

Fish and Wildlife Reference Service Newsletter

Number 138
Fall 2003



Measuring Public Opinion on Fish and Wildlife Management Issues Using Survey Research

"It is a capital mistake to theorize before one has data. Insensibly one begins to twist facts to suit theories, instead of theories to suit facts." – Sir Arthur Conan Doyle's Sherlock Holmes

Biological research is the foundation of successful fish and wildlife management programs. Human dimensions research is the foundation of successful fish and wildlife programs, communications, products, services, and positive and supportive constituent relationships. Successful fish and wildlife agencies develop policies that reflect both biological research as well as human dimensions research.

While most fish and wildlife agencies and organizations have increasingly utilized human dimensions research when developing policies, communications and public relations programs and strategies, a few organizations still place little importance on the value of human dimensions research, instead relying on nonscientific information about public and constituent opinions and attitudes. For example, too often public opinion obtained from a few telephone calls made to agencies, public meetings, chat rooms, or poorly designed Web surveys are used to make projections onto a certain constituent group or the general population as a whole. These sources of public opinion and attitudes, however, often represent polar and skewed positions and certainly not reflective of reality. Persons who choose to call an agency to express their opinion or attend public meetings are generally not representative of the general population. These persons tend to possess polarized opinions and be highly opinionated or simply have access to an outlet to express their opinion. If only the opinions of these persons are considered, the reality of public opinion such as support or opposition to proposed regulations or programs are highly skewed and are in no way reflective of the population or group as a whole.

Survey research is a science, and a well-conducted survey will reflect reality. A quantitative survey is a systematic collection of data from a sample population using a standardized questionnaire. The objective of a public opinion or attitude survey is to quantify opinions and attitudes in a scientific manner. There are several methods of collecting high quality and reliable human dimensions data, including literature reviews, focus groups, and quantitative mail, web, or phone surveys. To collect primary data on public opinions and attitudes, telephone surveys continue to be the most reliable, produce the highest response rates, and are most representative of the groups surveyed. However, mail and web based surveys can be effective when used in the proper context and carefully administered. Unfortunately today, Web-based surveys are probably the most abused of all survey methodologies, often being administered poorly, producing results that are not reflective of the population under study. In fact, one survey that was being administered via the Web came across our desks was soliciting respondents by e-mail stating: "Please forward this email to any one you believe is appropriate to help us maximize our response." Such a survey being forwarded here and there and everywhere with no pre-defined sample will be highly inaccurate and will certainly not produce valid results: it is biased because a sample has not been pre-selected. It has broken one of the most important rules of good solid survey research.

Just as in biological research, human dimensions research needs to be conducted following established rules. There are several fundamental elements in a well-designed survey project: 1) The goals and objectives of the study must be clearly defined. 2) Everyone in the population under study must have an equal likelihood

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of being surveyed. 3) A survey should be written in such a way as to not influence or lead respondents. 4) All interviews must be administered systematically in the same way. 5) The sample size must be large enough to minimize sampling error. 6) The response rate must be high enough to minimize any nonresponse bias. Response rates are inextricably linked to the level of error for and the meaning of every finding in a study. Good response rates are often evidence of good survey design and implementation. This is the reason that some organizations put great efforts into "redefining" what a "response rate" means. Obfuscation of true response rates gives an inaccurate accounting of actual survey performance. One survey actually pre-screens respondents and asks if they will respond at a later date. Then when the survey is administered at a later date, a high "response rate" is achieved because the organization reports the second response rate – essentially a response rate of those who have already agreed to do the survey!

- **Comments solicited from Mark Damian Duda and Joy Yoder**
Responsive Management

During the past fifteen years, Responsive Management has conducted more than 700 surveys on fish, wildlife and natural resource issues. *For more information contact: Mark@responsivemanagement.com*

NEW REPORTS

MAMMALS



1. Habitat Use, Home Ranges, and Survival of Swift Foxes in a Fragmented Landscape: Conservation Implications.

Warren, J.F., et al. J. of Mammal. 2003. pp. 989-995 (7 pp.). Vol. 84, No. 3. /1 mf/. MIN 420320182

2. Daily and Seasonal Movements and Habitat Use by Female Rocky Mountain Elk and Mule Deer. Ager, A.A., et al. J. of Mammal. 2003. pp. 1076-1088 (13 pp.). Vol. 84, No. 3. /1 mf/. MIN 360320183

3. Fire Impact to Small Mammals in Piedmont Oak-Shelterwoods. Keyser, P.D., et al. Proc. Annu. Conf. SEAFWA. 2001. pp. 375-381 (7 pp.). Vol. 55. /1 mf/. MIN 450320184

4. Initial Gray Squirrel Population Responses to Nest Boxes in Two Forest Types in Southern Alabama. Nupp, T.E.; Holler, N.R. Proc. Annu. Conf. SEAFWA. 2001. pp. 396-407 (12 pp.). Vol. 55. /1 mf/. MIN 010320185

5. Bobcat Home Range Size Relative to Habitat Quality. Conner, L.M., et al. Proc. Annu. Conf. SEAFWA. 2001. pp. 418-426 (9 pp.). Vol. 55. /1 mf/. MIN 230320186

6. An Expandable Radiocollar for Black Bear Cubs. Vashon, J.H., et al. Wildl. Soc. Bull. 2003. pp. 380-386 (7 pp.). Vol. 31, No. 2. /1 mf/. MIN 450320187

7. Evaluation of Aerial Line Transect for Estimating Pronghorn Antelope Abundance in Low-density Populations. Whittaker, D.G., et al. Wildl. Soc. Bull. 2003. pp. 443-453 (11 pp.). Vol. 31, No. 2. /1 mf/. MIN 360320188

8. Demographics, Temporal and Spatial Dynamics, and Resource Conflict Evaluation of Elk Wintering Near San Antonio Mountain in Northcentral New Mexico. Smallidge, S.T., et al. NM Dept. of Game & Fish. Final Report. 2003. 164 pp. /2 mf/. MIN 300330028

9. Effects of Precommercial Thinning on Snowshoe Hares, Small Mammals, and Forest Structure in Northern Maine.

Homyack, J.A. M.S. Thesis. U. of ME. 2003. 224 pp. /2 mf/. MIN 180330029

10. Desert Bighorn Sheep Management and Restoration. Goldstein, E. NM Dept. Game & Fish. Final Perf. Report. 2002. 406 pp. /5 mf/. MIN 300380312

BIRDS



11. True Metabolism Energy for Wood Ducks from Acorns Compared to Other Waterfowl Foods. Kaminski, R.M., et al. J. of Wildl. Manage. 2003. pp. 542-550 (9 pp.). Vol. 67, no. 3. /1 mf/. MIN 230320166

12. Potential Gas Development Impacts on Sage Grouse Nest Initiation and Movement. Lyon, A.G.; Anderson, S.H. Wildl. Soc. Bull. 2003. pp. 486-491 (6 pp.). Vol. 31, No. 2. /1 mf/. MIN 490320167

13. Nesting Success of Ruffed Grouse in West Virginia. Dobony, C.A., et al. Proc. Annu. Conf. SEAFWA. 2001. pp. 456-465 (10 pp.). Vol. 55. /1 mf/. MIN 470320168

14. Comparison of Reclaimed and Unmined Woodcock Summer Diurnal Habitat in West Virginia. Gregg, I.D., et al. Proc. Annu. Conf. SEAFWA. 2001. pp. 488-497 (10 pp.). Vol. 55. /1 mf/. MIN 470320169

15. Forest Clearings Management: Insects and Vegetation for Wild Turkey Broods. Lafon, N.W., et al. Proc. Annu. Conf. SEAFWA. 2001. pp. 547-559 (13 pp.). Vol. 55. /1 mf/. MIN 450320170

16. Effects of Jet Aircraft Overflights on Parental Care of Peregrine Falcons. Palmer, A.G., et al. Wildl. Soc. Bull. 2003. pp. 499-509 (11 pp.). Vol. 31, No. 2. /1 mf/. MIN 500320171

17. Effects of Recruitment, Oak Mast, and Fall-Season Format on Wild Turkey Harvest Rates in Virginia. Norman, G.W.; Steffen, D.E. Wildl. Soc. Bull. 2003. pp. 553-559 (7 pp.). Vol. 31, No. 2. /1 mf/. MIN 450320172