened our eyes to a greater need to communicate with the different user groups we have. In developing our mailing list, we have identified the different groups. Makes it a better tool for the future.

I didn't use it very much. I did use it on a couple of public relations talks I had to do to sportsmen groups.

I've got staff that attended the first school, which was a five-day course. In that way they used the knowledge and skills on their jobs as the opportunity arose with requests from the public. The other way was through John Olson's efforts to get more resources out there for outreach to use, like pelts, rubberized tracks and scat.

We always considered it because we were always looking for ways to do our business better and communicate to the public the things we can do for them. It was an eye-opener. The plan made it easier for us and shed new light on how to do it better.

I used it to a limited extent. I can think of one case where we used it to guide us when the natural resources committee was looking at a rule that pertained to trapping issues. It helped us know how to respond to public questions that arose.

Not at all, in my case. There just wasn't the need for it.

There wasn't much in there that applied specifically to me, so I didn't use it much personally. I think others on the committee used it a lot and made efforts to do more outreach than they did previously, and used the strategy to guide their efforts. It helped to have a focus for the messages we wanted to convey.

Question 4. Would you recommend that other states use the "model" outreach strategy to help guide their furbearer management outreach efforts? Why or why not?

Yes, I would recommend that other states use it because it incorporates focus groups and well-structured message development testing. It follows a communication plan, and a message-delivering plan. It also provided for message saturation, which is important in getting your message out.

Yes. It has identified our strengths and weaknesses and showed us where to focus our limited resources.

Absolutely. Why or why not? The sport of trapping is constantly under fire by other organizations and it is imperative that we have sound scientific research and documentation.

Yes! Truthfully I'm not sure a "model" has been developed. I don't know if the results have really been assessed. It's always good to do some internal analysis and external analysis to develop a strategy.

Absolutely yes. It's a must to survive in this day and age. If you're not using this strategy and working on the actions in it, you've already lost the battle.

Yes I would, based on what I know so far. It seems like it can provide good direction to your efforts.

I think it's a good model. If the state is struggling, it's a good starting point. There are some states that don't have the same clientele that WI has. It might be more problematic in some states than it is here.

Yes. I don't remember the specifics of the model strategy vs. our WI strategy, but if the model is adjusted based on what we learned in the pilots, it would be worthwhile for other states to use it as a place to start.

Question 5. Of all the things you and your Team did during this project, which actions stand out in your mind as being particularly effective? Why?

The way that the messages were developed, and Dave's overall program for defining and developing messages. That's something that agencies as a whole just don't get.

The formal focus groups were very insightful. They were a powerful example of the level of public knowledge and positive opinion. They reinforced our strong efforts toward more public education – getting more info out to the public. We have been limited because of our limited knowledge of traps, etc. Now with BMP research, we have much more data to fall back on. The committee members were so diverse, we brought in a lot of different abilities and expertise. It worked well to go outside our world to bring in people from industry, legislative arena, trappers assoc, research, etc. The brochure is very positive, although it could use reworking.

Probably the development of the brochure. That is a tool that potentially every single member of the public would have an opportunity to observe.

I can think of one of the things, probably two things. One thing is to have the brochure standardized with accepted terminology, but it needs tweaking. In concept, the brochure is good, but it needs quite a bit of redesign and editing if the target audience is the general public. The other thing that I think is important is the fur school opportunity. Why? Everyone walks away with a broader understanding of issues.

Learning the results of the focus groups and making use of them in everything we do. These results were very eye opening. We changed the way we communicate and the actions we pursued based on the research results. We thought everything we were doing was great, but after seeing the results, we changed a lot of things. This made a big difference and made us more effective. Having diverse skills and interests on the Team was also a big positive. Many different types of people, talents, etc.

I can't answer that. Wasn't involved closely in implementation.

I can't answer that. As I think back on the actions, they all had the potential for great merit, but since I left my extension position, I have not been tuned into the feedback, so I don't know if any of them worked or not.

I like the idea of developing key messages and clarifying what we want to convey to people and how to best say it. The next step is how to reach people with those messages. I think the wallet card is actually an innovative idea. Get the messages to people who may have the most opportunity to speak to the public. I wasn't too pleased with the brochure. It was not nearly specific enough to Wisconsin, although it is a good idea to have a brochure. Reaching educators is a good idea, but we haven't found the right vehicle to do it yet. If we had some concrete materials to give teachers (like the IN Heritage stuff), they might use them. Scott Craven's radio programs were good, and Scott Loomans did some good legislative work. This project reminded us that we need to be more visible on this issue.

Question 6. What specific actions (if any) would you recommend that other states NOT implement? Why?

None come to mind right now. I would really think that they should not implement the message that trapping is necessary to control wildlife diseases. I just don't agree with that, but that is a minor point.

The roles and responsibilities of the committee and members need to be cleared up from the beginning. I thought the committee would be more advisory, not action-oriented. I used that to coerce people to serve on the Team. Then they had to do the work.

I don't think that there are too many things at all. Everything we did related to our overall objective.

Can't think of any.

Can't think of anything. Everything made a positive difference, regardless of how big or small.

I don't know of any.

Can't think of anything.

None. We didn't get on the agenda at educator conferences, but that doesn't mean we shouldn't have tried.

Question 7. Amount to which you agree or disagree: The agency and its partners produced and distributed more outreach materials on furbearer management during this project than it would have if it had not been a pilot state.
1 2 3 4 5 (Where 1 = strongly disagree and 5 = strongly agree)
Mean = 4.6

Comments:

If we wouldn't have had the structure of the committee, assignments, follow-up, etc, things would not have happened. They probably could have had a few more meetings, but it's difficult to know when enough is enough.

Furbearer management is a topic that other states do not take as seriously as WI does. Our brochures needed updating pretty bad.

I don't' know that all that much was actually produced. The majority of the work is yet to be done. A lot of it is tied to money. No one has the budget.

We were doing a good job, but this outreach effort made it even better.

I know they put out more materials than they had prior to being part of this project.

I don't know what they would have done if they had not been a pilot state, but it probably made them do more. They wouldn't have done the brochure or wallet card otherwise.

Question 8. Amount to which you agree or disagree: The agency and its partners were able to raise the awareness of furbearer management issues within the agency because of participation in this project as a pilot state.
1 2 3 4 5
Mean = 4.0

Comments:

I don't think that the effects of the awareness of furbearer management have been realized yet within our agency. That is part of our target objective.

We did that, but we could have done more. Our efforts have made a fair number of agency people aware, but not all of them.

That says it all right there.

I know of an article in an internal pub and of wildlife conference publications. But, I don't really know of anyone outside of wildlife that would know about it.

No comment. It speaks for itself.

I saw people from other DNR bureaus participating in the issue—they wouldn't even be exposed to it if not for this project.

There was good discussion with agency people. The professionals were reached, but I don't know about the general public.

I don't know for sure, but Jen Patterson's article was probably read by a lot of people in the agency. People who go to the fur school certainly get additional awareness. Simply having the committee and having it contain a broad-cross section of agency people raised awareness as well.

Question 9. Amount to which you agree or disagree: The quality of the outreach materials produced and distributed by the [State] agency and its partners was improved as a result of participation in this project.
1 2 3 4 5
Mean = 3.9

Comments:

I agree with that.

Diversity of people on the committee enhanced the things we did. Made us more efficient and effective.

We need to individualize the brochure to meet the WI objectives.

They do a pretty good job on their own. The project may have helped a little.

Any product that is circulated to a group of professionals like the outreach team is a lot better because of it.

I don't know enough about what was produced before the pilot. However, we came out with some materials that weren't there before, so that counts for something. I'm sure the fur school was great beforehand, but it was probably even better after having the pilot.

Question 10. What advice would you give another state agency that was preparing to increase its furbearer management outreach efforts?

Develop a good plan and stick to it.

Get all the basic research done as much as possible. Have strong baseline data. Develop a network of user groups to communicate with. In WI, they have the Conservation Congress that represents the public. They have a good relationship with the Congress. They used that structure to get support for the BMP process. Other states would need a network of user groups. If they develop education products, do fewer that are of high quality instead of a lot of lower quality stuff. Attract and impress people with quality, don't baffle them with BS. We've done that in the past. Low-quality stuff serves a purpose, but doesn't represent the agency well. Compare that stuff to the brochure. It considers today's issues, in a modern look. Their traveling display is similar. It has won awards, is traveling all the time.

Just to be sure they have sound scientific documentation on everything that they do.

I think some of the most important things are staff training and giving them the resources to spread the word themselves. We need to have pelt collections, track collections, and teacher aids to broaden their awareness beyond slide shows. But slide shows are a good resource too, for certain venues. We need training and the resources to carry it out.

Have a very open communication line with state trappers association or the trapping community. Probably only about one third of the states have this right now. WI didn't used to have it before 1992. I became president and convinced the rest that we needed to change how we were doing business. We opened a line of communication with the DNR and the legislature. We worked hard to develop mutual respect. Got the trapper education program going, worked with legislature to make it mandatory. The trapping community must be proactive—work with the state agency and the legislature. Include professional educators and communicators on the Team. Have the attitude that they want to make a positive difference. In order to effectively pass this information on to other states, you need a traveling salesman to describe what happened and "sell" it to the states, instead of just sending a package. At least have contact info for people who have been involved in the pilot efforts. Use pull quotes from appropriate people to make it more real to the target audiences in other states.

Its important to do it, but don't tell people that trapping is necessary to control the critters. There is nothing wrong with just trapping for enjoyment. Many states fall into this trap. The trapper's association in WI was at fault, and the DNR to some degree. Then when things like the dove hunting bill come up, we have to go back to the Assembly and the public and re-educate them on this issue. Sometimes we have hunting and trapping because we can, not because we need to.

It's a good idea to do so. It must be done with a lot of sensitivity and caution. First, look at what others have done and build on their efforts. There are good materials out there and they shouldn't reinvent the wheel.

I like the idea of having an inter-disciplinary Team, so not everybody on the Team is coming from the same background or ideology. This will result in a better product in the end. Don't necessarily include opposition, or you may not get anything done, but it should not all be like-minded people. Work internally in the agency as well as outreach to the general public. The DNR employs a lot of people, and they interact with the public a lot, so they need to be educated about how to respond to the public on these points.

Question 11. Overall, was participation in the Furbearer Management Outreach Pilot Project a positive experience? How did it help/benefit Wisconsin]?

It was a positive experience. It benefited our state because it gave us increased exposure to the types of things you have to go through in order to develop a message and a communication plan that would resonate with the public. It

also gave us a chance to identify some areas of weakness. The end result was a communication plan and a carefully crafted message.

Yes. It was positive. It was painful at times, because of all the new work they identified that needed to be done, but it gave them an awareness of where were at, at where we want to go. Now we have a targeted approach.

Sure. It opened up more of our department employee's eyes that trapping is a legitimate activity worthy of being protected.

Yes, I think an eye-opener was having the huge task list generated for outreach efforts. I think it showed there were almost endless opportunities to get the word out if we had the staff and budget to do it.

Yes it was. Having key people on the Team allowed great communication and allowed people to carry the information throughout the state. Made the information go a lot further.

Yes. No comments.

Yes. – I had very little involvement in these issues otherwise, so it was very enlightening to me. My assistant went to the fur school and thought it was just great. I wish I could have attended. My perception is that there was some very good work done because of this project.

Yes. No comments.

Question 12. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want trappers, the state trappers association, and furbuyers to know about the BMP process currently underway.
1 2 3 4 5 (where 1 = not achieved at all, and 5 = completely achieved).
Mean = 4.3

Comments:

We achieved that fairly well.

Through the hard work of Rick Tischaefer and his media work, trappers are very aware of the BMP process in Wisconsin. If you are a Wisconsin trapper, and you do any reading at all, you cannot help but know about the BMP process.

Five for the trapping community, three for furbuyers.

I can't answer it. I suspect we achieved it pretty well, but I don't have enough information to say for sure.

I think they've started this process, but need to revise the brochure, produce the wallet card, and do more.

Question 13. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want trappers, the state trappers association, and furbuyers to support the use of the BMPs.
1 2 3 4 5
Mean = 4.0

Comments:

We received a formal endorsement from WTA and other organizations in WI.

I don't have an answer for that.

Five for trapping community, three for furbuyers.

I think most of them are supportive. I heard trappers speaking in favor of BMPs at our last meeting.

I can't answer that. I've seen anecdotal info to suggest that they do support it. But I can't be sure.

In general, they are supportive, but they may have been supportive before this project. I don't really know what their attitudes were before we started. Rick Tischaefer is a gift to Wisconsin, because he works so closely with the DNR and the trappers.

Question 14. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want the state agency to develop and implement outreach strategies that will build both the external support and the internal support needed to maintain regulated trapping as an important part of agency management programs for furbearers. 1 2 3 4 5
Mean = 4.0

Comments:

We did a lot, but there is always something else we could do. There are items in the Outreach Strategy that need to be completed.

But it was already legal in WI, not as a result of the Outreach Strategy. I would like to think that the outreach strategies have helped promote that, though.

It will just get better over time. The systems are in place.

I haven't seen too much evidence of going to the general public yet.

Agency has done a good job.

Some progress has been made, but more needs to be done. It is an ongoing struggle. Attitudes will only be changed slowly, over time.

Question 15. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want wildlife professionals in the state to understand the need for regulated trapping—recognize the value of trapping to society and the environment. **1 2 3 4 5**
Mean = 4.1

Comments:

I agree somewhat.

This has been achieved to some degree, but the pilot was so short.

It's a work in progress. It still remains a goal. People are changing all the time. It's a journey. We have a program in place to see that this happens, but it is never fully achieved.

We've done a good job with wildlife professionals in Wisconsin.

Most of the wildlife professionals probably already understood the need for trapping before this project. There were a lot of women in the fur school I just attended, which was a bit of a surprise to me. I'm not really in a position to know the answer to this question. But the things in the pilot had to have had a positive impact.

Question 16. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want wildlife professionals in the state to proactively pursue opportunities to communicate to the public the difficult choices that wildlife professionals face related to furbearer management, the benefits of regulated trapping, and BMPs with the non-trapping public. 1 2 3 4 5
Mean = 3.8

Comments:

[No rating] I can't assess that. I think that is really ongoing right now.

We've done a good job, but there is more to do. We get two dozen people in the fur school each year. Testimonials show that they are using it in everyday work. They need to get it in front of more people. Have reached those with strong interest. Now need to get it to more people.

I can't answer because I'm not in contact with wildlife folks enough to know what they've been doing.

John Olson has a pretty good handle on this. We are getting better all the time.

I haven't seen much work with the non-trapping public yet.

I understand the need for this, but I don't have any evidence to suggest that it has been done (or not). Since changing my position, I have been out of the loop.

We've made progress on this front. Rick Tischaefer has communicated with the trapping community. The fur school is very successful and effective, and presumably those people will be out there communicating, either formally or informally.

Question 17. Degree to which this objective was achieved: Through implementation of the Outreach Strategy, we want the "general public" in the state to accept regulated trapping as a legitimate activity—a humane use of renewable resources and a valuable management to that benefits society in many ways.
1 2 3 4 5
Mean = 3.3

Comments:

[No rating] Those results still remain to be seen. I can give no assessment at this time. I think it is probably going to work, but we need to monitor the effects over the next couple of years.

We have worked on it, but we have a long way to go. We will make it a goal. We were very impressed with the focus groups-how people thought of trapping. It was much more positive than we thought it would be. We look forward to seeing if the phone survey results are similar.

This hasn't been tested, so I can't really say one way or the other. It's legal right now, but who knows?

It's a work in progress. We are making great strides. Won't ever be done.

We're doing quite well, but this is a tough job and will take a long time.

I have no evidence to suggestion that this has been accomplished (or not). I simply don't know.

I'm not sure what we've done to reach the general public, except for the radio show and the brochure. Just picking the messages and having in mind what we want to convey will eventually reach the general public, but it is a long process. This pilot has developed the means to do this, but we haven't actually done much of it yet.

Question 18. To what degree do you think the overall purpose of the Outreach Strategy was achieved?
To maintain the regulated use of trapping as a safe, efficient, and acceptable means of managing and harvesting wildlife for the benefits it provides to the public, while ensuring the welfare of wildlife.
1 2 3 4 5
Mean = 4.0

Comments:

I don't know if this is a question that I can adequately answer right now. In 3-5 years we will know whether or not the agency followed through.

We just got the BMPs done. That is the introduction to the book, so to speak. It is a great foundation, and it was a critical step we needed to take before we can start chapter. They are working on their DNR policy this spring. It is risky, but because of the BMPs and outreach project, we are willing to take the risk and open it up to improvement.

Since it is still legal here.

Its great!

We're on the right track, but DNR and its partners need to stick with it over the long term.

I don't know. It was a step in the right direction, and it had a huge impact, but I don't know to what degree this overall purpose was achieved.

Hard to say. I don't know what's happening in the legislative arena, etc. Everything we did was working toward that direction. The process was begun. You're asking about our long-range goals, not our short-term objectives.

Other Comments from the Wisconsin Team:

The current DNR policy on furbearer management is archaic, poorly focused, etc. This project has enabled them to change it for the better, to fit today's world better. Other states should create a steering committee or outreach team. If a state does this, they should look outside the agency—get key people from different walks of life. It can be cumbersome at times, but it produces results they could never get otherwise. They didn't pick any anti-trappers. They picked people to be creative and supportive. It made it easier to work with that way. Was it the right way? He doesn't know. Maybe having Audubon or other protectionist groups on the team might have made it more palatable to middle America-he's not sure. The committee created a lot of good ideas and represented mainstream values, etc. Don't try to produce results overnight. Make your team viable for the long term—maybe even make it a standing committee with representation that would cycle over time. WI might do that.

I feel that so many your questions were trying to attribute results to the strategies that are in the action plan but not enough time has passed and this has not been tested so I don't know if anyone can accurately answer those questions. I think that everything you asked are things we are striving for but truly we don't know if the outreach strategies have had an impact beyond staff knowledge. Who could say without doing a test? We are continuing, John Olson is continuing to run the one school which has been filled to capacity for every class, so that tells me there are a lot of people out there who have not had the training yet.

Hire DJCA – they make things happen.

I recommend that other states try to figure out how to get involvement of appropriate committee staff from their legislatures on the Outreach Teams. This is very tough to do, but it can be extremely beneficial.

I'm glad I was a part of the Team. I learned a lot and it was a great group of folks to work with. I hope I can continue to work on achievement of those goals in the future. I will try to keep it moving forward in the education circles. I'd like to learn of the long-term effects of this pilot. It was a good pilot, but it was just a pilot—now we need to share what we've learned and keep the whole thing moving forward.

Appendix D. Pilot State Outreach Team Accomplishments (As of May 1, 2001).

Following are major actions from the state Outreach Strategies that the Pilot states (Connecticut, Indiana, and Wisconsin) were able to accomplish during the project.

Connecticut

"Trapping Connecticut" brochure.
The Team developed layout and text for a customized brochure (in addition to the "generic" brochure developed by IAFWA).

BMP slide program.
The BMP program was converted to PowerPoint format and made available for use.

Furbearer Workshop.
The Team worked with D.J. Case & Associates to develop and deliver a workshop to staff from the wildlife and law enforcement divisions of the Department of Environmental Protection.

Leadership Workshop.
The Team worked with D.J. Case & Associates to develop and deliver a leadership workshop to staff from the Department of Environmental Protection.

Provide ongoing updates to trapping leadership.
Several members of the Team have ongoing assignments to provide these updates as appropriate. In most cases, Team members are placed on the agenda at the spring and/or fall meetings.

Slide-tape/video for hunter education training.
The Team worked with D.J. Case & Associates to complete a customized version of this video program that is available to all state agencies through IAFWA.

Visual aids for hunter education courses.
The Team is working with hunter education instructors to identify and develop needed materials.

Persuade hunter education instructors to use trapper education instructors to teach the trapping portion of the course, and persuade trapper education instructors to participate in hunter education courses.
The Team is continuing to work in hunting/trapping education circles to increase the participation of trapper education instructors in hunter education courses.

Presentation at annual hunter education and trapper education instructor meetings.
The Team is developing special workshops to deliver furbearer management and BMP information to hunter and trapper education instructors.

Presentations to periodic meetings of animal control officers.
The Team makes these presentations on an as-needed" basis.

Meet with wildlife professors.
Representatives of the Team met with appropriate wildlife and fisheries educators to inform them about furbearer management and BMP information.

Furbearer management mini-course.
This was accomplished in Massachusetts in 2000. It will be presented in Connecticut if students show an interest.

Presentation to Environment Committee (state legislature).
Legislators asked questions about furbearers, beaver control, traps, etc. This will be continued as needed.

Presentations to key fish and game clubs.
This is done as needed or requested. Has been occurring about every other year.

Booth at hunting and fishing show.
This is an ongoing action.

Information in aquatic education program and Women in the Outdoors programs.
Information on furbearer management and trapping is provided on an ongoing basis.

Make presentation at quarterly meeting of Connecticut Outdoor Writers Association.
These presentations are made upon request.

Indiana

Develop a brochure.
The Team developed draft brochure text and submitted to IAFWA. After IAFWA redesigned the brochure to make it useable by all states, the Indiana Team drafted text for the customized inserts that fit into the back panel of the "generic" brochure.

Direct mail brochure and cover letter to key audiences.
The Team developed a list of target audiences for the initial printing of 1,000 brochures. The Team also developed a brochure evaluation form to be sent out with the brochures. Responses to the evaluation forms that were returned were compiled and included as part of the project final report.

Develop a series of articles that can be included in newsletters/publications.
Team member Jon Marshall wrote an article that was published in the Becoming an Outdoors Woman newsletter (Vol. 6, No. 3). Articles were also sent to 3 national trapping magazines.

Provide information through "Becoming an Outdoors Woman" workshops.
The May 2000 workshops included segments on trapping. It included an activity where participants made a fur hat. This was extremely popular—one of the highest rated activities of the entire workshop.

Provide information at State Fair Cookout.
The DNR and the Indiana Trappers Association had people working the game cookout at the State Fair. They served Beaver barbecue and answered questions from the audience. The DNR had a table of animal parts, etc. Will try to expand this to include furs, traps, etc.

Distribute timely information through F&W Division "Wild Bulletin."
Trapping season dates and bag limit information is provided through this electronic newsletter.

Provide information in hunting/trapping guide.
A trapper was featured on the cover of this DNR publication in the 2000-01 season edition.

Provide information to trapper education instructions on how to improve as instructors.
Sessions on trapper education are being added to the annual DNR Hunter Education Academy. Trapper education instructors are encouraged to attend to learn teaching effectiveness strategies.

Provide information on trapping at annual DNR biologists meeting.
Team members took trapper education and hunter education materials to the "show and tell" session of this annual meeting.

Provide information for seasonal and full-time state park naturalist training sessions.
The brochure was provided to naturalist trainers for inclusion in their program.

Provide information through the state park naturalist's newsletter.
A full-page article on beavers and trappers was published in the newsletter.

Animal Damage Control permit holders – training requirement.
The DNR is working on an administrative rule that will require ADC permit holders to pass a test in order to receive their permit. The test would assess knowledge and understanding of proper trapping techniques and BMPs.

Distribute information through wildlife conflicts hotline.
Information on trapping was sent to operators of the hotline. Brochures will also be provided to the hotline when they are printed in bulk.

Make presentation at Purdue University Veterinary School.
DNR furbearer biologist made presentation to freshman class.

Encourage hunter education instructors to include a trapper education module in the course. Developed a "generic" trapping video for use in hunter education courses. Indiana will encourage its use.

Make a presentation to the Hoosier Outdoor Writers annual meeting.

Implement and evaluate an Indiana wildlife heritage program for schools.
A pilot program has been implemented at 12 schools in Indiana. It features trapping as one of the elements of Indiana's wildlife and historical heritage to 4th graders. Pre- and post-workshop evaluations were administered to students to determine what impact the information has on their opinions/attitudes about trapping and hunting. Results of the evaluations will be part of the final report of the Outreach Project. Indiana Team member Warren Gartner is co-presenting a session on trapping education with Wisconsin Team member Susan Gilchrist at the Midwest Environmental Education Conference in October. He is also presenting the program to the meeting of state Project WILD Coordinators in Wyoming in June.

Develop a special insert on trapping for *WOW Magazine.*
Team spoke with editors at Wild Outdoor World magazine about the concept. Initially lukewarm about it, after further discussion they agreed to review a draft article. They sent the Team guidelines for authors.

Wisconsin

Develop a brochure.
The Team developed draft brochure text and submitted to IAFWA. After IAFWA redesigned the brochure to make it useable by all states, the Team drafted text for the customized inserts that fit into the back panel of the "generic" brochure. Conducted an evaluation of the generic brochure among target audiences. Based on feedback, currently preparing to edit the generic brochure for distribution of 10-20,000 copies among various target audiences.

Make presentations to key audiences.
The Team has used 3 slide shows to make presentations about furbearers: 1) BMP protocol slide show for internal audiences; 2) Raccoon BMP slide show for trappers/internal audiences; and 3) the IAFWA's BMP slide show.

Direct mail information to target audiences.
The Team has distributed the initial print run of 1,000 brochures that it received from IAFWA. Based on feedback, there is a need for 10-20,000 additional brochures. They plan to revise the brochure and send it out in large quantities.

Get Position statements/official endorsement of trapping and BMPs from key organizations.

Position statements/endorsements were developed by the Wisconsin Chapter of The Wildlife Society and the Wisconsin Trapper's Association. The Natural Resources Board is holding public hearings in April/May and will probably act on the issue by June 2001.

Conduct 1 or more public radio call-in shows on trapping and BMPs.
Trapping is part of a monthly 1.5-hour statewide radio program conducted by University of Wisconsin professor Scott Craven.

Publish article in Wisconsin Natural Resources Magazine.

"Caught in Time," a feature article by Team member Jen Patterson, was published in the October 2000 issue.

Provide updates and information at various WTA meetings and other trapper gatherings.

Rick Tischaefer makes presentations on BMPs and other information at all district meetings (13 trapper districts). He also writes articles on BMPs for every issue of the *Trapper and Predator Caller* magazine, a bi-monthly national publication. [See also Action 26].

Wallet card of key messages for trappers to use.

The Team developed a water-resistant card that lists the key messages that trappers should communicate when they interact with the public about trapping.

Provide information on WTA's web site.

New information, trap testing results, etc. are added to the "What's New" section of the web site every 6 months.

Incorporate information on outreach and BMPs into training for new instructors.

WI has three presentations per year for new trapper education instructors. BMP information is part of this training, and will be updated as the BMP information is updated over time.

Conduct a program at the annual Wisconsin Trapper's Association meeting for existing trapper education instructors on how to communicate effectively.

This will be conducted at the fall 2001 Rendezvous.

Encourage trapper education instructors to invite DNR biologists to give the wildlife biologist section of the course.

Instructors are encouraged to do this in periodic mailings and e-mails that are sent from the DNR trapper education coordinator

Provide quarterly updates on effective outreach in WTA newsletters.

Every issue of this publication since 1997 has had articles on BMPs and other appropriate information.

Send information via DNR permit application mailings and surveys.

All of their limited permit (bobcat, fisher, otter) recipients receive a package of information that includes BMPs.

Provide information in trapping regulations.

The regulations booklet has two full pages of information on BMPs, and includes the URL for the IAFWA furbearer management web site. These pages are highlighted on the cover.

Make presentation at regular meetings of Conservation Congress Annual Meeting.

John Olson gave a 1-hour presentation at the Fur Harvest Committee meeting. As a result, they officially endorsed BMPs.

Seek a resolution from the Wisconsin Trapper's Association to endorse the BMP process, to lay the groundwork for eventually getting Congress to endorse BMPs.

A resolution was passed.

Seek a resolution in support of the BMPs from the WI Natural Resources Board.
This was accomplished and the policy change will be voted on at county meetings in April-July, 2001.

Continue the fur school.
The fur school is held twice a year; once for wildlife staff and once for law enforcement It includes training on furbearer management and it includes information on BMPs. The following enhancements are being considered for future years:
* Mini-fur school for Administrators/Legislators
* Require all new hires in wildlife program to attend fur school within 2 years
* Expand to include more people from other agencies
* Develop a distance learning version

Make presentations to regional land meetings (includes all people from within the land division).
These presentations have been made in three of the six DNR regions to date.

Make a presentation at the Wisconsin state park naturalists= annual training.

Continue voluntary trapper education course at University of Wisconsin-Steven's Point.

The vice-president of the Wisconsin Trapper's Association does this every year.

Feature trapping and BMPs as a focus of the state FFA wildlife contest.

Trapping and BMPs have been incorporated into this program.

Make a mailing to all legislators and the governor on BMP process and trapping.

The brochure was sent to all legislators and the governor as part of the initial mailing.

Provide staff with the supplies necessary to do engaging furbearer programs:
Purchasing 14 complete sets of furs for 12 WTA DistrictsBprimarily for trapper education.

Produce segments for the "In to the Outdoors" TV program for kids.

A segment on trapping has been scheduled to air in 2002 season.

Uncompleted Actions from Pilot State Outreach Strategies

Following are some of the actions from the pilot state Outreach Strategies that were not yet completed at the end of the project. When the outreach teams developed their outreach strategies, they included short-term, long-term, and ongoing actions. Some were completed in their entirety during the project; others are ongoing, and others have not yet been started. This list of uncompleted actions is provided as a "tickler" list to show the wide range of outreach actions and efforts that are possible for state agencies and their partners to pursue. The actions are listed by target audience for which they were intended.

Multiple Audiences
Design a ATrapping in Connecticut@ web site.

Develop summary/talking points for public presentations.

Update DEP position statement on trapping—consider expanding to management and animal use in general.

Produce segments on “Outdoor “ TV Program.

Trappers
Form a working group to begin reviewing results from trap testing/BMP project. Members could include key Wildlife Division personnel, extension, NWCOs, veterinarians, and trappers.

Mail the brochure to all trappers statewide (include cover letter that points out the key messages and how to use them, and requests they pass the brochure on to family and friends).

Conduct and evaluate a 1-day leadership/communications/media training workshop for 15-20 key people within the community.

Provide information on BMPs and outreach on the annual trapping license (refer to the web address).

Promote the availability of the Trapper Education Course in hunter and trapper guides, hunter education manuals, and through hunter education courses (provide trapping brochures to the students).

Update the trapper education manual (incorporate BMPs).

Agency Personnel
Incorporate trapping information into orientation materials for new employees (F&W, Nature Preserves, State Parks, State Forests).

Provide information at Law Enforcement in-service training sessions.

Hunter Education Instructors
Distribute brochures to hunter education students.

Mail BMP information.

Nuisance Wildlife Control Operators
Provide information in DEP presentations and packets to NWCOs.

Provide information in NWCO newsletters and mailings.

Wildlife Professionals*--includes present and future (educators and students)*
Present a session on Outreach and BMP's at the state TWS chapter meeting.

Offer voluntary trapper education courses for wildlife students.

Develop a Wisconsin student trapper program modeled after the Wisconsin student hunter program.

Encourage professors to incorporate information into their curricula by providing materials and guest lecturers.

Assess the possibility of including information on trapping in curricula recommended by The Wildlife Society.

Have table or booth at the National Association for Interpretation=s Spring Training.

Make presentation at the Wisconsin Association of Environmental Educators meeting (teachers and non-formal educators).

Other Wildlife/Natural Resource Agencies *(U.S. Fish & Wildlife Service, USDA/Wildlife Services, U.S. Forest Service)*
Invite and encourage key personnel to attend fur school.

Interject trapping considerations into management planning processes on refuges, forests, etc. (particularly on WPAs, waterfowl related stuff).

Pursue a national strategy of getting formal endorsements and support on the BMP process from organizations.

Encourage FWS to do a training course at NCTC on doing AFur Schools.@

Seek to incorporate information into the USDA ALiving with Wildlife@ program.

Conservation and Habitat Organizations
Incorporate information into communications with leadership groups.

Veterinarians
Make a presentation at statewide meeting.

Outdoor Media
Develop a special packet of information to use in their outdoor writing.

Invite outdoor writers to trapping-related special events.

Educators/Youth
Include information on trapping in existing wildlife trunks.

Develop an Advanced Project WILD workshop on ADC: Trapping/hunting.

Appendix E. Furbearer Management Outreach Workshop Handbook

Workshop Description

The cooperation and participation of agency staff and other wildlife professionals are critical to achieving effective outreach on furbearer management issues. Yet many agency staff have had little or no exposure to trappers or furbearer management issues in their careers. These staff may be uninformed or misinformed, and many hold some of the same misconceptions about trapping as the general public. The Furbearer Management Outreach Workshop was designed to address this issue.

The workshop was developed by the Connecticut Pilot Outreach Team and tested in the Connecticut Department of Environmental Protection. Therefore, the following descriptions are specific to the Connecticut situation. However, all of the workshop components can be easily customized to other agencies.

This appendix contains the following sections:

- Objectives – describes the specific knowledge and behaviors that workshop participants should gain.
- Process – describes how the workshops were set up in Connecticut and who was invited to attend.
- Topics and Approach – a detailed description of the workshop segments and how they were delivered.
- Recommendations – recommends specific actions based on the pilot state experience.
- Materials – provides the customizable materials that were used in the Connecticut workshop.

Objectives

The workshop was developed so that as a result of attending, participants would:

1. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut;
2. Understand trapping issues and know how to communicate with the Connecticut public about trapping; and
3. Communicate effectively on the issue of trapping—both proactively and reactively.

Process

The one-day workshop was conducted three times in Connecticut. The first workshop was held on October 25, 2000. Based on the evaluations from that workshop (see Appendix F), slight modifications were made and subsequent workshops were held on February 21 and 22, 2001.

People from throughout the Connecticut Department of Environmental Protection were invited to participate, as were key people from outside the agency. In total, the following types of people participated in the three workshops:

Administrators	6
Conservation Officers	29
Information and Education Staff	6
Fisheries Administrators/Biologists	7
Forestry	6
Wildlife Biologists/Managers	25
Secretaries	3
Other:	
Professor	1
Hunter Education	2
Education	1

Topics and Approach

The agenda for the workshop follows in the "Materials" section of this appendix. Below is a summary of the key topics and how each topic was covered. Questions and discussion were encouraged throughout the workshop. Support materials available from the workshop are also described. All of the printed materials (included printed copies of the PowerPoint presentations were included in a 3-ring binder provided for workshop participants.

Introduction of workshop and participants
The workshop facilitator reviewed the agenda and objectives of the workshop, introduced participants, and set the stage for the day's activities.

Furbearer Management in Connecticut
This topic started with the distribution of a "pop quiz." Attendees were given time to answer the questions, and a group discussion of the answers followed. The quiz was designed to point out some common misconceptions and to preview some of the key messages that would be covered later in the day. A copy of the quiz is included in the "Materials" section.

The state furbearer biologist then made a PowerPoint presentation on furbearers in Connecticut. The presentation included both an historical perspective and a review of present furbearers in the state. A copy of the PowerPoint presentation is included in the "Materials" section.

Harvest techniques and BMPs
The first segment of this topic was a slide presentation on the history of trapping and harvest techniques and the development of BMPs (Best Management Practices) by Tom Decker from the Vermont Department of Fish and Wildlife.

The slide presentation was followed by a discussion of trapping devices, trapping techniques, and furs. Tom Decker was assisted in this presentation by Tip Garrett, an experienced Connecticut trapper and former president of the Connecticut State Trappers Association. They reviewed and passed around various traps, stretching boards, and pelts.

Lunch
Lunch was brought into the workshop room so that the lunch break could be short.

Trapping Demonstration
Following the brief lunch, workshop participants went outside. Tom Decker and Tip Garrett conducted demonstrations on how various traps were set in the field.

Communicating About Trapping and Furbearer Management
This topic included four segments and was presented by a communications specialist.

First, a slide presentation was given that talked about how public opinion is formed and why it is such a challenge to change it. Public opinion of trapping (based on human dimensions research) was then summarized. A copy of the PowerPoint presentation is included in the "Materials" section.

Second, participants reviewed a summary of the Connecticut Furbearer Management Outreach Strategy that was developed as part of the pilot project. The strategic approach and key messages were emphasized (a model outreach strategy is included in Appendix A).

Third, the video "Fur Hunting and Trapping in Illinois" was shown to illustrate how the key messages could be communicated. A national version of this video (which can be customized to any state) is now available to state wildlife agencies and partners.

The final segment included a slide presentation on how to be an effective communicator. This segment is included in the same PowerPoint presentation mentioned above (included in the "Materials" section).

Trapping and Furbearer Management Issues in Connecticut
The final topic of the workshops was a facilitated roundtable discussion of trapping and furbearer management issues in Connecticut. The purpose of the discussion was not to resolve issues, but rather to share information.

Evaluation
Evaluation forms were distributed for participants to complete and turn-in before departing. A copy of the evaluation form is included in the "Materials" section.

Recommendations

State agencies and their partners need to take whatever steps are necessary to ensure that their staff and other internal audiences have the information and experience necessary to communicate to the public about trapping and furbearer management. The following recommendations are offered as a means of meeting this need.

1. Conduct one or more furbearer management outreach workshops as part of agency outreach efforts.
2. Develop and conduct these workshops early in the outreach process, so uniform, consistent messages about furbearer management can communicated throughout the agency.
3. Customize the workshops to the state in question, but keep the format and content similar to what is described here (this format has been tested, evaluated, and shown to be effective).
4. Include an evaluation component and review the evaluation results
5. Include the field portion of the workshop. To facilitate maximum understanding, there is no substitute for seeing traps set and operated in field settings.

Materials

The following materials were used in the Connecticut workshops. These should be customized and used in state furbearer management outreach workshops.

- Agenda
- Pop quiz
- Evaluation Form
- Introductory PowerPoint
- Communications PowerPoint
- Furbearer mgmt. PowerPoint

Furbearer Management Workshop

Connecticut Department of Environmental Protection

February 21-22, 2001

Objectives

As a result of this workshop, participants should:

1. Know the benefits of regulated trapping particularly how it is used as a tool for managing wildlife in Connecticut;
2. Understand trapping issues and know how to communicate with the Connecticut public about trapping;
3. Communicate effectively on the issue of trapping—both proactively and reactively.

Agenda

9:00 a.m.	Introduction of workshop and participants—Dale May and Dave Case
9:30	Furbearer management in Connecticut—Paul Rego
10:20	Break
10:35	Harvest techniques and BMPs—Tom Decker and Tip Garritt
11:45	Lunch
12:30 p.m.	Trapping Demonstration
1:30	Communicating about trapping and furbearer management—Dave Case
3:00	Break
3:15	Trapping and furbearer management issues in Connecticut—Group Discussion
4:30	Evaluation and wrap-up
4:45	Adjourn

Connecticut Furbearer Management Workshop

POP QUIZ!
February 21-22, 2001

1. The term “blanket beaver” is used for beaver pelts that were very large and regularly used as blankets by mountain men.

   True or False

2. The most common food for mink is crayfish?

   True or False

3. If Connecticut did not have hunting and trapping seasons, wildlife would overpopulate and die of starvation.

   True or False

4. Trappers use the term “bank beaver” for beaver after they are caught because at that point they are as good as money in the bank.

   True or False

5. A property owner should attempt all non-lethal solutions to solve damage due to a furbearer before using a lethal solution.

   True or False

6. The size of raccoon populations in Connecticut is controlled through regulated hunting and trapping activities.

   True or False

7. Several states have reintroduced river otter by releasing animals captured in other states. What type of trap has been most commonly used to live trap otters for reintroductions?

   A. conibears
   B. footholds
   C. box traps
   D. Hancocks

8. In the 1700s and 1800s Connecticut residents frequently shot and trapped coyotes because they were viewed as a pest and danger to livestock.

   True or False

9. A “blue” pelt or skin is an uncommon color phase and therefore more valuable.

   True or False

10. A conibear is sometimes called a quick-kill trap because it is designed to forcibly strike the furbearer’s head and neck causing rapid irreversible unconsciousness.

    True or False

11. The Connecticut state government should provide the service of trapping furbearers that damage property or enter developed areas and relocate them to state forests or zoos.

    True or False

12. The size of white-tailed deer populations in Connecticut is controlled through regulated hunting activities.

    True or False

Connecticut Furbearer Management Workshop

POP QUIZ ANSWER SHEET

1. The term "blanket beaver" is used for beaver pelts that were very large and regularly used as blankets by mountain men.

False. This term is associated with beaver pelts that were traded for wool blankets.

2. The most common food for mink is crayfish.

True. Mink also eat small mammals, birds, eggs, frogs, and fish.

3. If Connecticut did not have hunting and trapping seasons, wildlife would overpopulate and die of starvation.

It depends.

In most circumstances, the wildlife species that are hunted or trapped produce more young each year than their habitats can support. When this happens, there are "surplus" animals that will die each year because of a variety of causes, including starvation, disease, accidents, hunting, etc. The answer depends on the specific species, how much hunting and trapping pressure they receive, and other factors.

4. Trappers use the term "bank beaver" for beaver after they are caught because at that point they are as good as money in the bank.

False.

This term refers to a beaver that digs a lodge into the bank of a river or stream instead of building a lodge of logs and sticks.

5. A property owner should attempt all non-lethal solutions to solve damage due to a furbearer before using a lethal solution.

False.

Landowners are always free to choose the ways in which they try to solve damage problems. However, non-lethal means of controlling furbearers are often more difficult and expensive than trapping, and may not be as effective at solving the problem. As long as it is done within the regulations, trapping may be a better solution.

6. The size of raccoon populations in Connecticut is controlled through regulated hunting and trapping activities.

Generally false. With the light trapping pressure of recent years, this is generally false, although it may be true in local areas.

7. Several states have reintroduced river otter by releasing animals captured in other states. What type of trap has been most commonly used to live trap otters for reintroductions?

B. footholds

8. In the 1700s and 1800s Connecticut residents frequently shot and trapped coyotes because they were viewed as a pest and danger to livestock.

False.

There were no coyotes in CT until the 1950s.

9. A “blue” pelt or skin is an uncommon color phase and therefore more valuable.

False.

It refers to pelts that have been trapped before they primed. The leather side of these pelts is bluish in color.

10. A conibear is sometimes called a quick-kill trap because it is designed to forcibly strike the furbearer’s head and neck causing rapid irreversible unconsciousness.

True.

11. The Connecticut state government should provide the service of trapping furbearers that damage property or enter developed areas and relocate them to state forests or zoos.

False.

Trapping and transferring furbearers is a problematic issue. Zoos have limited need for these animals, and many state forests already have full populations. If animals are released into areas where the population is already full, surplus animals will spill over into other areas, possibly causing damage problems there. Or, surplus animals will die due to other causes such as disease, starvation, accidents, etc., making the expensive relocation meaningless.

12. The size of white-tailed deer populations in Connecticut is controlled through regulated hunting activities.

True.

In areas where hunting is allowed, hunters can harvest surplus animals, keeping the population much more stable than it would be if hunting were prohibited.

Furbearer Management Workshop
Evaluation

Connecticut Department of Environmental Protection
February 21 - 22, 2001

Please rate the workshop using the following scale and circle your choice:

5 = excellent, 4 = good, 3 = average, 2 = poor, 1 = very poor

1. Overall workshop

A. Knowledge of instructors	5	4	3	2	1
B. Delivery style of instructors	5	4	3	2	1
C. Value of information	5	4	3	2	1
D. Objectives clearly stated	5	4	3	2	1

2. Were the objectives of the workshop achieved? As a result of the workshop, do you feel you:

A. "Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?"

Yes No

Comments:

B. "Understand trapping issues and know how to communicate with the Connecticut public about trapping?"

Yes No

Comments:

C. "Will communicate effectively on the issue of trapping–both proactively and reactively?"

Yes No

Comments:

3. How much of the information covered in the workshop did you already know (circle one)?

A. Most
B. Some
C. Not very much

4. What specific information from the workshop, if any, stands out as particularly useful to you or that you had previous misconceptions about?

5. What did you enjoy or find most helpful about the workshop?

6. What type of information would you like to see more of in the workshop?

7. What type of information would you like to see less of in the workshop?

8. Do you think this type of workshop would be useful to other state wildlife management agencies?

Yes No

Why or why not?

9. Comments on Dave Case as workshop facilitator?

10. What is your primary job responsibility for DEP?

11. Other Comments?

Introductory PowerPoint

Slide 1

Connecticut Furbearer Management Workshop

International Association of Fish & Wildlife Agencies

Slide 2

Connecticut Furbearer Management Workshop

Furbearer Management

- Important
- Controversial
- Difficult

Slide 3

Connecticut Furbearer Management Workshop

Levels of Competency

1. Unconsciously Incompetent
2. Consciously Incompetent
3. Unconsciously Competent
4. Consciously Competent

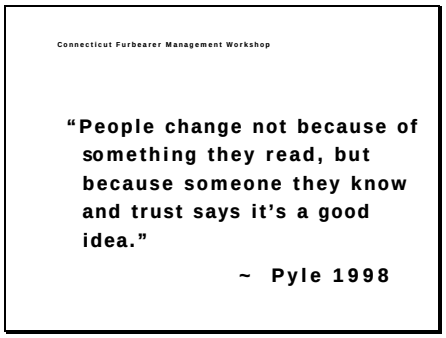
Slide 4

Connecticut Furbearer Management Workshop

Furbearer Management Outreach Project

- Part of Federal Aid Grant for BMPs and Outreach
- 3 Pilot States
  - Connecticut
  - Indiana
  - Wisconsin

Slide 5



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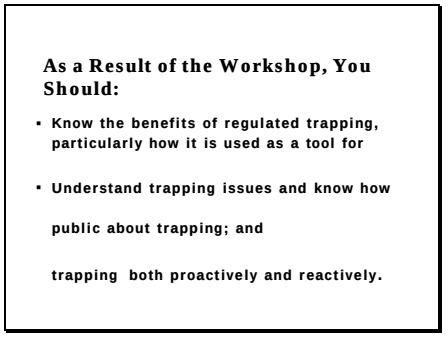

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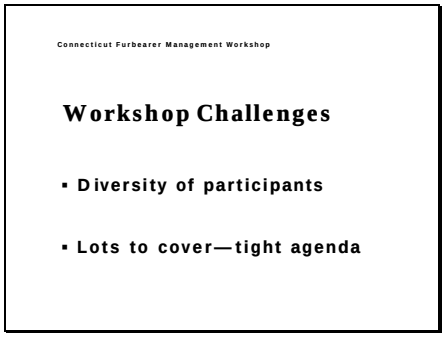

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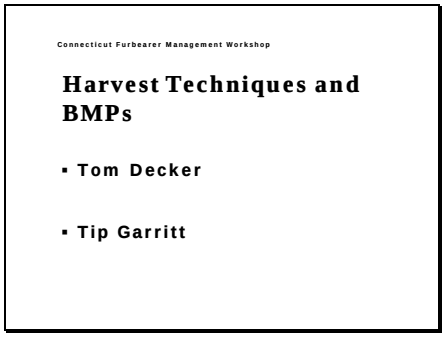


Communications PowerPoint

Slide 1

Connecticut Furbearer Management Workshop

Communications

- Public Opinion
- Key Messages
- Fur Hunting and Trapping Video
- Being an effective communicator

Slide 2

Connecticut Furbearer Management Workshop

Communications

Slide 3

Connecticut Furbearer Management Workshop

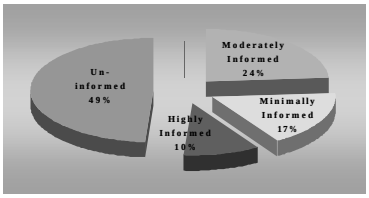
Persuasion Disciplines

- Public Relations
- Marketing
- Advertising
- Public Participation
- Outreach
- Public Affairs
- Environmental Education

Slide 4

Connecticut Furbearer Management Workshop

% of the American Public



Charlton Research Group, 1998.

Slide 5

Connecticut Furbearer Management Workshop

% Who Engage

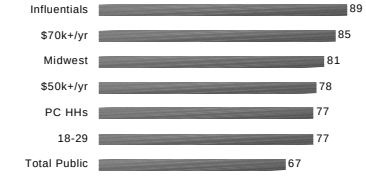
Activities	Highly Informed	General Public
Attended a public meeting on community affairs	85	16
Been a member of an organization dedicated to improving your community	83	16
Written to an elected official	78	14
Served as an officer of any club or organization	75	10
Been a member of a group focused on improving gov't or changing gov't policy	66	5
Given a public speech	61	6
Written a letter to the editor of a newspaper/magazine	50	4

Charlton Research Group, 1998.

Slide 6

Connecticut Furbearer Management Workshop

% Engaging Monthly in Outdoor Activity



Outdoor Recreation in America, 1999.

Slide 7

Connecticut Furbearer Management Workshop

"Activism" from All Fronts:

- Anti hunters
- Hunters
- Recreationists
- People with animal damage problems
- Tourism Interests

Slide 8

-fluentials

of today's 109 million Internet users.

Burson-Marsteller/Roper Starch Worldwide, 2000

Slide 9

Connecticut Furbearer Management Workshop

How the Public Makes Decisions

What Agencies Believe	What is Really True
Rational, no emotion.	Rich with emotion.
Based on facts and figures.	Based on what "rings true."
Experts looked to as catalysts for action.	Everyday citizens & neighbors are catalysts for action.
People are appealed to as passive consumers of information in the home.	Interaction with others through mediating institutions.

Based on Harwood et al., 1993

Slide 10

Connecticut Furbearer Management Workshop

Understanding Voter Behavior in CT

- Cognitive, rational, deliberative process *does not* occur.
- "General public" (voters) only slightly involved in issue.
- People use simple decision rules.
- Long, complex arguments may interfere.

1997. *Human Dimensions of Wildlife.* Manfredo, Fulton, and Pierce.

Slide 11

Connecticut Furbearer Management Workshop

Public Opinion

- Agency personnel
- Hunters/trappers
- Anti-hunters/trappers
- Everyone else

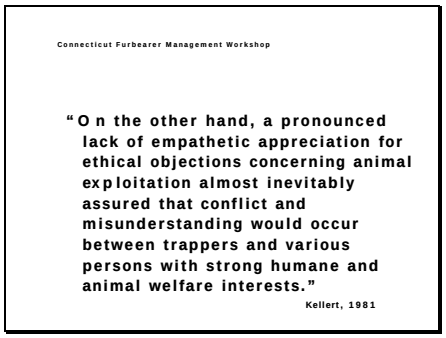
Slide 12

Connecticut Furbearer Management Workshop

"Trappers were unusual in their exceptional degree of knowledge, affection and concern for wildlife and natural habitats…. This protectionist concern was certainly encouraging and suggested a group particularly sensitive about its land stewardship responsibilities."

Kellert, 1981

Slide 13



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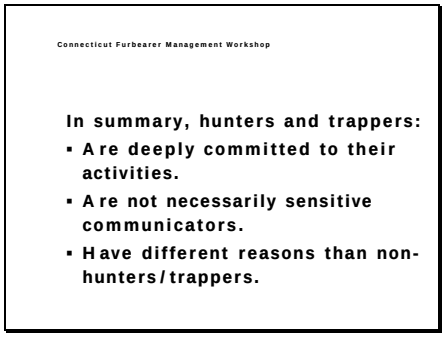

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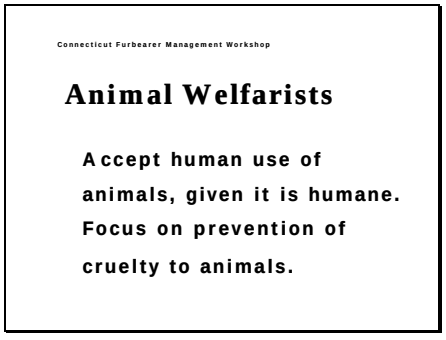

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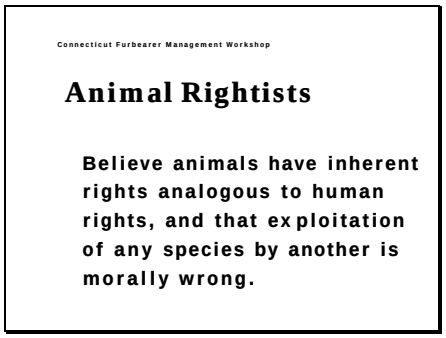

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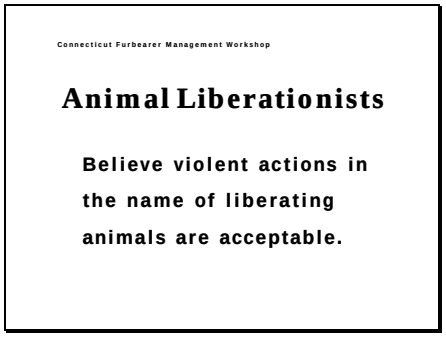

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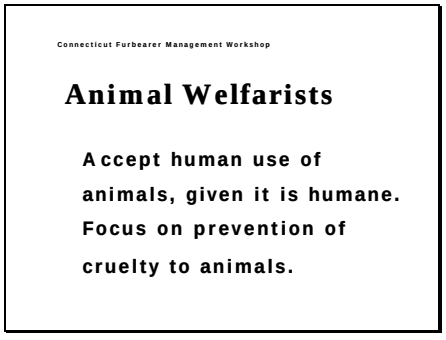


Slide 19

What Animal Activists Believe—Some Key Points

State agencies conserve hunting, not wildlife.

Slide 20

What Animal Activists Believe—Some Key Points

Agencies resort to hunting & trapping programs without investigation into more compassionate alternatives to population control (e.g., fertility control or translocation).

Slide 21

What Animal Activists Believe—Some Key Points

Feel that the natural process of death (e.g., starvation, disease, accidents) is preferable to hunters' bullets or anglers' hooks.

Slide 22

What Animal Activists Believe—Some Key Points

Some agencies misreport information on over-population to provide an excuse for hunting.

Slide 23

What Animal Activists Believe—Some Key Points

Agency representatives have a tendency to classify animal activists as "crazies." However, at least at the local level, most activists are sincere, intelligent, and aggressive advocates for their beliefs.

1991 Regional Animal Activist Workshops, PAS/IAFWA

Slide 24

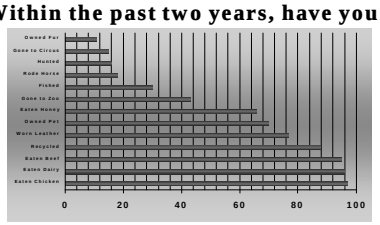
Connecticut Furbearer Management Workshop

Everyone Else

Slide 25

Connecticut Furbearer Management Workshop

Within the past two years, have you:



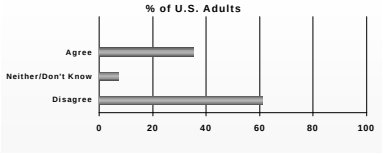
% of U.S. Adults

Responsive Management, 1998

Slide 26

Connecticut Furbearer Management Workshop

Agree with the mission of PETA



Responsive Management, 1998

Slide 27

Connecticut Furbearer Management Workshop

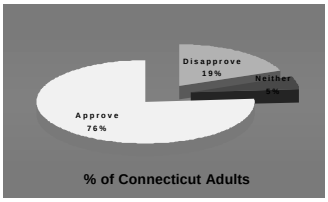
Opinion of Protesting Fur by Harassing People & Vandalizing Salons

Responsive Management, 1993

Slide 28

Connecticut Furbearer Management Workshop

Opinion of Regulated Hunting



Responsive Management, 1997

Slide 29

Connecticut Furbearer Management Workshop

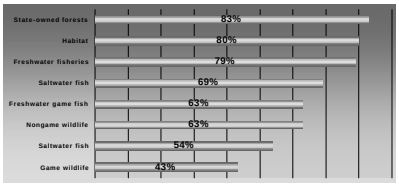
Approve/Support

	Angling	Hunting	Trapping
National (1998)	95%	73%	34%
Missouri (1990)	95%	75%	41%
Connecticut (1997)	89%	76%	---
Indiana (1998)	---	65%	35%

Slide 30

Connecticut Furbearer Management Workshop

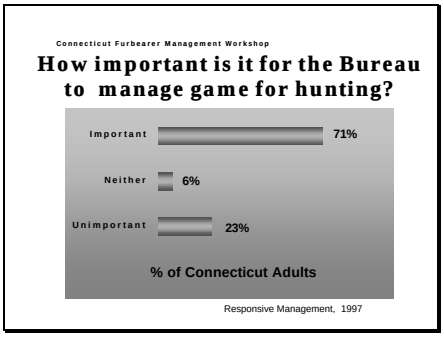
Should the Bureau manage and protect...



% of Connecticut Adults ***who said very important***

Responsive Management, 1997

Slide 31



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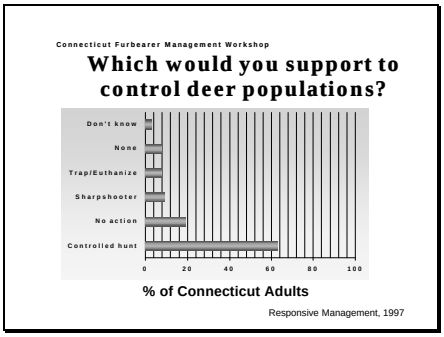

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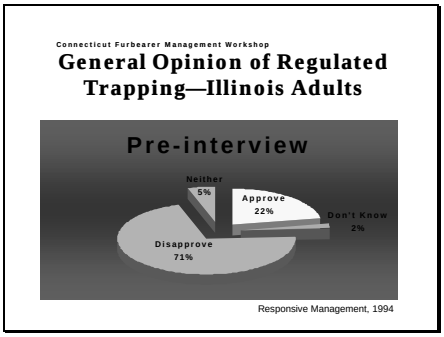

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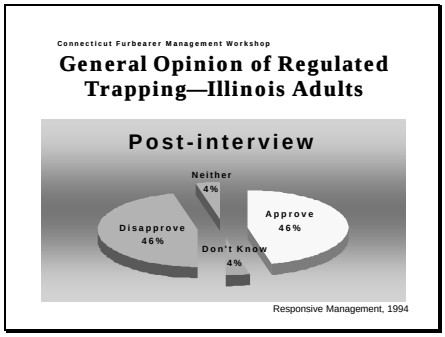

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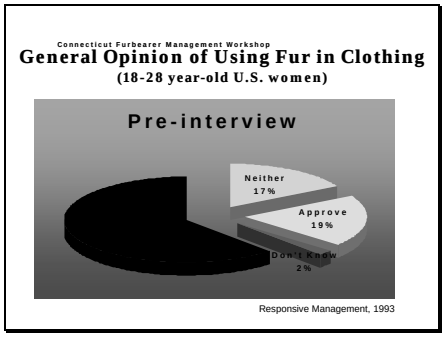

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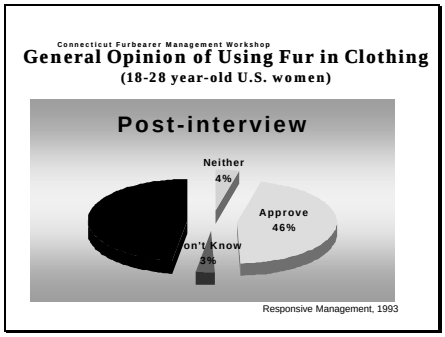

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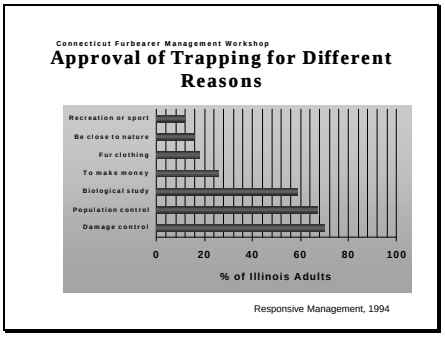

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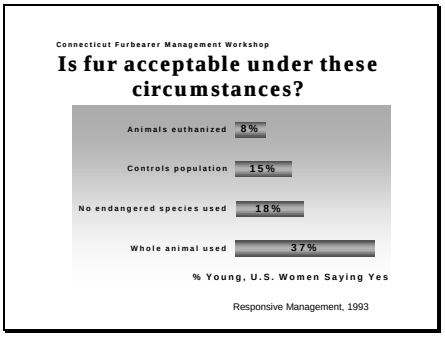

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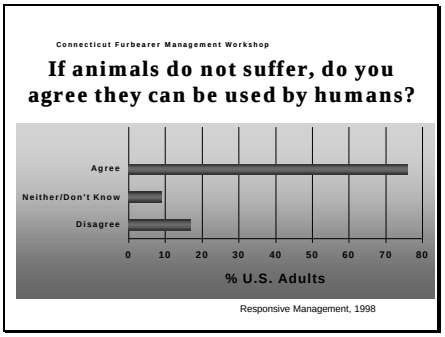

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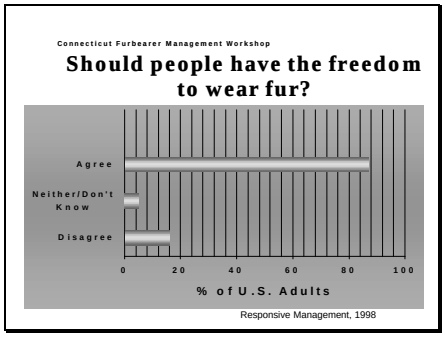

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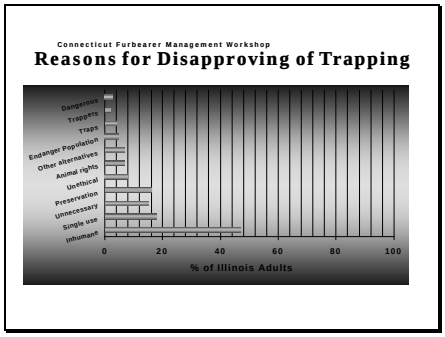

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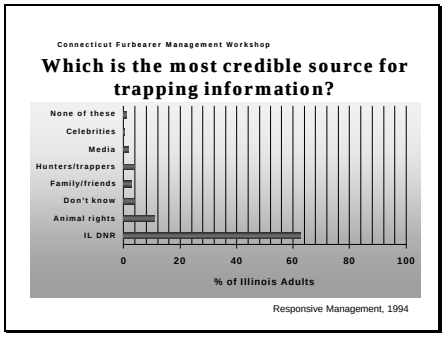
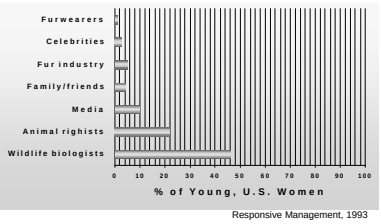


Slide 43

Connecticut Furbearer Management Workshop

Which is the most credible source for fur information? (Young, U.S. Women)



Responsive Management, 1993

Slide 44

Connecticut Furbearer Management Workshop

State Fish & Wildlife Agency	Rated Excellent or Good	Rated Poor
New Hampshire	65%	1%
Pennsylvania	50%	4%
Vermont	69%	3%
Maryland	38%	2%

Responsive Management, multiple studies

Slide 45

Connecticut Furbearer Management Workshop

CT Furbearer Management Outreach Strategy

Key Messages

Slide 46

Connecticut Furbearer Management Workshop

Video

"Fur Hunting and Trapping in Illinois"

Slide 47

Connecticut Furbearer Management Workshop

Being an Effective Communicator

1. **Use the "you" approach – what's in it for me?**

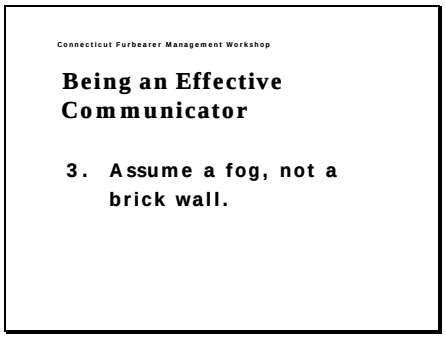
Slide 48

Connecticut Furbearer Management Workshop

Being an Effective Communicator

2. **Build rapport.**

Slide 49



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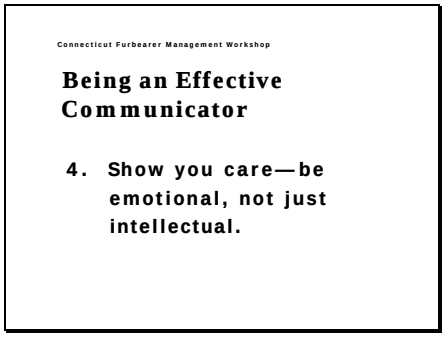

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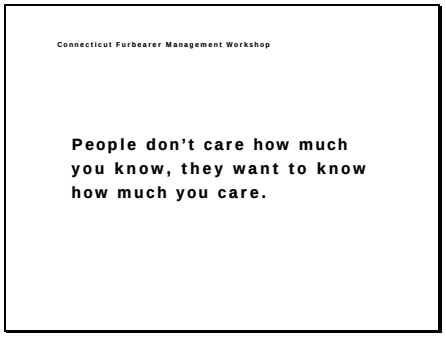

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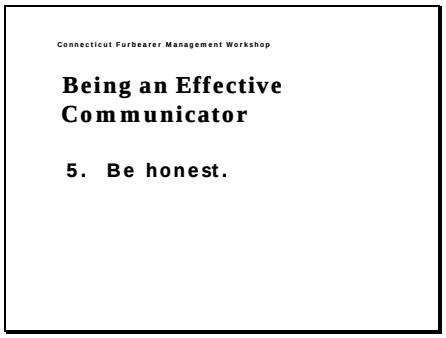

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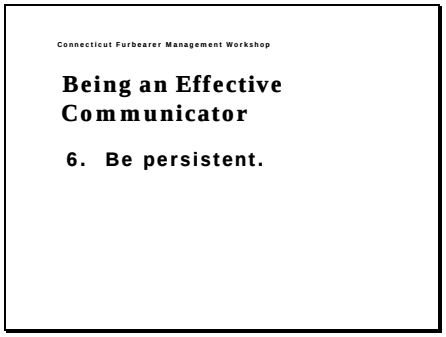

Slide 54

Slide 55

Contact Information

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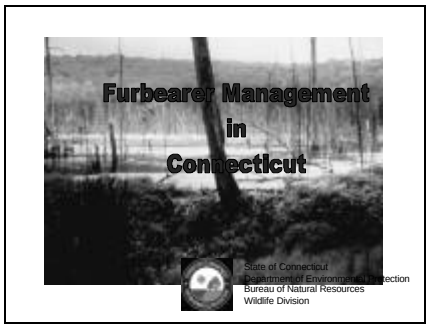
dave@djcase.com

Furbearer Management in Connecticut PowerPoint Presentation, 10-25-01

Slide 1



Furbearer Outreach Workshop
Sessions Woods WMA
October 25, 2000

Slide 2

What are Furbearers?

- Mammals traditionally sought for fur
  - many uses: food, pelts, leather, perfume
- Diverse
  - aquatic to terrestrial to semi-arboreal
  - herbivore to omnivore to carnivore

Slide 3

Many more abundant today than they have been in 200 years

- beaver
- fisher
- raccoon
- opossum
- coyote

Slide 4

Slide 5

Many furbearers are adaptable and have benefited from human activities.

Slide 6

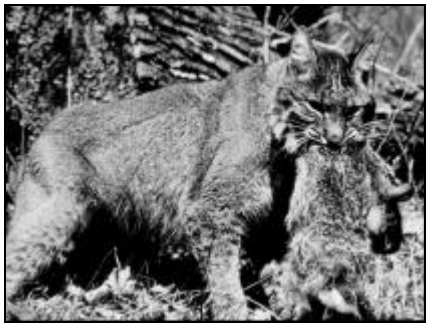
Current Harvest Status of Connecticut Furbearers

Trapped	Hunted & Trapped	Closed Season
Beaver	Coyote	Bobcat
Mink	Red fox	Fisher
River otter	Gray fox	Black bear
Muskrat	Raccoon	
Weasels	Opposum	
	Skunk	

Slide 7

Slide 8

Slide 9



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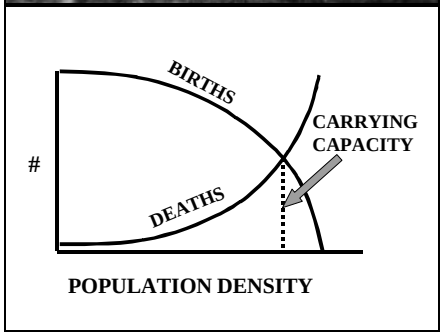
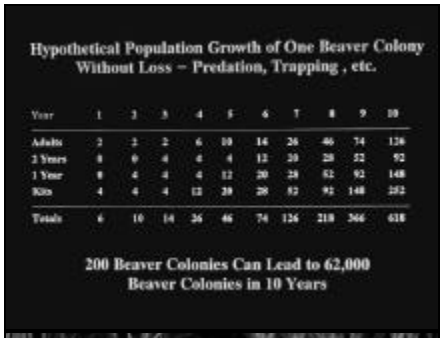
Slide 11

Slide 12



Trapping and hunting are based on ecological principles. As a population becomes more abundant, the birth rate decreases and mortality rate increases. At the point where births are equal to or offset by deaths, the population is stable. Habitat can support only a limited number of animals indefinitely. This is referred to as carrying capacity.

Slide 13

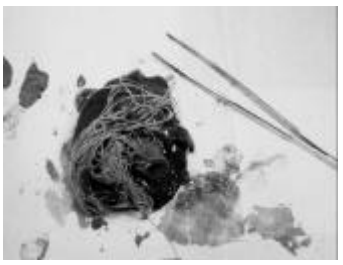


This chart shows the potential population growth of beaver in the absence of mortality factors.

Slide 14

Disease is one form of natural mortality that offsets births. In some species starvation is also an important form of mortality. This coyote pup is suffering from a severed case of mange. Mange is caused by a mite that burrows into the host's skin and regularly affects coyotes and foxes.

Slide 15

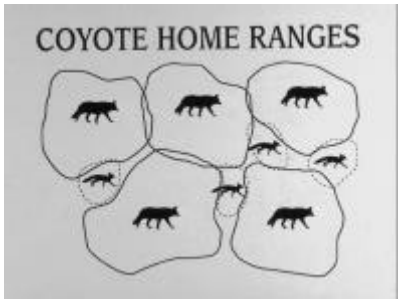


Furbearers carry many parasites. Here a coyote heart shows a severe infestation of heartworm.

Slide 16

Many deaths in furbearer populations go unnoticed and are not accounted.

Slide 17

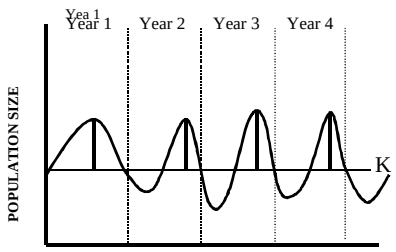


Territoriality is important in limiting numbers in species such as coyotes. Individuals that are not successful in acquiring territories are more likely to die from starvation, disease or accidents.

Slide 18

Muskrats have 2 to 3 litters of up to 8 young per year. Annual population growth and mortality is 70-80 %. The excess young that are produced every year are sometimes called the annual surplus. Some types of mortality can replace one another without changing the total mortality - this is called compensatory mortality. Trapping targets those animals in a population that would have died from other causes of death.

Slide 19

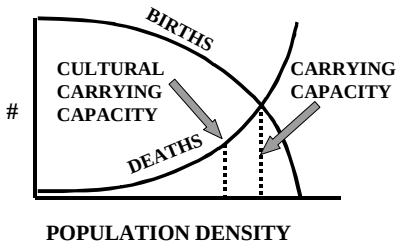


Most furbearers can double their population each year and produce more young than the habitat can support. Some of the "required" mortality can come in the form of trapping or hunting.

Slide 20

At times the population level of furbearers at carrying capacity is higher than the level human would prefer … the level humans would prefer is the cultural carrying capacity.

Slide 21



Cultural carrying capacity often occurs below biological carrying capacity and is founded on human interests and attitudes.

Slide 22

Because beaver frequently cause conflicts with human activities, the cultural carrying capacity is probably less than the biological carrying capacity.

Slide 23

In Connecticut, as elsewhere, there is a history of overpopulation of wildlife.

Slide 24

Wildlife Overexploitation

- Harvests were unregulated
- Cultural attitudes were different
- Wildlife species were valuable
- Dramatic habitat changes

Slide 25

In the 1920s fisher pelts average $50 dollars, about $500 in today's dollars. In the 1940s fisher were worth over $600 in today's dollars. In 1940 beaver pelts averaged $18, over $200 in today's dollars.

Slide 26

The last record of a bear in Connecticut, before its recent comeback, was one killed in Goshen in 1840.

Slide 27

22 September, 1766 *New London Gazette*:

There are the greatest number of bears come down among the towns that ever was known; they destroy great quantities of Indian corn and make great havoc among the sheep and swine. Last Tuesday morning a large he-bear was discovered opposite the Treasurer's, and being pursued, he took to the main street …and was followed into the South Meadow, where he was shot ...

The town was Hartford.

Slide 28

Much of Connecticut's forests were cleared. In 1870 Connecticut had only 20 to 30 percent forest land.

Slide 29

Slide 30

Slide 31

Evidence of past land use are the stonewalls, now found in nearly every patch of forest, marking the borders of the 1800s' fields and pastures.

Slide 32

Conservation Movement

- The Era of Protection 1900-1930
- The Era of Game Management 1930-1965
- The Era of Environmental Management 1965-present

Slide 33

The Era of Protection

- States establish Fish and Game Departments
- The Lacey Act (1900)
- Migratory Bird Treaty Act

Slide 34

The Era of Game Management

- Game Management, Aldo Leopold 1933
- Duck Stamp Act 1934
- Cooperative Wildlife Research Program 1935
- Pittman Robertson Act 1937

Slide 35

Era of Environmental Management

- Endangered Species Act 1966 1969
- National Environmental Policy Act 1969
- Environmental Protection Agency 1970

Slide 36

Many furbearer species also benefited from habitat changes. In the late 1880s a land use changes began to favor reforestation. Agricultural land was abandoned and there was less reliance on forest products. Today 60 to 70 percent of Connecticut is forest land.

Slide 37

Connecticut attempted to reintroduce beaver in the 1910s, 20s, and 30s.

Slide 38

Once established, beaver were regularly relocated from problem sites to unoccupied habitat.

Slide 39

Slide 40

Water control devices were used in an attempt to solve some beaver flooding problems.

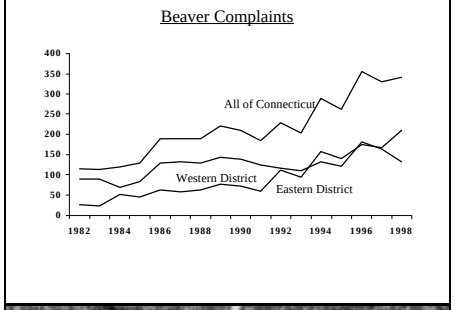
Slide 41

Beaver complaints continued to increase while suitable release sites decreased.

Slide 42

Shift in laws and regulations, recognizing too many animals rather than too few, from protection to management and use

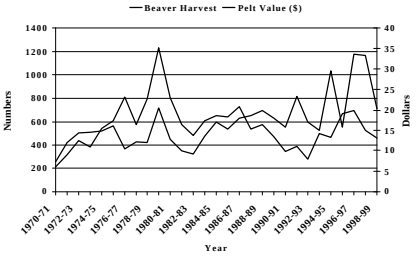
Slide 43



Slide 44

The first beaver trapping season began in 1961.

Slide 45



Furbearer management is complicated by the relationship between hunter and trapper effort and pelt values.

Slide 46

A young trapper receives a bounty payment from a Granby town official in 1968.

Connecticut had a bobcat bounty from 1935 to 1971. Towns paid five dollars per bobcat.

Slide 47

Slide 48

Today trapping is highly regulated

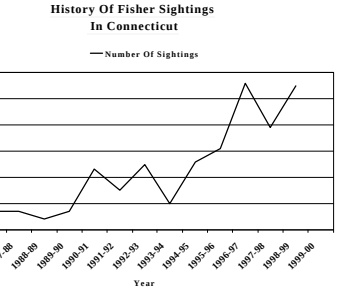
- Private land permission
- 24 hour trap check
- limits on size of traps
- limited type of traps allowed, no toothed traps, no snares
- most traps must be placed in water
- restricted to winter and early spring seasons
- restricted access to state properties

Slide 49

Slide 50

Monitoring populations often uses indices such as snow track surveys or sighting reports. For abundant species indexing their populations may be less important than indexing the level of human conflicts.

Slide 51



Reports of sightings and vehicle kills have documented the rapid increase and range expansion of fishers.

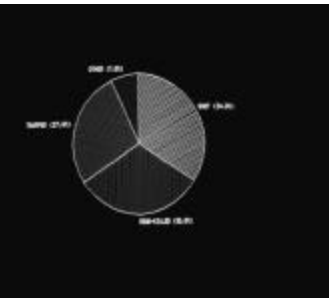
Slide 52

Reintroductions have been a component of furbearer management in more recent years.

Slide 53

Harvests are monitored through pelt tagging and trapper questionnaires.

Slide 54



Slide 55

Very little concern for over harvest

- Private land refuge
- Development, decreased access
- Low pelt values

Slide 56

How to View the Furbearer Resource?

- Asset
  - 1983-84
  - trappers harvest 15,000 raccoons
- Liability
  - 1997
  - NWCOs kill 1400 raccoons
  - 1998-99 trappers harvest 700 raccoons

Slide 57

A LARGE and growing aspect of furbearer management is addressing furbearer-human conflicts.

Slide 58

Slide 59

Slide 60

Slide 61

Furbearer-Human Conflicts

- Livestock attacks
- pet attacks
- disease transmission
- crop, garden, tree loss
- fear
- damage/presence in homes buildings
- Road/railroad flooding damage
- septic systems/wells
- fish: stocked, hatcheries, fishways ornamental
- runway hazards
- etc.

Slide 62

Responses/Solution

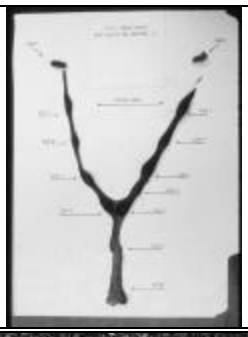
- Education
- Non-lethal: exclude, harass, protect, move
- move the humans
- Lethal
  - addressing individual problems
  - addressing populations

In recent years the beaver harvest has averaged near 1000 per year. From 50 to 80 percent of the beaver harvested by trappers are taken to directly solve problems. The beaver harvest contributes reducing beaver population growth and reducing the overall level of problems.

Slide 63

Slide 64

Slide 65



Slide 66

Slide 67

Slide 68

Finally, furbearers do interact with other wildlife and might influence their populations. Raccoons, opossums, skunks, foxes, fishers and coyotes are nest predators.

Slide 69

Appendix F. Furbearer Management Outreach Workshop Evaluations

Connecticut Furbearer Management Workshop
October 25, 2000

Evaluation Report
November 10, 2000

On October 25, 2000, the International Association of Fish and Wildlife Agencies conducted a Furbearer Management workshop for the Connecticut Department of Environmental Conservation. The workshop was developed and facilitated by David Case with D.J. Case & Associates. Instructors included:

Paul Rego, Connecticut Department of Environmental Protection
Tom Decker, Vermont Fish and Wildlife Department
Tip Garrett, Trapper and former president of Connecticut Trappers Association
David Case, D.J. Case & Associates

Forty-seven people participated in the workshop, primarily Wildlife Division staff. Thirty-eight participants completed evaluation forms.

Following in this report are:

1. The Workshop Agenda
2. The Evaluation Results

For additional information contact:

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Furbearer Management Workshop
Connecticut Department of Environmental Protection
October 25, 2000

Objectives

As a result of this workshop, participants should:

1. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut;
2. Understand trapping issues and know how to communicate with the Connecticut public about trapping;
3. Communicate effectively on the issue of trapping—both proactively and reactively.

Agenda

9:00 a.m.	Introduction of workshop and participants—Dale May and Dave Case
9:30	Furbearer management in Connecticut—Paul Rego
10:30	Break
10:45	Harvest techniques and BMPs—Tom Decker and Tip Garritt
12:00	Lunch
1:00 p.m.	Trapping and furbearer management issues in Connecticut—Group Discussion
2:15	Break
2:30	Communicating about trapping and furbearer management—Dave Case
4:30	Evaluation and conclusion
4:45	Adjourn

International Association of Fish and Wildlife Agencies

Evaluation Results

Below is a tabulation/compilation of results from the evaluation forms distributed at the end of the workshop. The actual questions from the evaluation form are printed in *italics*.

Participant comments are listed following bullet points (•).

Overall Workshop

1. Please rate the quality of the workshop using the following scale and circling your choice:

1 = very poor , 2 = poor, 3 = average, 4 = good, 5 = excellent

All Evaluations (n=38):

A. Knowledge of instructor	4.9
B. Delivery style of instructor	4.8
C. Value of information	4.8
D. Objectives clearly stated	4.8

Administrators (n=6):

A. Knowledge of instructor	5
B. Delivery style of instructor	4.6
C. Value of information	4.8
D. Objectives clearly stated	5

Information and Education Staff (n=6):

A. Knowledge of instructor	5
B. Delivery style of instructor	4.6
C. Value of information	4.8
D. Objectives clearly stated	4.8

Fisheries Administrators/Biologists (n=3):

A. Knowledge of instructor	4.7
B. Delivery style of instructor	4.7
C. Value of information	5
D. Objectives clearly stated	5

Wildlife Biologists/Managers (n=15):

A. Knowledge of instructor	4.9
B. Delivery style of instructor	4.8
C. Value of information	4.7
D. Objectives clearly stated	4.8

Secretaries (n=3):

A. Knowledge of instructor	5
B. Delivery style of instructor	5
C. Value of information	5
D. Objectives clearly stated	5

Others (n=5):

A. Knowledge of instructor	5
B. Delivery style of instructor	5
C. Value of information	5
D. Objectives clearly stated	4.6

Objectives

2. Were the objectives of the workshop achieved? As a result of the workshop, do you feel you:

All Evaluations:

A. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?

Yes	92%
No	3%
No Ans.	5%

B. Understand trapping issues and know how to communicate with the Connecticut public about trapping?

Yes	92%
No	5%
No Ans.	3%

C. Will communicate effectively on the issue of trapping both proactively and reactively?

Yes	87%
No	0%
No Ans.	13%

Administrators:

A. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?

Yes 100%

- No comments recorded.

B. Understand trapping issues and know how to communicate with the Connecticut public about trapping?

Yes 100%

- As a non-trapper, I don't know that I know enough yet to try to represent on the issue but I know a lot more than I did this morning.
- I understand the key messages proven to work.

C. Will communicate effectively on the issue of trapping both proactively and reactively?

Yes 100%

- The degree to which this happens will vary depending upon interest level of the staff.
- Within constraints set by the department.

Information and Education Staff:

A. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?

Yes	83%
No	0%
No Ans.	17%

- Nothing new for me.
- I believe the benefits were clear but how it is used as a tool to manage wildlife was more vague.

B. Understand trapping issues and know how to communicate with the Connecticut public about trapping?

Yes	83%
No	17%
No Ans.	0%

- Good insights from a different perspective were helpful.
- Very important topic of word choice re: recreation vs. regulational hunting.
- Good pointers and suggestions on communicating effectively.
- The Acommunications@ component was very clear with research results incorporated as a basis for communication efforts.
- Anti-trappers have a cadre of ›professional biologists: which can and will challenge agency justifications in court. Time consuming, very expensive, very skillful in raising emotional issues and negative results.

*C. Will communicate effectively on the issue of trapping**C**both proactively and reactively?*

Yes	67%
No	0%
No Ans.	33%

- It helps.
- Excellent presentations and discussion of the purpose and practice of trapping.
- Improved overall understanding of communication tools.

Fisheries Administrators/Biologists:

A. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?

Yes	67%
No	33%
No Ans.	0%

- I:d rather have a 1 **B** 5 rating. I:d say A3@. We kept saying Athere are public benefits@ is a key message but it:s hard for me to recall all of them at this time.

B. Understand trapping issues and know how to communicate with the Connecticut public about trapping?

Yes	100%

*C. Will communicate effectively on the issue of trapping**C**both proactively and reactively?*

Yes	100%

- In a Reactive sense, I still think we are left with a Aweak argument@ against those who say, Awe don:t need to trap anymore.@ They say "just like market hunting and slavery are passé, we are now Amore enlightened.@

Wildlife Biologists/Managers:

A. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?

Yes	93%
No	0%
No Ans.	7%

- Working with public on beaver issues, I feel I am more informed to answer specific trapping related issues/questions and why trapping is a necessary tool.
- All presentations were excellent. Perhaps more emphasis could have been placed on the conflicts animals cause to the role trapping plays in solving these specific situations. Ex-coyotes **B** could we dogs/electric fence/etc. **B** but must use trapping in certain situations, etc.
- After more reading of handout materials in addition to discussion.
- Very good seminar/workshop!
- Not being a trapper, I feel I can walk away from this knowing more about managing trapping. Also I can explain to other people how important it is to trap.

B. Understand trapping issues and know how to communicate with the Connecticut public about trapping?

Yes	93%
No	0%
No Ans.	7%

- I feel that I have a better way to organize and present key messages to the public.
- I have a better understanding but it would have been good to do a break at session with small groups**C**to practice making specific points.
- Workshop provided a good overview of trapping issues & base of understanding of what characteristics a good, effective communicator has. Of course, only practice will bring about your effectiveness. Another segment on role playing/responding to scenarios would be a great addition to the workshop.
- After more reading of handout materials in addition to discussion.
- Reference literature will be useful.
- I believe there could**-**ve been more feedback from surveys of why trapping is opposed and more specific ways to educate people. What happened in past and what**-**s happening today, i.e., stigma that trapping is highly destructive and over-harvest does to values a problem.
- Excellent way to discuss issues. We need to do more of this.
- Need to display the economic, tradition and recreation components that benefit the "individual" trapper—well done to bring that out.

*C. Will communicate effectively on the issue of trapping**C**both proactively and reactively?*

Yes	80%
No	0%
No Ans.	20%

- I can talk about overall trapping issues people may have good or bad.
- I think the session is a good step in helping people do this**C**but one needs to practice this**C**and to be ready for the really nitty-gritty questions people ask**C**how are animals in fast-hold traps dispatched**C**is drowning humane or inhumane**C**would have liked more specific details on this type of information.
- I do feel more confident about how to respond, but also think field staff should continue to receive training annually in this area and have opportunity to review/re-evaluate how we responded to actual situations and discuss with our communications division how they can support us proactively in the future.

- I learned some important messages but they are very basic. What about some state specific problems and regulatory limitations, i.e. can=t effectively trap nuisance coyotes in CT due to laws prohibiting dirt holes, or why beaver only trapped out of season if public health and safety, but muskrat can, etc. (Internal inconsistency in department policy.)
- Knowing what approach to take will be more effective.
- I already have been but always willing to learn new things. This course gave me some new perspectives.

- Still don=t feel the department is prepared to act in a proactive way. When everything is reactive misinformation can never be negated and much staff time is consumed.

Secretaries:

A. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?

Yes 100%

- Very informative for someone with very limited knowledge of trapping.

B. Understand trapping issues and know how to communicate with the Connecticut public about trapping?

Yes 67%
No 33%
No Ans. 0%

- Not fully.
- Gave some great ideas for initial approach.

*C. Will communicate effectively on the issue of trapping*C*both proactively and reactively?*

Yes 100%

- Mostly reactively as my peer group is not opposed.

Others:

A. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?

Yes 100%

- This needs more work (development)Ca summary or benefits of trapping would be very useful.
- Be somewhat more concise.
- The three key statements really stuck in my head about how trapping is used as a tool. 1. Heavily regulated, 2. Animals are not inhumanely trapped, 3. Benefits of trapping.

B. Understand trapping issues and know how to communicate with the Connecticut public about trapping?

Yes 100%

- Yes, qualified! We made progression in this direction, but Aunderstanding trapping@ and Acommunicating@ require different cognitive skills and effort.
- I strongly believe a department spokesperson should be trained and have experience in addressing the publicCthis would be his job.
- Again, I would use the answer I wrote above. (The three key statements really stuck in my head about how trapping is used as a tool. 1. Heavily regulated, 2. Animals are not inhumanely trapped, 3. Benefits of trapping.)

C. Will communicate effectively on the issue of trapping—both proactively and reactively?

Yes 100%

- Most are not spokespersons but if we remember and practice key issues—participants should be able to handle questions.

Prior Knowledge

3. How much of the information covered in the workshop did you already know?

All Evaluations:

A. Most 40%
B. Some 53%
C. Not very much 7%

Administrators:

A. Most 67%

- But always good to have periodic refreshers.
- But, I'm a genius!

B. Some 17%
C. Not very much 16%

Information and Education Staff:

A. Most 67%

- But not all.

B. Some 33%
C. Not very much 0%

Fisheries Administrators/Biologists:

A. Most 0%
B. Some 100%
C. Not very much 0%

Wildlife Biologists/Managers:

A. Most 20%

- But I learned new stuff especially the public survey info.

B. Some 73%

- I was very interested in the field session and trap sets.

C. Not very much 7%

Secretaries:

A. Most	0%
B. Some	33%
C. Not very much	67%

Others:

A. Most	80%
B. Some	20%
C. Not very much	0%

Particularly Useful Information

4. What specific information from the workshop, if any, stands out as particularly useful to you or that you had previous misconceptions about?

Administrators:

- The Illinois video helped to reinforce my opinion about public opinion on trapping.
- The foot-hold trapping**C**I had significant concerns about the humane treatment of animals issue. I believed that pain and maiming were common. The newer foot-hold designs, and kill trapping in proper sets, and the info on how those work out has significantly changed my perception and comfort level.
- Confirmation that this is not a lost battle.
- Field portion of program I think is very beneficial to a non-trapper**C**eliminates many misperceptions, etc.
- Key messages to convey in a short period of time.

Information and Education Staff:

- Public perspective. Education impacts with strategic messages.
- Communication tool: Concentrate on (sell) the aspects that are a benefit to your audience.
- Communicating effectively. It is such a necessary tool that the agency has not used to the best of its ability.
- Communication methods, pros & cons of certain traps.

Fisheries Administrators/Biologists:

- The Acommunicating about trapping**Y@** section and discussions in the afternoon were by far the most important. Most of the biology/mgmt. Was background and could be shortened.
- 1. Current trapping technology, 2. Issues that motivate the public as opposed to issues that motivate the hunter/trapper.
- The communication strategies**C**useful. I can easily transfer them to communicating in my own discipline. Misconceptions**C**purpose of trapping. Still left in a Ahard to argue@ mode. I accept that there are Apublic benefits. I just think we don=t yet have a great counter argument to those who want to prohibit a trapper from enjoying those benefits.

Wildlife Biologists/Managers:

- I was not sure 100% in the types or methods of killing the intended species, i.e. drowning. I now know how it=s done (but don=t want it to happen to me).
- Use of priority messages**C**instead of the use of recreation or sport.
- Understanding of what the public cares most about and how best to communicate it (knowing what points to bring out first).
- Market research stats were enlightening.
- Foot-hold versus leg-hold.
- Communication tips.

- Percent of general population not opposed to hunting/trapping.
- The survey info.
- The kinds of traps I=ve seen have changed. I=m used to seeing big traps with big teeth, breaking bones. That=s not the case any more. The managing aspect of it is very important. I didn=t realize how much damage was caused.
- Not using sport, recreation or furbearer terms. Realizing that to change public perceptions we must use the techniques they find appropriate.
- CT does not use leg-hold traps.

Secretaries:
- Had only seen videos about trapping previously. Hands-on trap setting was very useful as you explained how the traps would target species. Also info about the trap testing.
- Seeing more clearly the benefits of trapping to the environment.

Others:
- The statistical summaries of recent public surveys**C**excellent support info. More needed!
- Trapping is another form of hunting or fishing**C**public perception needs to be addressed. To those who know little about trapping, I believe from comments and discussion much was learned.
- Information about trapping and public opinion or other stats. It needs to be done in CT.
- It=s difficult to summarize 8+ hours of information received. However, I would say the section on communication was very important to me. To effectively communicate this topic is not easy. I came out of this workshop with more useful tools to communicate our position.
- Key messages, priority messages, supporting messages.

Most Helpful

5. What did you enjoy or find most helpful about the workshop?

Administrators:
- The demonstration of traps & their use.
- The obvious knowledge and concern for wildlife Avalues@ of the presenters.
- Tips on media relations/influencing public opinion.
- Direct contact in non-agency trapper (Tip) who was well spoken and professional/was excellent.
- BMP update.
- Understanding the BMP process.

Information and Education Staff:
- Public perspective/education impacts with strategic messages.
- Communication tool**C**sell the aspects that are a benefit to your audience. 2. Trap setting demonstrations.
- Group discussion.
- Dave Case and Tom Decker are excellent speakers**C**very good analogies and a great
- understanding for the big picture approach and its connection to hunting and trapping issues.
- Communication aspects.
- Well done**C**thought provoking.

Fisheries Administrators/Biologists:
- The Acommunicating about trapping@ section and discussions in the afternoon. Most of the biology/management was background and could be shortened.
- 1. Highlighting issues that motivate the public. 2. “Priority messages.”
- ”The humor. Humor works. We all ought to use it.

Wildlife Biologists/Managers:

- Humor, various opinions of attendees.
- A system of presenting information was outlined that can be used not only for trapping issues but may be applied to other wildlife management issues.
- Info on traps.
- All was very enjoyable, but the last session was probably the most informative**C**because it was a good exchange of thoughts, ideas and comments.
- Talking about different trap types and advances made and understanding what the public cares most about and how best to communicate it.
- I agree that messages should pinpoint values widely accepted by public and importance to use them.
- Ways to communicate to public on benefits of hunting and trapping.
- Tips on how to address the public.
- Stuck to schedule. Take-home data. Excellent detail.
- The format**C**Dave Case did a great job of facilitating. Good info presented.
- All of it.
- Realizing a need to change simple wording as a more effective approach. Realizing that to change public perceptions, we must use the techniques they find appropriate**C**not using sport, recreation or furbearer terms.
- Techniques and ways of working with the media to get our viewpoint across.
- How the traps are actually set, and used.

Secretaries:

- The concepts of how to deal with the questions about trapping in a positive way as I am a hunter and can also use this info about hunting. Also found history of CT species helpful.
- Helpful info on how to manage communications with the public.

Others:

- The field demo of trapping techniques. The discussion of issues.
- The format was well done**C**Decker was excellent!
- Group discussions about trapping issues.
- Everything was excellent, from beginning to end.
- The active participation of the attendees.

More of in Workshop

6. What type of information would you like to see more of in the workshop?

Administrators:

- OK as presented.
- Perhaps more info in the alternative consequences of not managing and harvesting wildlife. I know Athey will starve due to overpopulation@ is too simplistic**C**and not scientifically adequate.
- Too bad there was not more time in the field. Trap demos were very informative for many who did not have trapping experience.
- Info on communication.
- More info on traps, sets, etc.

Information and Education Staff:

- The process of coming up with the key messages and what to do with them.
- 1. Techniques in persuasive communication. 2. Creating a coordinated outreach campaign**C**types of products vs. audiences.

- Specific examples of how regulated trapping benefits other wildlife and habitat. Reasons why trapping is good management tool for general public to support.
- If more time than maybe more of a case-by-case discussion about real issues. It=s very helpful to generate open discussion with a moderator present that is knowledgeable and open-minded as Dave and Tom.
- If time allowed, natural history of furbearers and implications for trapping.
- Realistic, honest, straightforward answers, rebuttals to a growing proactive >anti= movement.

Fisheries Administrators/Biologists:

- More on effective communication and dealing with the media. Agencies need more specific help and guidance in these areas. Some more work or discussion on issues in the host state would be helpful. Recommendation from the facilitator would also help. Don=t play it safe!!!
- How a group establishes target Acultural carrying capacity@ in so far as this is a subjective target, the agency needs to be able to convince Athe public@ that the targets set were 1. reasonable, 2. benefit the public, 3. were established in reasonable ways, and 4. are sensitive to parties adversely affected.
- The Apurposes/key messages@ part ought to be stated more repetitively up front, before you go into the species/techniques material.

Wildlife Biologists/Managers:

- More species-specific types of trapping. I would like to experience trapping myself although it seems like a lot of work!
- Need**C**communication division staff here**C**to hear concerns of the wildlife division and about trapping. If CT doesn=t support it, no communication will be done.
- More info on the definition issues concerning methods of trapping, etc. Drowning vs. Conibear, etc.
- We didn=t cover real well how to respond to public concern about the humaneness of trapping for those who want to know the details (should we try to handle these questions ourselves or always refer them to those more knowledgeable). For us to really be effective, I think the former is the answer, but obviously this means our agency must make a commitment to training staff on trapping issues on some regular basis.
- More examples of using these messages to address common nuisance complaints (i.e., raccoon in attic) and in high profile (media) contacts that reach large number of public. One on one vs. large media event.
- Public views or surveys.
- Economic affect to states of hunting/trapping.
- Set up a Amock@ debate--have groups present their positions in front of the whole group.
- They didn=t talk about educating younger people. Just the adults. I think the younger population should be looked at closer.
- Perhaps more dialogue from high level administration as to their perspective on our open dialogue with anti-groups and on understanding or judicial rulings. Why did DEP give up on junior hunting day?

Secretaries:

- More info about what other states are doing**C**the Illinois video was very interesting. Give out PowerPoint handouts before the presentations start.
- I thought the coverage was adequate.

Others:

- How to communicate these issues better to publics. Clarification of state issues as part of intro material or morning session. Summary of trapping benefits, values, etc.**C**slide handout? More history of trapping, especially in CT (concise presentation). Small group discussions**C**summarize outcome.
- More of stressing the key points. Be repetitive on these issues. Perhaps more information in Communications.
- More group discussions of local issues (opening state lands for trapping).
- Effective communication. Again, I believe this will always be needed in our agency, considering the issues.
- More information on communication/persuasion with public and more ideas for supporting trapping.

Less of in Workshop

7. What type of information would you like to see less of in the workshop?

Administrators:

- OK as presented.
- All was important. First section (furbearers in CT) could have been shorter**C**was a review for most in this group (however, would not be a review for other DEP stuff).
- The furbearer management section and harvest techniques and BMPs section were too long. They should be shortened and simplified. This would leave more time to hit the key points. Communicating as priority message.
- More on skills--how exactly to communicate and interact with those on opposite sides.

Information and Education Staff:

- The actual basics, although there is a diverse audience.
- It is necessary. All relevant!
- None. All appeared appropriate.

Fisheries Administrators/Biologists:

- Don=t need as much background on biology and management.
- A little less of the Aspecies presentation@ material. It was quite long.

Wildlife Biologists/Managers:

- Everything was excellent and pertinent.
- A little less on furbearer history in CT as most pretty familiar with it. Also less on trap testing due to same reasons.
- The history and trapping techniques and BMP sections could be shorter in time taken.
- History of trapping. Concentrate more on current trapping issues.
- None.
- All information was valuable.

Secretaries:

- Less detail on communication.
- Perhaps fewer charts.

Usefulness for other States

8. Do you think this type of workshop would be useful to other state wildlife management agencies?

All Evaluations:

Yes 100%

Administrators:

- Reinforces need for messages that we need to present.
- To other states**C**certainly useful. And useful for other divisions within CT DEP: Particularly those in land management (parks, land acquisition, conservation office, forestry). Many others in the agency (particularly our I&E folks) could certainly benefit by learning the principles of communication.
- Brings a total unit of people in the same division up-to-date with latest info.
  Especially for staff that have no exposure to the trapping issue. Also for experienced staff to understand how our previous defense to trapping will not continue to be effective.

Information and Education Staff:

- Everyone will face these issues, if not already.
- Most people don't understand how to package their message so it sells to the intended audience.
- Very good discussions/viewpoints.
- Extremely helpful! I'm guessing that there are a lot of agencies with poor communication skills.
- Trapping is probably the least understood use of a natural resource among agency personnel.

Fisheries Administrators/Biologists:

- I suspect a lot of agencies are still Abehind the curve@ on effective communication techniques (in fact, many parts of our agency still are).

Wildlife Biologists/Managers:

- I=m sure there are many others like myself who are not clear on trapping issues.
- It is a useful workshop because it provides information on messages that wildlife professionals should be sending to the public.
- Great workshop**C**could be used (if communication division will let them). We need to tell communicators what to do for the department.
- Helps everyone recognize better ways to communicate.
- Useful information and communication techniques discussed. Also reaffirmation that public believes in our work.
- Hunting/trapping controversy is becoming more of an issue.
- Need to address the changing times and opinions.
- Excellent setting for exchange of ideas.
- Yes, we need more of this all around the country.
- To teach people on how to communicate on the trapping issue.

Secretaries:

- Especially those not involved with trapping.

Others:

- As official stewards of public biological resources**C**principles and approaches apply to other agencies as well.
- There are those who know little or nothing on this issue. Agencies should see the trapping controversy and relate it to the future of these management programs or Arecreational@ hunting.
- I will bring these types of workshops to the educational sector (teacher and high schoolers, universities, town halls, etc.) more than to other state management agencies.

Other Comments

Administrators:

- A lot to fit into one day, but very productive not sure if we could have ensured as much attendance if two days.
- Overall**C**a great workshop! Some sections should be shortened. I don=t believe that many people can absorb info after about 20 minutes on a topic.

Information and Education:

- There is a great need for a workshop on dealing with the public on all issues especially in situations with limited time such as phone conversation skills. Also, this would be a great workshop for educators and nature centers!
- Well done!
- Recreation is not a dirty word**C**must be included in any honest description of why most people hunt or trap. Few people derive major income from fur trapping. Few people hunt solely for subsistence food.

Fisheries Administrators/Biologists:

- 1. I believe the goal should be Aunconscious competence@ and that one gets there through structured training and practice (conscious competence). 2. The priority messages should include four main elements: a) there is a very real problem or opportunity, b) It is your (agency) responsibility to address, c) your methods to address are reasonable, e) you understand the difficulty your actions create; you=ve heard the negatives (taken from Hans Bliecker).

Wildlife Biologists/Managers:

- If the department does not have the info (because no staff) or one person. The department needs to get info**C**interns, contractors, staff. Lets put some money into finding out this info needed to make decisions.
- I would have liked to keep the coat!
- CT=s laws and policies can be contradictory or restrictive to extent that management loses its effectiveness and ultimately some credibility.
- I give many slide shows/lectures and interact with a large segment of the public. This workshop has reaffirmed my dedication and increased my knowledge of communicating to the public using various techniques. I=d like to see more opportunities like this on other topics such as Ainvasive plants,@ Adeer hunting,@ and Anuisance wildlife control.@
- I think the younger population should be educated on this issue. They will be the future trappers and hunters. If they are misinformed when they are kids, they will be misinformed as adults.
- Problem is to have a coordinated communication program in the division/bureau/agency. Not all spokespeople are as dynamic as Dave and Tom. Expertise as well as enthusiastic personalities are keys to public outreach.
- It would be nice to have similar seminars (similar format) on other controversial DEP issues; hunting, pesticide use, others. Good job! Thank you.

Others:

- You are on the right track—don't let up. The state wildlife agencies will benefit from following Input, prodding and reporting progress. Start earlier—go later—pack more in—rare to get these folks together for this topic.
- Good luck**C**I would like to see this project be successful throughout. Proud to be a part of it. I=m not always clear on comments. Feel free to e-mail.

Connecticut Furbearer Management Workshop
Follow-Up Evaluation Report
March 2, 2001

On October 25, 2000, the International Association of Fish and Wildlife Agencies conducted a workshop on Furbearer Management for the Connecticut Department of Environmental Conservation. The workshop was developed and facilitated by David Case with D.J. Case & Associates. Instructors included:

Paul Rego, Connecticut Department of Environmental Protection
Tom Decker, Vermont Fish and Wildlife Department
Tip Garrett, Trapper and former president of Connecticut Trappers Association
David Case, D.J. Case & Associates

Forty-seven people participated in the workshop, primarily Wildlife Division staff. Thirty-eight participants completed evaluation forms. On February 9, follow-up evaluation forms were sent by the CT DEP to the participants in the October 25 workshop. Thirteen participants completed and submitted evaluation forms, although some did not answer all of the questions. The results are summarized below.

Results

Listed below in *italics* are the questions asked on the follow-up evaluation form. Participant answers are included/tabulated after each question.

1. *Have you used the information presented at the workshop in your job activities?*
   Yes: **8** No: **5**
   Comments:
   - Yes….regarding how to deal with controversial Fisheries issues.
   - Information helped in designing an exhibit/display on trapping.
   - Yes to a degree. The workshop was well done.
   - The "public opinion" or "how to communicate effectively" elements of the presentation were useful.
   - Not directly. As a staff member in the Bureau of Natural Resources, I attended in order to have a basis of understanding if/when I might be involved in issues relating to furbearer management. That is not a primary function of my job, so it is surprising that I have not had occasion to use the information so far.
   - Yes, we've developed a portable display using much of the information discussed in the workshop.
   - Yes—I used the information in developing exhibit text on trapping for a Hunting and Fishing Expo.

2. *Has the information from the workshop made you more effective in communicating about trapping (e.g., better able to deal with inquiries or answer questions about furbearer management)?*
   Why or why not?
   Yes: **10** No: **2**
   Comments:
   - If I have to answer any questions, I feel I can answer those questions correctly.
   - By getting a better understanding about how the majority of public feels about trapping as a necessar6y management tool.
   - No … I work in the Fisheries Division and don't deal with trapping issues. However, the approaches & concepts that were discussed are also helpful in dealing with many Fisheries issues.
   - Provided information that explains trapping in way that can be used in dealing w/the public.
   - Somewhat, it was a good refresher on trapping.
   - Not a wildlife manager.

- Definitely. The information was particularly valuable to me as a non-wildlife management member of the staff.
- YES, though I have not had to answer any inquiries I am more aware and have updated information about the types of traps being used today.
- Yes, the information provided in the workshop has made it easier to le tough questions, including those concerning humane issues.
- Yes, I have a better understanding of trapping methods, traps and the reasons why people trap.

3. *Have you used the information presented at the workshop to proactively communicate with the non-hunting and non-trapping public?*
   Yes: **5** No: **8**
   Comments:
   - Not yet, but probably will in the near future.
   - No opportunity. I was on sabbatical fall semester.
   - Yes, the workshop gave us good strategies on how to present the trapping topic.
   - No. I presume you mean "communication with the non-hunting and non-trapping public regarding hunting and trapping issues."
   - Yes, in private (non job related discussions).
   - Yes, but for myself, so far it has only been through the publications and display materials we've used.
   - Yes, for developing exhibit text.

4. *If yes, how did you use the information? Check those that apply:*
   - *talking with friends and other casual interactions* - **4**
   - *presentations to schools or other groups of youths* - **1**
   - *presentations to groups of adults* - **3**
   - *dealing with the media* - **1**
   - *other--please describe* - **3***:*
     - Yes, for developing exhibit text.
     - Shared with students.
     - Yes, but for myself, so far it has only been through the publications and display materials we've used.

5. *Have you used any of the materials that were distributed at the workshop?*
   Yes: **6** No: **5**

6. *If yes, were the materials helpful?*
   Yes: **4** No: **0**
   Comments:
   - Yes.
   - The information has been a valuable resource for our dealings with the public about trapping issues.
   - Indirectly—using communication techniques when speaking with other groups.
   - Yes, the brochures were helpful.

   Workshop components included:
   - *Furbearer management in Connecticut* -**1**
   - *Harvest techniques and Best Management Practices (BMPs)* - **2**
   - *Trapping and furbearer management issues in Connecticut* - **1**
   -*Communicating about trapping and furbearer management* – **4**
   -*Public opinion* – **3**

7. *Which part of the Leadership Workshop has been most useful to you <u>and why</u>?*
   - [no choice made] My position with the state is a little different. I normally do not deal with the public. But I feel I learned things I didn't know. I think I can now answer most questions.
   - Public opinion, realized that people are less accepting of trapping even when presented as a reliable management tool.

- Communicating—because that is what my job involves.
- Public opinion. Contained new, recent data which is very useful.
- Public opinion, because I can use the information in my own work in marine fisheries management, which has many of the same pitfalls: emotional groups of people absolutely convinced that they are right, when in fact, they are either "not right" or they fail to consider the views of persons or groups which have a different opinion.
- Both furbearer management in CT and Trapping & furbearer mgmt in CT were very useful to me in understanding the wildlife management issues and challenges as well as the use of trapping as a management tool. The public opinion portion was also helpful to me in understanding how the general public perceives these issues (communication works a lot better when you understand the other person's viewpoint).
- Communicating about trapping and furbearer management. Many of these techniques can be used for other species and issues.
- The harvest techniques and BMP's portion had the most use for me because it provided a good base of information with which to deal with the public. Also, the harvest techniques taught me some new things about trapping and trappers.
- Communicating—management—best component.
- From a biological standpoint, the first 3 were most interesting. The communication unit was most helpful because it presented ways to effectively communicate with adversarial groups.
- Harvest techniques and Best Management Practices (BMPs) because it talked about trap design and effectiveness.

8. *What areas do you feel you need to improve upon in order to more effectively communicate with the public about fur hunting and trapping issues?*
   - Our division needs to become more proactive and make appoint to educate as much of the public as possible the facts about trapping. Do not try and fight the animal rights groups but rather allow the public to make an educated decision based on factual information provided by the division.
   - Find the best way of communicating w/out sounding defensive or appear to be preaching.
   - Solid justifications for trapping need to be articulated carefully and quickly. As a person with trapping experience (and license) I know this to be an important area for my use in teaching.
   - I don't normally communicate with the public about trapping but it is good info to know.
   - I think any new progressive ideas that help to deal with communicating with the public would be useful and appreciated.

9. *Other Comments?*
   - I need good, rel. brief 15-20 videos for use in my classes. Students range from young & totally inexperienced to older inexperienced. Trap manufacturers should donate high school & especially college wildlife management programs/teachers with a kit of modern traps, tools & supplies for demonstration (not to run a trap line!!).
   - Do not work in a furbearer program—However, much of the information and techniques are applicable in dealing with other adversarial groups.
   - Enjoyed the workshop.

Connecticut Department of Environmental Protection
February 21 – 22, 2001
Evaluation Report
March 8, 2001

On February 21 and 22, 2001, the International Association of Fish and Wildlife Agencies conducted a Furbearer Management workshop for the Connecticut Department of Environmental Protection. The workshops were developed and facilitated by David Case with D.J. Case & Associates. Instructors included:

Paul Rego, Connecticut Department of Environmental Protection
Tom Decker, Vermont Fish and Wildlife Department
Tip Garrett, Trapper and former president of Connecticut Trappers Association
Dale May, Connecticut Department of Environmental Protection
David Case, D.J. Case & Associates

Sixty-seven people participated in the workshops, primarily Wildlife Division staff. Fifty-five participants completed evaluation forms.

Following in this report are:

1. The Workshop Agenda
2. The Combined Evaluation Results

Furbearer Management Workshop
Connecticut Department of Environmental Protection
February 21-22, 2001

Objectives

As a result of this workshop, participants should:

1. Know the benefits of regulated trapping particularly how it is used as a tool for managing wildlife in Connecticut;
2. Understand trapping issues and know how to communicate with the Connecticut public about trapping;
3. Communicate effectively on the issue of trapping—both proactively and reactively.

Agenda

9:00 a.m.	Introduction of workshop and participants—Dale May and Dave Case
9:30	Furbearer management in Connecticut—Paul Rego
10:20	Break
10:35	Harvest techniques and BMPs—Tom Decker and Tip Garritt
11:45	Lunch
12:30 p.m.	Trapping Demonstration
1:30	Communicating about trapping and furbearer management—Dave Case
3:00	Break
3:15	Trapping and furbearer management issues in Connecticut—Group Discussion
4:30	Evaluation and wrap-up
4:45	Adjourn

International Association of Fish and Wildlife Agencies

Evaluation Summary

Furbearer Management Workshop

Connecticut Department of Environmental Protection

February 21 - 22, 2001

Below is a tabulation/compilation of results from the evaluation forms distributed at the end of the workshop. The actual questions from the evaluation form are printed in *italics*.

Participant comments are listed following bullet points **($)**.

Overall Workshop

1. Please rate the quality of the workshop using the following scale and circling your choice:
5 = excellent, 4 = good, 3 = average, 2 = poor, 1 = very poor

All Evaluations (n=55)

A. Knowledge of instructors	4.8
B. Delivery style of instructors	4.4
C. Value of information	4.5
D. Objectives clearly stated	4.4

Conservation Officers (n=29)

A. Knowledge of instructors	4.8
B. Delivery style of instructors	4.4
C. Value of information	4.3
D. Objectives clearly stated	4.3

Fisheries (n=4)

A. Knowledge of instructors	4.8
B. Delivery style of instructors	4.5
C. Value of information	4.8
D. Objectives clearly stated	4.8

Forestry (n=6)

A. Knowledge of instructors	5
B. Delivery style of instructors	4.5
C. Value of information	4.5
D. Objectives clearly stated	4.5

Wildlife (n=10)

A. Knowledge of instructors	4.9
B. Delivery style of instructors	4.6
C. Value of information	5
D. Objectives clearly stated	4.7

Others (n=6)

A. Knowledge of instructors	4.8
B. Delivery style of instructors	4.7
C. Value of information	4.7
D. Objectives clearly stated	4.3

Objectives

2. Were the objectives of the workshop achieved? As a result of the workshop, do you feel you:

All Evaluations:

A. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?

Yes - 100% No - 0%

B. Understand trapping issues and know how to communicate with the Connecticut public about trapping?

Yes - 100% No - 0%

C. Will communicate effectively on the issue of trapping—both proactively and reactively?

Yes - 93% No - 2% Not sure - 4% No answer - 1%

Conservation Officers:

A. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?

Yes - 100%

Comments:

- The workshop just reinforced my feelings. I did however benefit from the communications section of the seminar.
- I knew nothing about trapping, and have really gained some valuable knowledge, used during public hunt/fish shows.
- Would like to see more emphasis how to relate this to law enforcement & how to deal with anti hunters.
- Good info for explaining on angling for trapping & hunting.

B. Understand trapping issues and know how to communicate with the Connecticut public about trapping?

Yes - 100%

Comments:

- The priority messages & supporting messages from Section four will be very useful.
- I am going to need some practice.
- Both trapping & anti hunting.

C. Will communicate effectively on the issue of trapping—both proactively and reactively?

Yes - 86%

Comments:

- When I communicate I have a great resource to refer, it is to the point and covers timely topics.
- More scenarios of interacting w/public, both pro & con trapping/animal views.
- More on law enforcement & dealing with these people in a tactful manner.

No - 3%

Comments:

- Need more time to learn trapping.

Not sure - 8%

No answer - 3%

Fisheries:

A. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?

Yes - 100%

B. Understand trapping issues and know how to communicate with the Connecticut public about trapping?

Yes - 100%

Comments:

- "How to communicate"—I feel was an important benefit of this workshop. Very often I find myself getting very emotional on hunting/trapping issues and as a result lose sight of "how to effectively communicate." The workshop was quite enlightening with respect to this.

C. Will communicate effectively on the issue of trapping—both proactively and reactively?

Yes - 100%

Forestry:

A. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?

Yes - 100%

Comments:

- Not only did I learn how it is used as a tool for management, I learned valuable skills in conflict resolution.

B. Understand trapping issues and know how to communicate with the Connecticut public about trapping?

Yes - 100%

Comments:

- Will have to refresh myself on points & keep them in mind regularly!

C. Will communicate effectively on the issue of trapping—both proactively and reactively?

Yes - 100%

Comments:

- Hopefully.

Wildlife:

A. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?

Yes - 100%

Comments:

- If presented to the public, some of the benefits would need to be simplified—more like the IL video explanation.
- I liked the idea of not overstating trapping's important and communicating to the public that trapping is regulated.

B. Understand trapping issues and know how to communicate with the Connecticut public about trapping?

Yes - 100%

Comments:

- Provides a very good overview of issues & equal approach.
- Help communicate better, but not proficient.
- Very helpful. I talk to people about beaver damage and I have had a difficult time in the past with it. Using "regulated" & "balance", etc…is very important to convey that game species are not in jeopardy of becoming extinct. I definitely have overestimated, in the past, the public's knowledge of wildlife issues.

C. Will communicate effectively on the issue of trapping—both proactively and reactively?

Yes - 100%

Comments:

- Especially how important it can be to non-game & for T&E species mgt.
- Improve.
- Hopefully.

Others:

A. Know the benefits of regulated trapping, particularly how it is used as a tool for managing wildlife in Connecticut?

Yes - 100%

Comments:

- Unsure about realities of "catch & release" trapping mentioned during workshop.

B. Understand trapping issues and know how to communicate with the Connecticut public about trapping?

Yes - 100%

Comments:

- Even more on this topic would be beneficial.
- Very good to have 3 primary messages & that "emotion" is OK.
- Good discussion of key & supporting messages—it would be great to have enough time to do role-playing and have folks practice.

C. Will communicate effectively on the issue of trapping—both proactively and reactively?

Yes - 100%

Comments:

- Not sure on proactive part as an agency with political considerations.
- Good suggestions on how to be proactive.

Prior Knowledge

3. How much of the information covered in the workshop did you already know?

All Evaluations:

A. Most	33%
B. Some	60%
C. Not very much	7%

Conservation Officers:

A. Most	41%
B. Some	55%
C. Not very much	4%

Fisheries:

A. Most	25%
B. Some	75%
C. Not very much	0%

Forestry:

A. Most	17%
B. Some	66%
C. Not very much	17%

Wildlife:

A. Most	10%
B. Some	80%
C. Not very much	10%

Other:

A. Most	33%
B. Some	50%
C. Not very much	17%

Particularly Useful Information

4. What specific information from the workshop, if any, stands out as particularly useful to you or that you had previous misconceptions about?

Conservation Officers:

- Useful: Referring to hunting/trapping as "regulated;" also what phrases or ideas are more or less persuasive than others.
- Number of people sympathetic to trapping in the general public.
- Improving traps.
- Practical outdoor demonstrations.
- I did not know that most people were not against trapping. (Who knew?)
- Covered.
- Info & methods to discuss trapping with those who are uninformed or misinformed.
- How to deliver the communications to misinformed groups.
- Delivery of messages to public – empathizing, etc.
- None.
- About what is exactly is legal, what (in today's society) is a trapper, and his/her needs.
- Accept for statistics on what are important to people to hear i.e. "approval of trapping for different reasons."
- Communication skills.
- Other people's views and how public sees it.
- Popular reaction to information. The whats and when to get info out and who presents it.
- Priority messages, good condensation of effectively communicating trapping benefits.
- How the padded foot hold trap does not cause injury.
- CT issues section.
- Use of flesh of trapped animals.

Fisheries:

- The advancements that have been made in trap design.
- How to more effectively communicate the benefits of trapping to non-outdoors oriented people.
- Techniques/methods for effective communication.
- See comments on "2-B." ["How to communicate"—I feel was an important benefit of this workshop. Very often I find myself getting very emotional on hunting/trapping issues and as a result lose sight of "how to effectively communicate." The workshop was quite enlightening with respect to this.]

Forestry:

- Useful list, point by point, on being an "effective communicator." I knew many of these details but never put them in such concise terms.
- Opinions expressed in polling—I thought it would be more negative.
- The most useful was having the foot-hold trap (padded) go off while my wrist was in it. I was surprised that it didn't hurt that much. I thought it would be much more powerful and painful.
- Key issues to state; what to avoid to bring negative connotations.
- The different types of traps, how they're set and the selective capability of the traps cleared misconceptions that "traps" catch any and all animals.

Wildlife:

- How to better communicate with general public. How to use key words, like "regulate" and freedom.
- Something I forgot…trapping was important in restoring many populations of furbearers—especially foot-holds—that's something the public needs to know.
- I got some good methods for communication out of the workshop.
- Evolution of traps in recent years.
- Angle & approach when communicating with general public.

- I did not know that most people did not know that trapping is regulated.
- I was unaware of the fact that a large percentage of the public did not know that trapping is regulated.
- [stands out as particularly useful]—the public's opinion about trapping. [previous misconceptions]—that we as professionals "frown" upon becoming emotional about these topics when to the public they are emotional topics.
- Topics to focus on when communicating to general public.
- Leghold vs. foothold.

Others:

- Use of terminology.
- Information about public acceptance of outdoor activities & use of wildlife.
- 3 primary messages. Types/operations of traps.
- Description & workings of all the different kinds of traps—I was not aware of how sophisticated the technology had become.

Most Helpful

5. What did you enjoy or find most helpful about the workshop?

Conservation Officers:

- Learning how to interact/discuss problems by listening & dealing with people in a non-combative way. Hands-on demos were good. Good film.
- Trapping demonstration.
- The messages to bring to citizens who are not committed on the issues. Ways to sway the public to the pro management side.
- Good resources & info.
- Practical exercise.
- Practical outdoor demonstrations.
- Active with hands on demo of traps.
- Outdoor demonstration Illinois DNR video.
- Great instructors.
- Informative.
- Mechanics of setting traps in the field.
- Types & workings of equipment.
- Hands on—showing the mechanics of trapping.
- Review of state furbearer program.
- Traps and different legal and illegal methods.
- Trapping demonstration.
- Hands on trap info & techniques—biological furbearer info that is commonly asked for us to answer.
- The emotional aspect to the arguments.
- Trap use.
- Hands on with traps (demo).
- Trap demonstrations.

Fisheries:

- Quality graphics.
- Actual trapping demonstration. Survey result about public sentiments towards trapping/hunting. Priority message "sound bites."
- In seeing research data from public. In particular pre & post survey results where respondents were asked same questions before & after. This shows how "positive" and "well worded" questions or discussion can influence the general public.

Forestry:

- The trapping discussion in morning was all new to me and educational.
- No one issue.
- Communication.
- I learned quite a bit at the field session where different traps and techniques were demonstrated. It was interesting to learn how much knowledge of the animal's behavior is needed to be a successful trapper.
- Surveys were interesting & informative. Discovering how much effort has been put into making traps better for animals. Video was good (added variety).
- The PowerPoint presentation & video were enjoyable and the "hands-on" aspects were helpful.

Wildlife:

- Everything.
- Practical tactics for dealing with animal activists.
- Getting outside to see a trap set up.
- Enjoyed trap demonstrations.
- Field work-visuals. Attention to detail about trapping.
- Learning about public perceptions.
- I thought the movie was both enjoyable and useful. It was interesting to see people saying the exact things that the surveys reflect.
- The UMASS professor's work!!! Was very much an eye-opener. Many of us view our jobs as educators and to understand that it is a moral issue vs. pro-animal makes it a bit easier to swallow that, when speaking to activists, what you say will probably never sink in.
- Tom Decker's view on the origins of human use of animals as ground to stand on.
- Outside, setting traps.

Others:

- Thinking of other person's perspectives on these issues.
- Being an effective communicator.
- Instructors & field portion.
- Discussions—Tom is a wealth of knowledge. Dave too!
- Demonstrations in field situation.

More of in Workshop

6. What type of information would you like to see more of in the workshop?

Conservation Officers:

- Concentration on the positives of trapping, especially maybe in dealing with children. Also more info on how anti-trappers think and how to react/interact, e.g. more input from the proof. from Mass. would have been nice.
- More on actual animals and trapping techniques.
- Brief outline of CT trapping laws.
- Practical outdoor demonstrations.
- More tech of trapping.
- More time devoted to priority messages.
- How to talk more with antis.
- Covered.
- A CT video.
- Hands on setting traps.
- More styles of effective communications w/public. More relation to specific state issues (i.e., state trapping rights)
- It would be interesting to watch a clip on buffalo being slaughtered, Eskimo clubbing seals, or Japanese whale harvesting in the beginning, so you could see the reaction. That's what the media shows the public.

That's half of the bias opinions of the general public, because that's what first comes to mind.

- Would like to hear about <u>our</u> department's point of view and direction on dealing with this concern.
- Current trapping is, success rates—value, & illegal practices.
- 1) Have one (or some) anti's in the workshop (for civil debates). 2) "Hands on" ways to handle anti's.
- More on other types of traps ("snares, mesh, box, etc."). Could look into more info on some of urban wildlife, i.e. raccoon living in chimneys, mink in culverts.
- Don't know.
- Learn more about the animals and the habits.
- Trapping techniques.

<u>Fisheries</u>:

- Ways to convey this info to urban audiences.

<u>Forestry</u>:

- Communications part expanded to include other natural resource issues (hunting, logging).
- More of how to speak with opposition—used hey words such as "balance" etc.
- Communication could be a workshop in itself.
- I would like to see it expanded to include hunting, fishing, and timber harvesting.
- Stress key issues to state, & supporting statements to make me more confident when trying to explain to public.
- Presentation of scenarios demonstrating communication skills.

<u>Wildlife</u>:

- Public outreach tips & skills are something "professionals" don't always make use of & may not have learned—the examples of "how to" (or how <u>not</u> to) really help the group as a whole.
- I felt that a good deal of information was assumed to be already known, especially concerning the use and setup of traps.
- Respond to "difficult" issues—i.e. humaneness.
- Setting traps.
- The tactics on how to present key points.
- How to better our communication skills for speaking to the public.
- Examples of public opinions.
- How to prepare a skin.

<u>Others</u>:

- Concentration on the positives of trapping, especially man.
- Effective communication—more skills.
- Examples of how one could use these messages such as hot to weave the messages into a typical interview from newspaper reporter.
- Just right as is.
- Maybe video people delivering the messages?
- More of above in warmer weather. More communication skills section.

Less of in Workshop

7. What type of information would you like to see less of in the workshop?

<u>Conservation Officers</u>:

- How to "handle" people.
- None—good content.
- Nothing really. Everything aimed to objectives.
- None.
- Statistics.

- None.
- Too many statistics—suspicious of some phone surveys.
- BMPs.
- Try not to make it sound like your selling it. Keep an open mind, and leave the opinion up to the listener.
- As is.
- Theory.
- Don't know.
- First three sectors seemed the same.
- More ideas or ways to get information to the non-trapping/hunting/fishing community.

Fisheries:
- Standing outside in 10° temperatures.

Forestry:
- Although interesting & new to me, less emphasis on trapping instruction & demonstration, more on communications issues covered in the afternoon.
- No particular issue.
- It was all pretty good.
- Leave it as is.

Wildlife:
- Less of the formulas in the videos.
- Thought most of it was useful—nothing specific comes to mind.
- Stats on how people feel about topics could have been a little less abundant.
- Perhaps less graphs and statistics.
- Less basic info.
- All is useful.

Others:
- Trapping techniques was good but there could be less of it.
- Although all content is important, there's a lot to remember.
- Breaks a little long; can condense & end earlier.

Usefulness in Other States

8. Do you think this type of workshop would be useful to other state wildlife management agencies?

All Evaluations:

Yes - 98% Not sure - 2%

Why or why not?

Conservation Officers:

Yes - 100%

Comments:
- I think, esp. in law enforcement, many new hires haven't trapped, don't know traps and (worse) don't realize how imp. trapping is.
- Any training of this type is so rare it at least brings out discussion.
- To achieve the stated objective.
- The animal activists have been.
- Because professionals (conservations officers, biologists) whether they admit or not, are mostly clueless to trapping.
- Different perspective—from the general public's point of view—not just our thoughts through our rose-colored glasses.

- We all face the same problems and the same enemy.
- The more information that is given to individuals in our field of wildlife law, or the biologist , that deals with the public needs to communicate the issues of hunting and trapping in a non-confrontational way. The better we present ourselves the better we can communicate with them.
- Gives perspective to both sides.
- Never refuse training. Never stop learning.
- I & E
- Boils the essentials down to productive messages.

Fisheries:

Yes - 100%

Comments:

- Helpful in setting priorities for public presentations.
- Very informative. The basic message can be extended to other contentious resource issues.
- Natural resource managers should also attend. Also, I think DEP info & education unit should have been given opportunity to attend this (in general, they reach diverse audiences and probably have little understanding of natural resource management).
- It will be interesting once the information has been digested on how fisheries can apply some of these procedures.

Forestry:

Yes - 83%

Comments:

- Same problems with other controversial issues—universal!
- Would also be useful to other programs within the state—especially forestry.
- Because it helps in learning how to deal effectively with the public.
- It would be useful to other state wildlife agencies to let them know we're all facing the same issues and to develop a standard response nationwide.

Not Sure - 17%

Comments:

- Don't know enough about public relations programs.

Wildlife:

Yes - 100%

Comments:

- It is needed.
- Very logical approach to a hot-button issue, which states often do not handle well.
- The info on communication techniques was very useful.
- Foresters, fisheries, law enforcement & wildlife.
- This is information that all state wildlife agencies need to know.
- There are valuable things that are taught in this course and it would be good to have other state wildlife agencies all present a unified front.
- How you communicate with someone can mean a lot. Many people don't have unlimited access to speaking w/the biologists. Speaking with an agency representative gives that person a way to characterize the agency. "If you care, then the agency must."
- If such problems are consistent.
- Every state should be continually educated.

Others:

Yes - 100%

Comments:

- A unified message could result.
- Need for consistent messages being used by all individuals in agency.
- PR is important for biologists.

- This gives agency staff the confidence tools & skills to have effective, face-to-face communication—directly influence the future of trapping.

Other Comments

Conservation Officers:

- Glad I came.
- The other speakers were also very knowledgeable and well prepared. Tom and Paul and Tip should travel together and take this meeting to the whole northeast.
- Tom Decker was very good.
- This was the most helpful class I have had in a long time. I got a lot out given the allotted time.
- How the general public (uninformed) people form opinions and how they perceive the "state agency."
- As a CEO, we are, for the most part, unable to take sides when it comes to the sporting community. Unfortunately, we are neutral mediators more than educators.

Fisheries:

- Very worthwhile

Forestry:

- Thanks!
- Would like to have seen more of the department's movers and shakers here. Can't do much of administration if not on board.
- Wish more people from my division had attended—really brought issues of conflict resolution to the forefront and provided excellent concepts to deal with them.

Wildlife:

- The video has great educational potential—especially schools—small urban community colleges, universities in bio or ecology classes would go a long way to reach new folks. It's also good for younger school groups (It could include more benefits to T&E species mgt.). Keep up the good work!
- Some antis (against trapping) will always believe trapping is bad. They will talk to you, question you until they hear what they want to hear.

Others:

- Thanks! Lunch was good.
- Great workshop—I hope other states will see the value and take this on!

Wisconsin Furbearer Ecology and Management Workshop Follow-Up Evaluation Summary

Following are the results of a survey that was sent to previous graduates of the Wisconsin Fur School. The survey was taken and compiled in March 2001.

(Year participated in the workshop in parentheses)

1) Have you used the information presented at the workshop in your job activities?
Yes – 17
No – 0

Comments:

- Talking with the public (1997)
- Used Kerry Beheler's wildlife disease slides for conservation groups; information from course gave me more credibility when talking with trapping/non-trapping public (2000)

- Used the info primarily for communicating with trappers who utilize the properties we manage (1997)
- Incorporated some teachings into presentations to school groups/hunter education classes (2000)
- Fur tagging and trapper education courses (1997)
- Becoming familiar with furbearer ecology, trapping practices/skills involved to become an efficient trapper (1997)
- Use info from workshop for trapper education courses and as a member of the furbearer advisory committee (1997)
- Info is a valuable tool to interpret trapping to the general public, park visitors, and school groups; the knowledge I received has prepared me in answering trapping/furbearer questions (2000)
- Educational programs for grade school and adult programs, as well as dealing with trapping/furbearer issues with the general public (1999)
- I have offered several public programs, as well as spoken to specialty groups (2000)

2) Has the information from the workshop made you more effective in communicating about trapping and/or furbearer management?

Yes – 17
No – 0

Comments:
- Increased knowledge on trapping techniques, BMP study and fur trade (1999)
- Information helped my abilities to support trapping as an effective management tool (1997)
- Hands-on knowledge helped (2000)
- Information provided a solid background to answer questions I was never able to answer before (2000)
- I'm better able to communicate about BMPs for trapping and trapping techniques (2000)
- I have greater knowledge of the issues (1999)

3) Have you used the information presented at the workshop to proactively communicate with the non-hunting and non-trapping public?

Yes – 16
No – 1

Comments:
- I was asked to speak to a group regarding nuisance animals and chose to discuss the trapping (lethal and non-lethal) aspects (2000)

4) If yes, how did you use the information? Check those that apply:

14 (82%) - Talking with friends and other casual interactions
10 (59%) - Presentations to schools or other groups of youths
11 (65%) - Presentations to groups of adults
4 (24%) - Dealing with the media
3 (18%) - Other (nuisance wildlife calls, run-ins with trappers, specialty groups like landscapers/gardeners)
17 - Total # people responding

5) Have you used any of the materials that were distributed at the workshop?

Yes – 14
No – 3

6) If yes, were the materials helpful?

Yes – 10
No – 0

Comments:
- I have especially referred to the diseases sheets (2000)
- Great reference information (1999)

7) Which part of the Fur School Workshop has been most useful to you and why?

Workshop components:

1) Furbearer Management in Wisconsin (Population modeling, furbearer surveys, disease surveillance, regulations)
2) Harvest Techniques and Best Management Practices (BMPs) (trap designs, trap research)
3) Trap setting and fur handling
4) Trapping and furbearer management issues in Wisconsin (responsibility, ethics, damage control)
5) Fur grading and economics (North American Fur Auctions, Inc.)
6) Communicating about trapping and furbearer management
7) Public opinion

Answers: (in order of most useful – refer to above numbered list)

- **2, 3** – To help answer questions you must be familiar with the subject (2000)
- **all** - (2000)
- **6,4,2,7** – (2000)
- **2,3,5** – Helped me to be a better trapper (grading, ethics, damage control) (1997)
- **3** – Helped me to understand humaneness of trapping if done correctly (1999)
- **1, 5** – I get the most questions in these two areas (2000)
- **3** – Hands-on is the most effective way to learn. The other stuff can be obtained from a book (1997)
- **5, 3** – Hands-on is the best experience--most helpful to those with little to no prior experience (2000)
- **4, 1, 3, 5** – Furbearer management issues most relayed to the public and fur grading important to be able to more effectively communicate with trappers both casually and intelligently (2000)
- **1** – (1999)
- **all** – Furbearer management most helpful from a work standpoint
- **3** – Rick Tischaefer is very skilled and has a wealth of information to share (1997)
- **1, 4** – Most common request from the public is for this information and it is helpful in hunter safety talks (1997)
- **5, 1** – I am involved in trapper education and the furbearer advisory committee (1997)
- **4** – Helped me to clarify my messages (2000)
- **all** – All components helped me to understand the "big picture" – excellent workshop! (1999)

Summary:

Among 16 responses, the following components were listed most often as being the most useful:

- Trap setting and fur handling
- Furbearer management in Wisconsin
- Fur grading and economics
- Trapping/furbearer management issues in Wisconsin

8) What areas do you feel you need to improve upon in order to more effectively communicate with the public about fur hunting/trapping and furbearer management issues?

Comments:

- Trap types, regulations, damage issues (2000)
- Develop a good work book for fur school (2000)
- Stay better informed on WTA involvement and public opinion on trapping (1997)
- Trying to stay current with furbearer issues (1999)
- Dog hunting for bear, raccoon, fox, coyote, and bobcat; how dogs are trained, the # trappers statewide; nation-wide information on trapping/hunting issues and conflicts (2000)
- Increased field experience with trapping – it would be a good idea to hook up with an experienced trapper on his/her trap line (1997)
- Ethics and the need for trapping programs (1999)
- Current issues; bobcat/fisher/otter management and goal information (trappers very interested in this)
- Just keep sending me updates on furbearer management and BMPs (1997)

- I need more time in the workday to actively address these issues to the public. Add more field staff in wildlife management to become actively involved in furbearer management (1997)
- Need more time in work week to even think about additional efforts to educate the public (1997)
- Personality issues dealing with anti-trapper/hunters (1999)

9) Other Comments?

- Keep up the good work! (2000)
- Excellent workshop that should continue into the future (1997)
- Excellent course that should be a requirement for all wildlife management field personnel. You should also consider a mentor program of sorts to give participants the opportunity to accompany an experienced trapper on his/her trap line (1997)
- Thanks for the follow-up (1999)
- Disappointed that we didn't get to go on the North American Fur Auction tour. This is the best training session I've ever had in ten years service with the DNR (1997)
- Very good training session (1997)
- How about an advanced course? (1999)

Appendix G. Wildlife Heritage Classroom Program Handbook

Overview

The Indiana Outreach Team identified the need to communicate to schoolchildren the benefits that wildlife and wildlife products have provided and continue to provide to Indiana=s economy and culture, and the role that trapping, hunting, and wildlife management play in securing those benefits for people. The Indiana Wildlife Heritage Program was developed for this purpose.

The program involved a skilled presenter making a 1.5-hour presentation to fourth grade schoolchildren at their school site (the fourth grade level was selected primarily because that is where Indiana History is taught in the curriculum). The presentation covered the consumptive use of wildlife from pioneer times to the present day. The presenter shared many artifacts made from wildlife and other natural sources with the students to engage their natural curiosity and enthusiasm. The presenter worked with one or at most two classrooms of students at a time to ensure the maximum amount of interaction and hands-on experience possible.

Pre- and post-activity packets were sent to each participating school. These packets included an evaluation of students= knowledge and attitudes about wildlife, hunting, and trapping. Teachers were asked to administer the pre-evaluation and then prepare students for the presentation using the activities in the packet. After the presentation, the teachers were asked to administer the post-evaluation and to use post-presentation activities to expand upon the presentation. The presenter collected both sets of evaluations, which were analyzed to determine whether the presentation had any influence on the students' knowledge of or attitudes about wildlife, trapping, hunting, and other topics.

With funding from the Furbearer Management Outreach Project, the Indiana Division of Fish & Wildlife implemented this pilot program in 12 schools in 2000. Initial results were extremely positive (see Wildlife Heritage Program Results), and the Division plans to sponsor the program again during the 2001-2002 school year.

Program Objectives

The specific objectives of the Wildlife Heritage Program, as developed by Indiana's Outdoor Education Coordinator and the Outreach Team, were to:

<u>Provide presentations that focus on the relationships, both past and present, between wildlife and the people of Indiana</u>.

1. Encourage participation by correlating presentation information with ongoing classroom curriculum materials.
2. Examine the role of wildlife in the historical development of the state.
3. Discuss the ways in which wildlife is a part of our culture at the local, state, and national levels.
4. Discuss/demonstrate historical and current tools/products that come from animal sources.
5. Discuss/review the current wildlife management programs administered by Indiana=s Division of Fish & Wildlife (including game and nongame species).
6. Discuss the public=s role, participation in, and impact on wildlife management at local, state, and national levels. This underscores the concept that wildlife management is a social process in which everyone participates by virtue of their opinion expressed through political venues.

<u>Discuss/demonstrate the various tools utilized by wildlife managers to accomplish wildlife management goals</u>.

1. Discuss hunting. Discuss firearms and why certain firearms are used for specific species and in specific areas. Discuss hunter safety courses.
2. Discuss trapping. Show/demonstrate the use of different types of traps (snares, deadfalls, pit traps, single and double spring traps, live traps, etc.) For each trap, discuss its historical and/or current use. Discuss the use of best management practices for trapping. Discuss the use of trapping in the following Indiana Division of Fish & Wildlife projects: otter reintroduction, predator control near nesting least terns, and bobcat research. Discuss trapper education courses.
3. Discuss the regulation of hunting and trapping - seasons and limits and the reasons for them. Discuss from a population and ecological perspective.
4. Discuss examples of successful state and national wildlife programs including:
   - reintroduction (otters, eagles, turkeys, etc.)

- game management programs (deer, geese, etc.)
- nongame management programs (mussels, hellbenders, bobcats, etc.)

5. Discuss/make available wildlife related education materials from the Indiana Department of Natural Resources.

Budget

With underwriting from the Furbearer Management Outreach Project and with in-kind contributions from the Indiana DNR (copying and postage, advertising, and office space for the presenter), the Indiana Division of Fish and Wildlife was able to develop this program and offer it to Indiana grade schools at no charge to the school. This obviously encouraged school participation. Approximate costs of presenting the program are identified below.

Salary for presenter: $400/day x 12 days =	$4,800
Travel at $ .33/ mile x approx. 250 miles/day = $82.50/day x 12 days =	$990
Data entry and analysis of pre/post evaluations	$1,000
Copying and postage for all mailings to 12 schools	$500
Total	$7,290

Additional schools could be reached for approximately $500 each.

Presenter Profile

Selection of the right person to make the in-school presentations for this program is critical to the success of the effort. The content is value-sensitive due to the emphasis on consumptive uses of wildlife, so it is important that the information be presented with as much accuracy and sensitivity as possible. In Indiana, the Division of Fish & Wildlife has built a reputation within the education community as an authority and a quality source of information and education activities about wildlife. It was essential that this program did not jeopardize that reputation.

Many states share Indiana's approach to education programs, where the agency trains the educators and the educators in turn present the activities to the students. But for this effort, the agency sent a presenter directly into the classroom. This was done to ensure that the message was consistent, the information accurate, and the presenter could address questions with a broad base of experience and knowledge.

The ideal presenter for this program needs:

- a good background in historical uses of wildlife,
- to be current with the development and current operations of the state wildlife agency,
- to be knowledgeable about current hunting and trapping laws,
- firsthand experience in hunting, trapping, fur preparation, and creating historically authentic objects from wildlife parts.

In addition, the ideal presenter understands schools, teachers, and fourth graders. Being sensitive to a school's daily schedule and the demands placed on teachers helps the program go smoothly. The presenter needs to be able to communicate the information in a way that is entertaining to fourth graders, and that they could understand and remember. When answering questions or discussing the killing of animals, the presenter needs to be able to give accurate information while respecting the teachers' and students' views.

Indiana was extremely fortunate to have an ideal instructor available to present this program. Tom Barham grew up in a rural setting, hunting and trapping with his father. Today, Tom enjoys living history in the fur trade era and has a large personal collection of replicas or historical artifacts made from an assortment of natural materials, including wildlife (e.g., powder horns, buffalo robe, sinew cordage, knife handles, salt horn, possibles bag, sewing awls, moccasins, etc.). Tom has worked over twenty years in the conservation education field conducting countless programs for teachers and students of all ages. Tom is also married to a classroom teacher, which gives great insight into the scheduling and politics of the education world. Finally and perhaps most importantly, Tom was a known quantity to Indiana's outdoor education program, so the agency was very comfortable that he would present the program accurately and effectively.

School Selection

Because of the timing of the funding for this program, the Indiana Division of Fish & Wildlife had to prepare materials, advertise the program, schedule schools, and conduct 12 programs all in about 10 weeks. It was asking a lot of the schools to find time in their busy spring schedules to conduct pre- and post-testing and schedule the 1.5-hour presentations on short notice. To facilitate this process, the agency selected 12 schools with which they already had a working relationship. They chose schools that represented a cross section of Indiana education--from very rural to very urban students. The agency made personal contact by phone with teachers or administrators who had participated in the Division of Fish & Wildlife's programs.

Some of the schools contacted had outdoor classrooms with log cabins and active history programs. One teacher had assisted in previous agency programs on the fur trade era and was the head of his county's historical society. Having a personal relationship with the teachers or administrators made all the communications go faster and smoother. All of the schools that participated said they would like to have the program again for the next school year.

Next year, when there is more time to plan ahead, the Indiana Division of Fish & Wildlife plans to make a blanket announcement to fourth grade teachers and all teachers who have participated in a previous Division of Fish & Wildlife education program. Their goal is to conduct 20 programs in the fall and another 20 in the spring.

Pre-presentation Packet

Teachers in participating classrooms received a packet that contained the pre-presentation evaluation forms, with instructions for implementing them with their students. Teachers also received a collection of activities from the Project WILD Program that introduced concepts that were covered in the presentation. These included:

- Make A Coat
- What Did Your Lunch Cost Wildlife?
- First Impressions
- Wildlife in National Symbols
- The Hunter

Teachers also received the Indiana Division of Fish & Wildlife's River Otter Education Packet with the recommendation that they use the following activities:

- In an Otter Time
- Back Home Again

Post-presentation Packet

When the presenter arrived at the school the day of the presentation, he brought along a post presentation packet that contained the post-presentation evaluation forms. The presenter also left activities for teachers to use as a follow up to the presentation, including:

- Make a simple leather pouch. This included a sample pouch made from scrap leather, a leather punch or awl, and a cardboard pattern for tracing.
- Quill writing. This included a quill pen made from a primary feather of a turkey and an example of calligraphy writing and alphabet.
- Make a fiber cord. This included a piece of sinew to be made into fiber cord.

Classroom Presentation Outline

Following is a general outline of the classroom presentation. The outline is not written at the fourth grade level and there are more topics in the outline than there is time to cover in a 1.5-hour presentation. In the actual presentation, some of the less essential topics were summarized or skipped altogether, depending on the direction the class discussion took or the numbers of questions from the students. It is very important for others who wish to implement this program to customize this outline/presentation to fit the topics they want to cover, the materials they have to work with, and the strengths of the person(s) presenting in the classroom.

Introduction: Introduce presenter and purpose of the program (Look at the role of wildlife in the cultural & physical development of the state)

1. What is wildlife? Define wildlife vs. domesticated.
2. Wildlife in the History of Indiana (*pass around pelts from fur trade species and conduct sign language activity*)
    - first Europeans in Indiana were French trappers and traders
    - development of trade routes along major rivers (Maumee & Wabash)
    - species in demand for furs
    - beaver hat trade
    - decline of fur business
    - species scarce by 1850
3. Settlement of Indiana (*pass around historical items made from wildlife*)
    - changes of shift to farming economy
    - discussion of pioneer items made from wildlife
4. Public Ownership of Wildlife
    - public ownership in North America vs. royalty ownership in Europe
5. The Conservation Idea
    - public ownership leads to the idea that "I have a right to unlimited access to wildlife"
    - market hunting
    - overuse of wildlife & species becoming rare
    - government policy on buffalo extermination
    - beginnings of professional wildlife management and regulations (Roosevelt & Leopold)
6. Values of Wildlife
    - biological
    - scientific
    - recreational
    - economic (examples of figures of wildlife generated income)
    - aesthetic
    - cultural & historic
    - indicative (indicator species)
    - moral
7. Wildlife Management
    - purpose of management
    - some success stories
    - wildlife management in relation to human populations
    - wildlife/human conflicts due to increases in wildlife population and lack of habitat
    - discussion of urban deer issue
    - carrying capacity
8. Capture and/or Removal of Wildlife (*allow students to examine wildlife products*)
    - reasons: predator control, crop depredation, collection for study/research, consumption
    - hunting and trapping
    - examples of traps, historical & modern
    - use of traps with endangered species (predator control to protect terns, bobcat study, otter relocation)
    - animal related products historical & modern

At times, the venue for the presentation was less than ideal (e.g., next to a loud cafeteria). In one instance the presentation was interrupted because the students needed to have their pictures taken. Sometimes the pre/post test had to be administered within the time allotted for the presentation. To avoid these difficulties, agencies should create a detailed pre-presentation packet with a description of the setting needed to conduct the program.

Appendix H. Results of a Pre/Posttest Evaluation of Indiana's Wildlife Heritage Classroom Program

Following are the results of statistical analyses conducted on pre- and post-workshop evaluations of the Indiana Wildlife Heritage Classroom Program. These analyses were conducted by Dr. R. Ben Peyton, Human Dimensions of Wildlife Management, Dept. of Fisheries and Wildlife, Michigan State University.

This appendix contains:

- Procedure – description of the statistical analyses conducted on these data.
- Comparisons of Total Scores on Pre and Post Tests – explanation of the results of statistical analyses that focused on the effect that particular circumstances (sex of the respondents and school setting) had on pre and post test responses.
- Individual Test Items and Groups of Items – explanation of the results of various statistical analyses that were conducted on certain test items such as animal use, wildlife impacts on humans, wildlife values, human impacts, and more.
- Frequencies of Responses to All Test Items – tables showing the frequency and percent of each possible answer for every test question, for both the pre and post tests.
- Comparisons of Pre and Post Test Responses to "effect on wildlife" Questions – tables showing the comparisons between the pre test responses and the post test responses to the questions regarding what kind of general effect (helpful, harmful, etc.) certain actions (hunting, trapping, building houses, birdwatching, hiking, and wildlife research) have on wildlife.
- Comparisons of Correct and Incorrect Answers on Pre and Post Tests – tables showing the comparisons of correct responses and incorrect responses on both the pre and post tests for a variety of questions regarding wildlife heritage in Indiana.

Procedure

- Of the 764 students who took part in the program, 554 did both a pre and post program test. Only these 554 students are included in this analysis.
- Developers of the test instrument designated each question as having a correct/preferred answer. Based on these designations, each question was coded as correct or incorrect. The maximum possible score was 32.
- For ease of interpretation, the 32 different test items were segmented into six different categories: (1) Management, institutions and funding; (2) Natural history and endangered species; (3) Animal use; (4) Wildlife impacts on humans; (5) Wildlife values; (6) Human impacts.
- The frequencies of responses to each test item (pre and posttests) are found in Tables 1a- 32b.
- Overall changes in awareness of the impact on wildlife of the activities on page 3 of the test (i.e. hunting, trapping, building houses, bird watching, hiking, and wildlife research) were statistically evaluated based on the proportion giving preferred responses on the pre and post tests (Tables 39-69). However, a Cross-tab was also done to look for specific patterns of change (Tables 33-38). This comparison allows the reader to see where the changes in belief occurred. Detailed comparisons are not discussed in this report, however, it would be useful for program sponsors to review the patterns in those shifts. For example, regarding the impact of trapping, 31% already believed trapping had sometimes helpful and sometimes harmful impacts. Of this group, 35% retained this belief, however the program evidently caused 33% to think trapping impacts were always helpful, 26% to believe there were no effects, and 16% to believe the impacts were harmful. Such results are revealing for those involved in revising educational materials. What aspect of the program might have shifted 16% of those who had the correct opinion originally to believe trapping was harmful? A scrutiny of these tables with consideration of the curriculum content and processes might be more revealing than a simple comparison of preferred responses on pre and posttests.
- Comparisons between pre and posttest correct/incorrect responses are found in Tables 39- 69.
- All tables follow the order that they appeared on the test instrument.

Comparisons of Total Scores on Pre and Post Tests

Test developers had determined which choices were either "correct" or "preferred" for each item. These were scored as 1 if correct or preferred, 0 if not and then total pretest and posttest scores were summed for each student. A Statistical T Test of paired samples was used to compare overall pre and posttest changes. Significance was set at .05. ANOVA was used to investigate whether pre test or posttest scores were influenced by gender or school setting (i.e., whether a difference existed between males and females on post test, and similarly between urban, suburban and rural students.)

- The mean number of correct scores on the pretest for all students was 13.6.
- The mean number of correct scores on the posttest for all students was 24.3.
- There was a significant increase in the mean number of correct answers between the pre and posttests ($t=63.0$, d.f. = 527, $p<0.001$).
- Males had a pretest mean of 13.7 correct answers and posttest mean of 24.7 correct answers, which was a significant increase ($t=41.1$, d.f. =227, $p<0.001$).
- Females had a pretest mean of 13.7 and posttest mean of 24.4 correct answers which was a significant increase ($t= 42.4$, d.f.= 224, $p<0.001$).
- Comparisons of mean scores between genders on both pre and posttests were not found to be significant (Pretest: $F=0.007$, $p= 0.932$; Posttest: $F=0.493$, $p=0.483$).
- Rural students had a pretest mean of 13.9 correct answers and 27.7 posttest answers correct, which was a significant increase ($t=53.7$, d.f. 366, $p<0.001$).
- Suburban students had a mean of 13.8 pretest answers correct and 25.2 posttest correct, which was a significant increase ($t=31.8$, d.f. =109, $p<0.001$).
- Urban students had a mean of 11.0 correct pretest answers and 19.6 posttest answers, which was a significant increase ($t=15.2$, d.f. =50, $p<0.001$).
- Comparisons between school setting on their pre and posttest scores were found to differ significantly (Pretest: $F=29.8$, $p<0.001$; Posttest: $F= 43.3$, $p<0.001$). Tukey HSD test of significance found that there was no difference between rural and suburban schools' pre/post scores, however urban schools were different from both rural and suburban scores for both the pre and posttests ($p<0.0001$ for each comparison).
    - Urban students not only have lower scores to begin with, but the program is less effective for urban than for suburban or rural students.

Individual Test Items and Groups of Items

Statistical significance was also tested for each of the individual test items using a Statistical T Test of paired samples, alpha = .05. Of the 32 test items, significant improvement was found on all but six. The six items that did not statistically improve had high percentages of correct answers on the pretests: (1) Native Americans obtained moccasins from animals (87% correct on pretest); (2) deer still live in the wild in Indiana (92% correct on pretest); (3) fishing is allowed in Indiana (96% correct on pretest); (4) wildlife is important to the people of Indiana (76% correct on pretest); (5) we should provide wildlife with places to live (72% correct on pretest); (6) wildlife research is helpful or sometimes helpful, sometimes harmful (84% correct on pretest).

Management, Institutions and Funding

- Prior to the program, more students thought US Fish and Wildlife Service managed wildlife and enforced hunting and trapping laws in Indiana than any other agency listed (42% n=234). After the program 79% (n=437) correctly identified the Indiana DNR. This was a significant increase ($t=17.6$, d.f.=553, $p<0.0001$).
- Prior to the program 45% (n=246) thought that the Indiana DNR owned the wildlife in Indiana. On the posttest, 81% (n=449) correctly identified the people of Indiana. This was a significant increase ($t=20.4$, d.f.=553, $p<0.0001$).
- In the pretest, more students thought that state taxes are used to manage Indiana's wildlife (47%, n=255). On the post test 69% (n=379) correctly identified money spent by hunters, trappers and fishermen. This was a significant increase ($t=24.1$, d.f.=553, $p<0.0001$).

Natural History, Endangered Species

- Of the seven species of wildlife offered to students in the pretest, deer was most correctly identified as currently living in Indiana (92%, n=512). Only 26% (n=145) knew that bobcat still live in Indiana. Posttest 65% (n=360) of students knew that bobcat live in Indiana.
- There was a significant increase from 4.6 to 5.9 correct answers on this section (summed total of items 6a - 6g) in the pre and posttests ($t=19.2$, d.f.=553, $p<0.0001$).

Animal Use

- Of the six ways that Native Americans used animals, moccasins were the use most known in the pretest (86%, n=479). Animals used as toys was the least known in the pretest (19%, n=106). While the percentage of correct answers in the posttest increased in all six animal uses, toys (42%, n=232) and cooking containers (51%, n=282) increased the least.
- The mean number of correct answers on the native use section (summed total of items 5a - 5f) went from 2.2 to 3.9, which was a significant increase ($t=24.6$, d.f. 553, $p<0.0001$)
- In the pretest, most students knew that hunting (62%, n=345) and fishing (96%, n=530) is currently allowed in Indiana. Hunting went to 82% (n=456) which was a significant increase ($t=9.7$, d.f.=553, $p<0.0001$). Fishing went down to 93% (n=517) in the posttest which was not significant ($t=1.9$, d.f.=553, $p=0.065$).
- A fifth of the students in the pretest knew that trapping is allowed in Indiana (20%, n= 109). Post program 72% (n=401) knew that trapping was allowed. This was a significant increase ($t=22.6$, d.f.=553, $p<0.0001$).
- Over half (54%, n=302) of the students knew in the pretest that scientists can use traps to catch animals and release them unharmed in new areas. This went up to 73% (n=404) in the posttest. This was a significant increase ($t=7.4$, d.f.=553, $p<0.0001$).

Wildlife Impacts on Humans

- Just under half of the students (48%, n=265) knew that the number of animals in an area can sometimes get so high that they can cause problems for people. This increased to 75% (n=414) in the posttest. This was a significant increase ($t=11.9$, d.f.=553, $p<0.0001$).

Wildlife Values

- There was no significant change in the pre and posttest results on the importance of wildlife to the people of Indiana (pretest 76%, n=422, posttest 79%, n=438 ($t=1.5$, d.f.=553, $p=0.134$).
- Similarly, there was no significant change in the responses in the pre and posttests to "wildlife should be provided places to live" (pretest 72%, n=401, posttest 74%, n=412) ($t=0.9$, d.f.=553, $p=0.37$).

Human Impacts

- 42% (n=228) of students in the pretest thought that hunting was harmful to wildlife. This was reduced to 14% (n=74) in the posttest. This was a significant decrease ($t=13.3$, d.f.=553, $p<0.0001$). Males and females did not differ in their posttest answers to this question (chi-square= 3.9, $p=0.271$).
- 60% (n=325) of students in the pretest thought that trapping was harmful to wildlife. This was reduced to 14% (n=75) in the posttest. This was a significant decrease ($t=18.2$, d.f.=553, $p<0.0001$). Males and females did not differ in their posttest answers to this question (chi-square= 6.3, $p=0.096$).
- 31% (n=166) of students in the pretest thought that building houses was harmful to wildlife. This increased to 74% (n=407) in the posttest. This was a significant increase ($t=17.5$, d.f.=553, $p<0.0001$). Males and females did not differ in their posttest answers to this question (chi-square= 4.1, $p=0.253$).
- 50% (n=275) of students in the pretest thought that hiking was harmful or had no effect on wildlife. This decreased to 45% (n=249) in the posttest. This was a significant decrease ($t=2.3$, d.f.=553, $p=0.024$). Males and females did not differ in their posttest answers to this question (chi-square= 4.2, $p=0.235$).
- 84% (n=459) of students thought that wildlife research is helpful to wildlife in the pretest. This increased to 87% (n=479) in the posttest. This change was not significant ($t=1.8$, d.f.=553, $p=0.095$). Males and females did not differ in their posttest answers to this question (chi-square= 2.1, $p=0.562$).

Frequencies of Responses to All Test Items.
(pretest frequencies for each question are followed by posttest frequencies for the same question)

Table 1a: Who manages fish and wildlife and enforces hunting and trapping laws in Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	U.S. Fish and Wildlife Service	234	42.2	42.4	42.4
	Indiana DNR	198	35.7	35.9	78.3
	Park Rangers	92	16.6	16.7	94.9
	County Sheriff Department	28	5.1	5.1	100.0
	Total	552	99.6	100.0	
Missing	9	2	.4		
Total		554	100.0		

Table 1b: Who manages fish and wildlife and enforces hunting and trapping laws in Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	U.S. Fish and Wildlife Service	93	16.8	16.8	16.8
	Indiana DNR	437	78.9	78.9	95.7
	Park Rangers	14	2.5	2.5	98.2
	County Sheriff Department	10	1.8	1.8	100.0
	Total	554	100.0	100.0	

Table 2a: To whom does the wildlife in Indiana belong? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	the Governor of Indiana	63	11.4	11.4	11.4
	Indiana DNR	246	44.4	44.6	56.0
	Indiana landowners	59	10.6	10.7	66.7
	the people of Indiana	184	33.2	33.3	100.0
	Total	552	99.6	100.0	
Missing	9	2	.4		
Total		554	100.0		

Table 2b:To whom does the wildlife in indiana belong? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	the Governor of Indiana	10	1.8	1.8	1.8
	Indiana DNR	73	13.2	13.2	15.0
	Indiana landowners	22	4.0	4.0	19.0
	the people of Indiana	449	81.0	81.0	100.0
	Total	554	100.0	100.0	

Table 3a: What is the main cause of animals becoming endangered in Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	hunting	155	28.0	28.3	28.3
	trapping	17	3.1	3.1	31.4
	loss of habitat	264	47.7	48.2	79.6
	illegal hunting (poaching)	112	20.2	20.4	100.0
	Total	548	98.9	100.0	
Missing	9	6	1.1		
Total		554	100.0		

Table 3b: What is the main cause of animals becoming endangered in Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	hunting	37	6.7	6.8	6.8
	trapping	14	2.5	2.6	9.3
	loss of habitat	455	82.1	83.0	92.3
	illegal hunting (poaching)	42	7.6	7.7	100.0
	Total	548	98.9	100.0	
Missing	9	6	1.1		
Total		554	100.0		

Table 4a: Where does most of the money to manage Indiana's wildlife come from? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	state taxes	255	46.0	46.5	46.5
	donations from animal lovers	92	16.6	16.8	63.3
	money spent by hunters, trappers and fishermen	58	10.5	10.6	73.9
	state park entrance fees	143	25.8	26.1	100.0
	Total	548	98.9	100.0	
Missing	9	6	1.1		
Total		554	100.0		

Table 4b: Where does most of the money to manage Indiana's wildlife come from? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	state taxes	77	13.9	14.0	14.0
	donations from animal lovers	31	5.6	5.6	19.7
	money spent by hunters, trappers and fishermen	379	68.4	69.0	88.7
	state park entrance fees	62	11.2	11.3	100.0
	Total	549	99.1	100.0	
Missing	9	5	.9		
Total		554	100.0		

Table 5a: Native Americans got musical instruments from animals? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	335	60.5	60.5	60.5
	yes	219	39.5	39.5	100.0
	Total	554	100.0	100.0	

Table 5b: Native Americans got musical instruments from animals? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	183	33.0	33.0	33.0
	yes	371	67.0	67.0	100.0
	Total	554	100.0	100.0	

Table 6a: Native Americans got moccasins from animals? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	75	13.5	13.5	13.5
	yes	479	86.5	86.5	100.0
	Total	554	100.0	100.0	

Table 6b: Native Americans got moccasins from animals? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	62	11.2	11.2	11.2
	yes	492	88.8	88.8	100.0
	Total	554	100.0	100.0	

Table 7a: Native Americans got rope from animals? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	382	69.0	69.0	69.0
	yes	172	31.0	31.0	100.0
	Total	554	100.0	100.0	

Table 7b: Native Americans got rope from animals? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	120	21.7	21.7	21.7
	yes	434	78.3	78.3	100.0
	Total	554	100.0	100.0	

Table 8a: Native Americans got cooking containers from animals? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	439	79.2	79.2	79.2
	yes	115	20.8	20.8	100.0
	Total	554	100.0	100.0	

Table 8b: Native Americans got cooking containers from animals? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	272	49.1	49.1	49.1
	yes	282	50.9	50.9	100.0
	Total	554	100.0	100.0	

Table 9a: Native Americans got toys from animals? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	448	80.9	80.9	80.9
	yes	106	19.1	19.1	100.0
	Total	554	100.0	100.0	

Table 9b: Native Americans got toys from animals? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	322	58.1	58.1	58.1
	yes	232	41.9	41.9	100.0
	Total	554	100.0	100.0	

Table 10a: Native Americans got paint from animals? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	443	80.0	80.0	80.0
	yes	111	20.0	20.0	100.0
	Total	554	100.0	100.0	

Table 10b: Native Americans got paint from animals? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	210	37.9	37.9	37.9
	yes	344	62.1	62.1	100.0
	Total	554	100.0	100.0	

Table 11a: Bison still live in the wild in Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	118	21.3	21.3	21.3
	no	436	78.7	78.7	100.0
	Total	554	100.0	100.0	

Table 11b: Bison still live in the wild in Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	62	11.2	11.2	11.2
	no	492	88.8	88.8	100.0
	Total	554	100.0	100.0	

Table 12a: Elk still live in the wild in Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	205	37.0	37.0	37.0
	no	349	63.0	63.0	100.0
	Total	554	100.0	100.0	

Table 12b: Elk still live in the wild in Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	83	15.0	15.0	15.0
	no	471	85.0	85.0	100.0
	Total	554	100.0	100.0	

Table13a: River otters still live in the wild in Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	265	47.8	47.8	47.8
	2	289	52.2	52.2	100.0
	Total	554	100.0	100.0	

Table13b: River Otters still live in the wild in Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	422	76.2	76.2	76.2
	2	132	23.8	23.8	100.0
	Total	554	100.0	100.0	

Table 14 a:Turkeys still live in the wild in Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	208	37.5	37.5	37.5
	yes	346	62.5	62.5	100.0
	Total	554	100.0	100.0	

Table 14b: Turkey still live in the wild in Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	79	14.3	14.3	14.3
	yes	475	85.7	85.7	100.0
	Total	554	100.0	100.0	

Table 15 a: Deer still live in the wild in Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	42	7.6	7.6	7.6
	yes	512	92.4	92.4	100.0
	Total	554	100.0	100.0	

Table 15b: Deer still live in the wild in Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	41	7.4	7.4	7.4
	yes	513	92.6	92.6	100.0
	Total	554	100.0	100.0	

Table 16a: Bobcat still live in the wild in Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	409	73.8	73.8	73.8
	yes	145	26.2	26.2	100.0
	Total	554	100.0	100.0	

Table 16b: Bobcat still live in the wild in Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	194	35.0	35.0	35.0
	yes	360	65.0	65.0	100.0
	Total	554	100.0	100.0	

Table 17a: Muskox still live in the wild in Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	60	10.8	10.8	10.8
	no	494	89.2	89.2	100.0
	Total	554	100.0	100.0	

Table 17b: Muskox still live in the wild in Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	41	7.4	7.4	7.4
	no	513	92.6	92.6	100.0
	Total	554	100.0	100.0	

Table 18a: Hunting is allowed in Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	209	37.7	37.7	37.7
	yes	345	62.3	62.3	100.0
	Total	554	100.0	100.0	

Table 18b: Hunting is allowed in Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	98	17.7	17.7	17.7
	yes	456	82.3	82.3	100.0
	Total	554	100.0	100.0	

Table 19a: Fishing is allowed in Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	24	4.3	4.3	4.3
	yes	530	95.7	95.7	100.0
	Total	554	100.0	100.0	

Table 19b: Fishing is allowed in Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	37	6.7	6.7	6.7
	yes	517	93.3	93.3	100.0
	Total	554	100.0	100.0	

Table 20a: Trapping is allowed in Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	445	80.3	80.3	80.3
	yes	109	19.7	19.7	100.0
	Total	554	100.0	100.0	

Table 20b: Trapping is allowed in Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	153	27.6	27.6	27.6
	yes	401	72.4	72.4	100.0
	Total	554	100.0	100.0	

Table 21a: Wildlife is important to the people of Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	132	23.8	23.8	23.8
	yes	422	76.2	76.2	100.0
	Total	554	100.0	100.0	

Table 21b: Wildlife is important to the people of Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	116	20.9	20.9	20.9
	yes	438	79.1	79.1	100.0
	Total	554	100.0	100.0	

Table 22a: Scientists can use traps to catch animals and release them unharmed in new areas? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	252	45.5	45.5	45.5
	yes	302	54.5	54.5	100.0
	Total	554	100.0	100.0	

Table 22b: Scientists can use traps to catch animals and release them unharmed in new areas? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	150	27.1	27.1	27.1
	yes	404	72.9	72.9	100.0
	Total	554	100.0	100.0	

Table 23a: We should provide wildlife with places to live? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	153	27.6	27.6	27.6
	yes	401	72.4	72.4	100.0
	Total	554	100.0	100.0	

Table 23b: We should provide wildlife with places to live? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	142	25.6	25.6	25.6
	yes	412	74.4	74.4	100.0
	Total	554	100.0	100.0	

Table 24a: We are still learning about some of the aminals that live in Indiana? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	189	34.1	34.1	34.1
	yes	365	65.9	65.9	100.0
	Total	554	100.0	100.0	

Table 24b: We are still learning about some of the aminals that live in Indiana? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	158	28.5	28.5	28.5
	yes	396	71.5	71.5	100.0
	Total	554	100.0	100.0	

Table 25a: Sometimes the numbers of animals in an area get so high that they can cause problems for people? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	289	52.2	52.2	52.2
	yes	265	47.8	47.8	100.0
	Total	554	100.0	100.0	

Table 25b: Sometimes the numbers of animals in an area get so high that they can cause problems for people? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	140	25.3	25.3	25.3
	yes	414	74.7	74.7	100.0
	Total	554	100.0	100.0	

Table 26a: Once an animal no longer lives in our state, it will never come back? pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	121	21.8	21.8	21.8
	no	433	78.2	78.2	100.0
	Total	554	100.0	100.0	

Table 26b: Once an animal no longer lives in our state, it will never come back? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	400	72.2	72.2	72.2
	no	154	27.8	27.8	100.0
	Total	554	100.0	100.0	

Table 27a: The effect of hunting on wildlife is: pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	helpful	7	1.3	1.3	1.3
	somtimes helpful, sometimes harmful	288	52.0	52.7	53.9
	harmful	228	41.2	41.7	95.6
	has little effect	24	4.3	4.4	100.0
	Total	547	98.7	100.0	
Missing	9	7	1.3		
Total		554	100.0		

Table 27b: The effect of hunting on wildlife is? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	helpful	162	29.2	29.6	29.6
	somtimes helpful, sometimes harmful	297	53.6	54.2	83.8
	harmful	74	13.4	13.5	97.3
	has little effect	15	2.7	2.7	100.0
	Total	548	98.9	100.0	
Missing	9	6	1.1		
Total		554	100.0		

Table 28a: The effect of trapping on wildlife is: pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	helpful	12	2.2	2.2	2.2
	somtimes helpful, sometimes harmful	170	30.7	31.0	33.2
	harmful	325	58.7	59.3	92.5
	has little effect	41	7.4	7.5	100.0
	Total	548	98.9	100.0	
Missing	9	6	1.1		
Total		554	100.0		

Table 28b: The effect of trapping on wildlife is? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	helpful	123	22.2	22.4	22.4
	somtimes helpful, sometimes harmful	309	55.8	56.4	78.8
	harmful	75	13.5	13.7	92.5
	has little effect	41	7.4	7.5	100.0
	Total	548	98.9	100.0	
Missing	9	6	1.1		
Total		554	100.0		

Table 29a: The effect of building houses on wildlife is: pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	helpful	122	22.0	22.5	22.5
	somtimes helpful, sometimes harmful	172	31.0	31.7	54.1
	harmful	166	30.0	30.6	84.7
	has little effect	83	15.0	15.3	100.0
	Total	543	98.0	100.0	
Missing	9	11	2.0		
Total		554	100.0		

Table 29b: The effect of building houses on wildlife is? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	helpful	41	7.4	7.4	7.4
	somtimes helpful, sometimes harmful	78	14.1	14.2	21.6
	harmful	407	73.5	73.9	95.5
	has little effect	25	4.5	4.5	100.0
	Total	551	99.5	100.0	
Missing	9	3	.5		
Total		554	100.0		

Table 30a: The effect of bird watching on wildlife is: pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	helpful	216	39.0	39.6	39.6
	somtimes helpful, sometimes harmful	49	8.8	9.0	48.6
	harmful	11	2.0	2.0	50.6
	has little effect	269	48.6	49.4	100.0
	Total	545	98.4	100.0	
Missing	9	9	1.6		
Total		554	100.0		

Table 30b: The effect of birdwatching on wildlife is? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	helpful	267	48.2	49.0	49.0
	somtimes helpful, sometimes harmful	82	14.8	15.0	64.0
	harmful	9	1.6	1.7	65.7
	has little effect	187	33.8	34.3	100.0
	Total	545	98.4	100.0	
Missing	9	9	1.6		
Total		554	100.0		

Table 31a: The effect of hiking on wildlife is: pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	helpful	187	33.8	34.4	34.4
	somtimes helpful, sometimes harmful	82	14.8	15.1	49.4
	harmful	10	1.8	1.8	51.3
	has little effect	265	47.8	48.7	100.0
	Total	544	98.2	100.0	
Missing	9	10	1.8		
Total		554	100.0		

Table 31b: The effect of hiking on wildlife is? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	helpful	127	22.9	23.2	23.2
	somtimes helpful, sometimes harmful	171	30.9	31.3	54.5
	harmful	26	4.7	4.8	59.2
	has little effect	223	40.3	40.8	100.0
	Total	547	98.7	100.0	
Missing	9	7	1.3		
Total		554	100.0		

Table 32a: The effect of wildlife research on wildlife is: pretest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	helpful	386	69.7	70.6	70.6
	somtimes helpful, sometimes harmful	73	13.2	13.3	83.9
	harmful	12	2.2	2.2	86.1
	has little effect	76	13.7	13.9	100.0
	Total	547	98.7	100.0	
Missing	9	7	1.3		
Total		554	100.0		

Table 32b: The effect of wildlife research on wildlife is? posttest

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	helpful	432	78.0	78.3	78.3
	somtimes helpful, sometimes harmful	47	8.5	8.5	86.8
	harmful	11	2.0	2.0	88.8
	has little effect	62	11.2	11.2	100.0
	Total	552	99.6	100.0	
Missing	9	2	.4		
Total		554	100.0		

Comparisons of Pre and Post Test Responses to “effect on wildlife” Questions.

Table 33: Pretest/ posttest comparison of responses to "The effect of hunting on wildlife is....".

			The effect of hunting on wildlife is? posttest				
			helpful	somtimes helpful, sometimes harmful	harmful	has little effect	Total
The effect of hunting on wildlife is: pretest	helpful	Count	3	2	2		7
		% within The effect of hunting on wildlife is: pretes	42.9%	28.6%	28.6%		100.0%
		% within The effect of hunting on wildlife is? posttest	1.9%	.7%	2.7%		1.3%
		% of Total	.6%	.4%	.4%		1.3%
	somtimes helpful, sometimes harmful	Count	89	181	10	5	285
		% within The effect of hunting on wildlife is: pretes	31.2%	63.5%	3.5%	1.8%	100.0%
		% within The effect of hunting on wildlife is? posttest	54.9%	62.2%	13.5%	33.3%	52.6%
		% of Total	16.4%	33.4%	1.8%	.9%	52.6%
	harmful	Count	58	103	60	5	226
		% within The effect of hunting on wildlife is: pretes	25.7%	45.6%	26.5%	2.2%	100.0%
		% within The effect of hunting on wildlife is? posttest	35.8%	35.4%	81.1%	33.3%	41.7%
		% of Total	10.7%	19.0%	11.1%	.9%	41.7%
	has little effect	Count	12	5	2	5	24
		% within The effect of hunting on wildlife is: pretes	50.0%	20.8%	8.3%	20.8%	100.0%
		% within The effect of hunting on wildlife is? posttest	7.4%	1.7%	2.7%	33.3%	4.4%
		% of Total	2.2%	.9%	.4%	.9%	4.4%
Total		Count	162	291	74	15	542
		% within The effect of hunting on wildlife is: pretes	29.9%	53.7%	13.7%	2.8%	100.0%
		% within The effect of hunting on wildlife is? posttest	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	29.9%	53.7%	13.7%	2.8%	100.0%

Table 34: Pretest/postest comparisons of responses to "The effect of trapping on wildlife is...".

			The effect of trapping on wildlife is? posttest				
			helpful	somtimes helpful, sometimes harmful	harmful	has little effect	Total
The effect of trapping on wildlife is: pretest	helpful	Count	5	4	3		12
		% within The effect of trapping on wildlife is: pretest	41.7%	33.3%	25.0%		100.0%
		% within The effect of trapping on wildlife is? posttest	4.1%	1.3%	4.1%		2.2%
		% of Total	.9%	.7%	.6%		2.2%
	somtimes helpful, sometimes harmful	Count	41	106	12	10	169
		% within The effect of trapping on wildlife is: pretest	24.3%	62.7%	7.1%	5.9%	100.0%
		% within The effect of trapping on wildlife is? posttest	33.6%	34.5%	16.2%	25.6%	31.2%
		% of Total	7.6%	19.6%	2.2%	1.8%	31.2%
	harmful	Count	69	176	54	21	320
		% within The effect of trapping on wildlife is: pretest	21.6%	55.0%	16.9%	6.6%	100.0%
		% within The effect of trapping on wildlife is? posttest	56.6%	57.3%	73.0%	53.8%	59.0%
		% of Total	12.7%	32.5%	10.0%	3.9%	59.0%
	has little effect	Count	7	21	5	8	41
		% within The effect of trapping on wildlife is: pretest	17.1%	51.2%	12.2%	19.5%	100.0%
		% within The effect of trapping on wildlife is? posttest	5.7%	6.8%	6.8%	20.5%	7.6%
		% of Total	1.3%	3.9%	.9%	1.5%	7.6%
Total		Count	122	307	74	39	542
		% within The effect of trapping on wildlife is: pretest	22.5%	56.6%	13.7%	7.2%	100.0%
		% within The effect of trapping on wildlife is? posttest	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	22.5%	56.6%	13.7%	7.2%	100.0%

Table 35: Pretest/posttest comparisons of responses to "The effect of building houses on wildlife is...".

			The effect of building houses on wildlife is? posttest				
			helpful	somtimes helpful, sometimes harmful	harmful	has little effect	Total
The effect of building houses on wildlife is: pretest	helpful	Count	29	20	65	8	122
		% within The effect of building houses on wildlife is: pretest	23.8%	16.4%	53.3%	6.6%	100.0%
		% within The effect of building houses on wildlife is? posttest	72.5%	26.0%	16.3%	32.0%	22.6%
		% of Total	5.4%	3.7%	12.0%	1.5%	22.6%
	somtimes helpful, sometimes harmful	Count	5	32	129	4	170
		% within The effect of building houses on wildlife is: pretest	2.9%	18.8%	75.9%	2.4%	100.0%
		% within The effect of building houses on wildlife is? posttest	12.5%	41.6%	32.4%	16.0%	31.5%
		% of Total	.9%	5.9%	23.9%	.7%	31.5%
	harmful	Count	3	15	144	4	166
		% within The effect of building houses on wildlife is: pretest	1.8%	9.0%	86.7%	2.4%	100.0%
		% within The effect of building houses on wildlife is? posttest	7.5%	19.5%	36.2%	16.0%	30.7%
		% of Total	.6%	2.8%	26.7%	.7%	30.7%
	has little effect	Count	3	10	60	9	82
		% within The effect of building houses on wildlife is: pretest	3.7%	12.2%	73.2%	11.0%	100.0%
		% within The effect of building houses on wildlife is? posttest	7.5%	13.0%	15.1%	36.0%	15.2%
		% of Total	.6%	1.9%	11.1%	1.7%	15.2%
Total		Count	40	77	398	25	540
		% within The effect of building houses on wildlife is: pretest	7.4%	14.3%	73.7%	4.6%	100.0%
		% within The effect of building houses on wildlife is? posttest	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.4%	14.3%	73.7%	4.6%	100.0%

Table 36: Pretest/posttest comparisons of responses to "The effect of bird watching on wildlife is...".

			The effect of birdwatching on wildlife is? posttest				
			helpful	somtimes helpful, sometimes harmful	harmful	has little effect	Total
The effect of bird watching on wildlife is: pretest	helpful	Count	147	28	3	37	215
		% within The effect of bird watching on wildlife is: pretest	68.4%	13.0%	1.4%	17.2%	100.0%
		% within The effect of birdwatching on wildlife is? posttest	55.7%	34.6%	33.3%	20.0%	39.9%
		% of Total	27.3%	5.2%	.6%	6.9%	39.9%
	somtimes helpful, sometimes harmful	Count	13	18	1	16	48
		% within The effect of bird watching on wildlife is: pretest	27.1%	37.5%	2.1%	33.3%	100.0%
		% within The effect of birdwatching on wildlife is? posttest	4.9%	22.2%	11.1%	8.6%	8.9%
		% of Total	2.4%	3.3%	.2%	3.0%	8.9%
	harmful	Count	3	2	1	5	11
		% within The effect of bird watching on wildlife is: pretest	27.3%	18.2%	9.1%	45.5%	100.0%
		% within The effect of birdwatching on wildlife is? posttest	1.1%	2.5%	11.1%	2.7%	2.0%
		% of Total	.6%	.4%	.2%	.9%	2.0%
	has little effect	Count	101	33	4	127	265
		% within The effect of bird watching on wildlife is: pretest	38.1%	12.5%	1.5%	47.9%	100.0%
		% within The effect of birdwatching on wildlife is? posttest	38.3%	40.7%	44.4%	68.6%	49.2%
		% of Total	18.7%	6.1%	.7%	23.6%	49.2%
Total		Count	264	81	9	185	539
		% within The effect of bird watching on wildlife is: pretest	49.0%	15.0%	1.7%	34.3%	100.0%
		% within The effect of birdwatching on wildlife is? posttest	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	49.0%	15.0%	1.7%	34.3%	100.0%

Table 37: Pretest/posttest comparisons of responses to "The effect of hiking on wildlife is...".

			The effect of hiking on wildlife is? posttest				
			helpful	somtimes helpful, sometimes harmful	harmful	has little effect	Total
The effect of hiking on wildlife is: pretest	helpful	Count	76	64	8	37	185
		% within The effect of hiking on wildlife is: pretest	41.1%	34.6%	4.3%	20.0%	100.0%
		% within The effect of hiking on wildlife is? posttest	59.8%	38.3%	30.8%	16.9%	34.3%
		% of Total	14.1%	11.9%	1.5%	6.9%	34.3%
	somtimes helpful, sometimes harmful	Count	20	37	5	18	80
		% within The effect of hiking on wildlife is: pretest	25.0%	46.3%	6.3%	22.5%	100.0%
		% within The effect of hiking on wildlife is? posttest	15.7%	22.2%	19.2%	8.2%	14.8%
		% of Total	3.7%	6.9%	.9%	3.3%	14.8%
	harmful	Count	1	1	3	5	10
		% within The effect of hiking on wildlife is: pretest	10.0%	10.0%	30.0%	50.0%	100.0%
		% within The effect of hiking on wildlife is? posttest	.8%	.6%	11.5%	2.3%	1.9%
		% of Total	.2%	.2%	.6%	.9%	1.9%
	has little effect	Count	30	65	10	159	264
		% within The effect of hiking on wildlife is: pretest	11.4%	24.6%	3.8%	60.2%	100.0%
		% within The effect of hiking on wildlife is? posttest	23.6%	38.9%	38.5%	72.6%	49.0%
		% of Total	5.6%	12.1%	1.9%	29.5%	49.0%
Total		Count	127	167	26	219	539
		% within The effect of hiking on wildlife is: pretest	23.6%	31.0%	4.8%	40.6%	100.0%
		% within The effect of hiking on wildlife is? posttest	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	23.6%	31.0%	4.8%	40.6%	100.0%

Table 38: Pretest/posttest comparisons of responses to "The effect of wildlife research on wildlife is...".

			The effect of wildlife research on wildlife is? posttest				
			helpful	somtimes helpful, sometimes harmful	harmful	has little effect	Total
The effect of wildlife research on wildlife is: pretest	helpful	Count	341	21	3	21	386
		% within The effect of wildlife research on wildlife is: pretest	88.3%	5.4%	.8%	5.4%	100.0%
		% within The effect of wildlife research on wildlife is? posttest	79.5%	46.7%	30.0%	33.9%	70.7%
		% of Total	62.5%	3.8%	.5%	3.8%	70.7%
	somtimes helpful, sometimes harmful	Count	43	15	3	11	72
		% within The effect of wildlife research on wildlife is: pretest	59.7%	20.8%	4.2%	15.3%	100.0%
		% within The effect of wildlife research on wildlife is? posttest	10.0%	33.3%	30.0%	17.7%	13.2%
		% of Total	7.9%	2.7%	.5%	2.0%	13.2%
	harmful	Count	6	1	1	4	12
		% within The effect of wildlife research on wildlife is: pretest	50.0%	8.3%	8.3%	33.3%	100.0%
		% within The effect of wildlife research on wildlife is? posttest	1.4%	2.2%	10.0%	6.5%	2.2%
		% of Total	1.1%	.2%	.2%	.7%	2.2%
	has little effect	Count	39	8	3	26	76
		% within The effect of wildlife research on wildlife is: pretest	51.3%	10.5%	3.9%	34.2%	100.0%
		% within The effect of wildlife research on wildlife is? posttest	9.1%	17.8%	30.0%	41.9%	13.9%
		% of Total	7.1%	1.5%	.5%	4.8%	13.9%
Total		Count	429	45	10	62	546
		% within The effect of wildlife research on wildlife is: pretest	78.6%	8.2%	1.8%	11.4%	100.0%
		% within The effect of wildlife research on wildlife is? posttest	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	78.6%	8.2%	1.8%	11.4%	100.0%

Comparisons of Correct and Incorrect Answers on Pre and Post Tests.

Table 39: Pre and posttest comparisons of responses to "Who manages fish and wildlife and enforces hunting and trapping laws in Indiana?"

			Who manages fish and wildlife and enforces hunting and trapping laws in Indiana? posttest		
			"incorrect" answer	"correct" answer	Total
Who manages fish and wildlife and enforces hunting and trapping laws in Indiana? pretest	"incorrect" answer	Count	93	263	356
		% within Who manages fish and wildlife and enforces hunting and trapping laws in Indiana? pretest	26.1%	73.9%	100.0%
		% within Who manages fish and wildlife and enforces hunting and trapping laws in Indiana? posttest	79.5%	60.2%	64.3%
		% of Total	16.8%	47.5%	64.3%
	"correct" answer	Count	24	174	198
		% within Who manages fish and wildlife and enforces hunting and trapping laws in Indiana? pretest	12.1%	87.9%	100.0%
		% within Who manages fish and wildlife and enforces hunting and trapping laws in Indiana? posttest	20.5%	39.8%	35.7%
		% of Total	4.3%	31.4%	35.7%
Total		Count	117	437	554
		% within Who manages fish and wildlife and enforces hunting and trapping laws in Indiana? pretest	21.1%	78.9%	100.0%
		% within Who manages fish and wildlife and enforces hunting and trapping laws in Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	21.1%	78.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	14.975[b]	1	.000		
Continuity Correction[a]	14.146	1	.000		
Likelihood Ratio	16.018	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	14.948	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 41.82.

Table 40: Pre and posttest comparisons of responses to "To whom does the wildlife in Indiana belong?"

			To whom does the wildlife in Indiana belong? posttest		
			"incorrect" answer	"correct" answer	Total
To whom does the wildlife in Indiana belong? pretest	"incorrect" answer	Count	90	280	370
		% within To whom does the wildlife in Indiana belong? pretest	24.3%	75.7%	100.0%
		% within To whom does the wildlife in Indiana belong? posttest	85.7%	62.4%	66.8%
		% of Total	16.2%	50.5%	66.8%
	"correct" answer	Count	15	169	184
		% within To whom does the wildlife in Indiana belong? pretest	8.2%	91.8%	100.0%
		% within To whom does the wildlife in Indiana belong? posttest	14.3%	37.6%	33.2%
		% of Total	2.7%	30.5%	33.2%
Total		Count	105	449	554
		% within To whom does the wildlife in Indiana belong? pretest	19.0%	81.0%	100.0%
		% within To whom does the wildlife in Indiana belong? posttest	100.0%	100.0%	100.0%
		% of Total	19.0%	81.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	20.923[b]	1	.000		
Continuity Correction[a]	19.884	1	.000		
Likelihood Ratio	23.487	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	20.885	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 34.87.

Table 41: Pre and posttest comparisons of responses to "What is the main cause of animals becoming endangered in Indiana?"

			What is the main cause of animals becoming endangered in Indiana? posttest		
			"incorrect" answer	"correct" answer	Total
What is the main cause of animals becoming endangered in Indiana? pretest	"incorrect" answer	Count	76	214	290
		% within What is the main cause of animals becoming endangered in Indiana? pretest	26.2%	73.8%	100.0%
		% within What is the main cause of animals becoming endangered in Indiana? posttest	76.8%	47.0%	52.3%
		% of Total	13.7%	38.6%	52.3%
	"correct" answer	Count	23	241	264
		% within What is the main cause of animals becoming endangered in Indiana? pretest	8.7%	91.3%	100.0%
		% within What is the main cause of animals becoming endangered in Indiana? posttest	23.2%	53.0%	47.7%
		% of Total	4.2%	43.5%	47.7%
Total		Count	99	455	554
		% within What is the main cause of animals becoming endangered in Indiana? pretest	17.9%	82.1%	100.0%
		% within What is the main cause of animals becoming endangered in Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	17.9%	82.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	28.819[b]	1	.000		
Continuity Correction[a]	27.640	1	.000		
Likelihood Ratio	30.296	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	28.767	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 47.18.

Table 42: Pre and posttest comparisons of responses to "Where does most of the money to manage Indiana's wildlife come from?"

			Where does most of the money to manage Indiana's wildlife come from? posttest		
			"incorrect" answer	"correct" answer	Total
Where does most of the money to manage Indiana's wildlife come from? pretest	"incorrect" answer	Count	154	342	496
		% within Where does most of the money to manage Indiana's wildlife come from? pretest	31.0%	69.0%	100.0%
		% within Where does most of the money to manage Indiana's wildlife come from? posttest	88.0%	90.2%	89.5%
		% of Total	27.8%	61.7%	89.5%
	"correct" answer	Count	21	37	58
		% within Where does most of the money to manage Indiana's wildlife come from? pretest	36.2%	63.8%	100.0%
		% within Where does most of the money to manage Indiana's wildlife come from? posttest	12.0%	9.8%	10.5%
		% of Total	3.8%	6.7%	10.5%
Total		Count	175	379	554
		% within Where does most of the money to manage Indiana's wildlife come from? pretest	31.6%	68.4%	100.0%
		% within Where does most of the money to manage Indiana's wildlife come from? posttest	100.0%	100.0%	100.0%
		% of Total	31.6%	68.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.639[b]	1	.424		
Continuity Correction[a]	.423	1	.515		
Likelihood Ratio	.626	1	.429		
Fisher's Exact Test				.456	.255
Linear-by-Linear Association	.638	1	.424		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 18.32.

Table 43: Pre and posttest comparisons of responses to "Native Americans got musical instruments from animals?"

			Native Americans got musical instruments from animals? posttest		
			"incorrect" answer	"correct" answer	Total
Native Americans got musical instruments from animals? pretest	"incorrect" answer	Count	140	195	335
		% within Native Americans got musical instruments from animals? pretest	41.8%	58.2%	100.0%
		% within Native Americans got musical instruments from animals? posttest	76.5%	52.6%	60.5%
		% of Total	25.3%	35.2%	60.5%
	"correct" answer	Count	43	176	219
		% within Native Americans got musical instruments from animals? pretest	19.6%	80.4%	100.0%
		% within Native Americans got musical instruments from animals? posttest	23.5%	47.4%	39.5%
		% of Total	7.8%	31.8%	39.5%
Total		Count	183	371	554
		% within Native Americans got musical instruments from animals? pretest	33.0%	67.0%	100.0%
		% within Native Americans got musical instruments from animals? posttest	100.0%	100.0%	100.0%
		% of Total	33.0%	67.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	29.388[b]	1	.000		
Continuity Correction[a]	28.395	1	.000		
Likelihood Ratio	30.647	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	29.335	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 72.34.

Table 44: Pre and posttest comparisons of responses to "Native Americans got moccasins from animals?"

			Native Americans got moccasins from animals? posttest		
			"incorrect" answer	"correct" answer	Total
Native Americans got moccasins from animals? pretest	"incorrect" answer	Count	32	43	75
		% within Native Americans got moccasins from animals? pretest	42.7%	57.3%	100.0%
		% within Native Americans got moccasins from animals? posttest	51.6%	8.7%	13.5%
		% of Total	5.8%	7.8%	13.5%
	"correct" answer	Count	30	449	479
		% within Native Americans got moccasins from animals? pretest	6.3%	93.7%	100.0%
		% within Native Americans got moccasins from animals? posttest	48.4%	91.3%	86.5%
		% of Total	5.4%	81.0%	86.5%
Total		Count	62	492	554
		% within Native Americans got moccasins from animals? pretest	11.2%	88.8%	100.0%
		% within Native Americans got moccasins from animals? posttest	100.0%	100.0%	100.0%
		% of Total	11.2%	88.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	86.465[b]	1	.000		
Continuity Correction[a]	82.841	1	.000		
Likelihood Ratio	61.687	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	86.309	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.39.

Table 45: Pre and posttest comparisons of responses to "Native Americans got rope from animals?"

			Native Americans got rope from animals? posttest		
			"incorrect" answer	"correct" answer	Total
Native Americans got rope from animals? pretest	"incorrect" answer	Count	104	278	382
		% within Native Americans got rope from animals? pretest	27.2%	72.8%	100.0%
		% within Native Americans got rope from animals? posttest	86.7%	64.1%	69.0%
		% of Total	18.8%	50.2%	69.0%
	"correct" answer	Count	16	156	172
		% within Native Americans got rope from animals? pretest	9.3%	90.7%	100.0%
		% within Native Americans got rope from animals? posttest	13.3%	35.9%	31.0%
		% of Total	2.9%	28.2%	31.0%
Total		Count	120	434	554
		% within Native Americans got rope from animals? pretest	21.7%	78.3%	100.0%
		% within Native Americans got rope from animals? posttest	100.0%	100.0%	100.0%
		% of Total	21.7%	78.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	22.451[b]	1	.000		
Continuity Correction[a]	21.408	1	.000		
Likelihood Ratio	25.247	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	22.411	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 37.26.

Table 46: Pre and posttest comparisons of responses to "Native Americans got cooking containers from animals?"

			Native Americans got cooking containers from animals? posttest		
			"incorrect" answer	"correct" answer	Total
Native Americans got cooking containers from animals? pretest	"incorrect" answer	Count	242	197	439
		% within Native Americans got cooking containers from animals? pretest	55.1%	44.9%	100.0%
		% within Native Americans got cooking containers from animals? posttest	89.0%	69.9%	79.2%
		% of Total	43.7%	35.6%	79.2%
	"correct" answer	Count	30	85	115
		% within Native Americans got cooking containers from animals? pretest	26.1%	73.9%	100.0%
		% within Native Americans got cooking containers from animals? posttest	11.0%	30.1%	20.8%
		% of Total	5.4%	15.3%	20.8%
Total		Count	272	282	554
		% within Native Americans got cooking containers from animals? pretest	49.1%	50.9%	100.0%
		% within Native Americans got cooking containers from animals? posttest	100.0%	100.0%	100.0%
		% of Total	49.1%	50.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	30.747[b]	1	.000		
Continuity Correction[a]	29.596	1	.000		
Likelihood Ratio	31.852	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	30.691	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 56.46.

Table 47: Pre and posttest comparisons of responses to "Native Americans got toys from animals?"

			Native Americans got toys from animals? posttest		
			"incorrect" answer	"correct" answer	Total
Native Americans got toys from animals? pretest	"incorrect" answer	Count	293	155	448
		% within Native Americans got toys from animals? pretest	65.4%	34.6%	100.0%
		% within Native Americans got toys from animals? posttest	91.0%	66.8%	80.9%
		% of Total	52.9%	28.0%	80.9%
	"correct" answer	Count	29	77	106
		% within Native Americans got toys from animals? pretest	27.4%	72.6%	100.0%
		% within Native Americans got toys from animals? posttest	9.0%	33.2%	19.1%
		% of Total	5.2%	13.9%	19.1%
Total		Count	322	232	554
		% within Native Americans got toys from animals? pretest	58.1%	41.9%	100.0%
		% within Native Americans got toys from animals? posttest	100.0%	100.0%	100.0%
		% of Total	58.1%	41.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	50.969[b]	1	.000		
Continuity Correction[a]	49.418	1	.000		
Likelihood Ratio	51.069	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	50.877	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 44.39.

Table 48: Pre and posttest comparisons of responses to "Native Americans got paint from animals?"

			Native Americans got paint from animals? posttest		
			"incorrect" answer	"correct" answer	Total
Native Americans got paint from animals? pretest	"incorrect" answer	Count	186	257	443
		% within Native Americans got paint from animals? pretest	42.0%	58.0%	100.0%
		% within Native Americans got paint from animals? posttest	88.6%	74.7%	80.0%
		% of Total	33.6%	46.4%	80.0%
	"correct" answer	Count	24	87	111
		% within Native Americans got paint from animals? pretest	21.6%	78.4%	100.0%
		% within Native Americans got paint from animals? posttest	11.4%	25.3%	20.0%
		% of Total	4.3%	15.7%	20.0%
Total		Count	210	344	554
		% within Native Americans got paint from animals? pretest	37.9%	62.1%	100.0%
		% within Native Americans got paint from animals? posttest	100.0%	100.0%	100.0%
		% of Total	37.9%	62.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	15.639[b]	1	.000		
Continuity Correction[a]	14.786	1	.000		
Likelihood Ratio	16.671	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	15.611	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 42.08.

Table 49: Pre and posttest comparisons of responses to "Bison still live in the wild in Indiana?"

			Bison still live in the wild in Indiana? posttest		
			incorrect	correct	Total
Bison still live in the wild in Indiana? pretest	incorrect	Count	35	83	118
		% within Bison still live in the wild in Indiana? pretest	29.7%	70.3%	100.0%
		% within Bison still live in the wild in Indiana? posttest	56.5%	16.9%	21.3%
		% of Total	6.3%	15.0%	21.3%
	correct	Count	27	409	436
		% within Bison still live in the wild in Indiana? pretest	6.2%	93.8%	100.0%
		% within Bison still live in the wild in Indiana? posttest	43.5%	83.1%	78.7%
		% of Total	4.9%	73.8%	78.7%
Total		Count	62	492	554
		% within Bison still live in the wild in Indiana? pretest	11.2%	88.8%	100.0%
		% within Bison still live in the wild in Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	11.2%	88.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	51.462[b]	1	.000		
Continuity Correction[a]	49.128	1	.000		
Likelihood Ratio	42.361	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	51.369	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.21.

Table 50: Pre and posttest comparisons of responses to "Elk still live in the wild in Indiana?"

			Elk still live in the wild in Indiana? posttest		
			incorrect	correct	Total
Elk still live in the wild in Indiana? pretest	incorrect	Count	50	155	205
		% within Elk still live in the wild in Indiana? pretest	24.4%	75.6%	100.0%
		% within Elk still live in the wild in Indiana? posttest	60.2%	32.9%	37.0%
		% of Total	9.0%	28.0%	37.0%
	correct	Count	33	316	349
		% within Elk still live in the wild in Indiana? pretest	9.5%	90.5%	100.0%
		% within Elk still live in the wild in Indiana? posttest	39.8%	67.1%	63.0%
		% of Total	6.0%	57.0%	63.0%
Total		Count	83	471	554
		% within Elk still live in the wild in Indiana? pretest	15.0%	85.0%	100.0%
		% within Elk still live in the wild in Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	15.0%	85.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	22.614[b]	1	.000		
Continuity Correction[a]	21.457	1	.000		
Likelihood Ratio	21.803	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	22.573	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 30.71.

Table 51 Pre and posttest comparisons of responses to "River otters still live in the wild in Indiana?"

			River Otters still live in the wild in Indiana? posttest		
			"incorrect" answer	"correct" answer	Total
River otters still live in the wild in Indiana? pretest	"incorrect" answer	Count	94	195	289
		% within River otters still live in the wild in Indiana? pretest	32.5%	67.5%	100.0%
		% within River Otters still live in the wild in Indiana? posttest	71.2%	46.2%	52.2%
		% of Total	17.0%	35.2%	52.2%
	"correct" answer	Count	38	227	265
		% within River otters still live in the wild in Indiana? pretest	14.3%	85.7%	100.0%
		% within River Otters still live in the wild in Indiana? posttest	28.8%	53.8%	47.8%
		% of Total	6.9%	41.0%	47.8%
Total		Count	132	422	554
		% within River otters still live in the wild in Indiana? pretest	23.8%	76.2%	100.0%
		% within River Otters still live in the wild in Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	23.8%	76.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	25.192[b]	1	.000		
Continuity Correction[a]	24.200	1	.000		
Likelihood Ratio	25.916	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	25.146	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 63.14.

Table 52: Pre and posttest comparisons of responses to "Turkeys still live in the wild in Indiana?"

			Turkey still live in the wild in Indiana? posttest		
			"incorrect" answer	"correct" answer	Total
Turkeys still live in the wild in Indiana? pretest	"incorrect" answer	Count	51	157	208
		% within Turkeys still live in the wild in Indiana? pretest	24.5%	75.5%	100.0%
		% within Turkey still live in the wild in Indiana? posttest	64.6%	33.1%	37.5%
		% of Total	9.2%	28.3%	37.5%
	"correct" answer	Count	28	318	346
		% within Turkeys still live in the wild in Indiana? pretest	8.1%	91.9%	100.0%
		% within Turkey still live in the wild in Indiana? posttest	35.4%	66.9%	62.5%
		% of Total	5.1%	57.4%	62.5%
Total		Count	79	475	554
		% within Turkeys still live in the wild in Indiana? pretest	14.3%	85.7%	100.0%
		% within Turkey still live in the wild in Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	14.3%	85.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	28.670[b]	1	.000		
Continuity Correction[a]	27.342	1	.000		
Likelihood Ratio	27.721	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	28.619	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 29.66.

Table 53: Pre and posttest comparisons of responses to "Deer still live in the wild in Indiana?"

			Deer still live in the wild in Indiana? posttest		
			"incorrect" answer	"correct" answer	Total
Deer still live in the wild in Indiana? pretest	"incorrect" answer	Count	17	25	42
		% within Deer still live in the wild in Indiana? pretest	40.5%	59.5%	100.0%
		% within Deer still live in the wild in Indiana? posttest	41.5%	4.9%	7.6%
		% of Total	3.1%	4.5%	7.6%
	"correct" answer	Count	24	488	512
		% within Deer still live in the wild in Indiana? pretest	4.7%	95.3%	100.0%
		% within Deer still live in the wild in Indiana? posttest	58.5%	95.1%	92.4%
		% of Total	4.3%	88.1%	92.4%
Total		Count	41	513	554
		% within Deer still live in the wild in Indiana? pretest	7.4%	92.6%	100.0%
		% within Deer still live in the wild in Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	7.4%	92.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	72.547[b]	1	.000		
Continuity Correction[a]	67.419	1	.000		
Likelihood Ratio	41.941	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	72.416	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 3.11.

Table 54: Pre and posttest comparisons of responses to "Bobcat still live in the wild in Indiana?"

			Bobcat still live in the wild in Indiana? posttest		
			"incorrect" answer	"correct" answer	Total
Bobcat still live in the wild in Indiana? pretest	"incorrect" answer	Count	157	252	409
		% within Bobcat still live in the wild in Indiana? pretest	38.4%	61.6%	100.0%
		% within Bobcat still live in the wild in Indiana? posttest	80.9%	70.0%	73.8%
		% of Total	28.3%	45.5%	73.8%
	"correct" answer	Count	37	108	145
		% within Bobcat still live in the wild in Indiana? pretest	25.5%	74.5%	100.0%
		% within Bobcat still live in the wild in Indiana? posttest	19.1%	30.0%	26.2%
		% of Total	6.7%	19.5%	26.2%
Total		Count	194	360	554
		% within Bobcat still live in the wild in Indiana? pretest	35.0%	65.0%	100.0%
		% within Bobcat still live in the wild in Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	35.0%	65.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	7.791[b]	1	.005		
Continuity Correction[a]	7.236	1	.007		
Likelihood Ratio	8.065	1	.005		
Fisher's Exact Test				.006	.003
Linear-by-Linear Association	7.777	1	.005		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 50.78.

Table 55: Pre and posttest comparisons of responses to "Muskox still live in the wild in Indiana?"

			Muskox still live in the wild in Indiana? posttest		
			incorrect	correct	Total
Muskox still live in the wild in Indiana? pretest	incorrect	Count	9	51	60
		% within Muskox still live in the wild in Indiana? pretest	15.0%	85.0%	100.0%
		% within Muskox still live in the wild in Indiana? posttest	22.0%	9.9%	10.8%
		% of Total	1.6%	9.2%	10.8%
	correct	Count	32	462	494
		% within Muskox still live in the wild in Indiana? pretest	6.5%	93.5%	100.0%
		% within Muskox still live in the wild in Indiana? posttest	78.0%	90.1%	89.2%
		% of Total	5.8%	83.4%	89.2%
Total		Count	41	513	554
		% within Muskox still live in the wild in Indiana? pretest	7.4%	92.6%	100.0%
		% within Muskox still live in the wild in Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	7.4%	92.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.670[b]	1	.017		
Continuity Correction[a]	4.495	1	.034		
Likelihood Ratio	4.621	1	.032		
Fisher's Exact Test				.031	.024
Linear-by-Linear Association	5.660	1	.017		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.44.

Table 56: Pre and posttest comparisons of responses to "Hunting is allowed in Indiana?"

			Hunting is allowed in Indiana? posttest		
			"incorrect" answer	"correct" answer	Total
Hunting is allowed in Indiana? pretest	"incorrect" answer	Count	77	132	209
		% within Hunting is allowed in Indiana? pretest	36.8%	63.2%	100.0%
		% within Hunting is allowed in Indiana? posttest	78.6%	28.9%	37.7%
		% of Total	13.9%	23.8%	37.7%
	"correct" answer	Count	21	324	345
		% within Hunting is allowed in Indiana? pretest	6.1%	93.9%	100.0%
		% within Hunting is allowed in Indiana? posttest	21.4%	71.1%	62.3%
		% of Total	3.8%	58.5%	62.3%
Total		Count	98	456	554
		% within Hunting is allowed in Indiana? pretest	17.7%	82.3%	100.0%
		% within Hunting is allowed in Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	17.7%	82.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	84.551[b]	1	.000		
Continuity Correction[a]	82.452	1	.000		
Likelihood Ratio	83.708	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	84.399	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 36.97.

Table 57: Pre and posttest comparisons of responses to "Fishing is allowed in Indiana?"

			Fishing is allowed in Indiana? posttest		
			"incorrect" answer	"correct" answer	Total
Fishing is allowed in Indiana? pretest	"incorrect" answer	Count	6	18	24
		% within Fishing is allowed in Indiana? pretest	25.0%	75.0%	100.0%
		% within Fishing is allowed in Indiana? posttest	16.2%	3.5%	4.3%
		% of Total	1.1%	3.2%	4.3%
	"correct" answer	Count	31	499	530
		% within Fishing is allowed in Indiana? pretest	5.8%	94.2%	100.0%
		% within Fishing is allowed in Indiana? posttest	83.8%	96.5%	95.7%
		% of Total	5.6%	90.1%	95.7%
Total		Count	37	517	554
		% within Fishing is allowed in Indiana? pretest	6.7%	93.3%	100.0%
		% within Fishing is allowed in Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	6.7%	93.3%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	13.511[b]	1	.000		
Continuity Correction[a]	10.613	1	.001		
Likelihood Ratio	8.581	1	.003		
Fisher's Exact Test				.003	.003
Linear-by-Linear Association	13.487	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.60.

Table 58: Pre and posttest comparisons of responses to "Trapping is allowed in Indiana?"

			Trapping is allowed in Indiana? posttest		
			"incorrect" answer	"correct" answer	Total
Trapping is allowed in Indiana? pretest	"incorrect" answer	Count	139	306	445
		% within Trapping is allowed in Indiana? pretest	31.2%	68.8%	100.0%
		% within Trapping is allowed in Indiana? posttest	90.8%	76.3%	80.3%
		% of Total	25.1%	55.2%	80.3%
	"correct" answer	Count	14	95	109
		% within Trapping is allowed in Indiana? pretest	12.8%	87.2%	100.0%
		% within Trapping is allowed in Indiana? posttest	9.2%	23.7%	19.7%
		% of Total	2.5%	17.1%	19.7%
Total		Count	153	401	554
		% within Trapping is allowed in Indiana? pretest	27.6%	72.4%	100.0%
		% within Trapping is allowed in Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	27.6%	72.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	14.815[b]	1	.000		
Continuity Correction[a]	13.910	1	.000		
Likelihood Ratio	16.696	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	14.789	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 30.10.

Table 59: Pre and posttest comparisons of responses to "Wildlife is important to the people of Indiana?"

			Wildlife is important to the people of Indiana? posttest		
			"incorrect" answer	"correct" answer	Total
Wildlife is important to the people of Indiana? pretest	"incorrect" answer	Count	67	65	132
		% within Wildlife is important to the people of Indiana? pretest	50.8%	49.2%	100.0%
		% within Wildlife is important to the people of Indiana? posttest	57.8%	14.8%	23.8%
		% of Total	12.1%	11.7%	23.8%
	"correct" answer	Count	49	373	422
		% within Wildlife is important to the people of Indiana? pretest	11.6%	88.4%	100.0%
		% within Wildlife is important to the people of Indiana? posttest	42.2%	85.2%	76.2%
		% of Total	8.8%	67.3%	76.2%
Total		Count	116	438	554
		% within Wildlife is important to the people of Indiana? pretest	20.9%	79.1%	100.0%
		% within Wildlife is important to the people of Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	20.9%	79.1%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	93.077[b]	1	.000		
Continuity Correction[a]	90.728	1	.000		
Likelihood Ratio	82.513	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	92.909	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 27.64.

Table 60: Pre and posttest comparisons of responses to "Scientists can use traps to catch animals and release them unharmed in new areas?"

			Scientists can use traps to catch animals and release them unharmed in new areas? posttest		
			"incorrect" answer	"correct" answer	Total
Scientists can use traps to catch animals and release them unharmed in new areas? pretest	"incorrect" answer	Count	98	154	252
		% within Scientists can use traps to catch animals and release them unharmed in new areas? pretest	38.9%	61.1%	100.0%
		% within Scientists can use traps to catch animals and release them unharmed in new areas? posttest	65.3%	38.1%	45.5%
		% of Total	17.7%	27.8%	45.5%
	"correct" answer	Count	52	250	302
		% within Scientists can use traps to catch animals and release them unharmed in new areas? pretest	17.2%	82.8%	100.0%
		% within Scientists can use traps to catch animals and release them unharmed in new areas? posttest	34.7%	61.9%	54.5%
		% of Total	9.4%	45.1%	54.5%
Total		Count	150	404	554
		% within Scientists can use traps to catch animals and release them unharmed in new areas? pretest	27.1%	72.9%	100.0%
		% within Scientists can use traps to catch animals and release them unharmed in new areas? posttest	100.0%	100.0%	100.0%
		% of Total	27.1%	72.9%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	32.672[b]	1	.000		
Continuity Correction[a]	31.584	1	.000		
Likelihood Ratio	32.849	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	32.613	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 68.23.

Table 61: Pre and posttest comparisons of responses to "We should provide wildlife with places to live?"

			We should provide wildlife with places to live? posttest		
			"incorrect" answer	"correct" answer	Total
We should provide wildlife with places to live? pretest	"incorrect" answer	Count	73	80	153
		% within We should provide wildlife with places to live? pretest	47.7%	52.3%	100.0%
		% within We should provide wildlife with places to live? posttest	51.4%	19.4%	27.6%
		% of Total	13.2%	14.4%	27.6%
	"correct" answer	Count	69	332	401
		% within We should provide wildlife with places to live? pretest	17.2%	82.8%	100.0%
		% within We should provide wildlife with places to live? posttest	48.6%	80.6%	72.4%
		% of Total	12.5%	59.9%	72.4%
Total		Count	142	412	554
		% within We should provide wildlife with places to live? pretest	25.6%	74.4%	100.0%
		% within We should provide wildlife with places to live? posttest	100.0%	100.0%	100.0%
		% of Total	25.6%	74.4%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	54.065[b]	1	.000		
Continuity Correction[a]	52.476	1	.000		
Likelihood Ratio	50.617	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	53.967	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 39.22.

Table 62: Pre and posttest comparisons of responses to "We are still learning about some of the aminals that live in Indiana?"

			We are still learning about some of the aminals that live in Indiana? posttest		
			"incorrect" answer	"correct" answer	Total
We are still learning about some of the aminals that live in Indiana? pretest	"incorrect" answer	Count	93	96	189
		% within We are still learning about some of the aminals that live in Indiana? pretest	49.2%	50.8%	100.0%
		% within We are still learning about some of the aminals that live in Indiana? posttest	58.9%	24.2%	34.1%
		% of Total	16.8%	17.3%	34.1%
	"correct" answer	Count	65	300	365
		% within We are still learning about some of the aminals that live in Indiana? pretest	17.8%	82.2%	100.0%
		% within We are still learning about some of the aminals that live in Indiana? posttest	41.1%	75.8%	65.9%
		% of Total	11.7%	54.2%	65.9%
Total		Count	158	396	554
		% within We are still learning about some of the aminals that live in Indiana? pretest	28.5%	71.5%	100.0%
		% within We are still learning about some of the aminals that live in Indiana? posttest	100.0%	100.0%	100.0%
		% of Total	28.5%	71.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	60.217[b]	1	.000		
Continuity Correction[a]	58.687	1	.000		
Likelihood Ratio	58.411	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	60.108	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 53.90.

Table 63: Pre and posttest comparisons of responses to "Sometimes the numbers of animals in an area get so high that they can cause problems for people?"

			Sometimes the numbers of animals in an area get so high that they can cause problems for people? posttest		
			"incorrect" answer	"correct" answer	Total
Sometimes the numbers of animals in an area get so high that they can cause problems for people? pretest	"incorrect" answer	Count	116	173	289
		% within Sometimes the numbers of animals in an area get so high that they can cause problems for people? pretest	40.1%	59.9%	100.0%
		% within Sometimes the numbers of animals in an area get so high that they can cause problems for people? posttest	82.9%	41.8%	52.2%
		% of Total	20.9%	31.2%	52.2%
	"correct" answer	Count	24	241	265
		% within Sometimes the numbers of animals in an area get so high that they can cause problems for people? pretest	9.1%	90.9%	100.0%
		% within Sometimes the numbers of animals in an area get so high that they can cause problems for people? posttest	17.1%	58.2%	47.8%
		% of Total	4.3%	43.5%	47.8%
Total		Count	140	414	554
		% within Sometimes the numbers of animals in an area get so high that they can cause problems for people? pretest	25.3%	74.7%	100.0%
		% within Sometimes the numbers of animals in an area get so high that they can cause problems for people? posttest	100.0%	100.0%	100.0%
		% of Total	25.3%	74.7%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	70.719[b]	1	.000		
Continuity Correction[a]	69.083	1	.000		
Likelihood Ratio	75.981	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	70.592	1	.000		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 66.97.

Table 64: Pre and posttest comparisons of responses to "Once an animal no longer lives in our state, it will never come back?"

			Once an animal no longer lives in our state, it will never come back? posttest		
			incorrect	correct	Total
Once an animal no longer lives in our state, it will never come back? pretest	incorrect	Count	98	23	121
		% within Once an animal no longer lives in our state, it will never come back? pretest	81.0%	19.0%	100.0%
		% within Once an animal no longer lives in our state, it will never come back? posttest	24.5%	14.9%	21.8%
		% of Total	17.7%	4.2%	21.8%
	correct	Count	302	131	433
		% within Once an animal no longer lives in our state, it will never come back? pretest	69.7%	30.3%	100.0%
		% within Once an animal no longer lives in our state, it will never come back? posttest	75.5%	85.1%	78.2%
		% of Total	54.5%	23.6%	78.2%
Total		Count	400	154	554
		% within Once an animal no longer lives in our state, it will never come back? pretest	72.2%	27.8%	100.0%
		% within Once an animal no longer lives in our state, it will never come back? posttest	100.0%	100.0%	100.0%
		% of Total	72.2%	27.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	5.959[b]	1	.015		
Continuity Correction[a]	5.412	1	.020		
Likelihood Ratio	6.311	1	.012		
Fisher's Exact Test				.016	.009
Linear-by-Linear Association	5.948	1	.015		
N of Valid Cases	554				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 33.64.

Table 65: Pre and posttest beliefs about hunting

			Posttest attitude toward hunting		
			harmful/ has little effect	helpful/ sometimes helpful, sometimes harmful	Total
Pretest attitude toward hunting	harmful/ has little effect	Count	72	178	250
		% within Pretest attitude toward hunting	28.8%	71.2%	100.0%
		% within Posttest attitude toward hunting	80.9%	39.3%	46.1%
		% of Total	13.3%	32.8%	46.1%
	helpful/ sometimes helpful, sometimes harmful	Count	17	275	292
		% within Pretest attitude toward hunting	5.8%	94.2%	100.0%
		% within Posttest attitude toward hunting	19.1%	60.7%	53.9%
		% of Total	3.1%	50.7%	53.9%
Total		Count	89	453	542
		% within Pretest attitude toward hunting	16.4%	83.6%	100.0%
		% within Posttest attitude toward hunting	100.0%	100.0%	100.0%
		% of Total	16.4%	83.6%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	51.816[b]	1	.000		
Continuity Correction[a]	50.155	1	.000		
Likelihood Ratio	54.246	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	51.720	1	.000		
N of Valid Cases	542				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 41.05.

Table 66: Pre and posttest beliefs about trapping

			Posttest attitude toward trapping		
			harmful/ has little effect	helpful/ sometimes helpful, sometimes harmful	Total
Pretest attitude toward trapping	harmful/ has little effect	Count	88	273	361
		% within Pretest attitude toward trapping	24.4%	75.6%	100.0%
		% within Posttest attitude toward trapping	77.9%	63.6%	66.6%
		% of Total	16.2%	50.4%	66.6%
	helpful/ sometimes helpful, sometimes harmful	Count	25	156	181
		% within Pretest attitude toward trapping	13.8%	86.2%	100.0%
		% within Posttest attitude toward trapping	22.1%	36.4%	33.4%
		% of Total	4.6%	28.8%	33.4%
Total		Count	113	429	542
		% within Pretest attitude toward trapping	20.8%	79.2%	100.0%
		% within Posttest attitude toward trapping	100.0%	100.0%	100.0%
		% of Total	20.8%	79.2%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	8.154[b]	1	.004		
Continuity Correction[a]	7.526	1	.006		
Likelihood Ratio	8.605	1	.003		
Fisher's Exact Test				.005	.003
Linear-by-Linear Association	8.139	1	.004		
N of Valid Cases	542				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 37.74.

Table 67: Pre and posttest beliefs about bird watching.

			Posttest attitude toward bird watching		
			harmful/ has little effect	helpful/ sometimes helpful, sometimes harmful	Total
Pretest attitude toward bird watching	harmful/ has little effect	Count	137	139	276
		% within Pretest attitude toward bird watching	49.6%	50.4%	100.0%
		% within Posttest attitude toward bird watching	70.6%	40.3%	51.2%
		% of Total	25.4%	25.8%	51.2%
	helpful/ sometimes helpful, sometimes harmful	Count	57	206	263
		% within Pretest attitude toward bird watching	21.7%	78.3%	100.0%
		% within Posttest attitude toward bird watching	29.4%	59.7%	48.8%
		% of Total	10.6%	38.2%	48.8%
Total		Count	194	345	539
		% within Pretest attitude toward bird watching	36.0%	64.0%	100.0%
		% within Posttest attitude toward bird watching	100.0%	100.0%	100.0%
		% of Total	36.0%	64.0%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	45.714[b]	1	.000		
Continuity Correction[a]	44.509	1	.000		
Likelihood Ratio	46.776	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	45.630	1	.000		
N of Valid Cases	539				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 94.66.

Table 68: Pre and posttest beliefs about hiking.

			Posttest attitude toward hiking		
			harmful/ has little effect	helpful/ sometimes helpful, sometimes harmful	Total
Pretest attitude toward hiking	harmful/ has little effect	Count	177	97	274
		% within Pretest attitude toward hiking	64.6%	35.4%	100.0%
		% within Posttest attitude toward hiking	72.2%	33.0%	50.8%
		% of Total	32.8%	18.0%	50.8%
	helpful/ sometimes helpful, sometimes harmful	Count	68	197	265
		% within Pretest attitude toward hiking	25.7%	74.3%	100.0%
		% within Posttest attitude toward hiking	27.8%	67.0%	49.2%
		% of Total	12.6%	36.5%	49.2%
Total		Count	245	294	539
		% within Pretest attitude toward hiking	45.5%	54.5%	100.0%
		% within Posttest attitude toward hiking	100.0%	100.0%	100.0%
		% of Total	45.5%	54.5%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	82.380[b]	1	.000		
Continuity Correction[a]	80.817	1	.000		
Likelihood Ratio	84.787	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	82.227	1	.000		
N of Valid Cases	539				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 120.45.

Table 69: Pre and posttest beliefs about wildlife research

			Posttese attitude toward wildlife research		
			harmful/ has little effect	helpful/ sometimes helpful, sometimes harmful	Total
Pretest attitude toward wildlife research	harmful/ has little effect	Count	34	54	88
		% within Pretest attitude toward wildlife research	38.6%	61.4%	100.0%
		% within Posttese attitude toward wildlife research	47.2%	11.4%	16.1%
		% of Total	6.2%	9.9%	16.1%
	helpful/ sometimes helpful, sometimes harmful	Count	38	420	458
		% within Pretest attitude toward wildlife research	8.3%	91.7%	100.0%
		% within Posttese attitude toward wildlife research	52.8%	88.6%	83.9%
		% of Total	7.0%	76.9%	83.9%
Total		Count	72	474	546
		% within Pretest attitude toward wildlife research	13.2%	86.8%	100.0%
		% within Posttese attitude toward wildlife research	100.0%	100.0%	100.0%
		% of Total	13.2%	86.8%	100.0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	59.353[b]	1	.000		
Continuity Correction[a]	56.733	1	.000		
Likelihood Ratio	46.445	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	59.245	1	.000		
N of Valid Cases	546				

a. Computed only for a 2x2 table

b. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.60.