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Specializing in Survey Research on Natural Resource and Outdoor Recreation Issues

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Pennsylvania Residents' Opinions on and Attitudes Toward Black Bears

Responsive Management recently completed a major study to measure public knowledge of and attitudes toward black bears to help the Pennsylvania Game

Commission (PGC) meet its goals for successfully managing the species in Pennsylvania. Areas of inquiry include attitudes about black bears in general, opinions on black bear population levels, opinions on the hunting of black bears and black bear management, experience with human-bear conflicts, and knowledge of black bears and sources of information.

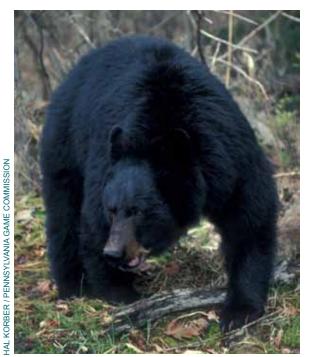
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Pennsylvania's black bear population has increased substantially in recent decades, and black bears are now near record numbers in many areas of the state, according to the PGC. At the same time, more people are moving into areas

of the state occupied by black bears, resulting in more human-bear encounters. Public education on species management, the habits of bears, and how to handle bear encounters has therefore become more important than ever.

Equally important is the need to integrate the biological and human aspects of black bear management. In this study, Responsive Management's research team integrated geographic information system (GIS) 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 wildlife management units (WMUs). This methodology will help state wildlife professionals to more effectively manage the species

by integrating findings regarding public opinion and knowledge with the goals of the state's Black Bear Management Plan on a per-WMU basis.



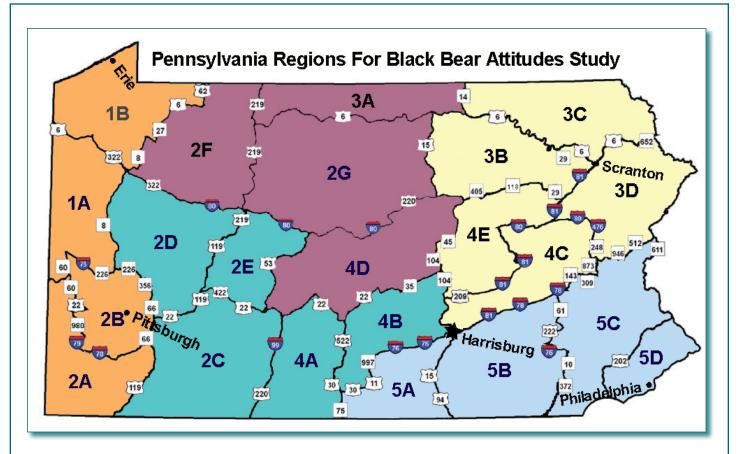
There are 22 WMUs in Pennsylvania, and for this study they were grouped into 5 regions, as shown in the above map: Western, North Central, South Central, Northeastern, and Southeastern. These regions were created for this study alone and have no relation to the PGC's administrative regions.

Information on a per-WMU basis was obtained for all but the Western and Southeastern Regions, which have lower bear densities than the other regions and therefore were of slightly less importance to the study; for these two regions, information was obtained

at the regional level. For the remaining WMUs, the sample size was large enough that comparing results between WMUs was possible.

The researchers obtained 4,411 completed interviews. Findings are reported at a 95% confidence interval. For the entire sample, the sampling error is at most plus or minus 1.48 percentage points. This means 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 plus or minus 1.48 percentage points of each other.

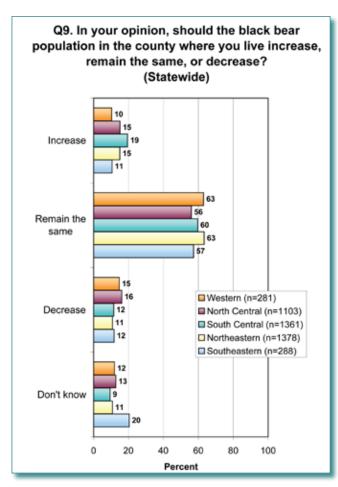
One major finding of the study was that 59% of Pennsylvania residents—hunters and non-hunters alike—think that the black bear population in their



county should remain the same. "Most populations appear to be at or slightly above social carrying capacity," said PGC Wildlife Management Director Calvin DuBrock.

At least 50% of residents in each WMU want bear populations to stay the same. In some WMUs, however, that percentage was only at or slightly above 50% (WMUs 2F, 2G, and 3A), whereas in others it exceeded 60% (WMUs 3D, 4C, and 4E). Regarding levels of opposition to a stable black bear population, results among the WMUs were similar, but residents wanted opposite outcomes depending on the WMU in which they lived. For example, WMUs 2G and 4B both had about 43% opposition to the stable population. Those opposed in WMU 2G, in the center of Pennsylvania's black bear range, tended to want a smaller population; those opposed in WMU 4B, on the periphery of Pennsylvania's black bear range, tended to want a larger population.

It appears that most residents want some distance between themselves and black bears but are otherwise amenable to having them in their county: 15% are comfortable with having black bears in their yard; 24% do not want them in their yard but are comfortable having them in their township; 40% say that they want black bears in their county, but not in their township or city; and 21% are



uncomfortable having black bears in their county at all. Respondents from the North Central and South Central Regions exhibit the most comfort with having black bears around, whereas respondents from the Western and Southeastern Regions exhibit the least comfort.

Other findings of the study include the following:

- Self-professed knowledge about black bears among Pennsylvania residents is low: 27% say that they know a great deal or moderate amount (with only 3% saying that they know a great deal), and 73% say that they know a little or nothing. Residents from the North Central, South Central, and Northeastern Regions are slightly more likely than respondents from the Western and Southeastern Regions to say that they know a great deal or moderate amount about black bears.
- The large majority of Pennsylvania residents (70%) support the legal, regulated hunting of black bears, while 23% oppose; 7% don't know. Respondents from the North Central and South Central Regions are slightly more likely than respondents from other regions to support hunting of black bears. Conversely, respondents from the Southeastern Region are slightly more likely than respondents from other regions to oppose hunting of black bears.
- Common reasons for supporting the hunting of black bears include that hunting is the best way to control black bear populations (49% of those who support), that population control is needed (34%), that the respondent simply is not opposed to hunting in general (18%), and that hunting black bears in Pennsylvania is a tradition (13%). The feeling that black bears threaten human safety is not a particularly important reason—only 7% of those who support hunting of black bears gave this reason for supporting black bear hunting.

- The most common reason for opposing the hunting of black bears is a general opposition to hunting—the top reason by far at 57% of those who oppose. Other common reasons (but well below the general opposition to hunting) are the respondent's feeling that other methods of population control are better (16%), an opposition to trophy hunting (8%), and that the black bear population is too low (7%), among others.
- The large majority of residents (79%) agree that black bears should be managed to control their population size; even in the southeast portion of the state, where bears and human-bear conflicts are relatively uncommon, 77% of respondents felt this way. Meanwhile, 14% oppose such management.
- Regarding nuisance bears, 5% of respondents report experiencing property damage and/or other problems with black bears at their primary home within the previous 2 years. North Central Region respondents are the most likely to have had problems with black bears in the past 2 years; Western and Southeastern Region respondents are the least likely to have had problems.
- There is overwhelming support for non-lethal control of nuisance black bears in different situations. The most support is for capturing and relocating a bear that is causing property damage (97%), followed by using non-lethal repellents (e.g., pepper spray, rubber ammunition) (91%), capturing and relocating a bear that has attempted to enter or has actually entered a building (88%), and capturing and relocating a bear that has caused agricultural damage (87%).

The full report, including a detailed explanation of the study methodology and correlations among individual responses and among the regions designated for this study, is available at http://www.responsivemanagement.com/download/reports/PA_Black_Bear_Report.pdf (1.83MB PDF).