

Understanding and Improving Attitudinal Research in Wildlife Sciences

ROBERT A. McCLEERY,¹ *Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX 77843, USA*

ROBERT B. DITTON, *Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX 77843, USA*

JANE SELL, *Department of Sociology, Texas A&M University, College Station, TX 77843, USA*

ROEL R. LOPEZ, *Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX 77843, USA*

Abstract

Human dimension research published regarding public attitudes about wildlife or natural resource management often reflects an inadequate understanding on the part of the authors regarding attitudes, their social psychological frameworks, and their relationship to behaviors. In this paper we define attitudes, examine their relationship to behaviors, and examine some theoretical frameworks for attitudes. Additionally, we examine some shortcomings we believe are common in wildlife attitudinal research and make suggestions to improve the quality and consistency of the work. (WILDLIFE SOCIETY BULLETIN 34(2):537–541; 2006)

Key words

attitudes, human dimensions, wildlife.

The increase of highly effective nongovernmental organizations and urban expansion into wildlife habitats has encouraged government agencies to become pro-active in their attempts to include public sentiments in wildlife management decisions (Peterson and Manfredi 1993, VanDruff et al. 1996). In seeking to reduce ballot initiatives, legislative bans, editorials, protests, forced resignations, and general political backlash (Zinn et al. 1998), natural resources managers have started considering the “human dimensions” of wildlife management (Decker et al. 2001).

In wildlife and natural resource management, a human dimensions study often is a sociological survey conducted of identified stakeholders that strives to define public attitudes toward particular wildlife species or management action (Decker et al. 2001). We contend that many of the authors of these studies portray an inadequate understanding of attitudes and their social psychological frameworks important for examining when and how attitudes relate to behaviors. We argue that most authors of attitudinal research papers on wildlife base their conclusions on a weak and unstated assumption about the relationship of attitudes to behaviors. This is not to suggest that attitudinal surveys have not been a positive step toward public inclusion in wildlife management. However, we believe there is a need for wildlife professionals who conduct stakeholder surveys to better understand what attitudes are and how they work. This understanding will provide a common basis for improving the quality of attitudinal research (Decker et al. 2001). We believe that wildlife professionals who engaged in attitudinal research should understand the basic components of attitudes and be aware of their limitations. Researchers can improve the quality of wildlife-human dimensions research by familiarizing themselves with relevant social science literature, conducting their work within established theoretical frameworks, and targeting their audiences. In this paper we 1) define attitudes and examine their relationship to behaviors, 2) examine some theoretical framework for attitudes, 3) examine what we believe are some of the common short-

comings in wildlife attitudinal research, and 4) make suggestions to improve its quality and consistency.

What Are Attitudes?

In everyday language, the term “attitude” is used to describe one’s disposition or way of thinking (Eagly and Chaiken 1998). However, in the social sciences, the term has a slightly different meaning. Attitudes are tendencies people have when they view an entity with some degree of favorability or unfavorability (Ajzen and Fishbein 2000, Ajzen 2001). People with positive attitudes toward entities (e.g., parents, forests, wilderness) are likely to have favorable responses (e.g., happy greetings, good feelings) while people with negative attitudes are likely to have unfavorable responses (e.g., anger, avoidance). The entities (attitude objects) we encounter can be abstract (e.g., wilderness) or concrete (e.g., song bird; Bohner and Wanke 2002).

A person’s responses to attitude objects (attitudes) can be expressed in 3 different ways: cognitively, affectively, or behaviorally. For example, a wildlife manager may realize it is ecologically important to reduce a deer (*Odocoileus* spp.) herd (cognitive) based on ideas of carrying capacity or be concerned or worried that a large number of deer can have a negative impact on an ecosystem (affective). As a result, the wildlife manager may recommend or implement a strategy to cull the deer herd (behavioral). Attitudes can incorporate any and all of the responses. Attitudes can be difficult to study because they are tied to such a wide range of human processes from thoughts and emotions to actual behaviors (Eagly and Chaiken 1998).

Do Attitudes Predict Behaviors?

Attitudes are studied to understand how people will respond (Decker et al. 2001). In many instances managers want to predict responses that are behavioral (i.e., public response to a program, management technique, or regulation; Teel et al. 2002, Ash and Adams 2003, Koval and Mertig 2004). For example, a wildlife agency might consider restricting development to protect an endangered species or initiating a bait-and-shoot program to

¹ E-mail: bmcc@tamu.edu

reduce an urban deer herd. In both cases wildlife managers want to know how stakeholders will behave; will they protest, write negative articles in the paper, take legal action, do nothing, or thank the agency and provide access to their land?

Wildlife researchers have tried to avert problems by using attitudes to predict behavioral responses (Riley and Decker 2000, Teel et al. 2002, West and Parkhurst 2002, Lee and Miller 2003). However, behavior is only one response to an attitude and attitudes may not correlate well with behaviors (Wicker 1969, Upmeyer and Six 1988). For example, people might have a positive attitude toward hunting but this does not mean they will hunt or have hunted previously; it simply means they have a tendency to view hunting favorably. Attitudes also do not appear to have a causal effect on behaviors (Ajzen 2001, Bohner and Wanke 2002) and, when they are studied alone, they provide minimal insight into why people perform certain behaviors (Fishbein and Manfredo 1992). To address these issues, social scientists have created theoretical models to explain and relate attitudes to behaviors.

Theoretical Structures

Two types of models have been used to explain the relationship of attitudes to behavior; 1) expectancy models and 2) attitude-to-behavior process models (ABPM). The best known expectancy model, the theory of reasoned action (TRA), works under the assumption that humans process information and use it to calculate how to act (Ajzen and Fishbein 1980, Fishbein and Manfredo 1992). In the TRA intentions to perform a certain behavior (not attitudes) are used as a direct indicator to whether a behavior will be performed. Behavioral intentions are determined by an individual's attitude toward a behavior (their attitude toward the act of going hunting instead of their attitude toward hunting) and their subjective norms (Fishbein and Manfredo 1992). Subjective norms are defined as an individual's perceptions of the social pressures that significant others place on them to perform or not perform a given behavior (Fishbein and Manfredo 1992). The logic of the TRA suggests that if people have a positive attitude toward a behavior and believe that people close to them think they should perform the behavior, they will do so (Fishbein and Manfredo 1992).

When specific behavioral attitudes (e.g., attitudes toward bow hunting deer in Maine in October with friends) correspond with specific behaviors (e.g., bow hunting deer in Maine in October with friends), the TRA has been successful at predicting behavioral outcomes (Bohner and Wanke 2002). Still, there are criticisms of TRA. The model has limited application because of its highly specific nature. Specific information on attitudes only yields specific information on behaviors. We believe most wildlife managers want to know if people are going to go hunting or visit a wildlife area, not the kind of equipment they use, which type of social group they will go with, and when they will go.

Another argument against the TRA in wildlife-human dimensions research is that it is not practical because the behaviors most managers want to predict are not simple or easily performed. The model appears to work best for simple, easily performed behaviors (Eagly and Chaiken 1998). This last concern has been partially addressed by a variant of the theory of planned action (TPA),

which has shown moderate success predicting behaviors under certain circumstances (Ajzen 2001). The TRA and TPA have also been criticized because they assume that people go through an elaborate cognitive process to decide whether to engage in particular behavior (Eagly and Chaiken 1993). People do not always experience elaborate cognitive processes before they act. To account for spontaneity and decidedly unplanned behavior, social scientists have developed other more direct models linking attitudes to behavior.

The ABPMs are based on the idea that behavior is a function of how individuals perceive a situation when they encounter an attitude object (Fazio 1990). Individuals' perceptions are a function of their attitudes. If someone has a favorable attitude toward bird watching they are likely to perceive an opportunity to go bird watching favorably. However, for an attitude to influence perception, and then behaviors, it has to be activated. This processes of activating or making attitudes available to the mind in the evaluation of a situation is called "accessibility" (Eagly and Chaiken 1998). The more accessible an attitude is the greater chance it has of being activated and affecting an individual's perceptions and, in turn, influencing behavior. Experience with an attitude object increases accessibility and the link between attitudes and behaviors (Fazio 1990). For example if someone bird watches frequently and has experience bird watching they will have a highly accessible attitude toward bird watching, which will affect their perception of bird watching and make it easier to predict their behavior toward bird watching from their attitudes toward bird watching. Additionally, people who continually express their attitudes (e.g. talk about how they enjoy bird watching) have a greater consistency between attitudes and behaviors (Powell and Fazio 1984).

The ABPMs, like the TRA, also account for social norms. Social norms can either counter or complement people's view of the situation, as determined by their perceptions from activated attitudes (Fazio 1990). Consider, for example, a person with a favorable view of hunting (attitude), who has been hunting many times (accessibility), and is surrounded by people who think hunting is a favorable activity (norms). According to ABPMs, this person will hunt. The ABPMs address some of the concerns raised with the TRA and TPA and illustrate the importance of previous behaviors when trying to predict future behaviors. The TRA, TPA, and ABPMs help make the relationship of attitudes to behaviors more understandable and help to standardize attitudinal research.

Shortcomings in Wildlife-Related Attitudinal Research

We contend the most difficult wildlife-related attitudinal research challenge is the unconditional assumption that attitudes reflect or predict future human behaviors. Our review of theoretical structures illustrates the difficulty in predicting behavior using attitudes alone. However, it is common to read justifications for attitudinal studies published in the *Wildlife Society Bulletin* that state attitudes were studied because "attitudes influence behavioral intentions which impact behaviors" (Teel et al. 2002:3) or "attitudes aid fish and wildlife professionals to predict public responses" (Brooks et al. 1999:190).

We argue it is important to know the conditions surrounding the attitudes and predicted behaviors because attitude-behavior

relations are not universally strong. Attitudes alone do not directly affect behaviors and sometimes can be weakly correlated (LaPiere 1934, Wicker 1969, Kim and Hunter 1993, Bohner and Wanke 2002). Another common shortcoming in wildlife attitudinal research occurs when conclusions state what behavior will happen without having a relevant research link to behavior. A common example of this is when attitudes about management actions are assessed and conclusions drawn about actual support or acceptance of various management actions. Such conclusions can be difficult to defend unless attitudes are framed in an appropriate theoretical framework and the behaviors that indicate support or acceptance are well defined prior to the collection of data.

Another potential pitfall in the interpretation of wildlife attitudinal studies is relating broad wildlife attitudes (i.e., value orientation) to more specific attitudes and behaviors (Zinn et al. 1998, Enck and Brown 2002). Research has shown that general attitudes (ideologies) often are not consistent with more specific attitudes (Converse 1964, Lavine et al. 1997, Eagly and Chaiken 1998), and if they are not consistent with specific attitudes, they may or may not be consistent with specific behaviors. For example, if a study finds that certain groups or individuals have a preservationist value orientation this does not necessarily mean the same people will have favorable attitudes toward the creation of a particular bird sanctuary or that they would support or visit that bird sanctuary.

Managers also should be cautious of results where a high number of respondents that have no perceivable attitude on the given topic (Decker et al. 2001). In all likelihood the sampled population does not have attitudes on these topics. Normally, people do not have attitudes about a given topic until they come into contact with an attitude object and only when information about the attitude object is “accessible” (i.e., can be retrieved to the conscious mind) can it be measured or expected to have an impact on behavior (Upmeyer and Six 1989). Thus, people with little experience with an attitude object may actually have more inaccessible attitudes (Fazio 1990). Because many members of the public may not be familiar with ecological concepts, it should be no surprise, for example, that many people might not have an attitude on the ecological, social, and economic impacts of urban deer or feral cats (*Felis silvestris*). We should cautiously examine attitudinal studies with high rates of attitude or opinion nonresponse (Eagly and Chaiken 1998).

Many attitudinal studies suggest education as the remedy for a disconnect between stakeholder attitudes and desired management actions (Coluccy et al. 2001, Enck and Brown 2002, Teel et al. 2002, Lee and Miller 2003). Whereas education and the dissemination of information are excellent ways to change attitudes (Bohner and Wanke 2002), we believe this is not the only way to change attitudes. Research has shown that social reinforcement, classic conditioning, exposure, heuristics, and emotions all can play a role in attitude formation and change (Eagly and Chaiken 1993). Thus, understanding how attitudes are formed and how information is processed can be extremely useful in the formation of strategies for influencing and changing people’s behaviors and attitudes (Bohner and Wanke 2002). Although these concepts are used in marketing, politics, businesses, and law they are rarely used by natural resource managers.

A pertinent question to ask at this point is: “What is the purpose of studying attitudes if education and outreach are always recommended?” Simple attitudinal surveys may help focus outreach programs but they will not get at the root of social problems and may not even help with solutions. The use of theoretically sound social research can help natural resource managers to understand the conditions and factors producing desirable or undesirable attitudes and behaviors. In turn, these insights can be used to help change the behaviors and attitudes that hinder effective resource management.

Suggested Improvements for Attitudinal Research

Wildlife scientists and managers realize the importance of public involvement in natural resources management (VanDruff et al. 1996, Decker et al. 2001). They also have experienced the incredibly frustrating, costly, and time-consuming battles that occur when stakeholders do not support their management policies (e.g., spotted owl [*Strix occidentalis*], urban deer conflicts, trapping methods; Roe 1996, Decker et al. 2001). In response, the social sciences have become important in understanding and avoiding potential problems like these in the future. The following provides some suggestions for improving wildlife attitudinal research and its use in natural resource management. We contend that many wildlife professionals who conduct human dimensions research have not taken full advantage of the social science literature. This literature contains a wealth of information on understanding attitudes, how to measure them, and their influence on behaviors. In addition to the citations in this manuscript, we recommend the following texts: *How to measure attitudes*, Henerson et al. 1987; *Questionnaire design, interviewing, and attitude measurement*, Oppenheim 2000; *The practice of social research*, Babbie 2003; and the peer-reviewed journals, *Journal of Personality and Social Psychology* and *Social Psychology Quarterly*. Further, we believe closer collaboration with social scientists can improve wildlife attitudinal research (Decker et al. 2001). In particular, care in study design, interpretation or limitation of surveys, and study conclusions should be emphasized in the collaboration. If you are a manager who does not have a working relationship with a university, you can contact the human dimensions of wildlife list (hdwildlist) at listproc@cornell.edu and send the following message: subscribe hdwildlist, your name.

Focusing Research

A central theme of human dimension research is identifying stakeholders’ responses and interpreting them. We argue that, all too often, research articles elaborate on the different options available for managers to take in response to a problem. While informative, there must be more attention placed on the actual social research. Additionally, we believe researchers need to define what they want to know or predict and under what condition these predictions are applicable. If a researcher wants to measure support for a management action, they must first define the variable support. Is support participation in activity, voting behavior, positive statements in the press, or a measure of the internal feelings people have? Additionally, researchers should also indicate under what conditions their variables (e.g., participation, voting, statements in the press) apply. For example, are predictions of participation valid

if the management plan is not executed properly or if it rains during high visitation times, etc. Vaguely defined variables, scope condition, and survey questions (e.g., Do you support a particular wildlife program?) will likely yield vague, unusable results.

Target Audience

Another way to improve attitudinal research in the wildlife arena is to focus studies on individuals with “accessible” attitudes (they have experience with the attitude or attitude object and it can be retrieved to the conscious mind; Fazio 1990). This could be accomplished in 1 of 2 ways. Researchers need to purposively sample members of groups and organizations (Sierra Club, People for the Ethical Treatment of Animals, Defenders of Wildlife, etc.) as well as individuals known to be involved in the issue at hand, and measure their attitudes and behaviors. These people are the ones who are most likely to help or hinder a management action (Decker et al. 2001). By doing so, wildlife managers may develop a more realistic picture of the response they can expect to a proposed action. Also, wildlife researchers sending questionnaires to random samples of the population could query individuals about their experience with proposed actions, similar actions, and their political activism on the subject. The behavioral intentions and attitudes of those with experience could then be analyzed as a subset and compared to those without such experience. Accordingly, managers may better understand how individuals who are likely to have stronger attitudes and a greater likelihood of a behavioral response will respond their management actions.

Survey Validation

We also recommend that wildlife attitudinal researchers test their studies’ findings. In wildlife ecology research predictions are frequently tested. This evaluation phase often is lacking in social research. If a study predicts the public will have a positive attitude toward a particular management action, then a follow-up study is needed to ascertain if public sentiments have changed or remained the same after the action. If a study predicted certain behavioral intentions, a study is needed to see if the intentions actually lead to the expected behavior. This will lend credibility to the research and help researchers address design flaws in future studies.

Measuring Behaviors

Wildlife researchers also should consider including more behavioral measures in their human dimensions studies. Knowing who performed a behavior previously, along with where and when they performed that behavior, is just as important as understanding

their attitudes when you are trying predict future behavioral outcomes. Combining attitudinal studies with behavioral insights should help provide management with usable information about stakeholders. For example, collecting information on previous hunting behaviors (extent and frequency of hunting) along with hunting attitudes should prove useful for predicting future behaviors (hunting).

Theoretical Structures

Researchers and managers contemplating the conduct and use of wildlife attitudinal studies should make use of existing theoretical frameworks developed by social scientists. Using a common theoretical framework can aid researchers in the comparison and evaluation of attitudinal studies (Decker et al. 2001). For example, information on stakeholder attitudes toward cougars (*Puma concolor*) in Montana could be used and compared with a study on stakeholders’ attitudes toward cougars in Utah. Additionally, these frameworks provide a “mechanism” for understanding how attitudes, norms, and experiences influence behaviors, instead of simply providing correlations between attitudes and behaviors (Decker et al. 2001). For example, using the TRA or TPA, one might ascertain that certain stakeholders have a negative attitude toward going hunting and killing a deer. This negative attitude could be derived from a variety of thoughts: “hunting is too much effort”; “there are a limited number of deer to harvest”; “others will think poorly of me”; or, “I don’t want to kill animals.” Within the TRA framework, researchers can identify the root of behavioral intentions.

Each of the 2 models (i.e., TRA, ABPM) discussed in this paper have strengths and weakness and work well in particular situations. Social scientists (Fazio 1990, Eagly and Chaiken 1993) have advocated that a combination of models works best and will improve the quality of attitudinal research. Additionally, investigating why people might respond in a certain way helps delineate what policies would or would not change their attitudes.

The complexity of attitudinal research offers challenges to wildlife researchers and managers interested in understanding the human dimensions of wildlife interactions and management. We believe the suggestions we offered can better integrate human dimensions research into wildlife management. We argue that a higher standard in wildlife attitudinal research is imperative (one where wildlife attitudinal research will stand up to peer review in the social science community) to better serve wildlife managers charged with management of our nation’s natural resources.

Literature Cited

- Ajzen, I. 2001. Nature and operation of attitudes. *Annual Review of Psychology* 52:27–58.
- Ajzen, I., and M. Fishbein. 1980. *Understanding attitudes and predicting social behavior*. Prentice-Hall, Englewood Cliffs, New Jersey, USA.
- Ajzen, I., and M. Fishbein. 2000. Attitudes and the attitude-behavior relationship: reasoned and automatic processes. *European Review of Social Psychology* 11:1–33.
- Ash, S. A., and C. E. Adams. 2003. Public preferences for free-ranging domestic cat (*Felis catus*) management options. *Wildlife Society Bulletin* 31: 334–339.
- Babbie, E. R. 2003. *The practice of social research*. Eighth edition. Wadsworth, Belmont, California, USA.
- Bohner, G., and M. Wanke. 2002. *Attitudes and attitude change*. Taylor and Francis, New York, New York, USA.
- Brooks, J. J., R. J. Warren, M. G. Melms, and M. A. Tarrant. 1999. Visitor attitudes and knowledge of restored bobcats on Cumberland Island National Seashore, Georgia. *Wildlife Society Bulletin* 27:1089–1097.
- Coluccy, J. M., R. D. Drobney, D. A. Graber, S. L. Sheriff, and D. J. Witter. 2001. Attitudes of central Missouri residents toward local giant Canada geese and management alternatives. *Wildlife Society Bulletin* 29:116–123.
- Converse, P. E. 1964. The nature of belief systems in mass publics. Pages 206–261 in D. E. Apter, editor. *Ideology and discontent*. Free Press, New York, New York, USA.
- Decker, D. J., T. L. Brown, and W. F. Siemer, editors. 2001. *Human dimensions of wildlife management in North America*. The Wildlife Society, Bethesda, Maryland, USA.
- Eagly, A. H., and S. Chaiken. 1993. *The psychology of attitudes*. Harcourt, Brace Jovanovich, New York, New York, USA.

Eagly, A. H., and S. Chaiken. 1998. Attitudes structure and function. Pages 269–322 in D. T. Gilbert, S. T. Fiske, and G. Lindzey, editors. *Handbook of social psychology*. Fourth edition. McGraw Hill, New York, New York, USA.

Enck, J. W., and T. L. Brown. 2002. New Yorkers' attitudes toward restoring wolves to the Adirondack Park. *Wildlife Society Bulletin* 30:16–28.

Fazio, R. H. 1990. Multiple processes by which attitudes guide behavior: the mode model as an integrative framework. *Advances in Experimental Social Psychology* 23:75–109.

Fishbein, M., and M. J. Manfredo. 1992. A theory of behavior change. Pages 29–50 in M. J. Manfredo, editor. *Influencing human behavior: theory and application in recreation, tourism, and natural resource management*. Sagamore, Champaign, Illinois, USA.

Henerson, M. E., L. L. Morris, and C. T. Fitz-Gibbon. 1987. *How to measure attitudes*. Sage, Thousand Oaks, California, USA.

Kim, M., and J. E. Hunter. 1993. Attitude-behavior relations: a meta analysis of attitudinal relevance and topic. *Journal of Communication* 43:101–142.

Koval, M. H., and A. G. Mertig. 2004. Attitudes of the Michigan public and wildlife agency personnel toward lethal wildlife management. *Wildlife Society Bulletin* 32:232–243.

LaPiere, R. T. 1934. Attitudes vs. action. *Social Forces* 13:230–237.

Lavine, H., C. J. Thomsen, and M. H. Gonzales. 1997. A shared consequence model of development of inter-attitudinal consistency: the influence of values, attitude-relevant thought, and expertise. *Journal of Personality and Social Psychology* 72:735–749.

Lee, M. E., and R. Miller. 2003. Managing elk in the wildland-urban interface: attitudes of Flagstaff, Arizona residents. *Wildlife Society Bulletin* 31:185–191.

Oppenheim, A. N. 2000. *Questionnaire design, interviewing, and attitude measurement*. Continuum, London, United Kingdom.

Peterson, M. R., and M. J. Manfredo. 1993. Social science and the evolving conservation philosophy. Pages 292–304 in S. K. Majumdar, E. W. Miller, D. E. Baker, E. K. Brown, J. R. Pratt, and R. F. Schmalaz, editors. *Conservation and resource management*. Pennsylvania Academy of Sciences, Philadelphia, USA.

Powell, M. C., and R. H. Fazio. 1984. Attitude accessibility as a function of repeated attitudinal expression. *Personality and Social Psychology Bulletin* 10:139–148.

Riley, S. J., and D. J. Decker. 2000. Wildlife stakeholder acceptance capacity for cougars in Montana. *Wildlife Society Bulletin* 28:931–939.

Roe, E. 1996. Why ecosystem management can't work without social science: an example from the California northern spotted owl controversy. *Environmental Management* 20:667–674.

Teel, T. L., R. S. Krannich, and R. H. Schmidt. 2002. Utah's stakeholders' attitudes toward selected cougar and black bear management practices. *Wildlife Society Bulletin* 30:2–15.

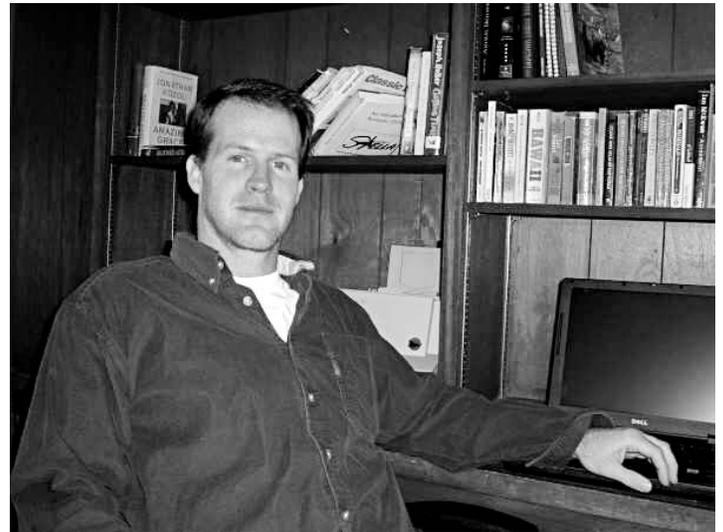
Upmeyer, A., and B. Six. 1989. Strategies for exploring attitudes and behavior. Pages 1–18 in A. Upmeyer, editor. *Attitudes and behavioral decisions*. Springer-Verlag, New York, New York, USA.

VanDruff, L. W., E. G. Bolen, and G. J. San Julian. 1996. Management of urban wildlife. Pages 507–530 in T. A. Bookhout, editor. *Research and management techniques for wildlife and habits*. Allen Press, Lawrence, Kansas, USA.

West, B. C., and J. A. Parkhurst. 2002. Interactions between deer damage, deer density, and stakeholder attitudes in Virginia. *Wildlife Society Bulletin* 30:139–147.

Wicker, A. W. 1969. Attitudes versus actions: the relationship of verbal and overt behavioral responses to attitude objects. *Journal of Social Issues* 4:41–78.

Zinn, H. C., M. J. Manfredo, J. J. Vaske, and K. Wittmann. 1998. Using normative beliefs to determine acceptability of wildlife management actions. *Society and Natural Resources* 11:649–662.



Robert (Bob) McCleery (photo) is a Ph.D. candidate at Texas A&M University, where he received his M.S. He spent 3 years as an ecologist in Swaziland with the U.S. Peace Corps after receiving his B.S. from Cornell University. His current research interests include small mammals, human dimensions of wildlife, urban wildlife, and endangered species. **Robert (Bob) Ditton** is a professor in the Department of Wildlife and Fisheries Sciences at Texas A&M University. He teaches a graduate-level course in the Human Dimensions of Wildlife and Fisheries. He also directs a graduate-level social science research program with funding support from federal and state natural resources management agencies environmental NGOs. He has served in numerous editorial positions in his field and is the author of over 200 research articles dealing with the human dimensions of natural resources. Over the past 30 years, he has completed human dimensions research in local, state, federal, and international fisheries jurisdictions. **Roel R. Lopez** is an Assistant Professor with the Department of Wildlife and Fisheries Sciences at Texas A&M University. His previous employment was with U.S. Fish and Wildlife Service's National Key Deer Refuge. He received his B.S. in Forestry from Stephen F. Austin State University and his M.S. and Ph.D. from Texas A&M University. His research interests are in urban wildlife ecology, deer ecology, wildlife population dynamics, and habitat management. **Jane Sell** is a professor of sociology at Texas A&M University. She specializes in social psychology and her research interests focus on stereotyping, labeling, and issues related to social dilemmas.