

Assessing Oregon Residents' Attitudes Toward Cougars

Proposal for Survey Research

Submitted by Responsive Management

March 2019

Responsive Management



Specializing in Survey Research on Natural Resource and Outdoor Recreation Issues

Responsive Management has conducted...

- Twenty-eight years of continuous human dimensions research only on natural resource and outdoor recreation issues
- More than 1,000 research studies
- Almost \$60 million in research
- Studies in all 50 states and 15 countries worldwide
- Research for every state fish and wildlife agency
- Research for most federal resource agencies, including the U.S. Fish and Wildlife Service, National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Coast Guard, and National Marine Fisheries Service
- Research for many NGOs, including the National Wildlife Federation, Izaak Walton League, Ducks Unlimited, Trout Unlimited, Sierra Club, American Museum of Natural History, Ocean Conservancy, National Association of State Boating Law Administrators (NASBLA), BoatUS Foundation, Environmental Defense Fund, and many more
- Research for numerous outdoor recreation industry leaders, such as Winchester, Vista Outdoor (which includes Bushnell, Primos, Federal Premium, etc.), Trijicon, Yamaha, and many others
- Data collection for the nation's top universities:

Auburn University, Colorado State University, Duke University, George Mason University, Michigan State University, Mississippi State University, North Carolina State University, Oregon State University, Penn State University, Rutgers University, Stanford University, Texas Tech, University of California-Davis, University of Florida, University of Montana, University of New Hampshire, University of Southern California, Virginia Tech, West Virginia University, and many others

Responsive Management conducts:

- Multi-modal surveys
- Telephone surveys
- Mail surveys
- Personal interviews
- Park/outdoor recreation intercepts
- Web-based surveys (when appropriate)
- Focus groups
- Needs assessments
- Literature reviews
- Data collection for researchers and universities

Responsive Management develops:

- Marketing plans
- Communication plans
- Outreach plans
- Economic analysis
- Program evaluations
- Policy analysis
- · Public relations plans



I regard Mark Damian Duda as an exceptional blend of intelligence, resourcefulness and professional competence. His leadership of the Responsive Management program has been distinguished and innovative.... Under his guidance, Responsive Management has been an outstanding source of information, ideas, and techniques helping to foster important and needed change.

> —Dr. Steve Kellert, Professor Emeritus of Social Ecology, Yale University

Mark Duda and his staff of professionals at Responsive Management recently conducted a national survey and completed a sizeable report for the Association of Fish and Wildlife Agencies. The survey was multimodal and incorporated phone, electronic and postal mail. We needed to acquire contact information for license holders from 49 states and then contact a sample of them. Getting that contact information was a challenge, but thanks to the tireless effort of the RM staff, we were able to secure that integral information.

Our survey goal was about 5,000 participants nationally, but RM acquired a sample of nearly 7,000 participants, far exceeding our expectations. They also insured that our results would be valid by state, region and nationally as a result of their expertise in sample collection methodology. RM far exceeded our expectations on every facet of this project. The project was completed in about half the time we thought it might take, far ahead of schedule. We had several reviews of the report and each time we asked for a revision, everything was done correctly and quickly. The final report is packed with well-organized and thoroughly explained information. You just can't beat that.

Mark, we want to thank you and your staff for your professionalism and your continued willingness to go the extra mile. It was a pleasure working with you!

> —Bryant White, Program Manager on Trapping Policy, Association of Fish and Wildlife Agencies

I finally had the opportunity to read this report in its entirety... Kudos to you and your team for doing such a great job (and a super prompt job!) on this project.

We really appreciate your work and couldn't be happier with the product. This gives us the information we need to make informed decisions regarding our program. THANK YOU SO MUCH, again, for all that you and your team do....

—Danna Baxley, Research Program Coordinator, Kentucky Department of Fish and Wildlife Resources

Mark Damian Duda is one of the nation's most respected researchers on natural resource issues. —Steve Pennaz, Executive Director, North American Fisherman, North American Outdoor Group, Inc. I have worked directly with Mark Duda and the Responsive Management team on numerous fish and wildlife-oriented surveys over much of my 26-year career in Florida. As the director for a state fish and wildlife agency, there is no doubt that Responsive Management is best positioned to coordinate and conduct this critical survey effort. There certainly are other organizations that can conduct large scale surveys, but there is no other organization in this arena with years of experience on a national scale that can combine the needed technical expertise for design and execution of complex survey methods with such a complete understanding of the communities and constituencies who engage in fish and wildlife-based recreation.

Moreover, Responsive Management's track record of successful fish and wildlife-related survey work over many years has earned strong credibility and respect among the state and federal agencies across the nation responsible for the stewardship of fish and wildlife resources; the very agencies who will depend the most on the results.

> —Nick Wiley, Executive Director, Florida Fish and Wildlife Conservation Commission

His work demonstrates the highest standards of professionalism and the volume of work is truly prolific. Responsive Management has become one of the foremost and highly respected survey and research companies in the United States with respect to fisheries, wildlife, natural resources and outdoor recreation.... The quality of work directed by Mark Damian Duda has become a benchmark of comparison for others doing similar work in the field....

> -Bruce Lemmert, President, Virginia Wildlife Society

The fact is, even if you're not familiar with Mark Duda's name—he's never one to grab the spotlight for himself—if you're in the arena of fish and wildlife management, then you're familiar with Mark Duda's work.

Everybody knows his work, everybody has confidence in him, and in 15 years of working with him, I've never heard a single negative comment about his work.

The thoroughness of his research, the quality of his data, and the insight he brings to his analysis all give him credibility that no one in the field can match. —John Tomke, Former President, Ducks Unlimited

Mark Duda has provided the leadership and information that is key to understanding the human dimensions of fish and wildlife conservation. Mark's work has established a foundation which is necessary to keep conservation relevant in the 21st century.

> —Steve Williams, President, Wildlife Management Institute; Former Director, U.S. Fish and Wildlife Service

I have had the good fortune of knowing and working with Mr. Mark Damian Duda and his expert staff for the past 25 years. In that time, they have conducted more than 20 surveys for our Department on a wide range of subjects. These studies have included a survey of constituent satisfaction with Virginia's Conservation Police Officers; opinions on Black Bears and their management; use of and opinions on Kill Permits; evaluation of Apprentice Licenses as a hunter retention strategy; and developing a marketing campaign to bring back lapsed hunters.

We have always been extremely pleased with the professionalism of their staff and the comprehensive manner in which they complete their data collection and analyses. The surveys conducted by Responsive Management have routinely made critical differences in our advancement of programs, regulations and legislation that supports the mission of the agency.

The individual states' data are of the utmost importance given that one of our major funding mechanisms is tied directly to the results. With the importance of this in mind, I highly recommend Responsive Management as a contractor for state survey work. They are superbly qualified to conduct these critically important surveys and have an exemplary track record of accomplishment. Additionally, Mr. Duda and his staff are truly a pleasure to work with.

> —Bob Duncan, Executive Director, Virginia Department of Game and Inland Fisheries

His firm is recognized as the leading social science research firm in the nation that works in the natural resources arena.

> —Dr. Steve L. McMullin, Associate Professor, Virginia Tech

When it comes to querying our valued constituents about salient fisheries and wildlife topics, natural resources related concerns, and associated outdoor recreation and economic trends, Responsive Management is in a class all to themselves. Quite simply, their longstanding history in this research space, their deep relationships with members of the professional fish and wildlife community, and the sheer breadth of their experience helps make them uniquely positioned to assume a project of this gravity and magnitude. My confidence in them is unambiguous.

> —Carter Smith, Executive Director, Texas Parks and Wildlife Department

I am a retired state employee of 32 years and a current hunter education instructor of 27 years. During that time I have attended so many seminars that I can review the redundancy from memory; however, yours was refreshingly different. It was the best, most informative seminar ever! You had information beyond the usual "personality typing" and had actual cause and effect data. Thank you for spending your time and expertise with us.

> -Ray Boone, Washington State Hunter Education Instructor

The Arkansas Game and Fish Commission has hired Responsive Management on numerous occasions over the past 25 years. They are an exceptional group when it comes to research studies on natural resource, fish and wildlife, and outdoor recreation issues.

Over the years, Responsive Management has performed several large-scale surveys for the Arkansas Game and Fish Commission. Each study required rapid turnaround times. In every case, they provided us with exceptional data that helped guide our agency. Our surveys have varied widely in subject. In each case, Responsive Management has been an invaluable partner in our efforts. They have met and exceeded all of their obligations, while at the same time producing a quality product on-time and on-budget. Despite deadline pressure, their professionalism and ethical conduct have allowed them to produce high quality results.

On a personal note, let me say that I have a great deal of admiration and trust for the company's executive director Mark Duda. We have worked closely on several AGFC projects. His knowledge, intellect and experience are beyond reproach. He's a leader in his field. I can unequivocally state my strong recommendation for Mark and Responsive Management.

> —Mike Knoedl, Director, Arkansas Game and Fish Commission

Responsive Management provided extraordinary services to my research project, which involved a largescale telephone survey about cultural diversity and attitudes toward marine animals in Los Angeles. This was a challenging project, involving a lengthy survey that needed to be translated into several languages, and required a complex sampling strategy. Mark provided invaluable guidance in refining my survey instrument, structuring the sampling design, and working out the survey's logistics. And his friendly, knowledgeable and professional staff worked closely with me before, during and after the survey was completed. I would recommend Responsive Management to anyone planning a survey or focus group about wildlife and wildlife management. —Dr. Jennifer Wolch, Professor,

University of Southern California

I want to take this opportunity to express my thanks for your outstanding work.... This is a very fine report that has already proven helpful in discussions about funding and marketing issues with my staff and the Administration. I know that it will prove to be of similar value in upcoming discussions with external constituents and legislators.

This is the third time... that my Department has contracted for your services, and I am pleased to have been personally involved in each survey. I continue to be impressed by your candid and thoughtful input, personalized approach to customer needs, and professional approach to survey design, implementation, and reporting. In sum, you do great work that results in a product with high outreach and advocacy value.

> -Ronald Regan; Executive Director, Association of Fish and Wildlife Agencies; Former Commissioner, Vermont Department of Fish and Wildlife

Responsive Management Current and Recently Completed Projects

Wildlife Management

- ✓ Americans' Wildlife Values (in cooperation with Colorado State University)
- ✓ Maine Residents' and Outdoor Recreationists' Attitudes Toward Wildlife Management and Participation in Wildlife-Related Recreation
- ✓ Public Opinion on and Attitudes Toward the Management of Big Game Species in Maine Among State Residents, Resident and Nonresident Hunters, and Landowners
- ✓ Attitudes Toward the Red Wolf in North Carolina
- ✓ Delaware Residents' Opinions on Funding for Fish and Wildlife Management
- ✓ California Deer Hunters' Opinions on and Attitudes Toward Deer Management in the State
- ✓ A Comparison of Split and Concurrent Firearms Deer Hunting Seasons in Pennsylvania
- ✓ Virginia Residents' and Hunters' Opinions on Hunting Over Bait
- Virginia Landowners' Opinions on and Attitudes Toward Wildlife Damage and Wildlife Management
- ✓ Understanding Public Attitudes Toward Human-Wildlife Conflict and Nuisance Wildlife Management in the Northeast United States
- ✓ Idaho Residents' and Sportsmen's Opinions on Wildlife Management and the Idaho Department of Fish and Game
- ✓ Texas Residents' and Hunters' Attitudes Toward Captive Deer Breeding and Hunting Pen-Raised Deer
- ✓ Residents', Hunters', and Farmers' Opinions on Deer Populations and Deer Management in Florida
- ✓ Deer Management in Georgia: Survey of Residents, Hunters, and Landowners
- ✓ Wyoming Mule Deer Hunters' Opinions on Mule Deer Hunting and Mule Deer Management
- ✓ Pennsylvania Residents' Opinions on and Attitudes Toward Deer Management
- ✓ Public Attitudes Toward Black Bear Management in Florida

- ✓ Louisiana Residents' Opinions on Black Bears
- ✓ Tennessee Residents' Opinions on Black Bears
- ✓ Hunters' Participation in and Opinions on Elk Hunting in Wyoming
- ✓ Arizona Residents' Attitudes Toward Wildlife

Nongame Wildlife

- ✓ Pennsylvania Residents' Opinions on and Attitudes Toward Nongame Wildlife
- ✓ Kansas Residents' Opinions on Threatened and Endangered Wildlife and Actions to Protect Wildlife

Outdoor Recreation

- ✓ Outdoor Recreation in Nebraska: Survey for the State Comprehensive Outdoor Recreation Plan (SCORP)
- ✓ Outdoor Recreation in Washington: State Comprehensive Outdoor Recreation Plan (SCORP)
- ✓ Washington State Trails Plan
- ✓ Iowa Survey for the State Comprehensive Outdoor Recreation Plan (SCORP)

Hunting, Shooting, & Trapping

- ✓ Connecticut Conservation and Education Firearms Safety Program Needs Assessment
- ✓ Enhancing the Pennsylvania Game Commission's Hunter Access Program
- ✓ Kentucky Landowners' Attitudes Toward Land Management and Hunting Access
- ✓ Use of Trapping Devices for the Capture of Furbearers by Trappers in the United States
- ✓ Deer Hunting and Harvest Management in Vermont
- ✓ Mississippi Hunters' Attitudes Toward Tagging
- ✓ An Analysis of the Trend in Participation in Sport Shooting
- ✓ Americans' Attitudes Toward Hunting, Fishing, and Target Shooting
- ✓ Hunters' and Anglers' Opinions on Factors Related to License Purchasing Behavior: A Comparison of Avid, Inconsistent, and One-Time License Buyers

- ✓ Archery Participation Among Adult United States Residents
- ✓ Archery Participation Among Youth
- ✓ Bowhunting Participation Among Adult United States Residents
- ✓ Tennessee Residents' and Hunters' Knowledge of and Opinions on Sandhill Cranes
- ✓ Alabama Licensed Hunters' Opinions on and Participation in Hunting on WMAs
- ✓ Residents' and Hunters' Opinions on Hunting and Game Management in Washington
- ✓ The Opinions of Hunters and Landowners on Implementing Antler Restrictions in Western Maryland
- ✓ Pennsylvania Lapsed Hunters' Attitudes Toward Hunting and Future Participation
- ✓ Virginia Kill Permit Holders' Opinions on and Attitudes Toward Kill Permits
- ✓ Hunting on Wildlife Management Areas in Georgia: Hunters' Attitudes Toward WMAs

Hunter Harvest

- ✓ California Hunter Harvest Survey
- ✓ Mississippi Resident and Nonresident Hunter Harvest Survey
- ✓ Deer Harvest in Florida
- ✓ Florida Triennial Small Game Survey
- ✓ Harvest of Wildlife in Georgia
- ✓ Harvest of Small Game in Georgia
- ✓ Georgia Turkey Harvest Survey

Fishing & Boating

- ✓ Anglers' Opinions on Fisheries Management in Maine
- ✓ Minimizing Marine Debris by Preventing Conflicts Between Recreational and Commercial User Groups
- ✓ Mountain Trout Anglers' and Landowners' Opinions on the Mountain Trout Water Program in North Carolina
- ✓ Arkansas Anglers' Motivations for, Expenditures on, Methods of, and Opinions on Trout Fishing in Arkansas
- ✓ Arizona Anglers' Opinions, Attitudes, and Expenditures in the State
- ✓ Saltwater Fishing in South Carolina

Responsive Management Current and Recently Completed Projects

- ✓ Hunters' and Anglers' Opinions on Factors Related to License Purchasing Behavior: A Comparison of Avid, Inconsistent, and One-Time License Buyers
- ✓ Resident Participation in Freshwater and Saltwater Sport Fishing in Georgia
- ✓ New Hampshire Licensed Anglers' Participation in and Satisfaction With Fishing
- ✓ Washington Angler Survey Report
- ✓ Enhancing Fishing Access Through a National Assessment of Recreational Boating Access
- ✓ Boaters' Preferences for and Opinions on Web-Based Boating Safety Courses

Coastal Resources & Wildlife

- ✓ Trends in Delaware Residents' Opinions on Climate Change and Sea Level Rise
- ✓ Delaware Decision-Makers' Attitudes Toward Coastal Resilience and Related Management Issues
- ✓ Gulf Coast Anglers' Opinions on the Red Snapper Fishery and Reef Management Strategies
- ✓ Restoration of Bottlenose Dolphin and Sea Turtles in the Gulf of Mexico Following the Impacts of the Deepwater Horizon Oil Spill
- ✓ Chesapeake Bay Anglers' Use of and Attitudes Toward Various Catch Reporting Methods and Technologies
- ✓ Fishing Participation and Opinions on Angler Management in the California Central Coast Area
- ✓ Attitudes Toward the Protection of Wild Dolphins and Dolphin-Human Interactions
- ✓ Corpus Christi Residents', Visitors', and Business Operators' Attitudes Toward the Illegal Feeding and Harassment of Wild Dolphins
- ✓ The Opinions of Residents of the Barnegat Bay Watershed on Fertilizer Use and the Health of Barnegat Bay
- ✓ Residents' Awareness of and Opinions on Environmental Learning in the San Francisco Bay Area
- ✓ Marine Anglers' Opinions on and Attitudes Toward Fisheries Management

Recruitment & Retention

- ✓ Hunting, Fishing, and Sport Shooting Recruitment, Retention, and Reactivation: A Practitioner's Guide
- ✓ Evaluating the Effectiveness of Hunting, Shooting, and Fishing Recruitment and Retention Programs
- ✓ Marketing Research to Develop Recruitment, Retention, and Outreach Strategies for Archery and Bowhunting
- ✓ Recruiting and Retaining Nontraditional Adult Participants Into Fishing and Hunting Through Targeted Marketing, Instruction, Mentoring, and Social Reinforcement
- ✓ Washington Residents' Awareness of the *Fish Washington* Campaign
- ✓ Increasing Hunting License Buyers and Excise Tax Receipts Through State-Industry Cooperative Recruitment and Retention Research and Testing
- ✓ Increasing Fishing License Buyers and Excise Tax Receipts Through State-Industry Cooperative Research Into Churn Rates and First-Time License Buyers
- ✓ Increasing the Number of Hunter Education Graduates Who Purchase Hunting Licenses
- ✓ Evaluating Apprentice Licenses as a Hunter Recruitment Strategy

Economics & Expenditures

- ✓ Understanding Anglers' Opinions on and the Economic Impact of the Tribal Fishing Program in Cherokee, NC
- ✓ Understanding the Economic Impact of Fishing in Arizona
- ✓ Expenditures of British Columbia Resident Hunters
- ✓ The Economic Impact of Saltwater Fishing in the Florida Keys
- ✓ Economic Impact of the Deepwater Horizon Oil Spill in Alabama
- ✓ An Analysis of the Economic Impact of the Collaborative Forest Landscape Restoration Program on Local Economies in the Osceola National Forest Region in Florida

Marketing & Communications

✓ Oregon Residents' Opinions on and Values Related to Fish and Wildlife

- ✓ Watershed-Literacy Survey of Carson River Watershed Residents
- ✓ Survey of Hunters and Sport Shooters About Their Use of Optics Equipment
- ✓ Maryland Hunting and Fishing Marketing Initiative: Survey of Nonresident Hunters and Anglers
- ✓ Public Awareness of and Satisfaction With the Vermont Fish and Wildlife Department's Media Resources
- ✓ North Dakota Residents' Use of Social Media and Its Influence on Their Hunting and Shooting Participation
- ✓ Marketing Plan for the Washington Department of Fish and Wildlife's Inland Fisheries Program

Assessment & Evaluation

- ✓ Izaak Walton League of America Membership Study
- ✓ Rocky Mountain Elk Foundation Membership Study
- ✓ An Assessment of Employee Morale Among U.S. Fish and Wildlife Service Employees in the Alaska Region
- ✓ Club Members' and Convention Exhibitors' Opinions on the Activities and Programs of Dallas Safari Club
- ✓ An Assessment of the Texas Outdoor Adventures Education Program
- ✓ Arkansas Game and Fish Commission Employee Satisfaction Survey
- ✓ Virginia Hunters', Anglers', and Boaters' Opinions on and Satisfaction With Department of Game and Inland Fisheries' Law Enforcement Activities
- ✓ An Evaluation of the National Fishing in Schools Program

Methodology

- ✓ Exploring Data Collection and Cost Options for the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation
- ✓ Planning and Coordination of the 2016 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation

See www.responsivemanagement.com for more information about our research.

My personal relationship with Mark goes back several years as WRD's hunter harvest survey coordinator. I could always count on Mark and his associates to be very attentive to our informational needs and we have often relied on his expertise to produce a high quality product for us. Not only are Mark and his staff knowledgeable, but they are very approachable and eager to provide quality customer service. I have found very few public opinion research firms with Responsive Management's experience and expertise in the field of natural resources and I recommend them, without hesitation, to other agencies that are looking for a quality vendor to provide a high level of competency and professionalism.

> —Don McGowan, Region Operations Manager, Game Management Section, Georgia Department of Natural Resources, Wildlife Resources Division

I would be remiss if I did not recognize and thank the outstanding professional work that Mark Damian Duda (Responsive Management) and his staff accomplished for the States Organization of Boating Access and its partners (NMMA, BoatUS, RBFF, AMI). This project was the first of its kind to understand on a national level, angler and boater experiences at boating access facilities. From the early stages of grant writing and developing a proposal through the final report, Mark and his staff demonstrated extraordinary skills in managing all phases of the project. I attended a boater focus group and watched facilitative skills draw much needed boater views that ultimately assisted in the survey questionnaire. Mark and his staff have great insight into human dimension work and this study proved that again. The project was expertly managed through the telephone survey and final report development, which resulted in completing the work ahead of schedule. This work represents a national baseline that can be measured against as boating access programs across the country can learn from and improve. I look forward to future opportunities where I can work again with Responsive Management.

—James Adams, Executive Board Member and Past President, States Organization for Boating Access; Facilities Director, Virginia Department of Game and Inland Fisheries

No one has done more to move the human dimensions aspect of natural resource management into the mainstream thinking of decision makers than Mark Duda. —Christine Thomas, Dean and Professor of Resource Management, College of Natural Resources, University of Wisconsin–Stevens Point

Responsive Management recently completed a detailed survey of Vermont deer hunters. Mark Duda and his very responsive staff went above and beyond in developing a sampling design and survey instrument that met our specific needs. Most notably, their continued assistance in evaluating survey results and providing additional analyses helped our staff better understand the interests of our deer hunting public.

-Scott Darling, Wildlife Management Program Manager Vermont Fish and Wildlife Department I would just like to take this quick opportunity to thank you and your staff on the tremendous work you recently completed for the West Virginia Division of Natural Resources. I believe wildlife management decisions should be based on solid biological data; however, I also believe that we must use essential human dimensions work and public opinion to come up with the best management strategy.

The report that Responsive Management supplied us with was very comprehensive, and the cross-tabulations supplied additional insight that may have otherwise gone undetected. The additional analysis that you and your staff did... was above and beyond the call of duty and demonstrated the kind of expertise and caring attitude that your staff has about our natural resources. It also helped to demonstrate that while this survey was conducted on all residents of West Virginia, your staff was able to identify our target audience very effectively and supplied us with the best possible data to make management recommendations. —Dr. Chris Ryan, Ph.D., Supervisor of Game Management Services, West Virginia Division of Natural Resources

In addition to an impeccable research record with numerous wildlife management agencies, including our own, Responsive Management has a history of thorough data collection and analysis, the ability to maintain a research schedule and budget, as well as the ability to consistently produce legally and statistically defensible research documents.

-Wyoming Game and Fish Department

It is no surprise that Mark Duda and his team at Responsive Management are regarded as some of the best in the field of wildlife-related human dimensions research. Responsive Management far exceeded expectations for professionalism, work ethic, and time to completion while working collaboratively on a public opinion survey regarding Pennsylvania residents' attitudes on and opinion toward nongame wildlife. The Game Commission sought to replicate a 1996 survey on the same topic, also completed by Responsive Management all those years ago. To our astonishment, Mark was able to find the 1996 report and survey instrument in his files, greatly facilitating the advancement of this project. In addition, Mark provided the narrative for a State Wildlife Grant to support this survey as part of the State Wildlife Action Plan revision. There was a grant match requirement, which Mark generously contributed to through a budget discount. By the time the state contracting process was completed, Responsive Management only had about three months to submit the final report. They not only finished on schedule, his survey team was able to procure the number of completes to accommodate the agreed upon sampling error. We were impressed. Suggested report edits were handled swiftly and professionally, and Mark continues to be available for additional questions and discussion about survey results. Sincere thanks, Mark, for your dedication to this project and best wishes for continued success.

-Catherine D. Haffner, Wildlife Diversity Conservation Planning Coordinator, Pennsylvania Game Commission Thank you very much for speaking at the plenary session at the recent SEAFWA conference, and I also thank you for your ideas on how the speakers should flow. I thought each built nicely on the message from the previous speaker....

You always bring such a unique perspective, and your work is absolutely integral to every aspect of a fish and wildlife agency. I heard more than one person remark that not only was your message important but that they felt you were more passionate than usual about bringing that message home.... Thanks again for all you did and for all you continue to do in helping us gauge the mood and thoughts of our constituents.

> -Ed Carter, Executive Director, Tennessee Wildlife Resources Agency

I have worked with Responsive Management as a client and as part of state agency or research teams benefiting from their work for over a decade. For years prior to then, I utilized and received tremendous value from the work of Responsive Management through their reports, peer-reviewed publications and presentations at a wide variety of national conferences. Their work has always been thorough, accurate, well-designed and statistically rigorous. There was never any doubt that the data, analysis and interpretations and findings from the studies of Responsive Management were of the highest standards....

It is important to recognize that Responsive Management has extensive experience and is highly regarded by the state fish and wildlife and natural resource agencies. In my previous capacity as executive director of the Pennsylvania Fish and Boat Commission, we worked with Responsive Management on a number of issues and were always thoroughly impressed with their professionalism, concern for and understanding of the needs of the client, and dedication to ensuring that all aspects of their work reflected the highest possible level of scientific integrity.

I strongly recommend Responsive Management.... Their work will be of great value to the quality of the survey, the value of the results, and the acceptance of the project by all involved.

> —Douglas J. Austen, Executive Director, American Fisheries Society

Aloha! Two reasons for this letter. First is to say thank you very much for all the great work you did on the freshwater fishing marketing study. We never imagined that the results would be that positive. Your expertise in asking the focus group questions and writing the surveys has given us a wealth of information. The opportunities provided for both the supporters of freshwater fishing and the environmentalists to work together is wonderful.

> —Lynn McCrory, President, Kauai Economic Development Board

On behalf of the entire staff at The Conservation Fund, I would like to extend my sincerest thanks to you and your wonderful team at Responsive Management for the work on our survey. Your professionalism and diligent work was truly outstanding. Your brilliant team's expertise shined through in every step of the survey process, delighting not only myself, but also our staff and in turn our partners.

I personally sincerely appreciated working with you and your impressive staff. There were many late nights when I was thankful to be working with such a competent and hard-working team. My expectations were considerably surpassed. The meaningful work that you and your staff put in to the survey allowed for our July Real Estate Summit to be a great success. In addition, your presentation at the Summit allowed for all of our staff to properly understand the results and how we need to interpret our partners' needs in order to plan for the future of The Conservation Fund. Your candor, critical thoughts, and vast expertise have allowed for us to move forward on a firm foundation. —Meg McCants, The Conservation Fund.

Mark, recently you spoke in Iowa at DNR wildlife statewide. Thanks for one of the best presentations we have ever enjoyed at our statewide meeting. —Pat Schlarbaum, Natural Resource Tech. II,

Iowa Department of Natural Resources

Mark Damian Duda is one of the nation's foremost researchers on public attitudes toward the environment. —Associated Press

Mark Duda, executive director of Responsive Management, has worked with the Florida Wildlife Federation on a number of projects and was our Conservation Educator of the Year for his work in applying an understanding of people to wildlife issues. I highly recommend his and Responsive Management's abilities for work you have involving your constituency and wildlife issues, training workshops for your employees, or public opinion/attitude surveys.

—Manley K. Fuller III, President, Florida Wildlife Federation

On behalf of Ducks Unlimited, I wish to thank you and your team at Responsive Management for your outstanding work.... You and your staff were pleasant, easy to work with, and very professional.... The questions and analysis were right on target to address important issues in habitat conservation.

> –James K. Ringelman, Director of Conservation Programs, Ducks Unlimited Inc.

If there is anyone who can predict the future of our industry, he's it.

-Florida Outdoor Writers Association

Contact us for additional client references.

Mark Damian Duda, Executive Director



Mark Damian Duda is the executive director of Responsive Management. Mark holds a Master's degree with an emphasis on natural resource policy and planning from Yale University, where he attended on two academic scholarships. During the past 28 years, Mark has conducted more than 1,000 studies on how people relate to the outdoors. Mark is the author of four books on wildlife and outdoor recreation, including *The Sportsman's Voice: Hunting and Fishing in America* and *Watching Wildlife*.

Mark is a certified wildlife biologist and his research has been upheld in U.S. District Courts, used in peer-reviewed journals, and presented at major natural resource and outdoor recreation conferences around the world. His work has

been featured in many of the nation's top media, including NPR's *Morning Edition*, CNN, *The New York Times*, *Newsweek*, and the front pages of *The Wall Street Journal*, *The Washington Post*, and *USA Today*. For 7 years, Mark served as a columnist for *North American Hunter* and *North American Fisherman* magazines.

SURVIVAL

OUTDOORHUB

HUNTING

NEWS

HOME

Leaders of Conservation: Responsive Management Executive Director Mark Duda

SHOOTING

FISHING

BY: Daniel Xu + POSTED: 6/11/14 This interview with Responsive Monogenent Executive Director Mark Dada is part of Calasorhibb is Leaders of Conservation series, in which we sit down with leaders of the North American conservation movement to learn more abace the sortice behand their organizations and people.

According to a 2011 survey by the US Census Bureau, there are nearly 14 million hundrers in the United States 16 years old and older. Hunters spent a total of 281.9 million days in the field and spent almost \$134 billion on equipment and other hunting-related expenses. This is the kind of data that the research and survey firm Responsive Management is interested in, and while that name may not ring a bell with many sportsmen, the research that Responsive Management does affects nearly every state natural resources department and conservation group in the contral.

"Responsive Management is a research firm that specializes in natural resource and outdoor recreation issues," Executive Director Mark Duda told me over the phone. "The more



GENERAL OUTDOORS



Mark has been named Conservation Educator of the Year by the Florida Wildlife Federation and National Wildlife Federation, was a recipient of the Conservation Achievement Award from the Western Association of Fish and Wildlife Agencies, and was named Wildlife Professional of the Year by the Virginia Wildlife Society. He also received the Conservation Achievement Award in Communications from Ducks Unlimited and an award from the Potomac Ducks Unlimited Chapter for his contributions as a researcher and writer. Mark was also honored as Qualitative Researcher of the Year by the National Shooting Sports Foundation and received the 2016 Distinguished Leadership Award from the National Rifle Association. Mark is an avid birdwatcher, hunter, sport shooter, angler, and boater.



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PURPOSE AND SCOPE

This proposal outlines the tasks, timeline, and cost to conduct a scientific telephone survey to assess Oregon residents' knowledge of and attitudes toward cougars. The results of the study will assist in the understanding of the ecological, economic, and social importance of cougars to Oregon. It is anticipated that the survey may include questions addressing general knowledge of and attitudes toward cougars; knowledge of cougar populations and behavior; attitudes toward cougars.

For this study, Responsive Management proposes to obtain 1,000 completed survey interviews with Oregon general population residents ages 18 years old and older using a questionnaire not to exceed 10-12 minutes in interview length. The survey will be conducted to ensure a 95% confidence level, with the sample size of 1,000 residents yielding a margin of error of plus or minus 2.9 percentage points for the total population of Oregon residents. Responsive Management will coordinate with the study partners to determine the preferred sampling approach, either randomly sampling 1,000 residents statewide or stratifying the sample to obtain a predetermined number of surveys within each of several defined regions or areas.

To accomplish the study objectives, Responsive Management will complete the following tasks:

- Task 1.Convene an Initial Planning Meeting. Responsive Management will convene an
initial planning meeting with the project partners via conference call. This initial
meeting will help confirm schedules, sampling methodology and procedures, and
project requirements.
- **Task 2. Design and Pretest Survey.** Responsive Management will plan, design, and computer code the survey instrument to assess public opinions on and attitudes toward cougars. Survey design will be based on collaboration with the study partners and Responsive Management's own extensive experience with natural resource, fish and wildlife, and outdoor recreation studies. Responsive Management will pretest the survey instrument and revise it as necessary for logic, wording, and clarification.
- **Task 3.** Administer Survey. Responsive Management will survey 1,000 Oregon adult general population residents. The sampling frame will be designed to ensure a 95% confidence level and a sampling error that will not exceed plus or minus 2.9 percentage points for the total population. The survey sample will be designed to provide an accurate reflection of both the geographic and demographic composition of Oregon residents.
- Task 4.Analyze Survey Data. Responsive Management will fully analyze the survey data
and interpret all findings. All data will be processed and analyzed using SPSS for
Windows software and proprietary software developed by Responsive Management.
Data processing and analysis will include coding, preparation of straight tabulations,
computer processing with crosstabulations, and preparation of study printouts.
- Task 5.Prepare Final Report. Responsive Management will create graphs to correspond to
each question for easy review and visual display of survey data and will prepare a
final report on the results of the study. The final report will include an analysis of
overall findings, regional breakdowns (if applicable), and extensive crosstabulations.

PROPOSED METHODOLOGY AND OVERALL APPROACH

Responsive Management will employ an interactive approach to study design and will work collaboratively with the study partners on all aspects of the project via conference calls and progress updates. The proposed study will begin with an initial conference call between Responsive Management's project team and the project partners to review the proposed methodology and finalize project goals and objectives.

TASK 1: CONVENE INITIAL PLANNING MEETING

Responsive Management envisions a collaborative partnership and will seek input from the partners throughout the entire research process. The initial meeting will offer an opportunity for the project partners to review the research process and set the parameters for the final report. Responsive Management will also review the sampling plan with the project partners and discuss content for the survey instrument. Following the initial meeting, Responsive Management will begin outlining the survey questionnaire and will work cooperatively with the project partners via email and teleconference to make revisions or changes to the survey instrument.

TASK 2: DESIGN AND PRETEST SURVEY

Telephone surveys remain the most accurate and reliable method of obtaining data that is representative of the general population. Due to the near universality of telephone ownership and minimized respondent burden, surveys conducted via telephone yield higher response rates, increase the representativeness of the sample, and reduce bias. Further, Responsive Management obtains cellular telephone numbers to reach elusive populations and further ensure the representativeness of the sample population. For this project, Responsive Management will conduct a scientific telephone survey (including landlines and cellular/wireless numbers) of Oregon residents, ages 18 and older, to fulfill the objectives of the study.

Questionnaire Design and Pretesting

Responsive Management will work collaboratively with the project partners to finalize the survey instrument. Questionnaire content will ultimately be determined based on discussions between the project partners and Responsive Management. Responsive Management will submit draft surveys and will work collaboratively with the project partners to finalize the instrument.

Responsive Management ensures rigorous quality control efforts. Its surveys are subject to detailed in-house review by associate staff and professional interviewers prior to pretesting. Responsive Management's professional associates will review the questionnaire for content, format, question-flow, and Computer-Assisted Telephone Interviewing (CATI) adaptability. Responsive Management will provide any recommended modifications based on previous experience conducting similar surveys. Responsive Management's research associates will then computer code the survey for the CATI system, and its professional interviewers will complete an internal review of the questionnaire.

During Responsive Management's internal review of the questionnaire, each interviewer will complete the survey several times using many different answer sets to ensure the accuracy of phrasing, flow, and skip patterns. After completing an internal review, Responsive Management

will pretest the survey with a representative sample of residents and recommend revisions based on pretest results. Responsive Management will work collaboratively with the project partners to develop additional questions or make revisions to the survey as necessary to meet the goals and objectives of the study, based on pretest results. This design process will ensure that the survey meets the exact needs of the study.

TASK 3: ADMINISTER SURVEY

Sample Size and Selection

In the United States, the use of a wireless telephone as an individual's sole telecommunications device has increased dramatically. As a result, research firms that do not conduct telephone surveys using both landline and wireless (i.e., cellular) telephone numbers may obtain biased or skewed results, particularly for certain demographic groups. For this reason, the telephone survey will be conducted using a dual-frame sampling plan, incorporating both landline and wireless telephone numbers to ensure maximum coverage and representation of the general population, including young adults, singles, and mobile-only households.

The Transition to Dual-Frame Sampling in Telephone Data Collection

Landline Random Digit Dialing (RDD) was the gold standard for telephone surveys that required a probability sample. It became the best way to survey the general population in the 1970s, when it was found that telephone surveys using listed numbers as a sampling frame suffered from systematic bias due to the exclusion of people with unlisted telephone numbers, who were found to be different in relevant ways from the general population (see Robert Oldendick and Dennis Lambries, "Differences in an RDD and List Sample: An Experimental Comparison," paper presented at the annual meeting of the American Association for Public Opinion Research, Phoenix, Arizona, May 2004). RDD was accepted as the general solution to this problem because it included unlisted numbers, since it did not rely on any listings at all but instead simply used sets of likely telephone numbers. However, RDD began to receive closer scrutiny during the 1990s due to two factors: (1) increasing proportions of non-residential and non-working numbers in RDD samples were driving up the cost of RDD, and (2) the increasing use of wireless telephones was creating another subset of potential survey respondents who might have a lower probability-or zero probability, if they were cell-phone-only (CPO) individuals-of being included in a landline RDD sample. The problem with coverage and costs led most users of RDD samples to begin including strategies for random-digit dialing of cell phone numbers, which only added to the former issues of cost and time.

Ironically, the rise of CPO and cell-phone-mostly individuals, together making up a majority of the population in 2012 (according to National Center for Health Statistics, which can be found on the www.cdc.gov website), while posing a challenge to all telephone survey research, has also opened a new opportunity. The overwhelming majority of households with unlisted landline numbers also have cell phones (see Thomas M. Guterbock, et al, "From Dual Frame to Triple Frame: An Assessment of Coverage Bias in a Telephone Survey Design: Combining RDD, Directory-Listed and Cell Phone Samples," presentation to the American Association for Public Opinion Research, Phoenix, Arizona, May 2011). Approximately 43% of all adults live in a household with only a cell/wireless phone (again, according to National Center for Health Statistics). Therefore, if an RDD cell phone sample were used together with a database of listed

telephone numbers (the most comprehensive being the Electronic White Pages), the two combined would theoretically provide nearly universal coverage of the entire phone-using population. The coverage rate is estimated to be 97.7% of U.S. households—only 2.3% have no telephone at all (landline or cell).

This theory has been tested by researchers at the University of Virginia, who combined the dualframe methods (listed telephone numbers and RDD cell phone) with RDD landline samples to create a "triple-frame" approach. The RDD landline sample was included because, at that early stage of testing, it was considered necessary to provide a test of the coverage provided by the Electronic White Pages. In several stages of testing, the triple-frame approach was found to provide results that were comparable to an RDD dual-frame sample and far superior to an RDD landline sample. Ultimately, however, the triple-frame approach showed that the dual-frame sampling approach still worked and was a cost-effective way to sample—in other words, the triple-frame approach was not so much markedly better than the dual-frame approach to justify its extra cost. Responsive Management has been routinely using the dual-frame sampling approach for several years and recommends that it be used for this study.

Questionnaire Programming Language

The accuracy and quality of data is vital to scientifically defensible survey research. For this reason, Responsive Management conducts telephone interviews using Questionnaire Programming Language (QPL), which is a comprehensive system for CATI that provides complete capabilities for designing, administering, and managing telephone-based research operations. The use of this program enhances the flow of data entry by eliminating unnecessary questions (e.g., follow-up questions will only be shown for questions that apply). The survey instrument is programmed to automatically skip, code, and/or substitute phrases in the survey based upon previous responses, as necessary, for the logic and flow of the interview. Any respondent-specific data provided can be programmed to appear to the interviewer as part of the text of any question or as a branching control or skip pattern. Additionally, questions within each topic block will be randomized in order to avoid any potential bias.

Because Responsive Management uses CATI software for telephone interviews and data entry, its staff is very familiar with questionnaire design that requires complex skip logic and branching patterns and will ensure accurate survey design and QPL coding. Although the QPL system automates the telephone survey process and data entry, it is *not* an automated system: a live, professionally-trained interviewer will conduct the surveys with respondents and enter the data into the QPL system as the interview is conducted, thereby ensuring the accuracy and instantaneous availability of data. Survey data will be entered into the computer as the interview is being conducted, thereby eliminating any potential subsequent data-entry errors. Additionally, QPL can automatically check data upon entry for inconsistencies to ensure the integrity of data collection.

Telephone Interviewing Procedures and Facilities

High-quality data collection is critical to survey research. Responsive Management maintains its own centrally located, in-house telephone interviewing facilities. These facilities are staffed by professional interviewers with experience conducting computer-assisted telephone interviews on the subjects of natural resources, fish and wildlife, and outdoor recreation, working under the close supervision of the Responsive Management professional staff.

To ensure that the data collected are of the highest quality, the interviewers are trained through lectures, role-playing, and video training, according to the standards established by the Council of American Survey Research Organizations. The Survey Center Manager will conduct in-depth project briefings with the interviewing staff prior to their work on this study. Interviewers will be instructed on survey goals and objectives, the type of study, handling of survey questions, interview length, termination points and qualifiers for participation, reading of interviewer instructions, reading of the survey, reviewing of skip patterns, and probing and clarifying techniques necessary for specific questions on the survey.

Through use of the computer-assisted interviewing facilities, the survey data will be entered into the computer as the interview is being conducted, thereby eliminating any potential subsequent data-entry errors. After the interviews are obtained, the Survey Center Manager and/or statisticians will check each completed survey to check for clarity, completeness, and format. The Survey Center Manager will also monitor the telephone workstations without the interviewers' knowledge of which interviews will be monitored, thereby allowing the Survey Center Manager to maintain strict quality control over the data collection process.

Interviews will be conducted Monday through Friday from 12:00 p.m. to 9:00 p.m., Saturday from 10:00 a.m. to 4:00 p.m., and Sunday 3:00 p.m. to 9:00 p.m., local time. A five-callback design will be used to maintain the representativeness of the sample, avoid bias toward people easy-to-reach by telephone, and provide an equal opportunity for all to participate. The five-callback system uses a total of at least four subsequent calls, often as many as eight, to each unanswered number selected in the original sample. Subsequent calls will be placed at different times of the day and different days of the week. In addition, respondents who decline to participate because of inconvenience will be called again to encourage their participation or to set an appointment for their participation. Converting refusals into completed interviews is an important part of Responsive Management's contact plan to help minimize nonresponse.

Response Rates

Response rate will be calculated by dividing the number of completed interviews by the number of all eligible telephone numbers. An eligible number is a working telephone number in a residence with someone with whom an interviewer can speak (e.g., not hearing-impaired) and who meets the criteria for the study. Therefore, the only numbers not included in the response rate are business or government office numbers, deaf/language-barrier numbers (i.e., languages other than English or Spanish), non-eligible respondents, and inactive or disconnected numbers.

TASK 4: ANALYZE SURVEY DATA

Responsive Management will fully analyze the survey data. All survey data will be processed and analyzed using SPSS for Windows software and proprietary software developed by Responsive Management. Data processing and analysis will include coding, preparation of straight tabulations, and preparation of study printouts. All data will be available in both hard copy and electronically in SPSS or Excel formats. The data analysis may include extensive crosstabulations comparing various groups within the sample, such as urban and rural residents. Responsive Management can provide a wide variety of statistical methods for this study. Descriptive analyses can be used to examine the characteristics of the samples, while inferential statistics will be used to project these analyses to make statements about the populations as a whole, where applicable. Nonparametric analyses can be performed on data that are entirely categorical (e.g., gender) or entirely ordinal (i.e., increasing levels of agreement with a statement), and parametric analyses can be performed on interval data (e.g., age). Univariate procedures examine relationships and differences among individuals on a single characteristic. Multivariate procedures examine these same relationships and differences among individuals using multiple characteristics.

This project will have two stages of statistical analysis. The first stage will be the descriptive analysis. This is the stage where attitudes, perceptions, opinions, and characteristics are described and summarized in graphs and tables. The exact method to be used to summarize the data will be dependent on the characteristics of the data (i.e., whether the data are categorical, ordinal, or interval). Categorical and ordinal data will be summarized as percents and sometimes in the form of measures of central tendency using medians. Interval data will be summarized in the form of central tendency using the mean.

The second stage of analysis will be the inferential analysis. This stage will analyze the relationships and differences among attitudes, perceptions, opinions, and characteristics being measured in the study. Selection of the type of statistical tests to be used will begin by deciding whether the questions are best answered by examining differences (e.g., analysis of variance) or by examining relationships (e.g., Pearson product-moment correlation). Within these two broad categories of differences and relationships are a multitude of statistical tests. The best one for each situation will be selected depending on whether the analysis is descriptive or inferential, whether the data are parametric or nonparametric, and whether the analysis is univariate or multivariate. In special cases, unique or less common analyses will be applied to clarify results that are otherwise difficult to interpret.

Statistical analyses identify significant findings. Survey results will be analyzed to obtain descriptive statistics as well as to examine relationships among variables. When crosstabulations of survey results are run, Pearson chi-square significance values will be used to confirm whether the relationship occurred by chance, using the formula below (Vaske, 2008)¹:

Chi-Square Formula

$$\chi^2 = \sum \frac{(f_o - f_e)^2}{f_e}$$

where: f_o represents the observed frequency in each cell f_e represents the expected frequency for each cell

¹ Vaske, J.J. (2008). Survey research and analysis: Applications in parks, recreation and human dimensions. State College, Pennsylvania: Venture Publishing, Inc.

P-values will be calculated to determine the statistical significance of the relationship between variables. If the *p*-value is .05 or less, there is a 95% chance that the relationship did not occur by chance, meaning that if the survey were conducted 100 times on different samples that were selected in the same way, the findings of 95 out of the 100 surveys would fall within the sampling error range. Sampling error will be calculated using the formula below.

Sampling Error Equation:



TASK 5: PREPARE FINAL REPORT

Responsive Management will provide a detailed final report that fully quantifies and clearly explains all of the topics measured in the survey.

The final report will begin with an executive summary with a "bullet" narrative of key findings and a brief description of methodology. Following the executive summary, the final report will include an introduction; detailed survey methodology, including a discussion of data analysis and statistical procedures; a tabular data report, including survey graphs and tables; crosstabulations; and analyses and interpretations of "other" or open-ended survey questions.

PROJECT TIMELINE AND COST

The table below provides the timeline and cost for the individual study components. Note that the specific dates for each deliverable depend on the ultimate date of the award of the contract.

Task	Cost	Timeline
Task 1: Convene Initial Planning Meeting	\$5,000	Within 2 weeks of award
Task 2: Design and Pretest Survey		Within 4 weeks
Task 3: Administer Survey	\$25,000	Within 6-8 weeks
Task 4: Analyze Survey Data	\$5,000	Within 8-12 weeks
Task 5: Prepare Final Report		
Total Project Cost	\$35,000	

RESPONSIVE MANAGEMENT COMPANY BACKGROUND

Responsive Management is an internationally recognized survey research firm specializing in attitudes toward natural resource and outdoor recreation issues. Our mission is to help natural resource and outdoor recreation agencies, businesses, and organizations better understand and work with their constituents, customers, and the public.

Since 1985, Responsive Management has conducted telephone, mail, and online surveys, as well as multi-modal surveys, on-site intercepts, focus groups, public meetings, personal interviews, needs assessments, program evaluations, marketing and communication plans, and other forms of research measuring public opinions and attitudes. Utilizing our in-house, full-service survey facilities with 75 professional interviewers, we have conducted studies in all 50 states and 15 countries worldwide, totaling more than 1,000 projects and almost \$60 million in research.

Responsive Management has conducted research for every state fish and wildlife agency and most of the federal resource agencies, including the U.S. Fish and Wildlife Service, the National Park Service, the U.S. Forest Service, the Bureau of Land Management, the U.S. Coast Guard, and the National Marine Fisheries Service.

We have also provided research for many nonprofit and nongovernmental organizations, including the National Wildlife Federation, the National Shooting Sports Foundation, the National Rifle Association, the Archery Trade Association, the Izaak Walton League, the Rocky Mountain Elk Foundation, Ducks Unlimited, SCI, and Dallas Safari Club. Other nonprofit and NGO clients include Trout Unlimited, the Sierra Club, the American Museum of Natural History, the Ocean Conservancy, the National Association of State Boating Law Administrators, and the BoatUS Foundation.

Responsive Management conducts market research and product testing for numerous outdoor recreation manufacturers and industry leaders, such as Winchester Ammunition, Vista Outdoor (whose brands include Federal Premium, CamelBak, Bushnell, Primos, and more), Trijicon, Yamaha, and others.

Responsive Management also provides data collection for the nation's top universities, including Auburn University, Colorado State University, Duke University, George Mason University, Michigan State University, Mississippi State University, North Carolina State University, Oregon State University, Penn State University, Rutgers University, Stanford University, Texas Tech, University of California-Davis, University of Florida, University of Montana, University of New Hampshire, University of Southern California, Virginia Tech, West Virginia University, and many more.

Our research has been upheld in U.S. Courts, used in peer-reviewed journals, and presented at major wildlife and natural resource conferences around the world. Responsive Management's research has also been featured in many of the nation's top media, including *Newsweek*, *The Wall Street Journal*, *The New York Times*, CNN, and on the front pages of *The Washington Post* and *USA Today*.

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EXAMPLES OF RELEVANT PAST RESEARCH

Responsive Management offers three decades of research experience conducting surveys and other data collection on the following topics:

- Public awareness of and attitudes toward wildlife and wildlife management issues.
- Attitudes toward wildlife law enforcement and opinions on regulations and laws.
- How people value wildlife.
- Public perceptions of wildlife populations and cultural carrying capacity issues—that is, how much is enough and what are people willing to sacrifice for the sake of wildlife conservation.
- Public attitudes toward endangered species.
- Public attitudes toward wildlife reintroductions.
- Opinions on invasive species.
- Attitudes toward habitat, habitat protection, and development.
- Landowner attitudes toward wildlife management issues.
- Information and education about wildlife issues.
- Where the public receives their information on wildlife issues.
- Public awareness of agency funding, and support for and opposition to various funding mechanisms for wildlife management.

Recent examples of our wildlife-related research include the following:

- Washington State Residents' Knowledge of and Attitudes Toward Cougars: This study was conducted for the Washington Department of Fish and Wildlife to determine Washington State residents' knowledge of and attitudes toward cougars. The results of the study were used in an assessment of outreach education needs on cougar ecology, behavior, safety, and management in Washington State. The data also guided the Cougar Outreach Project developed by the Washington Department of Fish and Wildlife. The study entailed a telephone survey of Washington State residents.
- Washington Residents' Opinions on Bear and Wolf Management and Their Experiences with Wildlife That Cause Problems: This study was conducted for the Washington Department of Fish and Wildlife to determine residents' opinions on bear and wolf management, their opinions on management of predators in general, their experiences with wildlife that cause problems, and their participation in outdoor recreation. The study entailed a telephone survey of Washington residents from across the state.
- **Public Opinion on Hunting and Wildlife Management in Washington:** This study was conducted for the Washington Department of Fish and Wildlife to determine public opinion on hunting and wildlife management in the state. The study entailed a telephone survey of Washington residents 18 years old and older.
- Americans' Wildlife Values (in cooperation with Colorado State University): Responsive Management partnered with Colorado State University, the Western Association of Fish and Wildlife Agencies, and the Midwest Association of Fish and Wildlife Agencies on a major longitudinal study examining U.S. residents' wildlife values. The largest study of its kind ever undertaken on how the public relates to wildlife and conservation, the project entails surveys with residents in all 50 states and determines

how values differ across states, regions, and the nation as a whole. The survey examines how people think wildlife and animals may be used and what they perceive as the most important priorities for fish and wildlife management, among other topics.

- Maine Residents' and Outdoor Recreationists' Attitudes Toward Wildlife Management and Participation in Wildlife-Related Recreation: This study was conducted for the Maine Department of Inland Fisheries and Wildlife to assess Maine residents' participation in various outdoor recreation activities as well as their attitudes toward and opinions on the Department's programs. In addition to Maine general population residents, stakeholder groups examined in the study include hunters, anglers, boaters, and trappers.
- The Opinions of Maine Residents, Landowners, and Hunters Regarding Deer, Moose, Bear, and Turkey: This study was conducted for the Maine Department of Inland Fisheries and Wildlife to determine the opinions of the general population, landowners of large tracts of land, and hunters regarding the management and hunting of deer, moose, bear, and wild turkey. The study entailed scientific probability-based random sample surveys of the three groups.
- Delaware Residents' Knowledge of Funding for Wildlife Management and Restoration: This study was conducted for the Delaware Division of Fish & Wildlife to determine Delaware residents' knowledge of and attitudes toward funding for wildlife management within the state, with an emphasis on the Federal Aid in Wildlife Restoration program. This information was used by the Division to enhance their outreach and communication efforts. The study entailed a telephone survey of Delaware residents, ages 18 and older.
- California Deer Hunters' Opinions on and Attitudes Toward Deer Management in the State: This study was conducted for the California Department of Fish and Wildlife to determine deer hunters' opinions on deer hunting and deer management in California. The study entailed a scientific multi-modal survey of California deer hunters.
- A Comparison of Split and Concurrent Firearms Deer Hunting Seasons in Pennsylvania: This study was conducted for the Pennsylvania Game Commission to assess the differences in hunters' expenditures during, satisfaction with, and attitudes toward deer hunting depending on whether they hunted a region with a split season or a concurrent season. The study entailed a telephone survey of Pennsylvania hunters who had purchased an antlerless license.
- Virginia Residents' and Hunters' Opinions on Hunting Over Bait: This study was conducted for the Virginia Department of Game and Inland Fisheries to determine Virginia residents' and hunters' opinions on hunting in general, hunting for various species, hunting using various equipment, and hunting over bait. The study entailed two telephone surveys: one of Virginia residents 18 years old and older and another of hunting license holders 16 years old and older.
- Virginia Landowners' Opinions on and Attitudes Toward Wildlife Damage and Wildlife Management: This study was conducted for the Virginia Department of Game and Inland Fisheries to determine the opinions and attitudes on wildlife damage and

wildlife management among owners of large tracts of land in Virginia. The study entailed a telephone survey of owners of at least 100-acre tracts in Virginia.

- Understanding Public Attitudes Toward Human-Wildlife Conflict and Nuisance Wildlife Management in the Northeast United States: This study was conducted for the Northeast Wildlife Damage Management Research and Outreach Cooperative to better understand public attitudes toward and expectations regarding management of problems caused by wildlife in the Northeast region of the United States. The study entailed a telephone survey of residents of the 13 northeastern states.
- Idaho Residents' and Sportsmen's Opinions on Wildlife Management and the Idaho Department of Fish and Game: This study was conducted for the Idaho Department of Fish and Game to determine residents' and sportsmen's opinions on wildlife management and wildlife-related recreation opportunities in the state, and to assess attitudes toward the Department. The study entailed a scientific telephone survey of Idaho residents ages 18 years old and older to reflect the Idaho adult general population.
- Texas Residents' and Hunters' Attitudes Toward Captive Deer Breeding and Hunting Pen-Raised Deer: This study was conducted for the Quality Deer Management Association to determine the public's and hunters' opinions on and attitudes toward captive breeding and hunting deer in high-fenced enclosures. The study entailed a scientific telephone survey of Texas residents and hunters aged 18 years and older.
- Residents', Hunters', and Farmers' Opinions on Deer Populations and Deer Management in Florida: This study was conducted for the Florida Fish and Wildlife Conservation Commission to determine residents', hunters', and farmers' opinions on deer in general, the size of the deer population in Florida, and the state's management of the deer population. The study entailed three separate scientific telephone surveys of Florida residents, hunters, and farmers.
- Deer Management in Georgia: Survey of Residents, Hunters, and Landowners: This study was conducted for the Georgia Department of Natural Resources to determine residents', hunters', and landowners' opinions on deer management and deer hunting regulations in the state. The study entailed a telephone survey of Georgia residents, hunters, and landowners.
- Wyoming Mule Deer Hunters' Opinions on Mule Deer Hunting and Mule Deer Management: This study was conducted for the Wyoming Game and Fish Department to determine mule deer hunters' opinions on the quality of mule deer hunting in Wyoming and their opinions on season structure and hunting regulations. The study entailed a telephone survey of resident and nonresident mule deer hunters.
- Pennsylvania Residents' Opinions on and Attitudes Toward Deer Management: This study was conducted for the Pennsylvania Game Commission to determine Pennsylvania residents' opinions on and attitudes toward deer and deer management, including their participation in deer-related and other wildlife-related activities, their opinions on management efforts and management goals, their opinions on methods for managing deer, and their concerns about deer nuisance problems. The study entailed a telephone survey of Pennsylvania residents 18 years old and older.

- **Public Attitudes Toward Black Bear Management in Florida:** This study was conducted for the Florida Fish and Wildlife Conservation Commission to determine Florida residents' attitudes toward black bears, their opinions on the management of black bears, and whether they have had any interactions with black bears, positive or negative. Additionally, the survey explored Florida residents' attitudes toward hunting in general and the hunting of black bears in particular. The study entailed a scientific telephone survey of adult Florida residents.
- Louisiana Residents' Opinions on Black Bears: This study was conducted for the Louisiana Department of Wildlife and Fisheries to determine residents' and landowners' attitudes toward and experiences with black bears and black bear management in Louisiana. The study entailed scientific telephone surveys of Louisiana residents and Louisiana landowners who reside in bear populated areas and own at least 40 acres of land. Both surveys were limited to adults age 18 years and older.
- Tennessee Residents' Opinions on Black Bears: This study was conducted for the Tennessee Wildlife Resources Agency to determine residents' opinions on black bears, including interactions they may have had, their opinions on the size of the black bear population in Tennessee, their level of tolerance of black bears, and their opinions on the hunting of black bears. The study entailed a telephone survey of Tennessee residents 18 years old and older.
- Hunters' Participation in and Opinions on Elk Hunting in Wyoming: This study was conducted for the Wyoming Game and Fish Department to determine elk hunters' opinions on various aspects of elk hunting and elk hunting regulations. The study entailed a telephone survey of resident and nonresident license holders with elk hunting privileges.
- Attitudes Toward Urban Wildlife Among Residents of Phoenix and Tucson, Arizona: This study was conducted for the Arizona Game and Fish Department to determine the attitudes toward and opinions on wildlife, particularly coyote, mountain lion, and javelina, among urban residents of Phoenix and Tucson.
- Pennsylvania Residents' Opinions on and Attitudes Toward Nongame Wildlife: In 1996 Responsive Management conducted a study for the Pennsylvania Game Commission to assess residents' opinions on and attitudes toward nongame wildlife in Pennsylvania. For this study update, Responsive Management conducted a revised version of the 1996 survey and a trends analysis using the results of the previous study to examine changes in opinions, attitudes, and behaviors regarding nongame wildlife, participation in wildlife-related recreation, and priorities for agency programs and nongame wildlife conservation efforts in Pennsylvania.
- Kansas Residents' Opinions on Threatened and Endangered Wildlife and Actions to Protect Wildlife: This study was conducted for the Kansas Department of Wildlife, Parks and Tourism to determine residents' knowledge of and opinions on threatened and endangered wildlife, as well as their support for or opposition to various actions to protect threatened and endangered wildlife. The study entailed a telephone survey of Kansas residents 18 years old and older.

- Assessment of the Way in Which Chimpanzees Are Perceived by United States Residents: Americans' perceptions of chimpanzees, including the ways in which various images and media portrayals affect those perceptions, were examined in a nationwide survey. The study entailed assessing respondents' reactions to, as well as ability to correctly identify, images of chimpanzees and nine other species; asking respondents to rate their own knowledge level of chimpanzees; and measuring actual knowledge levels of the current status (i.e., endangered) of chimpanzees in the wild.
- African Community Members' Opinions on the Commercial Trade and Consumption of Bushmeat: A large qualitative research study was conducted to assess African community members' knowledge of and opinions on the commercial trade and consumption of bushmeat in the United States to better understand attitudes toward the illegal trade and consumption of non-domesticated African wildlife, which has threatened many species in Central and West Africa and has been correlated with the spread of disease. Several series of focus groups were conducted in major metropolitan areas of the U.S. with Central and West African expatriates. In addition to assessing knowledge and general attitudes, the focus groups explored potential support for approaches to dealing with the bushmeat crisis, education on wildlife conservation and sustainability, law enforcement procedures, and public outreach and information dissemination.
- Arizona Residents' Attitudes Toward Nongame Wildlife: This telephone survey of Arizona residents was conducted for the Arizona Game and Fish Department to assess their attitudes toward and behavior regarding nongame-related outdoor activities, as well as their opinions on the importance of various Arizona Game and Fish Department programs and the performance of the Department.
- Specific Educational Marketing Strategies for Florida's Nongame Wildlife Program: This project involved a telephone survey of Florida residents to assess attitudes toward and behaviors regarding wildlife and wildlife conservation, identify important demographic subgroups with varying degrees of support for wildlife conservation, and gather information to facilitate the development of a communications plan to further the goals of the Florida Game and Fresh Water Fish Commission.
- Public Opinion and Knowledge Regarding Grizzly Bear Recovery Efforts in the Cabinet Mountains and Yaak Valley: This survey was conducted for the Cabinet Yaak Grizzly Bear Outreach Project to determine the behaviors and opinions of people within Lincoln and Sanders Counties regarding grizzly bears and grizzly bear recovery efforts in the Cabinet Mountains and Yaak Valley.
- Manatee Education and Outreach Assessment: An assessment of existing education and public awareness materials and programs related to the Florida manatee was conducted for the U.S. Fish and Wildlife Service's Manatee Recovery Implementation Team Education Working Group. The assessment was designed to identify any overlaps among the various education and outreach efforts; the full range of manatee issues that may need to be addressed through education and outreach but are not currently being adequately addressed; the target audiences that should be served by the Education Working Group, including those not currently being adequately served; and the best strategies and technologies to educate and inform the target audiences, including a prioritization of the groups who most need specific additional information and how to get

the information to them. The study entailed a multimodal survey designed to assess the specific needs for manatee education and outreach efforts.

- Arizona and New Mexico Residents' Awareness of and Opinions on the Mexican Wolf Recovery Project: This study entailed a survey of Arizona and New Mexico residents to determine public awareness of Mexican wolf reintroduction and opinions on various aspects of the Mexican Wolf Recovery Project.
- Hunters' Knowledge of and Attitudes Toward Threats to California Condors: A telephone survey of California licensed hunters was conducted to determine their knowledge of and attitudes toward the California condor, including threats to condors, particularly lead poisoning. This survey was also conducted with Arizona and Utah hunters.
- Floridians' Knowledge, Opinions, and Attitudes Toward Panther Habitat and Panther-Related Issues: This study was conducted to assess the public's current awareness and knowledge levels, opinions and attitudes, and behaviors regarding panther habitat and panther-related issues.
- Wyoming Residents' Attitudes Toward and Opinions on Wolf Management: This study was conducted to assess Wyoming residents' opinions on wolves and wolf management in Wyoming as part of Wyoming's draft wolf management plan.
- **Public Attitudes Toward Grizzly Bear Management in Wyoming:** This study was conducted in order to gather data on Wyoming residents' attitudes toward and opinions on the possible removal of the grizzly bear from the Endangered Species List. The purpose of the study was to gather information on Wyoming residents' support and opposition on a number of grizzly bear management issues.
- Public Opinions and Attitudes Toward Reintroducing Grizzly Bears to the Selway-Bitterroot Wilderness Area of Idaho and Montana: This study was conducted to assess public opinions and attitudes toward the reintroduction of grizzly bears to the Selway-Bitterroot Wilderness Area of Idaho and Montana.
- Status of Wildlife Diversity and Nongame Programs Within State Fish and Wildlife Agencies in the United States—Results of a Nationwide Survey: This project, completed for the International Association of Fish and Wildlife Agencies, involved a nationwide telephone survey to determine the status of wildlife diversity and nongame wildlife programs within state fish and wildlife agencies nationwide. The study focused on the strategic positioning and integration of nongame wildlife programs within state fish and wildlife agencies, and the use of volunteers.