Hunter Education Session

Identifying and Responding to Antihunting Sentiment

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Abstract: We compared Texas antihunters with hunters and neutrals in terms of 8 demographic characteristics, their views on 6 reasons for hunting, and opinions on 7 environmental statements. Antihunters were nearly indistinguishable from neutrals in demographic characteristics, levels of opposition to hunting, and environmental opinions. Membership in or desire to become a member of an antihunting organization does not necessarily identify an antihunter as evidenced by a measurable degree of antihunting sentiment among neutrals. Antihunters differed from hunters more in terms of demographic characteristics and all reasons for hunting than in environmental opinions. We offer 3 responses to address antihunting sentiments including: telling the real story about hunting and hunters, incorporating wildlife management education into public school curricula; and training hunters in ethics and public relations.

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The growth of antihunting sentiment among the public could challenge the management efforts of wildlife professionals (Berryman 1987). Recent articles have addressed the need to understand the magnitude of antihunting sentiment among the general public and to describe the background characteristics of hunting opponents (Decker and Brown 1987, Gentile 1987). Need for this type of information is critical where hunting revenues make significant contributions to the economies of states and their local communities and where lease hunting is a successful method of wildlife management. This is particularly the case in Texas (Adams and Thomas 1983, Pope et al. 1984).

We conducted a survey to describe Texas residents who are antihunters and to distinguish them from hunters and people who are neutral on hunting. Next, we compared the 3 groups' responses regarding 6 reasons for hunting and their environmental opinions. From past studies we expected antihunters to be older, white, urban, high income, women (Shaw 1977, Kellert 1978), to voice a high level of disapproval of hunting for any reason (Appelgate 1984), and to have the same

concerns as hunters for the environment and conservation of wildlife (Shaw 1977). Finally, we provided 3 methods of responding to antihunting sentiment among the general public.

Methods

In spring 1988, we conducted telephone interviews with 4,915 Texas residents. Generation of a random sample was achieved by interviewing a member of a household who was ≥18 years of age and who had had the most recent birthday. Sample representativeness was assessed in terms of sex and ethnicity and compared to 1985 population estimates (Murdock et al. 1988).

For this study, respondents were divided into 3 groups—hunters, antihunters, and neutrals—by using a 2-stage process. In the first stage, groups were first identified as hunters or nonhunters based on their response to the question, "Have you hunted in Texas within the past three years"? In the second stage, nonhunters were divided into antihunters or neutrals based on membership or desire for membership in an antihunting organization. An antihunter indicated membership or desire to be a member whereas neutrals did not. The hunter group was also checked on membership in an antihunting organization.

Next, we tested demographic differences among the 3 groups using gender, age, years of Texas residence, education, urban or rural residence, race, household size, and income. Logistic regression determined which of the 8 demographic characteristics accounted for significant ($P \leq 0.05$) variance between groups (SAS, 1988).

Logit analysis was used to determine whether the variable of group membership (e.g., antihunter, hunter, or neutral) accounted for differences in respondents opinions on hunting and environmental issues. The formula for the logit model was:

$$\text{Log}\,[P/(1-P)] = \lambda + \lambda_{\text{GROUP}},$$

where λ = intercept, λ_{GROUP} = group membership (e.g., hunters = 1, neutrals = 2, antihunters = 3), and P = probability of a negative response to each reason for hunting and environmental statement (SAS, 1988).

We did not expect antihunters to approve of hunting for any reason whether it be for food, recreation, predator control, trophies, profit, or managing animal numbers or that group membership would influence respondents' opinions regarding 7 statement about the condition or management of Texas habitats and wildlife.

Results

Completed interviews were obtained from 2,050 (52%) Texas residents. Nonrespondents were more likely to be women (69%) and elderly (≥69 years, 37%) men or women. These characteristics were typical of nonrespondents reported in other telephone surveys (Hawkins 1975). Since sample representativeness was statistically different for ethnicity only, 1985 ethnicity estimates were used to weight the survey

data. Because of this weighting, the sample size was adjusted from 2,050 to 2,078. there was sample bias on low-income and low-education groups and households without telephones; however, this bias is typical for these groups and is difficult to minimize in telephone surveys (Frey 1983:35).

Demographic Characteristics of Antihunters

Only 5% (N = 111) of 2,057 respondents indicated membership in or a desire to become members of an antihunting organization; 478 and 1,468 of the respondents were classified as hunters and neutrals, respectively. Twenty-one respondents had gone hunting and met the criteria of an antihunter. This group was excluded from further analysis because the reason for their inconsistent responses could not be determined.

The majority of antihunters were urban (64%, population ≥50,000), young (63%, age range = 18–34), and women (68%) but they were nearly evenly distributed between white and nonwhite ethnicities, incomes above and below $25,000 per annum, and years of Texas residence more and less than 25 years. Most (51%) had only elementary or high school levels of education; 27% had college or graduate levels of education.

Logistic regression identified which of the 8 demographic variables best distinguished antihunters from hunters and from neutrals. Maximum likelihood ratios (MLR) at or near 1.00 indicated the demographic characteristics accounted for nearly all of the variation in group membership. Demographic characteristics that had the highest probability of differentiating antihunters from hunters were sex, age, years lived in Texas, residence, race, and income; but age was the only variable that distinguished antihunters from neutrals.

These results were only in partial agreement with the findings of Shaw (1977) and Kellert (1978). For example, antihunters in Texas are young, not older, women and are not predominantly white. They are not highly educated or predominantly in high income groups. We found that antihunters were more like the neutral than the hunter population. These findings indicate that antihunters among the Texas public represent a small but broader demographic subset of the general population than was previously reported.

Antihunters' Views on Hunting

Levels of support or opposition to 6 reasons for hunting differed among antihunters, hunters, and neutrals. Majorities of antihunters favor hunting for food (62%), predator control (54%), and game management (51%). Conversely, they are highly opposed to hunting for making a profit, e.g., selling animal skins (93%), as a form of recreation (87%), and for obtaining trophies (86%). Average level of opposition to all 6 reasons for hunting by antihunters was 64% (range = 34–93%) compared to 44% (range = 13–88%) for neutrals and 32% (range = 5–74%) for hunters. Twenty-five percent of the respondents were unsure whether they opposed or favored a reason for hunting, indicating that they had definite opinions on each reason. For example, 57% of the antihunters opposed 4 or more of the reasons given, compared

to 24% and 9% of neutrals and hunters, respectively. These data revealed a degree of latent antihunting sentiment among the neutral group.

Logit analysis revealed that group membership was a highly significant factor (MLR = 1) influencing respondent's opposition to a reason for hunting. Antihunters are less likely than hunters to favor hunting regardless of reason. Comparatively, both neutrals and antihunters are likely to oppose hunting for all reasons except for recreation and predator control.

Environmental Attitudes of Antihunters, Hunters, and Neutrals

Group membership accounted for few differences in the opinions of respondents concerning several statements about the Texas environment or its management. Hunters were more likely than antihunters to agree that parts of the Texas natural environment are getting better, natural areas for wildlife should not be included in city development plans, Texas has effective wildlife conservation programs, and the Texas public is concerned about forest management practices in the state. There were no differences between neutrals and antihunters.

Shaw (1977) likewise found that hunters and antihunters were both concerned about the state of the environment and the future of wildlife. However, our study revealed greater consensus between neutrals' and antihunters' opinions concerning the environment than hunters and antihunters.

Antihunters among the Texas public are nearly indistinguishable from neutrals in demographic characteristics, levels of opposition to hunting, and environmental opinions. Membership in or desire to become a member of an antihunting organization does not necessarily identify an antihunter as evidenced by a measurable degree of antihunting sentiment among neutrals. Antihunters differ from hunters in several demographic characteristics and on all reasons for hunting. However, they differ less in environmental opinions.

Because our study focused on Texas antihunters, the results can not be generalized to the U.S. population. However, it is reasonable to assume that other states with large urban populations will inherently contain people with antihunting sentiments.

Responding to Antihunting Sentiments

Antihunting sentiment among the American public needs to be addressed using the most fundamental of management strategies, i.e., public education. Appelgate (1979) suggested that declines in antihunting sentiment among the New Jersey public may have been the result of large-scale public education programs by management agencies and private organizations. However, these programs were reactionary to previous findings on the magnitude of antihunting sentiment (Appelgate 1973). In past articles, we advocated a strong proactionary posture on the part of the wildlife profession regarding public education (Adams and Thomas 1986, Adams 1989). Antihunting sentiment needs to be addressed through the development of educational programs that tell the real story about hunting and hunters, incorporate wildlife

management education into public school curricula, and train hunters in ethics and public relations.

Telling the Real Story About Hunting and Hunters

Public perceptions of hunting and hunters will be influenced through mass media productions. The 1975 television program, *Guns of Autumn*, cast a highly negative image of hunters and hunting. The wildlife profession should develop a television program that portrays a positive image of hunting and hunters. Such a program could include the main reason(s) why people hunt, the entire range of activities involved in hunting, the backgrounds and attitudes of hunters concerning wildlife, the code of ethics to which serious hunters subscribe, and the financial commitments hunters and antihunters make to ensure the future of wildlife. This program needs to be developed for prime-time television, including the major and public broadcasting networks. Program sponsors should include those agencies and organizations that have the most to gain from a positive public perception of hunting (e.g., state departments of natural resources, National Rifle Association, The Wildlife Society, and regional and international associations of fish and wildlife agencies). We already have an excellent beginning in the type of production needed through *The Un-endangered Species: the Success of Wildlife Management in North America*, an educational (e.g., grades 7–12) production of the International Association of Fish and Wildlife Agencies (IAFWA).

Incorporating Wildlife Management Education Into Public Schools

Refusal by the wildlife profession to put education on a parity level with other components of the management process will inadvertently cause an increase of antihunters among the general public. Adams (1989) found that the token attention given to education within the profession focused heavily on professional rather than public concerns. Additionally, Adams et al. (1988) found that state natural resource agencies invest $0.23 cents per capita in education compared to $1.22 per capita for wildlife management. They further found that 39% of the education budget goes to magazine production compared to 6% and 5% for television and teacher training programs, respectively. Perhaps these data explain why 85% of our respondents in this study did not know which state agency was responsible for managing the state's wildlife resources.

Education may not change the views of antihunters toward hunting but it may curtail their recruitment efforts within the neutral population. Three criteria will need to be met before wildlife management education can be directly incorporated into public schools. These criteria are (1) a state-mandated curriculum that provides an entry point, (2) teacher training in wildlife management, and (3) teaching as a career option within the wildlife profession. All criteria can be met through agriscience education. For example, agriscience teachers in Texas and other states are adopting wildlife and fisheries management curricula to make their programs more relevant to students. This change in curriculum emphasis is being jointly planned

and coordinated by the state education agency and Departments of Agricultural Education and Wildlife and Fisheries Sciences at Texas A&M University (Adams and Eudy 1990). Missouri agriscience teachers are already using a wildlife and fisheries management curriculum produced by the Missouri Department of Conservation (Paul White, curriculum specialist, pers. commun.).

Training Hunters in Ethics and Public Relations

The public image of hunting is influenced by hunter behavior, appearance, and attitudes. Hunters need to be advocates and practitioners of the highest hunting standards and ethics. They need to clean their own ranks by turning in poachers, carefully selecting hunting partners, and openly challenging those who do not subscribe to these standards. Hunter education programs need to stress ethics and public relations as well as safety. Perhaps a Hunter's Code of Ethics that articulates these standards could be incorporated into hunter education programs.

Literature Cited

Adams, C. E. 1989. Broadening the paradigm of natural resource management. Trans. North. Am. Wildl. and Nat. Resour. Conf. 54:483–488.

——— and J. L. Eudy. 1990. Trends and opportunities in natural resource education. Trans. North Am. Wildl. and Nat. Resour. Conf. 55 (in press.

———, R. A. Stone, and J. K. Thomas. 1988. Conservation education within information and education divisions of state natural resource agencies. Wildl. Soc. Bul. 16:329–333.

——— and J. K. Thomas. 1983. Characteristics and opinions of Texas hunters. Proc. Annu. Conf. Southeast. Assoc. Fish. and Wildl. Agencies 37:244–251.

——— and ———. 1986. Wildlife education: Present status and future needs. Wildl. Soc. Bul. 14:479–486.

Appelgate, J. E. 1973. Some factors associated with attitudes toward hunting in New Jersey residents. Trans. North. Am. Wildl. and Nat. Resour. Conf. 38:267–273.

———. 1984. Attitudes toward deer hunting in New Jersey: 1972–1982. Wildl. Soc. Bul. 12:19–22.

Berryman, J. 1987. Socioeconomic values of the wildlife resource: are we really serious? Pages 5–11 *in* D. J. Decker and G. R. Goff, eds. Valuing wildlife: economic and social perspectives. Westview Press, Boulder, Colo.

Decker, D. J. and T. L. Brown. 1987. How animal rightists view the "wildlife management-hunting system." Wildl. Soc. Bul. 15:599–602.

Frey, J. H. 1983. Survey research by telephone. Sage Publ. Inc. Beverly Hills, Calif. 208pp.

Gentile, J. R. 1987. The evolution of antitrapping sentiment in the United States: a review and commentary. Wildl. Soc. Bul. 15:490–503.

Hawkins, D. F. 1975. Estimation of nonresponse bias. Sociol. Methods Res. 3:461–485.

Kellert, S. R. 1978. Attitudes and characteristics of hunters and antihunters. Trans. North. Am. Wildl. and Nat. Resour. Conf. 43:412–423.

Murdock, S. H., R. R. Hamm, K. F. Backman, and S. Hwang. 1988. The future populations of Texas: scenarios of growth and their implications for public and private services. Texas Agric. Exp. Sta. Tech. Rep. 88–3. 134pp.

Pope III, C. A., C. E. Adams, and J. K. Thomas. 1984. The recreational and aesthetic value of wildlife in Texas. J. Leisure Res. 16:51–60.

SAS Institute Inc. 1988. SAS User's Guide: Statistics. Cary, N.C. 189–282.

Shaw, W. W. 1977. A survey of hunting opponents. Wildl. Soc. Bul. 5:19–24.

———. 1978. The American disposition toward hunting in 1976. Wildl. Soc. Bul. 6:33–35.