

Solicitation Response(SR) Dept: 0310 ID: ESR0207220000004652 Ver.: 1 Function: New Phase: Final

Modified by batch , 02/08/2022

Header  6

General Information Contact Default Values Discount Document Information Clarification Request

Procurement Folder: 965049	SO Doc Code: ARFQ
Procurement Type: Agency Purchase Order	SO Dept: 0310
Vendor ID: 000000198635	SO Doc ID: DNR2200000016
Legal Name: MARK DAMIAN DUDA & ASSOC INC	Published Date: 1/19/22
Alias/DBA:	Close Date: 2/8/22
Total Bid: \$34,995.45	Close Time: 13:30
Response Date: 02/07/2022	Status: Closed
Response Time: 14:37	Solicitation Description: Wildlife - Hampshire County Hunter CWD Survey
Responded By User ID: jneedham	Total of Header Attachments: 6
First Name: Alison	Total of All Attachments: 6
Last Name: Lanier	
Email: alison@responsivemana	
Phone: 5404321888	

REQUEST FOR QUOTATION
West Virginia Division of Natural Resources – Wildlife Resources Section
Hampshire County Chronic Wasting Disease Hunter Opinion Survey

9.1.4 Failure to remedy deficient performance upon request.

9.2 The following remedies shall be available to Agency upon default.

9.2.1 Immediate cancellation of the Contract.

9.2.2 Immediate cancellation of one or more release orders issued under this Contract.

9.2.3 Any other remedies available in law or equity.

10. MISCELLANEOUS:

10.1 Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: Mark Damian Duda, Executive Director

Telephone Number: 540-432-1888

Fax Number: 540-432-1892

Email Address: mark@responsivemanagement.com

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Mark Damian Duda, Executive Director, Responsive Management
(Name, Title)
Mark Damian Duda, Executive Director, Responsive Management
(Printed Name and Title)
130 Franklin Street, Harrisonburg, VA 22801
(Address)
540-432-1888
(Phone Number) / (Fax Number)
mark@responsivemanagement.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Responsive Management
(Company)

Mark Damian Duda, Executive Director, Responsive Management
(Authorized Signature) (Representative Name, Title)

Mark Damian Duda, Executive Director, Responsive Management
(Printed Name and Title of Authorized Representative)

February 7, 2022
(Date)

540-432-1888
(Phone Number) (Fax Number)

Exhibit A - Pricing Page
REQUEST FOR QUOTATION
West Virginia Division of Natural Resources - Wildlife Resources Section
Hampshire County Chronic Wasting Disease Hunter Opinion Survey

Item No.	DESCRIPTION	Unit of Measure	Quantity	TOTAL AMOUNT
4.1	Hampshire County Hunter Chronic Wasting Disease Opinion Survey	Job	1	\$ 34,995.45

Responsive Management

Vendor Name

Mark Damian Duda, Executive Director, Responsive Management

Authorized Signature

February 7, 2022

Date

STATE OF WEST VIRGINIA

Purchasing Division

PURCHASING AFFIDAVIT

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Responsive Management (

Authorized Signature: Mark Damian Duda Date: February 7, 2022

State of Virginia

County of Rockingham, to-wit:

Taken, subscribed, and sworn to before me this 7 day of February, 2022.

My Commission expires November 30, 2025 Reg. No. 374115

AFFIX SEAL HERE

NOTARY PUBLIC Alan Jones

County of Rockingham



**State of West Virginia
Agency Request for Quote
Service - Prof**

Proc Folder: 965049			Reason for Modification:
Doc Description: Wildlife - Hampshire County Hunter CWD Survey			
Proc Type: Agency Purchase Order			
Date Issued	Solicitation Closes	Solicitation No	Version
2022-01-19	2022-02-08 13:30	ARFQ 0310 DNR2200000016	1

BID RECEIVING LOCATION

BID RESPONSE
 DIVISION OF NATURAL RESOURCES
 PROPERTY & PROCUREMENT OFFICE
 324 4TH AVE
 SOUTH CHARLESTON WV 25303-1228
 US

VENDOR

Vendor Customer Code: 000000198635
Vendor Name : Responsive Management
Address : 130 Franklin Street
Street :
City : Harrisonburg
State : Virginia **Country :** United States **Zip :** 22801
Principal Contact : Mark Damian Duda, Executive Director
Vendor Contact Phone: 540-432-1888 **Extension:**

FOR INFORMATION CONTACT THE BUYER

James H Adkins
 (304) 558-3397
 jamie.h.adkins@wv.gov

Vendor Signature X *Mark Damian Duda*

FEIN# 54-164-2830

DATE February 7, 2022

All offers subject to all terms and conditions contained in this solicitation

**West Virginia Division of Natural Resources –
Wildlife Resources Section Hampshire County
Chronic Wasting Disease Hunter Opinion Survey**



**Proposal for Survey Research for
the West Virginia Division of Natural Resources**

Submitted by Responsive Management

February 7, 2022

**In Response to ARFQ 0310 DNR220000016
("Wildlife – Hampshire County Hunter CWD Survey")
Issued by the West Virginia Division of Natural Resources**



TABLE OF CONTENTS

Transmittal Letter.....	1
Firm Information.....	4
Survey Development, Sampling, and Methods.....	4
Work Plan and Timeline	6
Communicating Findings.....	8
Multimodal Data Collection Approach	10
Analysis and Reporting.....	11
Reporting and Publishing.....	16
Examples of Relevant Survey Projects	20
Key Personnel	42
Attachment: Additional Information About Responsive Management.....	45

TRANSMITTAL LETTER

February 7, 2022

Mr. Jamie Adkins
West Virginia Division of Natural Resources
Property and Procurement Office
South Charleston, WV 25303

Dear Mr. Adkins:

Responsive Management is submitting the attached proposal in response to ARFQ 0310 DNR2200000016 (“Wildlife – Hampshire County Hunter CWD Survey”). Responsive Management (legal entity name: “Mark Damian Duda & Assoc., Inc.”) very much appreciates the opportunity to submit a bid for this important study, as Responsive Management offers the best choice in vendor to conduct the proposed survey.

For this study, Responsive Management will design and implement a survey to measure hunter attitudes toward Chronic Wasting Disease and Agency disease management efforts among Hampshire County, West Virginia hunters. The survey will assess how hunter behaviors, hunter participation, opinions on the Agency and Agency trust, and hunter opinions on disease management have changed in disease endemic Hampshire County over time as CWD prevalence and distribution have increased since 2011. Responsive Management conducted a previous similar survey for the West Virginia Division of Natural Resources (“the Division”) in 2011, and the new survey will allow for trend comparisons with the earlier data.

Per the specifications in the ARFQ, the cost submitted for this bid reflects the labor required to execute the study using a multimodal survey methodology entailing telephone and online interviews with Hampshire County, West Virginia hunters.

The RFQ specifies that the vendor must have a minimum of five similar surveys completed on attitudes towards wildlife-related issues and at least one study published in a peer reviewed journal conducted for a state wildlife agency within the last ten years. Responsive Management fully meets these requirements, and our qualifications—including firm experience, relevant studies conducted within the specified timeframe, and examples of peer-reviewed articles—are provided in this document.

Established 32 years ago, Responsive Management offers unmatched experience in human dimensions research to assist fish and wildlife agencies in managing natural resources, their constituents, and the public—our experience includes more than 1,000 scientific surveys of general population residents, hunters, trappers, anglers, and other recreationist groups across the country. We offer more experience than any other firm or individual in surveying specific recreationist groups such as hunters, anglers, wildlife viewers, sport shooters, boaters, and more.

Each year Responsive Management completes around 40 major studies on natural resource issues, outdoor recreation, and the human dimensions of fish and wildlife management.

In 32 years of continuous survey research, Responsive Management has never missed a deadline or gone over budget on a project.

The accuracy of Responsive Management's data is second to none. Our research is conducted according to the highest standards of the survey research industry. For the survey needs of the Division, Responsive Management will conduct a scientific, probability-based multimodal survey, which will yield the highest possible response rate, increase the representativeness of the sample, and reduce bias.

In a survey conducted for a university prior to the 2019 Virginia general election, Responsive Management conducted a scientific survey to predict the outcome of the state general assembly race within two percentage points—a projection far closer to the election result than the plus-or-minus-five-percent margin of error.

Responsive Management has a proven track record and a high level of credibility—we ensure reliable study results at a reasonable cost. I believe our prior experience, exceptional client service, and high level of credibility will be great assets in the successful completion of the proposed project.

Unparalleled Experience with Similar Studies: Utilizing our in-house, full-service survey center with 75 professional interviewers, Responsive Management has conducted roughly 1,000 studies regarding hunter and trapper participation; public attitudes toward conservation and the work of fish and wildlife agencies; approval of hunting, fishing, sport shooting, trapping, and other nature-based activities; opinions on wildlife management practices and agency funding models; and other relevant topics. Additionally, Responsive Management's Executive Director is a Certified Wildlife Biologist, and the firm's staff is highly familiar with the nuances of fish and wildlife and natural resource issues.

Client Satisfaction: Responsive Management works exclusively with fish and wildlife agencies and organizations and has a stellar 32-year track record of client satisfaction. The overview of our capabilities attached to this proposal includes many client comments attesting to the standards of our work. Responsive Management's substantial experience conducting similar studies guarantees that the proposed project will be completed accurately and promptly.

Academic Credibility: Responsive Management's research is trusted by the nation's top universities. We recently worked closely with Colorado State University on a nationwide wildlife values study and have also recently completed projects for Stanford University and Rutgers University. We have also conducted work for Auburn University, Duke University, George Mason University, Michigan State University, Mississippi State University, North Carolina State University, Oregon State University, Penn State 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 Yale University, among others.

Ability to Provide Data Comparisons: Responsive Management has conducted more studies than any other firm in the country on hunting and trapping participation, hunter harvest, wildlife and natural resource values, attitudes toward agency management practices, participation in wildlife-related outdoor recreation, and more. With 32 years' worth of research produced for the nation's fish and wildlife agencies, we have immediate access to in-house data allowing for the comparison of results between states as well as results within the same state over multiple time periods.

Reliability and Statistical Accuracy: Responsive Management follows the highest scientific and ethical standards in conducting survey research to ensure accurate, unbiased, and statistically reliable results. Our research has been upheld in U.S. District 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, National Public Radio, and on the front pages of *The Washington Post* and *USA Today*.

Methodological Expertise: Responsive Management offers thorough methodological expertise and conducts all forms of survey research using multiple modes of contact. We also routinely conduct focus groups, personal interviews, and public meetings for state fish and wildlife agencies. For the development of surveys, Responsive Management follows strict guidelines to ensure unbiased questioning. Our surveys ensure the widest possible coverage of the study population and use multiple contact attempts to achieve the highest possible response rates.

I have no doubt that Responsive Management would do an excellent job for you and your agency, and I hope we have the opportunity to work together soon.

Sincerely,



Mark Damian Duda
Executive Director
Certified Wildlife Biologist®
Responsive Management
mark@responsivemanagement.com

FIRM INFORMATION

Firm Name: Responsive Management

Firm Address: 130 Franklin Street, Harrisonburg, Va. 22801

Contact Name: Mark Damian Duda, Executive Director

Contact Email: mark@responsivemanagement.com

Contact Phone: 540.432.1888

SURVEY DEVELOPMENT, SAMPLING, AND METHODS

Finalizing Questions and the Survey Instrument

Responsive Management employs an interactive approach to survey design and will work collaboratively with the Division on all aspects of the survey via conference calls and progress updates. The study will begin with a kick-off meeting between Responsive Management's project team and the Division to review the proposed methodology and finalize the project goals and objectives. Responsive Management will also review the sampling plan with the Division 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 Division via email and teleconference to revise the survey instrument.

Responsive Management will work collaboratively with the Division to finalize the survey instrument based on input from the Division regarding desired content, the overall research goals and objectives, and any existing draft questions or ideas for questions. Questionnaire content will ultimately be determined based on discussions between the Division and Responsive Management. Responsive Management will submit draft surveys and work collaboratively with the Division to finalize the instrument. With decades of experience developing and administering scientific surveys consisting of neutral, unbiased questions, Responsive Management will provide all necessary input and guidance to the Division regarding question phrasing and placement in the survey. For this study, Responsive Management will fully adhere to the specifications outlined in the RFQ:

- Responsive Management will cooperate with Division staff to develop the survey questionnaire.
- Responsive Management will administer the survey via phone and/or online interviews (multimodal) to obtain a proportional random sample of 1,200 completed interviews with hunters within survey parameters.
- Responsive Management will obtain the sample frame from the Division via a database of contact information, to include e-mail addresses and phone numbers for current Hampshire County hunters 15 and older that have checked in at least one (1) deer between 2003-20.

- To conduct the survey, Responsive Management will use a multimodal approach that incorporates both phone and online survey response options, based upon respondent preference, to complete a proportional random sample of 1,200 completed interviews with hunters.
- Live, professionally trained telephone interviewers will be used to conduct the telephone portion of the survey. Responses will be electronically recorded using a computer-assisted phone interview system (survey responses will not be recorded on paper with a pen or pencil).
- **All surveys will be completed between March 21, 2022, and May 21, 2022.**
- Hunter samples will be partitioned by categories to include deer harvested:
 - In 2003-04, before detection of CWD.
 - Years 2005-09, immediately following detection of CWD in Hampshire County.
 - Years 2010-14, following CWD detection in a second county.
 - Years 2015-20, following the transition of all deer check-ins to an electronic system

Responsive Management will analyze the survey data to determine the following:

- Hampshire County deer hunter trust in the Division, both in general and where specific CWD related rules, regulations and management strategies are concerned.
- Hampshire County deer hunter opinions on the perceived effectiveness and acceptance of West Virginia CWD management strategies and specific potential strategies that could be employed in the future.
- The change in hunting participation and hunter behaviors, including antlerless deer hunting and venison consumption, in Hampshire County in general and as related to CWD.
- Hunter knowledge of CWS and concerns about meat safety, deer processing and human health related subjects.
- Percentage of Hampshire County hunters who have:
 - Personally, had their deer tested for CWD, both at check stations and voluntary “test on demand.”
 - Harvested a disease-positive animal.
 - Hunt on property know to have at least one (1) deer test positive for CWD.

Responsive Management will run crosstabulations to determine how major demographic factors such as age, gender, and residency (e.g., county resident, state resident, non-resident of WV) and designated variable pairs of interest (e.g., has harvested a CWD-positive deer and has not harvested a CWD-positive deer personally) correlate with key opinions and attitudes held by survey respondents.

Responsive Management will develop a sampling plan to ensure proportional representativeness of hunters who checked deer in each of the four categories of years and will report all findings at 95% confidence intervals with a sampling error that does not exceed +/- 3.0 percentage points.

WORK PLAN AND TIMELINE

Work Plan

Questionnaire Pretesting

Responsive Management ensures rigorous quality control efforts. Every survey is 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 adaptability to the Computer-Assisted Telephone Interviewing (CATI) and online survey platforms. Responsive Management will provide any recommended modifications to the Division based on previous experience conducting similar surveys. Responsive Management's research associates will then computer code the survey 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 respondents and recommend any revisions based on the pretest results. Responsive Management will work collaboratively with the Division to develop additional questions or make revisions to the survey as necessary to meet the goals and objectives of the study, based on the pretest results. This design process will ensure that the survey meets the exact needs of the study. Final approval of the methodology and survey will be obtained from the Division prior to implementation.

Questionnaire Programming Language

The accuracy and quality of data is vital to scientifically defensible survey research. For this reason, Responsive Management conducts survey interviews using Questionnaire Programming Language (QPL), which is a comprehensive system that provides complete capabilities for designing, administering, and managing survey 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.

Because Responsive Management uses CATI software for survey interviews and data entry, our 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.

Survey Interviewing Procedures and Facilities

High-quality data collection is critical to survey research. Responsive Management maintains its own centrally located, in-house survey 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.

Telephone interviews will be conducted Monday through Friday from 10:00 a.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.

The online version of the survey will be available to complete anytime at the convenience of the respondent.

COMMUNICATING FINDINGS

Responsive Management routinely works with clients to communicate survey findings to diverse audiences, including policymakers, media and press, and other third parties. Responsive Management staff have presented survey findings to agency employees, agency commissioners, county commissioners, elected officials, and industry members. These audiences vary by project based on the purpose of the research findings.

In other cases, Responsive Management presents survey findings to general audiences, such as those attending agency public meetings. As recent examples, Responsive Management conducted large-scale strategic direction and management plan studies for the Wyoming Game and Fish Department and the Maine Department of Inland Fisheries and Wildlife. In both cases, Responsive Management conducted statewide scientific surveys of residents before undertaking qualitative data collection (focus groups and personal interviews) and public input (on-site public meetings and an online public input forum). The latter phase of the projects entailed communicating relevant findings from the surveys to lay audiences who attended the meetings.

Following are examples of media/press coverage of Responsive Management's survey research studies; in most cases, Responsive Management staff worked directly with the journalists and writers to communicate the relevant findings and ensure their accuracy in the reporting (note that each bulleted item links to an external news item):

- [How do we feel about hunting, trapping, shooting and fishing?](#) (PennLive.com article covering results from Responsive Management's most recent trend survey on Americans' attitudes toward hunting, fishing, sport shooting, and trapping)
- [New study puts the crosshairs on American attitudes about hunting](#) (*Pittsburgh Post-Gazette* article covering results from Responsive Management's most recent trend survey on Americans' attitudes toward hunting, fishing, sport shooting, and trapping)
- [Collective Wisdom: Wildlife management professionals rate the programs that work and those that don't](#) (*Pittsburgh Post-Gazette* article covering results from Responsive Management's survey of wildlife management professionals conducted for the Wildlife Management Institute)
- [As bear population grows, more states look at hunts](#) (NPR article quoting Responsive Management Executive Director Mark Damian Duda regarding bear management research)
- [The dolphin lover's conundrum](#) (*New York Times* article covering results from Responsive Management's survey on dolphin feeding and harassment, conducted for the National Marine Fisheries Service)
- [Survey says: People happy with AGFC enforcement](#) (*Baxter Bulletin* article covering results from Responsive Management's employee morale study for the Arkansas Game and Fish Commission)
- [Wild neighbors: Black bears take a liking to the suburbs](#) (*Pittsburgh Post-Gazette* article covering results from Responsive Management's survey on bear management)

- [Trout fishing nets huge haul for WNC economy](#) (*Citizen Times* article covering results from Responsive Management's trout fishing participation and expenditure study for the North Carolina Wildlife Resources Commission)
- [WNC hatchery supported waters to get a million newly stocked trout](#) (additional *Citizen Times* article covering results from Responsive Management's trout fishing participation and expenditure study)
- [Focus group eyes better boating access](#) (marine industry article detailing a component of the methodology for a nationwide boating access study conducted by Responsive Management)
- [Decision makers to get more 'focused' training for coast, thanks to survey](#) (Georgia county news item detailing presentation by Responsive Management staff to county commissioners regarding Sapelo Island National Estuarine Research Reserve needs assessment findings)
- [Louisiana testing waters for controlled black bear hunts; survey suggests public support for it](#) (*The Advocate* article detailing implications of a survey on bear management conducted by Responsive Management for the Louisiana Department of Wildlife and Fisheries)
- [Longmont archery club thrives as kids seek team sport alternatives](#) (*Times-Call* article detailing findings from a nationwide archery participation study conducted by Responsive Management for the Archery Trade Association)
- [More women are signing up for the thrill of hunting](#) (*New Haven Register* news article quoting Responsive Management research on hunting participation among women)
- [Leaders of Conservation: Responsive Management Executive Director Mark Duda](#) (Outdoor Hub article profiling Responsive Management Executive Director Mark Duda)
- ['The Sportsmen's Voice' is a must-read](#) (*New York Post* review of a book published by Responsive Management staff covering research on hunting and fishing in America)

Articles on Responsive Management's strategic direction human dimensions research conducted for the Wyoming Game and Fish Department:

- [New Game and Fish report shows concern for Wyoming wildlife, fisheries and access](#) (Casper Star Tribune)
- [90 percent surveyed happy with Game and Fish](#) (Cody Enterprise)
- [Survey results reveal people satisfied with Game and Fish](#) (Cody Enterprise)
- [Wyomingites concerned for the future of wildlife, according to new study](#) (Wyoming Public Radio)
- [Outdoorsmen seek compromise on access, education](#) (Sheridan Press)

MULTIMODAL DATA COLLECTION APPROACH

Responsive Management proposes to conduct the survey of hunters using a multimodal approach entailing telephone interviews and an online questionnaire.

Responsive Management will select the survey sample from among all eligible hunters in the database provided by the Division, regardless of the contact information available for each individual (i.e., phone number or email address). The sample will be randomly selected to ensure a scientifically valid survey sample. The survey sample will be representative of all individuals in the database. Only after being selected for the sample will respondents be contacted and given a choice of survey modes.

This multimodal approach is superior to the use of only a single mode of data collection in that it ensures all respondents have a variety of opportunities and means to participate in the study. For example, conducting the survey entirely by mail would likely result in a problematically high number of incomplete or incorrectly filled out surveys due to the length of the questionnaire and the complexity of the branching and skip patterns. Conducting the survey entirely online would likely exclude many respondents who are less comfortable using the internet, as might be the case with older respondents.

As noted by Dillman et al. (2009), the multimodal, multi-contact approach to the data collection described here typically leads to the highest possible response rate. The multimodal approach also avoids the pitfalls of an open-ended online survey in that it establishes a closed population of respondents for the survey; in other words, only randomly selected hunters from the database will have the link to complete the online survey. Further, these individuals will be contacted by telephone in follow-up phases to encourage their participation in the survey, thereby increasing the response rate. This approach will result in timely and accurate data collection.

Responsive Management will initiate the data collection by sending an email (depending on which contact information is available) to all individuals in the sample. Concurrently, those in the sample with a missing or inactive email address will be contacted by Responsive Management by telephone to either complete the survey with an interviewer at that time or to set up a time for a scheduled callback.

This initial contact will explain the purpose of the study and include a link to an online version of the questionnaire, a toll-free number to complete the survey with a professional interviewer, and a deadline for survey completion. The initial contact and all subsequent contact with potential respondents will incorporate the logo and name of the Division, which will help to legitimize the study and encourage participation.

Responsive Management uses online survey design software that includes features to optimize the survey for mobile devices. Accessing the survey via the direct URL link while on a mobile device will automatically access the mobile-friendly version of the survey. Responsive Management will fully utilize these features to ensure the survey is accessible and user-friendly from all types of electronic devices, including mobile devices.

ANALYSIS AND REPORTING

Data Analysis

Responsive Management fully analyzes all survey data collected. 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 will include extensive crosstabulations comparing various groups within the sample.

Descriptive analyses will 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.

Typical survey projects have two stages of statistical analysis. The first stage is 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 on the next page (Vaske, 2008)¹:

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

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

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:

$$B = \left(\sqrt{\frac{N_p(.25)}{N_s} - .25} \right) (1.96)$$

Where: B = maximum sampling error (as decimal)
 N_p = population size (i.e., total number who could be surveyed)
 N_s = sample size (i.e., total number of respondents surveyed)

Derived from formula: p. 206 in Dillman, D. A. 2000. *Mail and Internet Surveys*. John Wiley & Sons, NY.

Note: This is a simplified version of the formula that calculates the maximum sampling error using a 50:50 split (the most conservative calculation because a 50:50 split would give maximum variation).

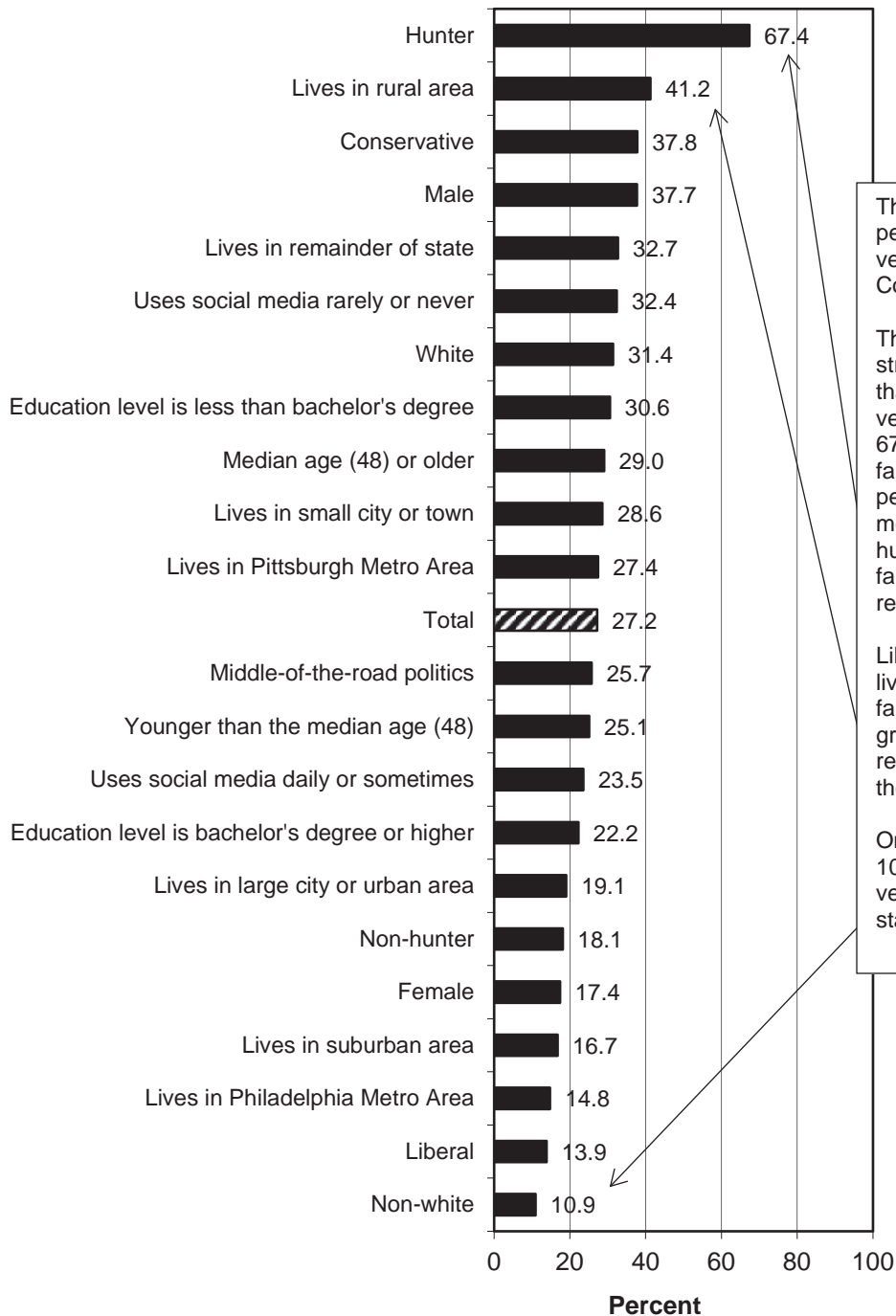
Demographic Analyses Graphs

The analysis will include special graphs that show, on one graph, how various demographic groups respond to certain questions. An example from one of Responsive Management's recent communications and relevance surveys for the Pennsylvania Game Commission is provided on the next page. The example shows the percentages of various groups who are *very* familiar with the Pennsylvania Game Commission. In this example, those who are very familiar with the Commission tend to be rural, politically conservative, male, white, less educated, and older. Most of them hunt (the strongest association of all to familiarity with the Commission), and they tend to use social media rarely or never.

The striped line shows the percentage overall (i.e., among all residents) who are very familiar with the Commission. The characteristics above the striped line are *more* likely to be very familiar, and the characteristics below the striped line are *less* likely to be very familiar with the Commission. Typically, when one group is above the overall bar (for instance, in this example, males), its counterpart (in this instance, females) is below the overall bar. The distance from the overall bar matters, as well: those groups far from the overall bar have a marked difference from residents overall, while those groups near the overall bar do not have a marked difference.

Note that the characteristics are not meant to describe a single person or a person that has all the traits. Rather, the analysis looks at groups defined by the individual characteristics, which sometimes are mutually exclusive.

Percent of each of the following groups who are very familiar with the Pennsylvania Game Commission:



The striped line shows the percentage overall who are very familiar with the Game Commission (27.2%).

Those groups above the striped bar are more likely than residents overall to be very familiar. For instance, 67.4% of hunters are very familiar, well above the percentage overall. (This means that 32.6% of hunters were not very familiar, giving some other response.)

Likewise, 41.2% of those living in a rural area are very familiar. Both of these groups (hunters and rural residents) are well above the percentage overall.

On the other hand, only 10.9% of non-whites are very familiar, well below the statewide total of 27.2%.

Reporting Format

Responsive Management will prepare a detailed final report that fully quantifies and clearly explains all data collected in the survey.

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

Responsive Management will also provide the Division with the study data file in .spss, .xlsx, or another mutually agreed upon format, along with a data codebook.

REPORTING AND PUBLISHING

Examples of Peer-Reviewed Publications by Responsive Management Staff or Based on Responsive Management's Work:

Mark Damian Duda, Tom Beppler, Douglas J. Austen & John F. Organ (2021) The precarious position of wildlife conservation funding in the United States, *Human Dimensions of Wildlife*, DOI: 10.1080/10871209.2021.1904307

Holland, A.M.; Haus, J.M.; Eyler, T.B.; Duda, M.D.; Bowman, J.L. (2020). Revisiting Hunter Perceptions toward Chronic Wasting Disease: Changes in Behavior over Time. *Animals*, 10, 187.

Manfredo, M.J., Sullivan, L., Don Carlos, A.W., Dietsch, A.M., Teel, T.L., Bright, A.D., & Bruskotter, J. (2018). America's Wildlife Values: The Social Context of Wildlife Management in the U.S. National report from the research project entitled "America's Wildlife Values". Fort Collins, CO: Colorado State University, Department of Human Dimensions of Natural Resources.

(Note: Responsive Management was a co-investigator for this project, handling the nationwide mail survey data collection entailing more than 43,000 completed surveys.)

Haus, J.M.; Eyler, T.B.; Duda, M.D.; Bowman, J.L. (2017). Hunter Perceptions Toward Chronic Wasting Disease: Implications for Harvest And Management. *Wildlife Society Bulletin*, 41, 294–300.

Duda, M.D., Beppler, T., Organ, J. (2017). The Growth of Sport Shooting Participation—What Does This Trend Mean for Conservation Revenue? *The Wildlife Professional*, Volume 11, Issue 2, pp. 38-41.

Duda, M.D., Beppler, T., Horstman, S.C. (2013). Attitudes Toward Illegal Feeding and Harassment of Wild Dolphins in Panama City. *Human Dimensions of Wildlife*, Volume 18, Issue 3, pp. 236-238.

Mark Damian Duda & Joanne L. Nobile (2010). The Fallacy of Online Surveys: No Data Are Better Than Bad Data, *Human Dimensions of Wildlife*, 15:1, pp. 55-64.

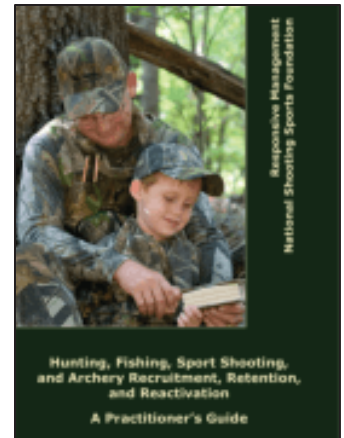
Duda, M.D., Jones, M.F., Criscione, A.E. (2009). Public Awareness and Credibility of Fish and Wildlife Agencies in the Northeastern United States. *Human Dimensions of Wildlife*, Volume 14, Issue 2, pp. 142-144

Ryan, C.W., Edwards, J.W., Duda, M.D. (2009). West Virginia Residents' Attitudes and Opinions Toward American Black Bear Hunting. *Ursus* 20(2), pp. 131–142.

Books by Responsive Management:

Hunting, Fishing, Sport Shooting, and Archery Recruitment, Retention, and Reactivation: A Practitioner's Guide (2017). Today, the need for organized and data-driven R3 efforts—including programs, outreach initiatives, and other strategies to recruit, retain, and reactivate sportsmen and women—has never been more important. This handbook, through an extensive research review and a corresponding list of action items based on the findings, is presented as a roadmap for members of the fish and wildlife management community to use as they navigate a terrain whose obstacles range from the social and demographic to the structural and technological.

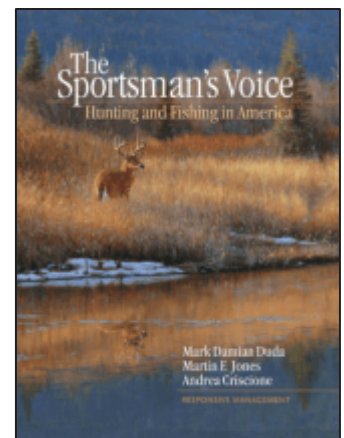
Included throughout the handbook are vignettes that have been provided by various professionals throughout the R3 community. These vignettes address topics and concepts covered throughout the handbook by way of specific case studies—they are real-life, on-the-ground examples of how R3 challenges have been met on the practical level. In short, the vignettes bring the research to life.



The Sportsman's Voice: Hunting and Fishing in America (2010).

Nearly 34 million Americans ages 16 and older head outdoors to hunt and fish every year. Through hunting and fishing license fees and excise taxes on hunting and fishing equipment, hunters and anglers are responsible for the majority of fish and wildlife conservation funding in the United States. Fish and wildlife management programs funded by these fees have conserved millions of acres of habitat and have brought back many species, including wild turkey, wood duck, bald eagle, and pronghorn antelope, from unhealthy population levels.

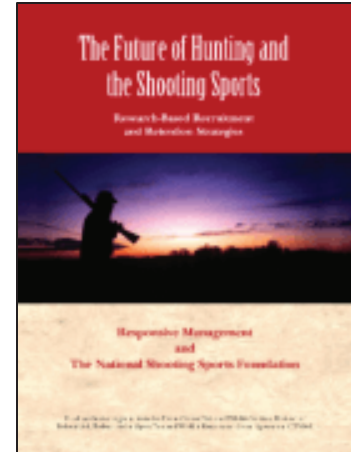
Understanding hunting and fishing, and hunters and anglers as a constituency, is vital to effectively managing the nation's natural resources. Policy makers, legislators, fish and wildlife professionals, conservation organizations, and hunters and anglers themselves have an unmet need for science-based, comprehensive information on hunting and fishing to inform their understanding, communications, decision making, and planning. *The Sportsman's Voice: Hunting and Fishing in America* is the first book that provides a comprehensive, up-to-date look at hunting and fishing in America. It bridges the gap between hundreds of scientific studies of the human dimensions of conservation and on-the-ground situations, giving this information meaningful context and real-world utility.



Virginia Wildlife Viewing Guide (1994), Watching Wildlife (1995), and West Virginia Wildlife Viewing Guide (1999)



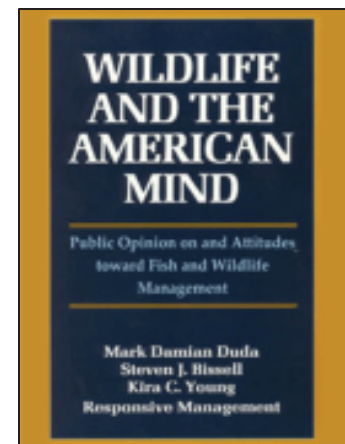
The Future of Hunting and the Shooting Sports: Research-Based Recruitment and Retention Strategies (2008). Data suggest that the future of hunting and the shooting sports is precarious. The number of active hunters and sport shooters has decreased in the U.S., and fewer young people are entering these sports. However, while data indicate that participation in the U.S. has been declining, there are strategies that fish and wildlife agencies, non-governmental organizations, and industry can pursue to retain hunters and shooters in these sports, to get them to hunt and shoot more often, to recruit new hunters and shooters into these sports, and to gain wider public acceptance of these activities among non-participants.



The purpose of the research detailed in this book is to better understand the factors related to hunting and sport shooting participation, identify strategies to better meet the needs of current and potential participants, and more effectively communicate to the public about these activities.

The book content is based on a study that included a comprehensive literature review of past research; focus groups in diverse geographic areas of active hunters and shooters, lapsed hunters and shooters, non-hunters and non-shooters, and anti-hunters and anti-shooters; two nationwide telephone surveys with hunters and shooters and the general population; and final report, including actionable recommendation strategies. Responsive Management then worked with the National Shooting Sports Foundation, numerous state fish and wildlife agencies, conservation organizations, and industry groups to implement the recommendations in the report.

Wildlife and the American Mind (1998). An understanding of the public often means the difference between the success and failure of fish and wildlife programs. Fish and wildlife agencies use biological and ecological research to better understand and manage fish and wildlife and their habitat. Effective fish and wildlife agencies use the human dimensions research produced by Responsive Management to better understand and work with their constituents. Among the benefits of using human dimensions research are enhanced management of the resource and a constituency that is supportive of the agency and its mission.



The purpose of this book is to help fish and wildlife managers, administrators, and outreach specialists better understand and work with their constituents and publics. This book represents a compilation of the most salient findings from more than 300 Responsive Management telephone, mail, and in-person surveys, as well as focus groups and literature reviews conducted over a ten-year period. The book includes recommendations strategies on how to utilize this information to enhance fish and wildlife management programs and policies, as well as how to more effectively manage hunting, fishing, and wildlife watching programs.

Examples of Recent News Releases on Responsive Management's Work:

- [DEC: Anglers' Report Confirms New York's World-Class Freshwater Fishing New York's Freshwater Sportfisheries Generate More Than \\$2 Billion a Year and Support More Than 10,000 Jobs](#) (news release covering major findings from Responsive Management's angler participation and expenditure survey for the New York State Department of Environmental Conservation)
- [RBFF Announces New Research with Actionable Strategies for Angler R3—New research provides key findings and recommendations for recruiting, retaining and reactivating \(R3\) anglers](#) (news release covering major findings from a Multistate Conservation Grant project conducted by Responsive Management in partnership with the Recreational Boating and Fishing Foundation)
- [Clemson Extension Survey Aims to Help Keep S.C. Waterways Clean](#) (news release from Clemson University announcing a Responsive Management survey of South Carolina residents concerning their attitudes toward water quality issues)
- [MDIFW NEWS: Responsive Management Conducting Furbearer Survey](#) (news release informing Maine residents about Responsive Management's role in the data collection effort for a major study to update the agency's furbearer management plan)
- [NSSF Report Shows Growth in Shooting Sports](#) (news release from Outdoor Hub on Responsive Management's sport shooting participation survey conducted on behalf of the National Shooting Sports Foundation)

Examples of Responsive Management's Work Informing Policy Change:

Responsive Management's research is routinely used to shape and inform policy, from statewide legislation and regulations to agency program areas and the content of specific outreach initiatives. For example, Responsive Management recently conducted several large-scale human dimensions studies for the Maine Department of Inland Fisheries and Wildlife to update the agency's furbearer, big game, and freshwater fisheries management plans:

- [Update of Maine's Big Game Management Plan](#)
- [Update of Maine's Freshwater Fisheries Management Plan](#)
- [Help Maine figure out its 15-year plan for furbearing species](#) (Bangor Daily News article)

Responsive Management has also conducted substantial human dimensions research to inform the content of statewide bear management plans, as shown in the following examples:

- [Florida Black Bear Management Plan](#)
- [Virginia Black Bear Management Plan](#)
- [State to poll residents regarding black bears in W.Va.](#) (West Virginia Explorer article)

As another example, in 2012, Responsive Management conducted an agency employee morale study that resulted in major personnel changes at the Arkansas Game and Fish Commission. Results from this research and the agency human resources policy outcomes are [detailed here](#).

EXAMPLES OF RELEVANT SURVEY PROJECTS

RECENT PROJECTS IN THE NORTHEAST UNITED STATES:

- **Massachusetts Residents' Attitudes Toward Black Bears and Black Bear Management:** This study was conducted for the Massachusetts Division of Fisheries and Wildlife and the Massachusetts Cooperative Fish and Wildlife Research Unit to explore Massachusetts residents' attitudes toward black bears and black bear management in the state. The study entailed a scientific telephone survey of Massachusetts residents 18 years old and older.
- **The Human Dimensions of Furbearer Management in Maine:** This study was conducted for the Maine Department of Inland Fisheries and Wildlife to obtain public input regarding the management of furbearers in the state, as well as to explore attitudes toward trapping, human-wildlife conflicts, and the Department itself. Responsive Management conducted a scientific multi-modal survey of Maine residents, hunters, trappers, and landowners; focus groups with residents, hunters, trappers, and animal rights advocates; and regional public meetings open to the general population of Maine. Responsive Management also designed and maintained an online public forum that allowed for additional input from Maine residents and recreationists. This combination of scientific, probability-based sampling and non-scientific qualitative data collection ensured that every Maine resident had an opportunity to provide input for the project.
- **The Opinions of Maine Residents, Landowners, and Hunters Regarding Deer, Moose, Bear, and Turkey:** This survey measured residents', hunters', and landowners' opinions on white-tailed deer, moose, black bear, and wild turkey management, including support for and opposition to changes to the current management program. The data were used to help develop Maine Department of Inland Fisheries and Wildlife's Big Game Management Plan.
- **Maine Anglers' Participation in and Opinions on Freshwater Fishing:** This survey examined resident and nonresident anglers' attitudes toward freshwater fisheries management in Maine. The data were used to help develop the Maine Department of Inland Fisheries and Wildlife's statewide Freshwater Fisheries Management Plan.
- **New York Angler Effort and Expenditures:** This study was conducted for the New York State Department of Environmental Conservation to determine angler preferences, opinions, behaviors, spending, and travel. The study entailed a scientific multi-modal survey of licensed New York anglers.
- **A Needs Assessment for Connecticut's Conservation Education and Firearms Safety Program:** Responsive Management completed this project for the Connecticut Department of Energy and Environmental Protection to evaluate the agency's hunter education program, as well as to assess supply and demand for hunting and sport shooting opportunities and firearms instruction in the state. Among other components, the study entailed focus groups and a survey of Connecticut residents.
- **Hunters' Attitudes Toward Chronic Wasting Disease and the Effects of Management Efforts on Hunting Participation in Hampshire County, West Virginia:** This survey was conducted for the West Virginia Division of Natural Resources to determine hunters' opinions on and attitudes toward Chronic Wasting Disease (CWD) and the effect CWD has on their hunting participation.

- **The Opinions of Residents of the Barnegat Bay Watershed on Fertilizer Use and the Health of Barnegat Bay (New Jersey):** This research was conducted for Rutgers University to determine residents' opinions on and behaviors related to fertilizer use in the Barnegat Bay watershed. The study entailed a telephone survey of residents of the Barnegat Bay watershed in Ocean and Monmouth Counties.
- **A Comparison of Split and Concurrent Firearms Deer Hunting Seasons in Pennsylvania:** This survey was conducted for the Pennsylvania Game 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.
- **Pennsylvania Residents' Opinions on and Attitudes Toward Nongame Wildlife:** This survey was conducted for the Pennsylvania Game Commission, in cooperation with the Pennsylvania Fish and Boat Commission, to determine Pennsylvania residents' opinions on and attitudes toward nongame wildlife, activities and priorities of the Commissions, and funding for the Commissions.
- **Opinions on Fish, Wildlife, and Land Use Among Vermont Residents, Hunters, and Anglers:** This survey was conducted for the Vermont Fish and Wildlife Department to determine the opinions of residents, hunters, and anglers on issues pertaining to the intersection of land use and the management of fish and wildlife.
- **New Hampshire Residents' Opinions on the Status and Management of Big Game Populations:** Responsive Management conducted this survey for the New Hampshire Fish and Game Department to determine residents' opinions on big game populations and big game management, their interest in wildlife, and their opinions on hunting.
- **New Hampshire Licensed Anglers' Participation in and Satisfaction With Fishing and Their Opinions on Fishing Issues:** This survey was conducted for the New Hampshire Fish and Game Department to determine New Hampshire anglers' participation in fishing, their satisfaction with fishing, their license purchasing behaviors, and their fishing behaviors.
- **Delaware Residents' Attitudes Toward Federal Aid Funding for Wildlife Management:** Delaware residents were surveyed regarding their knowledge of and opinions on funding for wildlife management in general and the Pittman-Robertson Act specifically.
- **Maryland Hunting and Fishing Marketing Initiative—Survey of Nonresident Hunters and Anglers:** This survey was conducted for the Sportsmen's Marketing Initiative, a private-public partnership between the Maryland Sportsmen's Foundation and the Maryland Department of Business and Economic Development, to determine strategies for promoting hunting and fishing opportunities in Maryland to nonresidents.
- **Boat Owners' Opinions on Factors Influencing the State in Which to Register Their Boat:** Responsive Management conducted this survey for the Maryland Department of Natural Resources and the University of Maryland's Environmental Finance Center to determine the extent to which various factors influence boat owners to register their vessel in a particular state. A key objective was to explore whether a cap on the Maryland vessel excise tax encouraged boaters to register a vessel in Maryland specifically.

RECENT PROJECTS IN THE SOUTHEAST UNITED STATES:

- **Kentucky Landowners' Attitudes Toward Land Management and Hunting Access:** Responsive Management completed this survey to determine private landowners' attitudes toward allowing hunting on their property, among other land use issues. In addition, the study evaluated landowners' familiarity with and willingness to participate in the Private Lands Program.
- **Florida Residents' Attitudes Toward Bear Management in the State:** This survey was conducted for the Florida Fish and Wildlife Conservation Commission to explore residents' opinions on bear management, including public acceptance of or intolerance to bears, the frequency of encounters or conflicts with bears and how these encounters affect behaviors, awareness of and attitudes toward various bear management options, and other topics.
- **North Carolina Residents' Attitudes and Beliefs Towards Canids:** This survey explored residents' attitudes and beliefs toward canids in five counties of interest, social and spatial factors that inform attitudes and beliefs, how attitudes and beliefs differ by stakeholder or other constituent group, attitudes toward cultural carrying capacity for canids in the five counties of interest, likelihood of landowner participant in canid management, and other key topics.
- **Georgia Hunters' Use of and Attitudes Toward Wildlife Management Areas:** This study was conducted to determine hunters' participation in and opinions on hunting on Wildlife Management Areas. The study entailed a telephone survey of Georgia licensed hunters who had hunted on a Georgia WMA within the past 5 years.
- **Mississippi Resident and Nonresident Hunter Harvest Survey:** Responsive Management provides continual harvest survey research on 15 species to the Mississippi Department of Wildlife, Fisheries and Parks.
- **Mississippi Hunters' Opinions on Tagging of Deer and Wild Turkey:** This survey was conducted to determine deer and turkey hunters' opinions on various tagging options.
- **Georgia Harvest—Ongoing Research:** Responsive Management provides continual small game, spring turkey, and deer harvest survey research to the Georgia Department of Natural Resources.
- **Florida Harvest—Ongoing Research:** Responsive Management provides continual small game and deer harvest survey research to the Florida Fish and Wildlife Conservation Commission.
- **Trout Anglers' Participation in and Opinions on Trout Fishing in North Carolina:** This portion of a multi-phase study was conducted to determine the percentage of all licensed anglers who fish for trout, as well as trout anglers' opinions on trout fishing in North Carolina, the types of waters in which they fish, and other aspects of trout fishing in North Carolina.
- **Mountain Trout Fishing: Economic Impacts on and Contributions to North Carolina's Economy:** This portion of the study was conducted to determine mountain trout anglers' contribution to North Carolina's economy. The study entailed a multi-modal survey of North Carolina licensed anglers and an economic analysis of their spending on mountain trout fishing activities.

- **North Carolina Landowners' Attitudes Toward Trout Fishing Access:** This portion of the study was implemented to determine North Carolina landowners' attitudes toward trout fishing access, including their experiences with recreationists accessing water from their property, their opinions on access in general, and their opinions on incentives to allow access. The study entailed a scientific multi-modal survey of landowners (of at least a quarter acre) in western North Carolina who have a stream that currently supports trout or could potentially support trout running through or adjacent to their property.
- **Hunters' Compliance with the Game Check System in Alabama:** This study was conducted for the Alabama Division of Wildlife and Freshwater Fisheries to determine hunters' compliance with the Game Check System. The study entailed a scientific telephone survey of licensed Alabama hunters and landowners who hunt on their land. The telephone survey questionnaire was developed cooperatively by Responsive Management and the Division, based on similar surveys conducted in 2017 and 2018. The survey had to consider two groups: (1) licensed hunters and (2) landowners who hunt on their own property, who are not required to get a license for that hunting.
- **Alabama Department of Conservation and Natural Resources Hunting and Fishing License Duplication Study:** Responsive Management conducted this survey to estimate the total numbers of hunters and anglers in the state (both resident and nonresident) based on the numbers of licenses sold. Specifically, the study estimated how many hunting and fishing licenses sold in the state were sold to hunters and anglers who already held other valid hunting and/or fishing licenses.
- **Assessing the Effect of Predator Control on Hunter Satisfaction:** Responsive Management collected both qualitative and quantitative data with members of Alabama hunt clubs to determine whether organized predator control efforts impact hunter participation and satisfaction on club land.
- **Florida Fish and Wildlife Conservation Commission Volunteer Program Survey:** Responsive Management conducted this study to determine the efficacy of the Florida Fish and Wildlife Conservation Commission's Volunteer Program by examining awareness, attitudes, opportunities, and limitations to working with volunteers on FWC wildlife conservation projects in Florida.

RECENT PROJECTS IN THE MIDWEST UNITED STATES:

- **North Dakota Hunters' and Landowners' Opinions on the Private Land Open to Sportsmen (PLOTS) Program:** This study was conducted for the North Dakota Game and Fish Department to evaluate hunters' and landowners' opinions on the Private Land Open To Sportsmen (PLOTS) program. The research entailed scientific telephone surveys of North Dakota hunters, landowners with land enrolled in PLOTS, and landowners without land enrolled in PLOTS; and a series of focus groups in diverse locations across the state.
- **Iowa Anglers' Participation in and Attitudes Toward Fishing and the Iowa DNR:** This study was conducted for the Iowa Department of Natural Resources to assess anglers' fishing preferences and behaviors, as well as their attitudes toward the Department's management of fishing and fisheries in the state. The study entailed a scientific multi-modal survey of anglers who had fished in Iowa within the 3 years previous to the survey.
- **Outdoor Recreation in Nebraska:** This study was conducted for the Nebraska Game and Parks Commission to determine state residents' participation in outdoor recreation, as well as their opinions on various issues related to outdoor recreation and the Commission. This survey was conducted in support of the State Comprehensive Outdoor Recreation Plan. The study entailed a scientific telephone survey of Nebraska residents 18 years old and older.
- **Kansas Residents' Opinions on Threatened and Endangered Wildlife and Actions to Protect Wildlife:** This survey was conducted 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.
- **Iowa Hunters' and Anglers' Opinions on Factors Related to License Purchasing Behavior: A Comparison of Avid, Inconsistent, and One-Time License Buyers:** This study was conducted to determine hunters' and anglers' license purchasing behaviors, including their reasons for hunting and fishing, their ratings of their hunting and fishing experiences in Iowa, and their opinions on factors and messages encouraging participation in these sports. The study entailed a telephone survey of avid license buyers, inconsistent license buyers, and one-time license buyers.
- **North Dakota Residents' Use of Social Media and Its Influence on Their Hunting and Shooting Participation:** This study was conducted to determine the extent to which social media influences North Dakota residents' participation in outdoor recreation, particularly hunting and shooting. The study entailed a telephone survey of members of the general population in North Dakota, as well as hunters and target shooters in the state.
- **An Assessment of Public Opinion on Fishing and Hunting License Structures and Pricing in Minnesota:** This study was conducted for the Minnesota Department of Natural Resources to develop legislative recommendations for modifying the Department's license structure and fee schedule. The survey determined public support for and opposition to possible license structures and explored customers' threshold for license fees.
- **Deer Management and Deer Hunting in Indiana:** This study was conducted for the Indiana Department of Natural Resources to determine deer hunters' participation in deer hunting seasons, their harvest of deer, and their opinions on deer management. The study entailed a scientific telephone survey of Indiana hunting license holders.

RECENT PROJECTS IN THE WESTERN UNITED STATES:

- **California Hunters' Opinions on Deer Hunting, Season Structure, Hunting Regulations, and Deer Management:** This study was conducted 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.
- **Harvest of Small Game, Upland Birds, and Other Wildlife in California:** This survey was conducted to determine harvest of small game, upland birds, and other wildlife excluding big game. The study entailed a scientific multi-modal survey of California hunters, including residents and nonresidents.
- **Washington Residents' Awareness of the Fish Washington Campaign:** This study was conducted to determine residents' awareness of the Fish Washington campaign, an effort to encourage increased fishing participation by providing fishing information that will appeal to all outdoor recreationists. The survey also gathered data on participation in fishing and residents' response to efforts to encourage fishing participation in general.
- **Washington Residents' Opinions on Bear and Wolf Management and Their Experiences with Wildlife That Cause Problems:** This survey was conducted 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.
- **Watershed-Literacy Survey of Carson River Watershed Residents:** Responsive Management completed this survey for the Carson Water Subconservancy District to determine Carson River Watershed residents' attitudes toward watershed health, knowledge of basic watershed concepts, and behaviors that may impact the watershed's environment.
- **Oregon Residents' Opinions on and Values Related to the Oregon Department of Fish and Wildlife:** This survey was conducted to assess Oregon residents' awareness of the agency perceived to be responsible for managing fish and wildlife, knowledge of the agency, satisfaction with and perceived benefits of the agency, ratings of the importance of fish and wildlife management programs, and opinions on agency funding, including license fees.
- **Trend Study Regarding Arizona Residents' Opinions on the Arizona Game and Fish Department and Outdoor Recreation in Arizona:** This survey was conducted for the Arizona Game and Fish Department to explore residents' participation in hunting, fishing, boating, off-highway vehicle use, sport shooting, and wildlife viewing, as well as attitudes toward the Department's performance and wildlife value orientations.
- **Data Collection to Explore Nevada Hunters' and Anglers' Attitudes Toward License Fee Restructuring:** Responsive Management implemented a survey of licensed Nevada hunters and anglers to assess their preferences for and opinions on potential license restructuring, including new license offerings and stamp/permit/tag bundling options. The data was designed to help broaden funding support for the Nevada Department of Wildlife.
- **Arizona Anglers' Opinions, Attitudes, and Expenditures in the State:** This study was conducted to determine anglers' opinions on various regulations, their satisfactions and dissatisfactions with fishing in Arizona, their fishing locations and methods typically used, and their fishing-related expenditures in Arizona. The study entailed a multi-modal survey of Arizona anglers.

RECENT COMMUNICATIONS PROJECTS:

- **Increasing Awareness of and Support for the Pennsylvania Game Commission:** This report was produced to guide the Pennsylvania Game Commission in its communications with the public about the work that it does. The report is the culmination of extensive research conducted by Responsive Management and is meant to enhance the Commission's relationship with the public by developing a better understanding of its stakeholders and their opinions and attitudes toward the Commission, its programs, and its methods of outreach and communication. The research on which this guidance is based comprised a review of previous research, a major survey of Pennsylvania residents, and focus groups of residents. The research review pulled in reports from within Pennsylvania but included studies outside of Pennsylvania when the research had applicability to the Commonwealth. The focus groups were composed of Pennsylvania residents and were held in different geographic areas of Pennsylvania (Philadelphia and Huntingdon). Finally, the survey was of residents statewide, and the data analysis of the survey results included a regional breakdown.
- **A Communications, Marketing and Public Relations Plan for the Maine Department of Inland Fisheries and Wildlife:** The plan was designed to raise overall public awareness of and support for MDIFW's mission, programs and projects; and to measurably increase support and participation in activities and programs overseen by the Department.
- **Oregon Residents' Opinions on and Values Related to the Oregon Department of Fish and Wildlife:** This survey is being conducted to assess Oregon residents' awareness of the agency perceived to be responsible for managing fish and wildlife, knowledge of the agency, satisfaction with and perceived benefits of the agency, ratings of the importance of fish and wildlife management programs, and opinions on agency funding, including license and user fees.
- **Watershed-Literacy Survey of Carson River Watershed Residents:** This study was conducted for the Carson Water Subconservancy District to determine Carson River Watershed residents' knowledge of and attitudes toward watershed health, knowledge of basic watershed concepts, and activities or behaviors that may impact the watershed's environment. Data from the study was used for a communications plan to encourage responsible environmental behaviors and lifestyle choices.
- **Delaware Residents' Opinions on Climate Change and Sea Level Rise:** This study was conducted for the State of Delaware and the Delaware Sea Grant College Program to determine residents' opinions on climate change and sea level rise, whether residents believe they are happening, the perceived threats posed by them, and opinions on the potential mitigating actions that could be taken.
- **Recruiting and Retaining Nontraditional, Young Adult Participants into Hunting and Fishing through Targeted Marketing, Instruction, Mentoring and Social Reinforcement:** Responsive Management is handling the data collection for a project to develop tools to introduce hunting and fishing to young adults in urban/suburban settings who are interested in locally grown or organic foods. For this project, Responsive Management is administering surveys of mentors and instructors and pre- and post-program surveys with participants in several pilot states.

- **Exploring Americans' Values and Attitudes Toward Animal Rights and Animal Welfare Issues:** This study is being conducted to explore the philosophical motivations and opinions that inform animal rights and/or animal welfare values. The project entails nationwide qualitative data collection with U.S. residents in a diverse series of locations to explore potential messages and themes that may be used in future outreach relating to wildlife issues.
- **Pennsylvania Residents' Opinions on and Attitudes Toward Nongame Wildlife:** This project was conducted for the Pennsylvania Game Commission, in cooperation with the Pennsylvania Fish and Boat Commission, to determine Pennsylvania residents' opinions on and attitudes toward nongame wildlife, activities and priorities of the Commissions, and funding for the Commissions.
- **Opinions on Fish, Wildlife, and Land Use Among Vermont Residents, Hunters, and Anglers:** This study was conducted for the Vermont Fish and Wildlife Department to determine the opinions of residents, hunters, and anglers on issues pertaining to the intersection of land use and the management of fish and wildlife.
- **Delaware Residents' Attitudes Toward Federal Aid Funding for Wildlife Management:** Delaware residents were surveyed regarding their knowledge of and opinions on funding for wildlife management in general and the Pittman-Robertson Act specifically.
- **Trend Study Regarding Arizona Residents' Opinions on the Arizona Game and Fish Department and Outdoor Recreation in Arizona:** This study was conducted for the Arizona Game and Fish Department to explore Arizona residents' attitudes toward the Department's performance, wildlife value orientations, and the relationship between humans and natural systems.

RECENT HUNTING PROJECTS:

- **Public Opinion on and Attitudes Toward the Management of Big Game Species in Maine Among State Residents, Hunters, and Landowners:** 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.
- **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:** Responsive Management conducted this study 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.

- **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 (i.e., hunters' and anglers') 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 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 three groups: 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.
- **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.
- **Deer Hunting and Harvest Management in Vermont:** This study was conducted for the Vermont Fish and Wildlife Department to determine hunters' opinions on and attitudes toward deer management strategies, specifically as they relate to hunting and harvest regulations. The ultimate purpose of this project was to help the Department develop a comprehensive evaluation of deer hunting and harvest regulations, thereby assisting the Department in developing the most effective deer management strategies and hunting regulations to best meet the needs of its diverse constituents.

- **Mississippi Hunters' Attitudes Toward Tagging:** This study was conducted for the Mississippi Department of Wildlife, Fisheries, and Parks to determine deer and turkey hunters' opinions on various tagging options. The study entailed a scientific telephone survey of hunters whose license allowed deer/turkey hunting.
- **Hunters' and Anglers' Opinions on Factors Related to License Purchasing Behavior—A Comparison of Avid, Inconsistent, and One-Time License Buyers:** This study was conducted for the Iowa Department of Natural Resources to determine hunters' and anglers' license purchasing behaviors, including their reasons for hunting and fishing, their ratings of their hunting and fishing experiences in Iowa, and their opinions on factors and messages encouraging participation in these sports. The study entailed a telephone survey of hunters and anglers. Within these groups of license buyers, the study examined three levels of avidity: avid license buyers, inconsistent license buyers, and one-time license buyers.
- **Tennessee Residents' and Hunters' Knowledge of and Opinions on Sandhill Cranes:** This study was conducted for the Tennessee Wildlife Resources Agency to determine residents' and hunters' knowledge of and experiences with sandhill cranes, their opinions on hunting sandhill cranes, and their experiences with the Tennessee Sandhill Crane Festival. The study entailed a telephone survey of residents of Tennessee, residents of the proposed sandhill crane hunt area, and hunters.
- **Alabama Licensed Hunters' Opinions on and Participation in Hunting on WMAs:** This study was conducted for the Alabama Division of Wildlife and Freshwater Fisheries to determine participation in hunting on designated Wildlife Management Areas (WMAs), opinions on and ratings of hunting on WMAs, opinions on WMA regulations, and several other issues about hunting on WMAs. The study entailed two telephone surveys: one survey of WMA License Holders and the other survey of Non-WMA License Holders.
- **Opinions on Quality Deer Management in Western Maryland:** This study was conducted for the Maryland Department of Natural Resources to determine hunters' and landowners' opinions on quality deer management in western Maryland. The study entailed a telephone survey of three groups: deer hunters who live in western Maryland (either Allegany or Garrett Counties), deer hunters who live outside of western Maryland, and landowners in western Maryland (again, either Allegany or Garrett Counties).
- **Pennsylvania Lapsed Hunters' Attitudes Toward Hunting and Future Participation:** This study was conducted for the Pennsylvania Game Commission to better understand why Pennsylvania hunters lapse in their hunting participation and do not purchase licenses in a given year; the study was also conducted to identify actions the Commission may take to prevent hunters from lapsing and solidify their involvement in the sport. The study entailed a series of six focus groups with adult and youth lapsed hunters in four areas of Pennsylvania.
- **Virginia Kill Permit Holders' Opinions on and Attitudes Toward Kill Permits:** This study was conducted for the Virginia Department of Game and Inland Fisheries to determine opinions on kill permits issued by the Department as part of its deer and bear management programs. In particular, the research was conducted to examine kill permit holders' satisfaction with kill permits as a management tool for resolving difficulties with wildlife causing crop or other property damage. The study entailed a telephone survey of Virginia landowners who received kill permits.

- **Hunting on Wildlife Management Areas in Georgia—Hunters’ Attitudes Toward WMAs:** This study was conducted for the Georgia Department of Natural Resources to obtain participation and opinion data regarding hunting on Wildlife Management Areas (WMAs) in Georgia. Specifically, this survey determined the number of hunters hunting WMAs, species hunted, and weapons used; to explore hunters’ satisfaction with WMAs and identify future needs; and to assess hunters’ opinions on attitudes toward overall hunting opportunities in the State of Georgia.

RECENT FISHING PROJECTS:

- **Iowa Anglers’ Participation in and Attitudes Toward Fishing and the Iowa DNR:** This study was conducted for the Iowa Department of Natural Resources to assess anglers’ fishing preferences and behaviors, as well as their attitudes toward the Department’s management of fishing and fisheries in the state. The study entailed a scientific multi-modal survey of anglers who had fished in Iowa within the 3 years previous to the survey.
- **New York Angler Effort and Expenditures In 2017:** This study was conducted for the New York State Department of Environmental Conservation to determine angler preferences, opinions, behaviors, spending, and travel. The study entailed a scientific multi-modal survey of licensed New York anglers.
- **Maine Anglers’ Participation in and Opinions on Freshwater Fishing:** This study examined resident and nonresident anglers’ attitudes toward freshwater fisheries management in Maine. The data were used to help develop MDIFW’s new Statewide Fisheries Management Plan.
- **New Hampshire Licensed Anglers’ Participation in and Satisfaction With Fishing and Their Opinions on Fishing Issues:** This study is being conducted for the New Hampshire Fish and Game Department to determine New Hampshire anglers’ participation in fishing, their satisfaction with fishing, their license purchasing behaviors, and their typical fishing behaviors.
- **Arkansas Anglers’ Motivations for, Expenditures on, Methods of, and Opinions on Trout Fishing in Arkansas:** This study was conducted for the Arkansas Game and Fish Commission to determine trout anglers’ participation in trout fishing, their methods and locations of fishing, their motivations, their expenditures, their satisfaction or dissatisfaction with trout fishing, and their opinions on various aspects of trout fishing in Arkansas.
- **Survey of South Carolina Licensed Recreational Marine Anglers:** This study entails a survey of South Carolina recreational marine anglers regarding their participation in crabbing and gigging for flounder, their catch and effort data, techniques used while crabbing or gigging flounder, and trip frequency data. The survey also measures anglers’ opinions on agency performance with regard to marine resource management, including population levels for blue crab, flounder, and other species.
- **Trend Study Regarding Arizona Residents’ Opinions on the Arizona Game and Fish Department and Outdoor Recreation in Arizona:** This study was conducted for the Arizona Game and Fish Department to explore Arizona residents’ participation rates in hunting, fishing, boating, off-highway vehicle use, sport shooting, and wildlife viewing, as

well as attitudes toward the Department's performance, wildlife value orientations, and the relationship between humans and natural systems.

- **Data Collection to Explore Nevada Hunters' and Anglers' Attitudes Toward License Fee Restructuring:** Responsive Management implemented a survey of licensed Nevada hunters and anglers to assess their preferences for and opinions on potential license restructuring, including new license offerings and stamp/permit/tag bundling options. The data was designed to help broaden funding support for the Nevada Department of Wildlife.
- **Arizona Anglers' Opinions, Attitudes, and Expenditures in the State:** This study was conducted to determine anglers' opinions on various regulations, their satisfactions and dissatisfactions with fishing in Arizona, their fishing locations and methods typically used, and their fishing-related expenditures in Arizona.
- **A large-scale project for the North Carolina Wildlife Resources Commission's trout program:**
 - **Trout Anglers' Participation In And Opinions On Trout Fishing In North Carolina:** This portion of the study was conducted to determine the percentage of all licensed anglers who fish for trout, as well as trout anglers' opinions on trout fishing in North Carolina, the types of waters in which they fish, and other aspects of trout fishing in North Carolina.
 - **Mountain Trout Fishing: Economic Impacts On And Contributions To North Carolina's Economy:** This portion of the study was conducted to determine mountain trout anglers' contribution to North Carolina's economy.
 - **North Carolina Landowners' Attitudes Toward Trout Fishing Access:** This portion of the study was implemented to determine North Carolina landowners' attitudes toward trout fishing access, including their experiences with recreationists accessing water from their property, their opinions on access in general, and their opinions on incentives to allow access.
- **New Jersey Trout Anglers' Opinions on Stocking and Other Trout Regulations:** This study was conducted to determine trout anglers' opinions on trout stocking and other regulatory issues. The study entailed a telephone survey of licensed anglers in New Jersey who fish for trout.
- **Resident Participation in Freshwater and Saltwater Sport Fishing in Georgia:** This study was conducted for the Georgia Department of Natural Resources to determine the numbers of residents participating in freshwater and saltwater sport fishing in Georgia within the previous 12 months, thereby allowing an equitable allocation of funding for freshwater and saltwater fisheries programs.
- **Washington Angler Survey Report:** This study was conducted for the Washington Department of Fish and Wildlife to determine anglers' typical fishing behaviors and their opinion on various fishing regulations. The study entailed a telephone survey of Washington anglers.
- **Iowa Anglers' Opinions on Factors Related to License Purchasing Behavior: A Comparison of Avid, Inconsistent, and One-Time License Buyers:** This study was conducted to determine anglers' license purchasing behaviors, including their reasons for

fishing, their ratings of their fishing experiences in Iowa, and their opinions on factors and messages encouraging participation. The study entailed a telephone survey of avid license buyers, inconsistent license buyers, and one-time license buyers.

RECENT AGENCY LAW ENFORCEMENT PROJECTS:

- **Planning for the Future of Conservation Law Enforcement in the United States:** This study was conducted by the National Association of Conservation Law Enforcement Chiefs (NACLEC), the National Conservation Law Enforcement Education Foundation (NCLEEF), Responsive Management, and the University of Wisconsin-Stevens Point to plan for future conservation law enforcement needs and priorities. Funded through a Multistate Conservation Grant, the overall study consisted of a nationwide scientific telephone survey of U.S. residents ages 18 years old and older (for which a minimum of 200 completed surveys were obtained in each state, for a total of over 10,000 completed surveys nationwide) and a survey of conservation law enforcement personnel in each state.
- **Virginia Hunters', Anglers', and Boaters' Opinions on and Satisfaction with the Department of Game and Inland Fisheries Law Enforcement Activities:** This study assessed hunters', anglers', and boaters' knowledge of, opinions on, and satisfaction with VDGIF law enforcement activities. The study entailed a scientific telephone survey of Virginia hunters, anglers, and boaters.
- **Needs Assessment for the Connecticut Department of Energy and Environmental Protection's Conservation Education and Firearms Safety Program:** This needs assessment study was conducted for the Connecticut Department of Energy and Environmental Protection to examine the current strengths and weaknesses of the Conservation Education and Firearms Safety Program.
- **Wyoming Residents' Attitudes Toward Wyoming Game and Fish Department Law Enforcement Activities:** For this project, Responsive Management completed a telephone survey of Wyoming residents to assess their attitudes toward and opinions on Wyoming law enforcement programs, game wardens, and the priorities of law enforcement in Wyoming.
- **Colorado Wildlife Law Enforcement Survey—Implications and Recommendations:** Responsive Management conducted a survey of Colorado residents, hunters, and anglers to assess their attitudes toward the Colorado Division of Wildlife's wildlife law enforcement efforts.
- **Opinions of Georgia Residents, Anglers, Hunters, and Landowners on Law Enforcement Activities of the Georgia Department of Natural Resources, Wildlife Resources Division:** This study was conducted to determine the opinions of Georgia residents, anglers, hunters, and landowners on law enforcement activities of the Division.
- **Georgia Boaters' Attitudes and Opinions Regarding Boating and the Enforcement of Boating Laws in Georgia:** This study was conducted to determine Georgia registered boaters' attitudes and opinions on a variety of boating and law enforcement issues.
- **Fish and Wildlife Law Enforcement's Motorized Vehicle Purchasing Practices, Considerations, and Motivations:** This project assessed law enforcement divisions' current use of and future needs for motorized recreational vehicles (ATVs, personal watercraft, snowmobiles, etc.) to better understand the characteristics and priorities of this group.

- **Idaho Residents' Opinions on and Attitudes Toward the Idaho Department of Fish and Game:** A telephone survey of Idaho residents was completed to assess their opinions on and attitudes toward the Idaho Department of Fish and Game's law enforcement officers, activities, and programs.
- **Arizona Residents' Knowledge, Opinions, and Attitudes Toward the Arizona Game and Fish Department's Law Enforcement Activities:** This survey of residents was conducted to assess their knowledge of and attitudes toward the Department's law enforcement activities and effectiveness.
- **Washington State Boaters Survey Regarding Safety, Education, and Law Enforcement:** This study was conducted to obtain data about safety, education, and law enforcement.

RECENT WILDLIFE MANAGEMENT PROJECTS:

- **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.
- **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.
- **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.
- **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.

RECENT BEAR MANAGEMENT PROJECTS:

- **Florida Residents' Attitudes Toward Bear Management in the State:** This survey was conducted to explore Floridians' opinions on bear management, including public acceptance of or intolerance to bears, the frequency of encounters or conflicts with bears and how these encounters affect behaviors, awareness of and attitudes toward various bear management options, and other topics.
- **Louisiana Residents' Opinions on Black Bears and Black Bear Management in Louisiana:** This survey was conducted for the Louisiana Department of Wildlife and Fisheries to determine residents' opinions on and experiences with black bears in Louisiana and their opinions on black bear management options.
- **Public Attitudes Toward Black Bear Management in Maryland:** This survey assessed Maryland residents' knowledge and awareness of black bears in the state, encounters with the species, attitudes toward bear nuisance behaviors, and opinions on management and regulation options.
- **Tennessee Residents' Opinions on Black Bears in General and the Management and Hunting of Black Bears:** This survey determined residents' 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.
- **West Virginia Residents' Opinions on Black Bears and Black Bear Hunting:** This survey looked at West Virginia residents' opinions on black bears, black bear management, and black bear hunting.
- **Anchorage, Alaska Residents' Attitudes Toward Bears and Bear Management Issues:** This study was conducted to determine Anchorage residents' opinions on bear populations, problems caused by bear, and bear management. The study entailed focus groups of Anchorage residents and trail users and a telephone survey of Anchorage residents at least 18 years old.
- **Virginia Residents' Opinions on Black Bears and Black Bear Management:** This survey determined public acceptance of and intolerance to bear, the frequency of encounters and conflicts with bear and how these encounters affect residents' behaviors and patterns, and public awareness of various bear management options.
- **Virginia Bear Management Plan 2011-2020:** The Virginia Department of Game and Inland Fisheries contracted with Responsive Management to revise its state Bear Management Plan. Responsive Management assessed public opinion in various regions of the state to develop the most informed bear management strategies and recommendations.
- **Pennsylvania Residents' Opinions on and Attitudes Toward Black Bears:** This study was conducted to determine Pennsylvanians' opinions on black bears in general, black bear management, and the hunting of black bears. Responsive Management's research team integrated geographic information system data with census block group data so that a statistically valid study sample of Pennsylvania residents age 18 and older could be drawn based on Pennsylvania's WMUs.
- **Michigan Black Bear Survey:** This survey examined Michigan residents' opinions on, attitudes toward, and awareness of black bears.

National and Regional Research on Americans' Attitudes Toward Wildlife Management, Hunting, and the Role of Fish and Wildlife Agencies:

- **Americans' Attitudes Toward Hunting, Fishing, Sport Shooting, and Trapping:** This study was conducted by Responsive Management and the National Shooting Sports Foundation to assess trends in Americans' attitudes toward hunting, fishing, sport shooting, and trapping. Responsive Management has tracked public attitudes on the four activities in various forms since 1995, and the study makes use of this trend data by examining how Americans' attitudes have changed over the years. The project was funded by a Multistate Conservation Grant from the Association of Fish and Wildlife Agencies. The study entailed a scientific telephone survey of adult Americans, ages 18 and older.
- **Understanding Public Values Toward Wildlife in the United States:** Responsive Management recently worked 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 entailed surveys with residents in all 50 states and determined how values differ across states, regions, and the nation as a whole. The survey examined how people think wildlife and animals may be used, what they perceive as the most important priorities for fish and wildlife management, and attitudes toward state fish and wildlife management.
- **The American Public's Attitudes Toward Animal Rights and Animal Welfare:** In another landmark study, Responsive Management recently conducted a scientific survey of U.S. residents and a series of focus groups across the country to examine Americans' understanding of and attitudes toward animal rights, animal welfare, and regulated hunting in the United States. The research was conducted for the National Rifle Association's Hunters' Leadership Forum and resulted in an extensive document of communications strategies.
- **Public Opinion on Fish and Wildlife Management Issues and the Reputation and Credibility of Fish and Wildlife Agencies in the Southeastern United States:** This study was conducted for the Southeastern Association of Fish and Wildlife Agencies (SEAFWA) to determine public opinion on fish and wildlife management issues and agency reputation and credibility. The study entailed a telephone survey of residents' attitudes toward and opinions on fish and wildlife management issues and the state's fish and wildlife agency in all 16 member states of the SEAFWA: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.
- **Public Opinion on Fish and Wildlife Management Issues and the Reputation and Credibility of Fish and Wildlife Agencies in the Northeast United States:** This study was conducted for the Northeast Conservation Information and Education Association (NCIEA) and its member state agencies to determine public opinion on fish and wildlife management issues and agency reputation and credibility. The study entailed thirteen telephone surveys of residents in each member state of the NCIEA regarding their attitudes toward and opinions on fish and wildlife management issues and each state's fish and wildlife agency. Member states included Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia.

- **Americans and Wildlife Diversity—Public Opinion, Attitudes, Interest and Participation in Wildlife Viewing and Wildlife Diversity Programs:** Commissioned by the Wildlife Diversity and Watchable Wildlife Committee of the International Association of Fish and Wildlife Agencies, this study used surveys, focus groups, and a literature review to examine public awareness of state fish and wildlife agencies and their nongame programs; funding of wildlife diversity programs; and participation, trends, and satisfaction with wildlife viewing and other wildlife-related activities.

Human Dimensions Research to Assist Agencies with Strategic Planning and Direction:

- **Forging the Future of Wyoming’s Wildlife—Human Dimensions Research Results from the Wyoming Game and Fish Department’s Strategic Planning Study:** Responsive Management conducted this study to assist the Wyoming Game and Fish Department in the development of a new agency-wide five-year strategic plan. The human dimensions research conducted by Responsive Management encompassed seven components: 1) a qualitative assessment of Game and Fish employees and stakeholders; 2) five pre-survey focus groups conducted with residents throughout Wyoming; 3) a scientific telephone survey of Wyoming residents, nonresident hunters, and nonresident anglers; 4) an online survey of Game and Fish employees; 5) five post-survey focus groups; 6) ten post-survey public meetings; and 7) a public comment forum open to anybody who wished to comment.
- **Increasing Awareness of and Support for the Pennsylvania Game Commission:** This report was produced to guide the Pennsylvania Game Commission in its communications with the public about the work that it does. The report is the culmination of extensive research conducted by Responsive Management and is meant to enhance the Commission’s relationship with the public by developing a better understanding of its stakeholders and their opinions and attitudes toward the Commission, its programs, and its methods of outreach and communication. The research on which this guidance is based comprised a review of previous research, a major survey of Pennsylvania residents, and focus groups of residents. The research review pulled in reports from within Pennsylvania but included studies outside of Pennsylvania when the research had applicability to the Commonwealth. The focus groups were composed of Pennsylvania residents and were held in different geographic areas of Pennsylvania (Philadelphia and Huntingdon). Finally, the survey was of residents statewide, and the data analysis of the survey results included a regional breakdown.
- **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’ and key stakeholders’ participation in various outdoor recreation activities as well as their attitudes toward and opinions on the Department’s programs. Data from the survey were used to develop a communications, marketing, and public relations plan for the Department. In addition to Maine general population residents, stakeholder groups included hunters, anglers, boaters, and trappers. The study entailed a scientific survey of Maine residents and surveys of the aforementioned stakeholder groups, as well as focus groups with the same audiences.
- **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. Responsive Management also conducted focus groups and public meetings with Maine residents, landowners, and hunters as part of the data collection to update the state's Big Game Management Plan.

- **Maine Anglers' Participation in and Opinions on Freshwater Fishing:** This study was conducted for the Maine Department of Inland Fisheries and Wildlife to determine anglers' participation, practices, and opinions regarding freshwater fishing in the state. In addition to a telephone survey of resident and nonresident licensed anglers in Maine, age 16 years or older, Responsive Management conducted focus groups and public meetings with Maine anglers. Study data were used to update Maine's Freshwater Fisheries Management Plan.
- **Attitudes Toward the Strategic Direction of the Arkansas Game and Fish Commission:** This project involved a step-by-step interactive planning process to consider the opinions and attitudes of internal and external Arkansas Game and Fish Commission (AGFC) constituents. Specifically, the planning process provided AGFC with a comprehensive overview of public, stakeholder, and employee input regarding the Commission's strategic goal and long-term objectives, priorities and efforts, and challenges and recommendations for future direction. The strategic planning process included focus groups with internal and external constituents; a survey of employees, agency stakeholders, and Arkansas residents and sportsmen; full analysis of findings; a final report of research; and the development of a comprehensive strategic plan for the AGFC. The resulting plan set priorities for future programmatic efforts and initiatives and established recommendations for funding and resource allocation.
- **Survey for the Strategic Direction of DNREC's Division of Fish and Wildlife:** For this study, Responsive Management conducted a large-scale assessment for the Department of Natural Resources and Environmental Control's Division of Fish and Wildlife (DFW). The purpose of this study was to help the DFW identify and quantitatively assess public and DFW staff and stakeholder attitudes toward the strategic direction of the Department; explore the DFW core mission, vision, and guiding principles; identify the future needs and expectations of its constituents; and establish long-term goals and objectives to assist in overall strategic planning for the Division. For this project, Responsive Management completed a telephone survey of employees, stakeholders, and Delaware residents.
- **The Attitudes of the General Public, Stakeholders, and Employees Regarding the Strategic Direction of the Georgia Department of Natural Resources:** For this study, Responsive Management surveyed the public, stakeholders, and Department of Natural Resources (DNR) employees regarding the future of the DNR, its strategic goals and desired long-term outcomes and objectives, and the challenges that the DNR will face in attempting to achieve its strategic goals. This study was designed to assess the level of support among the general population, stakeholders, and employees for the strategic direction of the DNR; to obtain input regarding the future of the DNR, its strategic goals and desired long-term outcomes and objectives; and to identify the challenges that the DNR will face in attempting to achieve its strategic goals. In addition to these long-term planning projects, Responsive Management conducted extensive research assessing agency outreach and campaign efforts, programs and initiatives, and media and messaging strategies.

Human Dimensions Research to Identify the Most Effective R3 Strategies for Hunters, Anglers, Sport Shooters, and Archers:

- **Hunting, Fishing, Sport Shooting, and Archery Recruitment, Retention, and Reactivation—A Practitioner’s Guide:** To build on the National Hunting & Shooting Sports Action Plan created by the Wildlife Management Institute and the Council to Advance Hunting and the Shooting Sports, Responsive Management partnered with the National Shooting Sports Foundation to develop a recruitment, retention, and reactivation handbook. The handbook summarizes in a single volume the most important and up-to-date R3 research, lessons learned, and practical information, resulting in a “one-stop R3 shop” for the fish and wildlife community. Agencies are now incorporating recommendations from the handbook into R3 plans at the state level.
- **The Future of Hunting and the Shooting Sports: Research-Based Recruitment and Retention Strategies:** Responsive Management partnered with NSSF to produce one of the largest and most comprehensive studies ever conducted on hunting and the shooting sports. Four primary components complete this large-scale research project focused on developing actionable, research-based hunter and sport shooter recruitment and retention strategies: a comprehensive literature review of past research pertaining to hunting and the shooting sports; a series of focus groups in diverse geographic areas of active hunters and shooters, lapsed hunters and shooters, non-hunters and non-shooters, and anti-hunters and anti-shooters; and two nationwide telephone surveys—one with a sample of hunters and shooters and the second with a sample of the general population. Responsive Management compiled and examined all the data obtained to produce a final report of the results, including strategic recommendations for increasing hunter recruitment and retention.
- **Recruiting and Retaining Nontraditional, Young Adult Participants into Hunting and Fishing through Targeted Marketing, Instruction, Mentoring and Social Reinforcement:** Responsive Management handled the data collection for a project to develop tools to introduce hunting and fishing to young adults in urban/suburban settings who are interested in locally grown or organic foods. For this project, Responsive Management is administering surveys of mentors and instructors and pre- and post-program surveys with participants in a handful of pilot states.
- **Exploring Recent Increases in Hunting and Fishing Participation:** The purpose of this project was to better understand the factors correlated with increases in hunting and fishing participation and license sales between 2006 and 2011, and to determine the factors that may have contributed to these increases. Promoting participation and license sales is in the best interest of each state. Thus, an understanding of those factors associated with increased participation is a vital tool for state fish and wildlife agencies. The resulting conclusions provided useful information in the continued development of marketing and outreach. While much research has been published on factors contributing to the declining trend in participation among hunters and anglers, less is known about those factors that have contributed to the increase at the time of this research. The project approached the subject in many ways: a review of past research, interviews with agency personnel, and surveys of hunters and anglers, as well as various types of analyses such as multi-regression analyses.
- **The Future of Fishing: A Marketing Plan to Increase Recreational Fishing Participation in the United States:** For this project, Responsive Management developed a

marketing plan for the Association of Fish and Wildlife Agencies, state fish and wildlife agencies, industry, non-government organizations, and federal agencies to increase participation in and enjoyment of recreational fishing nationwide. There were five phases to this project: 1) a compilation of existing literature as well as a detailed secondary analysis on Responsive Management databases, 2) a series of six focus groups with anglers and nonanglers nationwide, 3) a nationwide telephone survey administered to U.S. residents 12-years old and older, 4) a second series of focus groups in order to assess the viability of a promotional effort to encourage parents and their children to go fishing, and 5) a final report summarizing the results and implications of this study with an emphasis on target markets and strategies to increase participation, recruitment, and retention in recreational fishing.

Numerous Recent State-Level Studies Examining Attitudes Toward Agency Funding and Specific Wildlife/Fisheries Management Topics (list below shows representative examples):

- **Massachusetts Residents' Attitudes Toward Black Bears and Black Bear Management:** This study was conducted for the Massachusetts Division of Fisheries and Wildlife and the Massachusetts Cooperative Fish and Wildlife Research Unit to explore Massachusetts residents' attitudes toward black bears and black bear management in the state. The study entailed a scientific telephone survey of Massachusetts residents 18 years old and older.
- **Iowa Anglers' Participation in and Attitudes Toward Fishing and the Iowa DNR:** This study was conducted for the Iowa Department of Natural Resources to assess anglers' fishing preferences and behaviors, as well as their attitudes toward the Department's management of fishing and fisheries in the state. The study entailed a scientific multi-modal survey of anglers who had fished in Iowa within the three years previous to the survey.
- **Arizona Small Game Hunters' Opinions on Condor Conservation and Lead-Free Ammunition:** This study was conducted for the Arizona Game and Fish Department to examine the willingness of Arizona hunters to take actions to help curb the unintentional poisoning of wildlife from lead ammunition on Arizona and Utah lands. The research entailed four focus groups with small game, bird, furbearer, and varmint hunters.
- **Oregon Residents' Opinions on and Values Related to the Oregon Department of Fish and Wildlife:** This study was conducted to determine Oregon residents' attitudes toward wildlife and wildlife-related funding, as well as their knowledge of and opinions on the Oregon Department of Fish and Wildlife and its efforts.
- **Delaware Residents' Attitudes Toward Federal Aid Funding for Wildlife Management:** Delaware residents were surveyed regarding their knowledge of and opinions on funding for wildlife management in general and the Pittman-Robertson Act specifically.
- **Pennsylvania Residents' Opinions on and Attitudes Toward Nongame Wildlife:** This project determined Pennsylvania residents' opinions on and attitudes toward nongame wildlife, activities, priorities, and funding of the Game and Fish and Boat Commissions.
- **Opinions on Fish, Wildlife, and Land Use Among Vermont Residents, Hunters, and Anglers:** Responsive Management recently partnered with the Vermont Fish and Wildlife Department to survey residents, hunters, and anglers about their attitudes toward the Department, its mission, and alternative funding proposals.

- **Florida Residents' Attitudes Toward Bear Management in the State:** This study was conducted to explore residents' opinions on bear management, including public acceptance of or intolerance to bears, the frequency of encounters or conflicts with bears and how these encounters affect behaviors, awareness of and attitudes toward various bear management options, and other topics.
- **Trend Study Regarding Arizona Residents' Opinions on the Arizona Game and Fish Department and Outdoor Recreation in Arizona:** This study was conducted to explore Arizona residents' participation in hunting, fishing, boating, off-highway vehicle use, sport shooting, and wildlife viewing, as well as attitudes toward the Department's performance, wildlife value orientations, and the relationship between humans and natural systems.
- **Data Collection to Explore Nevada Hunters' and Anglers' Attitudes Toward License Fee Restructuring:** Responsive Management implemented a survey of licensed Nevada hunters and anglers to assess their preferences for and opinions on potential license restructuring, including new license offerings and stamp/permit/tag bundling options. The data was designed to help broaden funding support for the Nevada Department of Wildlife.
- **Kentucky Landowners' Attitudes Toward Land Management and Hunting Access:** This study determined private landowners' attitudes toward allowing hunting on their property, among other land use issues. In addition, the study evaluated landowners' familiarity with and willingness to participate in the Department's Private Lands Program.
- **North Carolina Residents' Attitudes and Beliefs Towards Canids:** This study explored state residents' attitudes and beliefs toward canids in five counties of interest, including social and spatial factors that inform attitudes and beliefs, how attitudes and beliefs differ by stakeholder or other constituent group, and attitudes toward cultural carrying capacity.
- **New Hampshire Residents' Opinions on the Status and Management of Big Game Populations:** Responsive Management conducted this study to determine opinions on big game populations and big game management, interest in wildlife, and participation in hunting.
- **Residents' Participation in Freshwater and Saltwater Sport Fishing in Mississippi:** This study was conducted for the Mississippi Department of Wildlife, Fisheries, and Parks to determine residents' participation in freshwater and saltwater fishing. The study entailed a scientific telephone survey of Mississippi residents.
- **Washington Residents' Attitudes Toward Wolves and Wolf Management:** This study was conducted for the Washington Department of Fish and Wildlife to determine residents' opinions on and attitudes toward wolf recovery and wolf management in the state. The study entailed a scientific telephone survey of Washington residents age 18 or older.

KEY PERSONNEL

Mark Damian Duda is the founder and executive director of Responsive Management. He has led Responsive Management since the firm's inception in 1990. 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. Mark has conducted more than 1,000 studies on how people relate to the outdoors. He 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[®] whose 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 seven years, Mark served as a columnist for *North American Hunter* and *North American Fisherman* magazines.

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 hunter, sport shooter, angler, boater, and birdwatcher.

Dr. Steven Bissell is a senior qualitative research associate with Responsive Management. In addition to working as a human dimensions researcher for more than 25 years, Steve has worked as a wildlife conservation officer, a nongame and endangered species biologist, and a land-use planner. He also served as the Head of Environmental Education for the Colorado Division of Wildlife. Steve is a pioneer in the use of focus groups to explore attitudes toward natural resource, fish and wildlife, and outdoor recreation issues. During his tenure with Responsive Management, Steve has analyzed data and reported findings from more than 100 studies on a range of issues. Steve holds a Ph.D. from the University of Colorado with a specialization in qualitative research methods.

Marty Jones is a senior quantitative research associate with Responsive Management. He has been with Responsive Management for 19 years. Marty serves as Responsive Management's lead technical report writer and is credited with writing more than 300 reports of survey findings. He also helps manage Responsive Management's quantitative data analysis. Prior to joining Responsive Management, Marty headed the technical writing department for a major engineering firm specializing in wetlands and land-use research. Marty's recent projects include a study for the Delaware Department of Natural Resources and Environmental Control to determine participation in and attitudes toward recycling; a trend study for the Arizona Game and Fish Department examining attitudes toward the agency and participation in outdoor recreation; and a study for the North Carolina Wildlife Resources Commission that looked at attitudes toward

migratory bird hunting on Sunday in the state. He also co-authored *The Sportsman's Voice: Hunting and Fishing in America*. Marty holds a master's degree from the University of Vermont.

Andrea Criscione is a senior research associate with Responsive Management. She has been with Responsive Management for 16 years and is a leader in survey design, having developed more than 200 survey instruments for an array of studies. In addition to managing projects and designing survey instruments, Andrea writes reports and moderates focus groups. Andrea was recently the project manager for a watershed-literacy survey of Carson River Watershed residents, a survey for the National Oceanic and Atmospheric Administration's National Hurricane Center to examine public understanding of tropical-storm-force wind graphics, and a survey of Maine residents, hunters, and landowners to assess their attitudes toward the management of deer, bear, moose, and turkey in the state. She is also a co-author of *The Sportsman's Voice: Hunting and Fishing in America*. Andrea holds a master's degree from Virginia Tech.

Tom Beppler is a senior research associate with Responsive Management. He has been with Responsive Management for 14 years. Tom manages projects, writes proposals, moderates focus groups, facilitates meetings, and writes and edits final reports. He was recently the project manager for a strategic direction planning study for the Wyoming Game and Fish Department, as well as for a needs assessment of the State of Connecticut's Conservation Education and Firearms Safety Program. Tom also recently conducted focus groups as part of a project for the Northwestern Indiana Regional Planning Commission to determine residents' knowledge of air quality issues and their opinions on air quality campaign messages. Tom received his bachelor's degree from James Madison University.

Patrick Doherty is a research associate statistician with Responsive Management. He has been with Responsive Management for 9 years. Patrick is primarily responsible for data analysis and the coding of survey instruments. Patrick recently managed the data analysis for a study for the National Oceanic and Atmospheric Administration's Coral Reef Conservation Program to determine U.S. Virgin Islands residents' attitudes toward coral reef management. His other recent projects include a longitudinal assessment of hunting, fishing, and sport shooting recruitment and retention programs, as well as a study for the Pennsylvania Game Commission to determine attitudes toward deer management in each of the Commonwealth's 22 Wildlife Management Units. He has analyzed survey data for the Florida Fish and Wildlife Conservation Commission, the Vermont Fish and Wildlife Department, and the Washington Department of Fish and Wildlife, among many others. Patrick received his bachelor's degree from the College of William & Mary.

Greg Hughes is a research associate statistician with Responsive Management. He has been with Responsive Management for 7 years. Greg's responsibilities include both statistical data analysis and technical writing for survey projects. Greg recently helped manage an evaluation of the North Dakota Game and Fish Department's Private Land Open To Sportsmen Program, a study for the Delaware Coastal Programs Office to explore decision-makers' needs regarding a variety of coastal management issues, and a survey for the Nebraska Game and Parks Commission to determine state residents' participation in outdoor recreation. Greg received his bachelor's degree from West Virginia University.

Alison Lanier is Responsive Management's business manager. She has been with Responsive Management for 22 years. Alison performs all of Responsive Management's administrative duties; maintains databases, accounts, and payroll; conducts business planning and development; and coordinates focus group logistics and recruitment. She recently managed focus groups of recreational boaters and commercial fishermen for a project for the BoatU.S. Foundation to reduce collisions with fixed commercial fishing gear, as well as focus groups with firearm owners who are infrequent or inactive shooters as part of research for the National Shooting Sports Foundation. Alison received her bachelor's degree from James Madison University.

Amanda Center is Responsive Management's survey center manager. Amanda has been with Responsive Management for 7 years and is responsible for survey implementation and management, including direct supervision of 75 professional interviewers. Amanda conducts in-depth project briefings with interviewing staff prior to their work on each study. She also monitors telephone workstations, thereby providing strict control over the data collection process. Since joining Responsive Management, Amanda has managed the data collection for numerous survey research projects, supervising interviewer staff and tracking completed surveys to ensure proper demographic and geographic representation. Amanda holds a master's degree from Walden University.

Responsive Management also maintains a full-service, state-of-the-art computer-assisted telephone survey center with 75 professional interviewers. To ensure that the data collected are of the highest quality, Responsive Management's interviewers are trained through lectures, role-playing, and video instruction, according to the standards established by the Council of American Survey Research Organizations.

ATTACHMENT: ADDITIONAL INFORMATION ABOUT RESPONSIVE MANAGEMENT

More information on Responsive Management's data collection capabilities and research experience, including additional examples of survey projects and client comments, is included on the pages that follow.

30 RESPONSIVE MANAGEMENT

30 years of continuous survey and human dimensions research only on natural resource and outdoor recreation issues



Responsive Management has conducted...

- Thirty years of continuous survey and human dimensions research only on natural resource and outdoor recreation issues
- More than 1,000 research studies only on natural resource and outdoor recreation issues
- Studies in all 50 states and 15 countries worldwide
- Research for every state fish and wildlife agency
- Research for all 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 most conservation NGOs, including the American Sportfishing Association, Archery Trade Association, Ducks Unlimited, Forest Landowners Association, Hunters' Leadership Forum, Izaak Walton League, National Shooting Sports Foundation, National Wildlife Federation, Recreational Boating and Fishing Foundation, Rocky Mountain Elk Foundation, and many more
- Research for numerous outdoor recreation industry leaders, such as Winchester Ammunition, Trijicon, Yamaha, and many others
- Data collection for the nation's top universities:

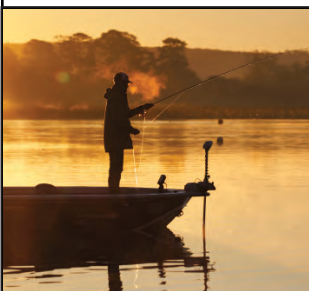
Auburn University, Clemson University, Colorado State University, Duke University, George Mason University, Michigan State University, Mississippi State University, North Carolina State University, Oregon State University, Penn State University, Rutgers University, Stanford University, Texas Tech, University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

Responsive Management conducts:

- Multi-modal surveys
- Telephone surveys
- Mail surveys
- Online surveys
- Intercept surveys
- Personal interviews
- Focus groups
- Needs assessments
- Message testing
- 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 large-scale 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

- ✓ Washington Residents' Attitudes Toward Wolves and Wolf Management
- ✓ Pennsylvania Residents' Attitudes Toward Wildlife Management
- ✓ Vermont Residents' and Hunters' Attitudes Toward Big Game Hunting and Management
- ✓ Maine Residents', Hunters', and Landowners' Attitudes Toward the Management of Big Game Species
- ✓ Maryland Residents', Hunters', and Landowners' Attitudes Toward Deer Hunting and Deer Management
- ✓ California Duck Hunters' and Suisun Marsh Users' Attitudes Toward Duck Hunting and Land Management
- ✓ Alabama Hunters' Attitudes Toward Predator Management
- ✓ Attitudes Toward Coyote and Red Wolf Management in North Carolina
- ✓ Delaware Residents' Opinions on Funding for Fish and Wildlife Management
- ✓ California Deer Hunters' Opinions on Deer Management in the State
- ✓ Virginia Residents' and Hunters' Opinions on Hunting Over Bait
- ✓ Understanding Public Attitudes Toward Human-Wildlife Conflict and Nuisance Wildlife Management in the Northeast United States
- ✓ Texas Residents' and Hunters' Attitudes Toward Captive Deer Breeding and Hunting Pen-Raised Deer
- ✓ Massachusetts Residents' Attitudes Toward Black Bear Management
- ✓ Florida Residents' Attitudes Toward Black Bear Management
- ✓ Louisiana Residents' Opinions on Black Bears
- ✓ Idaho Residents' and Sportsmen's Opinions on Wildlife Management
- ✓ Arizona Residents' Attitudes Toward Wildlife

Animal Rights & Welfare

- ✓ Americans' Attitudes Toward Animal Rights and Animal Welfare
- ✓ Consumer Attitudes Toward Alligator Products and Animal Rights Issues

Agency Relevancy

- ✓ Enhancing the Relevancy of the Pennsylvania Game Commission
- ✓ America's Wildlife Values: The Social Context of Wildlife Management in the U.S. (in cooperation with Colorado State University)
- ✓ Forging the Future of Wyoming's Wildlife: Research for the Game and Fish Department's Strategic Plan
- ✓ Marketing and Communications Plan for the Maine Department of Inland Fisheries and Wildlife, Division of Information and Education
- ✓ Oregon Residents' Opinions on and Values Related to Fish and 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
- ✓ Opinions on Condor Conservation and Lead-Free Ammunition

Outdoor Recreation

- ✓ Iowa Statewide Comprehensive Outdoor Recreation Plan (SCORP) Survey
- ✓ Delaware SCORP Survey
- ✓ Nebraska SCORP Survey
- ✓ Texas SCORP Survey
- ✓ Washington SCORP Survey
- ✓ West Virginia SCORP Survey
- ✓ Washington State Trails Plan
- ✓ Americans' Attitudes Toward Hunting, Fishing, Sport Shooting, and Trapping

Sport Shooting & Archery

- ✓ Sport Shooting Participation in the U.S.
- ✓ An Analysis of the Trend in Participation in Sport Shooting
- ✓ Archery Participation Among Adult United States Residents
- ✓ Archery Participation Among Youth
- ✓ Connecticut Conservation and Education Firearms Safety Program Needs Assessment

Hunting & Trapping

- ✓ Deer Hunting and Harvest Management in Vermont

- ✓ Oregon Deer and Elk Hunters' Attitudes Toward Big Game Management and Hunting Opportunities
- ✓ North Dakota Hunters' and Landowners' Opinions on the Private Land Open to Sportsmen (PLOTS) Program
- ✓ Opinions on the Nest Predator Bounty Program in South Dakota
- ✓ Attitudes Toward Hunting Migratory Birds on Sunday in North Carolina
- ✓ Mississippi Hunters' Opinion on Tagging of Deer and Wildlife Turkey
- ✓ Enhancing the Pennsylvania Game Commission's Hunter Access Program
- ✓ A Comparison of Split and Concurrent Firearms Deer Seasons in Pennsylvania
- ✓ Arkansas Hunters' Participation in and Opinions on Deer and Turkey Hunting
- ✓ Arizona Hunters' Opinions on the Order and Timing of the Firearm and Archery Elk Hunting Seasons
- ✓ Hunters' Perceptions of Chronic Wasting Disease and Agency Management Actions
- ✓ Wyoming Hunters' Opinions on Mule Deer Hunting and Management
- ✓ Attitudes Toward Hunting and Game Management in Washington
- ✓ Hunters' Attitudes Toward Hunting on Wildlife Management Areas in Georgia
- ✓ Trap Use, Furbearers Trapped, and Trapper Characteristics in the U.S.
- ✓ Public Attitudes Toward Furbearer Management in Maine

Hunter Harvest

- ✓ Alabama Hunter Harvest Survey
- ✓ Hunter Compliance With the Game Check System in Alabama
- ✓ California Hunter Harvest Survey
- ✓ Mississippi Hunter Harvest Survey
- ✓ Florida Deer Harvest Survey
- ✓ Florida Triennial Small Game Survey
- ✓ Harvest of Wildlife in Georgia
- ✓ Harvest of Small Game in Georgia
- ✓ Harvest of Turkey in Georgia

Fishing & Boating

- ✓ New York Angler Patterns, Preferences, Expenditures, and Attitudes Regarding the State's Freshwater Fisheries

Responsive Management

Current and Recently Completed Projects

- ✓ Maine Anglers' Opinions on Fisheries Management
- ✓ Vermont Licensed Anglers' Participation in and Opinions on Fishing
- ✓ Iowa Anglers' Participation in and Attitudes Toward Fishing
- ✓ Washington Licensed Guide and Recreational Angler Survey
- ✓ Washington Dedicated Funds Survey to Measure Fishing Participation
- ✓ New Hampshire Anglers' Participation in and Satisfaction With Fishing
- ✓ Indiana Anglers' Participation in and Attitudes Toward Fishing
- ✓ Trout Fishing at Greers Ferry Tailwater on the Little Red River in Arkansas
- ✓ Mississippi Residents' Participation in Freshwater and Saltwater Sport Fishing
- ✓ South Carolina Anglers' Participation in and Opinions on Marine Fishing
- ✓ Georgia Anglers' and Guides' Attitudes Toward Saltwater Fishing Issues
- ✓ Factors Influencing Boat Owners' Decision on Where to Register the Boat
- ✓ Recreational Boaters and Derelict Commercial Fishing Gear
- ✓ Enhancing Fishing Access Through a National Assessment of Recreational Boating Access

Coastal & Marine Resources

- ✓ South Florida Residents' Knowledge of and Attitudes Toward Coral Reefs and Coral Reef Management
- ✓ U.S. Virgin Islands Residents' Knowledge of and Attitudes Toward Coral Reefs and Coral Reef Management
- ✓ Gulf Coast Anglers' Opinions on the Red Snapper Fishery and Reef Management Strategies
- ✓ Attitudes Toward the Illegal Feeding and Harassment of Wild Dolphins
- ✓ Restoration of Bottlenose Dolphin and Sea Turtles in the Gulf of Mexico Following the Impacts of the Deepwater Horizon Oil Spill

Climate & Environmental Issues

- ✓ Trends in Delaware Residents' Opinions on Climate Change and Sea Level Rise
- ✓ Delaware Residents' Participation in and Opinions on Recycling

- ✓ Public Knowledge and Opinion of Stormwater Issues for the Clemson Extension Carolina Clear Program
- ✓ Public Survey on the National Hurricane Center's Arrival of Tropical-Storm-Force-Winds Graphics
- ✓ Knowledge and Perception of Air Quality Among Northwest Indiana Residents
- ✓ Consumer Attitudes Toward Recycling: Framing the Recycling Message
- ✓ Locavore Pilot Pre-Program, Post-Program, and Post-Season Survey Results
- ✓ Landowners' and Hunters' Opinions on the Impacts of Energy Development on PLOTS Land in North Dakota

R3: Recruitment, Retention, & Reactivation

- ✓ Actionable Strategies for Angler Recruitment, Retention, and Reactivation
- ✓ Reactivating Bowhunters: Evaluating the Effectiveness of Various Email Campaign Messages, Phases I & II
- ✓ Hunting, Fishing, and Sport Shooting Recruitment, Retention, and Reactivation: A Practitioner's Guide
- ✓ Reactivating Non-Shooting/Lapsed Firearm Owners
- ✓ Evaluating the Effectiveness of Hunting, Shooting, and Fishing Recruitment and Retention Programs
- ✓ Recruiting and Retaining Nontraditional Participants Into Fishing and Hunting Through Targeted Marketing, Instruction, Mentoring, and Social Reinforcement
- ✓ Factors Related to License Purchasing: A Comparison of Avid, Inconsistent, and One-Time License Buyers

Economics & Expenditures

- ✓ An Assessment of the Economic Impacts of Elk in Western North Carolina on Tourism Opportunities
- ✓ Understanding Anglers' Opinions on and the Economic Impact of the Tribal Fishing Program in Cherokee, NC
- ✓ Economic Impact of Saltwater Fishing in the Florida Keys
- ✓ An Analysis of the Economic Impact of the Collaborative Forest Landscape Restoration Program in the Osceola National Forest Region in Florida

- ✓ Economic Impact of the Deepwater Horizon Oil Spill in Alabama

Law Enforcement

- ✓ Planning for the Future of Conservation Law Enforcement in the United States
- ✓ Arkansas Residents' and Recreationists' Opinions on and Satisfaction With the Law Enforcement Activities of the Arkansas Game and Fish Commission
- ✓ Opinions on and Satisfaction With Department of Game and Inland Fisheries' Law Enforcement Activities

Marketing & Communications

- ✓ How to Debate and Communicate About Hunting: Communications Action Plan
- ✓ Communications Strategies to Increase Support for Hunting
- ✓ Public Perceptions of Messages in Favor of and in Opposition to Firearm Ownership
- ✓ Ammunition Consumption Study
- ✓ Watershed-Literacy Survey of Carson River Watershed Residents
- ✓ Opinions on *Arizona Wildlife Views* Magazine
- ✓ Opinions on *Wyoming Wildlife* Magazine
- ✓ 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

Assessment & Evaluation

- ✓ An Assessment of Agency, Industry, and NGO Attitudes Toward Fishing, Hunting, Sport Shooting, and Boating
- ✓ A Methodological and Technical Review of the USFS National Woodland Owner Survey
- ✓ An Assessment of Employee Morale Among U.S. Fish and Wildlife Service Employees in the Alaska Region
- ✓ Arkansas Game and Fish Commission Employee Satisfaction Survey
- ✓ An Evaluation of the National Fishing in Schools Program

See 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.

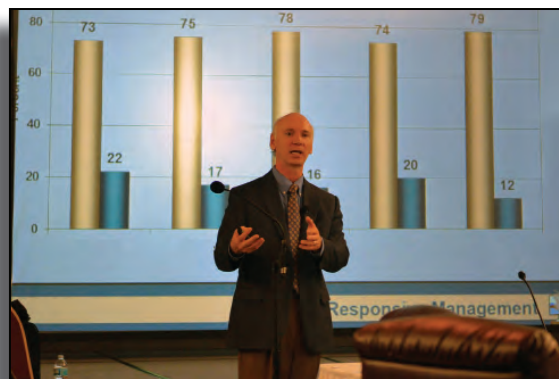
Mark Damian Duda, Executive Director



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 30 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. 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.



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STORY

Leaders of Conservation: Responsive Management Executive Director Mark Duda

BY: Daniel Xu + POSTED: 6/17/14

This interview with Responsive Management's Executive Director Mark Duda is part of OutdoorHub's Leaders of Conservation series, in which we sit down with leaders of the North American conservation movement to learn more about the stories behind their organizations and people.

According to a 2011 survey by the US Census Bureau, there are nearly 14 million hunters in the United States 16 years old and older. Hunters spent a total of 281.9 million days in the field and spent almost \$34 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 country.

"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

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 Hunters' Leadership Forum. Mark is an avid birdwatcher, hunter, sport shooter, angler, and boater.

