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# Public Awareness of NYSDEC and Participation in Wildlife Viewing

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## EXECUTIVE SUMMARY

The New York State Department of Environmental Conservation (NYSDEC), Division of Fish and Wildlife (DFW) wanted information on participation in wildlife watching activities in New York State. DFW asked the Cornell Center for Conservation Social Sciences (CCSS) to gather this information along with information about public awareness of DFW and its role in fish and wildlife management. Three questions on awareness of the DFW and participation in wildlife watching were developed for the 2020 Empire State Poll. The poll, conducted by telephone, surveyed New York State residents aged 18 and over.

We found that 40% of New York State residents, or roughly 6.2 million people, participated in wildlife watching activities in 2019. One-quarter participated for a limited amount of time ( $\leq 10$  days), but others (28%) participated more than 200 days. Non-white residents and those living downstate participated less frequently.

Over one-third of New York State residents (37%) did not know what agency has primary responsibility for fish and wildlife management in New York. One-third (33%) thought an agency other than NYSDEC had primary responsibility, leaving just under one-third of New York State residents (30%) correctly identifying NYSDEC as the agency with primary responsibility for fish and wildlife management in the state. Black residents (60%), those living downstate (42%), and those who did not watch wildlife in 2019 (42%) were more likely than their counterparts to not know the agency responsible for fish and wildlife management in the state. These results suggest that more can be done to increase awareness of NYSDEC's role.

## ACKNOWLEDGMENTS

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The Survey Research Institute of Cornell University conducted the 2020 Empire Poll.

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## INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC), Division of Fish and Wildlife (DFW) wanted information on participation in wildlife watching activities in New York State. The National Survey of Fishing, Hunting and Wildlife-Associated Recreation (National Survey), conducted by the U.S. Department of the Interior and Bureau of the Census, previously provided this information every five years, but stopped collecting statewide level data in their 2016 survey. DFW asked the Cornell Center for Conservation Social Sciences (CCSS) to gather this information along with information about public awareness of DFW and its role in fish and wildlife management in New York State. To address these needs CCSS and DFW developed questions to be included in the annual statewide survey of New York State residents conducted by Cornell University.

## METHODS

Three questions on awareness of the DFW and participation in wildlife watching were developed for the 2020 Empire State Poll. (See Appendix A at the end of this document for the exact wording of the questions.) The poll, conducted by telephone by the Survey Research Institute (SRI) at Cornell University, was a survey of New York State residents aged 18 and over. The survey combines a core of socio-demographic questions, which are repeated each year, with questions on a variety of other topics submitted by academic researchers.

In 2020, likely residents of New York State were sampled through a random sample of telephone numbers covering both cellular and land-line exchanges. The phone numbers were purchased from Marketing Systems Group. For households included in the sample, every adult in the household had an equal chance of being included in the poll. Interviews were conducted with 800 people, 400 upstate and 400 downstate. (Downstate was defined as residents of Bronx, Kings, Nassau, New York, Richmond, Rockland, Queens, Suffolk, and Westchester Counties.) Statewide estimates were calculated by weighting the data according to the population living in each region. For the first time in the poll's history, the data was also weighted by gender, age, race, education, household income, and party affiliation, based on the 2018 American Community Survey 5-year estimates, and New York State Board of Elections data. Thus, the results can be generalized to the entire state.

Telephone survey data collection began on January 24, 2020 and ended on March 15, 2020. Interviews were conducted in English or Spanish using a Computer Assisted Telephone Interviewing software system.

## RESULTS AND DISCUSSION

Over 18,000 telephone numbers were included in the initial sample. The majority of these numbers were either non-working numbers or no one answered the telephone after multiple attempts. From the initial sample, 4,128 telephone contacts were made. Almost 20% of the contacts resulted in completed interviews. Fifty-four percent refused to be interviewed, with two-thirds of the refusals coming from downstate residents. The remaining contacts were deemed ineligible because the person lived outside of New York State, did not speak English or Spanish, was physically or mentally unable to respond, the telephone number was not a household, or the telephone number connected to a minor's cell phone.

As a result of the weighting protocol used this year, the region of residence, gender, education, race (Black and Hispanic), and income in our results are the same as those for the New York State population as assessed by larger studies (Table 1). Those studies found that two-thirds of the state's population lives downstate (64%), slightly more than half are male (51%), and just over one-third have a college degree (36%). Other socio-demographic characteristics (marital status, employment status, social ideology, political party affiliation, and race [White and Asian]), reflect the sample drawn for this study (Table 2) and may not be identical to the characteristics of the New York State population.

The socio-demographic characteristics of age, race, marital status, and household income had statistically significant relationships with one or more of the three questions we asked. The other socio-demographic characteristics – gender, education, employment status, social ideology, and political party affiliation – were not significantly correlated with any of the three questions. Results for the three questions are presented in subsequent tables with the overall response to the question first, followed by responses categorized by other variables with which the responses were significantly correlated.

**Table 1. Socio-demographic characteristics of New York State population used for weighting respondent data.**

Characteristics	Percent
New York State region	
Downstate	63.7
Upstate	36.3
Gender	
Male	48.9
Female	51.1
Education	
Less than high school	8.3
High school degree	24.8
Some college	31.0
College degree	19.8
Graduate degree	16.1
Race*	
Black	17.0
Hispanic	19.1
Household income	
\$0 to < \$50,000	40.0
\$50,000 to < \$100,000	27.0
\$100,000 to < \$150,000	15.2
More than \$150,000	17.8
	Mean
Age	47.7

\*Categories are not mutually exclusive.

**Table 2. Socio-demographic characteristics of respondents.**

Characteristics	Percent
Race*	
White	72.8
Asian	7.8
Marital status	
Married	39.1
Divorced, separated	13.8
Widowed	9.2
Single	37.9
Employment status	
Employed	60.4
Not working for pay	14.3
Retired	19.3
Disabled	3.2
Unable to work	2.8
Political party affiliation	
Democrat	51.0
Independent	17.0
Republican	9.1
Undeclared or other party	23.0
Social ideology	
Liberal	35.2
Middle of the road	35.9
Conservative	29.1

\*Categories are not mutually exclusive.

## Participation in Wildlife Watching Activities

We adapted the question about wildlife watching activities used in the National Survey to focus on key elements from the original question that could be covered in one question on the telephone. Our intention was to compare the 2019 New York results with the 2016 national and regional results, and the 2011 New York results. The question used in the National Survey was:

Did you closely observe, feed, or photograph wildlife recreationally or maintain natural areas for the benefit of wildlife in 2016? Please include activities around your home and on trips away from home. Please do not include trips to zoos, circuses, aquariums, museums, or trips for hunting, fishing, or scouting for game. (U.S. Census Bureau 2019a, p.89)

Our question asked:

In 2019, did you participate in any activities in which the PRIMARY purpose was “watching wildlife,” including feeding birds around your home? Don’t include trips to zoos, aquariums, or museums, or times when you just happened to see wildlife when you were doing something else.

Based on our question, we estimated that 40% of New York State residents participated in wildlife watching activities in 2019 (Table 3). This percentage is equivalent to 6.2 million New York residents 18 years and older (using Census population estimates, U.S. Census Bureau 2019b). The percent participating was significantly lower downstate (30%) than upstate (60%). People who identified their race as White (49%) participated at a much higher rate than those who identified as Asian (14%) or Hispanic (19%).

In 2011, the National Survey estimated that 26% ( $\pm 18\%$ ) of New York residents 16 years and older participated in wildlife watching activities (USDOI 2018a). In 2016, the national average was 34% ( $\pm 7\%$ ) and in the Mid-Atlantic region, which included New York, the percentage was 36% ( $\pm 23\%$ ) (USDOI 2018b). These estimates are lower than the 2019 New York estimate of 40.5% ( $\pm 3.5\%$ ), but have wide confidence intervals, suggesting there may have been an increase in participation in New York between 2011 and 2019.

**Table 3. Participation in wildlife watching activities in 2019 by New York State residents, overall and by variables with a statistically significant relationship.**

	Percent participating in wildlife watching	
	Yes	No
Overall	40.5	59.5
New York State region*		
Downstate	29.8	70.2
Upstate	59.5	40.5
Race		
White**	49.4	50.6
Asian**	14.5	85.5
Hispanic**	18.7	81.3

\*Significant difference between downstate and upstate residents at  $P < 0.05$  using chi-square test.

\*\*Significant difference between racial group specified and all other respondents at  $P < 0.05$  using chi-square test.

Of those who participated in wildlife watching activities in 2019, approximately one-quarter participated between 1 and 10 days (Table 4). Half engaged in these activities more than 50 days in 2019. These estimates correspond to 1.5 million New Yorkers who could be classified as casual wildlife watchers (people who participated 1 to 10 days), and 3.0 million more avid wildlife watchers (people who participated more than 50 days). Using the mid-point for each range of days, we estimated New York residents participated in wildlife watching activities approximately 713 million days in 2019.

On average, downstate residents participated fewer days than upstate residents, but almost one-third of downstate residents were avid, participating more than 200 days (Table 4). Younger residents (aged 18-49) participated on fewer days than the oldest residents (aged 65+) among whom 44% participated more than 200 days. The number of days of participation varied by marital status, with single people more likely to participate on fewer days, and widowed residents the most likely to participate 200 days or more. White residents tended to participate on more days than non-white residents.

**Table 4. Of those who participated in wildlife watching activities, the numbers of days participating in 2019, overall and by variables with a statistically significant relationship.**

	Number of days participating in wildlife watching				
	1 to 10 days	11 to 20 days	21 to 50 days	51 to 200 days	More than 200 days
Overall	25.2	12.4	12.9	21.4	28.0
New York State region*					
Downstate	29.5	19.7	8.2	11.9	30.7
Upstate	21.5	5.9	17.1	29.8	25.7
Age*					
18-34	34.0	15.2	15.2	31.4	4.2
35-49	33.8	11.4	7.6	11.8	35.5
50-64	21.5	13.1	22.8	25.0	17.6
65+	16.1	11.8	7.2	21.3	43.6
Marital status*					
Married	26.9	14.1	18.4	11.9	28.7
Divorced/separated	16.0	9.6	14.7	41.6	18.1
Widowed	13.5	4.6	0.3	11.8	69.7
Single	32.2	14.3	8.8	27.6	17.0
Race**					
White	21.5	11.5	14.3	22.9	29.8
Non-white	42.7	20.4	5.6	11.9	19.4

\*Significant difference in days of participation between groups in each category at P<0.05 using chi-square test.

\*\*Significant difference between 1 to 10 days and greater than 10 days for white and non-white respondents at P<0.05 using chi-square test.

## Awareness of NYSDEC

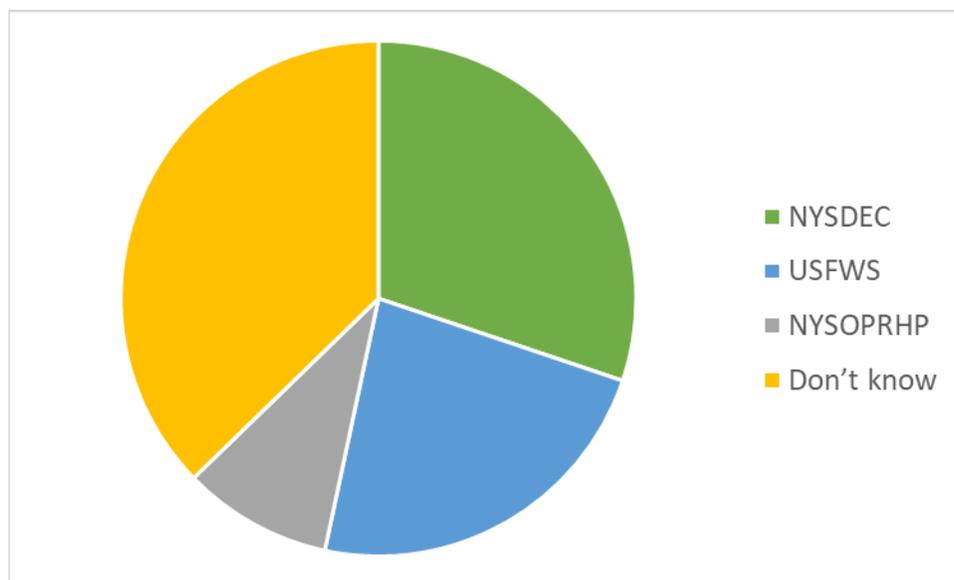
Poll participants were asked which of three agencies they thought had primary responsibility for fish and wildlife management in New York State. From among the list, 30% of New York State residents correctly identified NYSDEC as the agency primarily responsible for fish and wildlife management in the state (Figure 1). Fewer downstate residents (23%) compared with upstate residents (43%) correctly identified NYSDEC (Table 5). The second most commonly identified agency was the U.S. Fish and Wildlife Service (23%). Few identified the New York State Office of Parks, Recreation, and Historic Preservation as the agency primarily responsible (9%). Thirty-seven percent of residents, with more downstate (42%) and fewer upstate (30%),

indicated they did not know what agency was primarily responsible for fish and wildlife management in the state.

Among socio-demographic characteristics with significant relationships to agency awareness, household income did not have a consistent trend across income categories (Table 4). Those in the lowest income bracket were most likely to not know what agency had primary responsibility for fish and wildlife management (46%), however, it was the second highest category (\$100,000 to <\$150,000), not the highest that were most likely to know NYSDEC had primary responsibility (50%). Still approximately one-third or more of those in the three upper income categories identified NYSDEC.

Sixty percent of black residents did not know which agency had primary responsibility for fish and wildlife management in the state (Table 5). Few identified NYSDEC as the correct agency (12%).

Those who did not watch wildlife in 2019 were more likely than those who did to indicate that they did not know what agency had primary responsibility for fish and wildlife management in the state (42% vs. 30%). However, those who watched wildlife were not more likely to identify NYSDEC as the correct agency.



**Figure 1. Agency that residents believe has primary responsibility for fish and wildlife management in New York State.**

**Table 5. Agency that residents believe has primary responsibility for fish and wildlife management in New York State, overall and by variables with a statistically significant relationship using chi-square test.**

	Percent			
	NYSDEC <sup>a</sup>	USFWS <sup>b</sup>	NYSOPRHP <sup>c</sup>	Don't know
Overall	30.2	23.2	9.4	37.3
New York State region*				
Downstate	22.6	22.3	13.4	41.7
Upstate	43.5	24.7	2.3	29.5
Household income*				
\$0 to < \$50,000	18.7	23.8	11.2	46.3
\$50,000 to < \$100,000	34.3	24.3	9.7	31.6
\$100,000 to < \$150,000	50.2	20.4	11.1	18.3
More than \$150,000	31.5	25.8	5.1	37.6
Race				
White**	34.2	24.7	10.0	31.2
Black**	12.3	18.3	9.6	59.8
Watch wildlife in 2019***				
No	27.8	22.5	7.2	42.5
Yes	33.7	24.1	12.6	29.6

<sup>a</sup>New York State Department of Environmental Conservation

<sup>b</sup>U.S. Fish and Wildlife Service

<sup>c</sup>New York State Office of Parks, Recreation, and Historic Preservation

\*Significant difference in agency identification between groups in each category at P<0.05 using chi-square test.

\*\*Significant difference in agency identification between racial group specified and all other respondents at P<0.05 using chi-square test.

\*\*\*Significant difference between “don’t know” and naming an agency for those who did and did not watch wildlife in 2019 at P<0.05 using chi-square test.

Past research, summarized in Dillman et al. (2014), showed that in some cases the order in which the response categories are listed can influence a person’s answer. To avoid this potential bias in our question, the order the agency names were read was randomized. The “don’t know” option was always read last. SRI recorded the order (first, second, or third) in

which NYSDEC was read for each respondent, so we can examine the potential order effect for our question.

We found if NYSDEC was listed first, it was less likely to be chosen (Table 6).<sup>1</sup> It had a greater likelihood of being chosen if it was asked second or third. Krosnick and Alwin (1987) postulated that in telephone interviews it was hard to retain all possible options. Later options were more likely to be remembered and more often selected. This is called a recency effect. Dillman et al. (2014) notes that recency effects are not found in all telephone surveys, but it does appear to be operative in our case, so the randomization we did was beneficial for reducing potential bias.

**Table 6. Respondents answer to the question about which agency has primary responsibility for fish and wildlife management in NYS, by the order NYSDEC was listed (unweighted data).**

NYSDEC's order on list*	Percent			
	NYSDEC <sup>a</sup>	USFWS <sup>b</sup>	NYSOPRHP <sup>c</sup>	Don't know
First	29.5	31.3	6.9	32.3
Second	35.1	22.9	7.8	34.3
Third	37.1	24.0	7.5	31.5

\*Significant difference between agencies in place order for first vs. second/third at P<0.05 using chi-square test.

<sup>a</sup>New York State Department of Environmental Conservation

<sup>b</sup>U.S. Fish and Wildlife Service

<sup>c</sup>New York State Office of Parks, Recreation, and Historic Preservation

## SUMMARY

The questions asked in the Empire State Poll were intended to provide NYSDEC with more information about participation in wildlife watching activities in New York State, and estimates of public awareness of NYSDEC. We found that two-fifths of New York State residents, or roughly 6.2 million people, participated in wildlife watching activities in 2019. One-quarter participated for a limited amount of time ( $\leq 10$  days), but others (28%) participated more than 200 days. Non-white residents and those living downstate participated less frequently.

Over one-third of New York State residents (37%) indicated they did not know what agency has primary responsibility for fish and wildlife management in the state. One-third indicated an agency other than NYSDEC, leaving just under one-third of New York State residents correctly

<sup>1</sup> We used unweighted data for this comparison.

identifying NYSDEC as the agency with primary responsibility for fish and wildlife management in the state. Black residents, those living downstate, and those who did not watch wildlife in 2019 were more likely than their counterparts to not know the agency responsible for fish and wildlife management in the state. These results suggest that more can be done to increase agency awareness, but the best methods to go about doing that will require more thought and perhaps additional research.

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## APPENDIX A: 2020 EMPIRE POLL QUESTIONS

Question 1: In 2019, did you participate in any activities in which the PRIMARY purpose was “watching wildlife,” including feeding birds around your home? Don’t include trips to zoos, aquariums, or museums, or times when you just happened to see wildlife when you were doing something else.

No

Yes

Question 2: If “yes” to Question 1, about how many days would you estimate you participated in these types of activities in 2019?

1 to 10 days

11 to 20 days

21 to 50 days

51 to 200 days

More than 200 days

Question 3: Which of the following agencies do you think has primary responsibility for fish and wildlife management in New York State?

New York State Office of Parks, Recreation, and Historic Preservation

U.S. Fish and Wildlife Service

New York State Department of Environmental Conservation

I don’t know