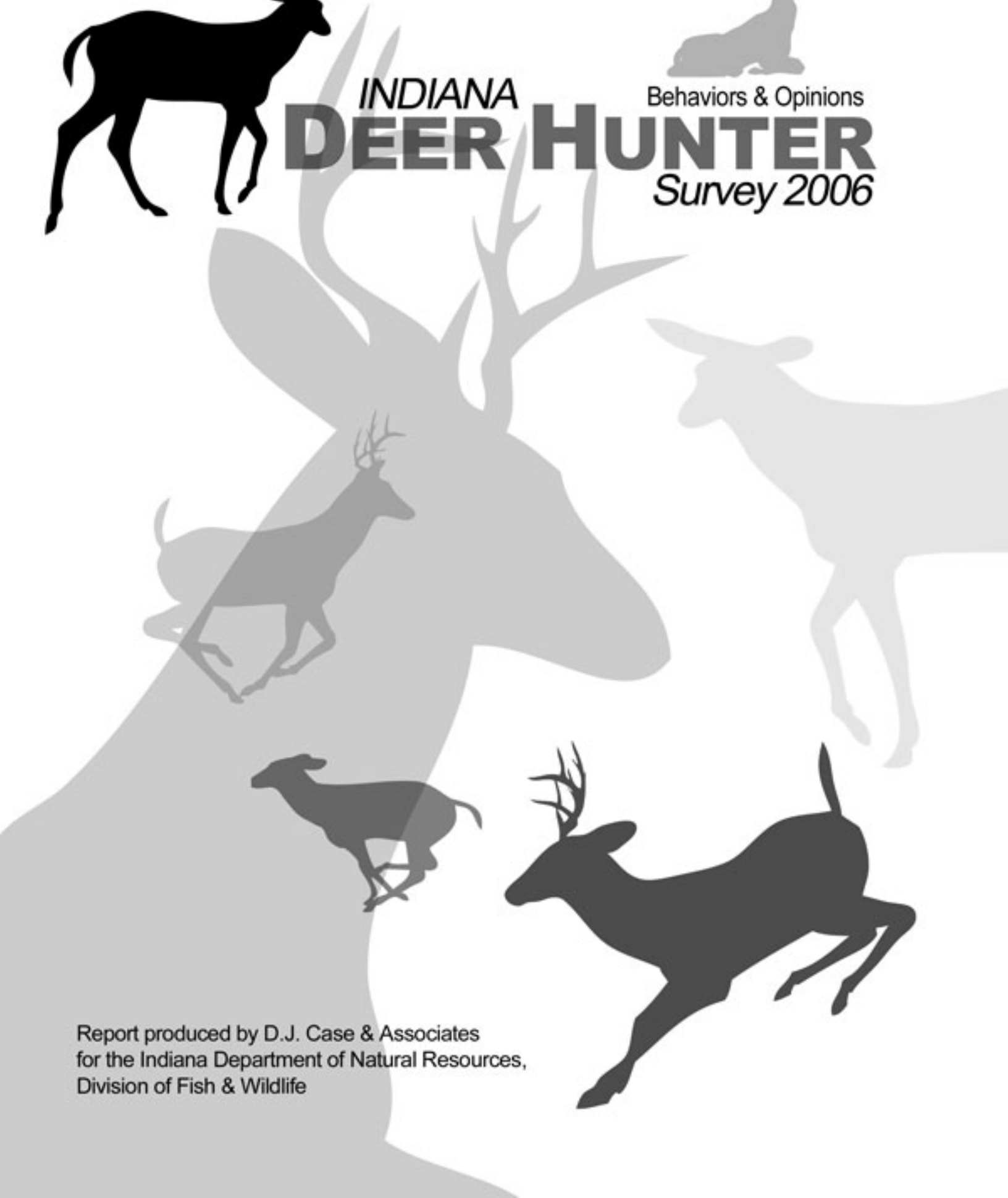
INDIANA DEER HUNTER

Behaviors & Opinions

Survey 2006



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Indiana Deer Hunter Survey 2006

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Executive Summary

From mid-June to mid-August, 2006, a mail survey of Indiana resident deer hunters who purchased 2005 Indiana deer hunting licenses was conducted for the Indiana Department of Natural Resources (IDNR). A stratified, random sample of 10,480 Indiana resident deer hunters was polled using contact information provided by IDNR through its point-of-sale database. After removing undeliverable addresses (changed addresses, passings, refusals) final response was 47% (4,566 respondents). Error tolerances for this sample are +/-1 percentage point (95% confidence level).

Key findings revealed:

- Almost two-thirds of Indiana deer hunters characterize deer hunting as "one of my most important recreational activities" (63%), and 19% said deer hunting was their "most important recreational activity." Indiana urbanites who are deer hunters are more likely than Indiana suburbanites and rural dwellers to characterize deer hunting as "my most important recreational activity."

- Most Indiana deer hunters tended to rate the overall success of Indiana's deer management program as "good" (55% statewide). More deer hunters were likely to evaluate the program as "excellent" (10% statewide) than "poor" (4% statewide). About one-quarter (26% statewide) characterized the program as "fair."

- When asked to express their sentiments toward Indiana's one-buck-rule as a continuing regulation, 48% of Indiana deer hunters responded "strongly support," and 23% said "moderately support." Indiana deer hunters who used *only* archery gear to deer hunt were especially supportive of one-buck-rule (64% "strongly support"), as well as those deer hunters using archery and muzzleloader gear *only* (63% "strongly support).

- Indiana deer hunters thought one-buck-rule (1) helped the state's deer herd management, (2) provided them opportunity to harvest a buck (small or large), (3) increased their opportunity to harvest a big buck, and (4) increased the number of bucks they see. Neutral sentiment was expressed toward the effects of one-buck-rule on increasing the number of antlerless deer seen, number of big bucks seen, and limiting deer hunters' chances to harvest the bucks they want. Indiana deer hunters as a group did not agree that one-buck-rule diminished their enjoyment of Indiana deer hunting.

- Of the various geographies over which one-buck-rule might be implemented (county-specific, block of counties, public land only, private land only), Indiana deer hunters indicated support for (41% strongly, 22% moderately) one-buck-rule *statewide* in Indiana.

- When asked if they would support a 3-year pilot-return to the former "two-buck-rule," 27% said they would "strongly support" the proposal, and another 27% said they "moderately support" itl, certainly reflecting confidence in Indiana Department of Natural Resources to do what's best for the state's deer herd and hunters, in light of their supportive sentiment toward one-buck-rule.

- Many (69%) respondents said they were either “very satisfied (28%) or “somewhat satisfied” (41%) with their overall hunting experiences. Moreover, majorities of hunters were either very or somewhat satisfied with chances they had to shoot an antlerless deer (69%), number of deer they saw (64%), and number of deer they harvested (51%). Slightly less than a majority said they were either very or somewhat satisfied with their chances to shoot an antlered buck (46%), and about one-quarter (23%) said they were satisfied with their chances to shoot a big buck.

- Hunters were asked how many deer they have to harvest in a year to feel satisfied with their harvest. Over half (53%) indicated they need to harvest one antlerless deer a season to feel satisfied with their harvest; and indeed, a majority of this group (55%) reported success in harvesting an antlerless deer (on average per year, over four years). In similar fashion, 77% of Indiana deer hunters said they need harvest only one buck to feel satisfied with their harvest in a year; and of this group, 60% reported success in harvesting a buck (on average per year, over four years).

- Indiana deer hunters expressed the degree to which they trusted each of a variety of groups to represent the interests of deer hunters like them. Accorded most trust were “avid/experienced deer hunters,” Indiana Department of Natural Resources, deer biologists, businesses promoting deer products, all deer hunters, and deer hunting guides. Accorded low trust were outdoor writers/TV personalities, the general public, legislators, and high fence operators.

- The average Indiana deer hunter is a middle-aged male who grew up in a predominantly rural setting and still resides in a rural area, who started deer hunting before 1975, and spends between $250 to $1,000 each year on deer hunting. However, 7% of Indiana deer hunters are females who show high affinity for deer hunting as a recreational activity, and who use a variety of hunting equipment. Analysis of the Indiana deer hunter population by age provides some encouragement that younger participants are being recruited to the activity.

- Analysis of reasons that Indiana deer hunters enjoy the activity revealed the top 5 to be “getting outdoors,” “getting close to nature,” “spending time with family and friends,” “introducing a child to hunting,” and “for food/meat.”

- Problems that Indiana deer hunters encounter are “finding a place to hunt,” “city growth,” “poor hunter ethics,” and “hunting pressure.”

- Although most Indiana deer hunters continue to gain no-fee access to land for deer hunting the 6% of Indiana deer hunters that paid for access to deer hunt in 2002, 2003, and 2004 jumped to 8% in 2005. Though the confidence intervals overlap on the two percentages—the 6% ranges statistically from 5% to 7% and 8% ranges from 7% to 9%--this increase in percentage of hunters paying an access fee may be the harbinger of a real change occurring on the Indiana deer hunting landscape.

- Analysis of participation by Indiana deer hunters from year to year suggests that there’s significant “churn,” with hunters choosing to participate 1 year, then not the next. Indiana’s Point-of-Sale database will allow quantification of this churn, with obvious implications for marketing to (or reminding) hunters to buy their deer licenses each year.

Introduction

Perhaps the wild animal that appeals most to American hunters is the deer. Not only is it pursued by more hunters and accounts for more hunter-days-afield than any other wild animal in the United States (USDI Fish and Wildlife Service, 2002), but interest in this quarry has given rise to a deer hunting mystique replete with special traditions, techniques, equipment—and today, TV programs.

Governmental interest in the welfare of deer extends well into America's past. Before 1720, most colonies had adopted seasonal restrictions on shooting deer (Wildlife Management Institute, 1975), though early regulations did little to prevent the near-demise of some populations due to habitat loss and market hunting.

Initial efforts in deer management came in the 1930s and 1940s with restocking and habitat management (Trefethen, 1975). Restoration continued with a shift to deer population management in the 1950s, 60s, and 70s. In the 1980s, there was growing recognition that many of the concerns arising about deer management were no longer issues of restoration and population maintenance, but rather deer abundance or overabundance.

In particular, the white-tailed deer's (*Odocoileus virginianus)* remarkable adaptability to urban and suburban settings brought the animal in sharp contact with a rapidly urbanizing U.S. landscape. Issues of deer/crop depredation, deer/vehicle strikes, and deer disease, once only concerns in rural areas, became significant issues in suburbia. Deer moved into urban and suburban backyards, often lured by food provided by well-meaning residents, only to end up feasting on the costly ornamental shrubs, cultivars, and gardens that suburbanites planted, much to residents' dismay. Too, deer movement across suburbia's twisting maze of roads and interstates inevitably led to tragic accidents; and the close proximity of deer to human population concentrations raised worries of disease, whether real or imagined.

Yet the white-tailed deer's mystique continues to grow even today, marked by the emergence over the last decade of a huge commercial market that promotes an astonishing array of deer hunting paraphernalia—calls , scents, tree-stands, ground-blinds, decoys, camouflaged clothing, ever-more-sophisticated archery and muzzleloader technologies, and on and on. And the virtues and practically-guaranteed effectiveness of these products are promoted in a similarly astonishing parade of weekly TV productions on the Outdoor Channel, Versus (formerly OLN), and others that feature episode after episode of show-hosts harvesting magnificent antlered bucks—for most hunters, the sighting of which would constitute a "lifetime memory"—much less harvesting one of these magnificent animals.

This fascination with big bucks—indeed, the simple recognition that many male deer will develop relatively large antlers if allowed to live to 3 years and beyond—has promoted a philosophy or management emphasis promoting large-antlered deer. Emerging from the large, privately-managed tracts in Texas and the southeastern United States, and then spreading to other parts of the U.S., the argument goes that state wildlife agencies should embrace the same "big buck" thinking and management practices that private ranches and hunting clubs have instituted to produce large-antlered deer. But whether it's possible or practical for state wildlife agencies to do this even if public will wanted it remains to be seen. Agencies must balance the often divergent expectations and opinions of hunters, landowners, and the general public about deer across vast state geographies—not just one ranch or farm.

So, in this dizzying swirl of deer-mania—practically unimaginable even a decade ago when state wildlife agencies were more concerned with what appeared to be rapid emergence and influence of an anti-hunting constituency in the United States—agencies are still very interested in what the "average" deer hunter thinks. Ultimately, it was the political and financial will of the average hunter that was instrumental in restoring the white-tailed deer, and it is in the interest of letting this hunter be heard that the following study was conducted.

Background

In spring, 2006, Indiana Department of Natural Resources (IDNR) contracted with D.J. Case & Associates (DJ Case) to administer a survey of Indiana deer hunters—the Indiana Deer Hunter Survey 2006 (IDHS06).

Objectives of this survey were to measure Indiana deer hunters':

- Sentiments toward the importance of deer hunting in their lives;
- Overall perceptions and satisfactions with Indiana deer numbers, the state's deer herd management in general, and in particular, opinions of Indiana's "one-buck-rule ("OBR");
- Past involvement and current interest in deer hunting, including recent experiences, motivations for hunting, and selected hunter characteristics.

IDNR staff and DJ Case collaborated to develop survey content, as well as refine survey methodology and review the questionnaire, cover letters, and reminder postcards (Appendix A). Questionnaire revisions continued until mid-May 2006, when the questionnaire was sent to printing at the Assessment Resource Center (ARC) at the University of Missouri, the organization that printed, mailed, tracked, and machine-scanned the questionnaires, then provided the dataset.

Methods

Sampling Frame

IDNR provided DJ Case with a stratified, random sample of names and addresses selected from its point-of-sale (POS) database, totaling 10,500 resident deer hunters purchasing Indiana deer hunting licenses in 2005. These names were amply distributed across the license types available to deer hunters in Indiana; that is, oversampling license types to allow analysis by licenses that otherwise might be effectively "undersampled" in a simple, random sample of Indiana deer hunters (such as Lifetime and Youth licenses):

- Archery License: 4,000
- Firearms License: 2,000
- Muzzleloader License 2,000
- Lifetime License 2,000
- Youth License 500

DJ Case first examined this dataset for duplicate names (multiple license purchases), omitting each found. Then, addresses were checked at the U.S. Postal Service for

deliverability; 909 undeliverable names and addresses were identified, revealing the somewhat surprising fact that 9% of deer hunter addresses from the IDNR POS database were already outdated a mere 6-months following Indiana's 2005 deer seasons. These non-deliverables were replaced with new contacts of the same license types, resulting in a final contact number of 10,480.

Survey Response

A 47% response (4,562 respondents) was achieved by August 8, 2006, the cut-off to accept surveys (Table 1).

The survey was conducted in two waves:

Wave 1: This first postal wave consisted of a questionnaire (Appendix A) sent by first class mail to each of the 10,480 in the original sample (postmarked, Columbia, MO, June 16, 2006). A separate cover letter (signed by IDNR's Director Kyle Hupfer, with IDNR contact information, Appendix A) explained the importance of the survey and solicited the hunter's participation.

TABLE 1. Fate of IDHS06 Questionnaires, and Composition (by %) of Response Group by License Type.

Fate of Surveys	**N**	**Percent**
A. Total Surveys Sent	10480	
B. Undeliverable	671	
C. Deceased	1	
D. Total Surveys Received A – (B + C) = D	9808	
E. Wave 1 Paper Completed	2897	29.5%
F. Wave 1 Web Completed	341	3.5%
G. Wave 2 Paper Completed	1245	13.0%
H. Wave 2 Web Completed	88	.9%
I. Total Surveys Completed E + F + G + H = I	**4,571**	**46.6%**
J. Refused participation W1	3	
K. Refused participation W2	2	
L. Total Response I + J + K = L	**4,566**	

Lifetime License	19%	847
Archery License	39%	1761
Muzzleloader License	20%	898
Firearm License	19%	858
Youth License	4%	202
Total		4566

The questionnaire was typeset in 4-page machine-scannable (response-bubble) format, with a final open-ended, "Any additional comments or suggestions." A postage-paid return envelope was enclosed. A web option encouraged respondent to complete the survey on-line (internet) if more convenient than responding by mail (www.INdeersurvey.com). A first class reminder postcard (Appendix A) was sent to each hunter the week following initial contact. Each survey was opened individually upon its return and examined to correct any data entry issues (mainly, ensuring response bubbles were completely filled-in by the respondent).

Wave 2: A second mailing—consisting of replacement questionnaire, cover letter signed by Director Kyle Hupfer appealing for hunter participation, and postage paid return envelope—was sent to each non-respondent on July 26, 2006. In summary, the final tally of returned, usable forms (after removing undeliverable surveys) was 4,566 (47%); DJ Case's pre-survey project prospectus to IDNR estimated a 50% response.