Resources for Further Reading about Habits and Practices Identified in the Foundational Study for this Professional Development-support Project

Introduction to these Resources

Many resources for learning about the 30 habits and practices (H/Ps) identified in the base study for this professional development-support project are available in the traditional literature and web-based sources. Resources for your further exploration of the H/Ps were identified by a subset of the full project team (resource search team) during the summer of 2020. A combination of the project team's personal knowledge of useful resources and internet searches for each H/P resulted in a large number of possible resources for most of the H/Ps, although a few were not extensively discussed in available sources. The lists of potential resources were critiqued by the search team, and where large numbers of possible resources were found, the search team filtered out those least useful or duplicative. Next, the full project team was involved in reviewing the remaining lists for each H/P, resulting in further condensing of the original lists of resources.

Most resources included in the lists are of a general nature; they are not specific to one professional field. Nevertheless, some are written with a specific field in mind (e.g., health care professionals), but the content is applicable to the fish and wildlife profession (or any other natural resource conservation profession). The lists contain a combination of bibliographic references to traditional academic and professional literature and links to web-based resources from a variety of sources, including consultants and professional development/training specialists. Accordingly, they vary in the way they present information and in the depth of topic coverage. Regardless of the type of resource in the lists below, the project team feels they all have something to offer for one or more of the H/Ps. You'll note that content overlaps from one resource to another and also some content addresses more than one H/P.

Due to copyright law, we are unable to provide more than bibliographic citations (plus abstracts in some cases) for many of the journal articles and books included in the lists. You'll need to find the full texts for those. Fortunately, many are available free on line, and where that is the case we provide links. Note that the search was conducted during summer 2020, so some of the links may become broken over time.

Overview Resources

A couple good general resources relevant to the H/Ps include:

- Senge, P., H. Hamilton and J. Kania. 2015. **The Dawn of System Leadership**. Stanford Social Innovation Review.

- Organ, J.F., D.J. Decker, L.H. Carpenter, W.F. Siemer, and S.J. Riley. 2006. **Thinking Like a Manager: Reflections on Wildlife Management**. Wildlife Management Institute, Washington, DC 106pp.

Contents

Critically Inquisitive and Continuously Learning

1. Be constructively critical/skeptical: Question assumptions, data, analyses or conclusions critically.

- [Giving Constructive Criticism Using Emotional Intelligence, an Outline](#) (Ladders)
    - Defines constructive criticism, brief discussion of the neuroscience behind it, provides steps on how to give constructive criticism and how to use it in the workplace.
- [15 Ways To Offer Truly Constructive Feedback](#) (Forbes)
    - 15 members of the Forbes Coaches Council each share a clear and easy to implement tip on providing constructive feedback in the workplace.
- [How to Give Kind Criticism, and Avoid Being Critical](#) (Zen Habits)
    - Description of the reasons why we give criticism and how it hurts or angers others. Provides clear suggestions on how to give criticism with kindness by using positive suggestions.
- [How to Give Better Constructive Feedback to Your Colleagues](#) (Justworks)
    - A "step-by-step guide for giving better feedback to your teammates." Provides 4 detailed steps for thinking through constructive feedback and examples that incorporate those steps.
- [5 Tips to Improve your Critical Thinking](#) (TED-Ed)
    - Animated 5 minute YouTube lesson on improving critical thinking. Includes a 5 step process to follow when making a decision to help you "solve any number of problems."
- [6 Critical Thinking Skills You Need to Master Now](#) (Rasmussen College)
    - Provides a brief definition of critical thinking and 6 critical thinking skills with details on how to improve each skill.

- [Critical Thinking: A Literature Review](#) (Pearson)
  - A lengthy deep-dive report into the critical thinking literature with a focus on educators. Includes detailed philosophical and psychological definitions of critical thinking; its connections to metacognition, motivation and creativity; discussion of its development in adults and children; and instructional implications/strategies.

2. Be reflective: Apply a self-critical perspective and evaluate performance for the purpose of adapting and improving.

- [Guide to Models of Reflection – When & Why Should You Use Different Ones](#) (Occupational Therapy Blog)
  - A brief guide to different academic models of reflection with commentary on the pros and cons of each.
- [What Is Reflective Practice?](#) (BusinessBalls)
  - Comprehensive overview article that includes definitions of reflection, various types and models of it, techniques for being reflective and a self-assessment. It has numerous academic citations and a lengthy reference list.
- [Reflective Practice](#) (Southern Cross University)
  - Educational guide on reflective practice for health care professionals that could be adapted to other fields. Covers why you should use reflective practice, when to use it, examples and types of reflection. Also includes an extensive list of recommended readings.

3. Be open-minded: Take a fresh look at a situation and search for factors that may have been missed in the past.

- [9 Smart Ways To Keep An Open Mind In The Workplace](#) (Medium Remote Symfony Team)
  - Brief description of 9 easy to implement ways to be open minded at work.
- [The Benefits of Being Open-Minded](#) (Verywell Mind)
  - Detailed easy to read article that describes open-mindedness, its benefits, factors the influence it, and tips on how to be more open-minded.
- [A New Way to Become More Open-Minded](#) (Harvard Business Review)
  - Brief conversational article on the psychological underpinnings of open-mindedness and its various components. Includes a link to a self-assessment.
- [Contradict Yourself to Become More Open-Minded](#) (Psychology Compass)
  - Discusses open-mindedness in terms of understanding and avoiding cognitive biases with 3 tips for combatting cognitive biases. Has an exercise and an open-mindedness assessment report card.

4. <u>Be flexible</u>: Reserve the option to change one's mind (and accept others doing so) if new evidence or understanding of a situation indicates that is prudent.

- [25 Ways I Can Improve My Flexibility at Work](#) (Open Sourced Workplace)
  - 25 tips broken into 4 categories to be more flexible at work; 1) developing a flexibility mindset, 2) building flexible skills, 3) encouraging flexible teams, and 4) attaining a work-life balance. There is also a brief description of all 25 tips.
- [Importance of Workplace Adaptability and Flexibility](#) (Open Sourced Workplace)
  - Brief discussion of workplace adaptability and flexibility. Has 10 factors of workplace flexibility, 5 crucial skills of adaptability and 5 ways to show adaptability at work.
- [4 Tips For Being More Flexible and Adaptable](#) (The Business Journals)
  - Brief description of 4 "skills to nurture as you embark on developing your team's ability to adapt."
- [11 Habits of Exceptionally Flexible (and Successful) People](#) (Inc.)
  - Very quick read that lists 11 habits of people who are flexible in a work environment.
- [Adaptable Leaders Have These 3 Types of Flexibility](#) (Center for Creative Leadership)
  - A general description of 3 components of adaptability: 1) cognitive flexibility, 2) emotional flexibility, and 3) dispositional flexibility. Article concludes with several tips for becoming a more flexible leader.
- [10 Quickest Ways to Develop your Adaptability and Flexibility Skills](#) (eSoft Skills)
  - Brief description of 10 actionable ways to develop flexibility. Includes a couple videos on the topic as well.

5. <u>Be adaptive</u>: Approach your work from the perspective of learning while doing; think of management as an experiment and take every opportunity to assess and learn from experience.

- [How to Be an Adaptive Learner to Be an Effective Leader](#) (Ed Brenegar)
  - Discussion on how to practice adaptive learning and its benefits. Part of the Circle of Impact leadership model.
- Cutrer WB, Miller B, Pusic MV, Mejicano G, Mangrulkar RS, Gruppen LD, Hawkins RE, Skochelak SE, Moore DE Jr. [Fostering the Development of Master Adaptive Learners: A Conceptual Model to Guide Skill Acquisition in Medical Education](#). Academic Medicine 2017 Jan;92(1):70-75. doi: 10.1097/ACM.0000000000001323. PMID: 27532867.
  - **Abstract**: Change is ubiquitous in health care, making continuous adaptation necessary for clinicians to provide the best possible care to their patients. The authors propose that developing the capabilities of a Master Adaptive Learner will provide future physicians with strategies for learning in the health care environment and for managing change more effectively. The concept of a Master Adaptive Learner describes a metacognitive approach to learning based on self-regulation that can foster the development and use of adaptive expertise in

practice. The authors describe a conceptual literature-based model for a Master Adaptive Learner that provides a shared language to facilitate exploration and conversation about both successes and struggles during the learning process.

6. <u>Be inquisitive/curious</u>: Learn as much as possible about an issue in order to understand how the social-ecological system in which the management opportunity or problem is embedded works and to identify probable impacts of management; ask lots of "how" and "why" questions and seek new evidence to support (or refute) existing perceptions.

- [Why Curiosity Matters](#) (Harvard Business Review)
  - "New research shows that curiosity is vital to an organization's performance—as are the particular ways in which people are curious and the experiences they are exposed to. This package examines how leaders can nurture curiosity throughout their organizations and ensure that it translates to success."
- [The Importance of Inquisitiveness](#) (LinkedIn)
  - Description of the differences between inquisitiveness and curiosity. Lists the traits of an inquisitive general council that can be translated to other professions.
- [Curiosity in the Workplace: How to Develop an Inquisitive Attitude and Become a Better Leader](#) (Thrive Global)
  - Makes the case for the importance of remaining curious with some easy to implement suggestions for how to become more curious in the workplace.
- [The Importance of Being Curious](#) (Harvard Business Publishing Corporate Learning)
  - Brief conversational read about curiosity in the workplace and how it can be developed.
- [Using Curiosity to Enhance Meaningfulness of Work](#) (Graziadio Business Review)
  - "Curiosity is a powerful catalyst for boosting career- and job-related meaningfulness. This paper describes three ways a curious mindset ignites this felt sense. Steps for developing related behaviors and attitudes also are outlined." Includes exercises, suggestions for further reading and an extensive reference list to published research papers.

Multi-level, Integrative Systems Thinking

- Holistic Approach to Strategy, Policy Development, and Planning (Medium)
  - An in-depth set of articles useful for thinking about a holistic approach to strategy, policy development, and planning (systems thinking):
    - [Holistic Approach to Strategy, Policy Development, and Planning — Part 1](#)
    - [Overview of the System of Systems — Part 2](#)
    - [Understanding Planning From the Top Down — Part 3](#)
    - [Key to Getting Systematic Thinking for Wholes — Part 4](#)

7. Be holistic and think comprehensively: See the whole situation by studying its parts, understanding how they fit together and identifying what's missing. Every specific situation is embedded in a larger context that either affects or is affected by management actions at any level.

- [Three Principles of Holistic Thinking](#) (Paul Terry Consulting Group)
  - Uses a puzzle metaphor to describe 3 principles of holistic thinking in the workplace: 1) know your overall objective, 2) correctly frame the problem/challenge, and 3) learn to recognize patterns.
- [Thinking and Planning for the 21st Century: A Holistic Approach to Thinking and Planning](#) (Federation of American Scientists)
  - Detailed deep dive into many aspects of comprehensive thinking and planning. Makes the case that there is a need to modify current methods of thinking and planning to be more holistic by incorporating the philosophical and historical context.

8. Be inclusive: Seek information about and try to include any primary and secondary stakeholders in a management decision or action; attempt to secure their input and involvement.

- [Stakeholder Identification, Engagement and Empowerment](#) (Inclusive Infrastructure)
  - Overview article on stakeholder engagement with a focus on being inclusive to all groups of people. It has succinct key messages, detailed definitions and describes the context.
- Decker, D.J., Forstchen, A.B., Pomeranz, E.F., Smith, C.A., Riley, S.J., Jacobson, C.A., Organ, J.F. and Batcheller, G.R. (2015), [Stakeholder engagement in wildlife management: Does the public trust doctrine imply limits?](#) Journal of Wildlife Management, 79: 174-179. doi:10.1002/jwmg.809
  - **Abstract**: Recent evolution of the wildlife management institution in the United States includes adoption of good governance principles, wherein stakeholders expect and are provided opportunities for input and involvement in making decisions about public wildlife resources. Concurrently and perhaps paradoxically, state wildlife agencies are encouraged to operate with fidelity to the public trust doctrine and the principles of public trust administration, which may require trust administrators (i.e., appointed commissioners and public wildlife managers) to keep trust beneficiaries (i.e., theoretically all citizens, but especially special interests) at arm's length (i.e., restricted from having undue control) with respect to directly influencing decision-making. In addition, public trust administration includes citizens taking responsibility for holding trust administrators accountable and requires government to provide citizens recourse for doing so. In practice, however, accountability typically is achieved through political influence or litigation, both routes antithetical to efficient public trust resource administration. This set of potentially conflicting expectations—practicing good governance through citizens' engagement in

wildlife decision-making processes, limiting beneficiaries' direct influence on decisions of trust administrators, and citizens' responsibility for holding trust administrators accountable—creates an apparent conundrum for state wildlife agencies. As a catalyst for deliberation about the implications of public trust doctrine in the wildlife profession, we describe potential problems and suggest ways for public wildlife managers to perform their responsibilities with due diligence to the combined expectations and requirements of good governance and the public trust doctrine.

- Daniel J. Decker, Charles C. Krueger, Richard A. Baer Jr., Barbara A. Knuth & Milo E. Richmond (1996) <u>From clients to stakeholders: A philosophical shift for fish and wildlife management</u>, Human Dimensions of Wildlife, 1:1, 70-82, DOI: <u>10.1080/10871209609359053</u>

  - **Abstract**: Fish and wildlife management in North America has been experiencing a fundamental philosophical shift among professional managers and policy makers about who are the beneficiaries of management. This has been reflected in broadening notions of who should be considered in decision making; not just traditional clients who pay for and receive services of managers, but all stakeholders in fish and wildlife management. The term "stakeholder"; has emerged to represent any citizen potentially affected by or having a vested interest (a stake) in an issue, program, action or decision leading to an action. The stakeholder approach in management decision making recognizes a larger set of beneficiaries of management (including, in concept, future generations) than the traditional concepts of constituencies and clients, or customers, a term currently popular among fish and wildlife agencies. The stakeholder approach requires: (1) identification of important stakeholders, (2) flexibility in selection of methods for incorporating stakeholder input in decision making to account for specific contexts, (3) development of a professional management philosophy strong enough to resist powerful special interests when broader public interests are in the balance, (4) development of ways to weigh stakeholder views on issues in management decision making, and (5) establishment of effective strategies for communication between managers and stakeholders and among stakeholders to encourage understanding and compromise.

- Decker, D.J., Forstchen, A.B., Siemer, W.F., Smith, C.A., Frohlich, R.K., Schiavone, M.V., Lederle, P.E. and Pomeranz, E.F. (2019), <u>Moving the paradigm from stakeholders to beneficiaries in wildlife management</u>. Journal of Wildlife Management, 83: 513-518. doi:10.1002/jwmg.21625

  - **Abstract**: Wildlife management is evolving in many ways including adaptation of philosophy and practices to contemporary ideas about governance of wildlife as public trust resources. Inherent to good governance is citizen engagement, especially regarding who is engaged and to what ends management efforts are directed. Two decades ago, the profession was encouraged to shift from a client orientation (i.e., a narrow focus on people who pay for services and products) to a stakeholder orientation (i.e., any people affected by or affecting wildlife or its management). We believe that it is time again to broaden thinking about the

related questions: wildlife management for whom and for what? We argue that management needs to shift slightly from a stakeholder orientation to a beneficiary orientation. This shift may be less challenging than the earlier call for change but nevertheless has implications for practices of public engagement and for objectives and outcomes of wildlife management that bring the enterprise into better alignment with the expectations of public trust resource management.

- Chase, L., Siemer, W., & Decker, D. (2002). Designing Stakeholder Involvement Strategies to Resolve Wildlife Management Controversies. *Wildlife Society Bulletin (1973-2006), 30*(3), 937-950.

  o **Abstract**: Deciding when and how to involve stakeholders in wildlife management is a challenge for state agencies throughout the United States. No single process works well in all cases, and a "cookbook" approach to designing a strategy that will address all the complex situations encountered by wildlife managers is unrealistic. The challenge is great, but experience of wildlife managers together with literature from other fields can help guide agencies toward effective involvement of stakeholders in management. Our analysis suggested that 4 steps were especially useful for designing stakeholder involvement strategies: conducting a situation analysis, defining agency objectives for stakeholder involvement, selecting a general stakeholder involvement approach, and designing a context-specific strategy. To illustrate these steps, we applied them to 2 case studies: elk (*Cervus elaphus*) management in Evergreen, Colorado and white-tailed deer (*Odocoileus virginianus*) management in Cayuga Heights, New York. Our analysis verified that some design elements of stakeholder involvement strategies were unique to specific situations, indicating the need for careful matching of contexts and involvement processes. We found that the desired level of influence of stakeholders was greater in Cayuga Heights than in Evergreen; however, stakeholders in both locations indicated a preference for involvement processes that shared certain characteristics. In both cases, results suggested that agencies should invest the resources necessary to implement stakeholder involvement processes that use scientific information, have genuine influence on decisions, treat citizens fairly, and promote communication and education. While certain aspects of stakeholder involvement strategies appeared to be desirable regardless of the context, the common foundation for stakeholder involvement was complemented by tailored strategies based on inquiry, analysis, and judgment.

- Crawford, B., R. Katz, & S. McKay (2017). Engaging Stakeholders in Natural Resource Decision-Making. Ecosystem Management and Restoration Research Program 10.13140/RG.2.2.13042.66248.

  o **Abstract**: Natural resource managers frequently face difficult decisions, many of which involve diverse stakeholders, competing objectives, multiple management options, and uncertainty of outcomes. Participatory decision-making has emerged as an effective approach for addressing such decisions. This approach

hinges on stakeholder engagement-a process that includes fostering a shared understanding of the issue, stakeholder buy-in, and co-creation of solutions as an effective means to address the issue. Effective engagement of stakeholders requires that organizers of the decision-making process have ample knowledge of relationships between stakeholders and the natural resource issue, strategic communication and trust within the community. Although many resources have described methods and tools for executing participatory decision-making (e.g., decision analysis), few resources describe effective methods for initiating the process of stakeholder engagement; this often presents a key barrier to participatory decision-making. This report explores issues and proposes solutions involved in stakeholder engagement to provide a cursory resource for those interested in leading a participatory decision-making process. After introducing the topic of participatory decision-making and highlighting its benefits, steps for initiating the stakeholder engagement process, discussion of common challenges encountered and best practices for overcoming them are presented. In order to more efficiently address natural resource issues, those interested in leading participatory decision-making efforts should apply and pursue further training in the topics discussed in this report.

- Lisa C. Chase, Daniel J. Decker & T. Bruce Lauber (2004) [Public Participation in Wildlife Management: What Do Stakeholders Want?](), Society & Natural Resources, 17:7, 629-639, DOI: [10.1080/08941920490466611]()

  o **Abstract**: As public participation in environmental decisions has increased, natural resource management agencies have been challenged to involve stakeholders constructively in the resolution of a variety of contentious issues. This research examines how evaluative criteria, initially derived from theory and literature and then refined based on input from agency staff and stakeholders, can provide natural resource agencies with guidance for designing context-specific stakeholder involvement strategies. To provide illustrations, we conducted inquiries in two communities experiencing wildlife management conflicts. Results suggest that quality stakeholder involvement processes use scientific information, have genuine influence on decisions, treat citizens fairly, and promote informative communication and learning.

- Donna Vogler, Suzanne Macey, and Amanda Sigouin (2017) [Stakeholder Analysis in Environmental and Conservation Planning](), Lessons in Conservation, Vol. 7, pp. 5–16

  o **Abstract**: Stakeholders are defined as the people and organizations who are involved in or affected by an action or policy and can be directly or indirectly included in the decision making process. In environmental and conservation planning, stakeholders typically include government representatives, businesses, scientists, landowners, and local users of natural resources. These groups of stakeholders often have very different positions and values that may be difficult to reconcile with each other and the planned project. This synthesis provides a brief overview of why it is important to incorporate different stakeholders, including underrepresented groups and "hidden" stakeholders, in the planning process and discusses the potential benefits of inclusion. Before involving

stakeholders, conducting a stakeholder analysis can help to identify relevant stakeholders and to assess their views and interests on a proposed project. The synthesis describes specific techniques for conducting a formal stakeholder analysis, such as the use of stakeholder tables and a stakeholder influence/interest grid. Finally, the synthesis also highlights some approaches and strategies that can help to facilitate a fair and productive participatory process.

- Leong, K.M., Decker, D.J., & Lauber, T.B. (2012). Stakeholders as beneficiaries of wildlife management. In D.J. Decker, S.J. Riley, & W.F. Siemer (Eds.), Human Dimensions of Wildlife Management (2nd ed.) (pp. 26-40). Johns Hopkins University Press. ISBN 9781421406541.
  - This chapter explores "the role of stakeholders in wildlife management. Stakeholder engagement helps managers fully realize their role in managing public trust resources. By incorporating the full range of stakeholders throughout all stages of management, agencies improve the durability of decisions and the sustainability of management activities."
- Lauber, T.B., Decker, D.J., Leong, K.M, Chase, L.C., & Schusler, T.M. (2012). Stakeholder engagement in wildlife management. In D.J. Decker, S.J. Riley, & W.F. Siemer (Eds.), Human Dimensions of Wildlife Management (2nd ed.) (pp. 139-156). Johns Hopkins University Press. ISBN 9781421406541.
  - "Stakeholder engagement at multiple geographical and temporal scales is becoming a regular practice in wildlife management. This intervention represents expanded attempts to increase transparency of decision-making processes and improve accountability (both important components of good governance)."

9. Be creative, divergent, and imaginative: Look for opportunities to create entirely new solutions to a problem at hand without undue concern about diverging from conventional practice.

- 4 Ways Creative Thinking Drives Professional Success (Harvard Division of Continuing Education
  - Brief read on 4 tips to inspire creativity in professional life: 1) see with fresh eyes, 2) make no assumptions, 3) spew ideas, and 4) start with the positive.
- Convergent Thinking vs. Divergent Thinking: Why Planning Isn't Always the Right Thing to Do (Wrike)
  - Detailed discussion on convergent and divergent thinking and how it relates to project management. Includes a descriptive video and 3 steps to follow to enable more divergent thinking.
- Strategies and Tools for Divergent Thinking (Instructional Design Fusions)
  - Basic guidelines for supporting divergent thinking, descriptions of various techniques that professionals can employ, and a listing of technology that can be used to support divergent thinking.

- [10 Ways to Boost Your Imagination and Achieve Big Things](#) (Lifehack)
  - Brief description of 10 ways to empower your mind through imagination to achieve your goals.
- [What is Creative Thinking?](#) (The Balance Careers)
  - Brief read on creative thinking with definitions, a description of how it works, a discussion of the different types and its benefits.
- [Creativity Skills: Definition, Tips and Examples](#) (Indeed Career Guide)
  - Defines creativity, provides examples of creativity skills, lists activities and exercises that can be done to improve it, includes ways to foster creativity in the workplace and how creativity skills can be highlighted in a resume or job interview.
- [17 Ways to Develop Your Creativity](#) (Verywell Mind)
  - "Creativity is all about finding new ways of solving problems and approaching situations. This isn't a skill restricted to artists, musicians or writers; it is a useful skill for people from all walks of life. If you've ever wanted to boost your creativity, these tips can help."
- [7 Steps You Need To Take To Be Creative At Work](#) (Lifehack)
  - "In almost every job there are opportunities for creativity and innovation— sometimes they are small procedural improvements, and sometimes they are big, risky innovations." Includes 7 key steps to "put some imagination and creativity into your work."

Self-disciplined

10. <u>Be scientific</u>: Approach technical assessments by means of scientific methods and principles; evaluate the methods used to address an issue to ensure the conclusions or recommendations are sound.

- [Evaluating Scientific Claims (Or, Do We Have to Take the Scientist's Word for It?)](#) (Scientific American)
  - Articulates ways of identifying the credibility of scientific claims and the scientists who make them.
- [Scientific Integrity in Public Policy](#) (American Chemical Society)
  - In depth article on the role of science and integrity. Makes science and integrity recommendations for governments including information on the scientific processes and procedures, data quality, use, review, and preservation and scientific access and advice.

11. <u>Be logical</u>: Seek general understanding of a problem in a way that shows clear, sound reasoning and is obviously sensible to others under the circumstances.

- [The Importance of Logical Thinking in the Workplace](#) (The Balance Careers)
  - Brief read on logical thinking with definitions, examples, and how to demonstrate logical thinking on resumes and in interviews.
- [4 Ways to Use and Improve Your Logical Reasoning Skills](#) (Indeed Career Guide)
  - Describes logical reasoning and 4 ways to use it in the workplace: 1) identifying the different types, 2) determining how the types apply to the workplace, 3) preparing to take a logical reasoning test, and 4) taking the test through your employer.
- [Logical Thinking](#) (Cleverism)
  - Very brief article on why logical thinking is important and some tips to help improve logical thinking skills.
- [What Is Logical Thinking and How to Strengthen It](#) (Lifehack)
  - Discussion of logical thinking through the lens of the brain's hemispheres and 4 ways it can be practiced and improved.
- [The 10 Habits of Logical People](#) (Foundation for Economic Education)
  - Brief description of "10 habits that people must cultivate if they are to think clearly and effectively."
- [How Logical Reasoning Works](#) (Brain Gymmer)
  - Comprehensive article defining the types of logical reasoning, how it relates to problem-solving and how to improve logical thinking skills. Includes diagrams to demonstrate concepts and logical thinking skill problems.
- [10 Tips for Sharpening your Logical Thinking](#) (TechRepublic)
  - "Logical thinking helps you discern the truth, solve problems, and make good decisions -- unless your logic is flawed. Here are a few principles that will help ensure correct reasoning."

12. <u>Be systematic:</u> Approach specific technical assessments following a pre-determined plan in a methodical manner (e.g., structured decision making), with clear focus on stated objectives.

- Fuller, A., Decker, D., Schiavone, M., & Forstchen, A. (2020). [Ratcheting up Rigor in Wildlife Management Decision Making](#). *Wildlife Society Bulletin, 44*(1), 29-41. Open Access, Full Text Available Online.
  - **Abstract**: The wildlife management institution has been transforming to ensure relevance and positive conservation outcomes into the future. Continuous improvement of decision making is one aspect of this transformation. Managers and policy makers with responsibility for wildlife decisions have an exceedingly challenging job because the set of objectives they wish to achieve is so complex, multifaceted, and often contentious. Many wildlife management agencies desire decision-making processes that are transparent, replicable, engage partners, and communicate effectively with the public. Using a decision science approach offers a framework to allow agencies to achieve these objectives so the decision-making process is consistent with their desires. One can point to many excellent

examples of formal decision science applications by state and federal agencies in the United States, but many obstacles hinder systematic approaches to decision making. We describe our observations—based on first-hand experiences—with decision making in wildlife management, present reasons why making decisions is difficult, identify challenges faced by wildlife managers at various levels of governance, and address measures wildlife managers can employ to help overcome these challenges. We acknowledge that no panacea, simple recipe, or one-size-fits-all prescription exists for wildlife management decision making. Nevertheless, we hope that by a) describing how a systematic decision science framework can help agencies achieve their objectives, while simultaneously benefiting stakeholders, managers, and conservation outcomes, and b) providing specific suggestions for overcoming challenges associated with decision making, we will help agencies in the midst of their challenges to improve decision-making processes consistent with their objectives.

- Structured Decision Making Fact Sheet (US Fish and Wildlife Service- National Conservation Training Center)
    - Course description for a Structured Decision Making (SDM) course offered through the National Conservation Training Center in 2008. Includes definitions of SDM as well as a nice overview of the steps involved in it. For more information on SDM courses visit: https://nctc.fws.gov/courses/programs/decision-analysis/structured-decision-making-overview.html
- 5 Steps to Systematic Thinking (Street Directory)
    - Very brief article highlighting the steps in systematic thinking to solving problems and 5 ways to achieve systematic thinking.
- Guidelines for Daily Systems Thinking Practice (Systems Thinker)
    - Basic practical steps to develop systems thinking as an individual and as part of a group or team.
- The "Thinking" in Systems Thinking: How Can We Make It Easier to Master? (Systems Thinker)
    - Deep dive into the "whole package of thinking skills" that describes the systems thinking method. It elaborates on seven critical thinking skills with detailed definitions and supporting diagrams.
- How Systems Thinking Makes You a Smarter Person (Lifehack)
    - Description of how to use systems thinking to make smarter decisions. Defines systems thinking, outlines its characteristics, how to use it, and how to foster learning with systems thinking.
- Systems Thinking – 7 Lessons for Ambitious Endeavors (The Quintessential Mind)
    - Suggests "effective ways to use systems thinking as a tool for your personal growth." Lists a series of 7 "important lessons one can learn by adopting a systems-thinking approach" with a personal growth takeaway for each.
- 5 Advantages of Systems Thinking and How to Make Full Use of It (Toggl Plan)

- Describes different approaches to simulation models to aid in systems thinking, how to apply them to management, and 5 advantages of systems thinking.

13. Be analytical: Examine problems and opportunities carefully by taking an organized, thoughtful, and unbiased approach that helps describe components of complex issues and their connections.

- [Thinking Skills](#) (The Peak Performance Center)
  - Defines core thinking skills, classifications and types of thinking, compares analytical to creative thinking, and provides links to more detailed information on similar concepts on their website.
- [Analytical Thinking](#) (Matter)
  - Brief read identifying why analytical thinking is important, what it is not about, and a listing of abilities that will lead to the "mastery of analytical thinking."
- [What Are Analytical Skills? Definition & Examples of Analytical Skills](#) (The Balance Careers)
  - Defines analytic skills and how they work. A definition and a bulleted list of skills for each type of analytic skill is provided. Tips for highlighting analytic skills on job applications and interviews along with key takeaways conclude the article.
- [Analytical Thinking: 8 Natural Talents Leading to Action](#) (Richtopia)
  - Brief article describing why analytical thinking is important, thoughts on how to improve analytical skills, and a listing of 8 natural talent areas that are part of analytical thinking.

14. Be economical and efficient: Work in a well-organized and competent way that gets intended results using no more funding, time, social capital and other resources than is necessary.

- [18 Habits of Highly Productive People: What Efficient People Have in Common](#) (Active Campaign)
  - "18 of the most important habits of highly productive people. From ways to spend less time on emails to methods of staying focused, these productivity tips can help you maximize your efficiency — and get more done." Each habit has a productivity tip and description.
- [Drowning in Work? Six Tips for Improving your Efficiency](#) (Kelly Services)
  - 6 brief tips to help improve efficiency and productivity at work.
- [How to Work Faster and More Efficiently; 5 Tips to Do Your Job Smarter](#) (The Balance Careers)
  - "If you work efficiently for the same number of hours you're working now, how much more could you accomplish? Try implementing these five techniques" 1) prioritize tasks, 2) keep a clean workspace, 3) minimize distractions, 4) avoid busywork, and 5) break up big projects.

- [How to Make the Most of Your Workday](#) (The New York Times)
  - Detailed practical guide on "productivity techniques that can be adapted to your personality and working style."
- [How to Be More Efficient at Work](#) (Wiki How)
  - Tips on how to be more efficient and productive at work, broken down into 3 parts: 1) creating focus, 2) enacting effective work strategies, and 3) making lifestyle changes.
- [8 Things Really Efficient People Do](#) (Inc.)
  - Brief read with "8 tips effectively used by the most efficient."
- [How to Be Efficient: 7 Science-Backed Ways to Build Speed as a Habit](#) (HubSpot)
  - Short practical tips that can be used to "learn how you can build speed as a habit and boost your productivity." Nice summary for each with links to scientific research and other helpful sources.
- [20 Ways to Improve Your Efficiency at Work](#) (Career Addict)
  - "20 tips that will help you manage your time and improve your efficiency in the workplace." Straightforward and easy to implement tips.
- [15 Best Productivity Tips at Work for Increased Efficiency](#) (Its All You Boo)
  - Provides a definition for productivity and 10 tips on how to increase productivity and 5 ways to improve performance at work. Includes links to additional research, articles, and a few helpful apps/products.

15. <u>Be impartial and objective</u>: Avoid being influenced by your personal beliefs or privileging particular stakeholders when doing so results in being unfair to others or producing undesirable effects on the resource.

- [7 Strategies for Making Objective Decisions](#) (Inc.)
  - "We all face difficult decisions, but how can we increase the likelihood of making the right choice? Here are seven strategies to ensure you make objective decisions that aren't influenced by irrelevant factors."
- [Check Your Bias: How to Make Impartial Decisions for Your Business](#) (Inc.)
  - "We all have biases, but it's critical to be aware of how they may impact your decisions." Outlines 7 tips on how to become aware of biases and work to actively set them aside when making decisions.
- [How to Make an Unbiased Decision in the Workplace](#) (Houston Chronical)
  - 5 brief tips to help "minimize bias by taking every possible precaution to ensure your decision-making process is fair and equitable to all involved."
- [The Foursquare Protocol: Managing Ethical Decision Making](#) (Mindtools)
  - Describes the Foursquare Protocol and how it can be used to make impartial objective decisions. Goes into detail of the 4 steps with examples and tips for each: 1) dig into the facts, 2) examine individual reactions to past solutions, 3) gauge similarities with past situations, and 4) analyze your decision-making situation.

16. Be ethical: Attend to at least two types of ethical considerations: (A) operate in a morally good or correct manner that avoids or minimizes harm to people, the resource or the environment generally; (B) understand and consider disparate ethical positions held by stakeholders regarding a management issue.

Type A ethics: ethics in public service
- Principles for Ethical Professional Practice (National Association of Colleges and Employers)
  - Lists 5 principles for professionals and some elaboration on each: 1) practice reasonable, responsible, and transparent behavior, 2) act without bias, 3) ensure equitable access, 4) comply with laws, and 5) protect confidentiality.
- Basic Obligation of Public Service: The Foundation For Ethical Behavior (U.S. Department of Interior)
  - Bulleted list of the ethical behavior expected of all federal employees and useful for all professionals.

Type B ethics:
- Daniel J. Decker, Ann B. Forstchen, Michael V. Schiavone, Emily F. Pomeranz, Richard King and R. Joseph Benedict, Jr. 2019. An Eye Toward Ethics: we lack tools to assess ethics issues in managing wildlife. The Wildlife Professional May/June 2019: 28-31.

17. Be patient: Endure delays and problems without becoming overly annoyed or anxious, and continue working on a project with a positive attitude despite difficulties encountered.

- Importance of the Character Trait Patience in the Workplace (The Nest)
  - Brief description of 5 traits that help or inhibit the practice of patience among professionals: 1) impatience, 2) taking time to think, 3) help others improve, 4) cooperation, and 5) drawing the line.
- How to Be Patient in the Workplace (Success Consciousness)
  - 7 brief tips on how to improve patience.
- Patience in the Workplace (Thnks)
  - Brief article broken into 3 sections: 1) how leaders develop patience in the workplace, 2) the role of empathy in sales, and 3) how increased patience increases success.
- Patience- Don't Let Frustration Get the Better of You (Mind Tools)
  - Defines 3 different types of patience, describes the benefits and risks of patience, and has a detailed discussion on understanding and managing the symptoms of impatience.
- 4 Tips to Help You Be a More Patient Person, Science Says You Will be Happier (Inc.)
  - Brief description of 4 tips to help with patience: 1) make yourself wait, 2) stop doing things that aren't important, 3) be mindful of the things making you impatient, and 4) relax and take deep breaths.

- [When Everything's Going Wrong at Work, Practice Patience](#) (Psychology Today)
  - A brief read of 6 things patient people do. "Patience is both hard and highly possible."
- [22 Simple Yet Effective Ways To Be More Patient](#) (Consulting.com)
  - "A quick introduction to the benefits of patience, and no fewer than 22 ways to boost your proficiency in this area."

Balanced Approach

18. <u>Be pragmatic</u>: Operate in a sensible, realistic way that considers both practical and theoretical perspectives.

- [5 Characteristics of a Practical Person](#) (Exploring your Mind)
  - Brief description of 5 characteristics that a practical person possesses: 1) they are realists, 2) they are determined, 3) they take risks, 4) they do not depend on praise or criticism, and 5) they know how to prioritize.
- [3 Principles of Pragmatic Leaders](#) (LinkedIn)
  - "There are three common, guiding principles observed with pragmatic leaders. Pragmatic leaders are authentic, they are patient while socializing their ideas for organizational acceptance and they have a bias for action." A detailed description of each principle is provided.

19. <u>Be proactive and strategic</u>: Anticipate and be ready to control a situation rather than just respond to it, and do so in a way that contributes to the achievement of long-term or overall aims and interests.

- [25 Tips on How to be Proactive at Work](#) (Thrive Yard)
  - Defines what it means to be proactive and provides 25 actionable tips to help you be more proactive at work. Has a clickable table of contents and a detailed description of each tip.
- [How to be Proactive and Strategic at Work](#) (Center for Management and Organization Effectiveness)
  - Brief read on "five recommendations to help you and your team become more proactive, agile, and strategic when you don't have a clear line of sight to guide you."
- [How to Be Proactive at Work: My 5 Step System](#) (Eat your Career)
  - Very brief read on 5 "five key behaviors (The 5 P's) involved in being proactive." Key behaviors: 1) predict, 2) prevent, 3) plan, 4) participate, and 5) perform. Link to purchase the book: https://www.amazon.com/Proactive-Professional-Playing-Catch-Getting/dp/0692755209
- [4 Ways to Improve Your Strategic Thinking Skills](#) (Harvard Business Review)

- Describes 4 steps that can be taken to be more strategic at work: 1) know: observe and seek trends, 2) think: ask the tough questions, 3) speak: sound strategic, and 4) act: make time for thinking and embrace conflict.
- [Three Ways To Be Sure You're A Strategic Thinker](#) (Forbes)
  - Discussion of 3 ways executives can "assume the appropriate strategic focus required by their job." Practices: 1) Identify the strategic requirements of your job, 2) uncover patters to focus resource investments, and 3) invite dissent to build other's commitment.
- [5 Tips for How to Think Strategically at Work](#) (Indeed)
  - "In this article we'll cover what thinking strategically means and how you can start doing it." Tips and examples cover these topics: 1) look forward, 2) continue learning, 3) talk to others, 4) take risks, and 5) argue the other side.
- [How to Master Strategic Thinking Skills in 5 Simple Steps](#) (Fraser Dove International)
  - Detailed article on "how to master strategic thinking skills and apply them to your business." Describes the importance of strategic thinking skills, the benefits of strategic thinking in leadership, the steps of the strategic thinking process, and how to improve strategic thinking skills.
- [5 Ways To Improve Your Strategic Thinking Skills Today](#) (Center for Management and Organization Effectiveness)
  - Outlines "5 tactics that can help guide your effort of improving your strategic thinking process." Tactics: 1) make time for progress, 2) be aware of your own biases, 3) improve listening skills, 4) hone questioning skills, and 5) understand the consequences. Also has 2 brief videos on the definition of strategic thinking and how to apply it.

20. <u>Be purposeful</u>: Orient toward achievement of established objectives (results- or outcomes-oriented); be sensitive to, but not mired in process (means).

- [Managing Performance Minded vs. Results Focused Employees](#) (The Overture Group)
  - Quick read highlighting the differences between performance minded and results focused employees and a description of how performance minded employees can benefit the organization long-term.
- [10 Tips for Being More Goal-Oriented at Work](#) (Indeed)
  - "In this article, we explore ways you can adopt a goal-oriented mindset and improve your skills to accomplish objectives." Describes what it means to be goal-oriented and a brief write-up on each of the 10 tips.
- [The 5 Habits of Purposeful People](#) (Huffington Post)
  - "Though there are many ways we could ultimately live purposefully, there are five basic habits exhibited by all people who do so. When you follow these habits yourself, you will lead a fulfilling, purposeful life as well."
- [Cracking the Code: 6 Steps to Achieving Your Company Goals](#) (Asana)

- - "To effectively track your company goals and objectives, follow these six steps so everyone on your team knows what to focus on and the impact of their work."
- [Be More Productive at Work And See What You're Capable of Accomplishing](#) (Tony Robins)
  - "Any self-improvement plan takes time and dedication to implement, and increasing your efficiency at work is no different. You're essentially forming new habits that will contribute to your productivity instead of detracting from it." Provides 10 strategies to increase productivity.
- [10 Rules of the Ultra-Successful to Master your Focus & Achieve your Goals](#) (Liz Huber)
  - "If you want to be ultra-successful, you really need to get clear on what you want and focus your time, energy and attention on it. The 10 rules in this article will help you to make that focus happen in your life."
- [8 Ways to Stay Focused on Your Goals](#) (Wanderlust Worker)
  - "How do we stay focused on our goals so that we can achieve the things that we want to achieve rather than being stuck in the status quo for another day, week, month, or even year? There are 8 very powerful methods that you can employ to help you retain your focus on your dreams."
- [5 Simple Ways to Stay Focused on Your Goals](#) (Coaching Positive Performance)
  - Listing of 5 strategies to focus on goals with a key point and related reading for each: 1) narrow your list, 2) break down each of your major goals, 3) have accountability partners, 4) record, measure and document your progress, and 5) create a physical or virtual goal board.
- [Follow These 8 Steps to Stay Focused and Reach Your Goals](#) (Entrepreneur)
  - Brief description of 8 "steps to help you prioritize and clear your mind" with additional reading for each.

21. <u>Be politically aware</u>: Build a clear understanding of and consider political ramifications of alternative choices, without allowing those realities to reduce integrity of the biological/ecological, social and ethical assessments conducted to serve decision making.

- [Political Awareness Skills](#) (Expert Program Management)
  - Detailed read on descriptions of political awareness, a model of various kinds of political skills, and tips to help leaders navigate political awareness at their organizations.
- [6 Behaviors That Characterize Politically Skilled Individuals in Organizations and How To Learn Them](#) (CQ Net)
  - "This blog describes the behaviors of politically skilled individuals and describes the positive outcomes associated with political skills. The blog also describes how organizations can implement interventions to enable employees to hone political skills."
- [Developing Political Awareness Skills to Influence Practice](#) (International Practice Development Journal) Full PDF

o **Abstract**: The aim of this article is to illustrate how an evidence-based conceptual framework for understanding political skills/awareness in public sector management can be adapted and applied to practice development. Jean Hartley and her colleagues' work has influenced my practice as an academic leader, and my approach to the development of compassionate academic practice. Here I reflect upon how the framework can be used to enable practitioners to develop skills of political awareness in an interprofessional practice team context.

22. Be adaptable: Make or accommodate change in process, protocol or program as needed to adapt to changing circumstances; be sensitive to, but not mired in established process (means).

- 4 Ways to Boost Your Adaptability Skills (Drexel University Goodwin College of Professional Studies)
    - o Brief description of adaptability, why it is important, and 4 ways to "train yourself to be more adaptable." Advice provided to: 1) change your thought process, 2) force yourself to take risks, 3) encourage others to be open minded, and 4) embrace learning.
- 14 Signs Of An Adaptable Person (Forbes)
    - o Brief write-up of 14 characteristics of an adaptable person.
- Adapting to Change Requires Flexibility: Adaptable Leaders Have These 3 Types of Flexibility (Center for Creative Leadership)
    - o Detailed article covering adaptability, 3 types of flexibility that help you adapt to change, and 5 tips for flexible leaders.
- Adaptability: An Age-old Approach to the Current Crisis (Goodwin University)
    - o Conversational article on the importance of adaptability as well as 7 qualities that advance adaptable people.
- Important Adaptability Skills for Workplace Success (The Balance Careers)
    - o Definition of adaptability skills, a list and a description of the different types of these skills organized in 5 categories: 1) ability to learn, 2) persistence, 3) resourcefulness, 4) curiosity, and 5) other skills.
- Importance of Workplace Adaptability and Flexibility (Open Sourced Workplace)
    - o Description of workplace flexibility including 10 factors and benefits, 5 reasons why adaptability is important in the workplace, and 5 ways to show adaptability at work.
- Adaptability and Flexibility (eSoft Skills)
    - o Brief listing of 10 of the "quickest ways to develop your adaptability and flexibility skills."

Interactions with Others

23. <u>Be attentive and listen actively</u>: Relate to stakeholders, co-workers and partners as they share their thoughts; listen to unsolicited input, whether it comes from familiar or novel sources or represents views consistent or inconsistent with agency policy, professional convention or one's own beliefs.

- [Active Listening: A Key Professional Skill](#) (Zip Recruiter Blog)
    - Brief read on why active listening skills are important, active listening in the workplace, as well as ways to test and improve your active listening skills.
- [Active Listening](#) (Skills You Need)
    - Description of the non-verbal and verbal signs of active listening with additional links on related topics.
- [Why Is Active Listening Important for Your Success](#) (University of the People)
    - An article that breaks "down what active listening means exactly, as well as ways to hone in on the skill." Includes sections on; what is active listening, why it matters for success, techniques, the importance of it, and benefits of active listening.
- [Three A's of Active Listening](#) (Lumen)
    - Detailed description of 3 elements of active listening: 1) attention, 2) attitude, and 3) adjustment. Includes a listening profile and references to research articles on this topic.

24. <u>Be collaborative</u>: Seek common ground; work in teams, populated with individuals from within and outside the agency who are willing to combine their efforts to achieve shared conservation goals.

- [The Importance of Collaboration in the Workplace](#) (Nutcache)
    - Several tips to "give you a fair idea of the importance and the benefits of encouraging collaboration among your employees." Includes important aspects that collaboration brings, why business should encourage it and its advantages.
- [Professional Communication and Team Collaboration](#) (Chapter from Patient Safety and Quality: An Evidence-Based Handbook for Nurses)
    - Lengthy detailed read on the importance of collaboration in health care, but applicable to other fields. Sections include: background, research evidence, practice implications, establishing culture to support communication & team collaboration, and research implications.
- [The 6 keys to effective collaboration in the workplace](#) (Ring Central)
    - Discussion on "how employees today successfully collaborate while also navigating the common work structures and dynamics that get in the way of effective collaboration in the workplace." It covers what effective collaboration

looks like, its benefits, 5 essential skills for collaborating at work, 6 principles of effective collaboration, and tools that help with collaboration.

- [Collaborative Overload](#) (Harvard Business Review)
  - Covers some research on collaboration in the workplace, different types of collaborative resources, ideas for redistributing the work, and rewarding effective collaboration.
- [The 12 Habits Of Highly Collaborative Organizations](#) (Forbes)
  - Description of "the 12 common habits or success factors for collaborative organizations." Includes a diagram, brief description and example of each habit.
- [6 Ways to Create a Collaborative Workplace](#) (Idea Drop)
  - Brief discussion on 6 "steps to creating a collaborative workplace." Includes links to similar topics and a pro tip that can be implemented for most of the steps.
- [10 Simple Ways to Build a Collaborative, Successful Work Environment](#) (Entrepreneur)
  - "10 simple ways to cultivate team cohesion" with related reading links.
- [10 Key Principles of Stakeholder Engagement](#) (Association for Project Management)
  - "An overview of each of ten principles with a link to more information" and several resources for each.
- [Stakeholder Collaboration: Building Bridges for Conservation](#) (World Wildlife Fund)
  - A lengthy and detailed resource book on stakeholder collaboration. "By explaining the principles of collaboration, introducing a range of tools, and reporting on a number of case studies from around the world, this resource book aims to help practitioners and stakeholders develop a wider appreciation of how to approach and structure a collaboration process."
- Eleanor J. Sterling, Erin Betley, Amanda Sigouin, Andres Gomez, Anne Toomey, Georgina Cullman, Cynthia Malone, Adam Pekor, Felicity Arengo, Mary Blair, Chris Filardi, Kimberley Landrigan, Ana Luz Porzecanski. (2017). [Assessing the evidence for stakeholder engagement in biodiversity conservation](#), Biological Conservation 209, 159-171. https://doi.org/10.1016/j.biocon.2017.02.008 (open access, full text available)
  - **Abstract**: Engaging local stakeholders is a central feature of many biodiversity conservation and natural resource management projects globally. Current literature on engagement predominantly focuses on individual case studies or specific geographical contexts, making general conclusions regarding the effect of these efforts on conservation outcomes difficult. We reviewed evidence from the peer-reviewed and grey literatures related to the role of stakeholder engagement (both externally-driven and self-organized engagement) in biodiversity conservation at the local scale using both quantitative and qualitative approaches. We critically appraised and extracted data using mixed methods for case studies (n = 82) and meta-analyses (n = 31) published from 2011 to 2015. We conducted an inductive thematic analysis on background literature references published from 2000 to 2016 (n = 283). The quantitative analysis assessed multiple variables, and yielded no significant results, but suggested a possible relationship between success in producing attitudinal change towards conservation and four engagement factors. Our qualitative

analysis identified six dimensions of engagement processes that are critical for successful outcomes when a project is externally-driven, and suggests that understanding of governance and social-cultural context plays an important role in all types of stakeholder engagement efforts. Finally, we reflect on the effectiveness of relying primarily on evidence available from published literature to understand links between conservation and stakeholder engagement, in particular with regard to self-organized engagement.

- [Engage Key Internal and External Partners and Stakeholders throughout the Process](#) (Standard 2 from Ecoregional Assessment and Biodiversity Vision Toolbox)
  - Guidance on how to conduct a stakeholder analysis; and "assessment of the most critical and influential stakeholders and partners and a strategy and timeline for engaging them." Includes case studies, tools, and resources.
- Decker, D.J., Raik, D.A., Carpenter, L.H. et al. [Collaboration for community-based wildlife management](#). Urban Ecosystems 8, 227–236 (2005). https://doi.org/10.1007/s11252-005-3264-6
  - **Abstract**: Perhaps as remarkable as the general upsurge in public interest in wildlife over the last 30 years is the trend toward greater community-based wildlife management since the late 1980s. This paper discusses the challenges and opportunities at the local, community scale of collaboration for wildlife management. We explain how collaborative activity between the professional wildlife manager and community stakeholders can lead to improved identification of human-wildlife interactions and better understanding of wildlife-related impacts that are of primary management concern in the community. Community-based collaborative decision making can also effectively result in the specification of management actions that are acceptable to a community. Furthermore, agency-community collaboration can lead to co-management that goes beyond stakeholder input or involvement in decision making about management objectives and actions, and includes appropriate sharing of responsibility for implementation and evaluation. A growing role for the wildlife agency in such situations is facilitating the development of local capacity by filling information and process needs so that individuals and groups in a community can participate effectively in collaborative efforts appropriate to the necessary level of agency-community engagement. This opportunity for the wildlife profession promises to be rewarding and have lasting positive influence on communities for the benefit of wildlife management. However, most agencies cannot address every issue at a community level. Public wildlife managers need guidelines for judgment about when to engage in community-based wildlife management. They need to assess various risks associated with not engaging in a particular issue and to prioritize the potential situations where various degrees of community engagement may be desirable. This paper highlights these intriguing challenges and opportunities associated with community-based wildlife management.

- Tania M. Schusler, Daniel J. Decker & Max J. Pfeffer (2003) Social Learning for Collaborative Natural Resource Management, Society & Natural Resources, 16:4, 309-326, DOI: 10.1080/08941920390178874
  - **Abstract**: This article contributes to understanding about the potential and limitations of social learning for collaborative natural resource management. Participants in a deliberative planning process involving a state agency and local communities developed common purpose and collaborative relationships, two requisites of comanagement. Eight process characteristics fostered social learning: open communication, diverse participation, unrestrained thinking, constructive conflict, democratic structure, multiple sources of knowledge, extended engagement, and facilitation. Social learning is necessary but not sufficient for collaborative management. Other requisites for comanagement, including capacity, appropriate processes, appropriate structures, and supportive policies, are necessary to sustain joint action.
- T. Bruce Lauber, Nancy A. Connelly, Jeff Niederdeppe & Barbara A. Knuth (2014) Collaborative Management and Public Trust Responsibilities: A Help or a Hindrance?, Human Dimensions of Wildlife, 19:5, 458-468, DOI: 10.1080/10871209.2014.936067
  - **Abstract**: We consider the implications of public trust administration principles for collaborative fish and wildlife management. Collaboration can increase the capacity of agencies to provide fish- and wildlife-related benefits but increases the ties of agencies to some stakeholders—potentially privileging those stakeholders' needs. We conducted two case studies of collaborative management in which we identified ways that collaboration enhanced and detracted from agencies' capacities. We found that collaboration led to benefits for agencies, but that agencies had to make tradeoffs in the goals and objectives they pursued. With regard to meeting public trust responsibilities, we hypothesized that: (a) agencies gain from collaboration when they do not have the capacity to provide a certain type of fish- or wildlife-related benefit on their own; but (b) it is more challenging for agencies to provide benefits through collaborative efforts when they work with organizations that have goals that differ considerably from their own.
- Doyle-Capitman, C.E. & Decker, D.J. (2018). Facilitating Local Stakeholder Participation in Collaborative Landscape Conservation Planning: A Practitioners' Guide. Human Dimensions Research Unit Publ. Series 17-12. Dept. of Nat. Resources., Coll. Agric. and Life Sci.,Cornell Univ., Ithaca, NY. (Full text PDF)
  - **Overview**: This document provides guidance on integrating local stakeholder participation and social data into collaborative landscape conservation (CLC) planning. CLC is a conservation model intended to address geographically broad environmental challenges. The model relies on collaborative decision making among diverse conservation partners that span jurisdictional boundaries. Local stakeholders are organizations, networks, and individuals that have direct administrative authority over resource use and management, and influence over social and political resources necessary to support conservation actions. These stakeholders are therefore instrumental to implementing conservation actions

needed to accomplish CLC goals. Social data relates to the values, beliefs, interests, concerns, needs, knowledge, preferences, cognitive traits, demographics, and behavioral tendencies of people living within landscapes targeted for conservation.

- T. Bruce Lauber, Richard C. Stedman, Daniel J. Decker, Barbara A. Knuth & Carrie N. Simon (2011) Social Network Dynamics in Collaborative Conservation, Human Dimensions of Wildlife, 16:4, 259-272, DOI: 10.1080/10871209.2011.542556
  - **Abstract**: Our research explored patterns in the development of social networks serving as the foundation for collaborative conservation. We conducted four case studies of conservation efforts associated with State Wildlife Action Plans in the United States. Data were collected on conservation objectives, key players, and their roles and interactions. Networks evolved through identifiable phases, which we labeled: organizational loyalty, reconsideration, partnership formation, and partnership utilization. During the partnership formation phase, networks had well-defined memberships, relied on structured opportunities for interaction and dialogue, and devoted attention to rules for dialogue. This phase was particularly important in contexts with multiple actors with diverse interests. In the partnership utilization phase, network memberships became more open, relied less on structured opportunities for interaction, and dialogue and decision-making became less formal. Our results can inform efforts to foster collaborative conservation.
- T. Bruce Lauber & Daniel J. Decker (2011) Developing Adaptability: The Promise and Pitfalls of Collaborative Conservation, Human Dimensions of Wildlife, 16:4, 219-221, DOI: 10.1080/10871209.2011.585437
  - No Abstract Available
- Leong, K.M., Decker, D.J., Lauber, T.B., Raik, D.B. and Siemer, W.F. (2009), "Chapter 9 Overcoming jurisdictional boundaries through stakeholder engagement and collaborative governance: Lessons learned from white-tailed deer management in the U.S.", Andersson, K., Lehtola, M., Eklund, E. and Salmi, P. (Ed.) Beyond the Rural-Urban Divide: Cross-Continental Perspectives on the Differentiated Countryside and its Regulation (Research in Rural Sociology and Development, Vol. 14), Emerald Group Publishing Limited, Bingley, pp. 221-247. https://doi.org/10.1108/S1057-1922(2009)0000014012
  - "The chapter goes beyond many existing approaches to public participation and governance and presents interesting findings related to exurbanized and protected areas in the USA."
- Decker, D.J., Raik, D.A., Carpenter, L.H. *et al.* Collaboration for community-based wildlife management. *Urban Ecosyst* 8, 227–236 (2005). https://doi.org/10.1007/s11252-005-3264-6.
  - **Abstract**: We used satellite land cover data and the program FRAGSTATS to quantify land cover types and calculate the amount of forest edge available in suburban and rural regions of northeastern and northwestern Massachusetts. Cover categories included forest cover, open canopy vegetation, and non-deer habitat. We calculated all edge segments where forest cover abutted open

canopy cover. Our open canopy vegetation category was calculated both with and without low intensity suburban development. We then compared these findings to movement data from 53 (13 males, 40 females) adult radio-marked white-tailed deer *Odocoileus virginianus* monitored biweekly and diurnally from January 2001 to January 2003. The range of movements of suburban deer in eastern Massachusetts showed no difference to that of suburban deer in western Massachusetts (P = 0.7). However, the ranges for suburban deer in both eastern and western Massachusetts were 10 times less than those of deer in rural western Massachusetts (P = 0.001).Our findings suggest that landscape configuration, as described by the amount and distribution of edge due to suburban development, which is related to the amount and distribution of resources such as food and cover, affects migratory behavior of white-tailed deer, allows deer to have smaller ranges, and contributes to high deer densities. Inclusion of suburban edge in habitat models will increase our understanding of deer-habitat relationships for management of deer in urbanizing environments.

25. <u>Be humble and respectful</u>: Demonstrate politeness, deference and humility when working with others, thereby avoiding appearing self-important or better than others.

- 6 Ways Humility Can Make You A Better Leader (Fast Company)
    - "Some narcissistic business leaders are treated like rock stars. But leaders who are humble and admit mistakes outshine them all." Brief read on how to "use humility to be more effective in six ways."
- 13 Habits Of Humble People (Forbes)
    - "To help identify what humble looks like (and how you can adopt greater humility for yourself. After all, who doesn't need greater humility?), here are 13 habits of humble people."
- The Importance of Practicing Humility at Work (Idealist Careers)
    - Brief read on what humility is, actions of humble leaders, positive impact of humble leaders, and tips on how to be more humble.
- Argandona, A. Humility in Management. Journal of Business Ethics 132, 63–71 (2015). https://doi.org/10.1007/s10551-014-2311-8
    - **Abstract**: Although virtues have gained a firm presence in the theory and practice of corporate management, humility is not ranked as one the chief virtues in the business world. In spite of this, it is an important virtue, contributing to the manager's moral and professional quality and the development of the company's human team. This paper explains the basic traits of humility in general and how they manifest in the manager's life and profession, and shows, within the ethics of virtues, that it is not just a personal desideratum but a fundamental quality of a good manager and good management.
- The 3 Types of Humility That Impact Your Leadership (Leadership Now)

- o Description of 3 types of humility: 1) intellectual, 2) moral, and 3) personal. "It gives one a multi-faceted picture of humility and how we might cultivate this quality more fully in our lives."

26. <u>Be transparent, truthful and honest</u>: Use open and candid communication, lacking obfuscation or deceit, and behaving in a way that demonstrates honesty.

- Clements, H.S.; Selinske, M.J.; Archibald, C.L.; Cooke, B.; Fitzsimons, J.A.; Groce, J.E.; Torabi, N.; Hardy, M.J. <u>Fairness and Transparency Are Required for the Inclusion of Privately Protected Areas in Publicly Accessible Conservation Databases</u>. Land 2018, 7, 96. (full article PDF)
  - o **Abstract**: There is a growing recognition of the contribution that privately-owned land makes to conservation efforts, and governments are increasingly counting privately protected areas (PPAs) towards their international conservation commitments. The public availability of spatial data on countries' conservation estates is important for broad-scale conservation planning and monitoring and for evaluating progress towards targets. Yet there has been limited consideration of how PPA data is reported to national and international protected area databases, particularly whether such reporting is transparent and fair (i.e., equitable) to the landholders involved. Here we consider PPA reporting procedures from three countries with high numbers of PPAs—Australia, South Africa, and the United States—illustrating the diversity within and between countries regarding what data is reported and the transparency with which it is reported. Noting a potential tension between landholder preferences for privacy and security of their property information and the benefit of sharing this information for broader conservation efforts, we identify the need to consider equity in PPA reporting processes. Unpacking potential considerations and tensions into distributional, procedural, and recognitional dimensions of equity, we propose a series of broad principles to foster transparent and fair reporting. Our approach for navigating the complexity and context-dependency of equity considerations will help strengthen PPA reporting and facilitate the transparent integration of PPAs into broader conservation efforts.
- Ford JK, Riley SJ, Lauricella TK and Van Fossen JA (2020) <u>Factors Affecting Trust Among Natural Resources Stakeholders, Partners, and Strategic Alliance Members: A Meta-Analytic Investigation</u>. *Frontiers in Communication* 5:9. doi: 10.3389/fcomm.2020.00009 (full article)
  - o **Abstract**: Trust, defined as a willingness of one entity (e. g., stakeholders) to be vulnerable to the discretionary actions of another (e.g., a wildlife management agencies), is a key attribute of effective environmental management. A lack of clarity about which factors matter most in developing and sustaining trust creates an impediment to good governance. Our objective was to derive a set of antecedents of trust from research reported in peer-reviewed literature in

natural resource and environmental science, management and policy domains. We conducted a meta-analysis of the relationships between trust and seven antecedents: reputation, communication, shared norms, and values, cooperation/support, negative past behaviors, satisfaction with/quality of services, and fairness. We also examined whether relationships between antecedents and trust differ depending on whether the target of trust is a specific person or the organization as an entity, as well as whether the relationship with the referent of trust is horizontal (i.e., between natural resource agencies partnering together) or vertical (i.e., between stakeholders and agencies). Results provide estimates of relationships between each antecedent and trust, as well as the relative importance of the antecedents in predicting trust. We conclude by evaluating the state of the literature on trust and providing recommendations for future research.

- Riley, S.J., Ford, J.K., Triezenberg, H.A. and Lederle, P.E. (2018), Stakeholder trust in a state wildlife agency. Journal of Wildlife Management, 82: 1528-1535. https://doi.org/10.1002/jwmg.21501 (Full article)
    - **Abstract**: Trust in science and government regulatory agencies (e.g., state wildlife agencies) is a growing issue among wildlife managers and administrators who are attempting to engage stakeholders and develop effective, public wildlife conservation. However, a paucity of research has investigated attributes affecting stakeholder trust in wildlife agencies. We proposed a theoretical model of 2 key factors that can affect levels of trust: procedural fairness and technical competency. We used structured equation modeling to examine the influence of these factors on trust in a state wildlife agency by a prominent wildlife stakeholder, licensed hunters ≥18 years old. We tested the model with results from a mail-back questionnaire (n = 2,708 respondents, 39.6% response rate) about trust in the Michigan Department of Natural Resources' Wildlife Division. The respondent population closely reflected Michigan's population of hunting license-holders regarding demographic and geographic composition. The modified measurement model fit the data well, supporting the uniqueness of the procedural fairness, technical competency, and trust measures. The test of the structural model indicted that stakeholder perceptions of procedural fairness and technical competence exhibited by agency personnel positively influenced trust; however, the coefficient for procedural fairness was nearly 4 times greater than that of perceived technical competence of personnel. Perceived congruency of values between stakeholders and the agency was the most important modifier of the relationship of fairness and competency on trust. Our findings identify influential pathways wildlife professionals generally and state wildlife agencies specifically can take to strengthen stakeholders' trust and confidence in their agencies. The complexity of public wildlife management ensures that there always will be factors affecting trust in state wildlife agencies for which agencies can do little about. Yet, development of decisions processes perceived by stakeholders to be fair and transparent and investment in agency personnel with

skills in stakeholder engagement likely will be effective ways to foster trust and confidence in state wildlife agencies.

- B. A. Rudolph & S. J. Riley (2014) Factors Affecting Hunters' Trust and Cooperation, Human Dimensions of Wildlife, 19:5, 469-479, DOI: 10.1080/10871209.2014.939314
  - **Abstract**: North American wildlife is treated as a public trust resource (PTR), managed for the benefit of all people by government. Wildlife managers historically used restrictive regulations and enforced compliance to recover many species. Present-day societal needs include reducing some abundant game populations. Hunters often oppose this objective, creating tension between managing PTRs and gaining trust of hunters upon whose cooperation management depends. We assessed effects of normative and personal gains on cooperation of hunters through their purchase of antlerless deer licenses and their trust in the agency regarding bovine tuberculosis eradication from Michigan white-tailed deer. Logit modeling of hunter survey data indicated trust was influenced by procedural justice and personal gains. Only a single procedural justice variable was a statistically significant cooperation predictor. Findings suggest agencies may gain trust more readily than cooperation through procedurally just exercise of authority. Additional research is needed to identify meaningful gains associated with trust.

- Bennett, NJ, Di Franco, A, Calò, A, et al. Local support for conservation is associated with perceptions of good governance, social impacts, and ecological effectiveness. *Conservation Letters*. 2019; 12:e12640. https://doi.org/10.1111/conl.12640 (Full article)
  - **Abstract**: Local support is important for the longevity of conservation initiatives. The literature suggests that perceptions of ecological effectiveness, social impacts, and good governance will influence levels of local support for conservation. This paper examines these relationships using data from a survey of small-scale fishermen in 11 marine protected areas from six countries in the Mediterranean Sea. The survey queried small-scale fishermen regarding perceptions and support for conservation. We constructed composite scores for three categories of perceptions—ecological effectiveness, social impacts, and good governance—and tested the relationship with levels of support using ordinal regression models. While all three factors were positively correlated with support for conservation, perceptions of good governance and social impacts were stronger predictors of increasing support. These findings suggest that employing good governance processes and managing social impacts may be more important than ecological effectiveness for maintaining local support for conservation.

- A Culture of Trust Needs Transparency (Inspired Executives)
  - Discussion of the status quo of trust in organizations, 5 things that can happen in a culture of trust and transparency, as well as how to build and nurture a trust-based work environment.

- The Three T's of Leadership: Transparency, Truth and Trust (Indiana University)
  - "As leaders, we must create the conditions our staff need to succeed, trust them to do so, and verify that they have done so – all in the context of open,

transparent and truthful communication. By applying the principles of transparency, truth and trust throughout our work, I believe that we will become better leaders who will help ensure our teams' success."

- [Honesty and Transparency in Parks and Recreation](#) (National Recreation and Park Association)
  - Brief conversational article about the importance of honesty and transparency. "Overall, honesty is important in the workplace as in anything you do. As a manager or future leader, cultivate a culture of honesty within the workplace."
- [Transparent Team Communication: Why and How to Embrace It](#) (Blog In)
  - Summary article that defines transparency, lists 5 characteristics of transparent communication, 7 benefits of open and honest communication, and 7 ways teams encourage transparency.
- [Creating Transparency in the Workplace: How to Get Started](#) (Bamboo HR)
  - "In this comprehensive guide to transparency in the workplace, we'll show you how to harness this powerful managerial approach and the advantages that can follow." Defines transparency in the workplace, discusses the benefits of it, and provides some tips on how it can be improved.
- [9 Ways to Promote Transparency in a Non-Transparent Work Culture](#) (Liquid Planner)
  - Brief read that defines transparency and provides "9 ways a mid-level project manager can promote transparency with colleagues in a closed office environment."

27. <u>Be compassionate, selfless and empathetic</u>: Comprehend and genuinely identify with other people's beliefs, attitudes, difficulties and circumstances; assist others to overcome their problems and don't fear revealing your own vulnerability in so doing.

- [How to Foster Compassion at Work Through Compassionate Leadership](#) (Positive Psychology)
  - Detailed and lengthy article covering many aspects of compassion in the workplace including benefits, examples, research, compassionate leadership, and more.
- [Empathy Definition & Ways to Increase Your Empathy](#) (Cleverism)
  - "In this article, we will show you: 1) empathy definition and how it is different from sympathy, 2) where empathy comes from, 3) the types of empathy, 4) why empathy is super important, and 5) how to increase and develop your empathy." Includes link to TEDx video on the power of empathy.
- [Empathy at Work: Developing Skills to Understand Other People](#) (Mind Tools)
  - "In this article, we explore what it really means to show empathy. We'll look at how a few simple actions can help us to create stronger connections, to build a culture of honesty and openness, and to make a real difference to the emotional well-being, and productivity, of our colleagues."
- [The Importance of Empathy in the Workplace](#) (Smart Business)

- Brief read that poses "4 questions regarding the nature, role and benefits of empathy" to "facilitate a deeper understanding of the importance of empathy in the workplace."
- [Patience is a Virtue at Work](#) (BOS)
  - "A few powerful ways you can learn to practice patience in the workforce and assist in creating a more productive and increasingly positive environment for both you and your colleagues."

28. <u>Be appreciative and supportive</u>: Show gratitude for contributions to conservation made by others.

- [How Gratitude Can Transform Your Workplace](#) (Greater Good Magazine)
  - "From nonprofits to Fortune 500 companies, learn how organizations are embracing a culture of gratefulness." Covers the topics of why gratitude is so revolutionary, gratitude as a "gateway drug," and four keys to gratitude at work.
- [The Power of Gratitude in the Workplace](#) (WeThrive)
  - Brief article that summarizes gratitude in the workplace, discusses its benefits, and lists tips on how to implement it at work.
- [An Attitude of Gratitude](#) (Leading Edge Institute)
  - Bulleted list of ways to show gratitude to others and some additional discussion about what happens in the workplace when an attitude of gratitude is not present.

29. <u>Be passionate about your work</u>: Openly convey strong feelings (emotions and beliefs) about conservation generally and your work specifically; show courageousness and passion for your work but do so without intimidating others.

- [Top 15 Reasons Why Passion at Work is Important](#) (Wisestep)
  - Detailed article that covers why passion is important in the workplace, how to develop it, why it is important to find it, 15 reasons why it is important at work and myths about passion.
- [Is It Important to Be Passionate About Your Work?](#) (Inspiring Social Innovation)
  - Brief article on how passion should be combined with other practices to be successful at work.
- [How to Rekindle Your Passion for Work](#) (Hongkiat)
  - "If you are one of those who would like to recover that long-lost devotion to your work, read on to find out how." Includes details on 10 ways to help find more passion in your work.

30. <u>Be optimistic and positive</u>: Take a favorable view of events or conditions whenever possible and work in a way that expresses hope and confidence about the future.

- [The Six Essentials of Workplace Positivity](#) (People and Strategy)
  - Lengthy PDF with many details and citations. "There are many benefits and causes of positive emotions. This article presents a framework developed from research in positive psychology that includes six essentials of workplace positivity: positive thinking, positive relationships, strengths, empowerment, meaning and well-being. Specific steps for increasing each of the six positivity dimensions are detailed."
- [7 Tips for Promoting Positivity in Your Workplace](#) (Total Wellness)
  - Brief blog post on 7 ways to promote positivity in the workplace.
- [Maximizing Optimism in the Workplace](#) (EHS Today)
  - Summary of important concepts from *The Optimistic Workplaces: Creating an Environment that Energizes Everyone* by Shawn Murphy. Lists 5 common missteps to maximizing optimism in the workplace and suggested ways to correct each. Also has some critical strategies that managers can use in the workplace.