Pennsylvania Residents' Attitudes Toward Wildlife Management



Conducted for the Pennsylvania Game Commission

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Responsive Management National Office

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EXECUTIVE SUMMARY

INTRODUCTION AND METHODOLOGY

This study was conducted for the Pennsylvania Game Commission (PGC) to determine Pennsylvania residents' attitudes toward wildlife management. Specifically, the study assessed attitudes toward the management of several big game species, concerns about wildlife-human conflicts, the potential reintroduction of the American marten, and awareness of wildlife diseases, among other topics. The study entailed a scientific, probability-based telephone survey of Pennsylvania residents 18 years old or older.

For the survey, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones (both landlines and cell phones were called in their proper proportions). Additionally, telephone surveys, relative to mail or online surveys, allow for more scientific sampling and data collection, provide higher quality data, obtain higher response rates, are more timely, and are more cost-effective. Telephone surveys also have fewer negative effects on the environment than do mail surveys because of reduced use of paper and reduced energy consumption for delivering and returning the questionnaires.

The telephone survey questionnaire was developed cooperatively by Responsive Management and the PGC, based in part on previous surveys. The sample of Pennsylvania residents was obtained from Marketing Systems Group.

The sample was stratified to ensure that approximately 150 interviews would be obtained within each of Pennsylvania's 22 Wildlife Management Units (WMUs). The WMUs were weighted so that they would be in their proper proportions in the statewide data.

The survey was conducted in June and July 2023, and Responsive Management obtained 3,428 completed interviews. The tabulation below shows the number of completed interviews obtained within each WMU.

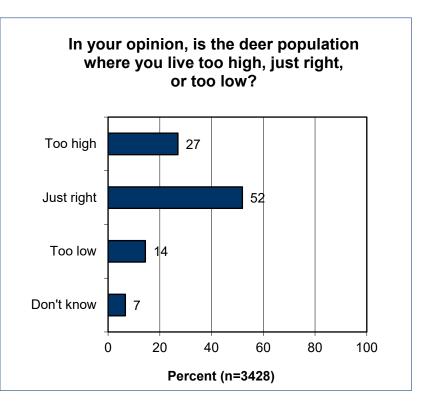
WMU	Number of completed interviews	WMU	Number of completed interviews
1A	156	3C	152
1B	158	3D	152
2A	151	4A	154
2B	157	4B	150
2C	153	4C	151
2D	159	4D	154
2E	155	4E	151
2F	156	5A	160
2G	179	5B	157
3A	151	5C	158
3B	155	5D	159

The analysis of data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management. The sampling error for the entire sample of adult Pennsylvania residents is at most plus or minus 1.67 percentage points.

ATTITUDES TOWARD DEER

The majority of Pennsylvania residents (52%) say that the deer population in their neighborhoods is just right. Otherwise, more of them say it is too high (27%) than too low (14%). The Southwest and Northwest Regions have the highest percentages of residents who say that the deer population is too high.

A little more than a third (36%) of Pennsylvania residents have taken a trip to view deer, including 13% who did so in the previous 12 months. About a third of them used a spotlight to view them at night.



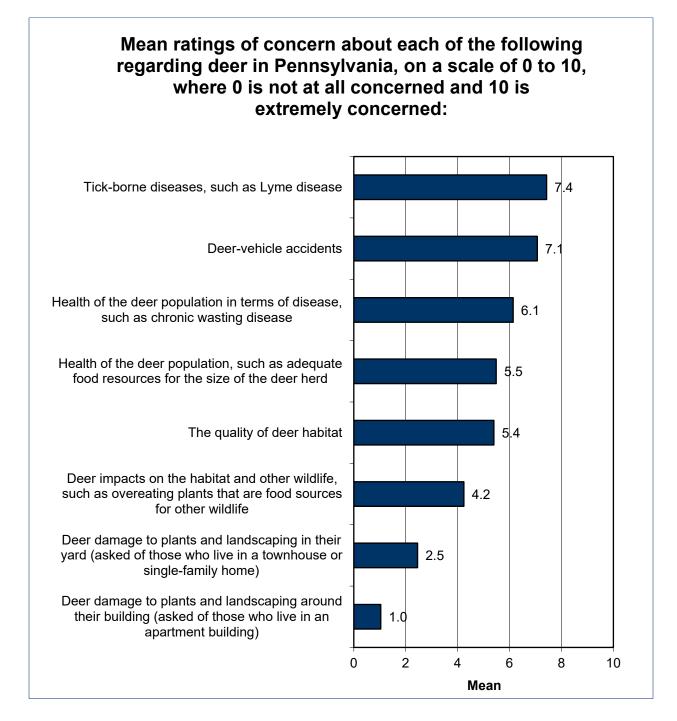
Pennsylvania residents are fairly evenly split on whether putting out deer feed or attractants is acceptable: 42% agree that it is okay to do this, while 45% disagree that doing so is okay. Regionally, the Southwest and Southeast Regions have the most disagreement.

A relatively small percentage of Pennsylvania residents (9%) fed deer within the previous 12 months.

Regarding deer hunting, 15% of Pennsylvania residents who live in a single-family home (i.e., could possibly have land on which hunting could occur) allow others to hunt deer on their property.

CONCERNS ABOUT DEER

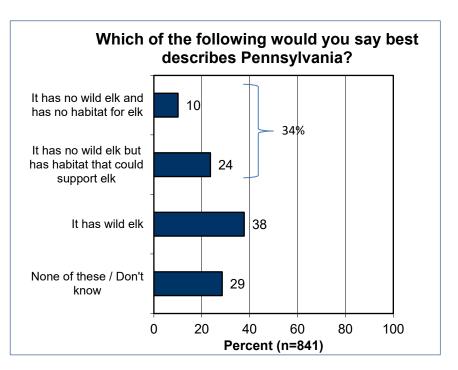
In a series of questions about potential concerns regarding deer, residents were asked to rate their concern using a 0 to 10 scale, where 0 is not at all concerned and 10 is extremely concerned. The most concern is with tick-borne diseases and deer-vehicle accidents.



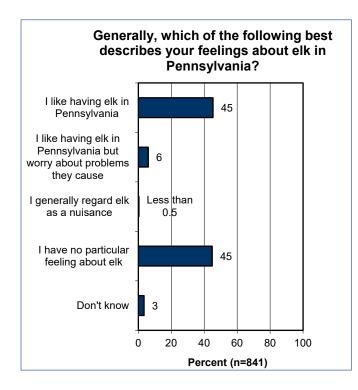
In the trends, there was a marked drop in concern about tick-borne diseases (p \leq 0.05) and deer impacts on habitat (p \leq 0.05)—both were statistically significant.

ATTITUDES TOWARD ELK

That elk live in Pennsylvania is not universally known: 34% of residents do not think that elk are in the state, including 10% who think that Pennsylvania does not even have habitat for them. When adding in the "don't know" responses, 62% of residents do not know that the state has wild elk (summed on unrounded numbers). Conversely, 38% know that elk are in the state.



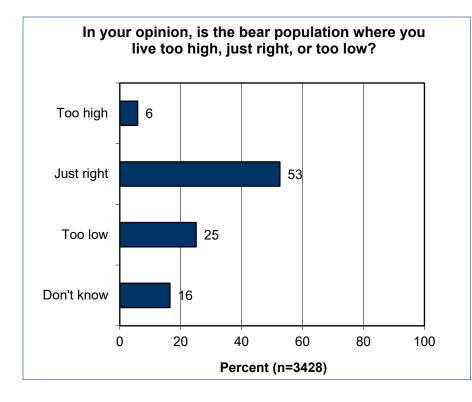
The trend shows a lower percentage of residents who know that Pennsylvania has wild elk, a statistically significant difference ($p \le 0.05$).



The survey next informed respondents that Pennsylvania has wild elk, which were reintroduced into Pennsylvania in the early 1900s. Residents were then asked about their attitudes toward elk. The majority of residents (51%) like that elk are in the state, made up of 45% who like that they in the state with no caveats and 6% who like that they are in the state but worry about problems the elk might cause. Only less than 0.5% regard elk as a nuisance. The remainder have no particular feeling about elk (or do not know).

Elk are an attraction to some, as 15% of state residents traveled to view wild elk.

ATTITUDES TOWARD BEAR

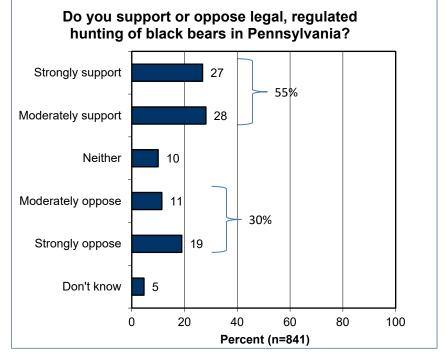


The majority of Pennsylvania residents (53%) say that the bear population where the residents live is just right. Otherwise, a much higher percentage say it is too low (25%) than too high (6%). Residents of the Northeast Region are the most likely to say the population is too high.

The trends analysis found an increase in the percentage saying the population is too low, a statistically significant difference ($p \le 0.05$).

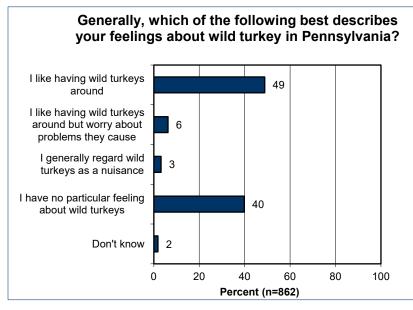
The survey asked about support for or opposition to hunting black bears. The majority of Pennsylvania residents (55%) support black bear hunting; nonetheless, 30% oppose it.

Regionally, the Southeast Region is markedly lower in support, where 40% support and 40% oppose. The other regions are much more supportive, where support ranges from 66% to 70%.



The survey determined that 5% of Pennsylvania residents had problems with bears within the previous 12 months. The top locations for having bear around are the Northcentral and Northeast Regions.

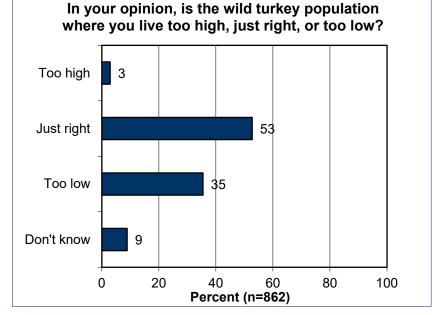
ATTITUDES TOWARD WILD TURKEY

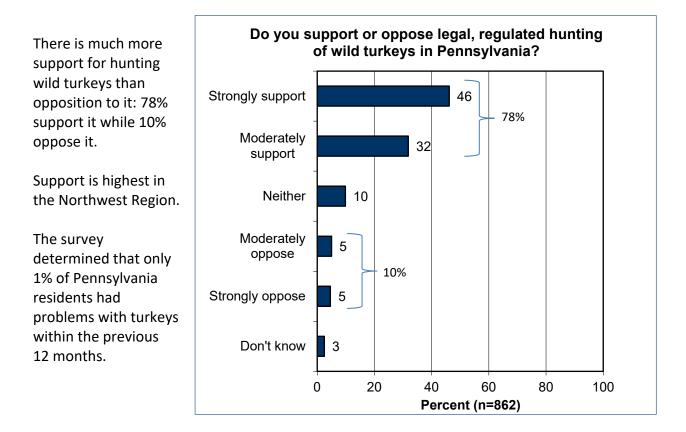


The majority of Pennsylvania residents like having wild turkeys around (55%), although a small portion of them like having them around but worry about the problems the turkeys might cause, as shown in the graph. A small percentage of residents (3%) consider turkeys to be a nuisance. A relatively large percentage (40%) have no feelings about turkeys.

The majority of Pennsylvania residents (53%) think that the turkey population is just right, and otherwise a much larger percentage think the population is too low (35%) rather than too high (3%).

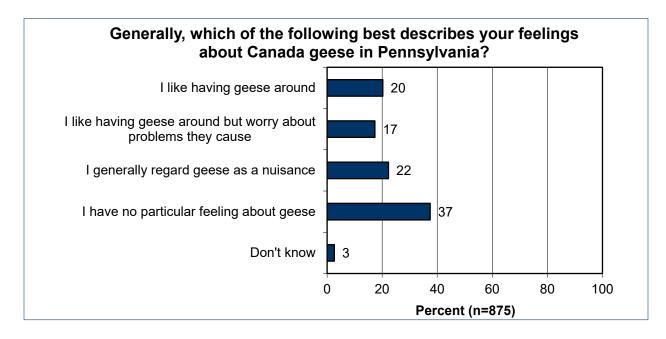
The Northwest and Southwest Regions are the locations with the greatest percentage of residents who say the population is too high.





ATTITUDES TOWARD CANADA GEESE

Regarding geese, less than a majority say that they like to have geese around: 38% like them around, but that consists of only 20% who like them around with no caveats and 17% who like them around but worry about the problems geese can cause (the sum on unrounded numbers is 38%). A substantial percentage of Pennsylvania residents consider Canada geese to be a nuisance: 22% do so.

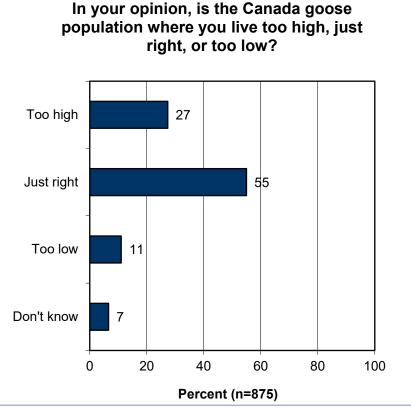


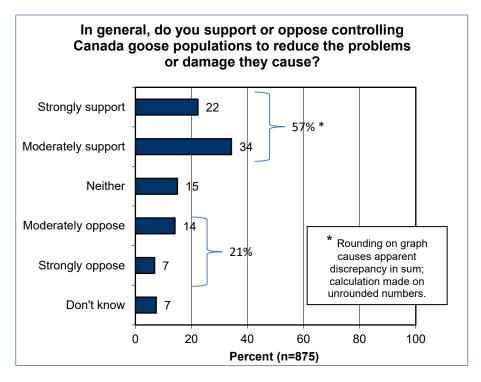
The regions with the highest percentages of residents who think that Canada geese are a nuisance are the Southeast and Southwest Regions (with the Northeast and Northwest Regions close behind).

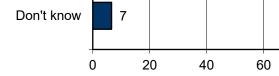
The majority of Pennsylvania residents think that the goose population in the area where the residents live is just right (55%). Otherwise, however, more than twice as many think the goose population is too high (27%) than too low (11%).

The Northwest and Southeast Regions are where residents are most likely to think that the goose population is too high. The trends show a slightly greater percentage who think the population is too high, a statistically significant difference (p < 0.05).

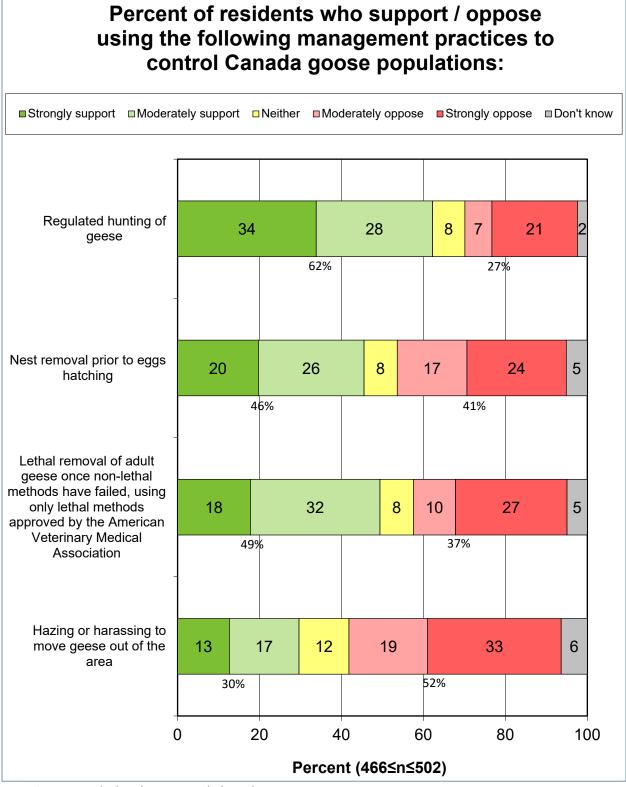
The survey asked a series of questions about controlling goose populations. The first was general, and it showed that 57% of Pennsylvania residents support controlling goose populations to reduce the problems that they cause. On the other hand, 21% oppose. The highest support for controlling goose populations is in the Southwest and Southcentral Regions.







The survey then asked about support for or opposition to four methods of addressing Canada goose problems. Of the four methods, the most support is for regulated hunting of geese. There is markedly less support for hazing/harassing. Sums are shown of support and oppose, calculated on unrounded numbers.

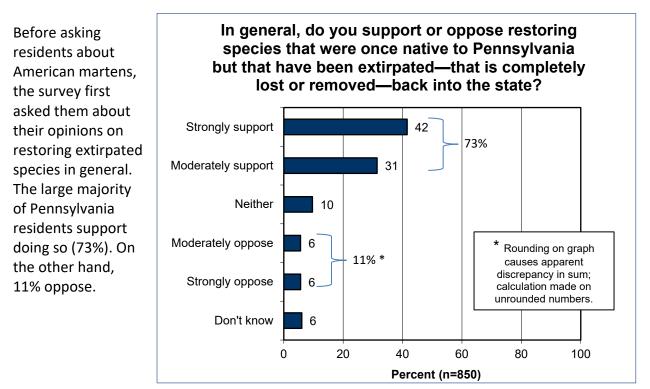


The final questions in this section pertained to problems that geese might cause. Two questions determined that 7% of Pennsylvania residents had problems with Canada geese within the previous 12 months.

SMALL GAME AND BIRD SPECIES

Just under half of Pennsylvania residents (47%) feed birds on their property. The highest rates of bird feeding are in the Southcentral and Northwest Regions.

About a third of residents (34%) experienced damage from rabbits, squirrels, and/or groundhogs (also called woodchucks). The Northwest and Southcentral Regions had the highest rates of damage.

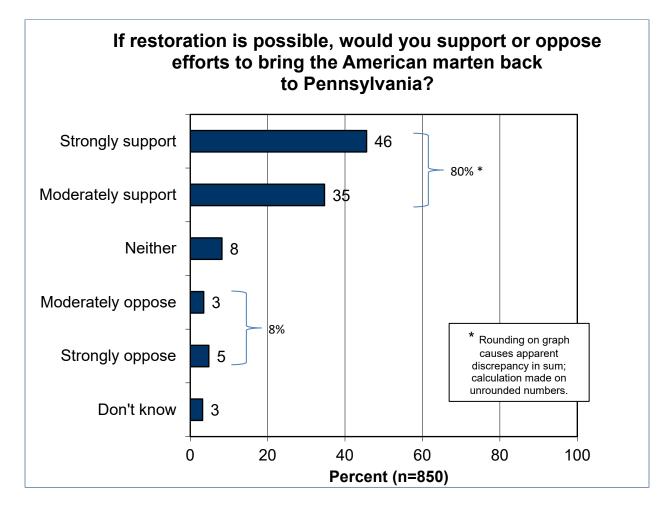


ATTITUDES TOWARD AMERICAN MARTEN AND ITS REINTRODUCTION

A little more than a third of Pennsylvania residents (38%) indicated being familiar with the American marten (which was formerly called the pine marten). Familiarity was highest in the Southwest Region.

<u>x</u>

The large majority of Pennsylvania residents (80%) would support efforts to bring the American marten back to Pennsylvania; nonetheless, 8% would oppose.



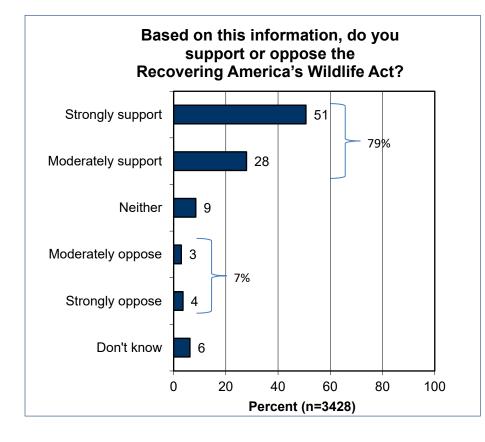
The most support is in the Southcentral and Southeast Regions, while the most opposition is in the Northwest and Northeast Regions.

The most common reasons for opposing the reintroduction of the American marten are concerns about their effects on other wildlife through predation, turkey predation specifically, and livestock predation.

RECOVERING AMERICA'S WILDLIFE ACT

The survey informed respondents of the following:

Recovering America's Wildlife Act is a bill to provide funding for the conservation and restoration of wildlife and plant species of greatest conservation need, including endangered or threatened species. Recovering America's Wildlife Act funds would come from the general Treasury, directing 1.4 billion dollars to wildlife conservation annually. Recovering America's Wildlife Act initially passed the U.S. House of Representatives last year but failed to make it through the Senate, so it was NOT passed nor funded. The survey then asked Pennsylvania residents if they had heard of the Act: 18% indicate having heard of it prior to the survey.



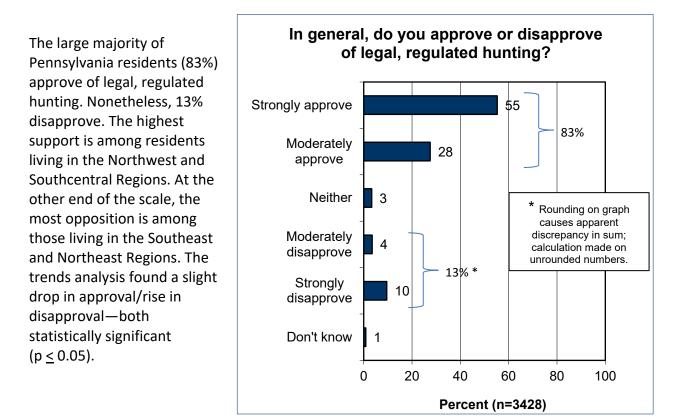
Support for the Recovering America's Wildlife Act (79%) far exceeds opposition to it (7%). The Northwest Region is markedly lower in support.

AWARENESS OF WILDLIFE DISEASES

Regarding white-nose syndrome, 13% of Pennsylvania residents indicated being *very* or *somewhat* familiar with it prior to the survey, and another 9% had heard of it but do not consider themselves familiar with it. Familiarity was highest in the Northcentral Region.

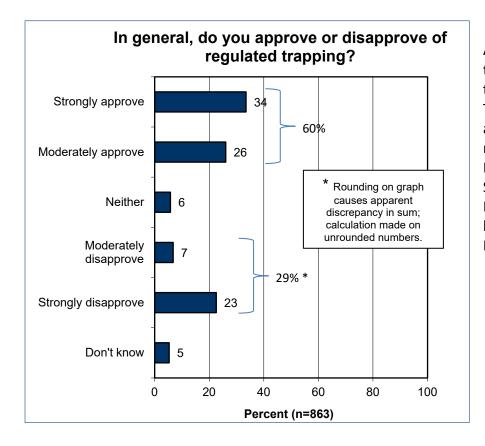
Regarding West Nile virus, 73% of residents indicated being *very* or *somewhat* familiar with it prior to the survey, while 17% had heard of it but do not consider themselves familiar with it. Familiarity was highest in the Northeast and Southeast Regions.

Finally, the survey asked about RHDV2. Instead of using a familiarity scale, the survey simply asked if residents were familiar with RHDV2: 17% of Pennsylvania residents indicate being familiar with it. Familiarity was highest in the Southcentral Region.



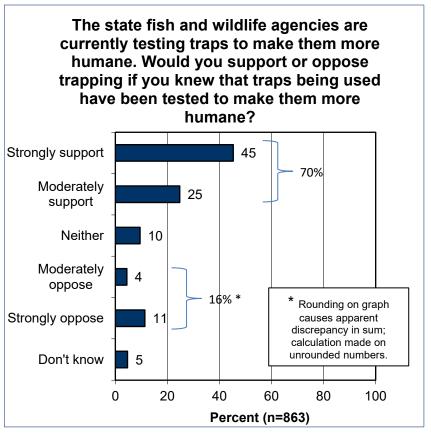
APPROVAL OR DISAPPROVAL OF HUNTING AND TRAPPING

The first trapping-related question asked about awareness that trapping is regulated by the PGC: 74% of Pennsylvania residents indicate being aware of this.



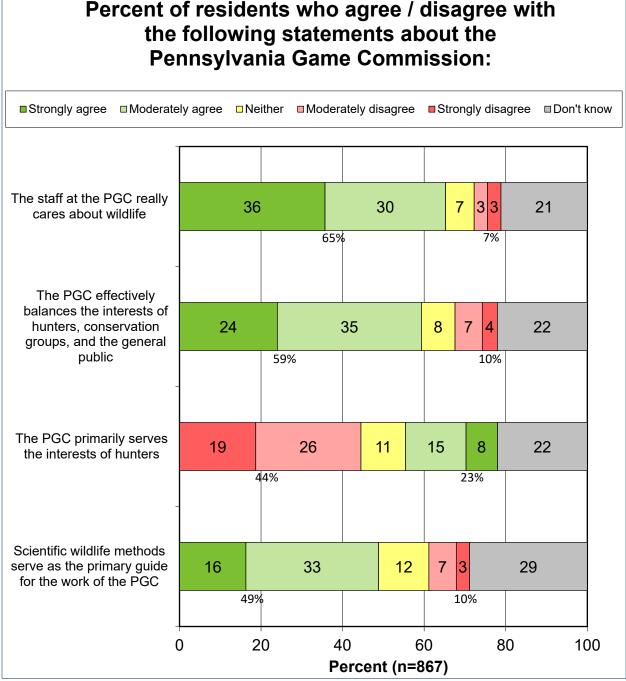
Approval of regulated trapping (60%) is higher than disapproval (29%). The highest rates of approval are among residents in the Northwest and Southcentral Regions. Disapproval is markedly higher in the Southeast Region.

A caveat to trapping affects approval or disapproval of trapping: 70% approve of it if they are informed that traps being used have been tested to make them more humane (compared to 60% in the previous question). Nonetheless, 16% still oppose trapping (compared to 29%).



RATINGS OF THE PENNSYLVANIA GAME COMMISSION

Pennsylvania residents have a high regard for the PGC. Of the positive statements, the most agreement is that *the staff at the PGC really cares about wildlife* and that *the PGC effectively balances the interests of hunters, conservation groups, and the general public*. Regarding the negative statement, agreement is higher than disagreement. The graph uses a "stoplight" style choice of colors where green represents the responses that reflect well on the agency and red represents those that reflect poorly on the agency. Note, therefore, that the negative statement's color coding is reversed. Sums are shown of agree and disagree, calculated on unrounded numbers.



Note: Sums are calculated on unrounded numbers.

CONSERVATION ORGANIZATIONS

About a fifth of Pennsylvania residents (21%) contribute to and/or are members of a conservation, sportsmen, recreation, or environmental club or group. The highest rates are among residents of the Southwest Region.

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INTRODUCTION AND METHODOLOGY

This study was conducted for the Pennsylvania Game Commission (PGC) to determine Pennsylvania residents' attitudes toward wildlife management. Specifically, the study assessed attitudes toward the management of several big game species, concerns about wildlife-human conflicts, the potential reintroduction of the American marten, and awareness of wildlife diseases, among other topics. The study entailed a scientific, probability-based telephone survey of Pennsylvania residents 18 years old or older. Specific aspects of the research methodology are discussed below.

USE OF TELEPHONES FOR THE SURVEY

For the survey, telephones were selected as the preferred sampling medium because of the almost universal ownership of telephones (both landlines and cell phones were called in their proper proportions). Additionally, telephone surveys, relative to mail or online surveys, allow for more scientific sampling and data collection, as well as higher response rates. Research has shown that respondents who are less interested in the subject matter of a study are less likely to respond to a mail or online survey, resulting in skewed results. For example, avid recreationists and/or those with an interest in the work of the PGC will disproportionately choose to complete a mail or online survey, while other individuals will not. Responsive Management's professional telephone interviewers are adept at avoiding this type of bias by persuading potential respondents, regardless of how uninformed or uninterested that they feel they are, that their opinions are important to the study. Another advantage of telephone surveys, relative to mail or online surveys, is that they provide higher quality data because of the clarification that a live interviewer provides for any questions in the survey.

Furthermore, telephone surveys allow respondents who cannot or will not respond to a mail or online survey to participate. Mail and online surveys systematically exclude those who have difficulty reading. According to statistics published by the U.S. Department of Education, 54% of U.S. residents 16 to 74 years old, which represents about 130 million Americans, lack proficiency in literacy, reading below the sixth-grade level.¹ Therefore, many might be reticent to complete a mail or online survey that they must read to themselves. In addition, those with poor or limited internet service or who are intimidated by technology may be reticent to complete a survey online. In a telephone survey, however, a live interviewer reads the survey questions, clarifies them if necessary, and assists the respondent with completing the survey, making it an excellent option to reduce bias and increase response rates for the survey.

Finally, telephone surveys have fewer negative effects on the environment than do mail surveys because of the reduced use of paper, reduced energy consumption for delivering and returning the questionnaires, and reduced quantity of material to be disposed of after the survey.

¹ U.S. Department of Education, National Center for Education Statistics. 2019. *Adult Literacy* (<u>https://nces.ed.gov/fastfacts/display.asp?id=69</u>). Downloaded November 8, 2022.

See also: Nietzel, M.T. 2020. "Low Literacy Levels Among U.S. Adults Could Be Costing the Economy \$2.2 Trillion a Year." *Forbes*, September 9, 2020.

The telephone survey was coded for integration with Responsive Management's computerassisted telephone interviewing (CATI) system. An important aspect of this CATI system is that the computer controls which questions are asked, but each telephone survey is administered by a live interviewer.

QUESTIONNAIRE DESIGN

The telephone survey questionnaire was developed cooperatively by Responsive Management and the PGC, based on similar studies conducted for the PGC as well as the research team's familiarity with wildlife management and natural resources. Responsive Management conducted pre-tests of the questionnaire to ensure proper wording, flow, and logic in the survey.

Because the survey was too long for any one respondent to complete, the questionnaire included split sampling where some questions were asked only of a randomly selected subsample. This allowed all the questions to be asked that the PGC wanted in the survey while ensuring that the survey would not be too long for any one respondent. For this reason, some questions have a sample size (n-value) that is less than the total.

SURVEY SAMPLE

The sample of Pennsylvania residents was obtained from Marketing Systems Group, a company that specializes in providing scientifically valid samples for public opinion research. This scientific probability-based sample used RDD (Random Digit Dialing) to ensure that all residents had an equal chance of being selected for participation. Landlines and wireless phones were included in their proper proportions so that the sample as a whole was representative of all residents across the state.

The sample was stratified by Wildlife Management Unit (WMU) to ensure that enough respondents would be included in each WMU for statistically valid results (see the map on the next page, obtained from the PGC). The goal was to obtain approximately 150 interviews within each of Pennsylvania's 22 WMUs. The WMU samples were then compiled for the statewide results, properly weighted so that each WMU matched the proportion of the state's population contained within that WMU. The survey found that some respondents were not in the WMU for which they were sampled; in those instances, the researchers re-assigned the respondent into the proper WMU.

There are two changes to the WMU analysis since the 2019 study. First, as of this year, WMU 2H has been dissolved and incorporated into WMU 2G. Also, WMUs 5C and 5D, which were combined for analysis in 2019, have been analyzed separately for this study.

2



TELEPHONE SURVEY DATA COLLECTION AND QUALITY CONTROL

As previously noted, the interviews were conducted using Responsive Management's CATI system, which utilizes software for telephone data collection. The survey data were entered into the computer as each interview was being conducted, eliminating manual data entry after the completion of the survey and the concomitant data entry errors that may occur with manual data entry. The survey instrument was programmed so that the CATI system branched, coded, and substituted phrases in the survey based on previous responses to ensure the integrity and consistency of the data collection. The software also allowed for error checks during the interview to help ensure that the data were accurate and valid.

Responsive Management has interviewers who have been trained according to the highest industry standards established by the American Association for Public Opinion Research. The Survey Center managers and other professional staff conducted a project briefing with the interviewers prior to the administration of this survey. Interviewers were instructed on type of study, study goals and objectives, handling of survey questions, interview length, termination points and qualifiers for participation, interviewer instructions within the survey questionnaire, reading of the survey questions, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey questionnaires. The Survey Center managers and statisticians monitored the telephone data collection, including monitoring of the actual telephone interviews without the interviewers' knowledge to evaluate the performance of each interviewer and ensure the integrity of the data.

Telephone surveying times were Monday through Friday from noon to 9:00 p.m. and Saturday from noon to 7:00 p.m., local time. A five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a respondent could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day.

Those with a cellular number who could not be reached after five attempts were sent a text message inviting them to participate in the survey. Two examples of the text invitation follow. If they still did not complete the survey after the text message, one final attempt was made to reach them through a telephone call.

Text Invitations to Participate in the Survey

Hi _____. This is Adam w/ Responsive Management. Pennsylvania Game Commission would like your opinion on wildlife management in the state. Please consider participating in this <u>survey</u>.

Hi _____. I am Adam w/ Responsive Management. Pennsylvania Game Commission would like to hear from you about wildlife management in Pennsylvania. Please consider participating in this <u>survey</u>.

After the telephone and text surveys were obtained, the Survey Center managers and statisticians checked each completed survey to ensure clarity and completeness and to filter out any invalid respondents. Analysts reviewed all individual survey responses to identify potential invalid submittals, such as text surveys that were completed in an unrealistically brief timeframe, which suggests that respondents were clicking through responses without reading and evaluating the questions, or "straight-lining" of responses, which is when respondents select (for example) the first or same response options throughout the survey. Also, openended responses to the final question asking for additional comments were used to identify and remove invalid respondents. All completed surveys of questionable quality were removed prior to data analysis.

Responsive Management obtained 3,428 completed interviews; partial interviews and terminated surveys were not used. The tabulation below shows the number of completed surveys obtained within each WMU.

WMU	Number of completed interviews	WMU	Number of completed interviews
1A	156	3C	152
1B	158	3D	152
2A	151	4A	154
2B	157	4B	150
2C	153	4C	151
2D	159	4D	154
2E	155	4E	151
2F	156	5A	160
2G	179	5B	157
3A	151	5C	158
3B	155	5D	159

DATA ANALYSIS

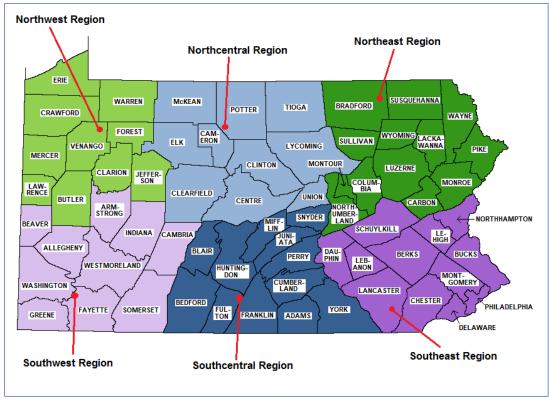
The analysis of data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management. The results were slightly weighted by age and gender within each WMU so that the sample was exactly representative of residents in that WMU as a whole. Then the WMUs were weighted for statewide data so that each WMU was properly represented in its proportion of the state's total population of residents 18 years old and older.

Finally, statewide data were weighted based on the percentage of respondents who consider themselves to be a hunter.

Along with results at the statewide and WMU level, this report presents survey results crosstabulated by the six PGC regions shown in the map that follows. The number of surveys obtained by region is shown.

Region	Number of Surveys	Region	Number of Surveys
Northwest	462	Southwest	605
Northcentral	500	Southcentral	588
Northeast 502		Southeast	519
		Unsure of Region	252

Pennsylvania Game Commission Regions



SAMPLING ERROR

Throughout this report, findings of the telephone survey are reported at a 95% confidence interval. For the entire sample of adult Pennsylvania residents, the sampling error is at most plus or minus 1.67 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 1.67 percentage points of each other. Sampling error was calculated using the formula shown on the following page, with a sample size of 3,428 and a population size of 10,145,303 Pennsylvania residents 18 years old and older. Sampling errors by WMU are also presented on the following page.

Sampling Error Equation

$$B = \left(\sqrt{\frac{\frac{N_p(.25)}{N_s} - .25}{\frac{N_s}{N_p - 1}}}\right) (1.96)$$

$$\begin{split} B &= \text{maximum sampling error (as decimal)} \\ N_P &= \text{population size (i.e., total number who could be surveyed)} \\ N_S &= \text{sample size (i.e., total number of respondents surveyed)} \end{split}$$

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 <u>maximum</u> sampling error using a 50:50 split (the most conservative calculation because a 50:50 split would give maximum variation).

Where:

WMU	Sampling error (%)	WMU	Sampling error (%)	WMU	Sampling error (%)
1A	7.84	2G	7.32	4D	7.90
1B	7.80	3A	7.97	4E	7.97
2A	7.97	3B	7.87	5A	7.75
2B	7.82	3C	7.95	5B	7.82
2C	7.92	3D	7.95	5C	7.80
2D	7.77	4A	7.90	5D	7.77
2E	7.87	4B	8.00		
2F	7.84	4C	7.97		

PRESENTATION OF RESULTS

In examining the results, it is important to be aware that the questionnaire included several types of questions:

- Single response questions: Some questions allow only a single response.
- Multiple response questions: Other questions allow respondents to choose all that apply. Those that allow more than a single response are indicated on the graphs with the label, "Multiple Responses Allowed."
- Closed-ended questions have an answer set from which to choose.
- Open-ended questions are those in which no answer set is presented to the respondents; rather, they can respond with anything that comes to mind from the question.
- Scaled questions: Many closed-ended questions (but not all) are in a scale, such as one that ranges from strongly support to strongly oppose.
- Series questions: Many questions are part of a series, and the results are primarily intended to be examined relative to the other questions in that series (although results of the questions individually can also be valuable). Typically, results of all questions in a series are shown together.

Some graphs show an average, either the mean or median (or both). The mean is simply the sum of all numbers divided by the number of respondents. Because outliers (extremely high or low numbers relative to most of the other responses) may skew the mean, the median may be shown. The median is the number at which half the sample is above and the other half is below. In other words, a median of 150 means that half the sample gave an answer of more than 150 and the other half gave an answer of less than 150.

Most graphs show results rounded to the nearest integer; however, all data are stored in decimal format, and all calculations are performed on unrounded numbers. For this reason, some results may not sum to exactly 100% because of this rounding on the graphs. Additionally, rounding may cause apparent discrepancies of 1 percentage point between the graphs and the reported results of combined responses (e.g., when "strongly support" and "moderately support" are summed to determine the total percentage in support). These instances are noted on the overall graphs with asterisks; however, these instances are not indicated on the regional graphs. Nonetheless, all sums are calculated on unrounded numbers.

This report includes trends analyses in which the new statewide results are shown side-by-side with results from Pennsylvania surveys in 2011, 2014, and/or 2019 that featured the same questions.

The report also includes special graphs that show how various demographic groups respond to certain questions, hereinafter simply referred to as demographic analyses graphs. The example that is explained below and on the following page is being provided so the reader will know how to interpret these graphs.

The graph shows the percentages of the various groups who support legal, regulated hunting. Overall, 83% of households support legal, regulated hunting, as shown by the striped bar.

Those groups above the overall bar are more likely to support hunting. For instance, the Northwest Region has a higher percentage of residents who support hunting (93%) compared to the overall percentage of 83%. Other groups markedly above the overall amount, in addition to hunters at the top, include rural residents, residents of the Southcentral Region, residents of the Northcentral Region, and males.

On the other hand, those groups below the overall bar are less likely to support legal, regulated hunting. For instance, residents of large cities/urban areas are the least likely to support hunting, and other groups markedly less likely to support hunting are residents of the Southeast Region, residents 18 to 34 years old, and females.

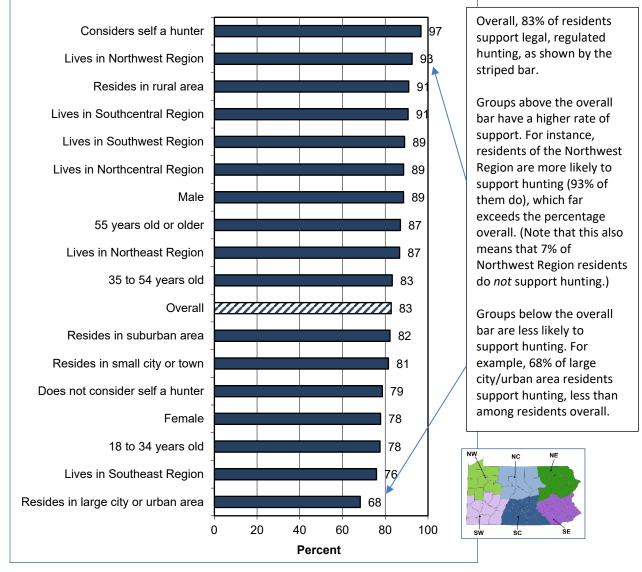
When one group is above the overall bar (for instance, in this example, males), its counterpart or one of its counterparts (in this instance, females) typically will be below the overall bar.

The distance from the overall bar matters, as well. If a group is *close* to the overall bar (for instance, suburban residents in this example), then the group should *not* be considered markedly different from respondents overall. A rule of thumb is that the difference should be 5 percentage points or more for the difference to be noteworthy.

A thumbnail map of the regions is included to help in visualizing the regional information included in these graphs.

Example of a Demographic Analyses Graph

Percent of each of the following groups who strongly or moderately support legal, regulated hunting in general:



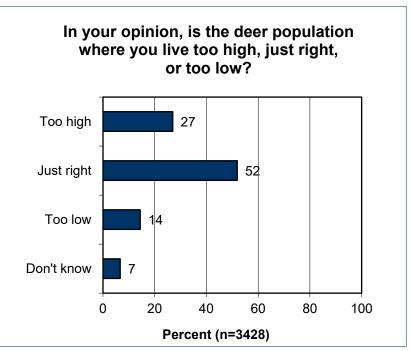
Throughout the report, results will be presented as follows:

- Statewide (in single-bar graphs)
- By WMU (in tables)
- By region (in 6-bar graphs)
- Trends (when applicable)
- Demographic analyses graphs (when applicable)

Note that "Don't know" responses are dropped from some graphs when they are less than 0.5% for better readability.

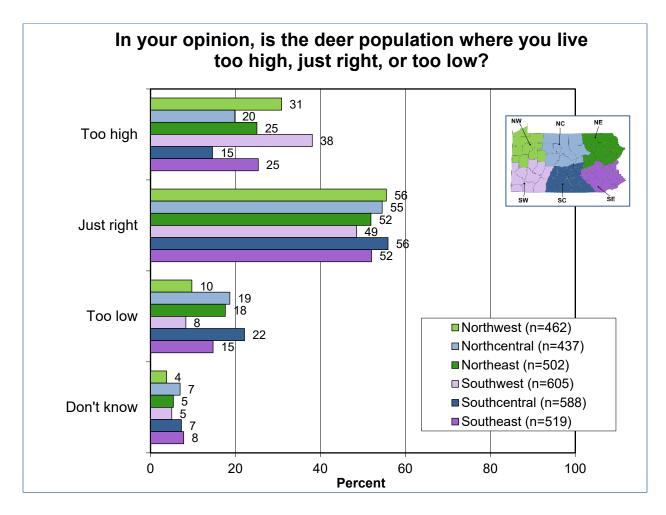
ATTITUDES TOWARD DEER

This section first discusses a general question about attitudes toward deer before examining questions about deer-related recreation. The first question simply asked about attitudes toward the size of the deer population where residents live. The majority of Pennsylvania residents (52%) say that the deer population in their neighborhoods is just right. Otherwise, more of them say it is too high (27%) than too low (14%).

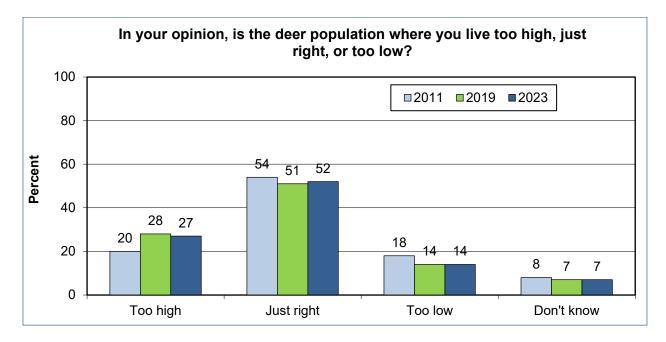


A tabulation of WMU results shows that WMUs 2B, 2A, and 1B have the highest percentages of residents who say that the deer population is too high. The regional graph shows that the Southwest and Northwest Regions have the highest percentages of residents who say that the deer population is too high.

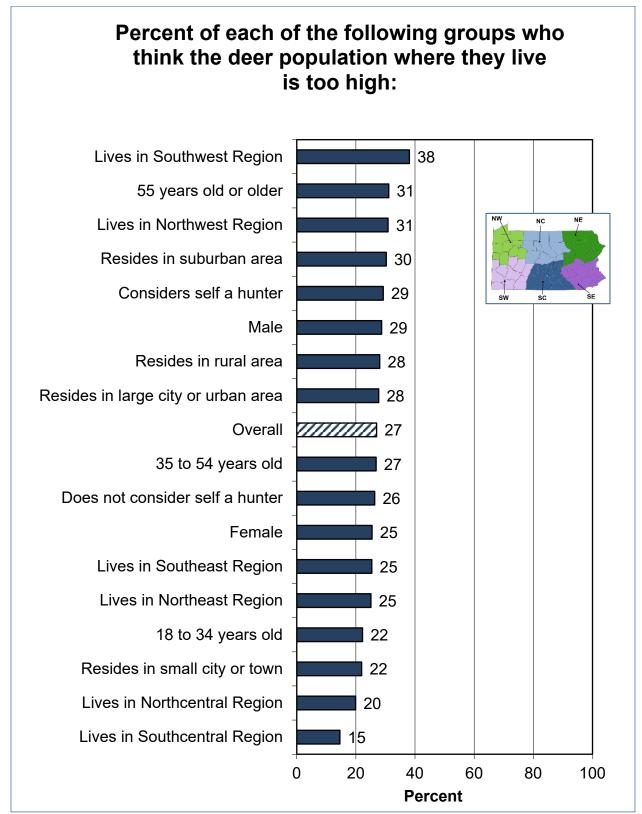
In your opinion, is the deer population where you live too high, just right, or too low?					
WMU	Too high	Just right	Too low	Don't know	
1A	27	59	11	3	
1B	34	53	7	6	
2A	34	51	9	5	
2B	42	49	5	4	
2C	30	45	16	8	
2D	30	51	16	3	
2E	27	46	21	5	
2F	28	53	15	4	
2G	14	47	30	8	
3A	27	48	18	8	
3B	30	52	13	5	
3C	28	56	11	5	
3D	28	50	18	5	
4A	15	51	30	4	
4B	19	48	27	5	
4C	20	50	20	10	
4D	13	51	31	6	
4E	22	55	17	6	
5A	15	58	18	9	
5B	16	51	21	12	
5C	28	53	14	6	
5D	26	53	13	7	



The trends show almost no change compared to 2019; however, there is a rise in the percentage who say that the deer population is too high in 2019 and 2023 when compared to 2011.

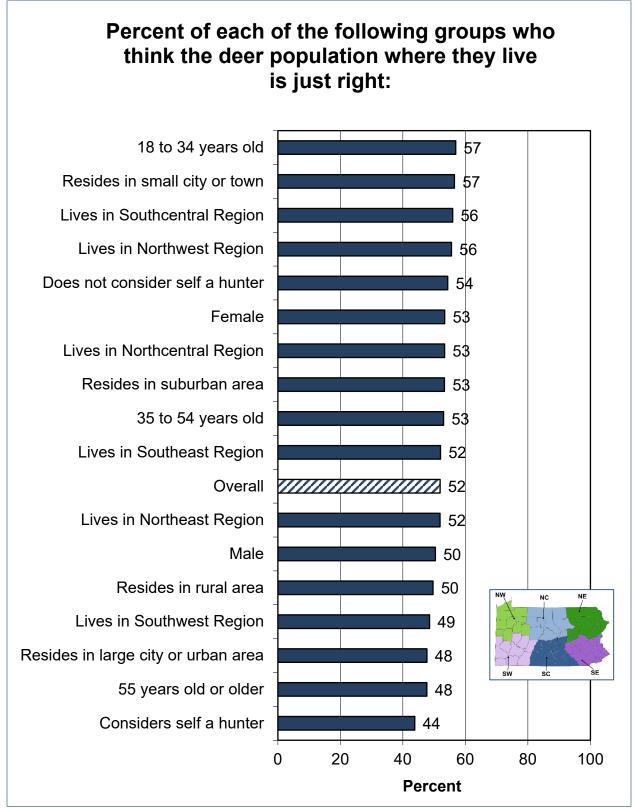


The demographic analyses graph shows that Southwest Region residents are the most likely to say that the deer population is too high—the only group markedly higher than the percentage overall.



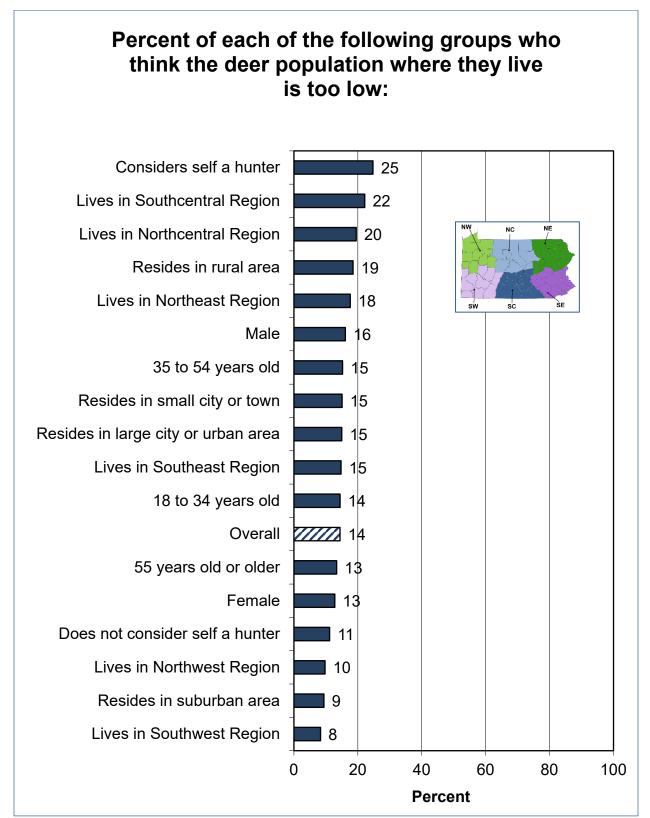
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

Another demographic analyses graph shows that residents 18 to 34 years old and residents of small cities/towns are the groups most likely to say that the deer population is just right.

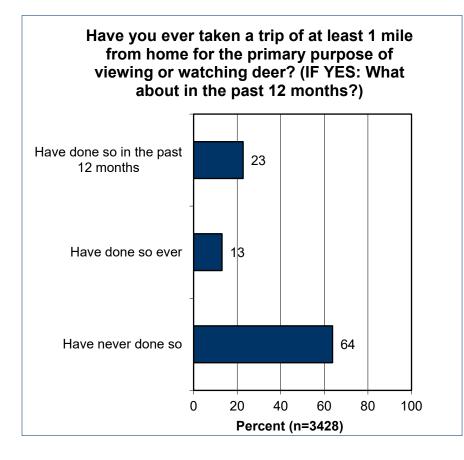


See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

On the other hand, the groups most likely to say that the deer population is too low are hunters, residents of the Southcentral Region, residents of the Northcentral Region, and rural residents.

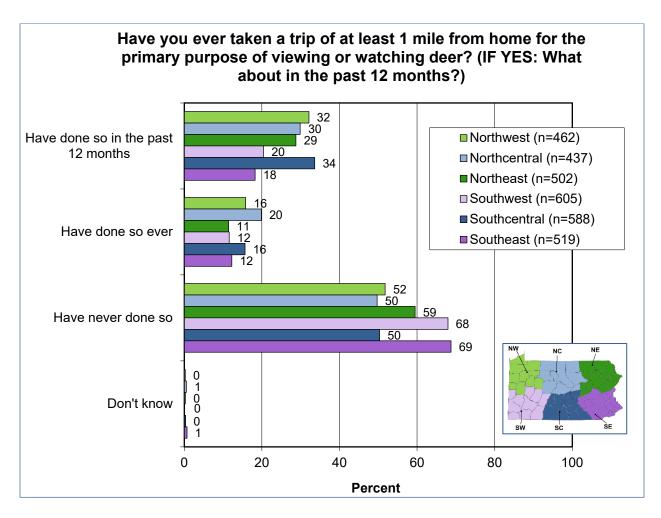


See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

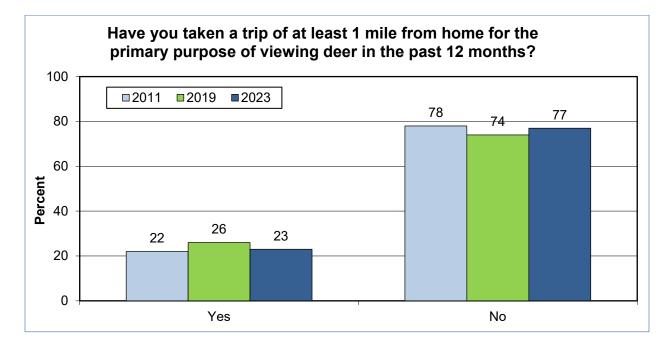


Other deer-related questions asked about taking wildlife viewing trips to see deer and using attractants to encourage deer to come to residents' property. Regarding viewing deer, 36% of Pennsylvania residents have taken a trip to view deer, including 13% who did so in the previous 12 months. WMU and regional results are also included; deer viewing is most popular in WMUs 2G, 2E, and 2F and in the Southcentral and Northcentral Regions.

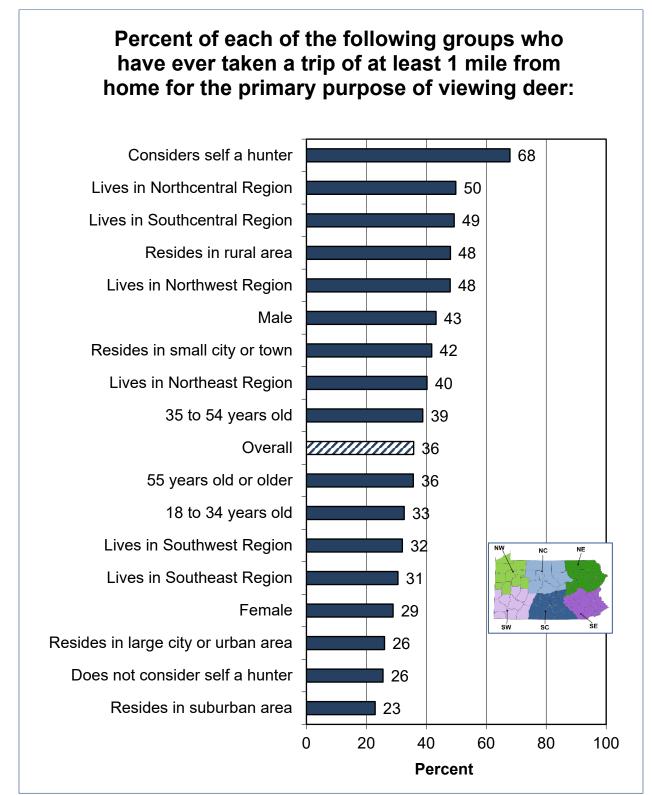
Have you ever taken a trip of at least 1 mile from home for the primary purpose of viewing or watching deer? (IF YES: What about in the past 12 months?)					
WMU	Trip in last year	Trip ever (not last year)	Never	Don't know	
1A	14	30	57	0	
1B	20	30	49	1	
2A	16	29	55	0	
2B	10	13	77	0	
2C	15	39	47	0	
2D	13	36	52	0	
2E	21	38	41	1	
2F	20	38	41	0	
2G	23	42	35	0	
3A	20	32	47	1	
3B	12	32	56	1	
3C	12	28	58	2	
3D	6	21	73	0	
4A	18	38	44	0	
4B	17	36	47	1	
4C	16	36	47	0	
4D	21	29	49	1	
4E	21	32	46	0	
5A	13	29	57	1	
5B	11	27	60	2	
5C	14	19	66	1	
5D	11	13	76	0	



The trends graph shows that deer viewing is about the same as it was in the last survey.

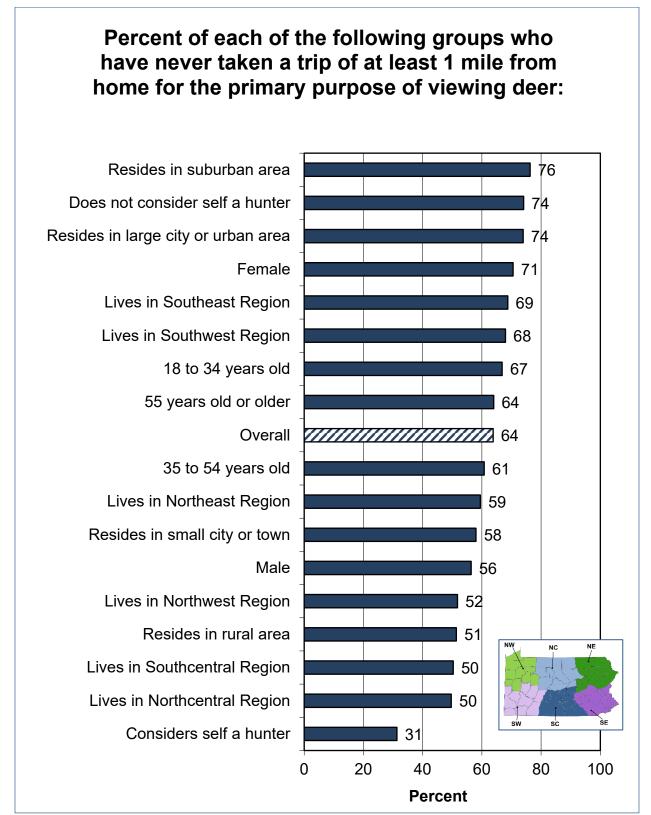


Demographic analyses graphs are included of those who have ever gone deer viewing and those who never did so. The groups most likely to have gone deer viewing are hunters, residents of the Northcentral Region, residents of the Southcentral Region, rural residents, residents of the Northwest Region, males, and residents of small cities/towns.

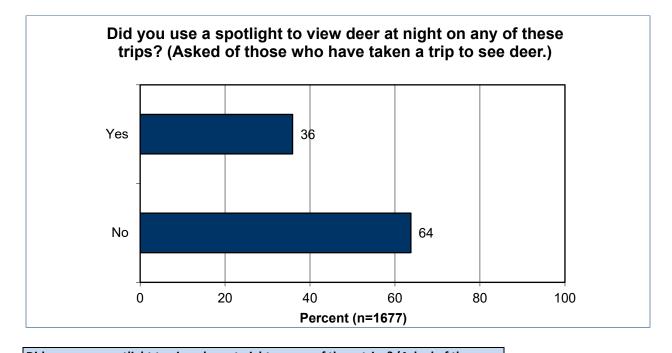


See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

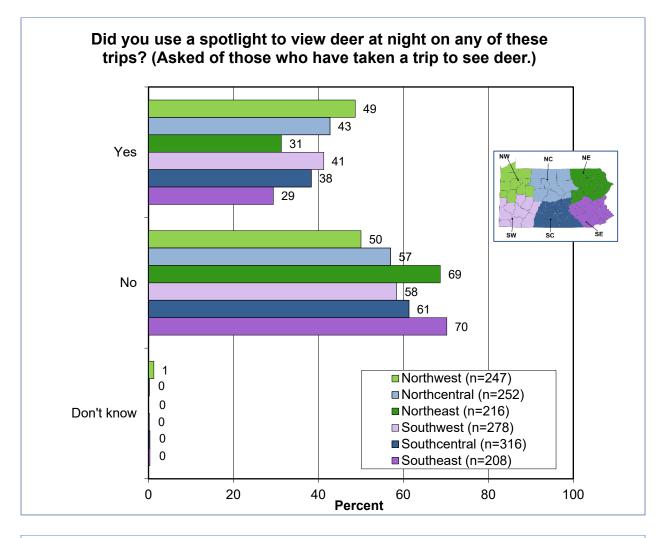
As shown below, the groups at the top of the ranking for never having gone deer viewing are suburban residents, non-hunters, residents of large cities/urban areas, females, and residents of the Southeast Region.

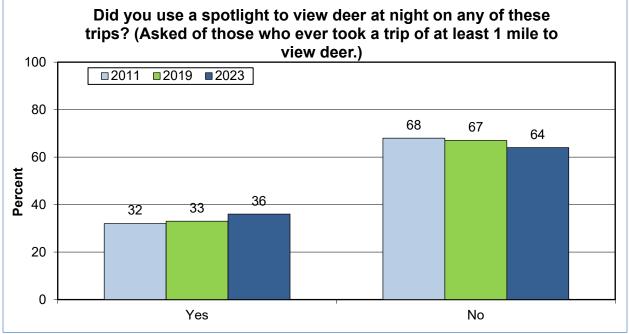


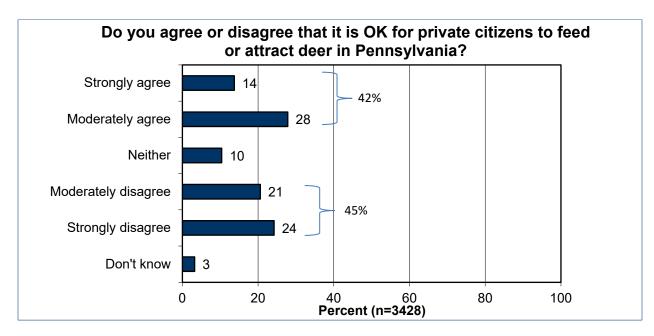
Among those who took deer viewing trips, 36% used a spotlight to view them at night. Results by WMU and by region are shown, followed by the trends graph.



Did you use a spotlight to view deer at night on any of these trips? (Asked of those							
Who took	a trip to view deer.) Yes (used spotlight)	No	Don't know				
1A	38	59	4				
1A 1B	51	49	0				
2A	37	62	1				
2A 2B	42	58	0				
2C	39	61	0				
2D	49	51	0				
2E	54	45	1				
2F	47	52	1				
2G	49	51	0				
3A	44	56	0				
3B	29	71	0				
3C	30	70	0				
3D	24	76	0				
4A	45	51	4				
4B	52	48	0				
4C	46	54	0				
4D	53	47	0				
4E	45	55	0				
5A	37	63	0				
5B	33	67	0				
5C	25	74	1				
5D	23	77	0				



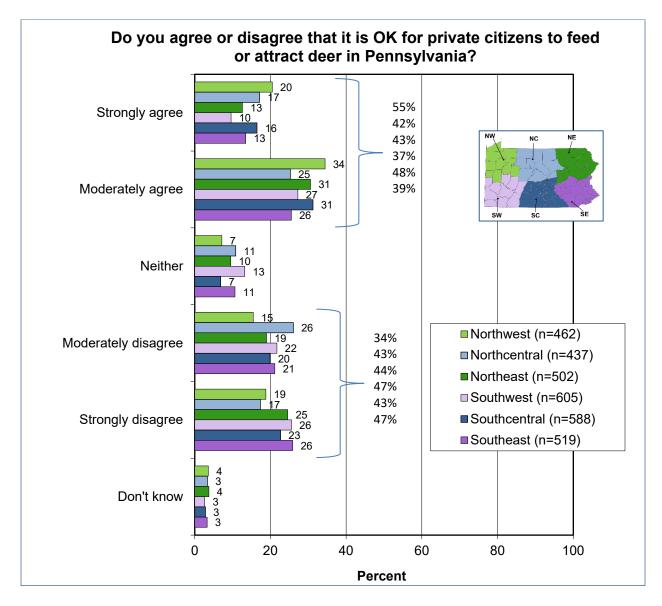




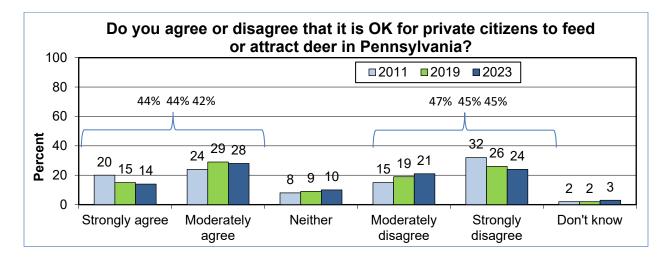
Pennsylvania residents are fairly evenly split on whether putting out deer feed or attractants is acceptable: 42% agree that it is okay to do this, while 45% disagree that doing so is okay.

Residents of WMU 1A have the highest percentages who agree that attracting deer is okay, while WMUs 3D, 2B, and 5D have the highest percentages who disagree. Regionally, the Northwest Region has the most agreement, while the Southwest and Southeast Regions have the most disagreement.

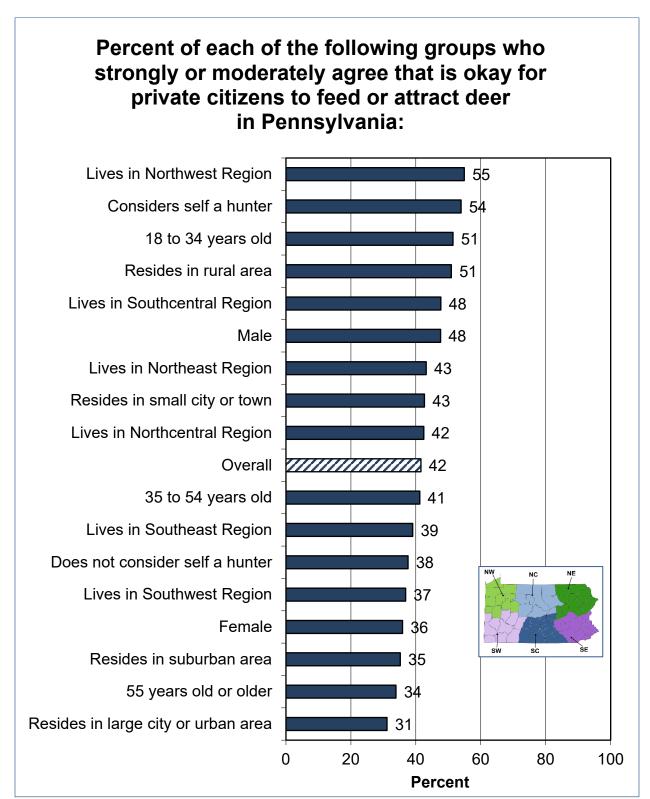
Do you ag	Do you agree or disagree that it is OK for private citizens to feed or attract deer in Pennsylvania?									
WMU	Strongly agree	Moderately agree	Neither agree nor disagree	Moderately disagree	Strongly disagree	Don't know				
1A	19	38	7	16	16	4				
1B	18	32	6	15	24	6				
2A	16	24	13	20	24	3				
2B	6	26	14	22	28	3				
2C	16	33	8	21	21	1				
2D	18	33	11	21	14	3				
2E	16	35	11	17	17	3				
2F	17	26	14	18	21	4				
2G	24	26	11	19	17	2				
3A	16	30	10	17	22	5				
3B	14	33	6	21	26	1				
3C	14	25	7	25	24	4				
3D	10	22	10	22	33	3				
4A	21	30	9	19	18	4				
4B	16	30	11	25	14	4				
4C	16	34	10	15	20	5				
4D	16	22	10	29	19	3				
4E	14	34	9	22	17	3				
5A	14	32	9	26	17	3				
5B	14	29	12	15	26	5				
5C	13	35	7	18	25	2				
5D	14	20	12	24	26	4				



The trends show no marked changes since 2019.

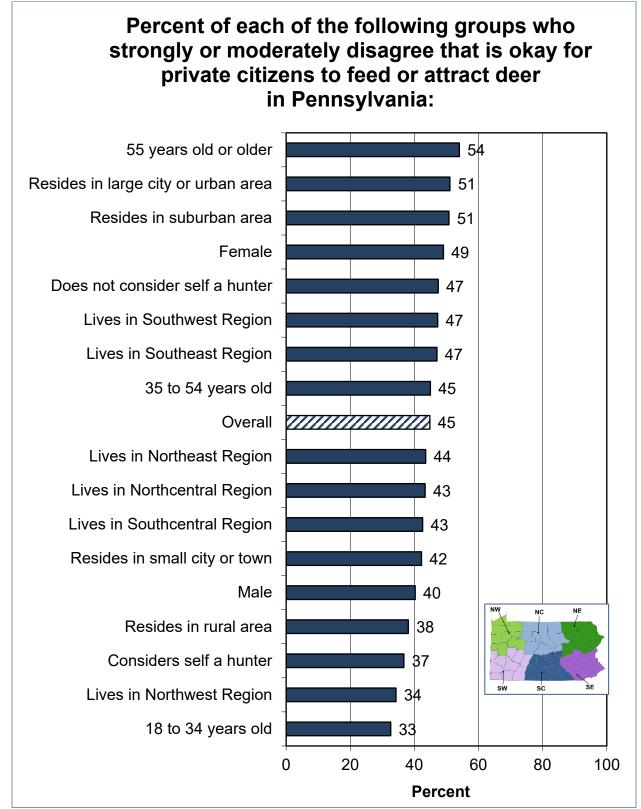


A demographic analyses graph shows those most likely to agree that feeding/attracting deer is okay, which includes *strongly* and *moderately* agree, include residents of the Northwest Region, hunters, residents 18 to 34 years old, rural residents, residents of the Southcentral Region, and males.

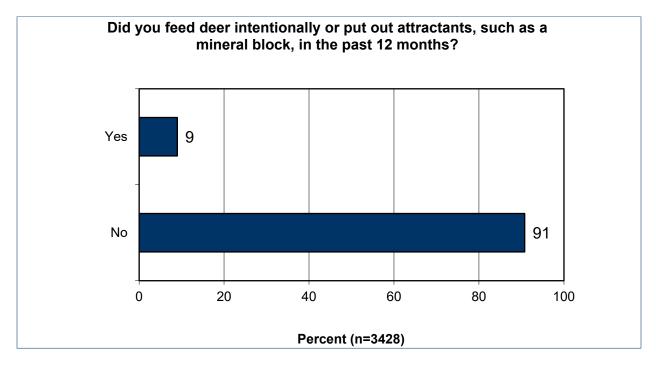


See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

On the other hand, the groups most likely to disagree include residents 55 years old or older, residents of large cities/urban areas, and suburban residents.



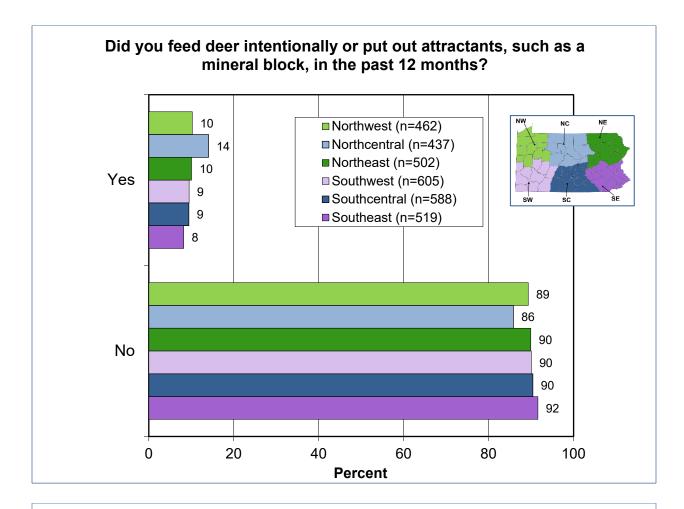
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

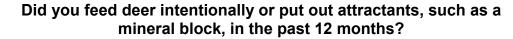


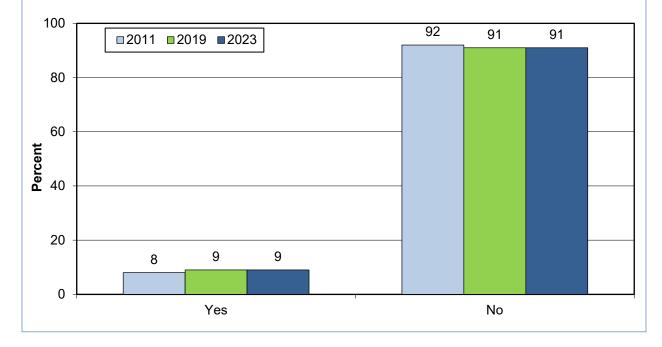
A relatively small percentage of Pennsylvania residents (9%) fed deer within the previous 12 months.

The WMUs and region with the highest percentages of residents putting out feed are WMUs 2G and 3A and the Northcentral Region, as shown in the results by WMU and by region. The trends graph follows the regional results, showing no change from the previous survey.

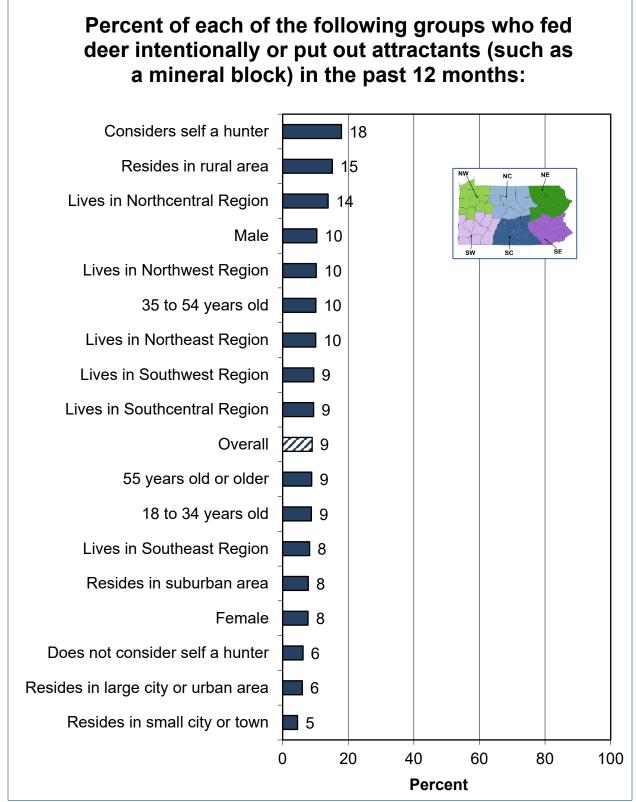
Did you feed	Did you feed deer intentionally or put out attractants, such as a mineral block, in the past 12 months?									
WMU	Yes	No	Don't know	WMU	Yes	No	Don't know			
1A	10	89	1	3C	9	91	0			
1B	8	91	0	3D	5	95	0			
2A	11	87	2	4A	8	92	0			
2B	8	92	0	4B	9	89	1			
2C	10	89	1	4C	14	86	0			
2D	14	86	1	4D	8	92	0			
2E	12	87	1	4E	13	87	0			
2F	13	87	0	5A	9	91	0			
2G	18	82	0	5B	9	91	0			
3A	18	82	0	5C	9	90	1			
3B	10	90	0	5D	7	93	0			





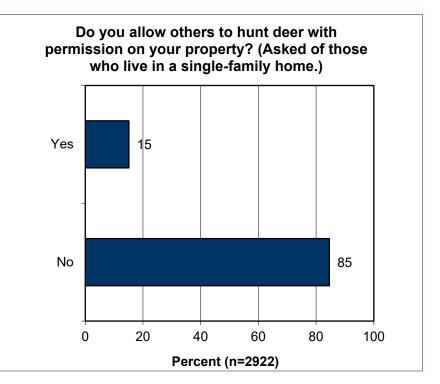


The characteristics most associated with putting out deer feed/attractants, as shown in the demographic analyses graph, include hunters and rural residents.



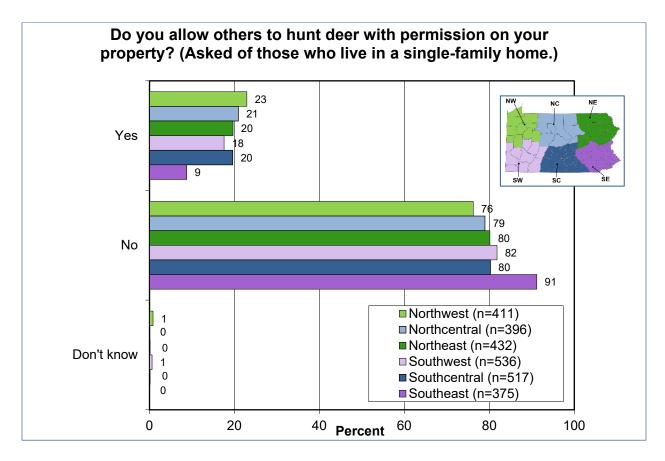
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

The final question in this section concerns deer hunting. As shown in the accompanying graph, 15% of Pennsylvania residents who live in a single-family home (i.e., could possibly have land on which hunting could occur) allow others to hunt deer on their property. Results by WMU and region are also shown. Southeast Region residents are markedly less likely to allow hunting on their property, compared to all other regions.

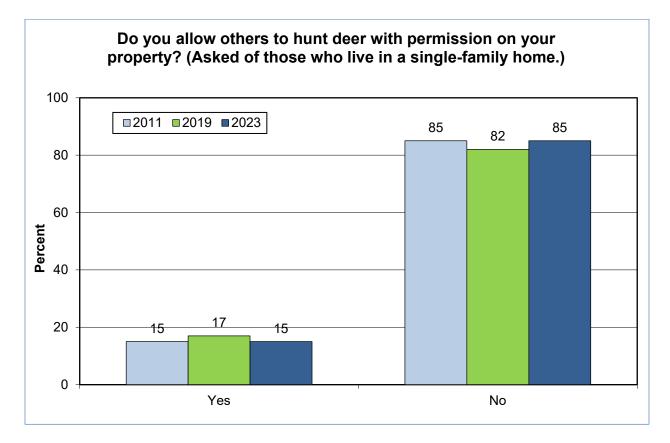


Do you allow others to hunt deer with permission on your property? (Asked of those who live in a single-family home.)								
WMU	Yes	No	Don't know					
1A	15	83	2					
1B	24	76	0					
2A	21	77	2					
2B	14	86	1					
2C	24	76	0					
2D	30	70	0					
2E	26	74	0					
2F	27	73	0					
2G	26	74	0					
3A	37	63	0					
3B	21	78	0					
3C	30	70	0					
3D	9	91	0					
4A	27	72	1					
4B	24	76	1					
4C	19	81	1					
4D	17	83	0					
4E	25	75	0					
5A	14	86	0					
5B	14	86	0					
5C	15	85	0					
5D	2	98	0					

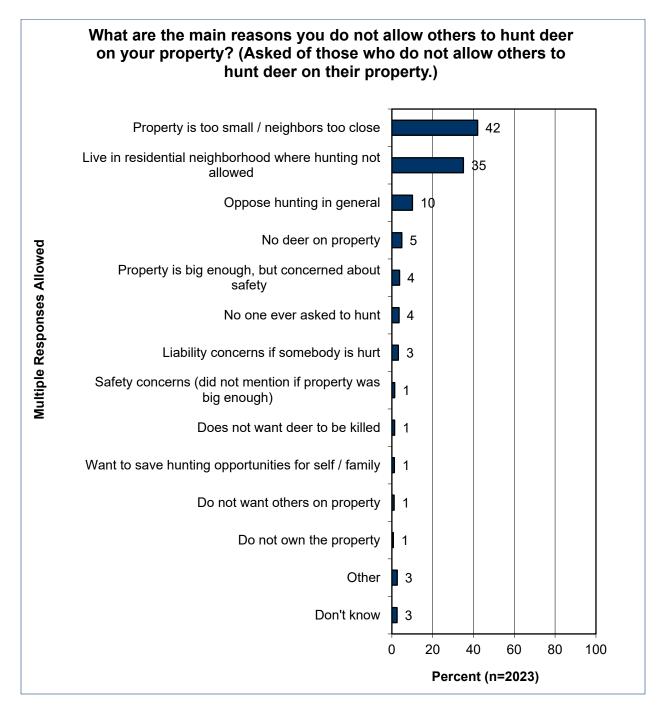
27



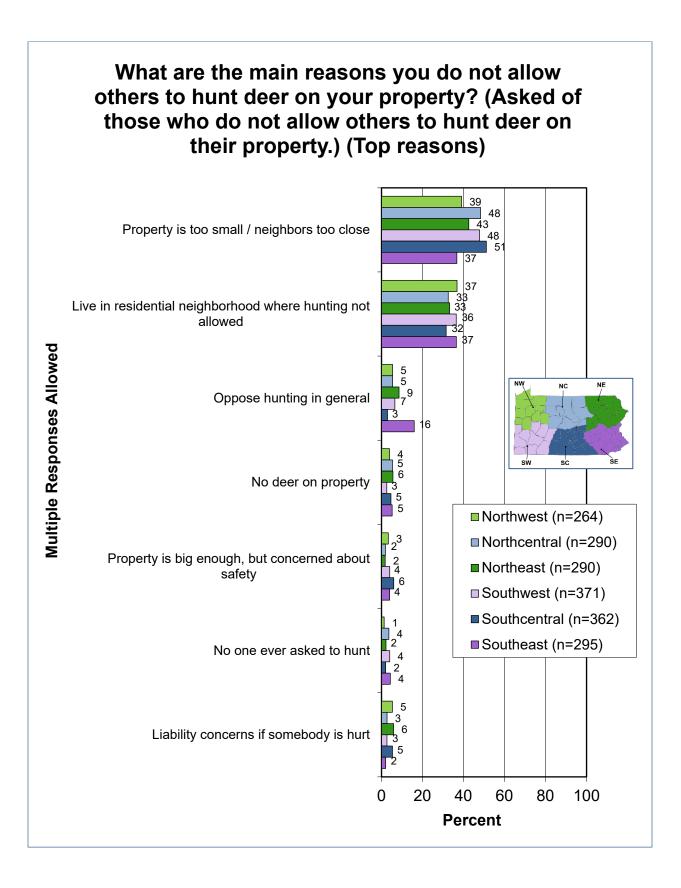
There is not a marked change from the previous survey, as shown in the trends graph below.



The most common reasons that residents do not allow deer hunting on their property pertain to the limited size of their tract where hunting cannot occur. Otherwise, an opposition to hunting, safety concerns, and liability concerns are limiting factors. Some residents indicated that nobody had asked to go hunting on their property. The graph shows the full listing of reasons. WMU and regional results are shown on the succeeding pages.

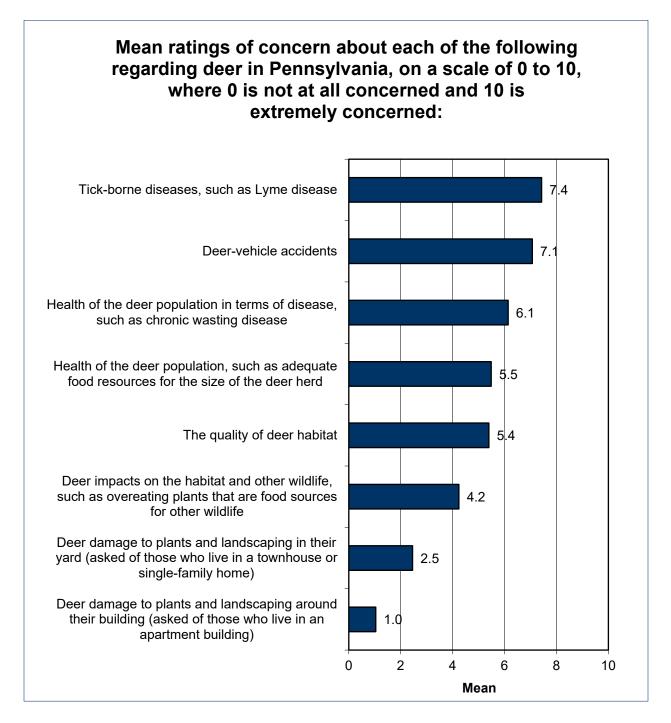


	What are the main reasons you do not allow others to hunt deer on your property? (Asked of those who do not allow others to hunt deer on their property.)										
wмu	Property is too small / neighbors too close	Live in residential neighborhood where hunting is not allowed	Oppose hunting in general	No deer on property	Property is big enough, but concerned about safety	No one ever asked to hunt	Liability concerns if somebody is hurt				
1A	39	41	6	2	6	0	4				
1B	42	35	3	5	3	2	8				
2A	56	35	2	4	3	2	1				
2B	42	41	10	2	3	4	2				
2C	55	26	2	3	9	4	2				
2D	56	21	3	3	2	4	4				
2E	57	20	4	7	3	6	4				
2F	38	35	4	2	3	4	11				
2G	43	35	3	7	3	3	1				
3A	52	30	2	1	3	6	2				
3B	52	32	8	8	2	1	4				
3C	45	30	7	0	2	1	6				
3D	36	37	10	8	1	3	4				
4A	54	21	7	3	4	3	6				
4B	57	33	1	3	2	7	2				
4C	42	32	6	6	3	3	6				
4D	44	42	5	6	2	2	3				
4E	37	23	4	5	1	5	7				
5A	50	25	5	7	3	2	4				
5B	52	35	8	7	6	1	5				
5C	38	35	17	4	6	5	4				
5D	30	37	17	7	3	6	0				



CONCERNS ABOUT DEER

The survey asked a series of questions about potential concerns regarding deer. For each, residents were asked to rate their concern using a 0 to 10 scale, where 0 is not at all concerned and 10 is extremely concerned. The most concern is with tick-borne diseases and deer-vehicle accidents. (Note that damage to landscaping was asked about in two questions: one for those who live in a single-family house or townhouse that asked about the landscaping in their yard and the other question for those living in a condo or apartment building that asked about the landscaping around their building.)



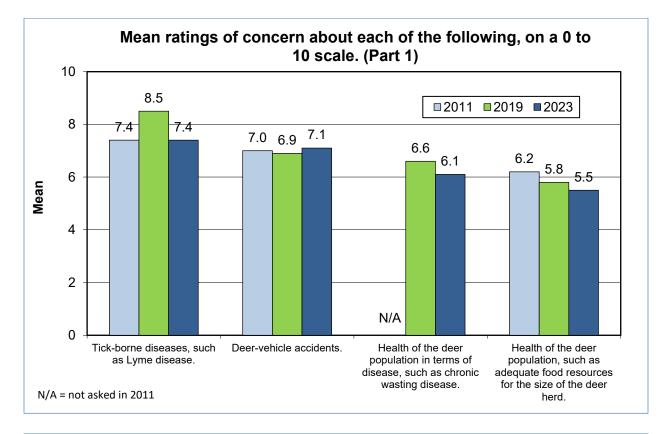
	Mean ratings of concern about each of the following in Pennsylvania (on a scale of 0 to 10, where 0 is not at all										
concern	concerned and 10 is extremely concerned).										
WMU	Tick-borne diseases	Deer- vehicle accidents	Health of the deer population in terms of disease	Health of the deer population (resources for the size of the deer herd)	The quality of deer habitat	Deer impacts on the habitat and other wildlife	Deer damage to plants and landscaping in your yard	Deer damage to plants and landscaping around your building			
1A	7.9	7.5	6.1	5.1	4.9	4.0	2.9	0.9			
1B	7.6	7.2	5.9	4.7	5.2	4.2	2.4	1.1			
2A	7.7	7.5	6.3	4.9	4.9	4.6	3.3	0.9			
2B	8.0	6.7	6.4	5.2	5.1	4.4	4.0	1.4			
2C	7.7	6.7	6.2	5.3	4.6	4.3	2.9	1.0			
2D	7.9	7.0	6.6	5.2	4.7	3.9	2.7	5.0			
2E	7.9	6.9	6.4	6.0	5.1	4.1	2.7	1.9			
2F	7.7	6.4	6.5	4.9	4.9	3.9	2.7	0.7			
2G	7.6	5.9	5.7	5.7	5.3	3.8	1.4	1.1			
3A	7.6	6.3	5.5	4.8	4.3	3.8	2.5	2.0			
3B	7.8	7.1	6.2	5.9	5.4	3.8	2.8	1.4			
3C	7.8	7.4	5.6	5.3	4.8	4.5	2.4	0.6			
3D	7.7	6.8	5.9	5.5	5.7	4.7	3.6	5.2			
4A	7.8	7.1	7.1	6.5	5.4	3.7	2.2	1.8			
4B	7.3	6.3	6.0	4.7	5.4	3.3	1.9	3.6			
4C	7.9	7.1	5.4	5.6	5.8	4.4	2.1	0.9			
4D	7.6	7.0	6.2	5.2	5.3	3.5	1.5	1.1			
4E	7.4	6.5	6.3	5.0	5.4	3.7	2.0	0.4			
5A	7.4	6.8	6.0	5.3	5.3	4.2	2.1	0.4			
5B	6.7	6.6	6.1	5.8	5.9	4.4	1.7	0.6			
5C	6.7	7.3	6.2	5.1	5.7	3.6	2.3	0.8			
5D	7.4	7.6	6.0	6.1	5.6	4.8	1.9	1.1			

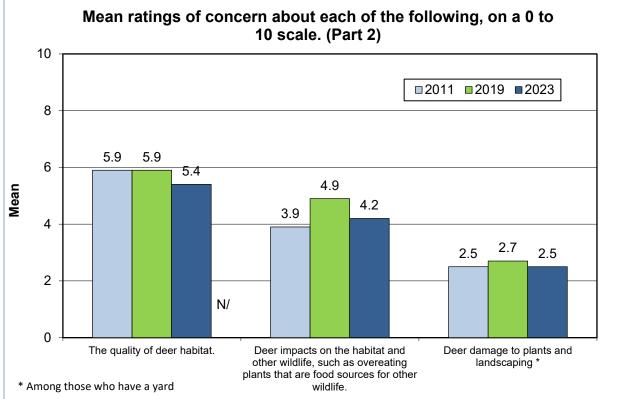
WMU and regional results are shown in the tables below.

Mean ratings of concern about each of the following in Pennsylvania (on a scale of 0 to 10, where 0 is not at all concerned and 10 is extremely concerned).

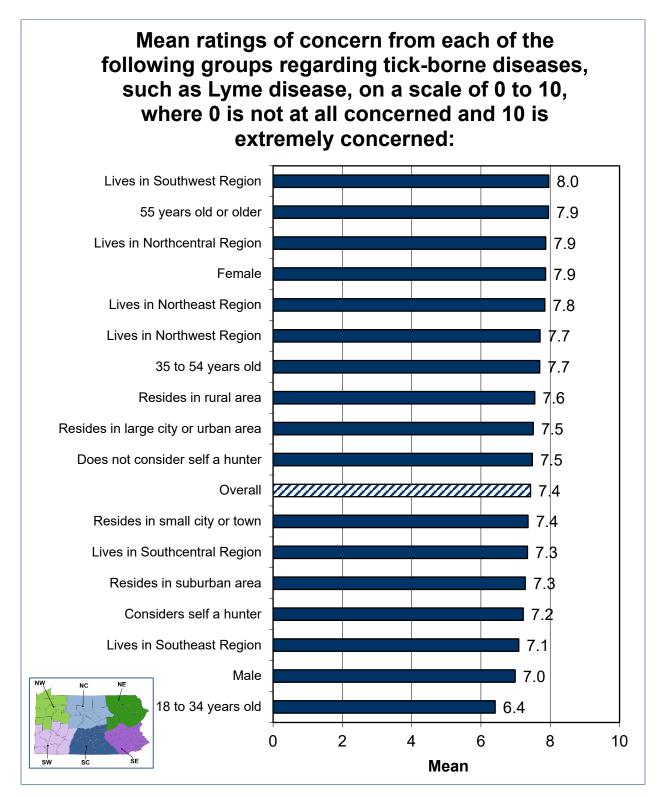
Region	Tick- borne diseases	Deer- vehicle accidents	Health of the deer population in terms of disease	Health of the deer population (resources for the size of the deer herd)	The quality of deer habitat	Deer impacts on the habitat and other wildlife	Deer damage	Deer damage to plants and landscaping around your building
Northwest	7.7	7.3	6.1	5.0	5.0	4.2	2.9	1.5
Northcentral	7.9	6.7	6.4	5.8	5.0	4.1	1.9	0.7
Northeast	7.8	7.1	6.1	5.6	5.5	4.4	2.8	1.5
Southwest	8.0	6.8	6.4	5.2	5.1	4.3	3.6	1.5
Southcentral	7.3	6.2	6.1	5.2	5.5	3.6	1.8	0.7
Southeast	7.1	7.3	6.1	5.7	5.7	4.3	2.0	0.9

The trends are included below; for space considerations, they are shown on two graphs. There was a marked drop in concern about tick-borne diseases ($p \le 0.05$) and deer impacts on habitat ($p \le 0.05$)—both were statistically significant.



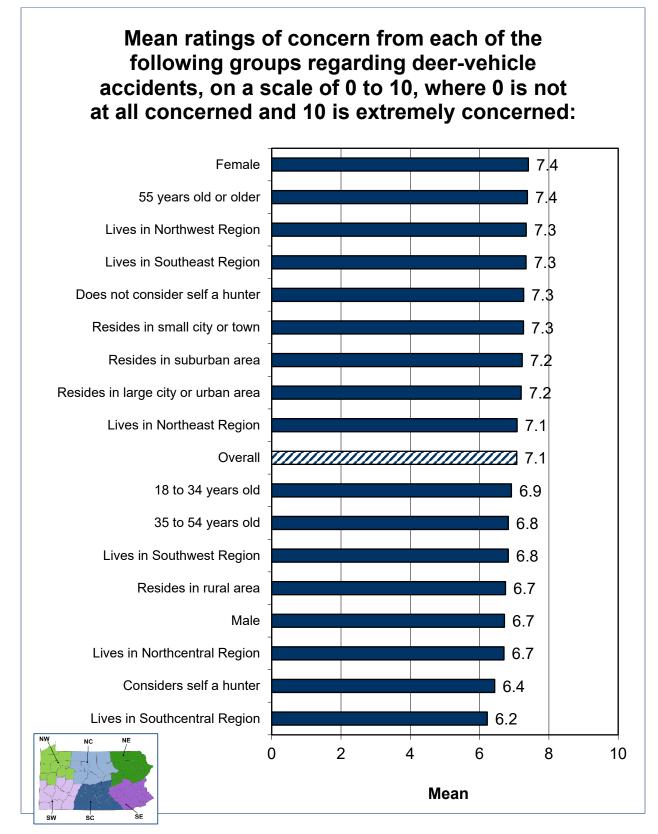


Demographic analyses were run on six of the concern questions in the series (the questions asked of everybody), which are shown below and the succeeding pages. The groups most concerned about tick-borne diseases are those living in the Southwest Region, older residents, those living in the Northcentral Region, and females.



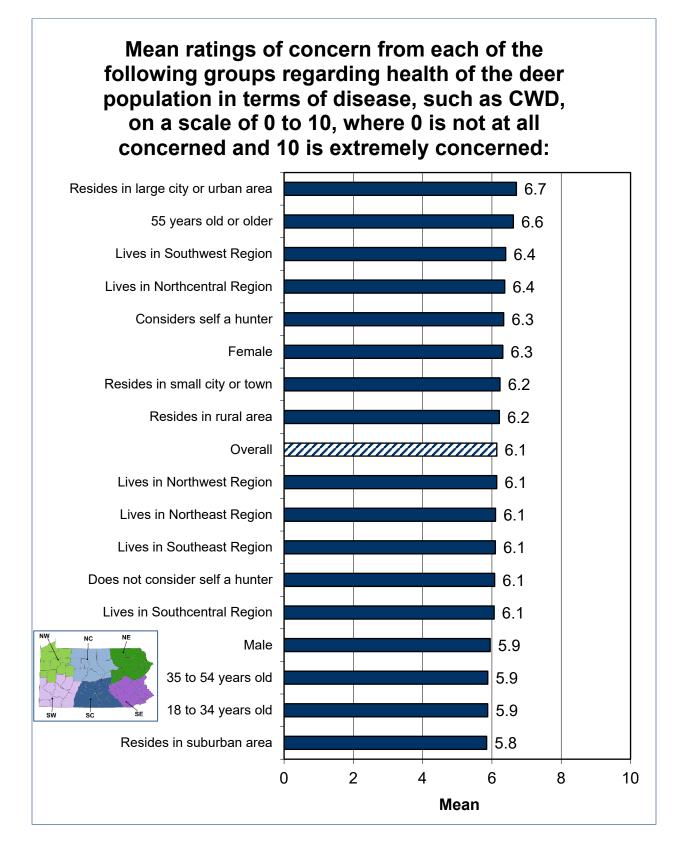
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

No group is markedly more concerned about deer-vehicle accidents, with the top-ranked mean of 7.4 being only slightly higher than the mean overall of 7.1.



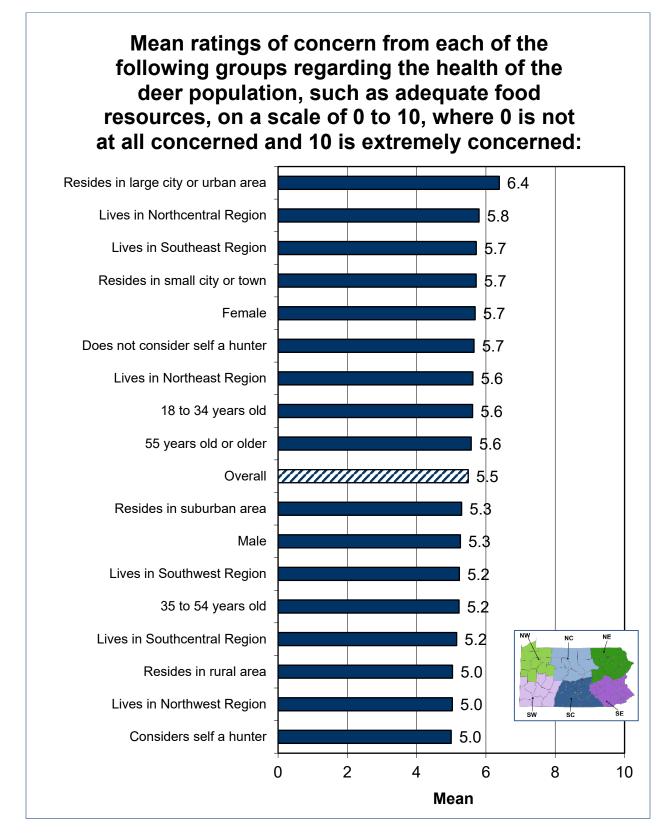
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

The groups most concerned about the health of the deer population in terms of disease are large city/urban area residents and older residents.



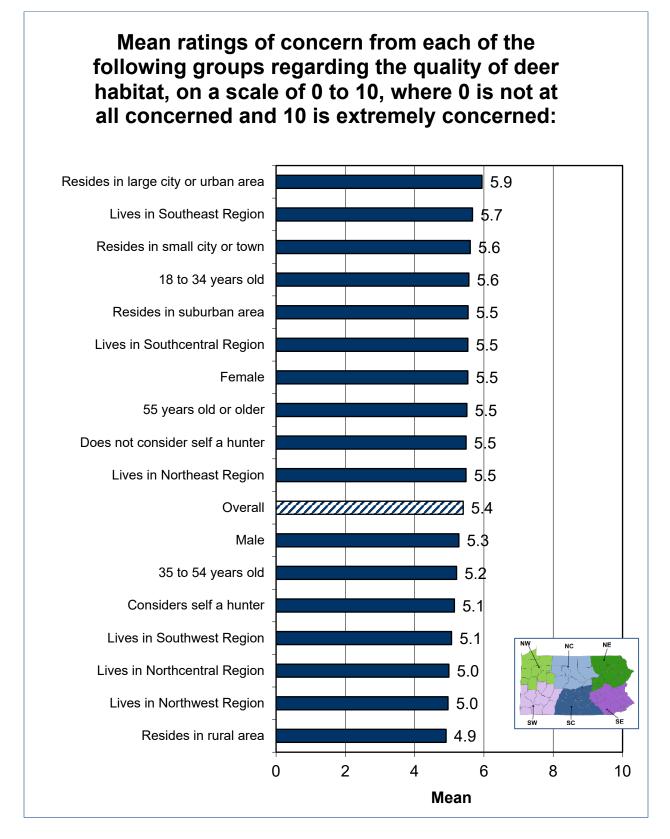
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

The groups most concerned about the health of the deer population in terms of adequate resources are residents of large cities/urban areas.

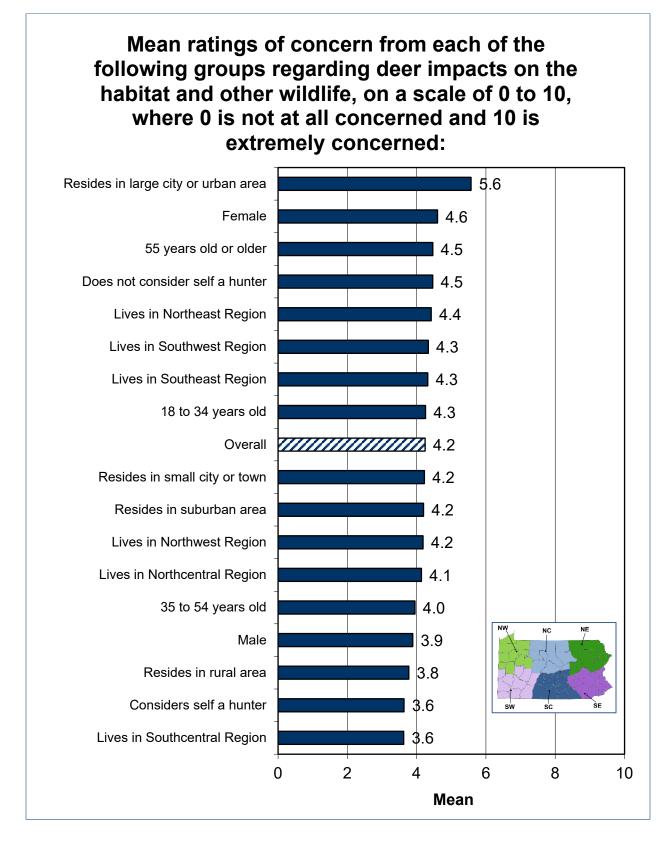


See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

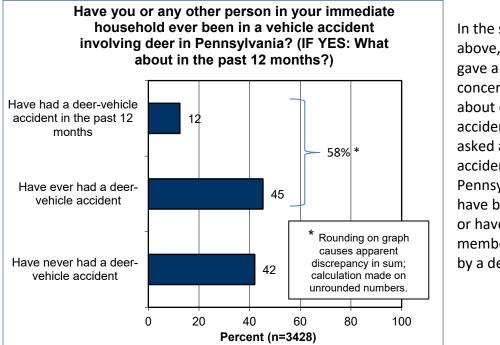
The groups most concerned about the quality of deer habitat are residents of large cities/urban areas.



The groups most concerned about deer impacts on habitat and other wildlife are residents of large cities/urban areas.



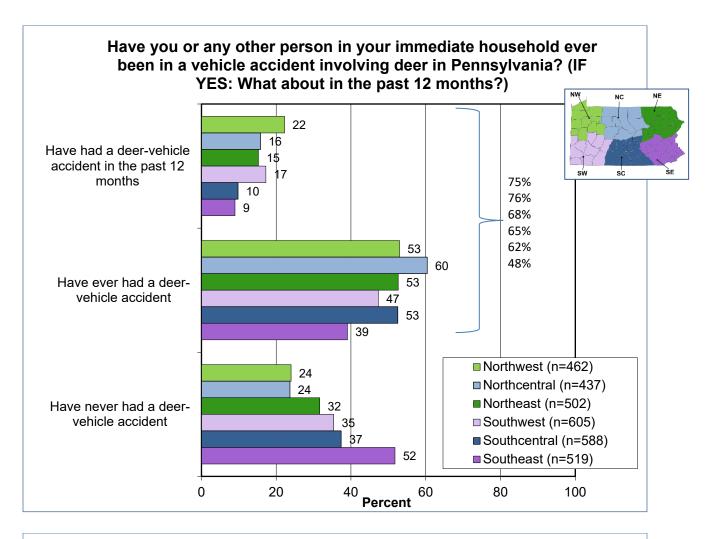
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

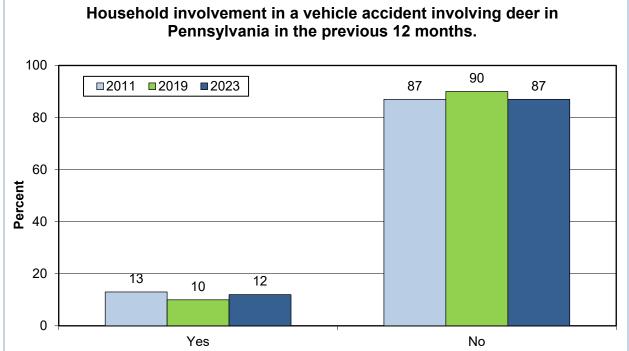


In the series of questions above, 50% of residents gave a high rating of concern (8, 9, or 10) about deer-vehicle accidents. The survey also asked about experiencing accidents: 58% of Pennsylvania residents have been in an accident, or have had a household member in one, caused by a deer.

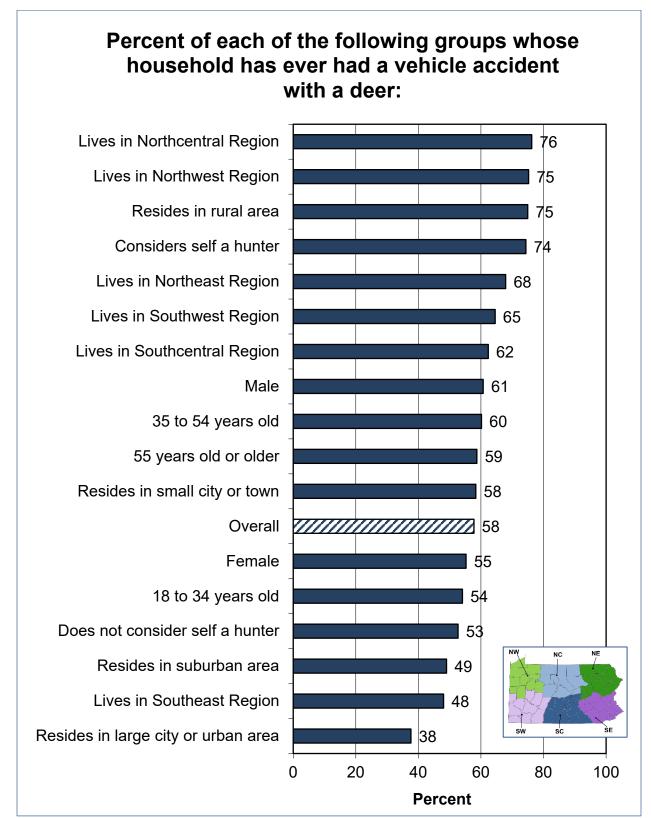
The highest accident rates (ever) were in WMUs 3A, 2A, and 2E and in the Northwest and Northcentral Regions. The trends graph that follows, regarding an accident in the past 12 months, shows little change since the previous survey in 2019.

-	Have you or any other person in your immediate household ever been in a vehicle accident involving deer in Pennsylvania? (IF YES: What about in the past 12 months?)							
WMU	Accident past 12 months	Accident ever (not past 12 months)	Never	Don't know				
1A	15	53	30	2				
1B	26	51	24	0				
2A	28	55	17	0				
2B	12	44	44	0				
2C	24	53	23	0				
2D	27	53	20	0				
2E	31	51	18	0				
2F	19	61	20	0				
2G	15	65	20	0				
3A	24	61	13	1				
3B	17	47	36	0				
3C	21	51	28	0				
3D	13	54	31	1				
4A	8	65	26	0				
4B	17	59	23	0				
4C	10	52	35	3				
4D	8	63	28	0				
4E	17	58	25	1				
5A	14	46	40	1				
5B	8	35	57	0				
5C	11	53	36	0				
5D	7	31	62	0				



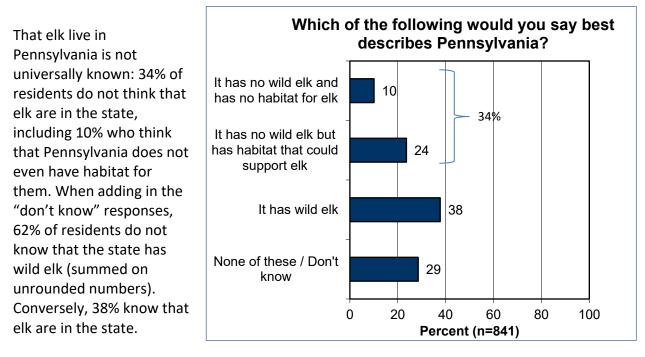


A demographic analyses graph shows that having an accident with deer is associated with being residents of the Northcentral Region, residents of the Northwest Region, rural residents, hunters, residents of the Northeast Region, and residents of the Southwest Region.



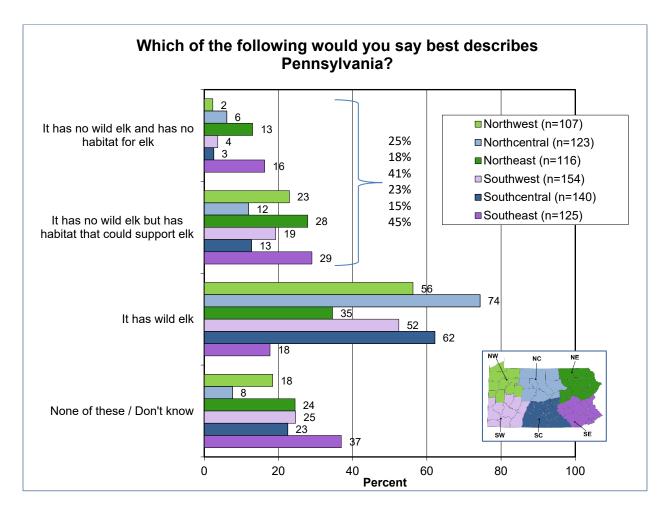
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

ATTITUDES TOWARD ELK

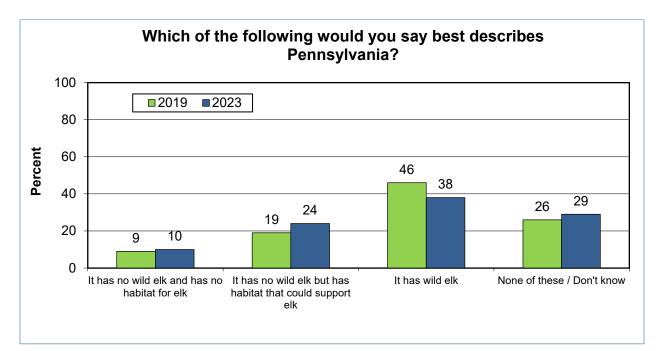


The highest knowledge rates are in WMUs 4D, 2C, and 2G and in the Northcentral and Southcentral Regions: these places have the highest percentages saying that the state has wild elk.

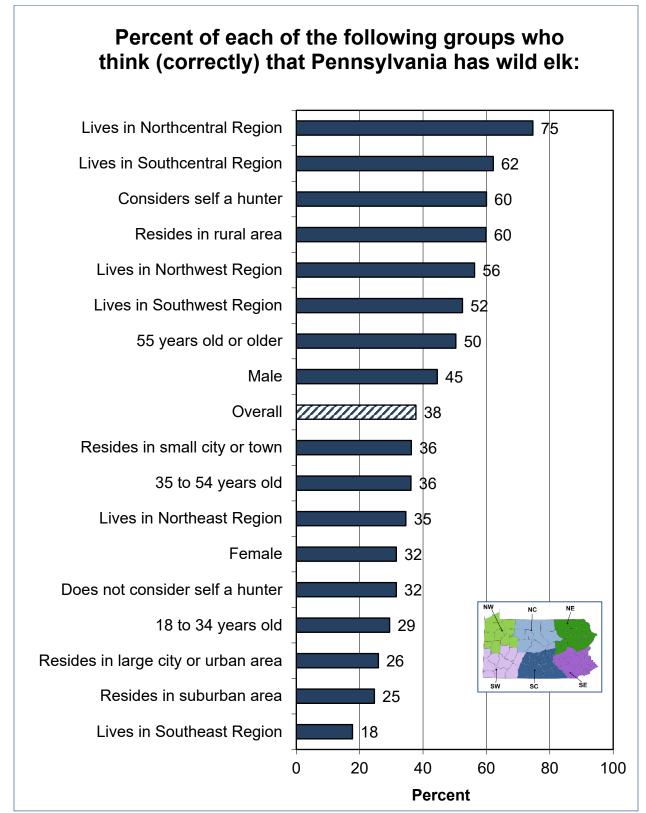
Which of	Which of the following would you say best describes Pennsylvania?							
WMU	It has no wild elk and has no habitat for elk	It has no wild elk but has habitat that could support elk	lt has wild elk	None of these / Don't know				
1A	6	13	53	28				
1B	0	36	48	17				
2A	11	16	50	23				
2B	1	22	48	29				
2C	2	12	78	8				
2D	6	12	70	12				
2E	5	15	70	9				
2F	0	8	73	19				
2G	0	15	78	6				
3A	9	18	57	16				
3B	9	26	57	8				
3C	13	25	29	34				
3D	13	32	16	39				
4A	2	25	53	20				
4B	1	5	67	27				
4C	18	12	43	27				
4D	7	4	80	9				
4E	23	12	48	17				
5A	3	9	74	14				
5B	0	31	43	25				
5C	15	13	28	44				
5D	20	37	5	38				



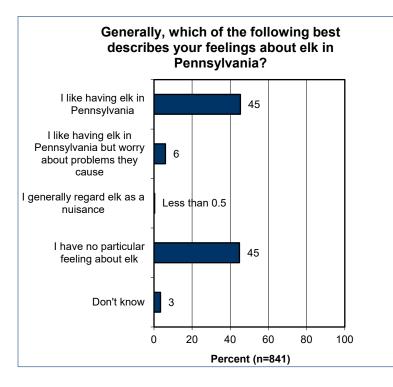
The trend shows a lower percentage of residents who know that Pennsylvania has wild elk, a statistically significant difference ($p \le 0.05$).



The demographic analyses show that the groups most likely to know that Pennsylvania has wild elk are residents of the Northcentral and Southcentral Regions, hunters, rural residents, residents of the Northwest and Southwest Regions, and residents 55 years old or older.



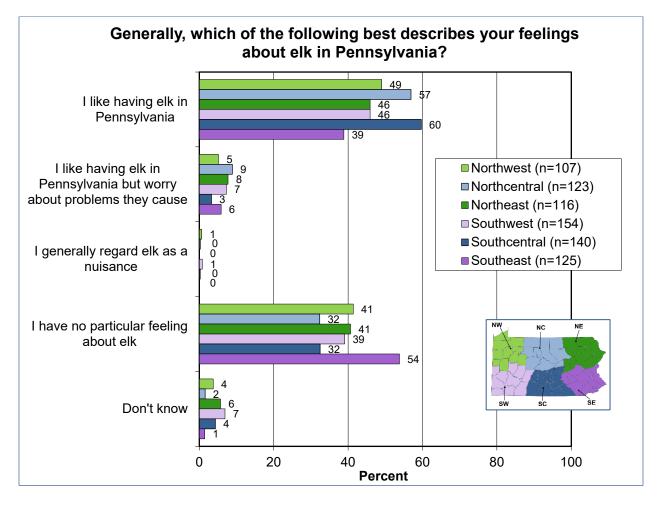
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.



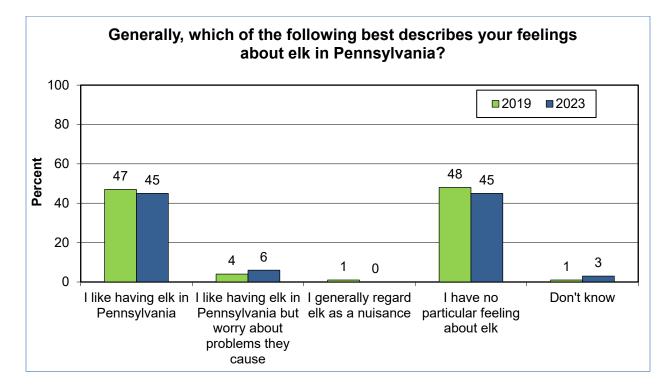
The survey next informed respondents that Pennsylvania has wild elk, which were reintroduced into Pennsylvania in the early 1900s. Residents were then asked about their attitudes toward elk. The majority of residents (51%) like that elk are in the state, made up of 45% who like that they in the state with no caveats and 6% who like that they are in the state but worry about problems the elk might cause. Only less than 0.5% regard elk as a nuisance. The remainder have no particular feeling about elk (or do not know).

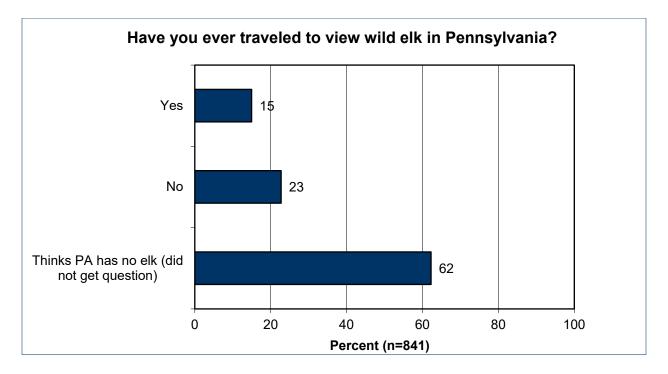
Residents of WMUs 2F, 2G, 3A, 4A, and 4B and the Northcentral and Southcentral Regions are most amendable to having elk around.

Generall	Generally, which of the following best describes your feelings about elk in Pennsylvania?								
wмu	I like having elk in Pennsylvania	I like having elk in Pennsylvania but worry about problems they cause	l generally regard elk as a nuisance	l have no particular feeling about elk	Don't know				
1A	35	3	0	56	6				
1B	47	4	1	46	2				
2A	39	2	4	47	9				
2B	49	7	0	38	6				
2C	50	15	0	25	11				
2D	54	9	2	27	7				
2E	56	7	0	32	6				
2F	65	2	0	25	7				
2G	60	13	0	25	1				
3A	60	9	2	29	0				
3B	52	7	0	40	2				
3C	44	8	7	38	2				
3D	42	7	0	39	12				
4A	60	8	3	24	5				
4B	65	1	0	29	5				
4C	57	0	0	37	7				
4D	57	10	0	30	2				
4E	51	9	0	38	2				
5A	58	2	0	38	2				
5B	35	3	0	58	4				
5C	46	3	0	49	2				
5D	39	8	0	54	0				



The trends graph is included, showing little change since the previous survey.

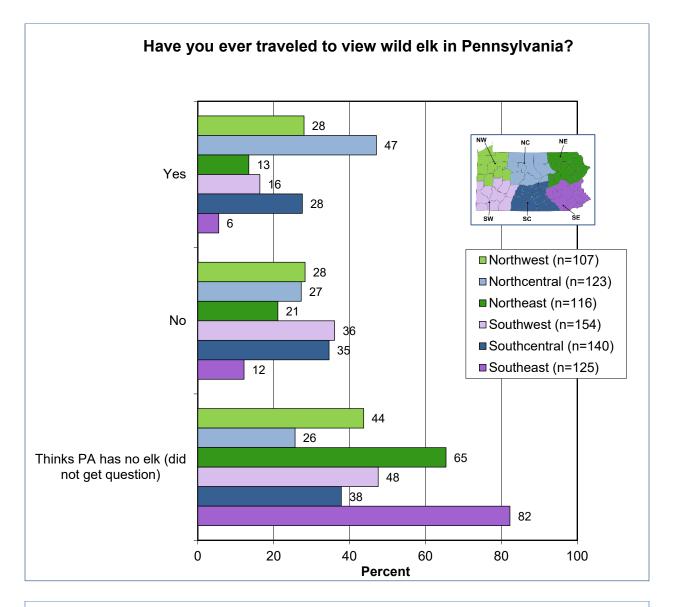


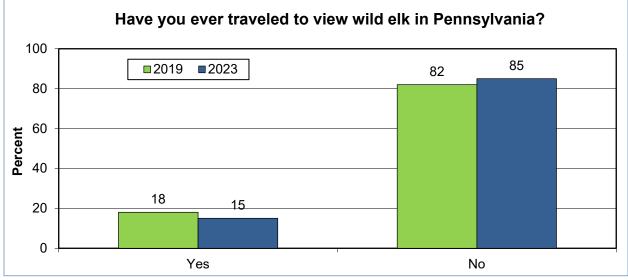


Elk are an attraction to some: 15% of state residents traveled to view wild elk at some time.

Those WMUs and regions with the highest percentages of residents who traveled to view elk are WMUs 2G, 2E, and 2C and the Northcentral Region. The trends do not show a marked change.

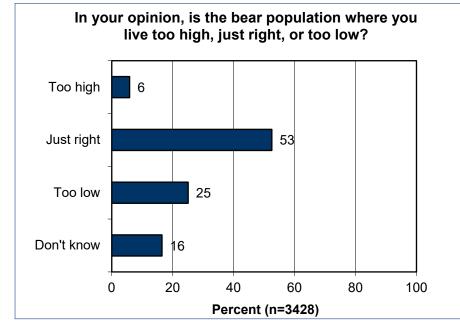
Have you	Have you ever traveled to view wild ELK in Pennsylvania?							
WMU	Yes	No	Thinks PA has no elk (did not get question)					
1A	16	37	47					
1B	15	32	52					
2A	16	34	50					
2B	9	39	52					
2C	56	21	22					
2D	52	19	30					
2E	58	12	30					
2F	47	26	27					
2G	63	15	22					
3A	28	29	43					
3B	23	33	43					
3C	7	22	71					
3D	3	13	84					
4A	34	19	47					
4B	28	39	33					
4C	16	27	57					
4D	51	29	20					
4E	29	20	52					
5A	33	41	26					
5B	7	36	57					
5C	6	23	72					
5D	3	2	95					





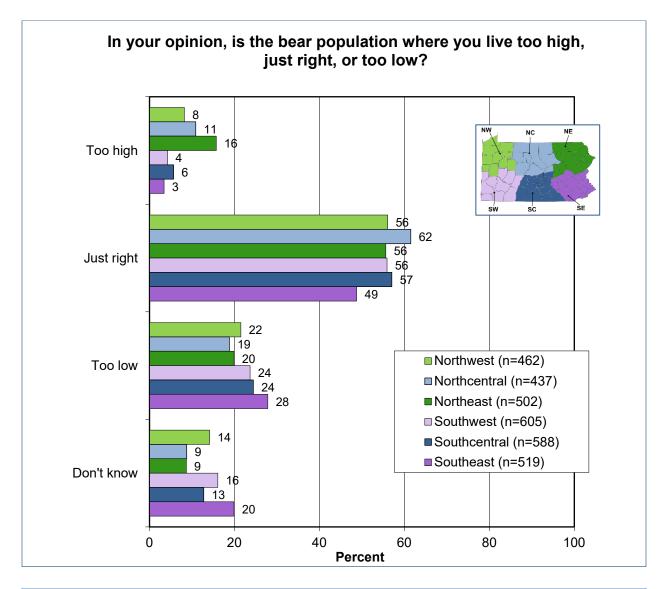
ATTITUDES TOWARD BEAR

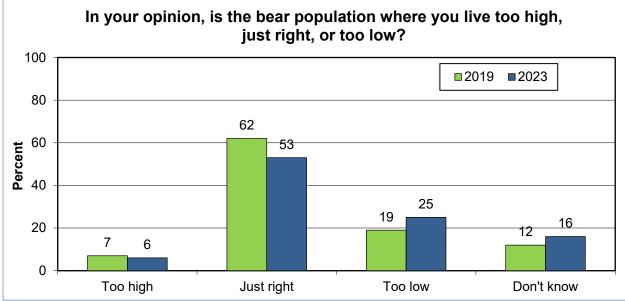
The survey started off the bear section by asking residents about their attitudes toward the bear population. The majority of Pennsylvania residents (53%) say that the bear population where the residents live is just right. Otherwise, a much higher percentage say it is too low (25%) than too high (6%).



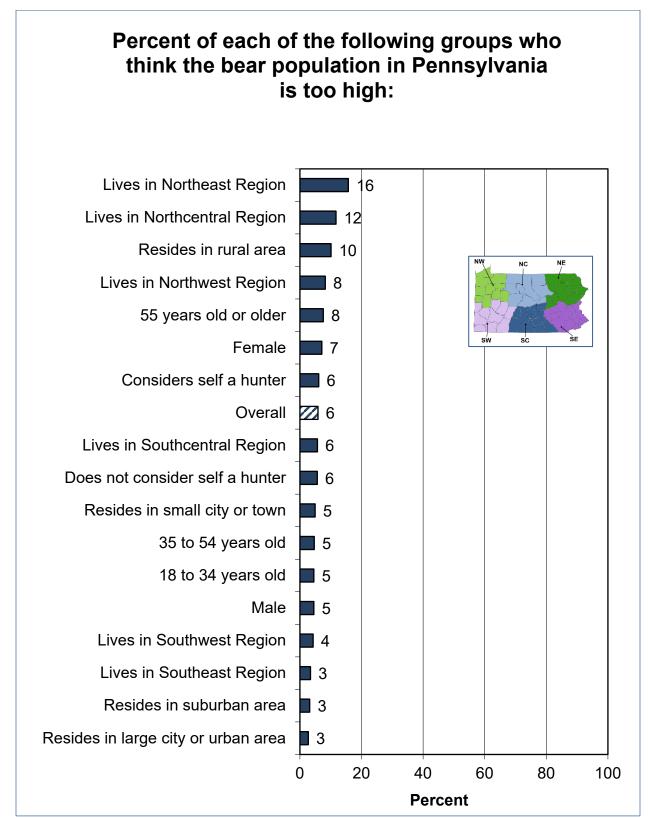
The WMUs in which residents are most likely to say that the bear population is too high are 3C, 3B, and 3D. Residents of the Northeast Region are the most likely to say the population is too high. The trends graph shows an increase in the percentage saying the population is too low, a statistically significant difference ($p \le 0.05$).

In your opin	n your opinion, is the bear population where you live too high, just right, or too low?						
WMU	Too high	Just right	Too low	Don't know			
1A	5	54	25	16			
1B	8	56	20	15			
2A	3	45	36	16			
2B	4	58	22	16			
2C	5	57	24	14			
2D	9	56	19	16			
2E	9	58	25	9			
2F	15	62	13	10			
2G	14	61	11	13			
3A	11	60	21	9			
3B	20	56	16	9			
3C	21	54	12	13			
3D	19	59	17	6			
4A	17	56	16	11			
4B	9	51	26	13			
4C	9	56	22	13			
4D	7	53	30	11			
4E	8	50	34	8			
5A	6	51	27	17			
5B	3	55	25	18			
5C	6	45	28	21			
5D	2	50	29	20			



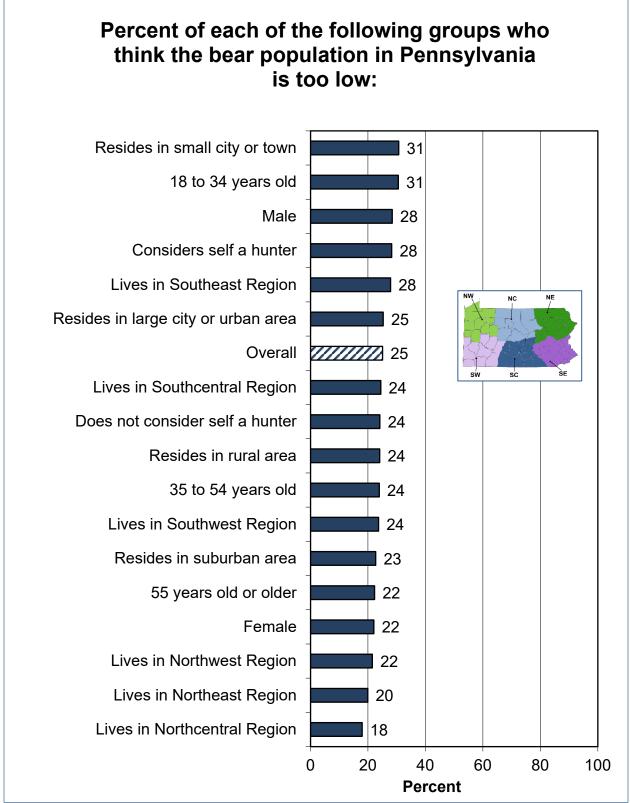


The groups most likely to say that the bear population is too high, as shown in the demographic analyses graph, include residents of the Northeast Region and residents of the Northcentral Region.

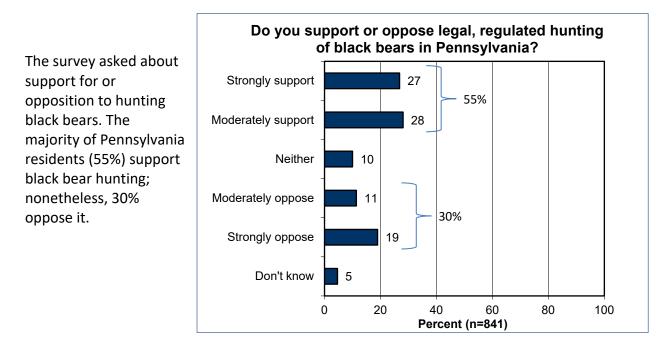


See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

On the other hand, the groups most likely to say that the bear population is too low include residents of small cities/towns and residents 18 to 34 years old.

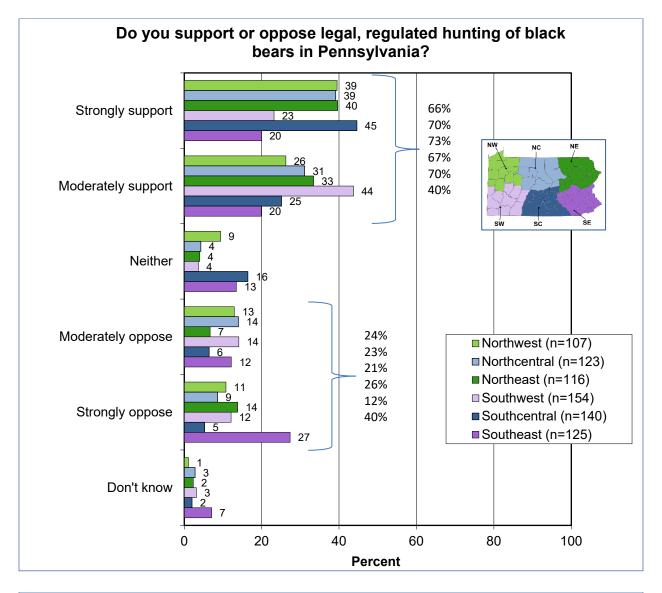


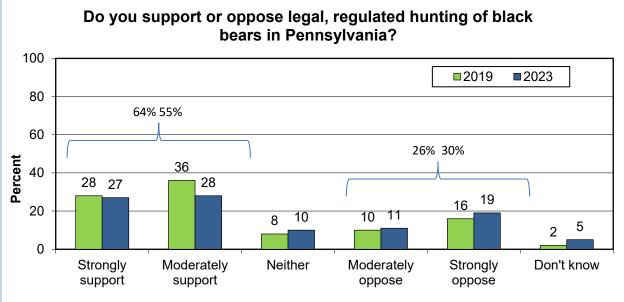
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.



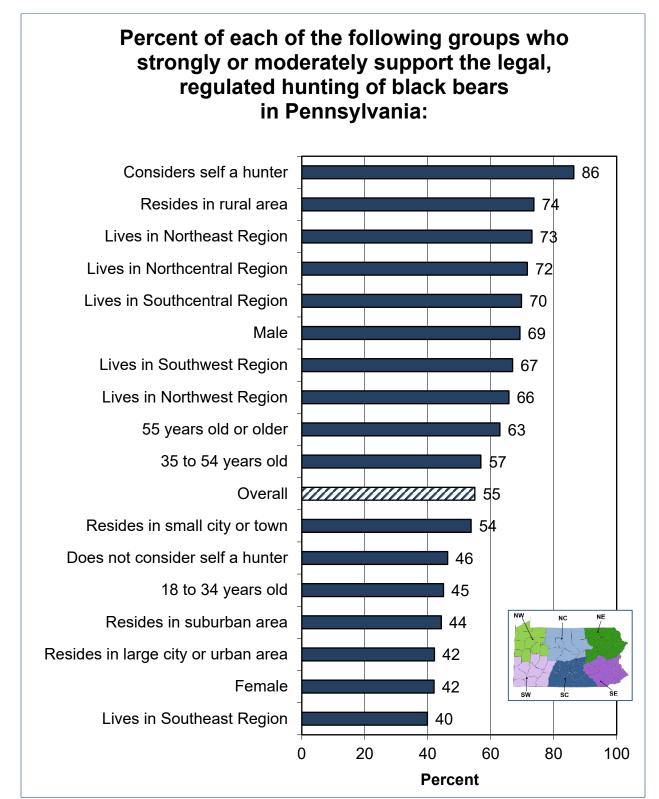
The most support for the hunting of black bears is in WMUs 2C, 3A, and 3C. Regionally, the Southeast Region is markedly lower in support, where 40% support and 40% oppose. The other regions are much more supportive, where support ranges from 66% to 70%. The trends graph is also shown; support has dropped since the 2019 survey, a statistically significant difference ($p \le 0.05$).

Do you su	Do you support or oppose legal, regulated hunting of black bears in Pennsylvania?							
WMU	Strongly support	Moderately support	Neither support nor oppose	Moderately oppose	Strongly oppose	Don't know		
1A	40	24	13	13	11	0		
1B	34	31	4	12	17	1		
2A	32	27	13	12	13	3		
2B	13	48	0	18	18	3		
2C	66	25	0	4	0	6		
2D	38	39	17	3	0	2		
2E	43	36	0	8	12	1		
2F	38	38	7	4	9	3		
2G	41	35	6	15	3	0		
3A	55	33	2	2	6	0		
3B	37	36	0	16	7	4		
3C	48	37	8	7	0	0		
3D	29	30	6	5	24	6		
4A	44	32	7	0	7	9		
4B	51	29	0	7	12	0		
4C	46	31	12	0	8	3		
4D	40	24	7	21	9	0		
4E	41	32	0	3	24	0		
5A	38	22	16	11	6	7		
5B	31	32	21	0	11	5		
5C	30	19	10	4	26	12		
5D	9	17	15	19	34	5		



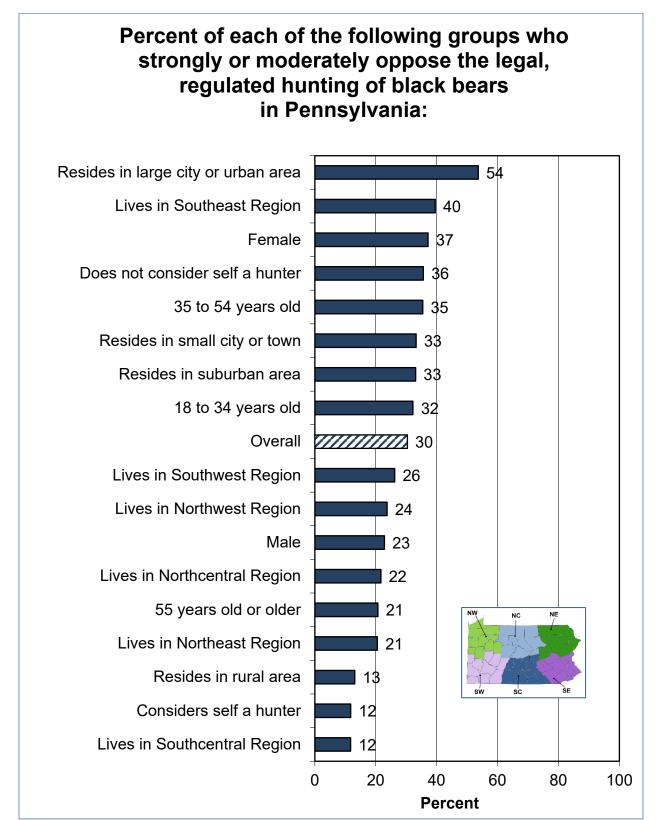


The demographic analyses graphs show that the most support for the hunting of black bears is among those who are hunters; rural residents; residents of the Northeast, Northcentral, and Southcentral Regions; males; residents of the Southwest and Northwest Regions; and residents 55 years old or older.



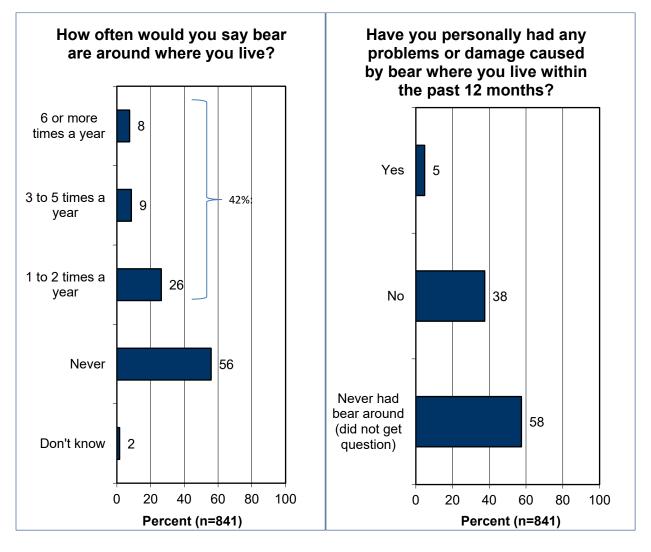
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

Conversely, the groups most associated with opposition to the hunting of black bears include residents of large cities/urban areas, residents of the Southeast Region, females, non-hunters, and residents 35 to 54 years old.



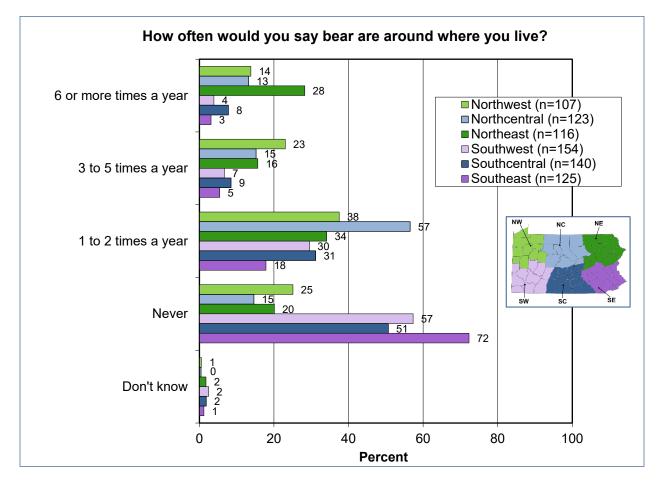
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

The final bear questions pertained to problems that bears might cause. Two questions determined that 5% of Pennsylvania residents had problems with bears within the previous 12 months. The first of the questions found that 56% of residents never have bear around to cause problems, while 42% have bears around some times, including 8% who have them around 6 or more times a year. Those who had bear around some of the time were then asked about having problems with bears.



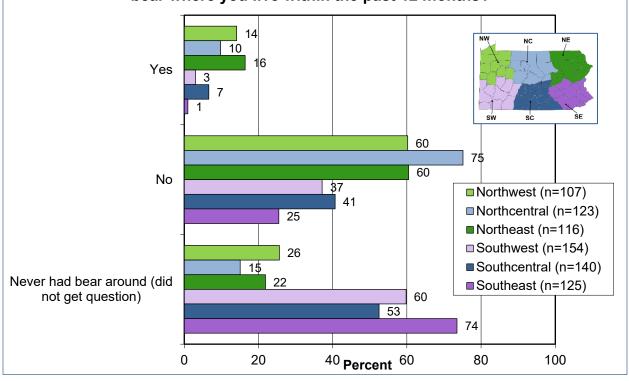
WMU and regional results show that the top locations for having bear around are WMUs 2F, 3D, and 3A and the Northcentral and Northeast Regions. This partly coincides with the locations where bear cause the most problems: WMUs 3C, 2G, and 3D and the Northeast and Northwest Regions.

How often	How often would you say bear are around where you live?						
WMU	6 or more times a year	3 to 5 times a year	1 to 2 times a year	Never	Don't know		
1A	13	23	32	32	0		
1B	15	15	30	38	1		
2A	7	4	14	70	5		
2B	0	3	31	63	3		
2C	13	3	51	33	0		
2D	9	35	37	19	0		
2E	16	20	49	14	1		
2F	20	26	54	0	0		
2G	25	17	37	20	2		
3A	24	21	41	14	0		
3B	22	18	44	14	3		
3C	35	21	25	19	0		
3D	44	17	26	10	4		
4A	8	25	37	30	0		
4B	18	9	35	26	12		
4C	7	13	37	38	5		
4D	9	11	48	32	0		
4E	9	0	52	39	0		
5A	3	13	43	41	0		
5B	2	10	20	67	0		
5C	5	0	26	69	0		
5D	2	4	10	82	2		

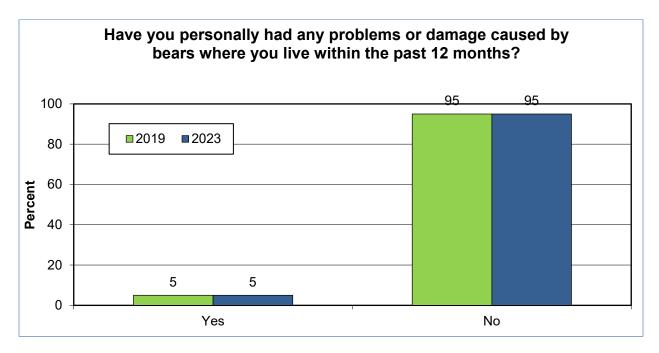


(Asked of those who had bears around.) Never had bears around Never had bears around						
WMU	Yes (had problems)	No	(not asked question)	Don't know		
1A	17	51	32	0		
1B	8	53	39	0		
2A	3	22	75	0		
2B	0	35	65	0		
2C	16	52	33	0		
2D	18	63	19	0		
2E	6	78	15	0		
2F	15	85	0	0		
2G	20	58	21	0		
3A	10	75	14	0		
3B	16	67	16	0		
3C	21	54	19	6		
3D	19	68	13	0		
4A	2	66	30	2		
4B	1	61	38	0		
4C	7	50	43	0		
4D	6	62	32	0		
4E	7	54	39	0		
5A	3	56	41	0		
5B	2	30	68	0		
5C	2	29	69	0		
5D	0	16	84	0		

Have you personally had any problems or damage caused by bear where you live within the past 12 months?

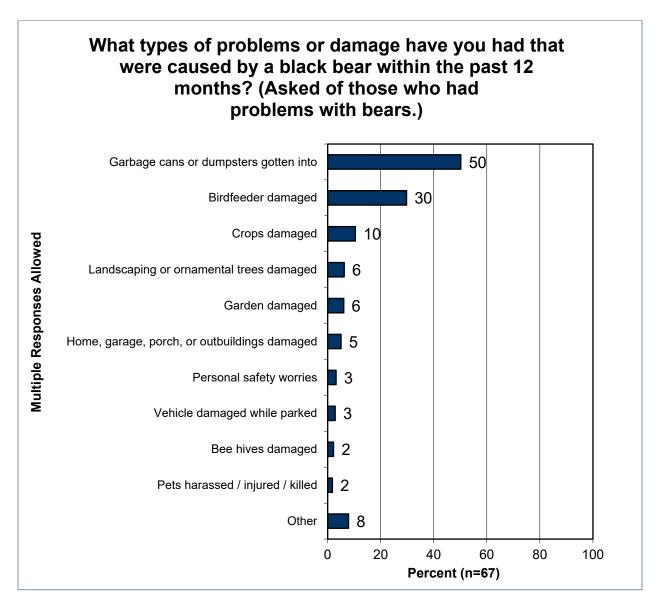


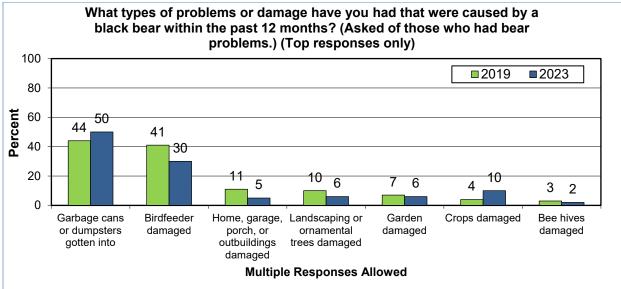
Trends were run on the question regarding having damage (no trends could be run on the frequency of having bears around; it was not asked in previous surveys using the same answer set). The percentage experiencing bear damage is the same in this survey as it was in the 2019 survey.



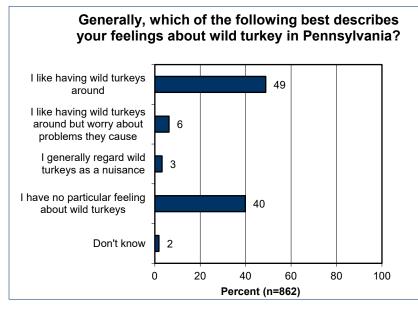
The most common types of bear problems are getting into garbage, damaging birdfeeders, and damaging crops. The graph shows the full list of problems. No WMU or regional results are shown because only a small number of respondents had damage and received the question.

Trends suggest a slight rise in problems with garbage and crop damage, although neither of them were statistically significant.





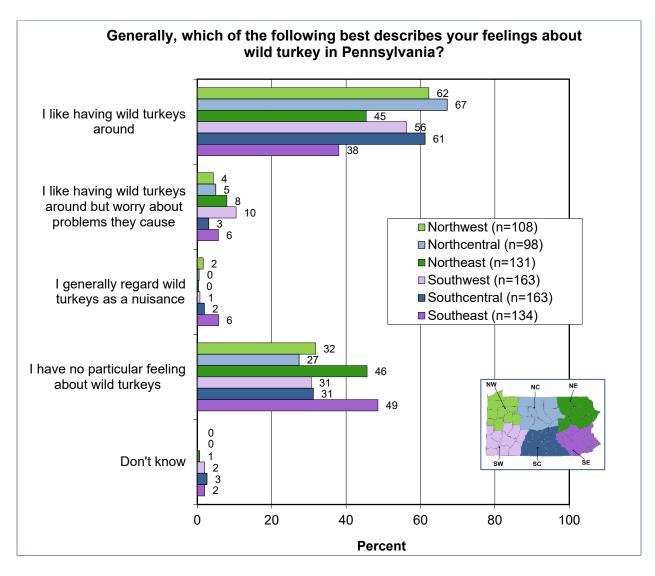
ATTITUDES TOWARD WILD TURKEY

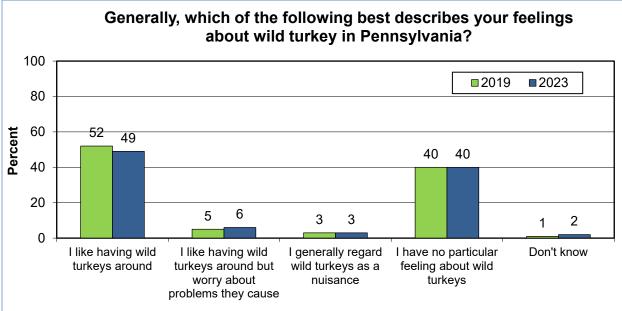


The majority of Pennsylvania residents like having wild turkeys around (55%), although a small portion of them like having them around but worry about the problems the turkeys might cause, as shown in the graph. A small percentage of residents (3%) consider turkeys to be a nuisance. A relatively large percentage (40%) have no feelings about turkeys.

The WMUs and regions with the highest percentages of residents who say that they worry about turkeys or consider them a nuisance are WMUs 2B and 5D and the Southwest and Southeast Regions. The trends show little change since 2019.

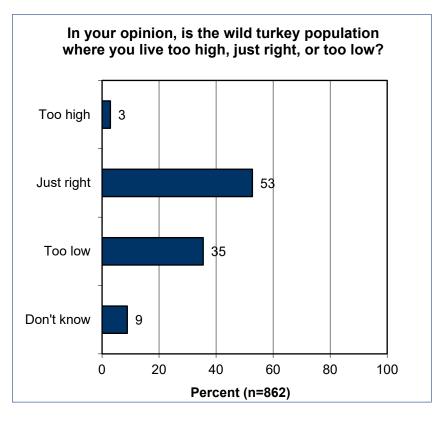
Generally, w	Generally, which of the following best describes your feelings about wild turkey in Pennsylvania?							
WMU	I like having wild turkey around	I like having wild turkey around but worry about problems they cause	l generally regard wild turkey as a nuisance	l have no particular feeling about wild turkey	Don't know			
1A	53	5	2	40	0			
1B	46	4	0	49	1			
2A	33	0	7	59	2			
2B	59	17	0	21	3			
2C	69	0	0	31	0			
2D	83	6	2	10	0			
2E	64	0	0	36	0			
2F	69	3	0	27	1			
2G	80	0	0	20	0			
3A	78	2	4	15	0			
3B	34	9	2	55	0			
3C	59	0	3	38	0			
3D	40	13	0	47	0			
4A	74	3	3	20	0			
4B	75	2	4	18	0			
4C	51	1	12	36	0			
4D	60	2	0	37	1			
4E	41	8	0	43	8			
5A	48	8	4	34	6			
5B	50	2	3	44	1			
5C	50	2	2	42	3			
5D	32	8	6	51	2			



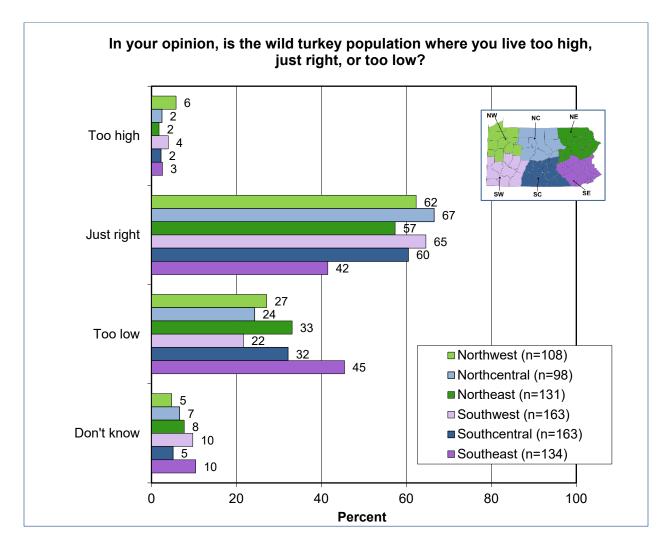


The majority of Pennsylvania residents (53%) think that the turkey population is just right, and otherwise a much larger percentage think the population is too low (35%) rather than too high (3%).

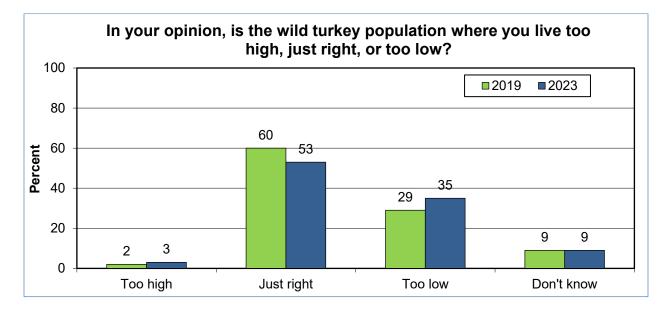
WMUs 4A and 2A and the Northwest and Southwest Regions are the locations with the greatest percentage of residents who say the population is too high.



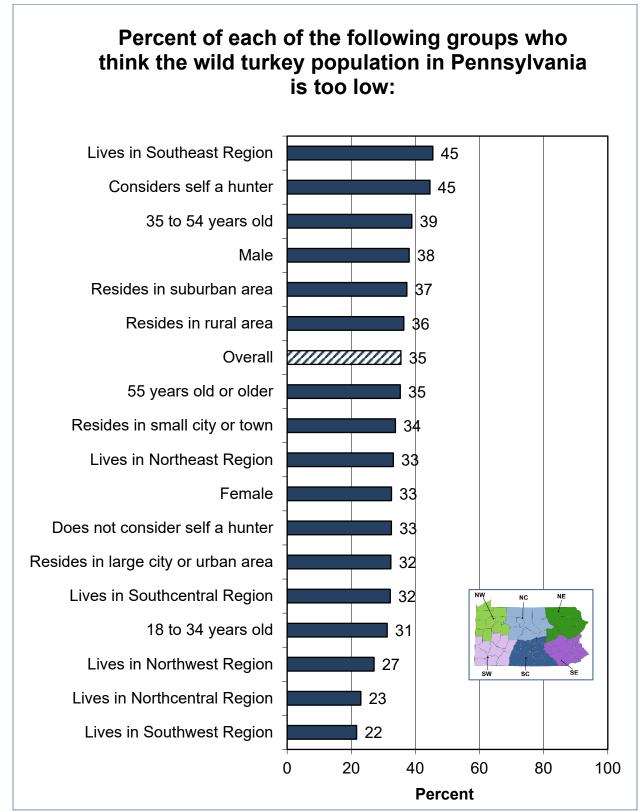
In your opi	n your opinion, is the wild turkey population where you live too high, just right, or too low?						
WMU	Too high	Just right	Too low	Don't know			
1A	2	64	31	3			
1B	4	67	18	11			
2A	10	62	14	15			
2B	3	65	22	10			
2C	1	52	37	9			
2D	8	71	19	2			
2E	2	65	28	6			
2F	5	78	8	9			
2G	0	73	16	11			
3A	4	73	21	2			
3B	0	50	36	14			
3C	2	70	27	1			
3D	3	53	39	6			
4A	11	63	19	7			
4B	0	62	27	10			
4C	0	64	31	4			
4D	8	66	24	1			
4E	2	63	29	5			
5A	5	42	42	11			
5B	1	55	43	2			
5C	2	43	37	18			
5D	3	36	50	10			



The trends show a greater percentage saying that the wild turkey population is too low in this survey compared to 2019, a statistically significant difference ($p \le 0.05$).



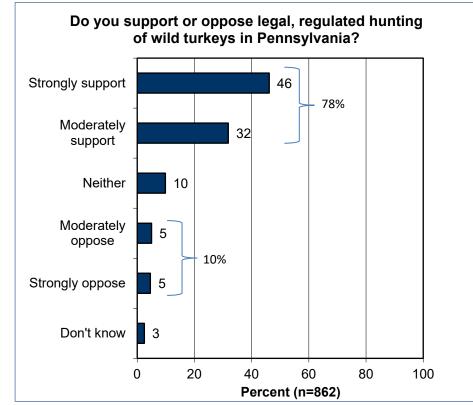
The demographic analyses found that the groups most likely to say that the turkey population is too low include residents of the Southeast Region and hunters. (The demographic analyses could not be run on "too high" because so few residents selected that response choice.)



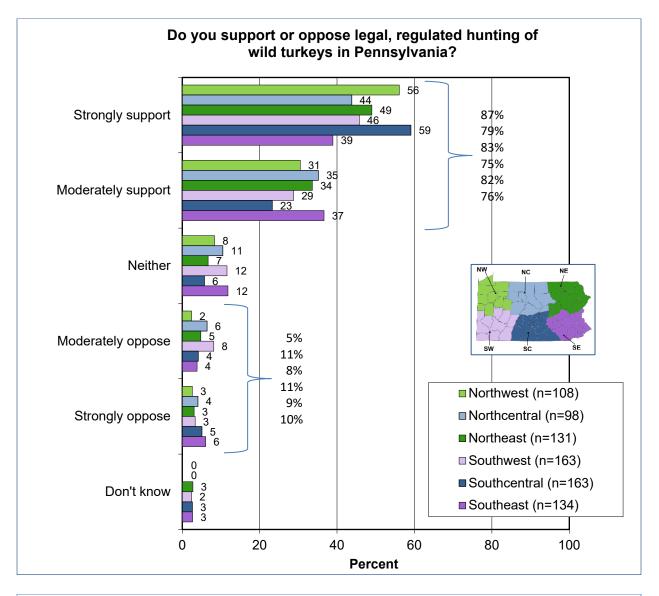
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

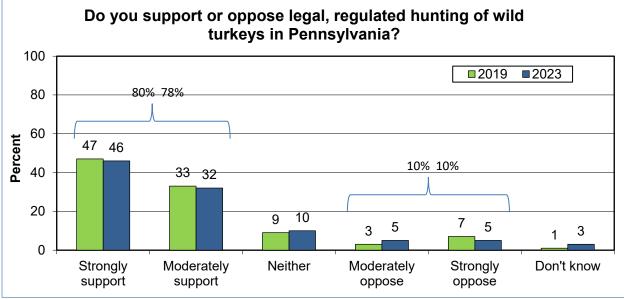
There is much more support for hunting wild turkeys than opposition to it: 78% support it while 10% oppose it.

WMU and regional results are included: support is highest in WMUs 1B, 2F, and 2A and the Northwest Region. The trends show little substantive change.

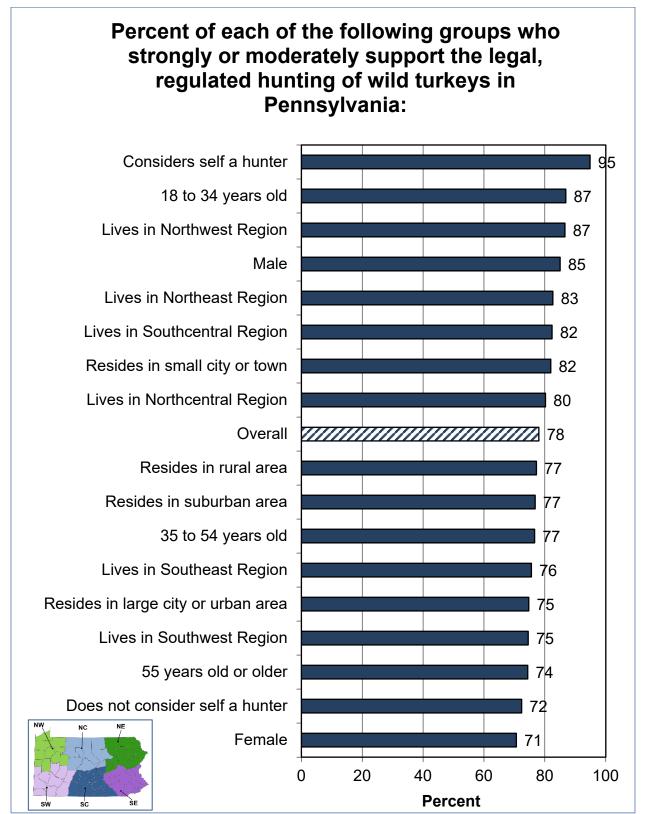


Do you support or oppose legal, regulated hunting of wild turkeys in Pennsylvania?							
WMU	Strongly support	Moderately support	Neither support nor oppose	Moderately oppose	Strongly oppose	Don't know	
1A	50	41	2	3	4	0	
1B	71	25	0	0	3	1	
2A	52	41	3	3	0	1	
2B	38	24	18	13	5	3	
2C	57	29	12	0	2	0	
2D	56	30	6	3	0	4	
2E	57	27	6	10	0	0	
2F	61	32	2	2	0	2	
2G	53	34	5	4	4	0	
3A	64	26	6	4	0	0	
3B	51	27	9	11	2	0	
3C	46	33	8	2	3	8	
3D	47	32	9	3	5	4	
4A	62	23	7	0	2	6	
4B	53	36	10	0	1	0	
4C	52	20	17	8	0	2	
4D	56	30	6	0	8	1	
4E	44	47	0	3	0	7	
5A	41	32	9	6	8	5	
5B	53	19	13	10	4	1	
5C	37	42	4	6	5	6	
5D	39	39	11	0	8	2	



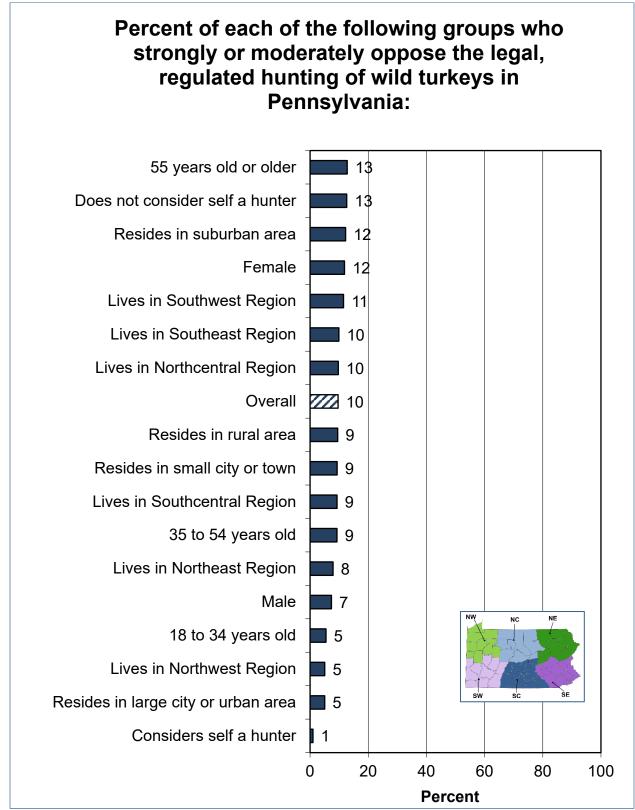


Demographic analyses found support of turkey hunting highest among, in addition to hunters, residents 18 to 34 years old, residents of the Northwest Region, males, and residents of the Northeast Region.



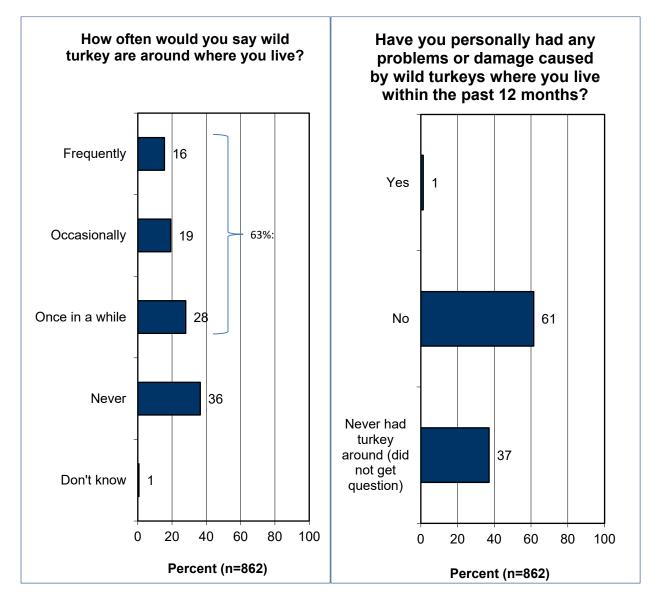
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

The demographic analyses found no groups to have a markedly higher percentage who oppose turkey hunting than residents overall.



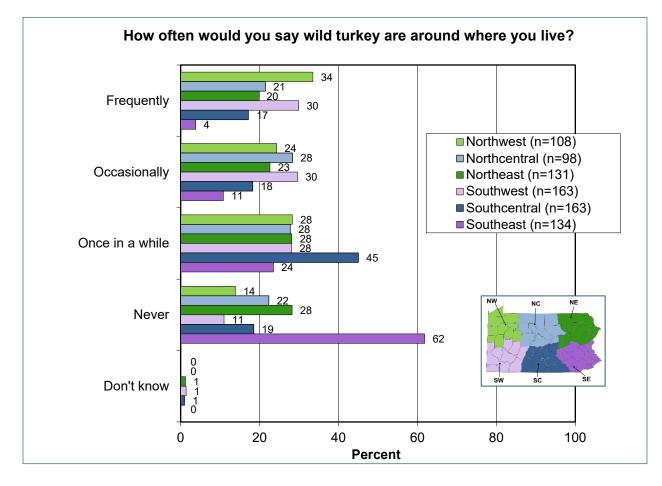
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

As was done regarding bear problems, two questions were asked about turkey problems, and they show that 1% of Pennsylvania residents had problems with turkeys within the previous 12 months. First the survey found that 36% of residents never have turkey around to cause problems (and 1% did not know, who also were not asked the follow-up question). Those who had turkeys around were then asked about having problems with them, as shown in the graphs that follow.

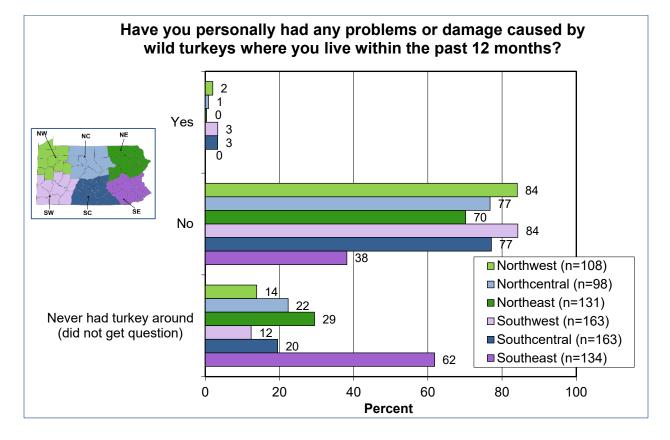


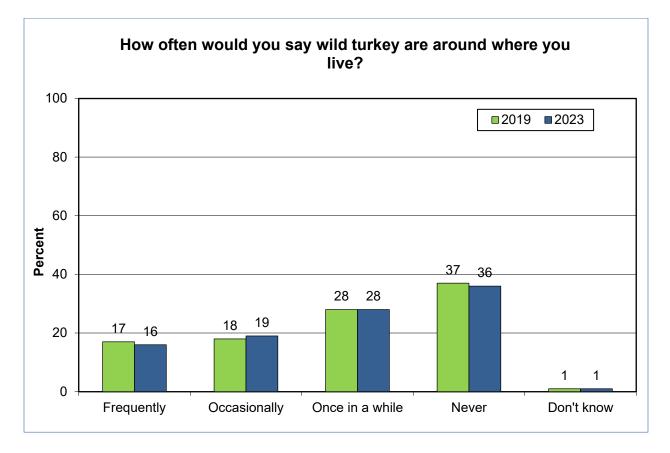
The greatest problems with turkeys occurred in WMUs 4A and 2B and the Southwest and Southcentral Regions, as shown in the tables and graphs that follow.

How often would you say wild turkey are around where you live?							
WMU	Frequently	Occasionally	Once in a while	Never	Don't know		
1A	16	34	33	17	0		
1B	39	17	24	20	1		
2A	32	23	19	26	0		
2B	28	35	29	8	0		
2C	26	25	35	7	7		
2D	49	25	18	8	0		
2E	40	17	27	15	0		
2F	40	19	21	19	1		
2G	28	30	25	18	0		
3A	35	28	27	10	0		
3B	18	18	24	40	0		
3C	35	35	21	9	0		
3D	13	30	33	20	4		
4A	35	24	37	4	0		
4B	18	28	35	18	0		
4C	9	24	34	33	0		
4D	23	14	31	31	1		
4E	28	22	37	8	5		
5A	10	28	33	28	1		
5B	7	12	42	39	1		
5C	0	13	24	63	0		
5D	6	9	18	66	0		

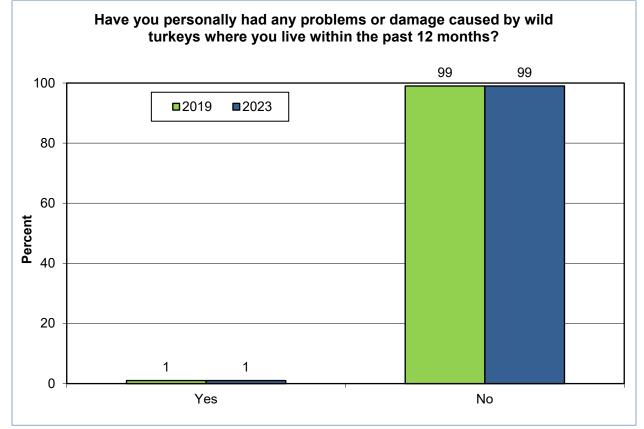


Have you personally had any problems or damage caused by wild turkeys where you live within the past 12 months?					
WMU	Yes (had problems)	No	Never had wild turkeys around (not asked question)	Don't know	
1A	3	80	17	0	
1B	0	79	21	0	
2A	3	70	26	1	
2B	5	87	8	0	
2C	0	86	14	0	
2D	2	90	8	0	
2E	0	85	15	0	
2F	0	80	20	0	
2G	4	78	18	0	
3A	0	90	10	0	
3B	0	60	40	0	
3C	2	88	9	0	
3D	0	77	23	0	
4A	10	85	4	0	
4B	0	82	18	0	
4C	0	67	33	0	
4D	0	68	32	0	
4E	0	87	13	0	
5A	4	67	29	0	
5B	1	60	39	0	
5C	0	37	63	0	
5D	0	34	66	0	





The trends show little substantive change since 2019.



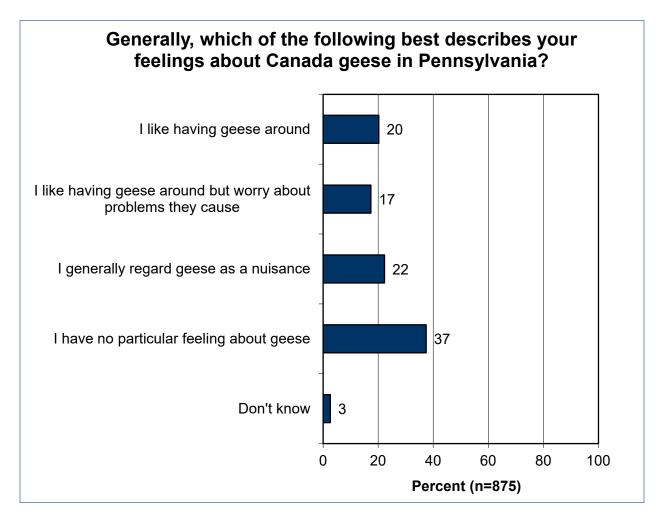
There were too few people who experienced problems with or damage from wild turkeys to be shown in a graph. The table below of the results overall in the state shows the number of respondents, not the percentages. There were 13 respondents in total, and they could choose multiple responses. The sample sizes are also too low to show results at the WMU and regional levels.

Problem	Number of respondents (not percentage)
Garden damage	4
Crop damage	4
Vehicle damage while parked	2
Vehicle damage while being driven	2
Pets harassed	1
Birdfeeder damage	1
Stuck in pool filter	1
Nuisance behavior on deck	1

ATTITUDES TOWARD CANADA GEESE

It should first be noted that the term, *Canada geese*, refers to the name of the species, which are native to Pennsylvania; the term does not mean that the geese are from Canada (survey respondents were informed of this prior to the questions).

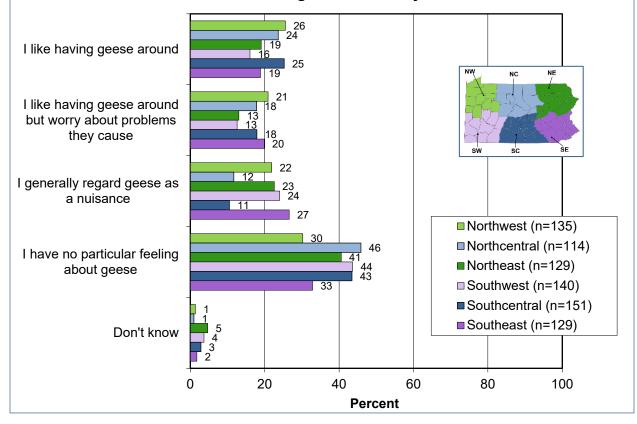
Residents' feelings about Canada geese are more negative than they are about elk or turkey discussed in previous sections of the report. Regarding geese, less than a majority say that they like to have geese around: 38% like them around, but that consists of only 20% who like them around with no caveats and 17% who like them around but worry about the problems geese can cause (the sum on unrounded numbers is 38%). A substantial percentage of Pennsylvania residents consider Canada geese to be a nuisance: 22% do so. (For reference, less than 1% think that elk are a nuisance, and only 3% think that turkey are a nuisance.)

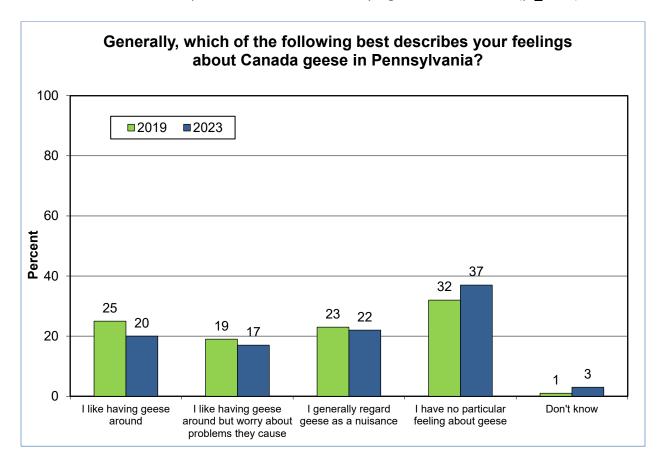


The WMUs and regions with the highest percentage of residents who think that Canada geese are a nuisance are WMUs 2F, 3D, 5B, and 1B and the Southeast and Southwest Regions (with the Northeast and Northwest Regions close behind), as shown on the next page.

Generally, w	Generally, which of the following best describes your feelings about Canada geese in Pennsylvania?						
WMU	I like having geese around	I like having geese around but worry about problems they cause	I generally regard geese as a nuisance	l have no particular feeling about geese	Don't know		
1A	21	24	20	34	1		
1B	22	16	26	33	2		
2A	21	7	23	39	11		
2B	15	16	24	43	1		
2C	21	11	22	39	6		
2D	25	16	18	34	8		
2E	19	22	16	39	3		
2F	23	7	32	36	3		
2G	18	8	16	57	2		
3A	23	14	19	41	3		
3B	10	16	22	49	3		
3C	17	15	15	46	8		
3D	23	15	29	31	3		
4A	14	27	8	46	5		
4B	25	10	17	48	0		
4C	23	19	16	42	0		
4D	21	17	16	45	1		
4E	25	13	11	43	8		
5A	33	24	16	23	4		
5B	16	17	27	39	2		
5C	15	22	22	37	5		
5D	28	17	24	31	0		

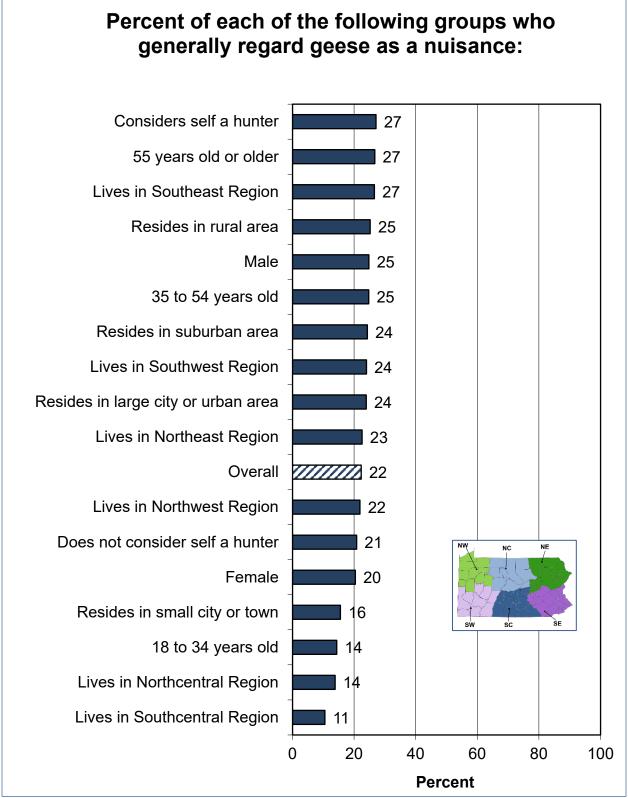
Generally, which of the following best describes your feelings about Canada geese in Pennsylvania?



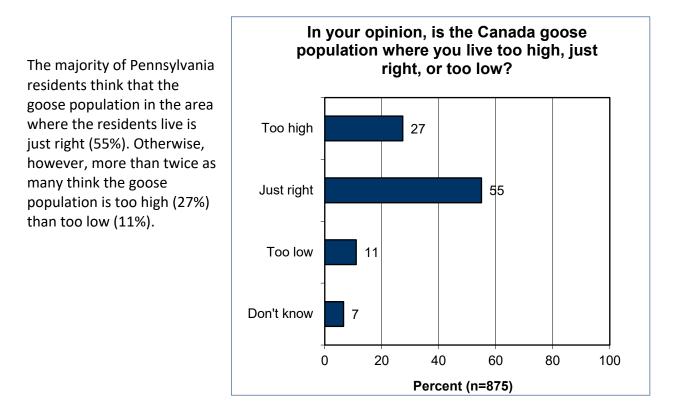


The trends show that a slightly lower percentage of Pennsylvania residents like having geese around in 2023 when compared to 2019, a statistically significant difference ($p \le 0.05$).

Demographic analyses found that the groups most likely to regard Canada geese as a nuisance are hunters, residents 55 years old or older, and residents of the Southeast Region.

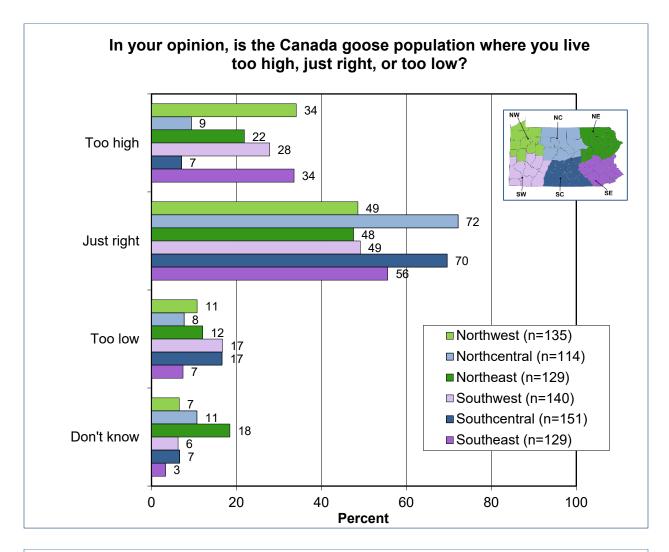


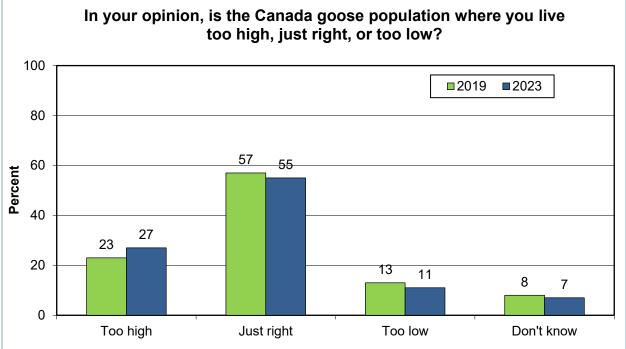
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.



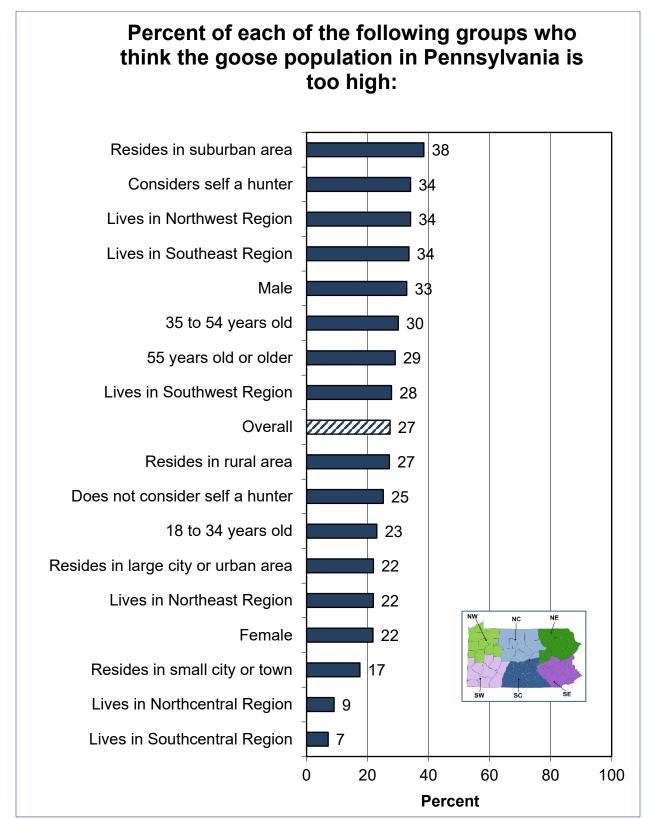
WMUs 1B, 5D, and 2B and the Northwest and Southeast Regions are where residents are most likely to think that the goose population is too high. The trends show a slightly greater percentage who think the population is too high, a statistically significant difference ($p \le 0.05$).

In your opinion, is the Canada goose population where you live too high, just right, or too low?					
WMU	Too high	Just right	Too low	Don't know	
1A	18	63	10	9	
1B	39	42	12	7	
2A	23	42	11	24	
2B	35	44	17	4	
2C	8	67	21	4	
2D	21	67	5	7	
2E	19	56	12	14	
2F	23	60	6	11	
2G	11	63	8	18	
3A	17	64	15	4	
3B	24	48	5	23	
3C	15	56	6	23	
3D	22	45	4	29	
4A	7	59	27	8	
4B	11	63	13	13	
4C	5	64	17	14	
4D	14	64	19	3	
4E	23	43	20	14	
5A	13	64	12	11	
5B	30	58	8	4	
5C	27	59	10	4	
5D	37	54	7	2	



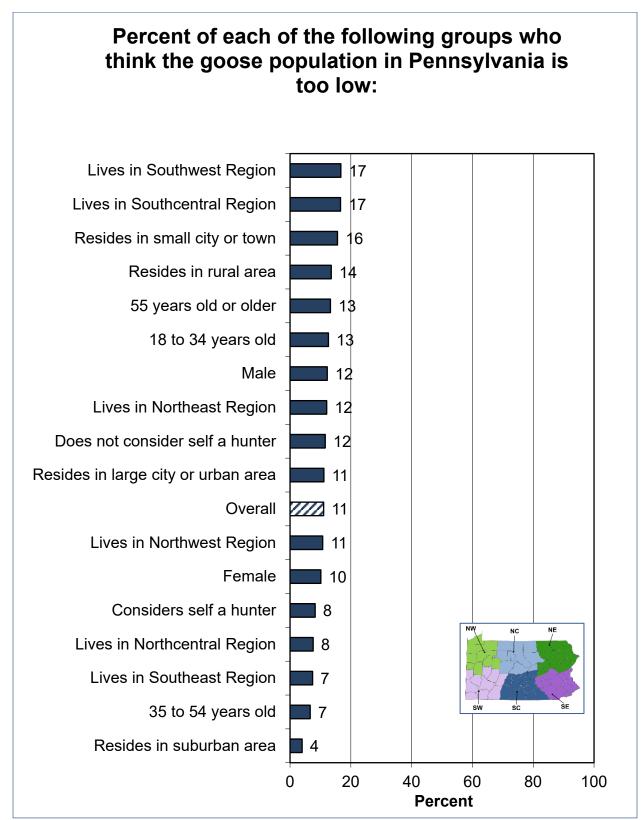


The demographic analyses graph below shows that characteristics associated with thinking that the goose population is too high are suburban residents, hunters, and residents of the Northwest and Southeast Regions.



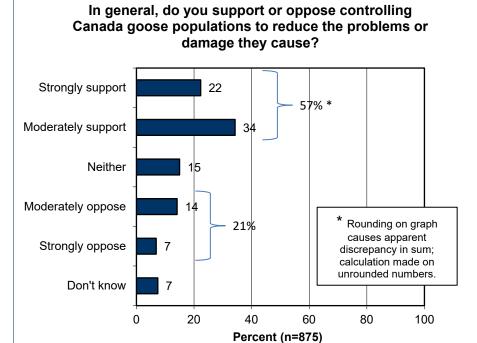
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

Conversely, the characteristics associated with thinking that the goose population is too low are residents of the Southwest Region, residents of the Southcentral Region, and residents of small cities/towns.



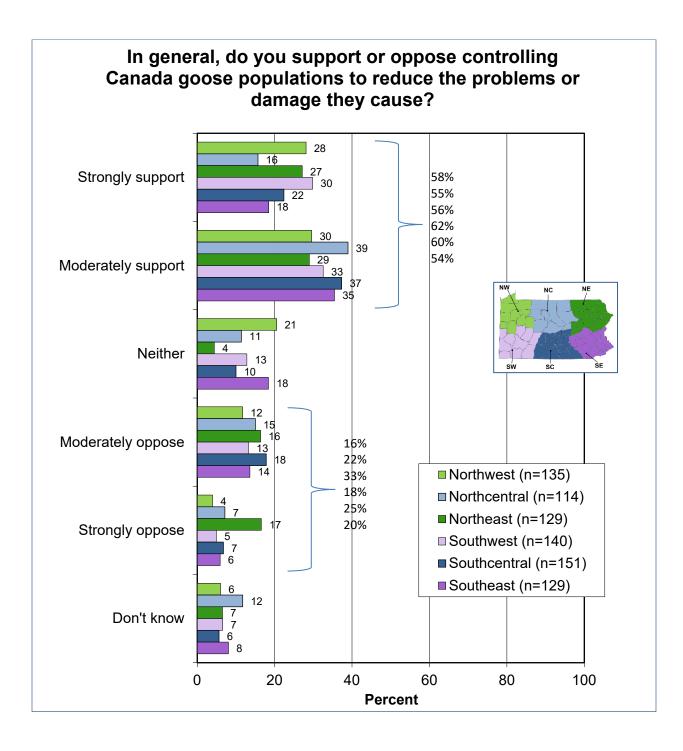
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

The survey asked a series of questions about controlling goose populations. The first was general, and it showed that 57% of Pennsylvania residents support controlling goose populations to reduce the problems that they cause. On the other hand, 21% oppose.

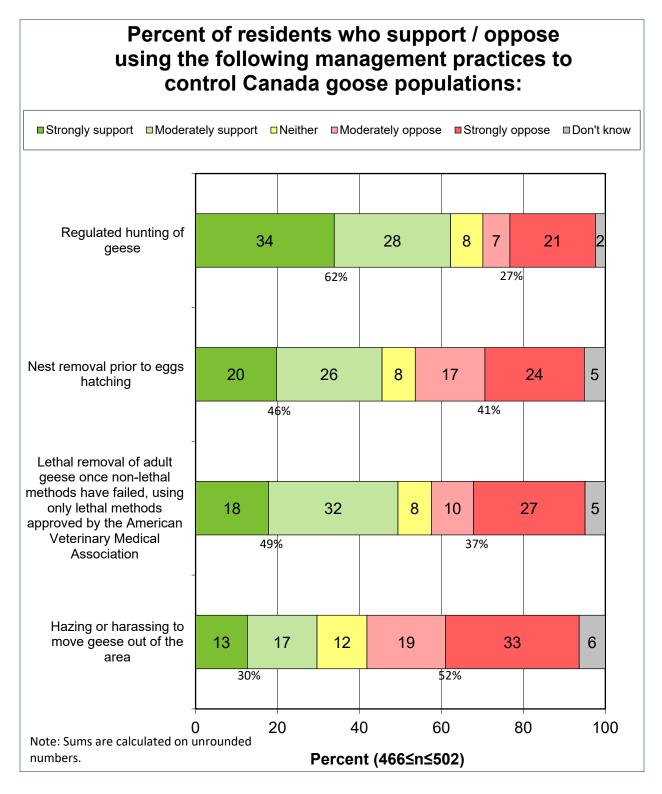


The highest support for controlling goose populations is in WMUs 2B, 3D, and 3C and the Southwest and Southcentral Regions.

WMU	Strongly support	Moderately support	Neither support nor oppose	Moderately oppose	Strongly oppose	Don't know
1A	28	29	18	17	6	2
1B	27	23	22	12	5	12
2A	33	26	14	7	4	17
2B	30	37	8	15	5	4
2C	30	31	25	8	3	3
2D	24	27	23	10	5	10
2E	22	36	14	5	12	10
2F	25	31	25	12	0	7
2G	17	30	22	10	10	11
3A	28	27	7	24	11	4
3B	20	35	11	20	11	3
3C	28	38	6	12	4	12
3D	33	34	0	11	17	5
4A	9	41	11	19	5	15
4B	27	33	14	17	3	6
4C	18	27	15	22	11	9
4D	14	44	13	16	3	10
4E	19	32	11	10	18	9
5A	17	36	14	16	6	11
5B	33	29	4	18	14	2
5C	24	23	30	14	4	5
5D	9	49	11	13	7	13



The survey then asked about support for or opposition to four methods of addressing Canada goose problems. Of the four methods, the most support is for regulated hunting of geese. There is markedly less support for hazing/harassing. Results by WMU and region are also presented. Sums are shown of support and oppose, calculated on unrounded numbers. (For instance, opposition to regulated hunting of geese is 7% moderate and 21% strong, which would seemingly sum to 28%; however, the unrounded numbers are 6.62% and 20.87%, which sums to 27.49%.)



Nest remo	Nest removal prior to eggs hatching. (Would you support or oppose controlling Canada goose populations using								
this manag	gement practice?)							
WMU	Strongly support	Moderately support	Neither support nor oppose	Moderately oppose	Strongly oppose	Don't know			
1A	20	24	10	0	43	3			
1B	10	8	27	21	13	21			
2A	13	35	5	11	27	10			
2B	31	33	19	11	5	0			
2C	3	16	18	9	44	10			
2D	16	32	11	6	26	8			
2E	12	33	24	6	25	0			
2F	19	21	10	6	42	2			
2G	8	39	2	16	36	0			
3A	7	16	9	9	60	1			
3B	12	26	7	4	35	16			
3C	17	32	3	20	25	3			
3D	16	14	0	20	45	6			
4A	8	32	4	31	20	5			
4B	11	13	19	14	43	0			
4C	11	28	0	17	28	17			
4D	26	12	12	22	25	3			
4E	10	14	11	22	38	5			
5A	16	23	22	13	13	14			
5B	9	33	0	25	29	5			
5C	14	24	7	17	33	5			
5D	33	28	0	23	14	3			

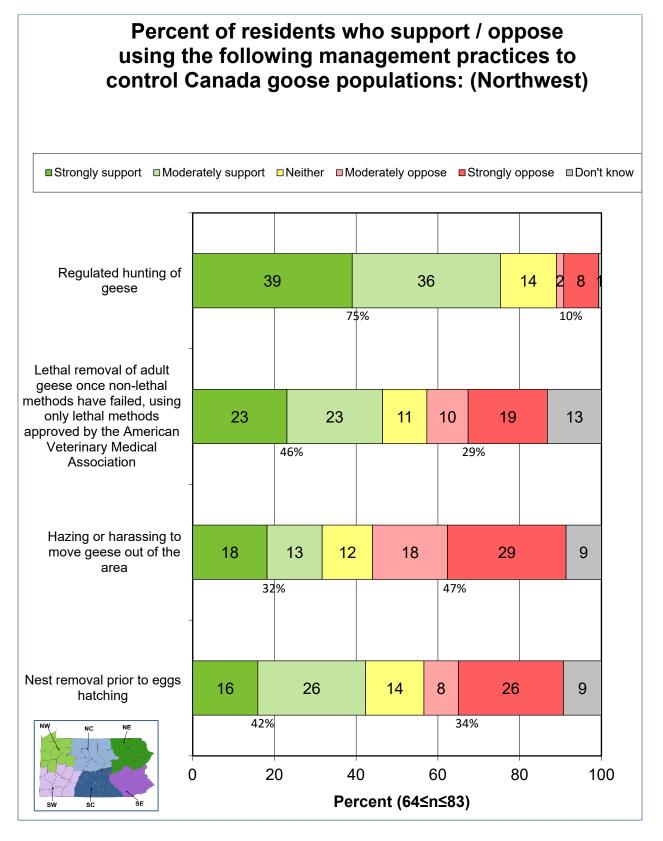
-	Hazing or harassing to move geese out of the area. (Would you support or oppose controlling Canada goose populations using this management practice?)									
WMU	Strongly support	Moderately support	Neither support nor oppose	Moderately oppose	Strongly oppose	Don't know				
1A	15	15	14	11	37	8				
1B	13	8	14	28	25	12				
2A	16	10	11	9	40	15				
2B	12	31	13	17	27	0				
2C	17	15	19	18	31	0				
2D	31	23	19	2	15	10				
2E	12	12	37	14	22	3				
2F	19	17	6	23	33	2				
2G	16	25	9	18	20	11				
3A	3	10	18	22	39	7				
3B	3	23	8	10	45	11				
3C	7	17	11	16	45	3				
3D	22	37	0	8	34	0				
4A	0	26	10	23	29	11				
4B	8	35	8	21	25	3				
4C	5	8	20	15	45	7				
4D	5	31	12	28	25	0				
4E	23	20	17	26	14	0				
5A	24	25	4	8	26	13				
5B	13	15	4	37	31	0				
5C	7	10	20	27	37	0				
5D	14	13	8	13	36	15				

American Veterinary Medical Association. (Would you support or oppose controlling Canada goose populations									
using this	management pra	ctice?)							
WMU	Strongly support	Moderately support	Neither support nor oppose	Moderately oppose	Strongly oppose	Don't know			
1A	31	17	0	0	47	5			
1B	13	19	14	13	20	21			
2A	23	22	5	16	10	25			
2B	14	47	14	6	19	0			
2C	31	14	12	20	8	16			
2D	27	10	16	0	33	14			
2E	16	22	14	17	23	7			
2F	19	13	11	29	21	7			
2G	13	29	14	23	20	1			
3A	13	0	22	29	36	0			
3B	20	29	16	10	25	0			
3C	22	37	0	4	37	0			
3D	11	42	5	0	35	8			
4A	14	39	10	11	10	17			
4B	20	24	6	13	32	6			
4C	24	38	9	3	21	5			
4D	14	39	13	19	15	0			
4E	15	30	8	11	23	13			
5A	15	27	0	28	26	4			
5B	24	21	4	21	31	0			
5C	25	26	3	17	23	6			
5D	10	38	7	0	41	4			

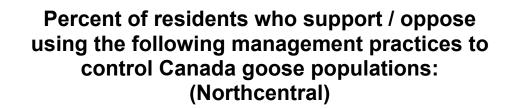
Lethal removal of adult geese once non-lethal methods have failed, using only lethal methods approved by the American Veterinary Medical Association. (Would you support or oppose controlling Canada goose populations using this management practice?)

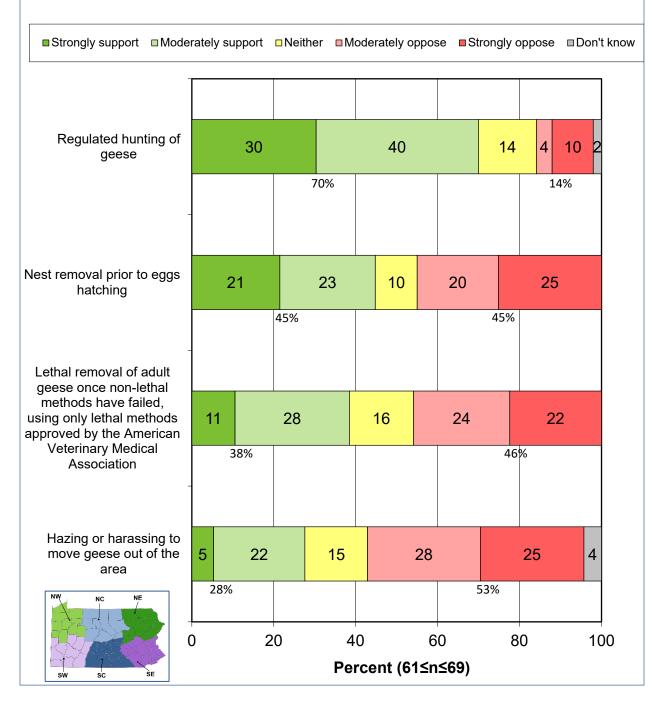
Regulated hunting of geese. (Would you support or oppose controlling Canada goose populations using this management practice?)

wмu	Strongly support	Moderately support	Neither support nor oppose	Moderately oppose	Strongly oppose	Don't know	
1A	36	36	13	3	12	0	
1B	38	28	19	0	14	1	
2A	51	30	4	6	8	1	
2B	34	40	13	0	13	0	
2C	40	34	8	12	0	6	
2D	30	48	14	0	5	3	
2E	33	32	3	8	17	7	
2F	50	41	0	9	0	0	
2G	32	35	12	4	11	6	
3A	32	54	8	0	6	0	
3B	37	32	4	7	11	9	
3C	23	48	7	8	0	14	
3D	38	40	1	5	13	3	
4A	17	50	0	11	15	8	
4B	25	43	3	12	9	8	
4C	21	39	10	0	26	4	
4D	28	47	11	4	6	4	
4E	35	29	3	7	17	8	
5A	38	39	8	0	15	0	
5B	47	11	19	14	10	0	
5C	25	24	4	8	39	1	
5D	38	10	0	12	36	4	

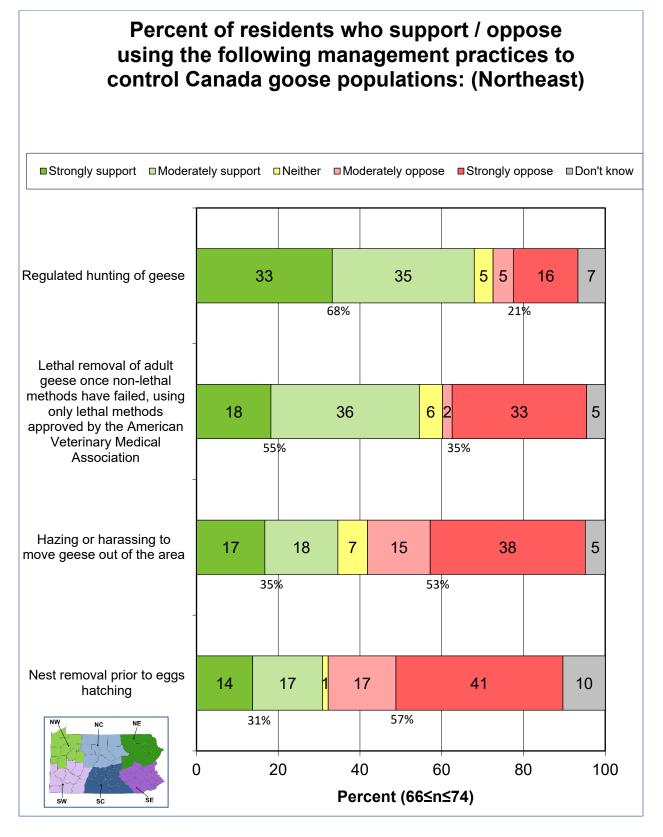


Note: Sums are calculated on unrounded numbers.

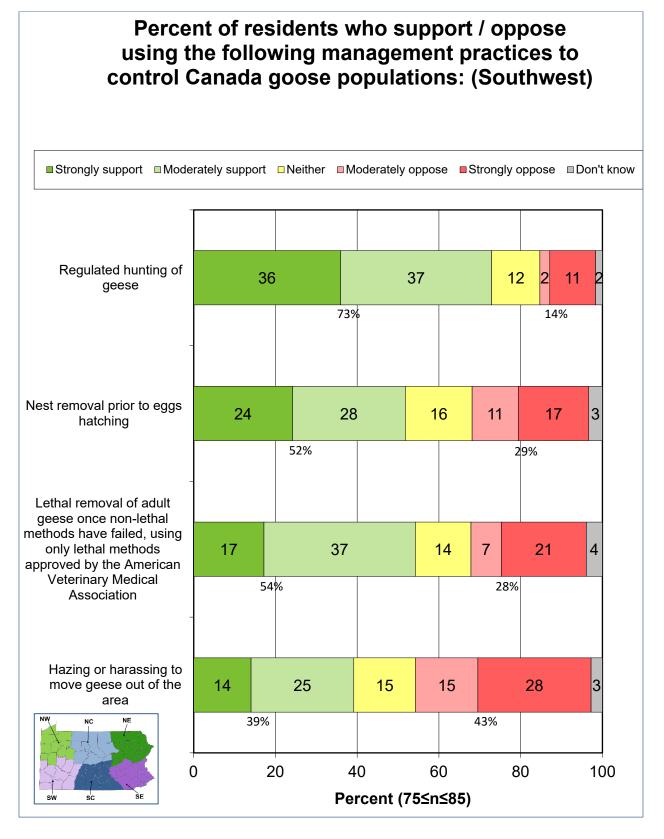




Note: Sums are calculated on unrounded numbers.

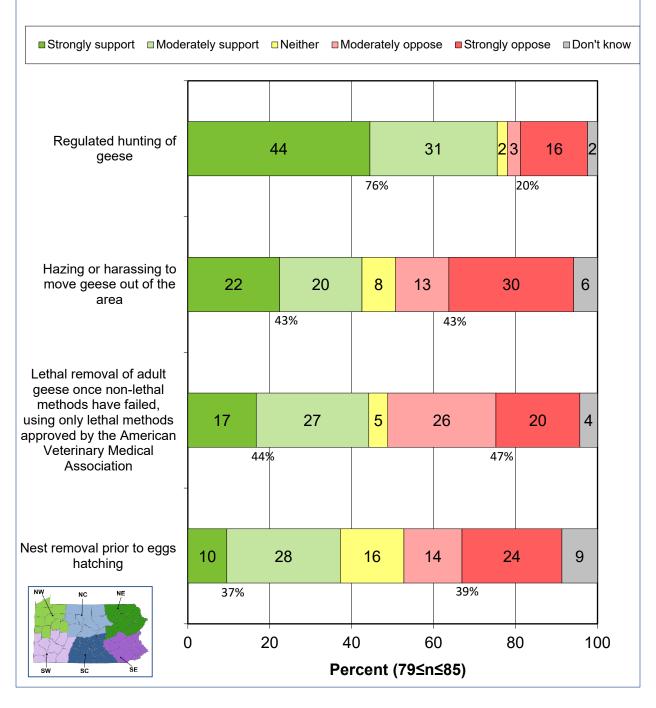


Note: Sums are calculated on unrounded numbers.

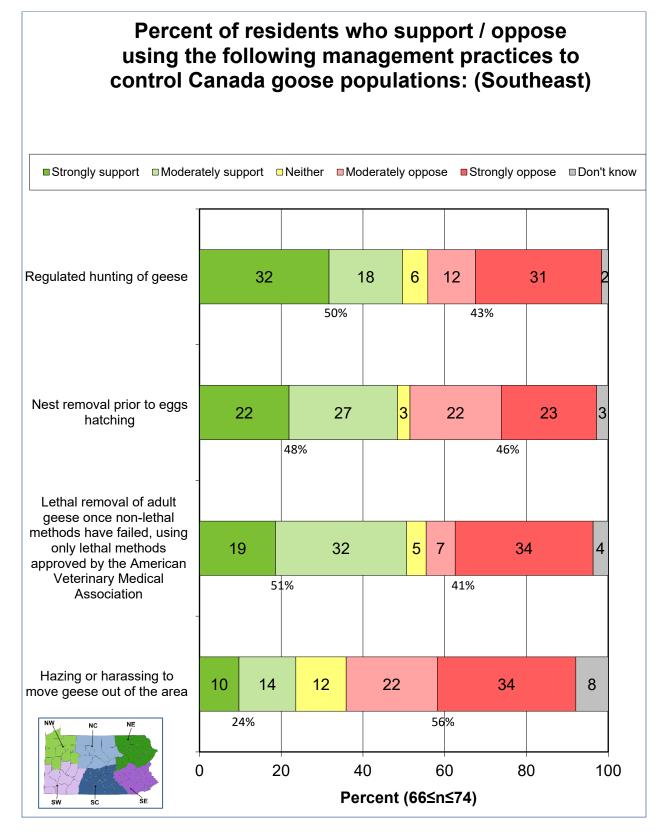


Note: Sums are calculated on unrounded numbers.

Percent of residents who support / oppose using the following management practices to control Canada goose populations: (Southcentral)

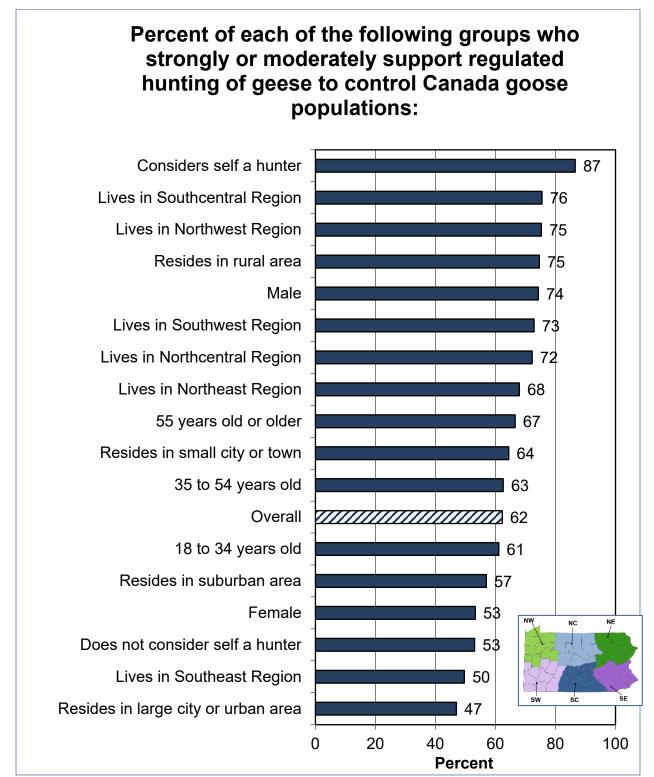


Note: Sums are calculated on unrounded numbers.



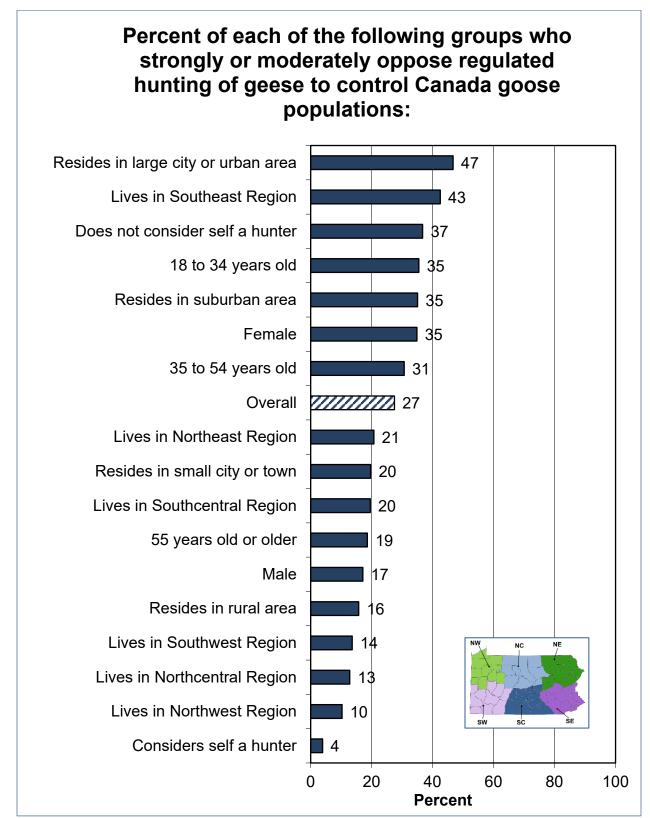
Note: Sums are calculated on unrounded numbers.

Within that series is support for or opposition to regulated hunting of geese. As was shown, 62% support it but 27% oppose it. Demographic analyses were run on these questions. The groups most likely to support hunting of Canada geese are hunters, residents of the Southcentral Region, residents of the Northwest Region, rural residents, males, residents of the Southwest Region, and residents of the Northcentral Region.



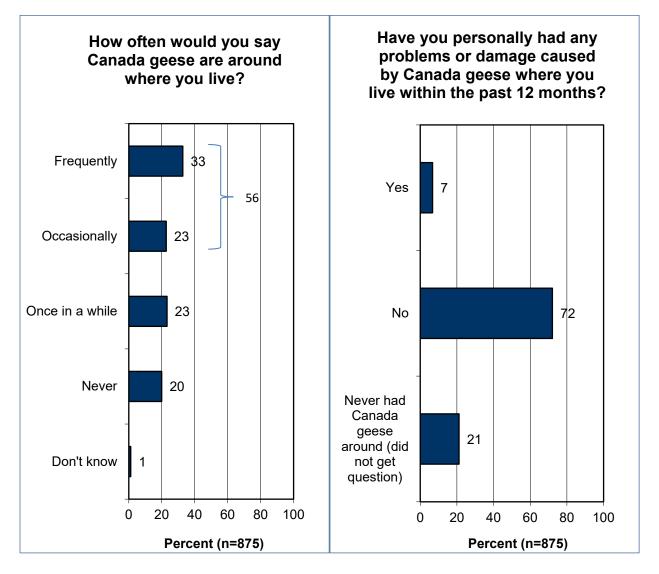
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

The groups most likely to oppose the hunting of Canada geese are residents of large cities/urban areas, residents of the Southeast Region, non-hunters, residents 18 to 34 years old, suburban residents, and females.



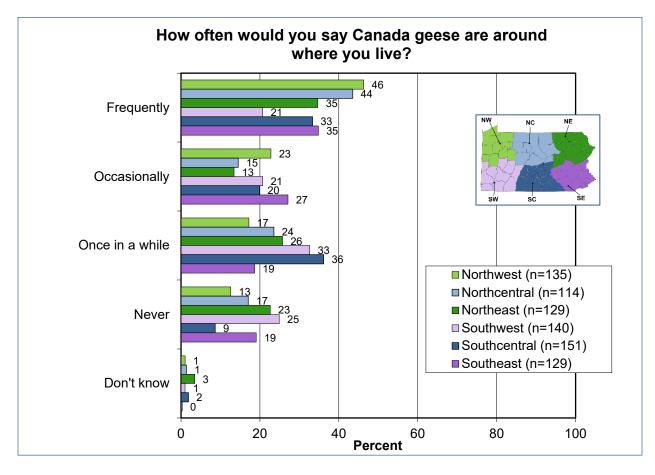
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

The final questions in this section pertained to problems that geese might cause. Two questions determined that 7% of Pennsylvania residents had problems with Canada geese within the previous 12 months. Geese are quite common, as only 20% of residents never have Canada geese around to cause problems (21% were not asked the follow-up question, as the 1% answering "don't know" also were not asked along with the 20% who indicated "never"), while 56% have geese around *frequently* or *occasionally*. Those who had geese around were then asked about having problems with them.

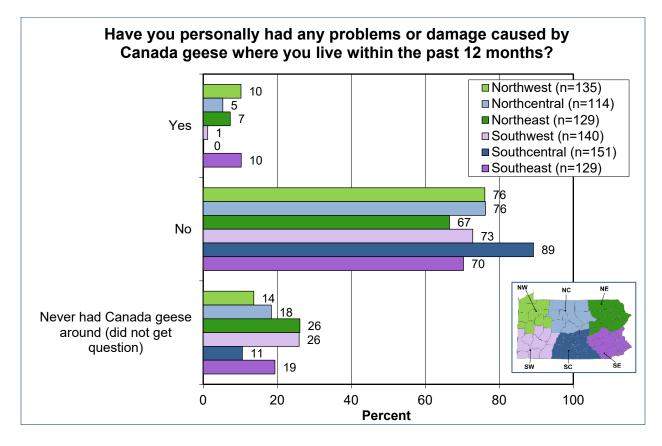


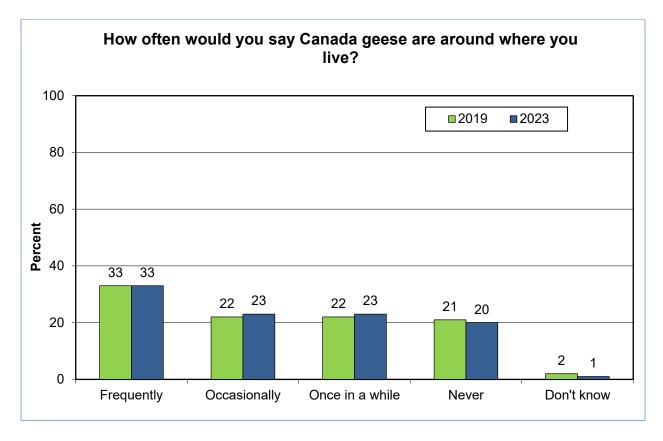
Problems with geese occur most commonly in WMUs 3B, 5C, 2F, 1A, and 1B and the Northwest and Southeast Regions.

How often would you say Canada geese are around where you live?									
WMU	Frequently	Occasionally	Once in a while	Never	Don't know				
1A	51	15	21	12	1				
1B	49	22	16	11	1				
2A	39	19	19	12	11				
2B	17	19	37	27	0				
2C	23	23	30	24	0				
2D	31	29	19	21	0				
2E	36	19	26	16	3				
2F	30	43	9	15	2				
2G	40	23	20	15	2				
3A	62	10	16	8	4				
3B	45	7	15	29	3				
3C	31	20	20	25	4				
3D	32	8	27	30	3				
4A	6	23	50	16	5				
4B	34	24	28	13	2				
4C	38	12	32	18	0				
4D	30	21	36	14	0				
4E	26	14	28	29	4				
5A	33	34	19	9	5				
5B	37	14	35	12	2				
5C	33	30	11	25	1				
5D	36	27	19	18	0				

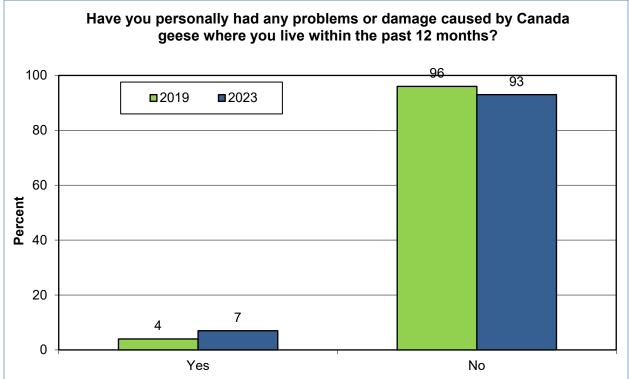


Have you months?	Have you personally had any problems or damage caused by Canada geese where you live within the past 12 months?								
wмu	Yes (had problems)	No	Never had Canada geese around (not asked question)	Don't know					
1A	12	75	13	0					
1B	11	77	12	0					
2A	0	77	23	0					
2B	0	73	27	0					
2C	2	74	24	0					
2D	7	72	21	0					
2E	8	72	19	0					
2F	14	68	18	0					
2G	5	78	17	0					
3A	5	83	12	0					
3B	17	50	33	0					
3C	9	62	29	0					
3D	2	65	33	0					
4A	0	79	21	0					
4B	4	82	15	0					
4C	9	73	18	0					
4D	3	84	14	0					
4E	2	65	33	0					
5A	0	86	14	0					
5B	0	87	13	0					
5C	17	57	26	0					
5D	6	76	18	0					



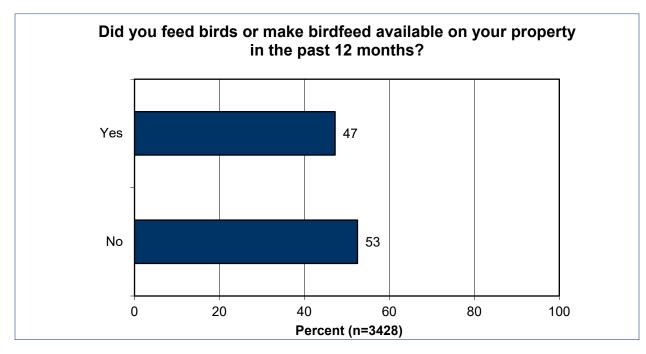


The trends show little change in having geese around (not significant) but a slight uptick in goose problems (which is statistically significant, $p \le 0.05$).

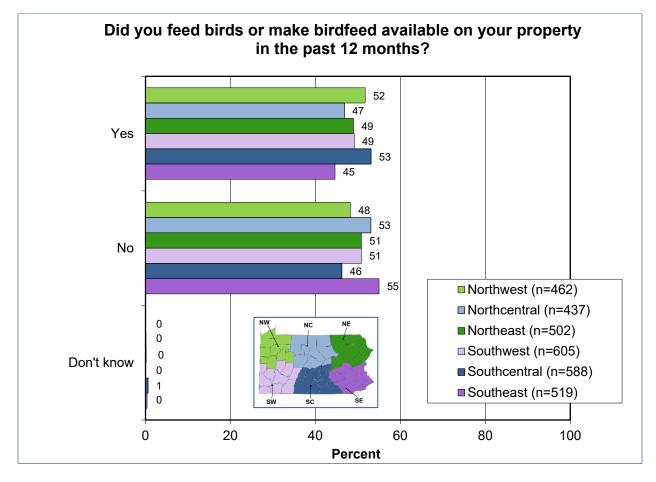


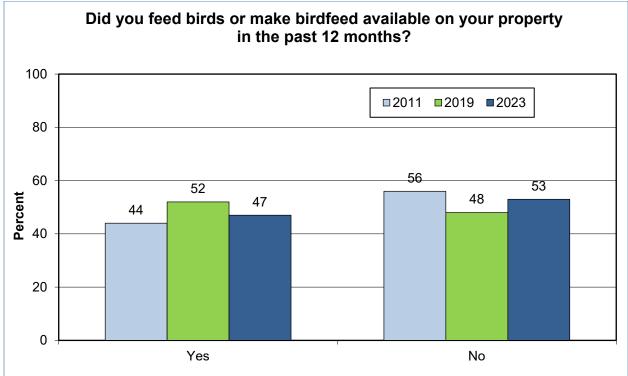
SMALL GAME AND BIRD SPECIES

Just under half of Pennsylvania residents (47%) feed birds on their property. The highest rates of bird feeding are in WMUs 4A and 4B and the Southcentral and Northwest Regions. The trends show a slight drop in the percentage who fed birds, a statistically significant difference ($p \le 0.05$).

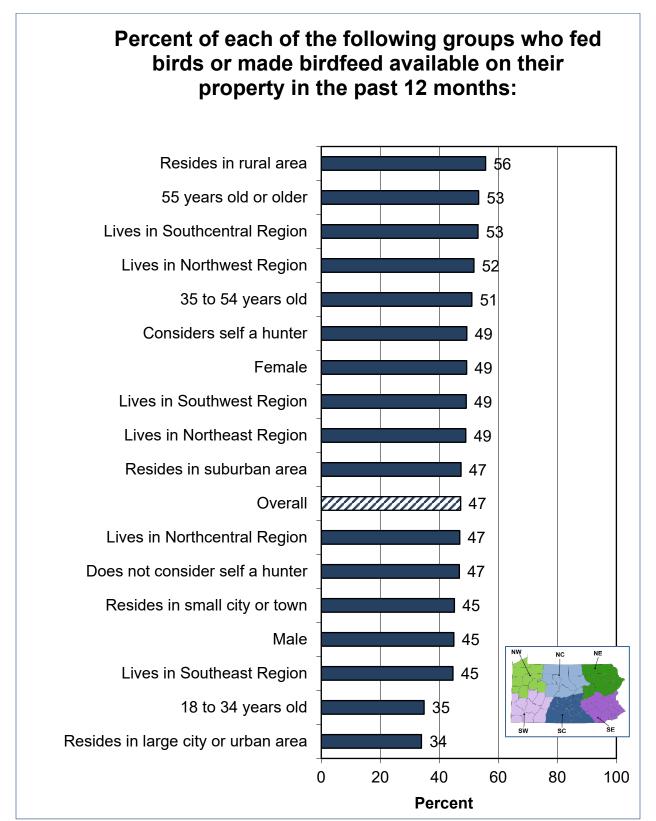


Did you feed birds or make birdfeed available on your property in the past 12 months?							
WMU	Yes (fed birds)	No	Don't know				
1A	47	53	0				
1B	44	55	1				
2A	52	48	0				
2B	48	52	0				
2C	56	44	0				
2D	54	46	0				
2E	49	51	0				
2F	47	52	0				
2G	49	50	0				
3A	49	51	0				
3B	45	55	0				
3C	57	43	0				
3D	45	55	0				
4A	62	38	0				
4B	61	39	0				
4C	57	43	1				
4D	49	51	0				
4E	41	58	1				
5A	50	49	1				
5B	45	54	1				
5C	50	50	0				
5D	41	59	0				

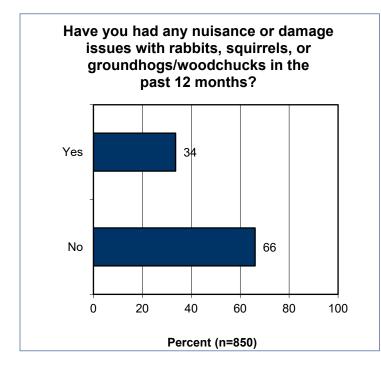




A demographic analyses graph shows the groups most likely to feed birds include rural residents, residents 55 years old or older, residents of the Southcentral Region, and residents of the Northwest Region.



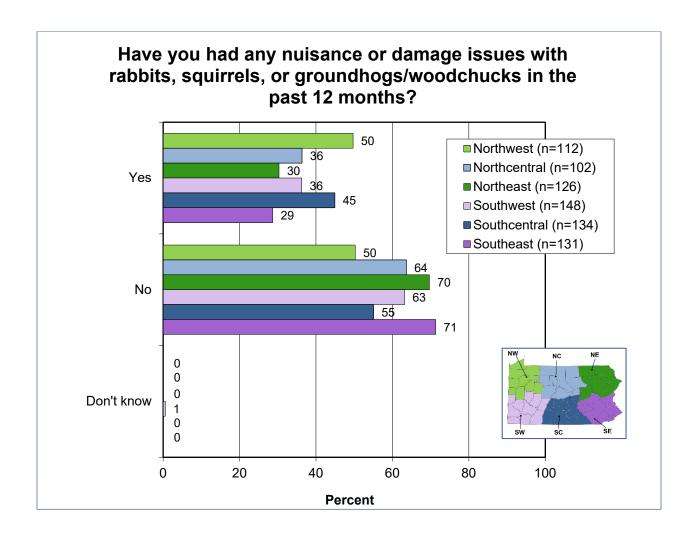
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.



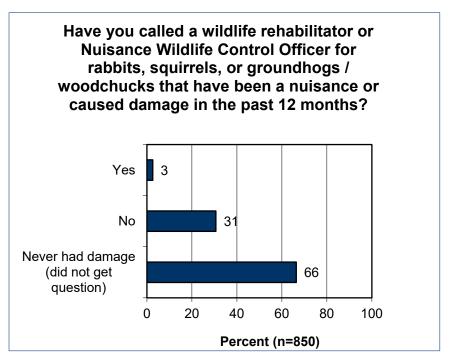
About a third of residents (34%) experienced damage from rabbits, squirrels, and/or groundhogs (also called woodchucks).

WMUs 1B, 4B, and 5A and the Northwest and Southcentral Regions had the highest rates of damage.

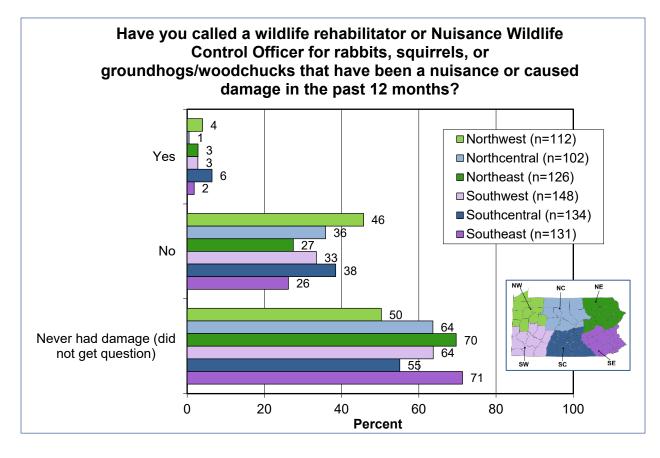
	Have you had any nuisance or damage issues with rabbits, squirrels, or groundhogs/woodchucks in the past 12 months?								
WMU	Yes (had damage)	No	Don't know						
1A	43	57	0						
1B	59	41	0						
2A	25	75	0						
2B	40	60	0						
2C	29	67	3						
2D	36	64	0						
2E	31	69	0						
2F	38	62	0						
2G	28	72	0						
3A	35	64	1						
3B	42	58	0						
3C	19	81	0						
3D	23	75	2						
4A	39	61	0						
4B	51	48	1						
4C	25	75	0						
4D	34	65	1						
4E	40	60	0						
5A	54	46	0						
5B	48	52	0						
5C	33	67	0						
5D	20	80	0						



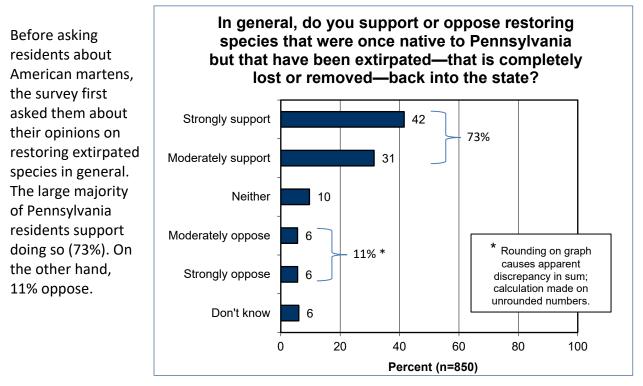
Those who had damage from rabbits, squirrels, and/or groundhogs were asked if they had called a wildlife rehabilitator or Nuisance Wildlife Control Officer for help with the problems. Among residents overall, 3% had done so.



wмu	Yes (called for help)	No	Never had damage (not asked question)	Don't know
1A	2	40	57	0
1B	4	55	41	0
2A	0	25	75	0
2B	3	37	60	0
2C	0	29	71	0
2D	12	23	64	0
2E	0	31	69	0
2F	2	36	62	0
2G	1	27	72	0
3A	3	32	65	0
3B	0	42	58	0
3C	0	19	81	0
3D	0	23	77	0
4A	2	35	61	2
4B	0	51	49	0
4C	2	23	75	0
4D	0	34	66	0
4E	8	32	60	0
5A	2	52	46	0
5B	5	40	52	3
5C	6	27	67	0
5D	0	20	80	0

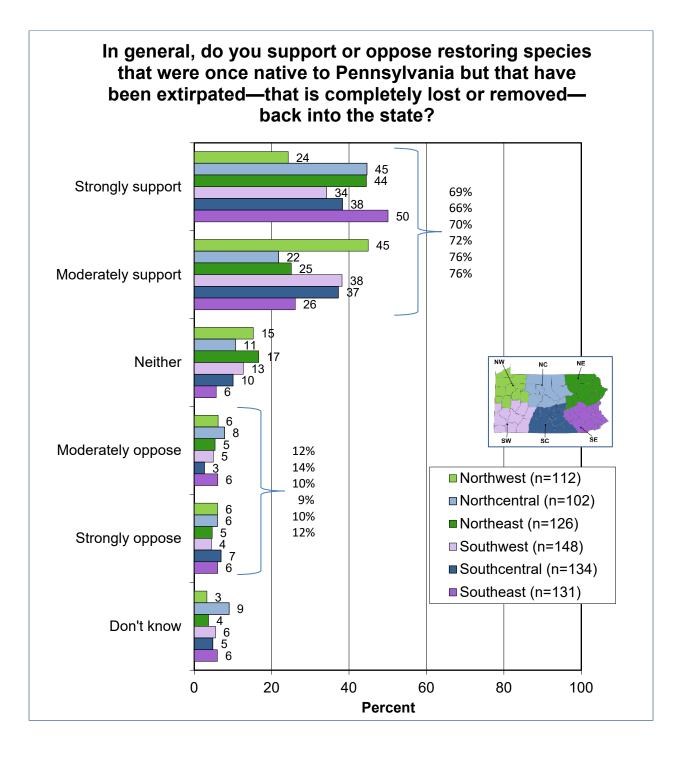


ATTITUDES TOWARD AMERICAN MARTEN AND ITS REINTRODUCTION

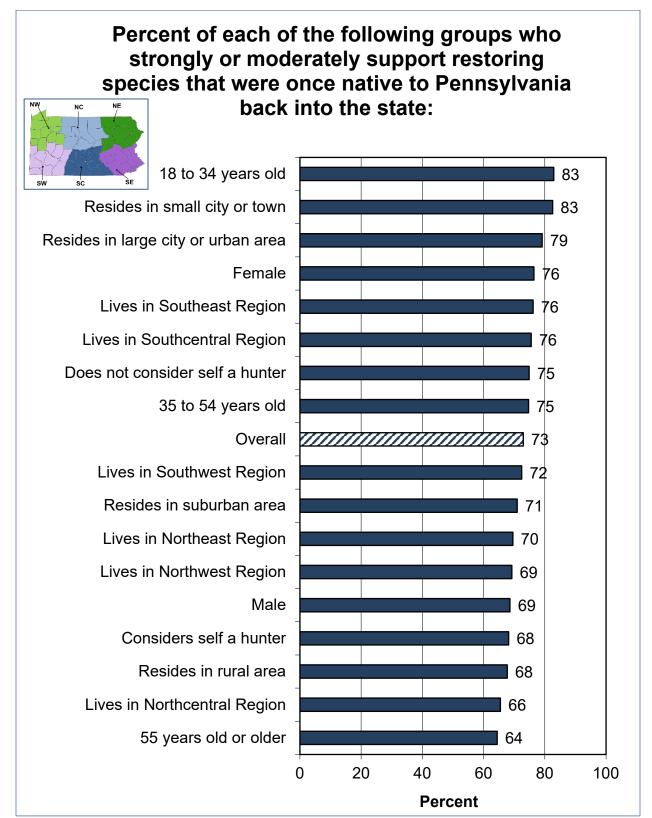


The highest support is in WMUs 5A, 2A, and 5B and the Southcentral and Southeast Regions, while the highest opposition is in WMUs 2F, 2E, and 4E and the Northcentral Region.

-	In general, do you support or oppose restoring species that were once native to Pennsylvania but that have been extirpated—that is, completely lost or removed—back into the state?									
WMU	Strongly support	Moderately support	Neither support nor oppose	Moderately oppose	Strongly oppose	Don't know				
1A	37	41	11	7	0	3				
1B	14	41	19	8	6	13				
2A	49	37	3	9	2	0				
2B	36	38	15	5	4	3				
2C	16	45	11	3	9	16				
2D	32	41	11	4	10	2				
2E	12	37	14	13	11	14				
2F	30	22	13	14	16	5				
2G	38	26	5	16	5	10				
3A	36	31	9	11	7	6				
3B	53	20	16	4	4	3				
3C	34	36	11	0	12	8				
3D	52	24	12	4	2	6				
4A	37	20	17	9	10	8				
4B	28	24	19	10	2	18				
4C	25	26	32	16	0	2				
4D	33	31	13	2	10	10				
4E	42	28	5	15	9	1				
5A	52	40	4	1	3	0				
5B	46	36	8	1	5	4				
5C	47	31	4	5	3	10				
5D	49	23	7	7	8	6				

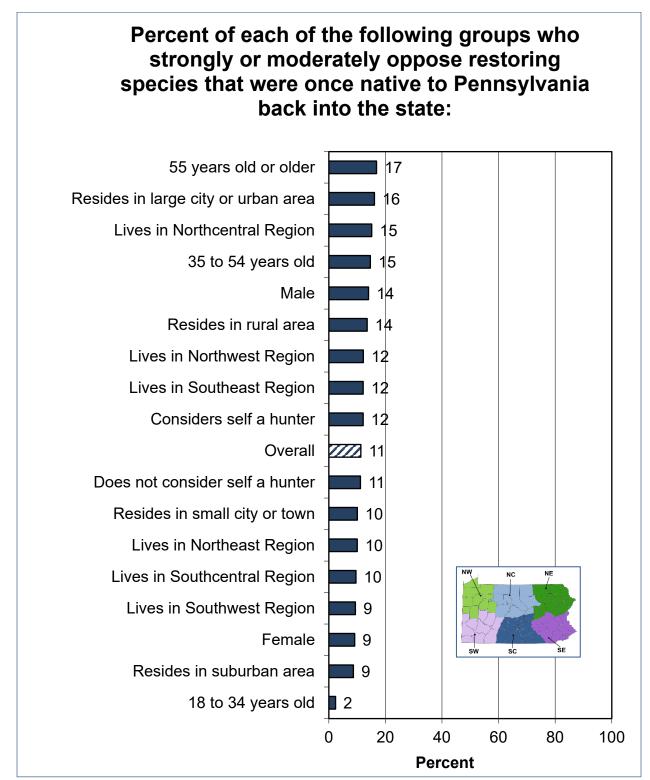


Demographic analyses were run on this question, finding that the groups most in support are residents 18 to 34 years old, residents of small cities/towns, and residents of large cities/urban areas.



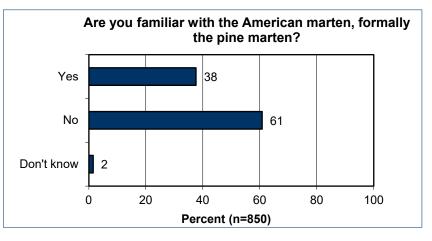
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

Conversely, the groups most in opposition to reintroducing extirpated species are residents 55 years old or older and residents of large cities/urban areas. Note that residents of large cities/urban areas can be at the top of both this and the previous graph because they have a low percentage who are neutral or who answered that they did not know in the question about supporting or opposing reintroduction of species.

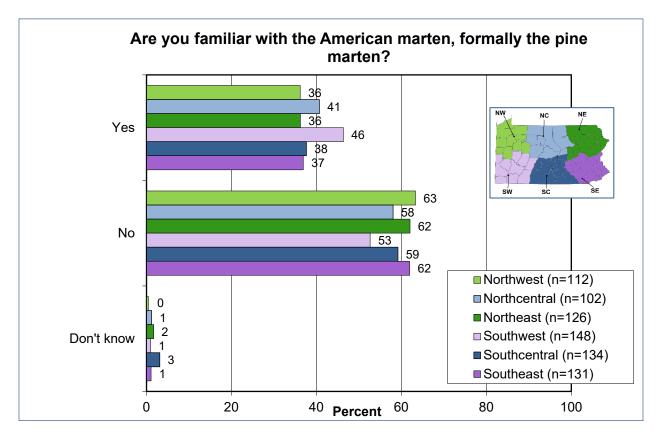


See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

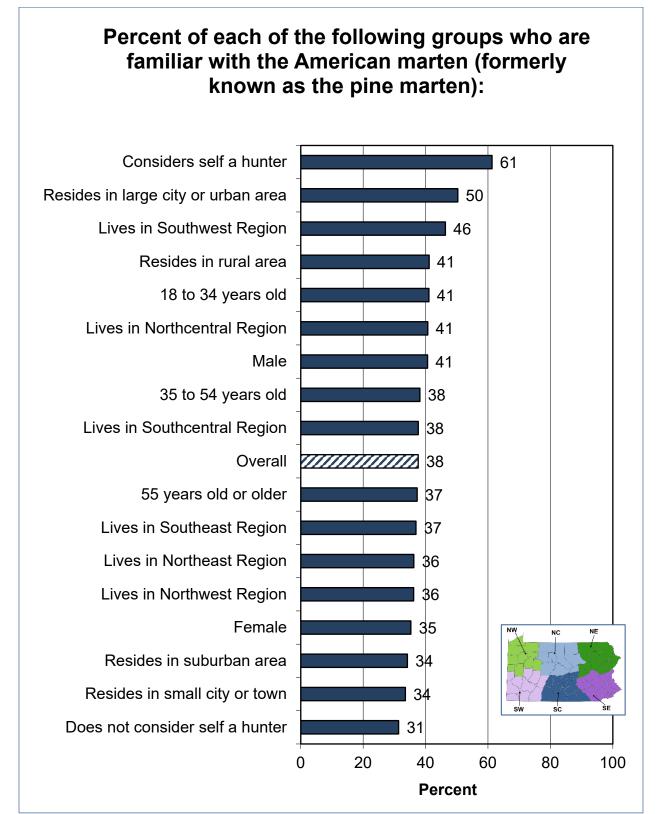
A little more than a third of Pennsylvania residents (38%) indicated being familiar with the American marten (which was formerly called the pine marten). Familiarity was highest in WMUs 2A and 3A and the Southwest Region.



Are you famil	Are you familiar with the American marten, formally the pine marten?									
WMU	Yes	No	Don't know	WMU	Yes	No	Don't know			
1A	38	62	0	3C	41	59	0			
1B	36	64	0	3D	23	77	1			
2A	55	45	0	4A	38	62	0			
2B	45	53	1	4B	47	51	2			
2C	47	53	0	4C	38	56	6			
2D	29	71	0	4D	35	60	5			
2E	26	68	6	4E	44	54	2			
2F	48	52	0	5A	33	62	5			
2G	40	56	4	5B	41	59	0			
3A	56	43	1	5C	33	67	0			
3B	38	55	6	5D	33	65	2			



The demographic analyses graph below shows that the most familiarity with the American marten is among hunters, residents of large cities/urban areas, and residents of the Southwest Region.



See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

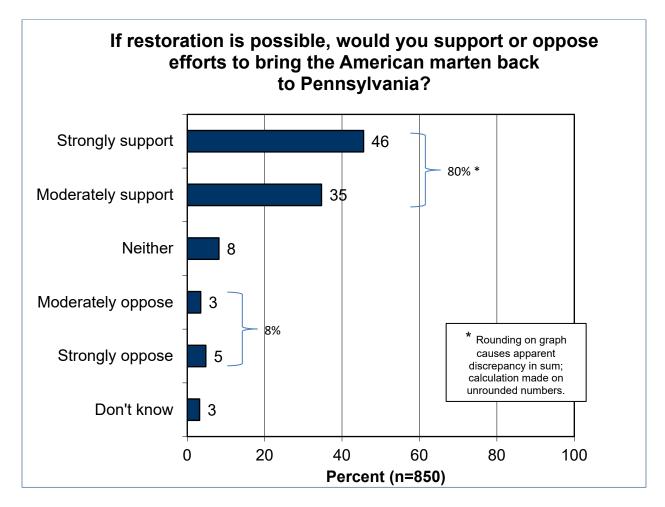
The survey then informed respondents of the following:

The American marten is a small mammal that was once native to Pennsylvania. Martens eat primarily rodents and live in forested areas away from human development. The marten disappeared from the state by the year 1900 because of deforestation.

If respondents asked for more information, they were also informed of the following:

The American marten is a small mammal that weighs 2 pounds and measures 24 inches from its nose to the tip of its tail. Once native to Pennsylvania, it has disappeared from the state due to losing forest habitat in the late 1800s and early 1900s. There are still active populations in New York and other parts of the United States and Canada. It eats rodents, insects, and fruits as well as squirrels and birds. Martens typically live in mature forested areas away from human development.

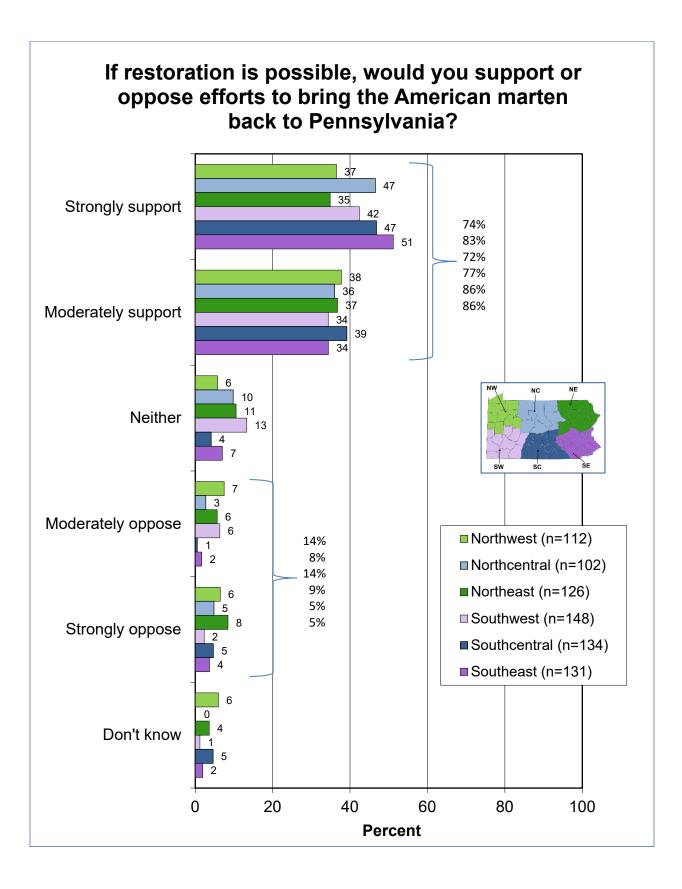
The large majority of Pennsylvania residents (80%) would support efforts to bring the American marten back to Pennsylvania; nonetheless, 8% would oppose.



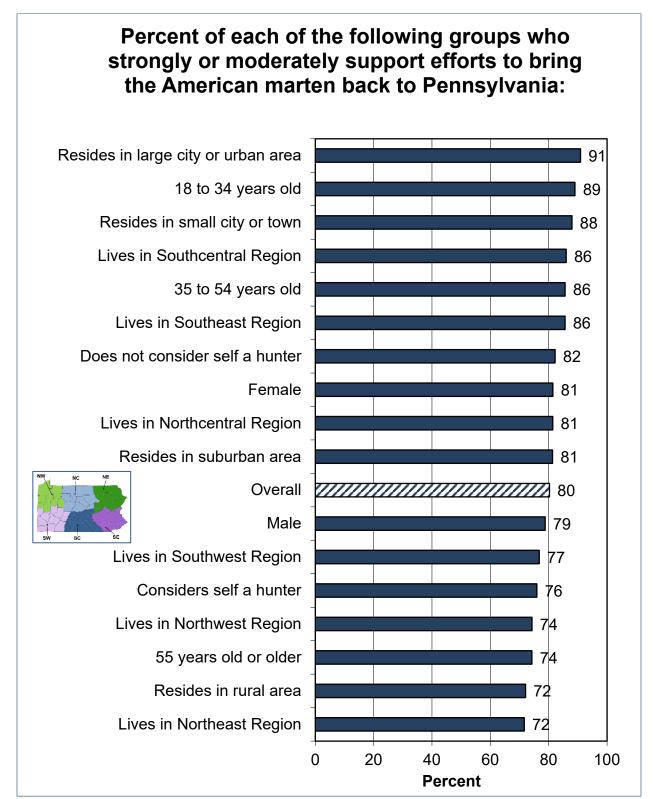
As shown on the succeeding pages, the most support is in WMUs 5B, 5C, 3D, and 5A and the Southcentral and Southeast Regions, while the most opposition is in WMUs 2G and 4C and the Northwest and Northeast Regions.

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	If restoration is possible, would you support or oppose efforts to bring the American marten back to Pennsylvania?								
WMU	Strongly support	Moderately support	Neither support nor oppose	Moderately oppose	Strongly oppose	Don't know			
1A	48	31	7	6	4	5			
1B	27	45	4	8	8	8			
2A	39	41	2	11	6	0			
2B	47	30	15	6	0	1			
2C	29	50	8	9	5	0			
2D	42	35	4	6	6	7			
2E	26	43	16	1	14	0			
2F	37	37	8	10	8	0			
2G	40	17	13	11	13	6			
3A	49	24	10	4	10	4			
3B	43	28	8	3	7	11			
3C	43	28	10	5	14	0			
3D	38	49	3	3	4	3			
4A	26	54	2	7	9	2			
4B	38	21	5	1	7	28			
4C	35	17	27	11	10	0			
4D	40	41	12	0	4	3			
4E	35	38	5	11	7	4			
5A	28	59	5	0	2	6			
5B	55	33	4	0	5	3			
5C	52	36	5	0	6	1			
5D	49	32	9	3	4	4			

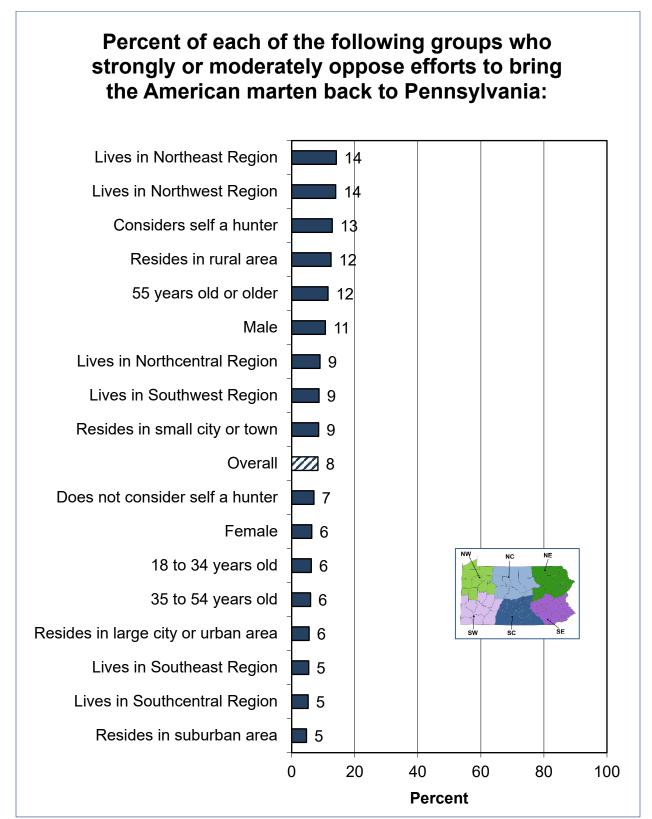


In the demographic analyses, the groups that are most associated with supporting the reintroduction of the American marten include residents of large cities/urban areas, residents 18 to 34 years old, residents of small cities/towns, residents of the Southcentral Region, residents 35 to 54 years old, and residents of the Southeast Region.



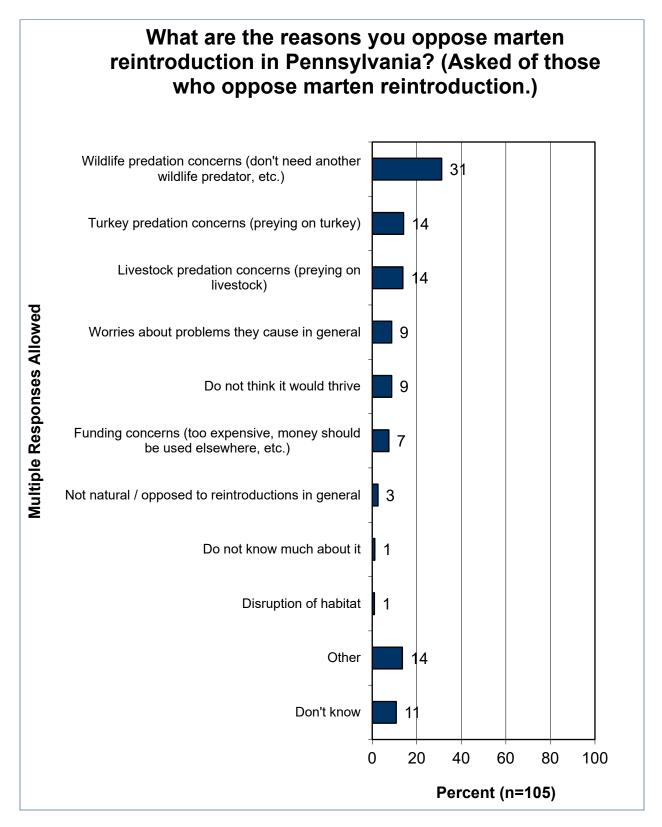
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

On the other hand, the groups that were most associated with opposing the reintroduction of the American marten are residents of the Northeast Region, residents of the Northwest Region, and hunters.



See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

The most common reasons for opposing the reintroduction of the American marten are concerns about their effects on other wildlife through predation, turkey predation specifically, and livestock predation. The sample size of people who oppose the reintroduction is too small to show results by WMU and region.



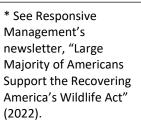
RECOVERING AMERICA'S WILDLIFE ACT

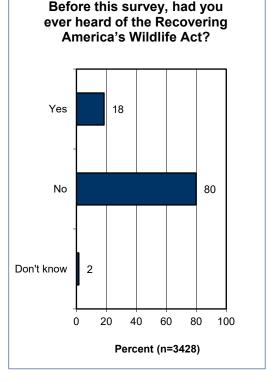
The survey informed respondents of the following:

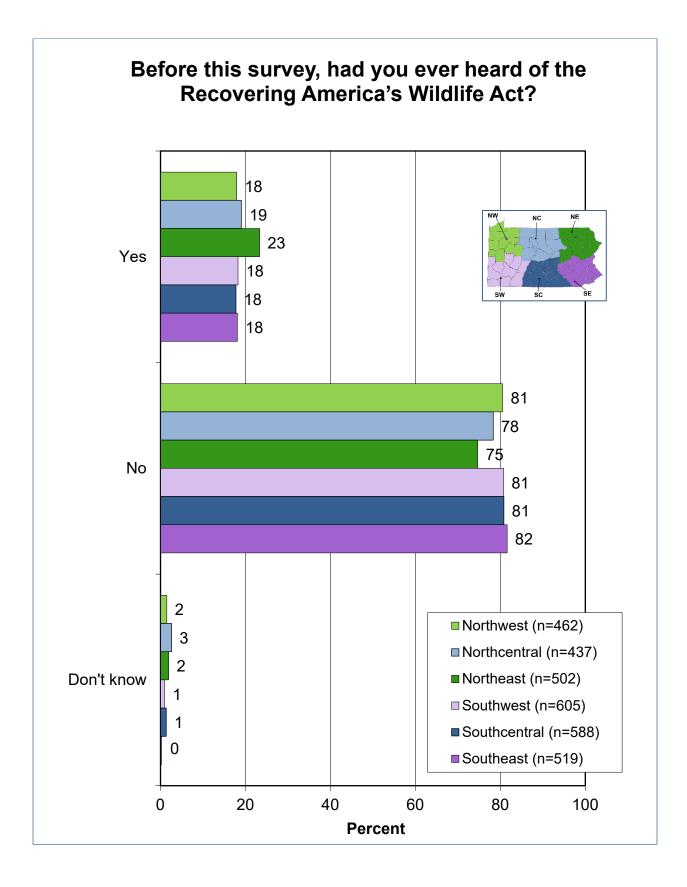
Recovering America's Wildlife Act is a bill to provide funding for the conservation and restoration of wildlife and plant species of greatest conservation need, including endangered or threatened species. Recovering America's Wildlife Act funds would come from the general Treasury, directing 1.4 billion dollars to wildlife conservation annually. Recovering America's Wildlife Act initially passed the U.S. House of Representatives last year but failed to make it through the Senate, so it was NOT passed nor funded.

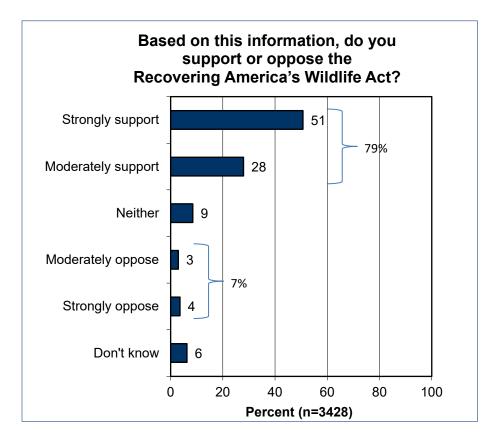
The survey then asked Pennsylvania residents if they had heard of the Act: 18% indicate having heard of it prior to the survey. The highest rates of knowledge were in WMUs 3A, 3B, 3D, 4C, and 5A and the Northeast Region. (By way of context, a national survey* in 2022 found that 27% of U.S. residents had heard of it at that time.)

Before this survey, had you ever heard of the Recovering								
America's Wildlife Act?								
WMU	Yes (had heard)	No	Don't know					
1A	19	78	3					
1B	15	84	2					
2A	18	79	3					
2B	18	81	1					
2C	17	81	2					
2D	21	77	2					
2E	17	76	7					
2F	20	78	2					
2G	16	83	2					
3A	27	66	8					
3B	26	74	1					
3C	20	78	2					
3D	25	71	4					
4A	20	77	3					
4B	18	79	3					
4C	24	75	2					
4D	18	80	2					
4E	14	81	4					
5A	23	74	4					
5B	17	83	0					
5C	18	80	1					
5D	17	82	1					







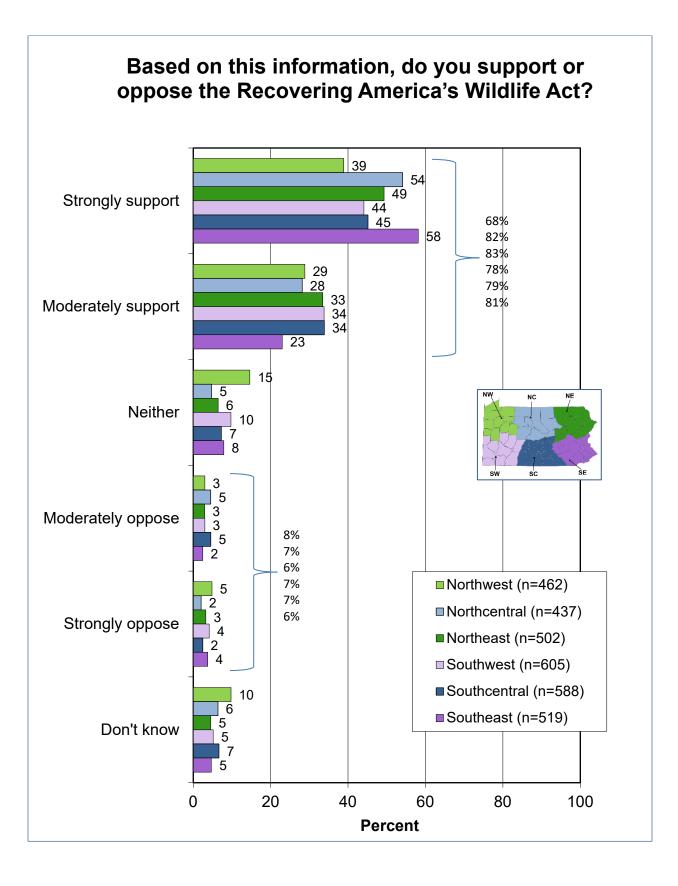


Support for the Recovering America's Wildlife Act (79%) far exceeds opposition to it (7%). The most support is in WMUs 3B, 3D, and 5D. All the regions are between 79% support to 83% support except the Northwest Region, which is markedly lower in support.

Nationally, support was 70% (42% strong, 28% moderate), and opposition was 5% (2% moderate, 3% strong)*.

Based on this information, do you support or oppose the Recovering America's Wildlife Act?									
WMU	Strongly support	Moderately support	Neither support nor oppose	Moderately oppose	Strongly oppose	Don't know			
1A	44	30	10	3	3	10			
1B	30	32	18	4	7	9			
2A	37	35	11	2	4	11			
2B	46	31	10	3	4	6			
2C	38	39	8	6	4	5			
2D	45	29	12	4	4	6			
2E	36	36	14	4	2	9			
2F	51	20	14	4	3	8			
2G	47	30	9	2	4	8			
3A	44	33	12	0	4	7			
3B	56	29	6	3	3	4			
3C	50	26	11	3	2	8			
3D	49	36	7	3	1	4			
4A	45	28	10	4	2	10			
4B	32	39	15	3	3	8			
4C	49	27	11	4	5	5			
4D	50	30	8	3	1	7			
4E	41	35	7	5	4	8			
5A	47	27	9	4	4	9			
5B	54	27	6	4	4	5			
5C	51	25	9	3	5	8			
5D	62	23	7	2	3	4			

*See Responsive Management's newsletter, "Large Majority of Americans Support the Recovering America's Wildlife Act" (2022).



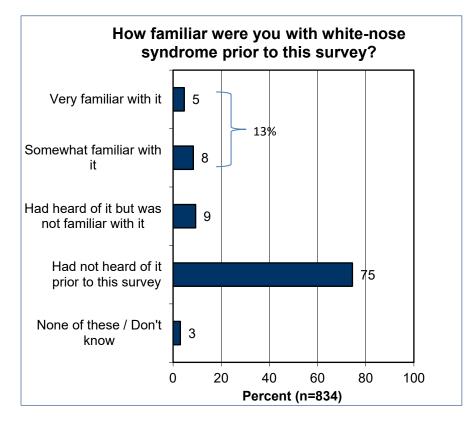
AWARENESS OF WILDLIFE DISEASES

The survey asked about residents' familiarity with three wildlife diseases: white-nose syndrome, West Nile virus, and rabbit hemorrhagic disease virus (also called RHDV2). Before discussing the results of the survey, the following is background information about each disease, taken from the PGC website.

White-Nose Syndrome refers to a white fungus on the muzzles and wing membranes of bats. Because this fungus is a cold-loving fungus, it is a condition that only affects them while they hibernate. This fungus has been confirmed to be the causative agent of the disease, although the exact mechanism by which it causes mortality is unknown. However, it has been shown that when bats become infected by the causative agent, a fungus called *Geomyces destructans*, the bats arouse too frequently, causing a severe depletion of fat reserves that leads to their death.

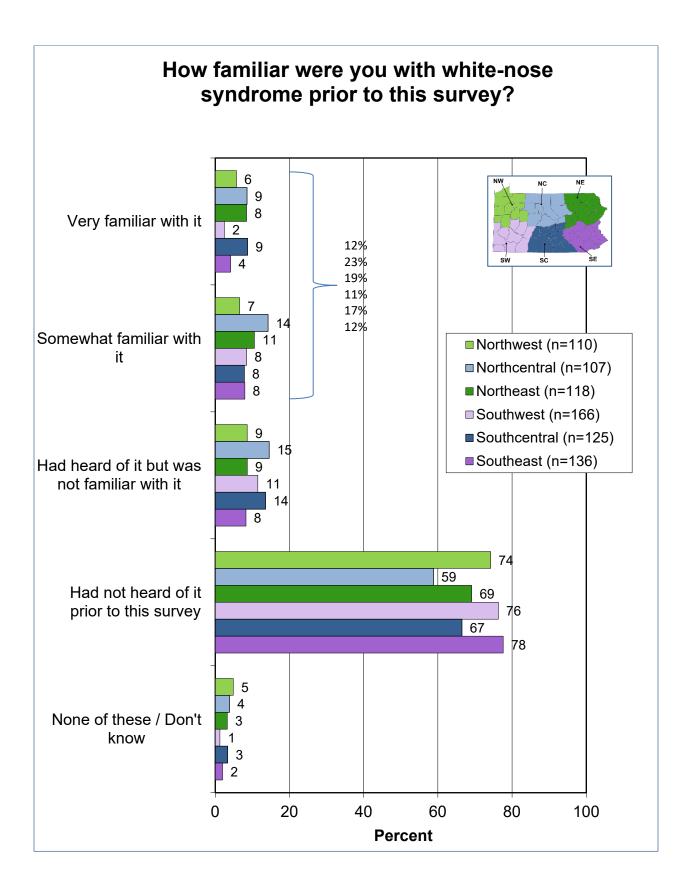
West Nile Virus is primarily a disease of birds that affects the central nervous system and is transmitted by the bite of mosquitoes carrying the virus. West Nile Virus has been found in more than 250 species of birds, but crows, jays, and ravens are most susceptible to the disease. House sparrows, common grackles, house finches, Cooper's hawks, and red-tailed hawks are also more commonly infected species. Birds with West Nile Virus often show neurological signs including loss of coordination, head tilt, tremors, weakness, and lethargy. Most infected crows and jays will die within 3 weeks.

RHDV2 is a foreign animal disease, meaning it is not typically found in the United States and is of high concern to domestic and wild animal health. RHDV2 is a highly pathogenic and contagious calicivirus affecting hares, rabbits, and closely related species. It has been responsible for mass die-offs in wild hare and rabbit populations in several countries, including the United States. The virus is extremely hardy and highly contagious. It can spread between hares and rabbits via many pathways that include direct contact with an infected live or dead individual; ingestion of contaminated food or water; inhalation; contact with contaminated equipment, tools, and enclosures; viral movement by flies, birds, biting insects, predators, scavengers, and humans; and contact with urine, feces, and respiratory discharges from infected individuals. There is no specific treatment for the disease, and it is often fatal (generally 75%-100%) with the potential to result in large, localized mortality events.

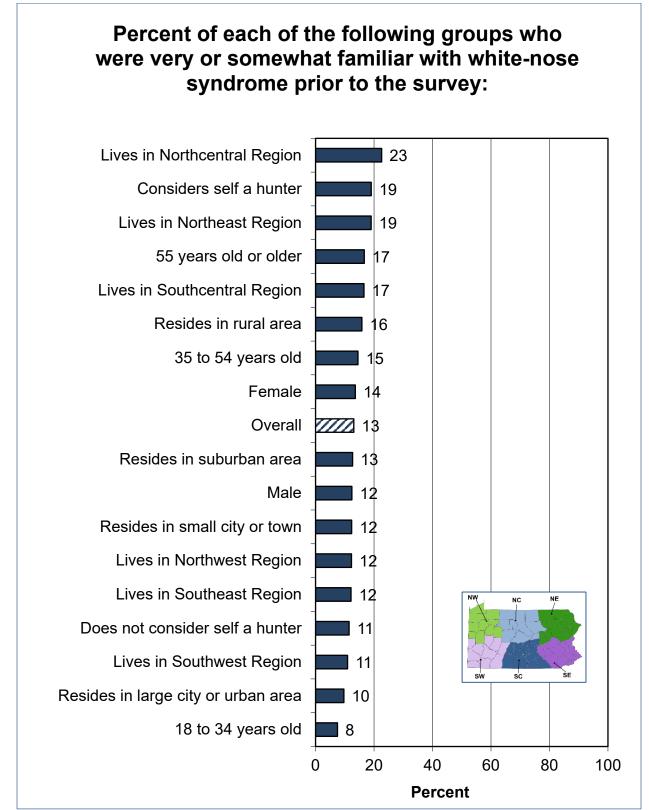


Regarding white-nose syndrome, 13% of Pennsylvania residents indicated being *very* or *somewhat* familiar with it prior to the survey, and another 9% had heard of it but do not consider themselves familiar with it. Familiarity was highest in WMUs 4C and 4D and the Northcentral Region.

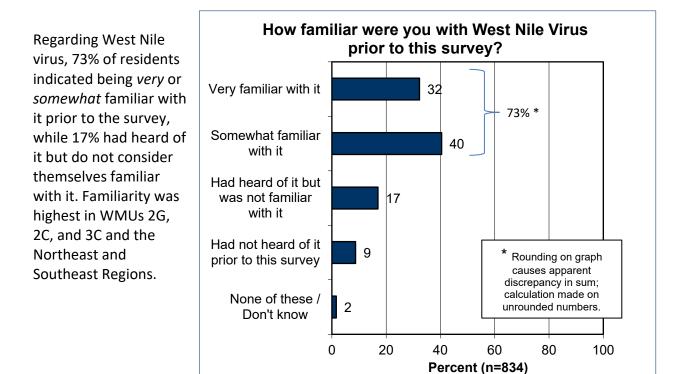
How familia	r were you with whi	te-nose syndrome p	rior to this survey?		
WMU	Very familiar with it	Somewhat familiar with it	Had heard of it but was not familiar with it	Had not heard of it prior to this survey	-
1A	2	10	6	80	2
1B	10	4	6	70	9
2A	4	2	5	73	16
2B	2	9	13	76	0
2C	3	11	6	80	0
2D	0	6	17	74	3
2E	3	7	9	76	5
2F	10	8	10	64	8
2G	15	11	11	61	2
3A	0	4	32	61	3
3B	3	8	11	72	6
3C	9	13	11	62	4
3D	12	11	10	62	5
4A	11	7	15	61	6
4B	2	3	18	69	9
4C	4	31	3	61	0
4D	11	20	13	57	0
4E	7	4	9	73	7
5A	11	4	7	73	5
5B	5	10	9	73	3
5C	2	9	5	82	2
5D	5	4	11	76	4



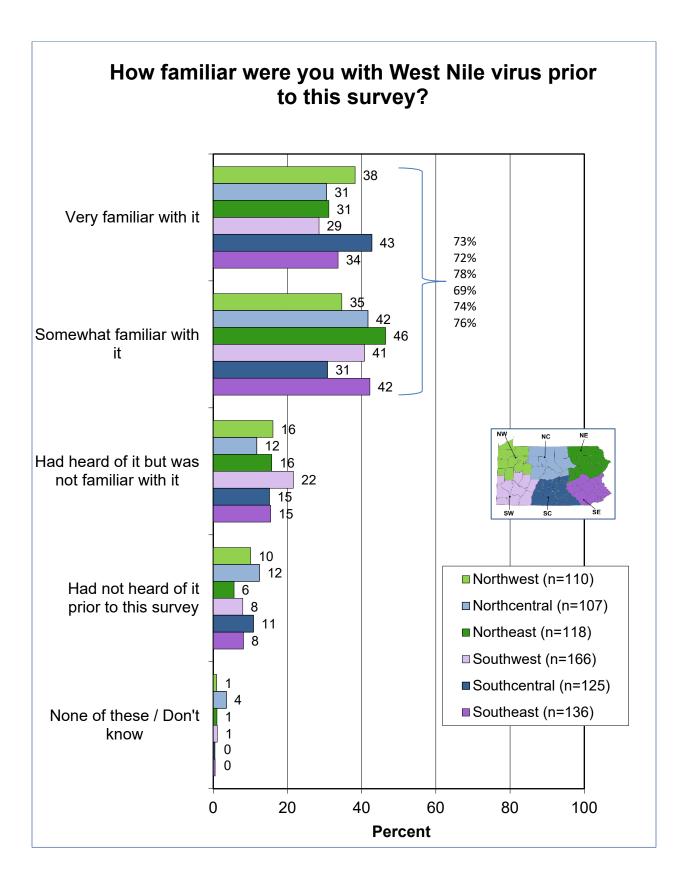
The groups most familiar with white-nose syndrome, as shown in the demographic analyses graph, are residents of the Northcentral Region, hunters, and residents of the Northeast Region.



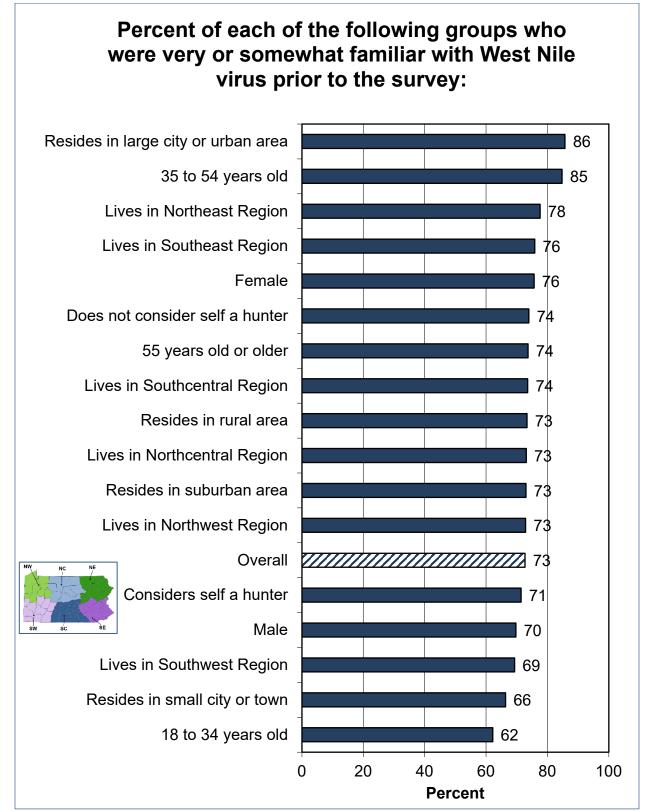
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.



How familia	ar were you with Wes	t Nile virus prior to	this survey?		
WMU	Very familiar with it	Somewhat familiar with it	Had heard of it but was not familiar with it	Had not heard of it prior to this survey	-
1A	28	43	13	14	2
1B	44	24	18	10	3
2A	30	29	34	2	5
2B	27	37	26	8	2
2C	24	60	4	13	0
2D	41	37	18	3	1
2E	33	40	22	2	3
2F	46	26	6	22	0
2G	32	53	9	5	1
3A	50	31	15	2	3
3B	17	54	18	11	1
3C	31	53	10	4	2
3D	34	30	24	6	5
4A	25	31	33	4	6
4B	37	18	37	4	4
4C	33	48	11	4	5
4D	33	30	19	18	0
4E	36	43	9	3	10
5A	49	28	8	10	5
5B	43	31	20	7	0
5C	15	55	15	14	1
5D	41	38	14	7	1

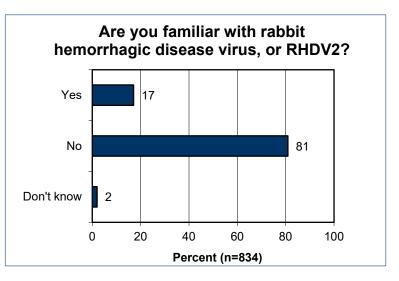


The demographic analyses graph below shows that the groups most familiar with West Nile virus are residents of large cities/urban areas, residents 35 to 54 years old, and residents of the Northeast Region.

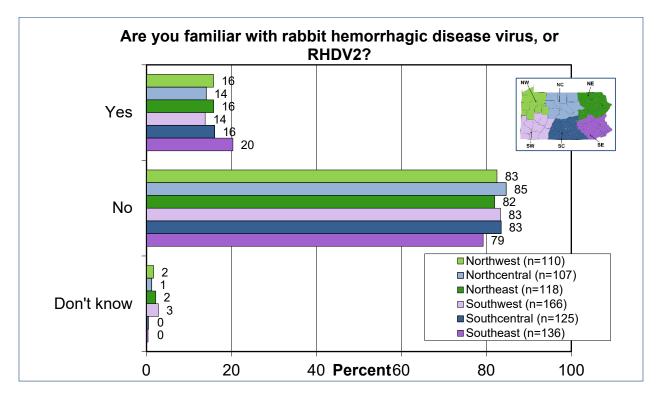


See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

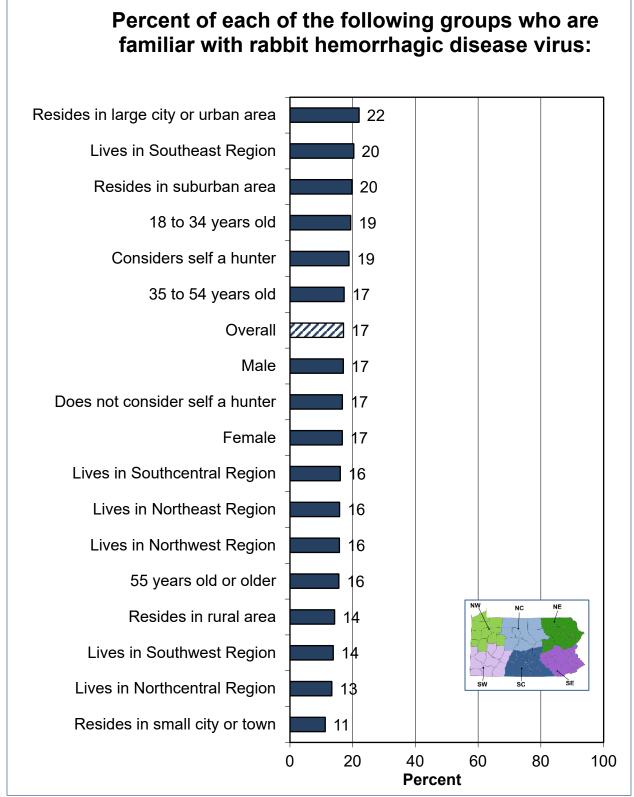
Finally, the survey asked about RHDV2. Instead of using a familiarity scale, the survey simply asked if residents were familiar with RHDV2: 17% of Pennsylvania residents indicate being familiar with it. Familiarity was highest in WMUs 4A, 5D, 3A, and 5A and the Southeast Region.



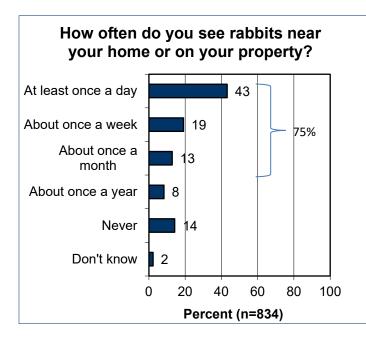
re you fami	liar with rabbit	hemorrhagic	disease virus,	or RHDV2?			
WMU	Yes (are familiar)	No	Don't know	WMU	Yes (are familiar)	No	Don't know
1A	15	83	2	3C	12	83	4
1B	13	84	3	3D	17	78	5
2A	14	81	5	4A	30	64	6
2B	13	86	2	4B	12	84	4
2C	22	69	9	4C	9	86	5
2D	8	91	1	4D	8	89	3
2E	11	84	5	4E	16	77	7
2F	14	79	6	5A	25	75	0
2G	13	84	3	5B	15	85	0
3A	25	72	3	5C	14	85	1
3B	13	84	3	5D	26	73	1



No group was markedly more familiar with RHDV2 than residents overall, as shown in the demographic analyses graph.

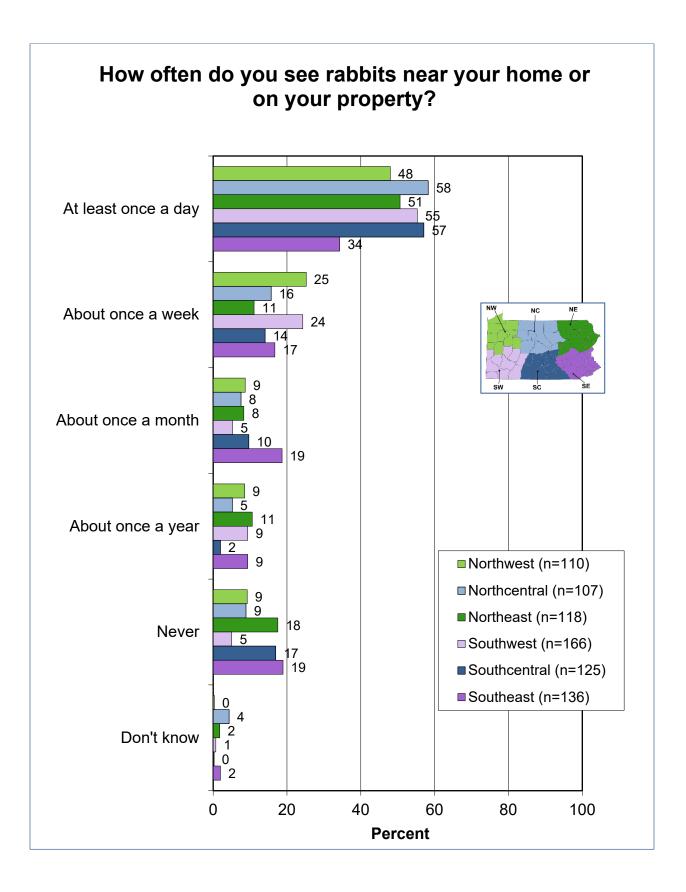


See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.



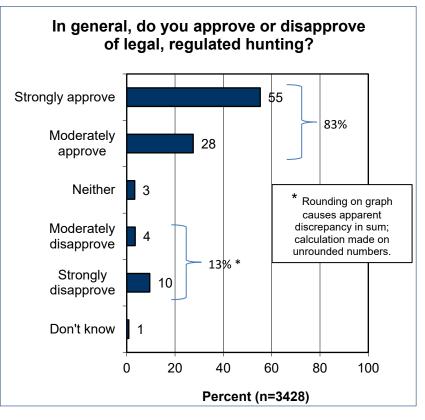
A follow-up question asked residents how often they saw rabbits near their home or on their property: 83% of residents indicated seeing them at some time, including three quarters (75%) seeing them at least once a month. WMUs 2E and 4D and the Southwest Region are the locations with the most prevalence of rabbit sightings (based on residents seeing them at least once a month).

How ofter	n do you see rabb	its near your hon	ne or on your pro	perty?		
WMU	At least once a day	About once a week	About once a month	About once a year	Never	Don't know
1A	58	21	7	5	9	0
1B	49	20	8	15	5	3
2A	51	21	6	9	4	9
2B	53	27	4	11	5	0
2C	50	22	11	4	11	1
2D	72	12	3	8	3	1
2E	59	24	11	2	2	3
2F	33	21	14	8	22	3
2G	67	10	11	1	8	2
3A	47	18	12	2	16	6
3B	46	19	9	5	18	3
3C	45	12	17	14	10	2
3D	36	12	9	19	19	5
4A	57	19	8	4	9	3
4B	59	13	12	7	6	3
4C	36	39	9	5	11	0
4D	56	33	6	3	2	0
4E	58	7	1	2	25	7
5A	59	8	13	2	12	5
5B	42	22	15	3	17	0
5C	35	21	32	0	6	6
5D	30	12	11	17	30	1

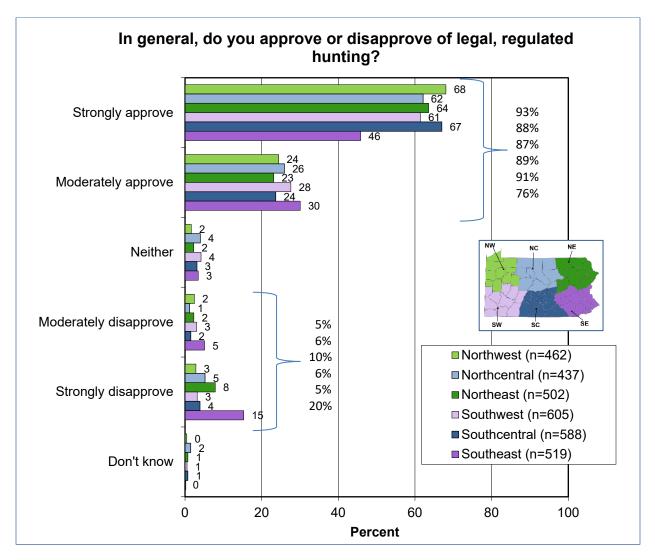


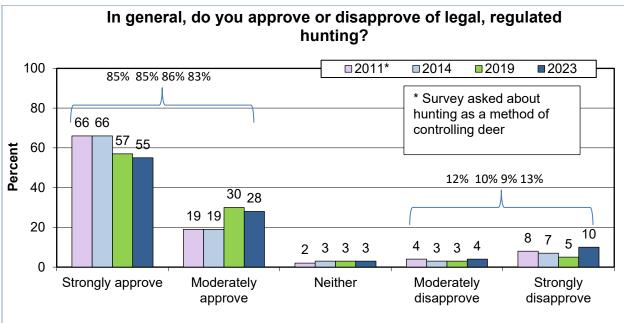
APPROVAL OR DISAPPROVAL OF HUNTING AND TRAPPING

The large majority of Pennsylvania residents (83%) approve of legal, regulated hunting. Nonetheless, 13% disapprove. The highest support is among residents living in WMUs 1B, 2F, 2C, 4B, and 3A and the Northwest and Southcentral Regions. At the other end of the scale, the most opposition is among those living in WMUs 5D and 5C and the Southeast and Northeast Regions. The trends graph shows a slight drop in approval/rise in disapproval-both statistically significant (p ≤ 0.05).

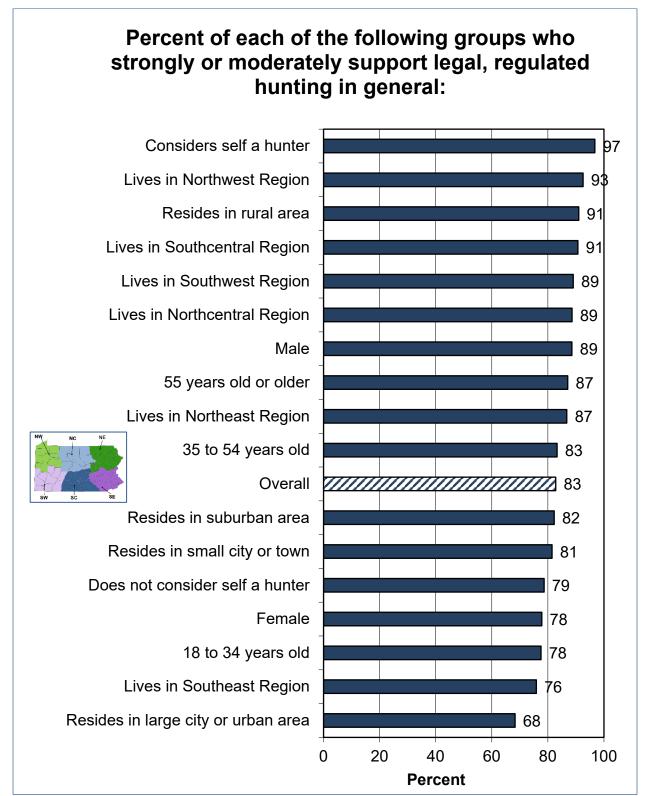


In general,	, do you approve	or disapprove of	legal, regulated h	nunting?		
WMU	Strongly approve	Moderately approve	Neither approve nor disapprove	Moderately disapprove	Strongly disapprove	Don't know
1A	62	27	2	3	5	1
1B	68	27	0	3	1	0
2A	72	19	3	2	2	3
2B	56	30	6	4	4	0
2C	74	21	0	1	2	1
2D	66	24	3	4	1	1
2E	68	22	4	0	4	2
2F	76	19	3	1	0	1
2G	62	30	2	1	4	1
3A	72	22	2	0	2	1
3B	66	23	3	3	6	1
3C	73	15	3	2	4	2
3D	56	29	2	2	9	2
4A	70	21	3	2	3	1
4B	69	25	0	0	4	2
4C	63	25	6	0	6	1
4D	58	24	7	3	6	2
4E	61	28	2	1	7	0
5A	68	22	3	2	4	1
5B	59	26	4	4	7	1
5C	50	29	3	5	12	0
5D	40	32	3	4	21	1

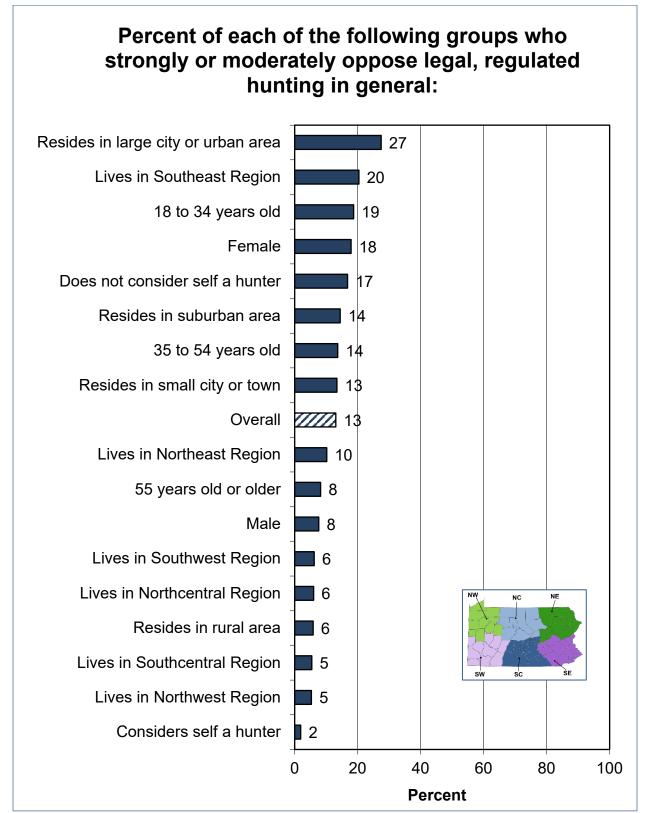




On this question, the demographic analyses graph shows that the groups most approving of legal, regulated hunting, in addition to hunters, are residents of the Northwest Region, rural residents, residents of the Southcentral Region, residents of the Southwest Region, residents of the Northcentral Region, and males.

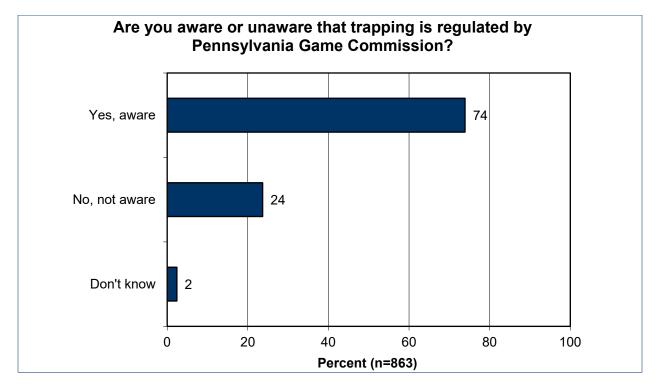


The demographic analyses graph below shows that the groups with the highest percentages of disapproval of legal, regulated hunting are residents of large cities/urban areas, residents of the Southeast Region, and residents 18 to 34 years old.

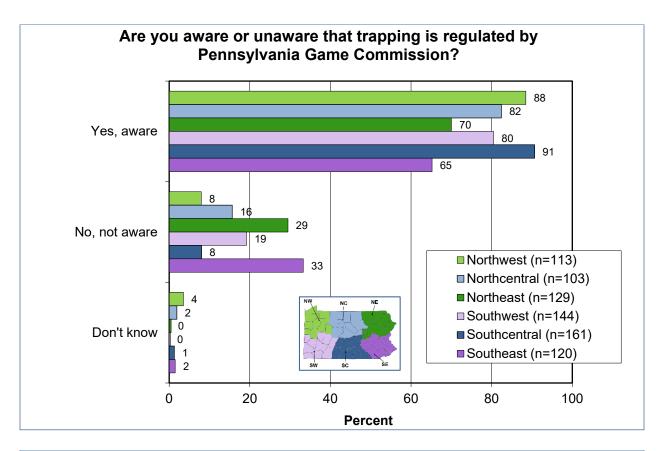


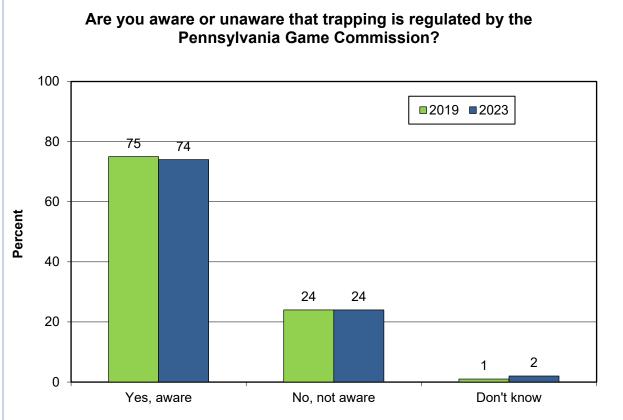
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

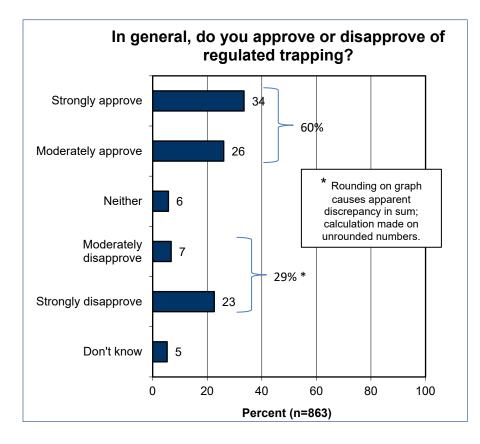
The first trapping-related question asked about awareness that trapping is regulated by the PGC: 74% of Pennsylvania residents indicate being aware of this. The results by WMU and region are included. The trends show almost no change since 2019.



WMU	Yes, aware	No, not aware	Don't know
1A	78	20	2
1B	88	0	12
2A	73	24	3
2B	79	19	2
2C	88	12	1
2D	89	11	0
2E	81	11	8
2F	90	10	0
2G	83	12	4
3A	86	10	4
3B	83	16	1
3C	62	35	3
3D	55	43	2
4A	90	9	1
4B	90	9	1
4C	77	22	1
4D	90	9	1
4E	75	21	4
5A	79	15	6
5B	90	10	0
5C	69	25	6
5D	56	42	2

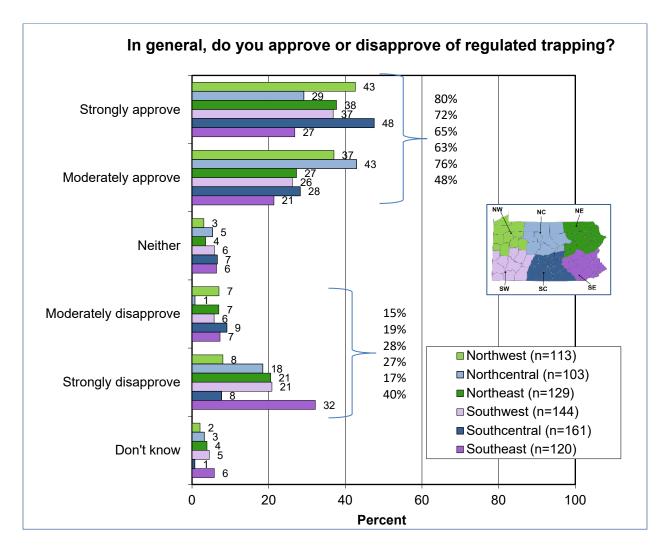




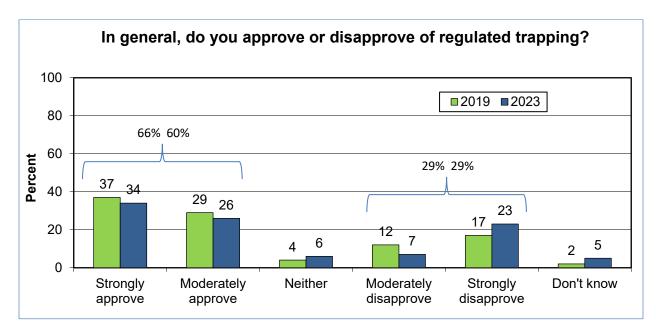


Approval of regulated trapping (60%) is higher than disapproval (29%), but overall opinion is much more divided regarding trapping when compared to overall opinion on hunting. The highest rates of approval are among residents in WMUs 2F, 2D, and 1B and the Northwest and Southcentral Regions. **Disapproval is markedly** higher in WMU 5D than in any other WMU. Regionally, disapproval is highest in the Southeast Region.

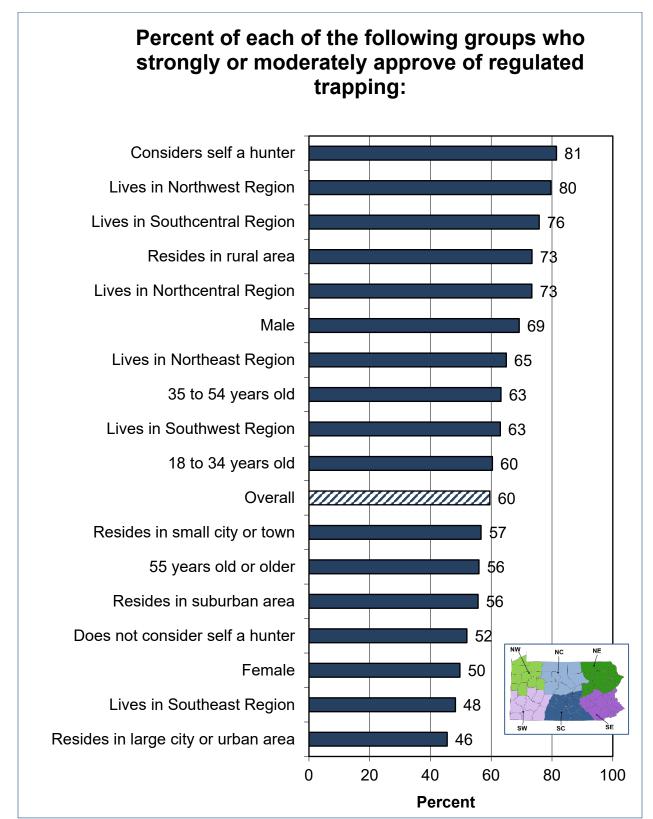
In general,	, do you approve	or disapprove of	regulated trappir	ng?		
WMU	Strongly approve	Moderately approve	Neither approve nor disapprove	Moderately disapprove	Strongly disapprove	Don't know
1A	39	28	4	12	12	6
1B	48	33	4	3	7	5
2A	34	28	16	4	9	8
2B	31	28	4	7	24	7
2C	44	29	3	4	19	1
2D	49	34	2	8	7	0
2E	39	27	5	2	24	3
2F	56	32	0	0	12	0
2G	45	24	6	3	18	4
3A	43	29	12	8	3	4
3B	45	24	1	8	13	8
3C	23	40	7	17	12	1
3D	29	29	3	2	27	9
4A	32	41	8	7	13	1
4B	49	25	4	6	8	8
4C	44	9	15	2	29	1
4D	37	37	6	2	17	1
4E	45	28	5	6	15	1
5A	50	28	2	7	12	1
5B	50	20	9	12	5	4
5C	40	21	0	14	17	7
5D	11	26	9	3	45	7



The trends show a slight drop in approval of regulated trapping, a statistically significant difference ($p \le 0.05$).

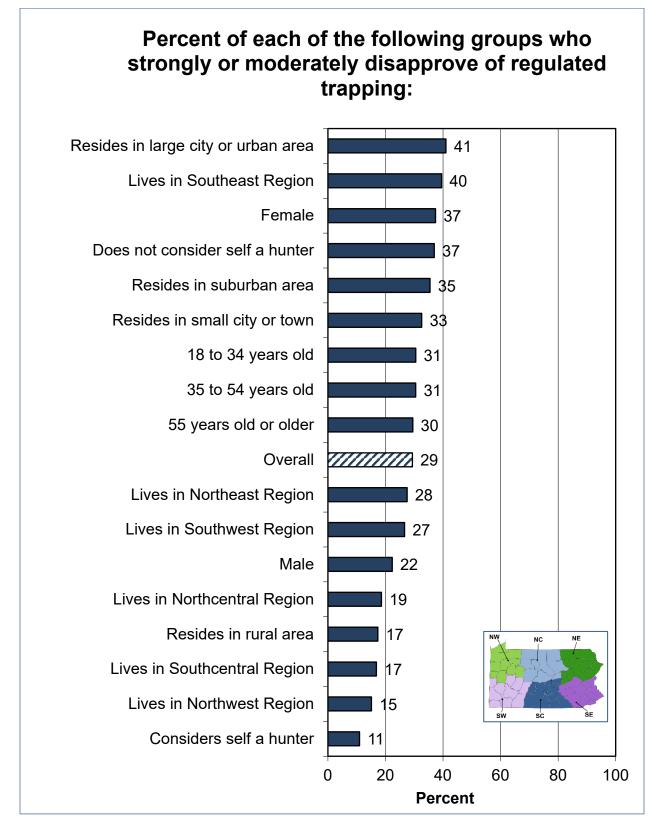


Demographic analyses show that the highest approval of regulated trapping is among hunters, residents of the Northwest Region, residents of the Southcentral Region, rural residents, residents of the Northcentral Region, and males.



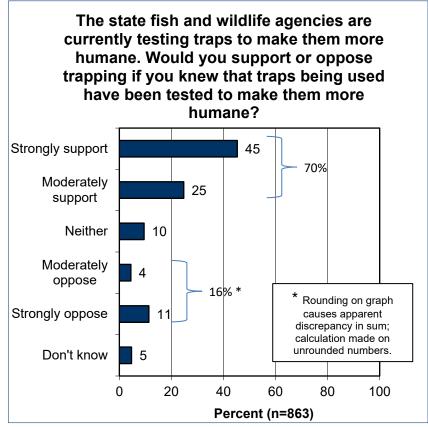
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

Demographic analyses show that the highest disapproval of regulated trapping is among residents of large cities/urban areas, residents of the Southeast Region, females, non-hunters, and suburban residents.



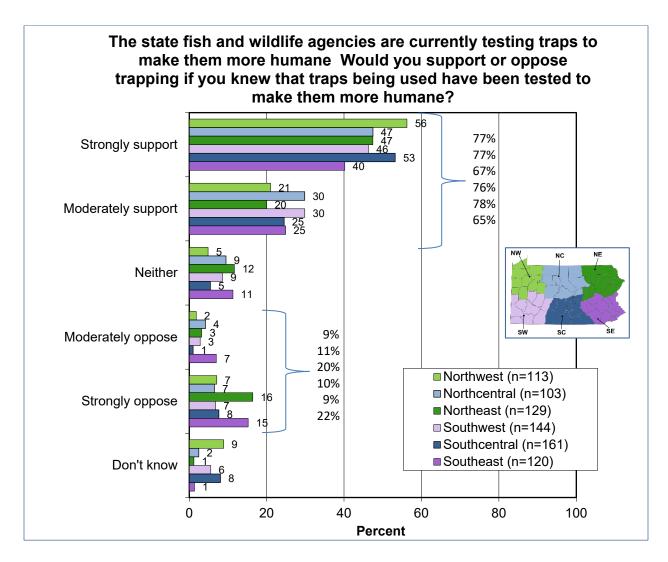
A caveat to trapping affects approval or disapproval of trapping: 70% approve of it if they are informed that traps being used have been tested to make them more humane (compared to 60% in the previous question). Nonetheless, 16% still oppose trapping (compared to 29%).

WMU 2D has markedly higher support than the other WMUs, while the most opposition is in WMUs 3D, 5C, and 5D. Two regions have markedly lower support than the other regions: the Southeast and Northeast Regions.

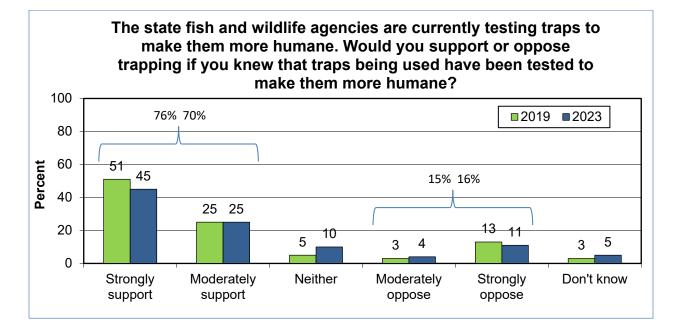


The state fish and wildlife agencies are currently testing traps to make them more humane. Would you support or oppose trapping if you knew that traps being used have been tested to make them more humane?

numane?						
WMU	Strongly support	Moderately support	Neither support nor oppose	Moderately oppose	Strongly oppose	Don't know
1A	58	21	9	0	11	2
1B	52	29	3	5	6	6
2A	41	39	8	2	5	5
2B	43	26	7	3	8	13
2C	49	29	12	3	3	3
2D	63	24	6	0	4	4
2E	40	35	7	2	10	6
2F	66	16	5	1	4	8
2G	48	22	11	3	16	1
3A	45	29	5	3	6	12
3B	61	19	8	3	8	1
3C	44	25	6	8	16	1
3D	39	16	12	0	28	4
4A	50	25	9	7	7	3
4B	51	24	13	6	2	4
4C	49	28	16	0	7	1
4D	51	23	9	4	7	5
4E	39	33	9	3	8	8
5A	48	29	10	0	12	2
5B	51	28	6	2	6	8
5C	45	26	5	0	25	0
5D	37	21	15	11	13	3



The trends show a drop in strong support, a statistically significant difference ($p \le 0.05$).



RATINGS OF THE PENNSYLVANIA GAME COMMISSION

Four statements about the PGC were presented to Pennsylvania residents; three of them have positive connotations:

The staff at the PGC really cares about wildlife.

- The PGC effectively balances the interests of hunters, conservation groups, and the general public.
- Scientific wildlife methods serve as the primary guide for the work of the PGC.

One statement has negative connotations because the statement implies that the agency does not properly balance its work to all Pennsylvanians:

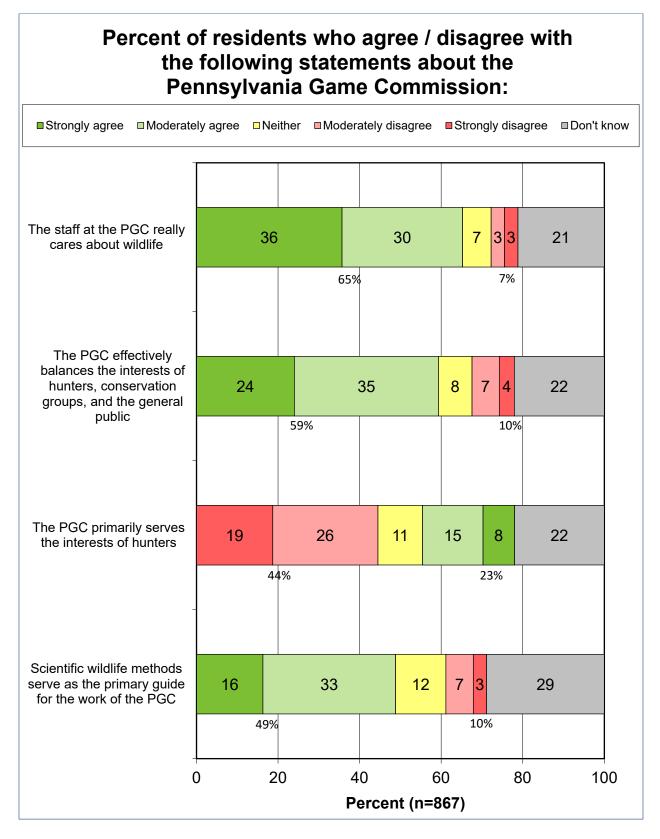
The PGC primarily serves the interests of hunters.

The results of this series are discussed overall and shown. Results are then shown by WMUs and regions, and then demographic analyses graphs for all of the individual questions in the series. The demographic analyses graphs are set up to explore the groups that have the most problematic opinions toward the PGC, which should assist with any targeted outreach efforts.

Pennsylvania residents have a high regard for the PGC. Of the positive statements, the most agreement is that *the staff at the PGC really cares about wildlife* and that *the PGC effectively balances the interests of hunters, conservation groups, and the general public*. Regarding the negative statement, agreement is higher than disagreement. The graph uses a "stoplight" style choice of colors where green represents the responses that reflect well on the agency and red represents those that reflect poorly on the agency. Note, therefore, that the negative statement's color coding is reversed.

Sums are shown of agree and disagree, calculated on unrounded numbers. Any apparent discrepancies of 1 percentage point on the sums shown on the graphs are caused by rounding of the graph percentages to the integer level. For instance, the first graph in the series shows that 36% of residents strongly agree and 30% moderately agree, which would seemingly sum to 66%; however, their sum is 65% because the calculation was made on the unrounded numbers (which were 35.7 strongly agreeing and 29.6 moderately agreeing, summing to 65.3).

To assess which opinions on the statements might be problematic for the PGC, the negative statement's "agree" responses need to be compared to the other statements' "disagree" responses. In this, *the PGC primarily serves the interests of hunters* falls last in the ranking of these statements and, therefore, represents the most problematic opinions for the PGC.



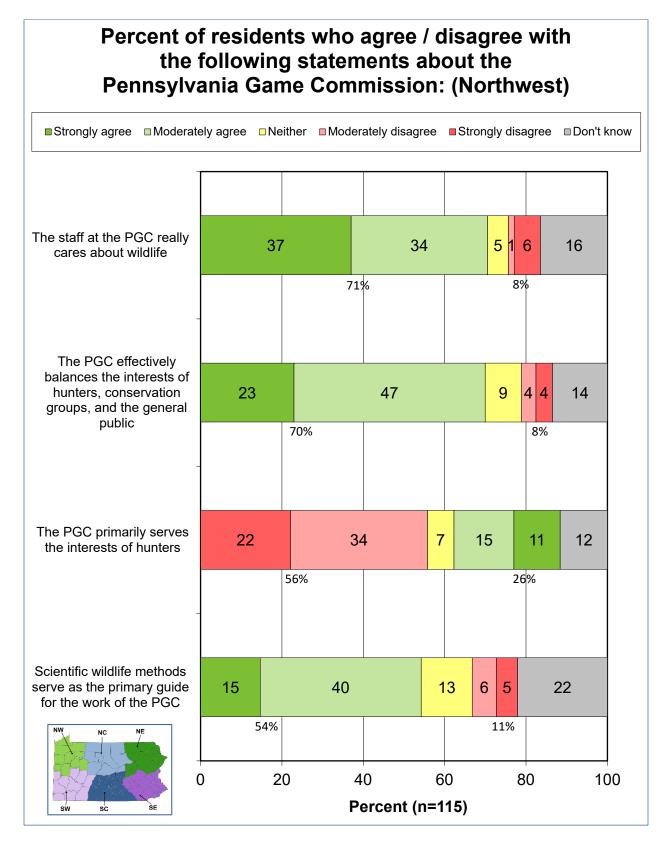
Note: Sums are calculated on unrounded numbers.

The staff at the PGC really cares about wildlife. (Please tell me whether you agree or disagree with this statement about the Pennsylvania Game Commission.)							
WMU	Strongly agree	Moderately agree	Neither agree nor disagree	Moderately disagree	Strongly disagree	Don't know	
1A	40	30	4	4	2	19	
1B	32	29	7	0	11	21	
2A	54	11	0	19	3	13	
2B	33	38	9	4	4	12	
2C	45	21	3	0	6	25	
2D	42	18	11	3	2	24	
2E	33	35	9	1	12	9	
2F	40	29	15	0	2	14	
2G	31	29	7	5	7	21	
3A	44	37	9	3	0	7	
3B	49	31	0	4	5	11	
3C	33	33	4	0	0	30	
3D	44	24	8	1	3	20	
4A	30	30	9	5	6	20	
4B	30	45	8	0	3	14	
4C	40	36	2	2	0	20	
4D	36	44	2	0	7	10	
4E	29	36	12	8	2	14	
5A	32	22	5	2	2	36	
5B	44	24	6	0	9	17	
5C	23	37	9	1	0	30	
5D	36	23	8	7	0	27	

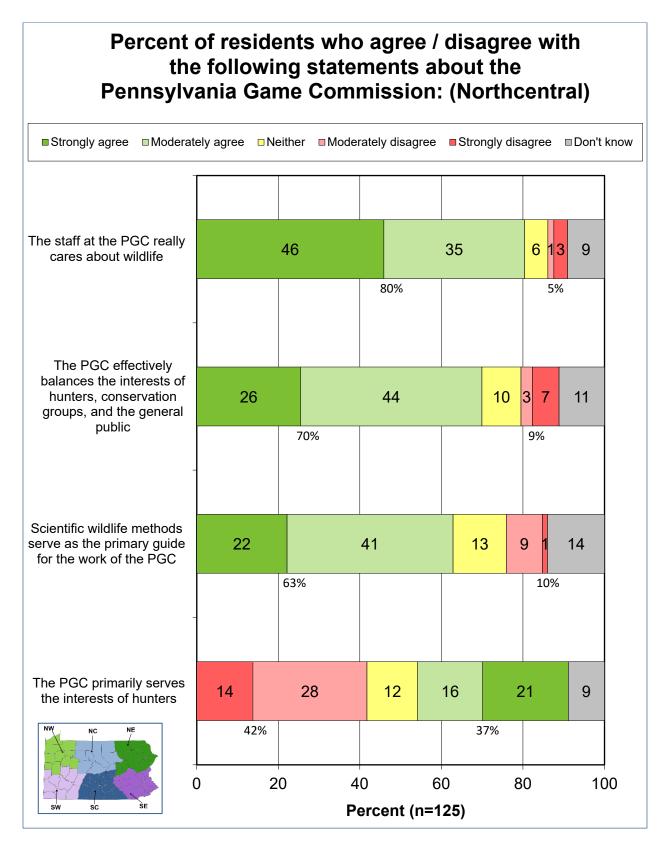
The PGC effectively balances the interests of hunters, conservation groups, and the general public. (Please tell me whether you agree or disagree with this statement about the Pennsylvania Game Commission.)							
WMU	Strongly agree	Moderately agree	Neither agree nor disagree	Moderately disagree	Strongly disagree	Don't know	
1A	21	37	14	8	3	16	
1B	25	48	4	3	3	16	
2A	31	34	0	13	0	22	
2B	17	42	11	9	4	17	
2C	20	36	4	11	7	22	
2D	21	42	6	0	19	11	
2E	27	30	12	6	9	15	
2F	28	29	26	5	2	10	
2G	20	31	8	6	13	22	
3A	38	37	10	10	3	2	
3B	31	43	7	4	2	13	
3C	32	33	0	0	9	25	
3D	44	31	0	10	3	12	
4A	19	39	5	10	14	13	
4B	10	46	4	14	2	24	
4C	44	29	2	9	0	16	
4D	25	47	8	0	8	11	
4E	12	48	14	9	7	10	
5A	24	37	9	4	4	22	
5B	29	24	6	6	4	31	
5C	16	38	9	1	0	35	
5D	27	28	10	9	2	24	

Scientific wildlife methods serve as the primary guide for the work of the PGC. (Please tell me whether you agree or disagree with this statement about the Pennsylvania Game Commission.)						
WMU	Strongly agree	Moderately agree	Neither agree nor disagree	Moderately disagree	Strongly disagree	Don't know
1A	16	25	14	16	3	24
1B	11	42	11	4	6	27
2A	25	30	4	2	5	34
2B	17	40	13	9	4	17
2C	21	34	12	4	8	21
2D	30	41	6	0	10	13
2E	20	36	4	13	9	19
2F	27	20	31	6	3	14
2G	16	38	7	15	0	24
3A	36	40	10	2	3	9
3B	18	38	5	6	4	29
3C	20	32	8	5	2	33
3D	27	46	4	1	2	20
4A	15	27	14	10	6	28
4B	3	62	9	8	2	16
4C	28	44	3	4	0	21
4D	19	44	11	6	4	16
4E	5	41	21	10	2	21
5A	22	22	6	6	0	45
5B	12	34	9	2	5	37
5C	8	32	24	0	4	32
5D	17	18	12	13	0	40

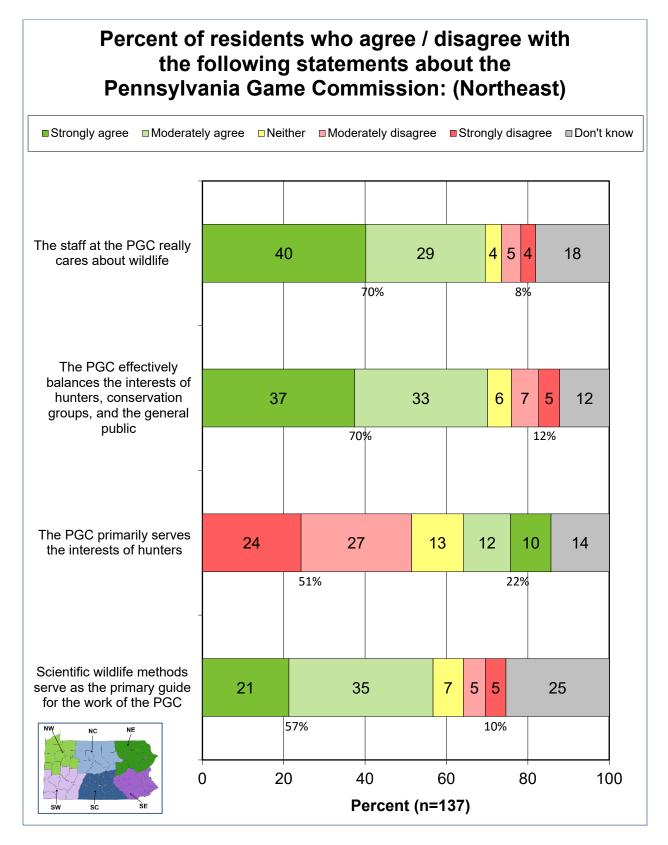
The PGC primarily serves the interests of hunters. (Please tell me whether you agree or disagree with this statement about the Pennsylvania Game Commission.)							
WMU	Strongly agree	Moderately agree	Neither agree nor disagree	Moderately disagree	Strongly disagree	Don't know	
1A	11	27	7	21	18	16	
1B	28	37	5	8	11	11	
2A	19	24	6	24	5	22	
2B	21	19	11	24	7	18	
2C	25	25	5	21	6	18	
2D	18	23	12	18	10	19	
2E	22	29	12	10	14	12	
2F	21	19	18	25	2	15	
2G	13	30	7	13	24	13	
3A	26	36	9	9	17	3	
3B	24	25	15	14	11	12	
3C	30	24	2	12	7	25	
3D	19	31	7	11	17	16	
4A	9	27	10	20	12	21	
4B	16	21	4	17	11	31	
4C	34	23	7	7	6	24	
4D	19	26	7	25	7	15	
4E	13	31	25	9	11	13	
5A	14	31	10	13	7	26	
5B	16	32	5	11	9	27	
5C	11	30	17	14	3	26	
5D	20	22	13	10	6	29	



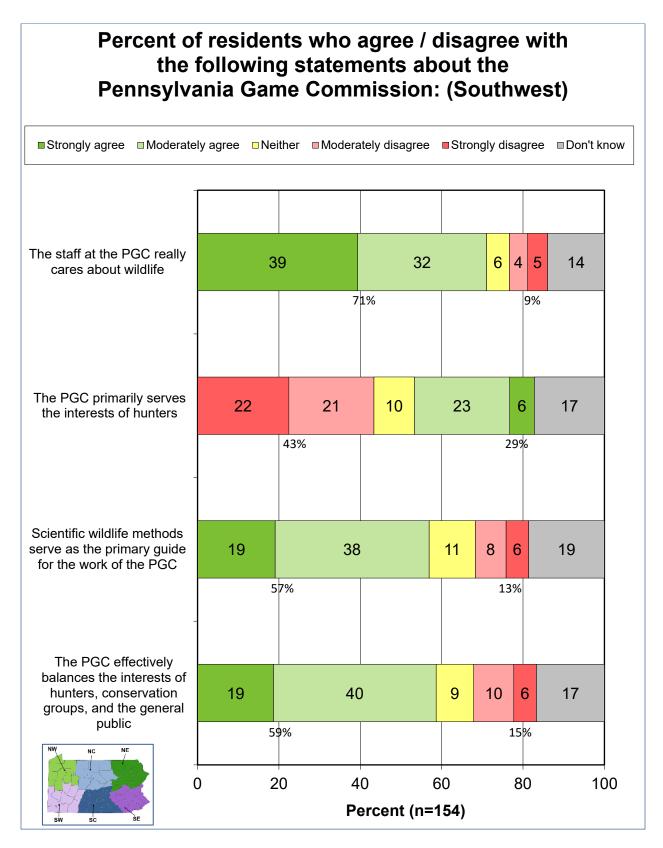
Note: Sums are calculated on unrounded numbers.



Note: Sums are calculated on unrounded numbers.

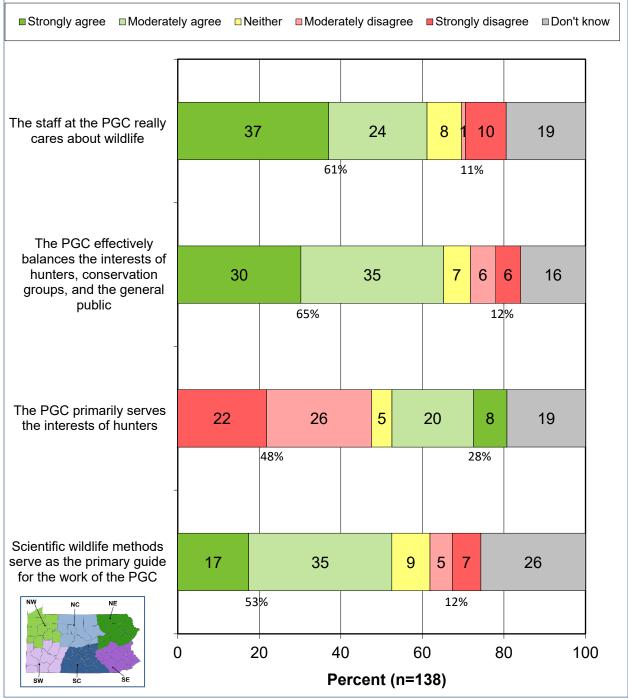


Note: Sums are calculated on unrounded numbers.

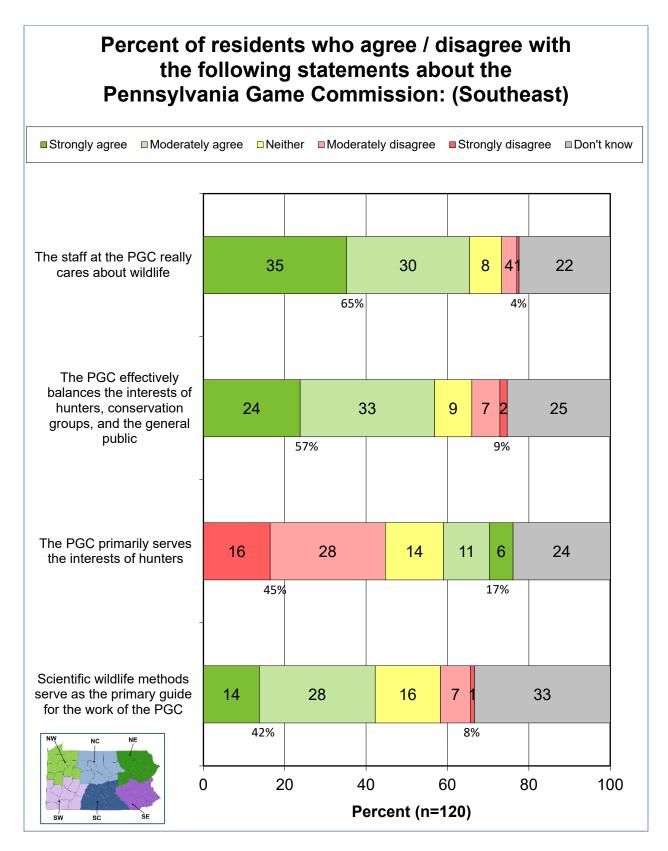


Note: Sums are calculated on unrounded numbers.



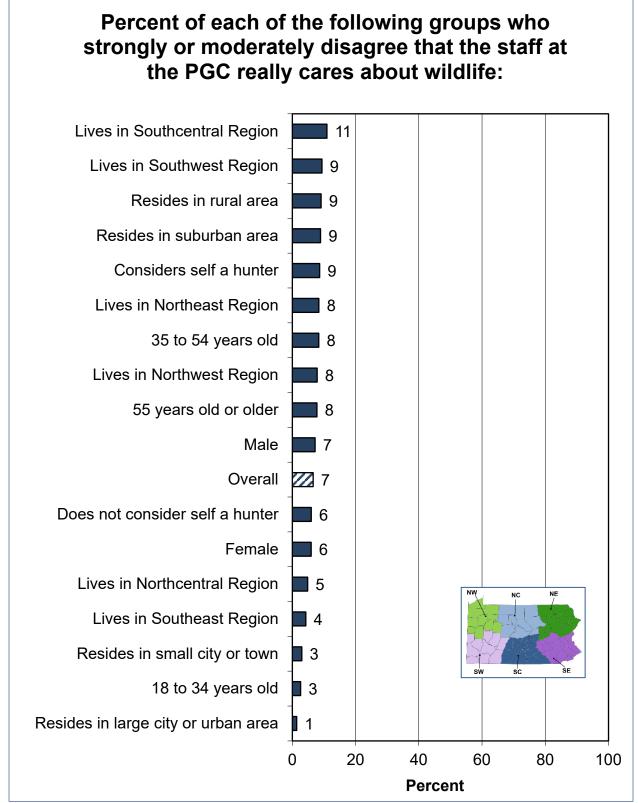


Note: Sums are calculated on unrounded numbers.



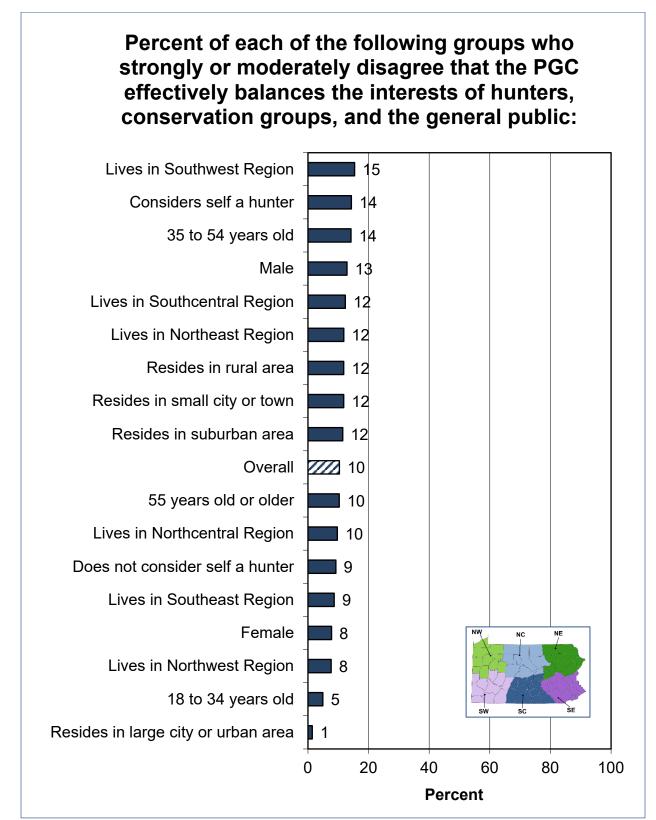
Note: Sums are calculated on unrounded numbers.

The demographic analyses graph shows that no group is markedly higher than residents overall in disagreeing with the statement, "The staff at the PGC really cares about wildlife."



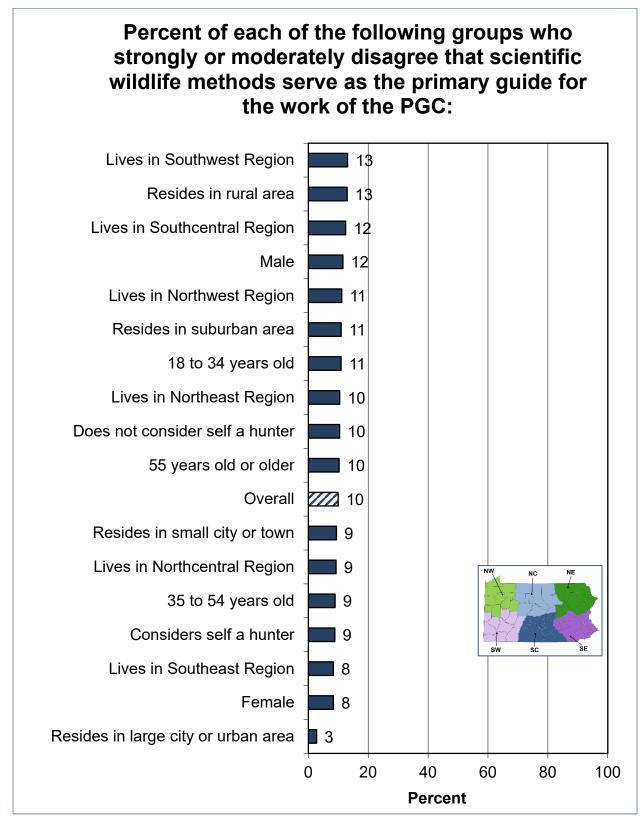
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

The demographic analyses graph shows that the most disagreement with the statement, "The PGC effectively balances the interests of hunters, conservation groups, and the general public," is among residents of the Southwest Region.



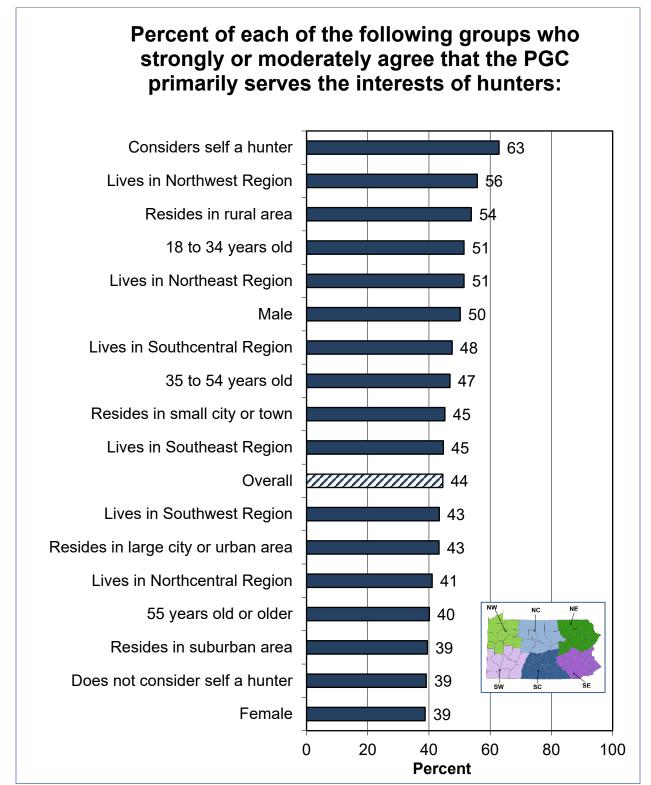
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

The demographic analyses graph shows that the groups are not markedly different in disagreeing that "Scientific wildlife methods serve as the primary guide for the work of the PGC."



See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

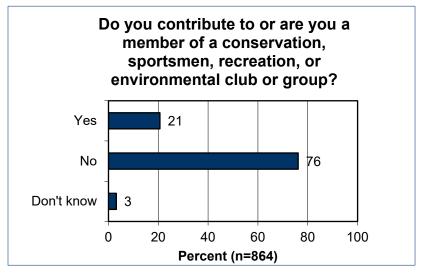
The demographic analyses graph shows that the most agreement (note this looks at agreement, not disagreement) with the statement, "The PGC primarily serves the interests of hunters," is among hunters, residents of the Northwest Region, rural residents, residents 18 to 34 years old, residents of the Northeast Region, and males.



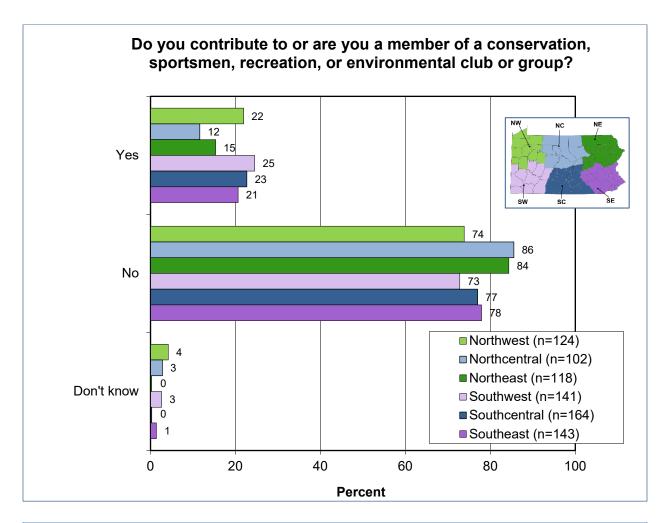
See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

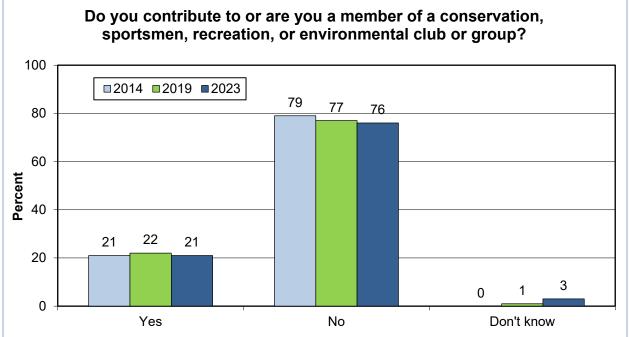
NONGOVERNMENTAL ORGANIZATIONS

About a fifth of Pennsylvania residents (21%) contribute to and/or are members of a conservation, sportsmen, recreation, or environmental club or group. The highest rates are among residents of WMUs 4A, 2A, and 5A and the Southwest Region. The trends graph shows almost no change.

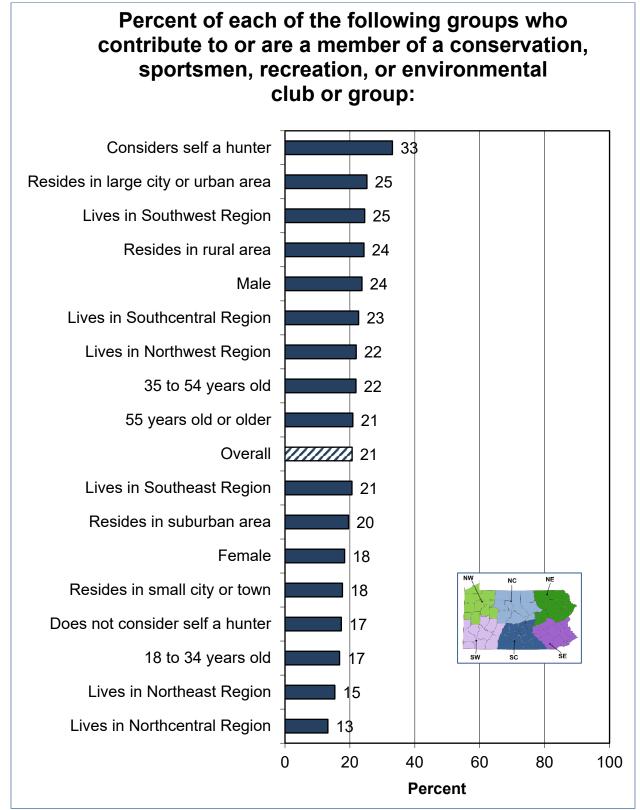


Do you contribute to or are you a member of a conservation, sportsmen, recreation, or environmental club or group?					
WMU	Yes (donate/are member)	No	Don't know		
1A	26	74	0		
1B	27	69	4		
2A	42	51	6		
2B	20	78	2		
2C	25	69	6		
2D	13	78	10		
2E	21	72	7		
2F	19	74	7		
2G	28	71	1		
3A	24	74	2		
3B	11	85	4		
3C	18	80	2		
3D	7	89	4		
4A	44	54	2		
4B	17	82	1		
4C	16	76	8		
4D	19	76	5		
4E	22	78	0		
5A	37	60	3		
5B	18	80	2		
5C	25	75	0		
5D	17	78	5		



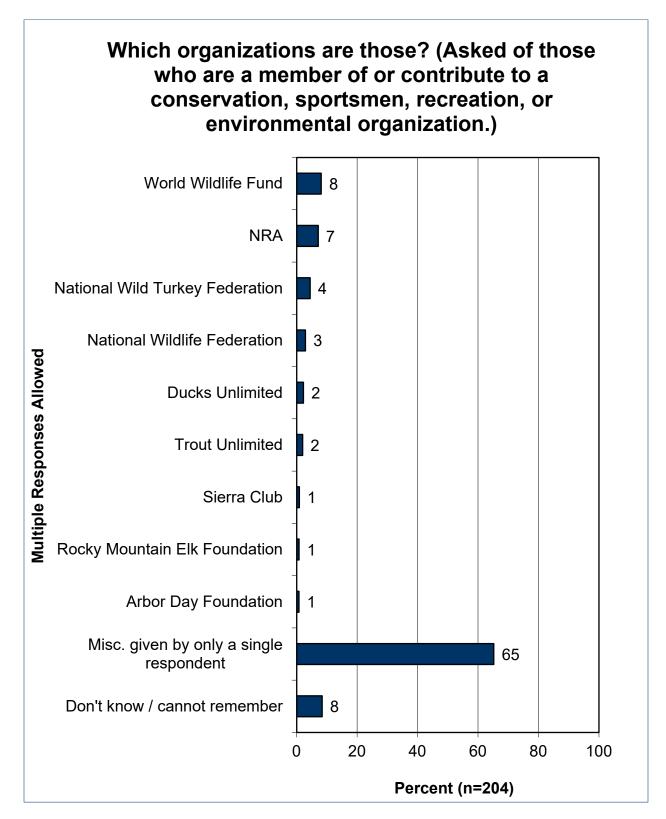


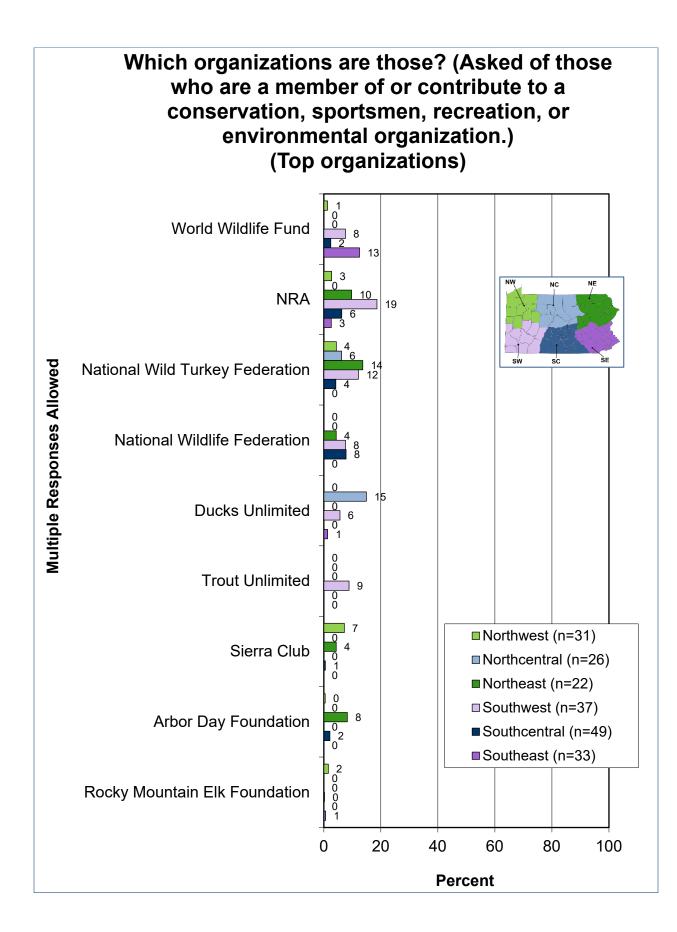
The demographic analyses graph below shows that the highest rate of donating/membership is among hunters.



See pages 7-8 for a full discussion of how to interpret these demographic analyses graphs.

A follow-up question asked those who donated to or were members of such organizations to name them. The results are presented below showing any organization named by more than a single respondent. Because of the low number of people getting the follow-up question, results are not shown by WMU.

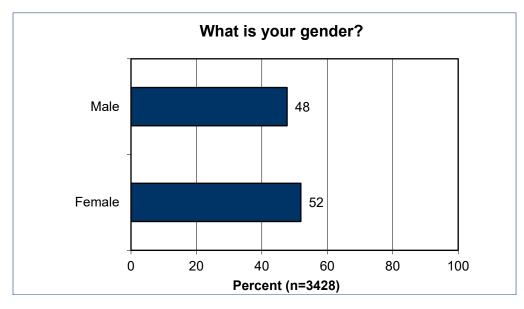




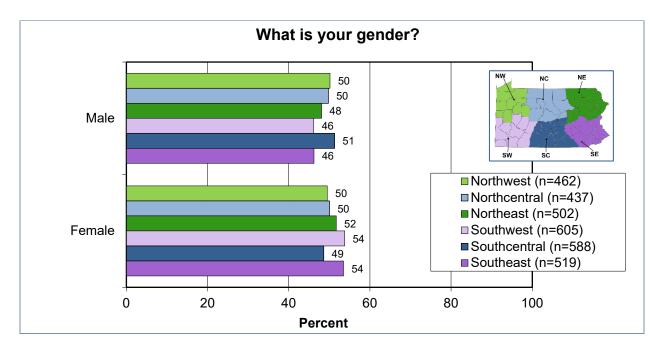
DEMOGRAPHIC INFORMATION

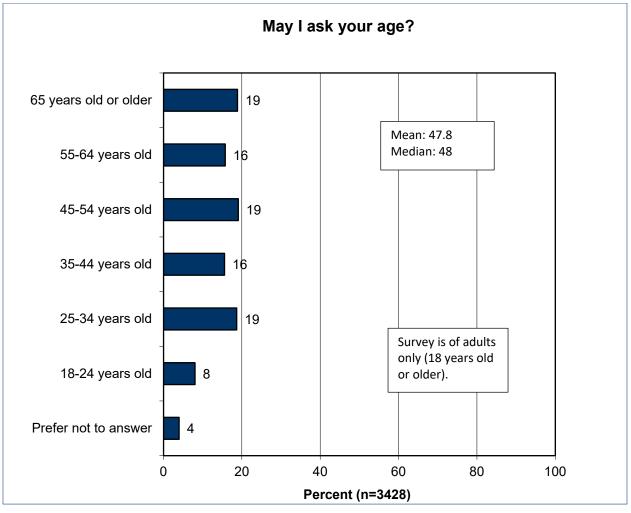
Demographic information was obtained in the survey primarily for the demographic analyses graphs that have been presented throughout the report; nonetheless, the demographic information is shown on its own. The following demographic information was obtained.

- Gender.
- Age.
- Residency (county and type of area).

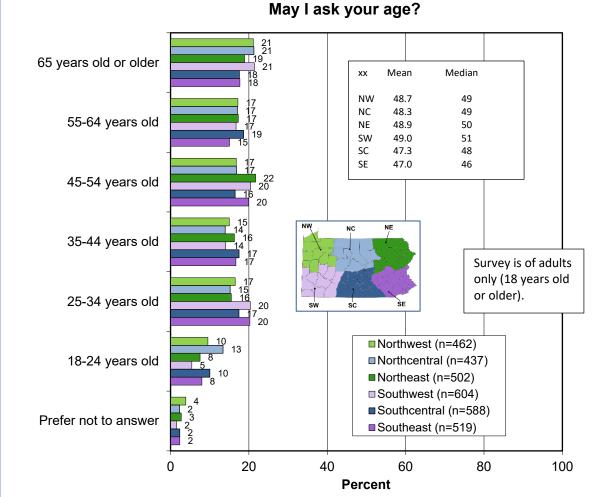


espondent's gender.						
WMU	Male	Female	Refused			
1A	47	52	1			
1B	48	52	0			
2A	49	51	0			
2B	47	53	0			
2C	49	51	0			
2D	48	52	0			
2E	49	50	2			
2F	50	50	0			
2G	49	51	0			
3A	50	49	1			
3B	48	52	0			
3C	49	51	0			
3D	49	50	0			
4A	49	50	1			
4B	49	51	1			
4C	49	51	0			
4D	51	49	0			
4E	49	51	0			
5A	48	52	0			
5B	48	52	0			
5C	48	52	1			
5D	46	53	1			

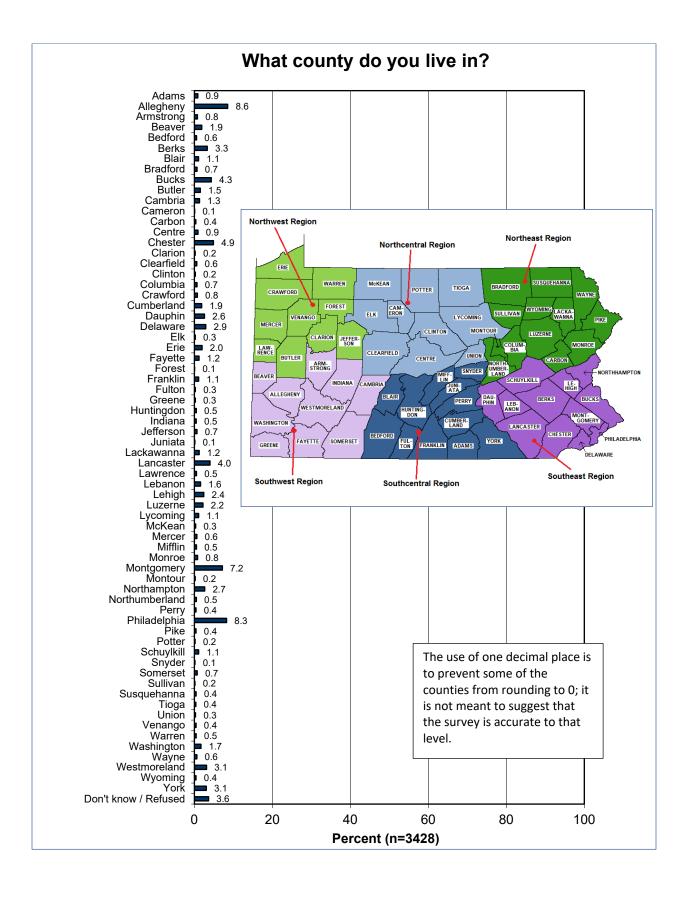


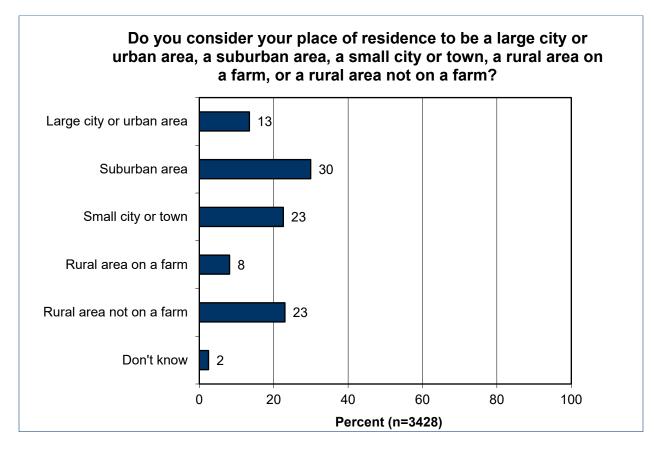


Respond	Respondent's age.						
WMU	65 years old	55-64 years	45-54 years	35-44 years	25-34 years	18-24 years	Prefer not to
	or older	old	old	old	old	old	answer
1A	22	17	20	15	11	10	5
1B	18	17	19	15	17	11	2
2A	19	17	19	16	19	5	5
2B	21	16	19	15	23	4	2
2C	23	18	19	15	15	7	2
2D	21	16	19	13	16	9	6
2E	20	17	19	15	14	9	6
2F	22	17	19	12	18	6	6
2G	22	16	19	15	16	7	4
3A	22	16	16	16	12	10	7
3B	21	16	17	14	16	11	4
3C	22	18	20	15	13	9	3
3D	19	15	20	17	13	10	6
4A	23	15	18	17	16	6	6
4B	18	17	20	17	15	7	6
4C	20	16	19	16	14	7	8
4D	17	14	16	13	13	20	7
4E	20	16	19	13	19	3	10
5A	20	17	18	16	17	9	3
5B	19	16	20	17	17	10	2
5C	16	15	21	18	15	11	4
5D	17	15	18	15	25	6	4

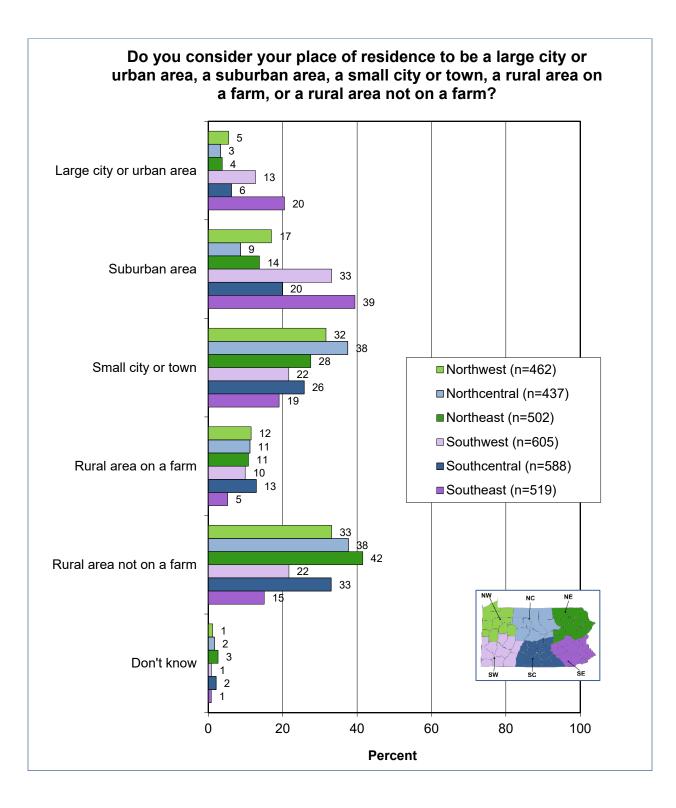


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Type of r	Type of residential area.						
WMU	Large city or urban area	Suburban area	Small city or town	Rural area on a farm	Rural area not on a farm	Don't know	Refused
1A	3	23	34	11	28	0	1
1B	9	17	31	11	29	3	0
2A	3	8	31	15	40	4	0
2B	19	46	17	4	12	1	1
2C	2	14	25	17	38	4	0
2D	1	4	27	24	42	2	0
2E	0	2	28	17	46	5	0
2F	2	4	34	11	44	4	1
2G	2	4	39	12	43	1	0
3A	3	1	26	23	44	3	1
3B	5	16	33	7	33	4	0
3C	3	5	28	15	46	2	0
3D	5	14	22	6	47	4	1
4A	2	6	28	21	37	5	0
4B	3	11	27	11	44	4	0
4C	3	13	34	8	35	8	0
4D	11	8	35	12	31	3	0
4E	4	4	27	17	42	5	1
5A	1	22	22	14	37	5	0
5B	8	39	22	9	20	2	1
5C	6	30	24	10	28	2	0
5D	33	46	14	1	4	2	0



ABOUT RESPONSIVE MANAGEMENT

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

Focusing only on natural resource and outdoor recreation issues, Responsive Management has conducted telephone, mail, and online surveys, as well as multi-modal surveys, on-site intercepts, focus groups, public meetings, personal interviews, needs assessments, program evaluations, marketing and communication plans, and other forms of human dimensions research measuring how people relate to the natural world for more than 30 years. Utilizing our in-house, full-service survey facilities with 75 professional interviewers, we have conducted studies in all 50 states and 15 countries worldwide, totaling more than 1,000 human dimensions projects *only* on natural resource and outdoor recreation issues.

Responsive Management has conducted research for every state fish and wildlife agency and every federal natural resource agency, including the U.S. Fish and Wildlife Service, the National Park Service, the U.S. Forest Service, Bureau of Land Management, U.S. Coast Guard, and the National Marine Fisheries Service. Additionally, we have also provided research for all the major conservation NGOs including the Archery Trade Association, the American Sportfishing Association, the Association of Fish and Wildlife Agencies, Dallas Safari Club, Ducks Unlimited, Environmental Defense Fund, the Izaak Walton League of America, the National Rifle Association, the National Shooting Sports Foundation, the National Wildlife Federation, the Recreational Boating and Fishing Foundation, the Rocky Mountain Elk Foundation, Safari Club International, the Sierra Club, Trout Unlimited, and the Wildlife Management Institute.

Other nonprofit and NGO clients include the American Museum of Natural History, the BoatUS Foundation, the National Association of Conservation Law Enforcement Chiefs, the National Association of State Boating Law Administrators, and the Ocean Conservancy. As well, Responsive Management conducts market research and product testing for numerous outdoor recreation manufacturers and industry leaders, such as Winchester Ammunition, Vista Outdoor (whose brands include Federal Premium, CamelBak, Bushnell, Primos, and more), Trijicon, Yamaha, and others.

Responsive Management also provides data collection for the nation's top universities, including Auburn University, 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, Yale University, and many more.

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