

Model State Wildlife Health Programs

A growing number of states have wildlife health programs of variable age. In addition, several states in the Southeastern United States pooled their resources in 1957 to establish a regional wildlife health program, the Southeastern Cooperative Wildlife Disease Study (SCWDS). The following descriptions of three state programs and SCWDS are included as examples of some of the ways that state wildlife management agencies currently are addressing wildlife health issues. No two programs are alike and they can be tailored to fit the needs of individual states. These program descriptions were submitted by the corresponding states and additional information on them can be obtained from the Virginia Department of Game and Inland Fisheries, the Nevada Department of Wildlife, and the Oregon Department of Fish and Wildlife, as well as from the Southeastern Cooperative Wildlife Disease Study.

A. VIRGINIA WILDLIFE HEALTH PROGRAM

PROJECT STATEMENT

GRANT TITLE: WILDLIFE CONSERVATION PROGRAM **GRANT NO:** WE-99-R

PROJECT TITLE: WILDLIFE HEALTH PROGRAM **PROJECT NO:** XVII

PERSONNEL: Virginia Department of Game and Inland Fisheries Wildlife Veterinarian
Jonathan Sleeman performs all three jobs listed within this program.

NEED: There is an increasing need for wildlife health and veterinary input into the management and conservation of natural resources. Emerging wildlife diseases are an increasing concern for the conservation and management of natural resources as well as a threat to human and animal health necessitating increased emphasis on wildlife mortality investigation and active disease surveillance. In addition, increasingly overlapping human and wildlife populations in Virginia have resulted in a greater number of human-wildlife conflicts necessitating an increased need for the safe capture and chemical immobilization of wildlife.

OBJECTIVE: To determine the etiology of unusual wildlife mortality events in Virginia and conduct appropriate disease control, eradication and prevention measures as deemed necessary and feasible. To conduct active surveillance for diseases of greatest concern such as Chronic Wasting Disease (CWD) and highly pathogenic avian influenza and conduct appropriate disease control, eradication and prevention measures as deemed necessary and feasible. To provide veterinary technical expertise to assist in the safe capture and chemical immobilization of wildlife.

EXPECTED RESULTS AND BENEFITS: Results from the wildlife mortality investigations and active disease surveillance will allow the agency to apply timely disease control, eradication and prevention measures that will mitigate and reduce the impact of wildlife diseases on human, domestic animal and wildlife health. In addition, the results will allow the agency to provide information about wildlife diseases in Virginia to the public, relevant stakeholders and other government agencies. Providing veterinary anesthesia expertise will ensure that all wildlife captures and chemical immobilizations are conducted safely, with minimal risks to the animals and agency personnel, as well as ensuring that the most up-to-date techniques are used that will minimize the probability of anesthetic

death. This will also ensure that the agency complies with all relevant state and federal laws pertaining to the use of controlled substances.

APPROACH AND EVALUATIONS:

1) Wildlife Health Program Coordination. This job will be evaluated by documenting the administrative overhead necessary to manage the Wildlife Health Program. This work will require a synthesis and use of information from multiple Wildlife Health Program jobs. This proposed activity is new for the upcoming grant period.

2) Wildlife Mortality Investigations and Active Disease Surveillance. This job will involve the investigation of wildlife mortality events; maintaining annual payments to the Southeastern Cooperative Wildlife Disease Study (SCWDS) for diagnostic services; evaluating diagnostic results; conducting active disease surveillance for epizootic hemorrhagic disease, CWD, avian influenza, and other diseases as necessary; conducting disease control, eradication and preventive measures as necessary; maintaining disease databases; conducting research on wildlife disease ecology and epidemiology; maintaining disease information on the agency's Web site; and disseminating information on wildlife diseases to the public, stakeholders and other government agencies. This proposed activity is new for the upcoming grant period.

3) Wildlife Anesthesia and Immobilization. This job will involve ordering anesthetic drugs as necessary; maintaining controlled drug logs and inventory; supplying anesthetic agents to field biologists; providing training to field biologists in the use of anesthetics and drug delivery systems; consulting with field biologists on the appropriate choice of anesthetics for various circumstances, and maintaining data sheets on anesthetic use by the agency. This proposed activity is new for the upcoming grant period.

JOB NO: 1

WILDLIFE HEALTH PROGRAM COORDINATION

NEED:

The Wildlife Health Program will require appropriate management and administration. Specific activities will include project planning meetings, employee training and supervision, time accounting, travel and Federal Aid reports, as well as purchasing. Additionally, representation at professional meetings and on interagency committees, media interviews, public education and outreach, special analyses for regulations and management, research and publication, and cooperation with relevant non-governmental organizations and stakeholders. This work will require a synthesis and use of information from multiple Wildlife Health Program jobs.

JOB OBJECTIVE:

TO PROVIDE ADMINISTRATION, MANAGEMENT, COORDINATION, OUTREACH, AND PROFESSIONAL SUPPORT FOR THE WILDLIFE HEALTH PROGRAM.

APPROACH:

- Complete monthly, routine and special reports as needed.
- Manage purchases and budget.
- Conduct personnel management and training activities.
- Represent the agency and the agency's Wildlife Health Program at professional and technical meetings and on committees.
- Conduct education and outreach, and media interviews as needed.

JOB NO: 2**WILDLIFE MORTALITY INVESTIGATIONS AND ACTIVE DISEASE SURVEILLANCE****NEED:**

Emerging wildlife diseases are an increasing concern for the conservation and management of natural resources as well as a threat to human and animal health. Consequently, there is increasing need to investigate unusual wildlife morbidity and mortality events to determine the cause of the outbreak (outbreaks can be due to a variety of infectious agents such as rabies, canine distemper, bovine tuberculosis, West Nile virus or noninfectious diseases such as poisonings, or contaminants, or nutritional deficiencies and novel emerging diseases) as well as determine the significance and implications of the event. Should it be determined that the disease event could have significant negative impacts on natural resources or human and animal health then appropriate disease control, eradication, and prevention measures will need to be devised including, but not limited to, public awareness and education, the delineation of wildlife disease management, surveillance, and quarantine areas, the reduction of selected wildlife populations, the restriction in the movement of wildlife or parts thereof, the prohibition of feeding of wildlife or use of animal-based products such as attractants, the prohibition of rehabilitation and release of selected wildlife species and the manipulation or modification of environmental conditions as well as modifications of hunting seasons and bag limits. In addition, active surveillance for the diseases of greatest concern such as epizootic hemorrhagic disease, CWD, highly pathogenic avian influenza, and other diseases of concern will need to be performed to detect these diseases as early as possible in the event they are introduced into Virginia to allow for effective disease control measures to be implemented.

OBJECTIVE:

1. TO DETERMINE THE ETIOLOGY OF UNUSUAL WILDLIFE MORTALITY EVENTS IN VIRGINIA AND CONDUCT APPROPRIATE RESEARCH, DISEASE CONTROL, ERADICATION AND PREVENTION MEASURES AS DEEMED NECESSARY AND FEASIBLE. 2. TO CONDUCT ACTIVE SURVEILLANCE FOR DISEASES OF GREATEST CONCERN SUCH AS EPIZOOTIC HEMORRHAGIC DISEASE, CWD, HIGHLY PATHOGENIC AVIAN INFLUENZA, AND OTHER DISEASES OF CONCERN, AND CONDUCT APPROPRIATE RESEARCH, DISEASE CONTROL, ERADICATION AND PREVENTION MEASURES AS DEEMED NECESSARY AND FEASIBLE.

APPROACH:

- Conduct field investigations of reported wildlife mortality events.
- Conduct field necropsies on affected animals and collect, preserve, and submit diagnostic samples to the appropriate diagnostic laboratories including, but not limited to, Southeastern Cooperative Wildlife Disease Study (SCWDS), National Wildlife Health Center, and the Virginia Department of Agriculture and Consumer Services.
- Assess the diagnostic results and determine significance.
- Disseminate the results and interpretation to appropriate agencies and stakeholders.
- With USFWS approval, design and implement appropriate disease control, eradication and prevention measures as necessary and feasible.

- Maintain a database of mortality events and diagnostic results.
- With USFWS approval, design and implement research on wildlife disease ecology that helps elucidate etiology, epidemiology and implications for wildlife populations and ecosystems. Publish results in peer-reviewed journals.
- Design and conduct active surveillance for epizootic hemorrhagic disease, CWD, highly pathogenic avian influenza, and other diseases of concern.
- Submit surveillance samples to appropriate diagnostic laboratories.
- Assess the results and inform appropriate agencies and stakeholders of any positive results.
- Maintain response plans for diseases for which active surveillance is being conducted and activate these plans in the event a disease of concern is detected.
- Maintain a database of surveillance data, and generate reports on surveillance activities.
- Disseminate wildlife disease research results and other disease-related activities via scientific presentations and peer-reviewed journals.

JOB NO: 3

WILDLIFE ANESTHESIA AND IMMOBILIZATION

NEED:

Increasing human and wildlife populations in Virginia have resulted in a greater number of human-wildlife conflicts necessitating an increased need for the safe capture and chemical immobilization of wildlife. In addition, the confiscation and removal of illegally held captive wildlife will require the use of appropriate methods of capture and chemical immobilization.

JOB OBJECTIVE:

TO PROVIDE VETERINARY TECHNICAL EXPERTISE TO ASSIST IN THE SAFE CAPTURE AND CHEMICAL IMMOBILIZATION OF WILDLIFE. TO PROVIDE VETERINARY ANESTHESIA EXPERTISE WILL ENSURE THAT ALL WILDLIFE CAPTURES AND CHEMICAL IMMOBILIZATIONS ARE CONDUCTED SAFELY, WITH MINIMAL RISKS TO THE ANIMALS AND AGENCY PERSONNEL, AS WELL AS ENSURE THAT THE MOST UP-TO-DATE TECHNIQUES ARE USED THAT WILL MINIMIZE THE PROBABILITY OF ANESTHETIC DEATH.

APPROACH:

- Order anesthetic drugs as necessary.
- Maintain controlled drug logs and inventory.
- Supply anesthetic agents to field biologists as necessary.
- Provide training to field biologists in the use of anesthetics and drug delivery systems
- Consult with field biologists on the appropriate choice of anesthetics for various circumstances
- Maintain data sheets on anesthetic use by the agency.