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Landowner Views on Providing Public Access for Wildlife-Dependent Recreation

Findings from a 2021 survey

PREPARED BY:

William F. Siemer and T. Bruce Lauber

CCSS
Center for Conservation Social Sciences

Center for Conservation Social Sciences
Department of Natural Resources and the Environment
Cornell University

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EXECUTIVE SUMMARY

Hunters, trappers, and wildlife watchers highly value opportunities to recreate on private lands. Finding places to hunt, trap or watch wildlife on private lands can be a major challenge, due to a long-term trend toward restrictive public access decisions by private landowners. Lack of access to private land can constrain participation in wildlife-dependent recreation. Reduced public access to private lands is concerning to wildlife managers because participating in wildlife-dependent recreation connects people to the natural world, cultivates appreciation of wildlife resources, and maintains public support for wildlife conservation.

The New York State Department of Environmental Conservation (DEC) is considering how it could offer programs that would increase public access to private lands, but DEC managers need current information on landowners' interests, concerns, and behaviors to understand how to design, and where best to implement, access incentive programs that will attract substantial numbers of private landowners. Here we report results of a 2021 study of private landowners, conducted collaboratively by DEC and the Cornell Center for Conservation Social Sciences (CCSS). The purpose of this study was to inform development of a program that would expand access to private land in New York for wildlife-dependent recreation.

In cooperation with a DEC contact team, we developed a self-administered questionnaire to address our research objectives. The questionnaire assessed: land characteristics, landowner concerns about wildlife damage; use of land for wildlife-dependent recreation; likelihood that landowners would consider participating in an exchange relationship with DEC to allow public access for wildlife-dependent recreation; landowner perceptions of costs and benefits associated with allowing public access for hunting; and degree to which different incentives would encourage landowners to consider participating in a hunting access exchange relationship with DEC.

We drew samples of 1,250 landowners who owned 50 or more acres in one of four regions (i.e., the Capital District, Lower Hudson, North Country, and West Central) (total sample size 5,000). Landowners were selected from residential and agricultural property tax codes in 3 – 5 counties from each region. The survey was implemented in April and May, 2021 (response rate 43%).

Key Findings

Wildlife-dependent recreation Depending in the region, 60 – 72% of landowners hunted on their own land or allowed hunting by nonfamily members. The West Central region had the highest proportion of lands where some hunting occurred and where landowners allowed hunting by both family and nonfamily members.

The proportion of landowners who permitted trapping by nonfamily members ranged from 19 – 30%. Landowners in the West Central region were most likely to permit trapping by nonfamily members. The proportion of landowners who allowed public access for wildlife watching or photography ranged from 21 – 31% by region.

Concerns about Wildlife Majorities of landowners in every region were unconcerned about crop damage by deer, crop damage by other wildlife, damage to forests by deer, wildlife predation on farm animals, or other wildlife-related property damage. Landowners expressed the highest level of concern about low numbers of game. Concern about low numbers of game animals was highest in the Lower Hudson and West Central regions.

Interest in Access Programs In all regions, about one third of landowners said they might consider participating in a program to allow access for wildlife watching or photography. Landowners in the West Central region were most likely to consider participating in an agreement to permit public access for wildlife watching.

Depending on the region, 11 – 23% of landowners might consider participating in an agreement to provide access for trapping furbearers. Owners in the West Central region were most likely to consider participating in an agreement to permit public access for trapping.

Depending on the region and type of hunting involved, 7 – 22% of respondents indicated they might consider participating in an agreement to provide public access for hunting. Willingness to consider participating in an access agreement for hunting was greater among landowners who: (1) owned >150 acres; (2) did not have a seasonal or year-round residence on their property; (3) had no acreage in agricultural fields; (4) were moderately to highly concerned about wildlife-related property damage; and (5) already allowed hunting by nonfamily members.

In all regions only a third or fewer respondents agreed that entering an access agreement would help offset property taxes, help control problems with wildlife, help them with habitat management, or reduce predation on farm animals. Landowners who did expect to gain such benefits were more likely to say they would consider entering an access agreement.

Incentives to Consider a Hunting Access Agreement Providing liability protection, providing an annual payment, providing a DEC contact person, and limiting the length of an agreement were the incentives most likely to encourage landowners to consider participating in programs to allow public access for hunting. A majority of landowners who expressed disinterest in access agreements indicated that the incentives described would not increase their willingness to enter an access agreement.

Conclusions and Recommendations

Findings suggest that the Central Western region contains the most landowners who might be willing to enter access agreements with DEC, so the Central Western Region appears to be the most promising location in which to pilot test an access program.

Findings suggest that, to attract substantial numbers of landowner participants, access agreements should include provisions for liability protection, an annual payment, a designated DEC contact person, and should be relatively short in duration.

Private landowners are not a monolithic group. To attract different types of landowners, wildlife managers should consider developing a program or programs targeted at specific types of landowners. To inform development of such programs, managers should consider small group meetings with representatives who can describe the types of incentive programs that would be attractive to specific landowners groups, such as large forest owners or agricultural producers.

A small proportion of landowners hold high levels of concern about wildlife-related damage, and that subset of landowners is more likely to consider participating in hunting or trapping access programs. These findings suggest that communications promoting the ability of hunting or trapping access to alleviate wildlife-related property damage would resonate with, and may attract, landowners most likely to consider participation in an access program.

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INTRODUCTION

Access to private land for wildlife-dependent recreation (i.e., hunting, trapping, wildlife watching) is a topic of concern both to recreationists and wildlife managers in New York State. A majority of land in New York State is privately owned. Recreationists highly value opportunities to hunt, trap, or watch wildlife on private lands. Participating in wildlife-dependent recreation connects people to the natural world, cultivates appreciation of wildlife resources, and maintains public support for wildlife conservation.

Attitudes and practices of New York's private landowners have changed over time. Landowners have become more restrictive in their decisions about public access, making it more difficult for recreationists to find places to hunt, trap or watch wildlife. Research suggests that hunting access has declined in multiple states and continued decline is expected (Stedman et al. 2008). Difficulty in gaining access to private lands is commonly identified by hunters as a reason why they hunt less frequently or stop hunting. Wildlife agencies are interested in promoting public access to private lands as a means to recruit and retain wildlife recreationists, maintain broad public support for wildlife conservation, and incentivize wildlife habitat conservation on private lands.

Based on the assumption that maintaining or increasing access to private lands is important to hunter recruitment and retention, a number of wildlife agencies across the U.S. have implemented programs to incentivize public access to private lands for hunting. The New York State Department of Environmental Conservation (DEC) is considering how it could offer programs that would increase public access to private lands, but DEC managers need current information on landowners' interests, concerns, and behaviors to understand how to design, and where best to implement, access incentive programs that will attract substantial numbers of private landowners.

In 2021, DEC and the Cornell Center for Conservation Social Sciences (CCSS) collaborated to assess private landowners' views on public access to private lands for wildlife-dependent recreation. The purpose of this study was to inform development of a program that would expand access to private land in New York State for hunting, trapping, and wildlife viewing. Here we report findings from a 2021 landowner survey and discuss implications for development of a DEC program to incentivize public access to private land for wildlife-dependent recreation.

Study Objectives

1. Assess landowner interest in engaging in an access exchange relationship with DEC to provide wildlife-dependent recreation opportunities to the public.

2. Ascertain landowners' access-related concerns and how concerns affect their interest in participating in future private lands access programs offered by DEC.
3. Ascertain how interest in a DEC-sponsored access exchange relationship differs across landowner subgroups.
4. Ascertain what kinds of monetary or nonmonetary incentives would motivate different subgroups of landowners to enroll their land in a DEC private lands access program.

BACKGROUND

Much of what we know about access to private lands for wildlife-dependent recreation comes from research on hunting access. Access to private land for hunting (especially deer hunting) has been explored in New York through DEC-sponsored research conducted periodically since the 1980s. Past surveys document the extent to which hunters depend upon and value access to private lands, and many hunters report that getting access to private lands is a perennial challenge. Landowner attitudes and human development patterns make gaining access to hunt deer on private land particularly challenging in peri-urban areas (Harden et al. 2005, Storm et al. 2007, Campa et al. 2011, Stewart 2011, Williams et al. 2013).

Access relationships between hunters and private landowners can be grouped into four broad categories. The most common access relationships are s*entiment-based relationships* (i.e., noneconomic relationships based on friendship between landowners and hunters) and *kinship-based* (i.e., landowner-hunter relationships based on family networks).

Some landowners form *casual access relationships*—they grant access to strangers who ask permission to hunt. A 1991 survey found that about 1 in 3 landowners said they would grant hunting access to someone who asked permission to hunt (Siemer and Brown 1993). But findings from more recent research raise concerns among wildlife managers that casual hunting access relationships have become uncommon, especially in areas with higher human populations. For example, Lauber and Brown (2000) found that in Dutchess County, New York, only 15% of landowners would allow strangers who ask permission to hunt their land in 2000 and nearly one-quarter of landowners did not allow anyone to hunt on their land. Studies in New York documented a steady increase in the percentage of landowners who posted their land with no hunting signs between the late 1960s and the early 1990s. A 1991 survey of New York landowners with >10 acres of land found that some hunting occurred on 75% of private land parcels, but 63% of landowners posted their land and restricted hunting access (Siemer and Brown 1993).

Formal exchange relationships—allowing recreation access in exchange for payments or services—are still relatively uncommon on private nonindustrial lands in New York State. Hunting leases represent formal exchange relationships. Responses to hunter surveys have

suggested that relatively few NYS hunters lease access for hunting. For example, a 1991 survey found that only 6% of private landowners in New York received gifts, services, or payments from hunters in exchange for access privileges during the 1991-92 hunting license year (Siemer and Brown 1993). A more recent statewide survey of deer hunters indicated that a majority of deer hunters spend most of their hunting time on private land with no access fee; depending on the region hunted 4-7% of survey respondents leased land for deer hunting (Enck et al. 2011). Boulanger et al. (2013) reported that 7% of turkey hunters leased private land for hunting in 2012. A study of landowners in Saratoga and Sullivan counties (New York) found that perceived liability, anticipated hunter problems, and conflicts with landowner attitudes and practices were strong disincentives to allowing fee-based or free access to private lands for hunting (Siemer and Brown 1990). The authors concluded that, "Unless market, legal, or regulatory activities occur which effectively reduce or remove these disincentives, it is not likely that access to private land for hunting will increase" (Siemer and Brown 1990, page iii).

Factors Associated with Landowners' Access Decisions

Past research on landowners' acceptance of hunting access or land conservation incentive programs provided a basis for our hypotheses about landowner groups who would be interested or disinterested in entering an access exchange relationship with DEC.

Landowners' access decisions have been linked to: hunter behavior (and perceptions that many hunters behave badly), attributes of landowners (e.g., concerns about privacy, safety, control, and liability), and land attributes (e.g., parcel size, primary land use, wildlife habitat quality) (Brown et al. 1985, Jagnow et al. 2006, Lauber and Brown 2000, Siemer et al. 1998, Wright et al. 1989). For example, a landowner survey documented that only a small proportion of landowners allowed new hunters to access their property in the year that a new program—the Deer Management Focus Area (DMFA)—was created to liberalize deer take and allow additional hunting days in Tompkins County, New York. Tompkins County landowners did not allow access to new hunters because doing so would interfere with hunting activities of friends and family, or because the landowner was concerned about the behavior of hunters they did not know or trust (Siemer et al. 2015, 2016). Landowners' top concerns about allowing additional hunting access (e.g., concerns about interference with hunting by the landowners' family or friends, hunter behavior, safety) were similar to those identified in previous studies in New York State (Waldbauer 1966, Brown and Thompson 1976, Brown et al. 1983, Siemer et al. 1988, Siemer et al 1990, Siemer and Brown 1993). Since these types of concerns have appeared in landowner studies completed in multiple contexts over multiple decades, we expected to find similar concerns among private landowners in New York in our 2021 landowner survey, and we expected landowner concerns about safety, privacy, and personal hunting to dampen interest in access exchange relationships.

One potential reason that private landowners might allow hunting access is to control wildlife-related problems, such as deer damage to crops or forested land. But even when landowners are concerned about deer-related problems, they may not desire a deer population reduction and may remain reluctant to open or expand opportunities for public hunting. For example, landowner concerns about deer-related problems did not predispose many landowners toward providing access for additional hunters in the Tompkins County DMFA program (Siemer et al. 2015, 2016). This suggests landowners were more concerned about potential problems associated with allowing more hunters than they were about problems associated with high deer densities. We expected to find that landowner concern about wildlife-related problems would not be a strong motivation to consider entering an access exchange relationship.

Most forest land in the United States is held by private nonindustrial forest owners. Non-governmental organizations, state, and federal agencies have created numerous programs to encourage sustainable forest management and conservation on private forest lands. But participation in forest conservation programs remains low. The USDA 2002-2006 national forest woodland owner survey [Butler 2008] found that less than 10% of family forest owners nationwide had ever participated in a forest management or conservation program. Ma et al. (2012) analyzed data from the USDA Forest Service's National Woodland Owner Survey, to identify characteristics of nonindustrial forest owners who participated in cost-share, land certification, and conservation easement programs. They found that owners with larger land holdings were more likely to participate in all three types of programs. They suggest that small parcel size helps explain why such a low percentage of family forest owners participate in forest conservation programs. We expected to find that large land holders in New York would be more interested in access exchange relationships than small landowners.

Multiple studies have found that financial gain is typically not a primary reason for owning nonindustrial private forestland (Birch 1996, Butler 2008, Butler and Leatherberry 2004, Erickson et al. 2002, Finley and Kittredge 2006, Johnson et al. 1997, Kendra and Hull 2005, Kuuluvainen et al. 1996). Family forest owners value the natural beauty, privacy, and other non-consumptive amenities (e.g., hunting, fishing) provided by their forests (Ma et al. 2012). Safety and privacy concerns are particularly important to landowners who live on the property where public access would occur. We expected to find that landowners with a residence on their property would be less interested in access exchange relationships than owners with no residence on their property. We expected to find that landowners who restricted hunting access to self and family would be disinterested in entering and access exchange relationship, because doing so would conflict with their personal recreation. We expected landowners who were heavily engaged in farming would be disinterested in entering and access exchange relationship, because doing so would interfere with farming activities.

Research Hypotheses

Research on the traits, attitudes, and behaviors of private nonindustrial landowners led us to the following hypotheses about willingness to consider participating in a program to allow public access for wildlife-dependent recreation.

H_1: Large landowners will be more likely than small landowners to consider an access agreement.

H_2: Owners with a residence on their land will be less likely than owners with no residence to consider an access agreement.

H_3: Farmers will be less likely than nonfarmers to consider an access agreement.

H_4: Landowners with high concern about wildlife-related property damage will be no more likely than other landowners to consider an access agreement.

H_5: Landowners with liberal hunting access policies will be more likely than other landowners to consider an access agreement.

H_6: Landowners will be unwilling to participate in an access agreement if they anticipate high personal costs and low personal gains associated with participation.

METHODS

Survey Instrument

In cooperation with a DEC Contact Team, we developed a self-administered questionnaire to address our research objectives (Appendix A). The questionnaire assessed: land characteristics (i.e., number of acres owned in parcels of 50 acres or more, counties in which land is owned, number of acres owned by cover type, whether the owner had a seasonal or year-round residence on one of their parcels over 50 acres), landowner concerns about wildlife damage; use of land for hunting and trapping; whether landowners permitted public access to watch or photograph wildlife; likelihood that landowners would consider participating in an access exchange relationship with DEC; landowner perceptions of disincentives and incentives to engage in an access exchange relationship with DEC; and degree to which different incentives would encourage landowners to consider participating in an exchange relationship to provide access for hunting. The Cornell University Office of Research Integrity and Assurance (Institutional Review Board for Human Participants, Protocol ID#1004001374) approved the questionnaire for use with human subjects.

Survey Implementation

The DEC contact team for this study identified four geographic strata in which to survey landowners. These strata were labeled as the Capital District region, Lower Hudson region, North Country region, and West Central region. Staff in CCSS accessed real property tax assessment rolls to identify samples of 1,250 landowners in each stratum (total sample size 5,000) who owned 50 or more acres. We drew the samples from 3 – 5 counties in each region that were identified by the contact team. Landowners were selected from residential and agricultural property codes. A sample size of 1,250 landowners per stratum was selected with the goal of receiving at least 400 completed questionnaires from every stratum.

Staff in CCSS provided the landowner samples to DEC, supervised questionnaire printing, and assisted with preparations for survey implementation. Staff in DEC implemented survey mailings between April 22, 2021 and May 20, 2021. Landowners were contacted up to four times. All landowners received an initial letter and questionnaire; those who had not responded to a previous mailing received up to three additional contacts (i.e., a reminder postcard, a third reminder letter and replacement questionnaire, and a final reminder postcard about one week after the third mailing).

We contracted ReconMR to complete follow-up telephone interviews with a sample of landowners who did not return a completed questionnaire. We had a target of 100 completed nonresponse interviews (25 per survey stratum). ReconMR staff completed nonrespondent interviews between June 11, 2021 and July 8, 2021. Interviews contained 18 key questions from the mail survey and took an average of 7 minutes to complete. ReconMR was only able to complete 52 interviews before the nonrespondent contact list was exhausted (i.e., completed 8 interviews in the Capital stratum, 12 in the Lower Hudson stratum, 18 in the North Country stratum, and 14 in the West Central stratum). Only 50 nonrespondent interviews were included in the nonrespondent analysis (2 interviewees were excluded because they owned less than 50 acres).

Analysis

Staff in DEC transferred survey data to CCSS for analysis. We completed all analyses using IBM SPSS Statistics for Windows, Version 24.0 (IBM Corp. 2016). We calculated descriptive statistics (frequencies, means) to compare results for each variable. We used chi square tests and Student's t-tests to identify respondent-nonrespondent differences and differences between subgroups of respondents.

We used principal component factor analysis with varimax rotation to construct scales to assess landowner perceptions of costs and benefits associated with entering an agreement to provide public access for hunting. Based on results of factor analysis, we created a 6-item costs scale (n=1,747, cronbach's alpha=0.724) and a 4-item benefits scale (n=1,648, cronbach's alpha=0.747).

We grouped respondents based on willingness to consider participating in an access exchange relationship with DEC. Respondents who said they definitely or probably would not consider participating were placed in a low likelihood group. Respondents who said they would possibly or definitely consider participating were placed in a moderate/high likelihood group. We compared low and moderate/high groups based on: number of acres owned (50 – 75 acres vs. >150 acres); whether there was a residence on the landowner's property; whether the respondent did or did not own acreage in agricultural fields; whether >50% of their acreage was in agricultural fields or forest cover; level of concern about wildlife-related damage; hunter types allowed (none, self and family, nonfamily); anticipated costs and benefits of participating in an access exchange relationship; and effect of incentives on landowner willingness to consider participating in an access exchange relationship.

RESULTS

Landowners returned a total of 1,967 questionnaires from a pool of 4,556 deliverable questionnaires, yielding an overall response rate of 43%. Response rates varied by geographic region, ranging from a low of 37% in the Lower Hudson region to a high of 49% in the Central Western region (Table 1). Sixteen respondents reported owning less than 50 acres of land. Only landowners with 50 or more acres (n=1,951) were included in our analysis.

Respondent–Nonrespondent Comparisons

We had a target of 100 completed nonresponse interviews, but only 50 valid interviews were completed before the nonrespondent contact list was exhausted. Over half of all attempts to reach nonrespondents were screened out (i.e., call was never answered or was taken by answering machine). Over 20% of telephone numbers were no longer in service or were the wrong number. Interview refusal rate was over 11% (Appendix A, Table A1).

A comprehensive set of respondent-nonrespondent comparisons is provided in Appendix B. Respondents were similar to nonrespondents on the following traits:

- average number of acres owned (mean acres for respondents 185.7 [n=1,838, SD=436.36] vs. mean acres for nonrespondents 161.5 [n=50, SD=126.2]; t=1.18, p=0.24).

- percent who had a residence on their property (Table A2), hunted on their own land (Table A3), allowed nonfamily to hunt on their land (Table A4), allowed nonfamily to trap on their land (Table A6), or allowed access for wildlife watching or photography (Table A9).
- number of hunters and trappers landowner was comfortable allowing on their land at one time (Table A7, A8).

But there were also respondent-nonrespondent differences. In aggregate, likelihood of considering participation in an access exchange relationship with DEC was higher among nonrespondents than among respondents. Specifically, nonrespondents were more likely than respondents to consider participating in an agreement to allow access for:

- big game hunting with a bow or crossbow (30.8% vs. 11.9%) (Table A10).
- big game hunting with a firearm (28.9% vs. 10.1%) (Table A11),
- furbearer trapping (32.7% vs. 17.0%) (Table A12),
- wildlife watching or photography (59.6% vs. 35.9%) (Table A13).

Although we found differences between respondents and nonrespondents, we did not weight the data to address potential nonresponse bias.

Land and Land Use Characteristics

Location

Capital Region All respondents in this stratum owned land in one of the sample counties (i.e., Albany, Columbia, and Schoharie). About 4% of respondents in this stratum owned land in a county outside the Capital region.

Lower Hudson Region All respondents in this stratum owned land in one of the sample counties (i.e., Sullivan, Ulster, and Orange). Less than 6% of respondents in this stratum owned land in a county outside the Lower Hudson region.

North Country Region All respondents in this stratum owned land in one of the sample counties (i.e., Jefferson, Essex, and Washington). Less than 5% of respondents in this stratum owned land in a county outside the North Country region.

West Central Region All respondents in this stratum owned land in one of the sample counties (i.e., Broome, Chemung, Erie, Madison, and Ontario). About 3% of respondents in this stratum owned land in a county outside the West Central region.

Acreage

Respondents owned between 50 and 10,950 acres (mean number of acres = 186; median number of acres = 109; mode = 100 acres). A quarter of respondents owned fewer than 77 acres and 75% of respondents owned less than 176 acres. Average number of acres owned was highest in the North Country region and lowest in the Lower Hudson region (Table 2).

Cover Types

Forest/shrubland Over 90% of landowners in every region owned acreage in forest or shrubland. Mean number of acres in forest/shrubland cover was greatest in the North Country region (Table 3). Number of forested acres per landowner ranged from 1 – 3,000 acres, but 50% of respondents owned less than 61 acres in forest land and 75% of respondents owned less than 101 acres in forest land.

Agricultural Fields A majority of landowners in Capital, North Country, and West Central region owned some acreage in agricultural fields. Less than half of Lower Hudson region owners had acreage in agricultural fields. Mean number of acres in agricultural fields was highest in the North Country and West Central regions (Table 3). Number of acres in agricultural fields per landowner ranged from 1 – 10,400 acres, but 50% of respondents owned less than 47 acres in agricultural fields and 75% of respondents owned less than 88 acres in agricultural fields.

Nonagricultural Fields More than half of all landowners had some acreage in nonagricultural fields (Table 3). Number of acres in nonagricultural fields per landowner ranged from 1 – 525 acres, but 50% of respondents owned less than 16 acres in nonagricultural fields and 75% of respondents owned less than 34 acres in nonagricultural fields.

Wetlands A majority of landowners in every region held some acreage in wetland, but the number of acres in wetland was small compared to other cover types (Table 3). Number of acres in wetlands per landowner ranged from 1 – 250 acres, but 50% of respondents owned fewer than 7 acres in wetlands and 75% of respondents owned fewer than 16 acres in wetlands.

Table 1. Summary of survey response rates by geographic stratum.

	Geographic region (survey stratum)			
	Capital[a]	Lower Hudson[b]	North Country[c]	West Central[d]
Sample size	1,250	1,250	1,250	1,250
Undeliverable questionnaires	134	113	113	84
Adjusted sample size	1,116	1,137	1,137	1,166
Completed questionnaires	490	418	475	567
Adjusted response rate	43.9%	36.8%	41.8%	48.6%

[a] Capital region sample drawn from tax records in Albany, Columbia, and Schoharie counties.

[b] Lower Hudson region sample drawn from tax records in Sullivan, Ulster, and Orange counties.

[c] North Country region sample drawn from Jefferson, Essex, and Washington counties.

[d] West Central region sample drawn from Broome, Chemung, Erie, Madison, and Ontario counties.

Table 2. Total number of acres owned in New York State, by geographic region.

Geographic Region	n	Mean	Range
Capital [a]	454	159.5	50 – 1,600
Lower Hudson [b]	390	142.4	50 – 1,600
North Country [c]	443	235.6	50 – 10,000
West Central	541	198.2	50 – 11,000

[a] Counties in Capital region: Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie.

[b] Counties in Lower Hudson: Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester

[c] Counties in North Country region: Jefferson, St. Lawrence, Lewis, Oneida, Herkimer, Franklin, Hamilton, Fulton, Clinton, Essex, Warren, Washington

[d] Counties in West Central region: Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Cortland, Erie, Genesee, Livingston, Madison, Monroe, Niagara, Onondaga, Ontario, Orleans, Oswego, Seneca, Schuyler, Steuben, Tioga, Tompkins, Wayne, Wyoming, Yates.

Table 3. Proportion of landowners who own acreage in four cover types and mean acreage owned in each cover type, by survey stratum.

	Geographic Stratum			
	Capital region (n=459)	L. Hudson region (n=392)	N. Country region (n=443)	W. Central region (n=543)
Forest or shrublands				
Proportion who own this land type	95.0%	95.7%	93.9%	93.7%
Mean # acres in this land type	82.9	91.9	108.1	85.2
Range (acres)	5 – 600	1 – 1,000	1 – 3,000	1 – 1,850
Agricultural fields (e.g., hay, row crops)				
Proportion who own this land type	60.3%	44.1%	65.0%	65.4%
Mean # acres in this land type	83.7	65.9	143.6	134.4
Range (acres)	1 – 1,700	1 – 1,000	1 – 8,000	1 – 10,400
Nonagricultural fields (e.g., grasslands)				
Proportion who own this land type	68.0%	54.8%	54.9%	60.4%
Mean # acres in this land type	28.8	23.1	32.4	26.8
Range (acres)	1 – 295	1 – 200	1 – 525	1 – 280
Wetlands (e.g., marsh, open water)				
Proportion who own this land type	60.6%	58.4%	60.7%	54.9%
Mean # acres in this land type	12.9	13.4	17.5	12.0
Range (acres)	1 – 200	1 – 166	1 – 197	1 – 250

Wildlife-dependent Recreation

Depending in the region, 60 – 72% of landowners hunted on their own land or allowed hunting by nonfamily members. Use of property for personal or family hunting was highest in the West Central region. Most landowners (over 87% in every region) did not use their property for furbearer trapping by themselves or family members, but 16 – 31% allowed trapping by nonfamily members. Landowners in the West Central region were most likely to allow access to nonfamily members for furbearer trapping. Depending on the region, 21 – 31% of landowners allowed public access to their land for wildlife watching or photography (Table 4).

Most landowners reported that some hunting activity was occurring on the land they owned. The proportion of lands where some hunting occurred, and the proportion of landowners who allowed hunting by both family members and nonfamily was highest in the West Central region (Table 5).

Concerns about Wildlife

We asked landowners how concerned they were about 6 wildlife-related topics. The greatest level of concern related to low numbers of game, crop damage by deer, and damage caused by wildlife other than deer. In two regions (i.e., Lower Hudson, West Central), about a third of landowners were moderately or very concerned about low numbers of game animals (Table 6).

Another noteworthy pattern in the data was that the majority of landowners were not at all or only slightly concerned about wildlife-related damage. Majorities of landowners in every region were not at all concerned about crop damage by deer, crop damage by other wildlife, damage to forests by deer, wildlife predation on farm animals, or other wildlife-related property damage (Table 6). Respondents who owned some acreage in agricultural fields were more likely than respondents with no agricultural acreage to be concerned about wildlife-related crop damage and wildlife predation on farm animals (Table 7). Landowners who allowed nonfamily members to trap furbearers were more likely than other landowners to be moderately or very concerned about wildlife damage to property other than crops (31% vs. 18%; χ^2=34.26, df=1, p<0.001).

Interest in Access Agreements

About 7 – 22% of respondents said they would possibly or definitely consider participating in a hunting access exchange agreement, depending on the region and type of hunting involved. By region, 11 – 23% indicated they might consider an agreement to allow access for furbearer trapping. In all regions, about one third of landowners said they might consider participating in a program to allow access for wildlife watching or photography. Likelihood of considering participation in an access agreement was highest in the West Central region (Table 8).

How Program Interest Differs Across Landowner Subgroups

We hypothesized that owners of larger properties would be most likely to consider an access agreement, because owners of larger land holdings could more easily accommodate additional users on their land. We found that owners of large acreage (>150 acres) were more likely than owners of small acreage (50 – 75 acres) to consider participating in an access agreement, supporting H_1 (Table 9).

Table 4 . Proportion of landowners who allow access to their land for hunting, trapping and wildlife watching, by geographic region.

Types of people allowed, by activity	Region	n	Yes (%)	No (%)
Self and/or family hunt on land	Capital	476	60.1	39.9
	L. Hudson	413	60.8	39.2
	N. Country	470	63.6	36.4
	W. Central	560	70.4	29.6
Nonfamily allowed to hunt	Capital	477	62.7	37.3
	L. Hudson	413	59.6	40.4
	N. Country	470	72.4	41.1
	W. Central	558	63.9	27.6
Self and/or family trap on land	Capital	469	10.9	89.1
	L. Hudson	408	9.3	90.7
	N. Country	455	11.9	88.1
	W. Central	549	12.2	87.8
Nonfamily allowed to trap	Capital	456	19.3	80.7
	L. Hudson	407	16.2	83.8
	N. Country	455	21.2	78.9
	W. Central	546	29.5	70.5
Allow public access to watch wildlife	Capital	464	24.6	75.4
	L. Hudson	404	20.8	79.2
	N. Country	462	28.4	71.6
	W. Central	545	30.5	69.5

Table 5. Characterization of hunting access by geographic region.

	Geographic region			
	Capital (n=474)	L. Hudson (n=474)	N. Country (n=474)	W. Central (n=474)
No hunting reported by landowner	15.0	17.2	15.1	7.2
Land hunted by owner/family only	22.4	23.1	26.0	20.4
Land hunted by nonfamily only	24.9	22.1	21.3	22.6
Land hunted by both family and nonfamily	37.8	37.6	37.7	49.8

Table 6. Landowner concerns about wildlife on their land, by geographic region.

	Region			Level of concern			
		n	Mean[1]	Not	Slightly	Moderately	Very
Low numbers of game animals	Capital	451	1.91	50.6	20.6	15.7	13.1
	L. Hudson	390	2.03	47.4	16.9	20.5	15.1
	N. Country	440	1.82	54.1	19.3	17.5	9.1
	W. Central	537	2.05	45.1	19.2	21.8	14.0
Crop damage (deer)	Capital	450	1.79	56.7	18.2	14.2	10.9
	L. Hudson	386	1.86	53.9	20.7	10.6	14.8
	N. Country	439	1.64	64.0	16.6	10.9	8.4
	W. Central	534	1.83	52.4	21.9	15.5	10.1
Other wildlife-related property damage	Capital	450	1.82	50.0	26.4	14.7	8.9
	L. Hudson	387	1.73	57.6	19.6	15.0	7.8
	N. Country	442	1.80	51.4	25.9	16.5	7.2
	W. Central	534	1.56	63.9	21.2	10.1	4.9
Crop damage (other wildlife)	Capital	447	1.56	65.1	19.5	9.8	5.6
	L. Hudson	384	1.53	67.2	18.5	8.6	5.7
	N. Country	439	1.49	68.1	18.9	9.3	3.6
	W. Central	531	1.55	65.0	20.5	9.2	5.3
Wildlife predation on farm animals	Capital	443	1.67	61.9	17.8	12.0	8.4
	L. Hudson	379	1.59	64.6	18.7	9.5	7.1
	N. Country	436	1.49	70.0	16.1	8.7	5.3
	W. Central	526	1.62	62.7	18.1	13.3	5.9
Damage to forests by deer	Capital	447	1.50	72.7	11.4	8.9	6.9
	L. Hudson	377	1.64	63.1	18.0	10.1	8.8
	N. Country	439	1.37	75.9	14.6	5.9	3.6
	W. Central	529	1.52	68.4	17.0	9.1	5.5

[1] Response options: 1=not at all concerned, 2=slightly, 3=moderately, 4=very concerned.

Table 7. Level of concern about wildlife-related problems among respondents who have no acreage in agricultural fields compared to respondents with some acreage in agricultural fields.

	n	Mean[a]	t	Degrees of freedom	P value
Concern about low numbers of game or other animals					
No agricultural fields	745	2.02	2.17	1,816	0.030
Some agricultural fields	1,073	1.91			
Concern about crop damage by deer					
No agricultural fields	731	1.47	-11.04	1,808	<0.001
Some agricultural fields	1,079	2.00			
Concern about other wildlife-related damage					
No agricultural fields	740	1.67	-1.82	1,811	0.068
Some agricultural fields	1,073	1.75			
Concern about crop damage by wildlife other than deer					
No agricultural fields	732	1.31	-9.14	1,799	<0.001
Some agricultural fields	1,069	1.68			
Concern about wildlife predation on farm animals					
No agricultural fields	718	1.38	-8.21	1,782	<0.001
Some agricultural fields	1,066	1.74			
Concern about deer damage to forests					
No agricultural fields	733	1.48	-0.80	1,790	0.423
Some agricultural fields	1,059	1.52			

[a] Response options: 1=not at all concerned, 2=slightly concerned, 3=moderately concerned, 4=very concerned.

[b] Probably or definitely will not consider participating in an access program.

[c] Possibly or definitely will consider participating in an access program.

Table 8. Likelihood that landowners would consider participating in programs to allow public access for wildlife-dependent recreation, by geographic region.

Program purpose	Region	n	Likelihood of considering an access program			
			Definitely not	Probably Not	Possibly Consider	Definitely consider
Big game hunting (bow)	Capital	476	79.4	10.7	7.4	2.5
	L Hudson	408	79.4	10.5	7.4	2.7
	N Country	468	75.0	13.9	8.8	2.4
	W Central	557	70.4	13.6	11.3	4.7
Big game hunting (gun)	Capital	477	82.6	10.3	5.0	2.1
	L Hudson	410	81.5	8.5	7.1	2.9
	N Country	467	77.7	12.4	7.5	2.4
	W Central	556	72.8	14.4	8.8	4.0
Small game hunting	Capital	475	78.1	11.8	8.2	1.9
	L Hudson	410	76.8	12.7	7.3	3.2
	N Country	466	72.3	14.6	10.1	3.0
	W Central	557	67.0	16.3	12.4	4.3
Furbearer hunting	Capital	474	77.0	11.2	8.0	3.8
	L Hudson	409	79.7	11.0	6.1	3.2
	N Country	466	72.1	11.4	12.7	3.9
	W Central	556	64.2	14.0	13.7	8.1
Waterfowl hunting	Capital	472	80.1	11.0	7.0	1.9
	L Hudson	406	77.6	12.3	7.9	2.2
	N Country	464	73.5	13.4	9.7	3.4
	W Central	552	71.2	15.8	8.5	4.5
Turkey hunting	Capital	473	78.2	10.4	9.5	1.9
	L Hudson	410	78.5	11.2	8.0	2.2
	N Country	466	71.2	12.7	12.0	4.1
	W Central	554	69.1	16.4	10.8	3.6
Furbearer trapping	Capital	475	75.4	9.3	10.1	5.3
	L Hudson	408	78.7	10.8	6.9	3.7
	N Country	467	70.9	11.8	12.8	4.5
	W Central	556	64.4	12.6	15.1	7.9
Wildlife watching	Capital	474	52.5	12.2	22.2	13.1
	L Hudson	409	53.5	13.9	21.0	11.5
	N Country	466	48.9	15.0	21.7	14.4
	W Central	554	48.0	13.2	23.1	15.7

Table 9. Comparison of respondents with 50-75 acres to respondents with more than 150 acres on likelihood of considering participation in programs to allow public access for hunting.

	Likelihood of considering participation					
	n	Unlikely to consider %	May consider %	Chi square	Degrees of freedom	P value
Big game hunting (bow)						
50-75 acres	827	90.0	10.2	4.52	1	0.034
>150 acres	552	86.2	13.8			
Big game hunting (gun)						
50-75 acres	829	92.9	7.1	12.19	1	<0.001
>150 acres	551	87.3	12.7			
Small game hunting						
50-75 acres	829	89.5	10.5	7.89	1	0.005
>150 acres	551	84.4	15.6			
Furbearer hunting						
50-75 acres	823	88.5	11.5	19.77	1	<0.001
>150 acres	552	79.7	20.3			
Waterfowl hunting						
50-75 acres	821	92.1	7.9	19.42	1	<0.001
>150 acres	548	84.5	15.5			
Turkey hunting						
50-75 acres	825	89.3	10.7	7.37	1	0.007
>150 acres	550	84.4	15.6			
Furbearer trapping						
50-75 acres	827	85.9	14.1	13.05	1	<0.001
>150 acres	550	78.4	21.6			
Wildlife watching						
50-75 acres	826	63.8	36.2	0.26	1	0.610
>150 acres	548	65.1	34.9			

We hypothesized that owners with a residence on their land would be concerned about safety and privacy, and thus would be less likely to consider an access agreement. We found that owners who do not have a part-time or year-round residence on their property were more likely than owners with a residence on their land to consider participating in an access agreement, supporting H_2 (Table 10)

We hypothesized that farmers would be reluctant to consider an access agreement, because doing so might interfere with their commercial enterprise. We found that owners who did not have any acreage in agricultural fields were more likely to consider participating in an access agreement. Most respondents (78%) who's land was primarily in agricultural fields agreed a hunting access agreement would interfere with farming or other activities on their land; 55% of respondents who had less than 50% of their land in agricultural fields agreed a hunting access agreement would interfere with farming or other activities on their land These findings provided weak support for H_3 (Table 11).

We also compared respondents who owned primarily forested land to those who owned primarily agricultural fields, with the expectation that agricultural field owners would be less willing than forest owners to consider participating in an access exchange agreement. We found that owners who had the majority of their acreage in agricultural fields and owners with the majority of their acreage in forest or shrubland were no different on interest in participating in most access programs. Owners with more than 50% of their land in agricultural fields were more interested in programs to allow furbearer hunting and waterfowl hunting (Table 12). These findings did not support H_3.

We hypothesized that concern about wildlife-related property damage would not impact willingness to consider participating in an access agreement. We found that owners with moderate-high willingness to consider participating in an agreement to allow access for big game hunting had higher levels of concern about crop damage by deer and other wildlife, deer damage to forests, and wildlife predation on farm animals (Table 13, Figure 1). These findings do not support H_4.

We hypothesized that owners with liberal hunting access practices would be most likely to consider participating in an access agreement. We found that owners who already allowed nonfamily members to hunt on their land were more likely than those who allowed only family to hunt to be willing to consider entering an agreement to allow public access for wildlife-dependent recreation. This provides support for H_5 (Table 14).

Anticipated Consequences of Participating in a Hunting Access Program

We anticipated that likely program participants would expect to gain benefits by participating in an access agreement. We found that owners with moderate-high willingness to consider participating in an agreement to allow public access for hunting anticipated both lower costs and higher benefits than owners who had low willingness to consider an access agreement (Table 15). Figure 2 provides a visual representation of anticipated costs and benefits associated with participation in a program to allow public access for big game hunting with a bow. Landowners who were likely to consider an agreement to allow big game hunting with a bow were more likely than other landowners to agree that such a program would help them control problems with some wildlife, help them get assistance with habitat management, and help offset property taxes (Table 16). These findings provided partial support for H_6.

Majorities of respondents in all regions—including owners who were willing to consider an access agreement—anticipated that they would be negatively affected by providing public access for hunting in exchange for incentives or services. Majorities of landowners agreed that doing so would: make it harder to control who is on their land, be an invasion of their privacy, expose them to legal liabilities, lead to property damage, compromise safety around their home, conflict with their own hunting, or conflict with other uses of their land (Table 17).

In all regions only a third or fewer of respondents anticipated that they would be affected positively by providing public access for hunting in exchange for incentives or services. A third or fewer of landowners agreed that doing so would help offset property taxes, help control problems with wildlife, help them with habitat management, help them get to know hunters, or reduce predation on farm animals (Table 17).

Most Attractive Incentives to Participate in an Access Program

Providing liability protection, providing an annual payment, providing a DEC contact person, and limiting the length of an agreement were the incentives most likely to encourage landowners to consider participating in programs to allow public access for hunting (Table 18). Those findings become clearer when we look at only those landowners who say they might consider or would definitely consider participating in a program that allows public access for hunting (Table 19). A majority of landowners who said they probably would not consider participating in an access program said that the incentives described would not increase their willingness to enter an access agreement (Table 19).

Table 10. Likelihood of considering participation in hunting access programs among respondents who have or do not have a residence on one of their parcels of 50 acres.

	Likelihood of participating					
		Low[a]	Mod – High[b]			
	n	%	%	Chi square	Degrees of freedom	P value
Big game hunting (bow)						
Residence on property	1,322	89.9	10.1	7.79	1	0.005
No residence	485	85.2	14.8			
Big game hunting (gun)						
Residence on property	1,321	91.5	8.5	7.34	1	0.007
No residence	487	87.3	12.7			
Small game hunting						
Residence on property	1,320	89.3	10.7	11.80	1	0.001
No residence	486	83.3	16.7			
Furbearer hunting						
Residence on property	1,320	86.1	13.9	4.33	1	0.037
No residence	483	82.2	17.8			
Waterfowl hunting						
Residence on property	1,311	90.2	9.8	5.40	1	0.020
No residence	482	86.3	13.7			
Turkey hunting						
Residence on property	1,316	88.3	11.7	4.51	1	0.034
No residence	485	84.5	15.5			
Furbearer trapping						
Residence on property	1,318	84.0	16.0	3.46	1	0.063
No residence	487	80.3	19.7			
Wildlife watching						
Residence on property	1,315	65.1	34.9	2.35	1	0.125
No residence	487	61.2	38.8			

[a] Definitely or probably will not consider. [b] Possibly or definitely will consider.

Table 11. Likelihood of considering participation in a program to allow public access for wildlife-dependent recreation among respondents who do or do not have acreage in agricultural fields.

		Likelihood of considering				
		Low[a]	Mod – High[b]	Chi	Degrees	P
	n	%	%	square	of freedom	value
Big game hunting (bow)						
Have agric. fields	737	91.3	8.7	9.47	1	0.002
Do not have agric. fields	1,069	86.6	13.4			
Big game hunting (gun)						
Have agric. fields	739	93.0	7.0	9.66	1	0.002
Do not have agric. fields	1,068	88.6	11.4			
Small game hunting						
Have agric. fields	738	90.8	9.2	11.37	1	0.001
Do not have agric. fields	1,067	85.5	14.5			
Furbearer hunting						
Have agric. fields	734	91.0	9.0	34.36	1	<0.001
Do not have agric. fields	1,068	81.0	19.0			
Waterfowl hunting						
Have agric. fields	730	93.7	6.3	27.11	1	<0.001
Do not have agric. fields	1,063	85.9	14.1			
Turkey hunting						
Have agric. fields	736	90.8	9.2	13.99	1	<0.001
Do not have agric. fields	1,064	84.8	15.2			
Furbearer trapping						
Have agric. fields	739	87.4	12.6	17.8	1	<0.001
Do not have agric. fields	1,065	79.8	20.2			
Wildlife watching						
Have agric. fields	737	66.9	33.1	4.82	1	0.028
Do not have agric. fields	1,064	61.8	38.2			

[a] Definitely or probably will not consider. [b] Possibly or definitely will consider.

Table 12. Likelihood of considering participation in a program to allow public access for wildlife-dependent recreation among respondents who own predominately forested land or land in agricultural fields.

	Likelihood of participating					
		Low[a]	Mod – High[b]	Chi	Degrees	P
	n	%	%	square	of freedom	value
Big game hunting (bow)						
>50% of acres in agric. fields	368	88.9	11.1	0.111	1	0.738
>50% of acres in forest	980	89.5	10.5			
Big game hunting (gun)						
>50% of acres in agric. fields	368	89.4	10.6	1.704	1	0.191
>50% of acres in forest	982	91.2	8.8			
Small game hunting						
>50% of acres in agric. fields	368	85.6	14.4	1.376	1	0.240
>50% of acres in forest	981	88.8	12.2			
Furbearer hunting						
>50% of acres in agric. fields	367	79.8	20.2	13.937	1	<0.001
>50% of acres in forest	979	87.8	12.2			
Waterfowl hunting						
>50% of acres in agric. fields	363	85.1	14.9	11.124	1	<0.001
>50% of acres in forest	973	91.4	8.6			
Turkey hunting						
>50% of acres in agric. fields	365	87.9	12.1	0.002	1	0.958
>50% of acres in forest	979	88.0	12.0			
Furbearer trapping						
>50% of acres in agric. fields	367	80.4	19.6	3.306	1	0.069
>50% of acres in forest	982	84.5	15.5			
Wildlife watching						
>50% of acres in agric. fields	366	64.2	35.8	0.027	1	0.868
>50% of acres in forest	980	64.7	35.3			

[a] Definitely or probably will not consider. [b] Possibly or definitely will consider.

Table 13. Level of concern about wildlife-related problems among respondents who have low or moderate-high likelihood of considering participation in a program to allow deer hunting with a bow.

	n	Mean[a]	t	Degrees of freedom	P value
Concern about crop damage by deer					
Low likelihood[b]	1,576	1.74	-4.67	1,780	<0.001
Moderate-high likelihood[c]	206	2.10			
Concern about crop damage by wildlife other than deer					
Low likelihood[b]	1,570	1.50	-3.65	1,773	<0.001
Moderate-high likelihood[c]	205	1.74			
Concern about deer damage to forests					
Low likelihood[b]	1,561	1.48	-3.15	1,762	0.002
Moderate-high likelihood[c]	203	1.69			
Concern about wildlife predation on farm animals					
Low likelihood[b]	1,555	1.57	-3.30	1,756	0.001
Moderate-high likelihood[c]	203	1.79			
Concern about other wildlife-related damage					
Low likelihood[b]	1,581	1.70	-1.41	1,784	0.158
Moderate-high likelihood[c]	205	1.80			
Concern about low numbers of game or other animals					
Low likelihood[b]	1,587	1.95	-0.01	1,788	0.99
Moderate-high likelihood[c]	203	1.96			

[a] Response options: 1=not at all concerned, 2=slightly concerned, 3=moderately concerned, 4=very concerned.

[b] Probably or definitely will not consider participating in an access program.

[c] Possibly or definitely will consider participating in an access program.

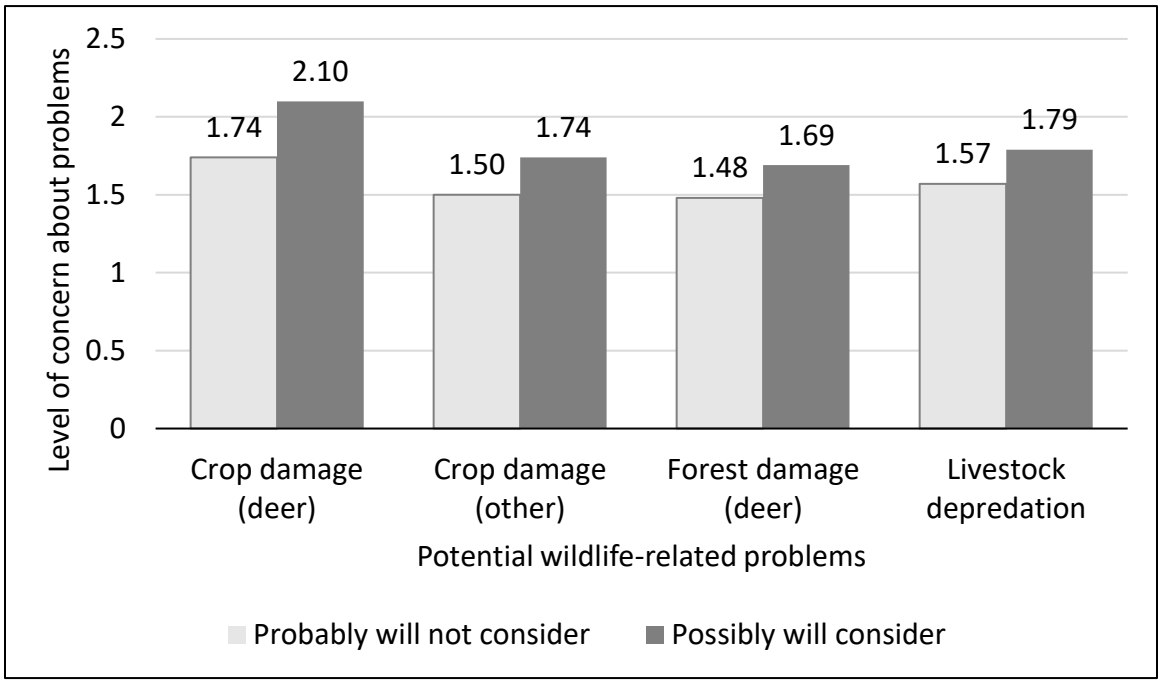


Figure 1. Concern about wildlife-related problems among landowners with different willingness to consider participating in an access program to allow deer hunting with a bow.

Table 14. Likelihood of participating in programs to allow public access for wildlife-dependent recreation among respondents in different hunting access groups.

		Likelihood of participating				
	n	Low[a] %	Mod – High[b] %	Chi square	Degrees of freedom	P value
Big game hunting with (bow)						
No hunting	250	92.8	7.2	62.52	3	<0.001
Self, family hunt	435	96.6	3.4			
Nonfamily hunt	428	80.4	19.6			
Self, family, nonfamily hunt	784	85.8	14.2			
Big game hunting with (gun)						
No hunting	252	95.6	4.4	74.27	3	<0.001
Self, family hunt	435	97.2	2.8			
Nonfamily hunt	429	80.9	19.1			
Self, family, nonfamily hunt	782	89.0	11.0			
Small game hunting						
No hunting	251	94.8	5.2	51.69	3	<0.001
Self, family hunt	434	94.0	6.0			
Nonfamily hunt	428	81.1	18.9			
Self, family, nonfamily hunt	783	84.2	15.8			
Furbearer hunting						
No hunting	252	94.0	6.0	40.13	3	<0.001
Self, family hunt	435	89.7	10.3			
Nonfamily hunt	425	82.8	7.2			
Self, family, nonfamily hunt	782	79.9	20.1			
Waterfowl hunting						
No hunting	251	95.2	4.8	40.88	3	<0.001
Self, family hunt	433	94.5	5.5			
Nonfamily hunt	422	83.9	16.1			
Self, family, nonfamily hunt	776	85.8	14.2			

[a] Definitely or probably will not consider participating. [b] Possibly or definitely will consider.

Table 14. (cont.)

	Likelihood of participating			Chi square	degrees of freedom	P value
	n	Low[a] %	Mod – High[b] %			
Turkey hunting						
No hunting	251	94.4	5.6	77.76	3	<0.001
Self, family hunt	434	95.4	4.6			
Nonfamily hunt	425	77.2	22.8			
Self, family, nonfamily hunt	781	84.8	15.2			
Furbearer trapping						
No hunting	252	93.3	6.7	40.77	3	<0.001
Self, family hunt	435	84.8	15.2			
Nonfamily hunt	428	85.3	14.7			
Self, family, nonfamily hunt	779	77.0	23.0			
Wildlife watching						
No hunting	250	60.8	39.2	71.79	3	<0.001
Self, family hunt	435	79.8	20.2			
Nonfamily hunt	429	52.9	47.1			
Self, family, nonfamily hunt	778	62.5	37.5			

[a] Definitely or probably will not consider participating. [b] Possibly or definitely will consider.

Table 15. Anticipated costs and benefits of participating in programs to allow public access for wildlife-dependent recreation, among respondents with different likelihoods of participating in such programs.

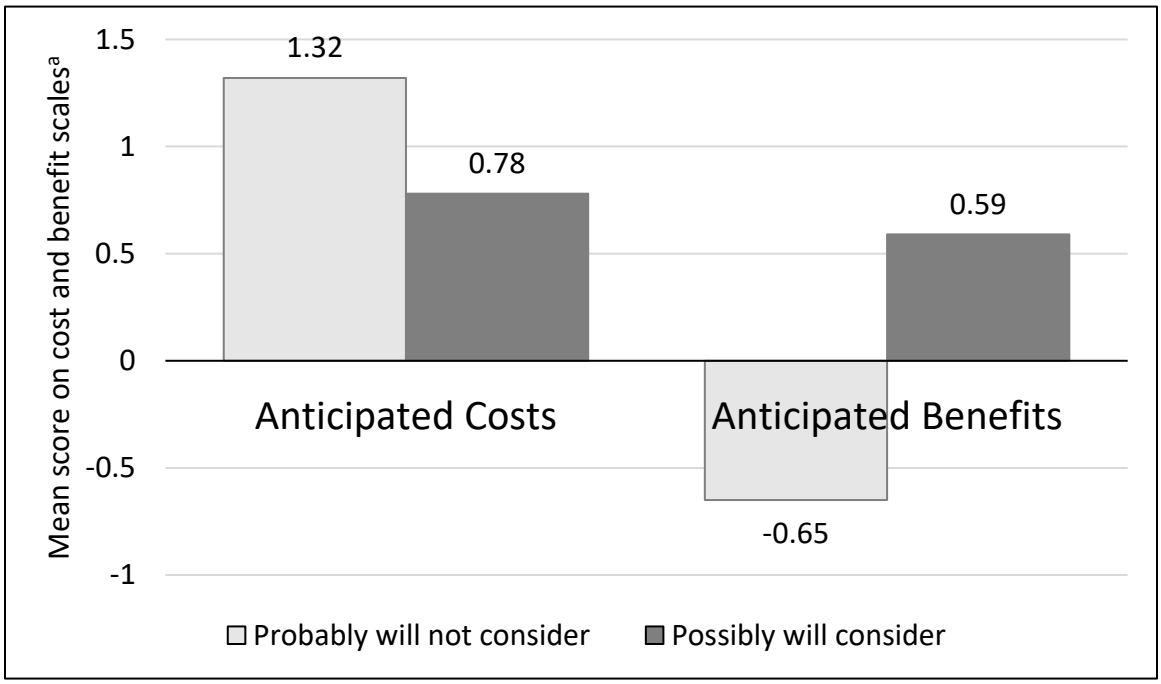
Programs that would allow Public access for…	Likelihood of participating: Low[a] (n) Mean[1]	Likelihood of participating: Mod – High[b] (n) Mean[1]	*t*	Degrees of freedom	P value
Big game hunting with (bow)					
Anticipated costs	(1,504) 1.32	(206) 0.78	7.66	1,708	<0.001
Anticipated benefits	(1,447) -0.65	(202) 0.59	-16.94	1,647	<0.001
Big game hunting with (gun)					
Anticipated costs	(1,547) 1.31	(166) 0.66	8.55	1,711	<0.001
Anticipated benefits	(1,485) -0.63	(167) 0.63	-15.51	1,650	<0.001
Small game hunting					
Anticipated costs	(1,491) 1.31	(220) 0.82	7.26	1,709	<0.001
Anticipated benefits	(1,434) -0.66	(217) 0.58	-17.56	1,649	<0.001
Furbearer hunting					
Anticipated costs	(1,454) 1.32	(255) 0.87	6.91	1,707	<0.001
Anticipated benefits	(1,394) -0.66	(253) 0.38	-15.37	1,645	<0.001
Waterfowl hunting					
Anticipated costs	(1,508) 1.30	(194) 0.88	5.80	1,700	<0.001
Anticipated benefits	(1,451) -0.64	(189) 0.52	-15.09	1,638	<0.001

[a] Definitely or probably will not consider participating. [b] Possibly or definitely will consider.
[1]Range of costs and benefits scales -2 to +2. Positive number indicate agreement that costs and benefits will be experienced; negative number indicate disagreement that costs and benefit will be incurred.

Table 15. (cont.)

Programs that would Allow public access for…	Likelihood of participating: Low[a] (n) Mean[1]	Likelihood of participating: Mod – High[b] (n) Mean[1]	*t*	Degrees of freedom	P value
Turkey hunting					
Anticipated costs	(1,484) 1.31	(222) 0.84	6.97	1,704	<0.001
Anticipated benefits	(1,427) -0.66	(218) 0.51	-16.38	1,704	<0.001

[a] Definitely or probably will not consider participating. [b] Possibly or definitely will consider.
[1]Range of costs and benefits scales -2 to +2. Positive number indicate agreement that costs and benefits will be experienced; negative number indicate disagreement that costs and benefit will be incurred.



[a] Scale range -2 to +2; -2=strongly disagree, -1=slightly disagree, 0=Don't know, 1=Slightly agree, 2=Strongly agree.

Figure 2. Comparison of anticipated costs and benefits of participating in an access agreement among landowners with different likelihood of considering an agreement to provide access for big game hunting (bow).

Table 16. How landowners believe they would be affected by allowing public access for hunting recreation, among respondents with different likelihoods of participating in an agreement to allow public access for hunting.

An agreement to allow public access for hunting could…		Response[a]				
	n	Disagree	Agree	NA/DK	Chi sq	P value
Be an invasion of my privacy						
Low likelihood[b]	1,545	10.0	87.4	2.5	85.83	<0.001
Mod-high likelihood[c]	212	32.1	63.7	4.2		
Lead to property damage						
Low likelihood[b]	1,543	14.1	81.9	4.0	13.56	<0.001
Mod-high likelihood[c]	213	23.0	71.4	5.6		
Compromise safety around my home						
Low likelihood[b]	1,536	12.8	80.1	7.1	54.41	<0.001
Mod-high likelihood[c]	211	31.8	59.7	8.5		
Conflict with my own hunting						
Low likelihood[b]	1,544	15.8	74.0	10.2	20.02	<0.001
Mod-high likelihood[c]	213	28.2	63.4	8.5		
Conflict with farming, other land uses						
Low likelihood[b]	1,523	16.0	60.7	23.2	37.45	<0.001
Mod-high likelihood[c]	212	33.0	45.3	21.7		

[a] Disagree=strongly or moderately disagree, Agree=moderately or strongly disagree, NA/DK=not applicable/don't know.

[b] Probably or definitely will not consider participating in an access program.

[c] Possibly or definitely will consider participating in an access program.

Table 16. (continued).

An agreement to allow public access for hunting could…	n	Response[a]			Chi sq	P value
		Disagree	Agree	NA/DK		
Help control problems with some wildlife						
Low likelihood[b]	1,516	62.8	26.6	10.6	155.8	<0.001
Mod-high likelihood[c]	211	24.6	69.2	6.2		
Help me get assistance with habitat management						
Low likelihood[b]	1,510	49.8	27.9	22.3	160.9	<0.001
Mod-high likelihood[c]	211	12.8	70.6	16.6		
Help offset property taxes						
Low likelihood[b]	1,490	49.1	27.3	23.6	167.9	<0.001
Mod-high likelihood[c]	206	13.1	71.8	15.0		
Give me a chance to get to know hunters						
Low likelihood[b]	1,502	63.7	17.6	18.7	119.5	<0.001
Mod-high likelihood[c]	210	34.8	50.5	14.8		
Reduce predation on my farm animals						
Low likelihood[b]	1,500	37.1	16.5	46.4	21.99	<0.001
Mod-high likelihood[c]	210	26.7	29.0	44.3		

[a] Disagree=strongly or moderately disagree, Agree=moderately or strongly disagree, NA/DK=not applicable/don't know.

[b] Probably or definitely will not consider participating in an access program.

[c] Possibly or definitely will consider participating in an access program.

Table 17. How landowners believe they would be affected by allowing public access for hunting, by geographic region.

An agreement to allow public access for hunting could…	Region	n	Response[a]		
			Disagree	Agree	NA/DK
Make it harder to control who is on my land	Capital	435	6.7	90.8	2.5
	L Hudson	392	6.9	90.6	2.6
	N Country	436	8.0	90.1	1.8
	W Central	525	8.4	88.8	2.9
Be an invasion of my privacy	Capital	436	13.1	83.9	3.0
	L Hudson	394	9.9	88.3	1.8
	N Country	433	14.3	82.9	2.8
	W Central	519	13.5	83.4	3.1
Expose me to legal liabilities	Capital	437	10.3	83.8	5.9
	L Hudson	392	10.2	84.7	5.1
	N Country	436	11.0	81.9	7.1
	W Central	519	12.7	80.7	6.6
Lead to property damage	Capital	436	15.6	81.0	3.4
	L Hudson	389	14.1	82.5	3.3
	N Country	435	14.9	79.3	5.7
	W Central	519	15.8	80.3	3.9
Compromise safety around my home	Capital	433	13.6	79.0	7.4
	L Hudson	389	15.9	79.2	4.9
	N Country	432	15.5	77.3	7.2
	W Central	517	15.5	75.6	8.9
Conflict with my own hunting	Capital	433	17.8	73.7	8.5
	L Hudson	390	17.2	69.5	13.3
	N Country	436	18.3	70.0	11.7
	W Central	521	16.1	76.2	7.7
Conflict with farming, other land uses	Capital	428	18.0	62.4	19.6
	L Hudson	388	16.0	52.8	31.2
	N Country	429	19.6	58.3	22.1
	W Central	514	18.7	60.5	20.8

[a] Disagree=strongly or moderately disagree, Agree=moderately or strongly disagree, NA/DK=not applicable/don't know.

Table 17. (continued).

An agreement to allow public access for hunting could…	Region	n	Response[a]		
			Disagree	Agree	NA/DK
Help control problems with some wildlife	Capital	425	57.2	33.4	9.4
	L Hudson	388	58.2	32.5	9.3
	N Country	425	61.4	26.4	12.2
	W Central	513	55.9	34.3	9.7
Help me get assistance with habitat management	Capital	424	46.7	33.0	20.3
	L Hudson	383	43.3	35.0	21.7
	N Country	428	46.3	29.0	24.8
	W Central	510	44.3	35.5	20.2
Help offset property taxes	Capital	418	42.6	33.3	24.2
	L Hudson	382	43.7	35.6	20.7
	N Country	415	45.1	29.2	25.8
	W Central	504	47.0	32.5	20.4
Give me a chance to get to know hunters	Capital	421	60.3	23.0	16.6
	L Hudson	383	60.1	19.6	20.4
	N Country	424	58.5	21.2	20.3
	W Central	507	60.7	23.1	16.2
Reduce predation on my Farm animals	Capital	417	38.1	16.5	45.3
	L Hudson	383	30.5	16.4	53.0
	N Country	422	36.3	19.0	44.8
	W Central	512	37.3	19.9	42.8

[a] Disagree=strongly or moderately disagree, Agree=moderately or strongly disagree, NA/DK=not applicable/don't know.

Table 18. Extent to which incentives would encourage landowners to participate in a program to allow public access for hunting, by geographic region.

				Effect of incentive[a]			
	Region	n	Mean	1	2	3	4
Providing liability protection	Capital	426	2.10	51.6	13.1	8.5	26.8
	L Hudson	379	2.05	54.1	12.9	6.9	26.1
	N Country	425	2.03	53.2	12.9	11.3	22.6
	W Central	502	2.08	53.4	11.0	9.8	25.9
Receiving an annual payment	Capital	423	1.95	53.0	17.3	11.8	18.0
	L Hudson	379	2.04	51.7	16.1	8.4	23.7
	N Country	422	1.95	55.0	15.2	10.0	19.9
	W Central	502	2.03	50.6	18.1	9.2	22.1
Having a DEC contact person	Capital	424	1.95	55.0	14.2	11.8	19.1
	L Hudson	380	1.97	55.0	13.7	10.5	20.8
	N Country	424	1.92	55.4	15.3	11.3	17.9
	W Central	506	2.01	54.0	13.0	10.9	22.1
Limiting the length of the agreement	Capital	425	1.90	56.7	13.9	11.8	17.6
	L Hudson	380	1.89	60.3	10.5	8.7	20.5
	N Country	424	1.87	59.2	11.8	12.3	16.7
	W Central	505	1.93	58.2	11.5	9.3	21.0
Ability to limit number of hunters	Capital	429	1.75	61.3	16.1	8.6	14.0
	L Hudson	381	1.82	63.0	10.5	8.4	18.1
	N Country	425	1.78	62.8	12.7	8.2	16.2
	W Central	506	1.85	62.6	10.5	5.7	21.1
Ability to limit access to specific seasons	Capital	429	1.73	61.5	16.6	8.9	13.1
	L Hudson	380	1.80	62.6	13.2	6.1	18.2
	N Country	425	1.74	64.5	12.2	8.2	15.1
	W Central	505	1.82	63.0	10.1	8.7	18.2
Process to screen hunters	Capital	425	1.86	58.1	14.6	10.8	16.5
	L Hudson	380	1.86	60.5	12.4	7.9	19.2
	N Country	424	1.77	62.0	12.3	12.0	13.7
	W Central	504	1.86	59.7	12.3	10.7	17.3

[a] 1=Would make no difference, 2=might encourage, 3=likely to encourage, 4=definitely would encourage.

Table 18. (cont.).

	Region	n	Mean	Effect of incentive[a]			
				1	2	3	4
Control over type of hunting allowed	Capital	429	1.75	62.2	14.5	9.3	14.0
	L Hudson	380	1.79	63.4	11.3	7.6	17.6
	N Country	424	1.77	63.2	13.4	6.4	17.0
	W Central	504	1.79	63.7	11.1	7.7	17.5
Technical assistance on Habitat management	Capital	427	1.73	60.7	16.2	12.6	10.5
	L Hudson	378	1.81	59.8	14.0	11.9	14.3
	N Country	427	1.71	60.7	17.6	11.5	10.3
	W Central	504	1.83	57.9	15.7	11.5	14.9
Getting free trees, Shrubs, seeds	Capital	425	1.77	58.1	18.4	11.8	11.8
	L Hudson	379	1.79	59.6	14.8	12.4	13.2
	N Country	425	1.79	56.0	18.4	16.0	9.6
	W Central	506	1.87	55.5	16.8	12.5	15.2

[a] 1=Would make no difference, 2=might encourage, 3=likely to encourage, 4=definitely would encourage.

Table 19. Extent to which incentives would encourage landowners to enter an access agreement, for respondents grouped by the likelihood that they would consider participating in programs to allow public access for three types of hunting.

		Big game-bow		Big game-gun		Small game hunt	
Incentive	Effect of incentive	Unlikely to consider	May consider	Unlikely to consider	May consider	Unlikely to consider	May consider
		(n) %	(n) %	(n) %	(n) %	(n) %	(n) %
Providing liability protection		(1498)	(212)	(1,540)	(173)	(1483)	(229)
	Makes no difference	59.8	6.1	58.2	8.1	60.3	7.0
	Might encourage	13.4	5.2	12.9	7.5	12.6	10.9
	Likely encourage	8.1	17.5	8.2	17.9	7.7	19.2
	Definitely encourage	18.8	71.2	20.6	66.5	19.4	62.9
Having a DEC contact Person		(1,501)	(211)	(1,543)	(172)	(1486)	(228)
	Makes no difference	61.5	8.1	60.1	7.6	62.2	7.0
	Might encourage	14.4	11.8	13.8	16.3	13.5	18.0
	Likely encourage	9.5	21.8	10.2	19.8	9.8	19.7
	Definitely encourage	14.6	58.3	15.9	56.4	14.5	55.3
Receiving an annual payment		(1496)	(209)	(1,537)	(171)	(1480)	(227)
	Makes no difference	58.5	9.1	56.7	14.0	58.6	11.9
	Might encourage	17.3	13.9	17.3	13.5	17.2	15.0
	Likely encourage	8.6	18.2	9.1	16.4	8.2	20.7
	Definitely encourage	15.6	58.9	16.9	56.1	16.0	52.4

Table 19. (cont.)

Incentive	Effect of incentive	Big game-bow Unlikely To consider	Big game-bow May consider	Big game-gun Unlikely To consider	Big game-gun May consider	Small game hunt Unlikely To consider	Small game hunt May consider
		(n) %	(n) %	(n) %	(n) %	(n) %	(n) %
Limiting the length		(1500)	(212)	(1,542)	(173)	(1485)	(229)
Of the agreement	Makes no difference	66.0	6.6	64.2	8.7	66.3	8.7
	Might encourage	12.1	10.8	11.6	15.0	11.3	16.2
	Likely encourage	7.6	30.7	8.5	27.7	8.1	25.8
	Definitely encourage	14.3	51.9	15.7	48.6	14.3	49.3
Ability to limit number		(1,508)	(212)	(1,548)	(174)	(1492)	(229)
of hunters	Makes no difference	70.0	9.4	68.5	8.6	70.0	14.0
	Might encourage	11.9	16.0	11.6	19.5	11.4	19.2
	Likely encourage	5.4	23.6	6.0	22.4	5.5	21.8
	Definitely encourage	12.7	50.9	13.8	49.4	13.1	45.0
Ability to limit access		(1,508)	(209)	(1,549)	(171)	(1491)	(228)
to specific seasons	Makes no difference	70.0	12.0	68.4	13.5	70.4	14.5
	Might encourage	12.8	14.4	12.6	16.4	12.1	18.9
	Likely encourage	5.5	26.3	6.2	24.6	5.4	25.0
	Definitely encourage	11.7	47.4	12.8	45.6	12.1	41.7

Table 19. (cont.)

Incentive	Effect of incentive	Big game-bow Unlikely To consider	Big game-bow May consider	Big game-gun Unlikely To consider	Big game-gun May consider	Small game hunt Unlikely To consider	Small game hunt May consider
		(n) %	(n) %	(n) %	(n) %	(n) %	(n) %
Process to screen hunters		(1,501)	(210)	(1,542)	(172)	(1486)	(227)
	Makes no difference	67.2	9.5	65.5	11.6	67.6	11.5
	Might encourage	12.4	17.1	12.1	20.9	11.8	20.3
	Likely encourage	7.9	29.0	8.6	27.3	8.3	24.7
	Definitely encourage	12.5	44.3	13.8	40.1	12.2	43.6
Control over type of hunting allowed		(1,504)	(211)	(1,546)	(172)	(1488)	(229)
	Makes no difference	70.1	14.7	68.2	18.6	70.3	17.9
	Might encourage	12.0	16.1	11.5	22.1	11.2	21.8
	Likely encourage	5.4	24.6	6.0	23.8	5.5	22.3
	Definitely encourage	12.5	44.5	14.3	35.5	13.0	38.0
Technical asst. on habitat management		(1,501)	(212)	(1,543)	(173)	(1487)	(228)
	Makes no difference	65.3	19.8	63.8	22.0	65.8	19.3
	Might encourage	16.0	15.1	15.8	16.8	15.7	17.5
	Likely encourage	9.5	27.8	10.2	26.0	9.7	25.9
	Definitely encourage	9.2	37.3	10.1	35.3	8.8	37.3
Getting free trees, shrubs, seeds		(1,502)	(211)	(1,544)	(172)	(1487)	(228)
	Makes no difference	62.1	21.3	60.6	25.0	62.9	18.9
	Might encourage	17.5	14.7	17.7	12.8	17.1	17.1
	Likely encourage	11.0	28.4	11.4	29.1	11.0	27.6
	Definitely encourage	9.4	35.5	10.3	33.1	8.9	36.4

We hypothesized interest in program incentives would differ based on land cover/use. We compared respondents who owned predominately forested land to respondents who owned predominately agricultural fields. The mean effect of the incentives did not differ between groups on any of the incentive questions. For example, providing liability protection was equally attractive to owners of primarily forested and primarily agricultural lands (Table 20).

DISCUSSION

This research documents the interest that private landowners with >50 acres of land have in exchange relationships to provide public access for wildlife-dependent recreation.

The proportion of landowners likely to consider entering an access agreement for hunting—7 to 22% depending on the region and type of activity—was relatively low, but consistent with expectations based on previous research in New York State.

The percentages of landowners in each region who allowed access for furbearer trapping by nonfamily members (16 – 30%), or would consider an agreement to allow trapping (11 – 23%), were higher than we expected. We found that owners who allowed nonfamily members to trap furbearers were more likely than other landowners to be moderately or very concerned about wildlife damage to property other than crops. Motivation to reduce wildlife-related property damage may help explain why landowners allow access to nonfamily members for trapping.

The proportion of landowners likely to consider entering an access agreement for wildlife watching was relatively high—33 to 39% depending on the region. We did not ask questions that reveal why landowners would be more willing to consider a wildlife-watching access agreement than a hunting access agreement. It may be that landowners would have less concern about exposure to legal liabilities, safety around their home, and possible property damage if they allowed public access for wildlife watching rather than hunting.

Although the level of interest in access exchange relationships differed slightly by geographic region, response patterns were similar in every geographic region on several topics (i.e., concerns about wildlife damage; perceptions of disincentives and incentives to engage in an access exchange relationship with DEC; degree to which different incentives would encourage landowners to consider participating in a hunting access agreement). One explanation for the similarities across regions is that the factors that affect landowners' perceptions about access exchange relationships are likely to be the same in every region.

Table 20. Extent to which incentives would encourage landowners to participate in a program to allow public access for hunting, among respondents who own predominately forested land or land in agricultural fields.

	n	Mean[a]	t	Degrees of freedom	P value
Providing liability protection					
>50% of acres in forest	911	2.07	-0.489	1,242	0.625
>50% of acreage in agric. fields	333	2.11			
Receiving an annual payment					
>50% of acres in forest	909	2.01	-0.488	1,238	0.626
>50% of acreage in agric. fields	331	2.01			
Having a DEC contact person					
>50% of acres in forest	913	1.98	0.643	1,243	0.521
>50% of acreage in agric. fields	332	1.93			
Limiting the length of the agreement					
>50% of acres in forest	914	1.91	0.390	1,243	0.697
>50% of acreage in agric. fields	331	1.88			
Process to screen hunters					
>50% of acres in forest	913	1.84	0	1,244	0.999
>50% of acreage in agric. fields	333	1.84			
Ability to limit number of hunters					
>50% of acres in forest	915	1.82	-0.390	1,245	0.692
>50% of acreage in agric. fields	332	1.85			
Control over type of hunting allowed					
>50% of acres in forest	913	1.78	-0.539	1,245	0.590
>50% of acreage in agric. fields	334	1.82			
Getting free trees, shrubs, seeds					
>50% of acres in forest	914	1.81	0.435	1,244	0.664
>50% of acreage in agric. fields	332	1.78			
Ability to limit to specific seasons					
>50% of acres in forest	913	1.78	-0.272	1,244	0.788
>50% of acreage in agric. fields	333	1.80			
Asst. on habitat management					
>50% of acres in forest	912	1.79	0.718	1,242	0.473
>50% of acreage in agric. fields	332	1.74			

[a] Response categories 1-4; 1=makes no difference, 2=might encourage, 3=likely to encourage, 4=definitely would encourage.

We found support for the hypotheses that owners of large parcels (>150 acres), and owners who do not reside on their parcels of >50 acres, would be more likely than other owners to have interest in exchange relationship to provide hunting access. Larger parcels are better able to accommodate additional recreational use, and parcels without a residence remove the consideration of maintaining safety and privacy around the owner's home.

We found modest support for the hypothesis that farmers would be less likely than nonfarmers to have interest in an exchange relationship to provide hunting access. The proportion of farmers likely to consider entering an access agreement will be low, but farm owners are still an audience worth approaching with incentive programs because enrolling even a small proportion of farm owners in an access program could increase recreational access on lands with high recreational value.

We found that nonrespondents were more likely than respondents to say they would consider participating in an access exchange relationship. But findings from the nonrespondent follow-up interviews should be regarded cautiously, because only 50 useable nonrespondent interviews could be completed. Differences in method of data collection may help explain why nonrespondents appeared to be more willing to consider participating in an access program. Speaking with an interviewer on the telephone can remove the sense of anonymity afforded to respondents completing a mail-back questionnaire. Nonrespondents may have assumed that the telephone interviewer wanted them to express interest in access programs because the topic of the interview was access to private land for recreation. The tendency to over-estimate their likelihood of performing socially-desirable behavior and underestimate their likelihood of performing socially undesirable behavior is called social desirability bias (Zerbe and Paulhus, 1987).

Study Limitations This study focused on private landowners with 50 or more acres of land, because future access programs offered by DEC are likely to focus on landowners with at least 50 acres of property. This study does not provide information about residents who own small (10–40 acre) parcels that could supply some hunting, trapping, or wildlife viewing opportunities. It is important to note, however, that results from this study are similar to those from a 1991 landowner study that included owners of as little as 10 acres of land (Siemer and Brown 1993). It is reasonable to assume that owners of 10–40 acre parcels hold as much concern about safety, privacy, and liability as was observed among the landowners surveyed for our study.

Results from this study provide a useful snapshot of the constraints on, and opportunities to improve, access to private lands for wildlife-dependent recreation in New York State in 2021. This study helps us create an accurate big picture view of private, nonindustrial landowners in

New York State. This study is not able to provide depth of information about any specific group of landowners, such as small-scale farmers or nonindustrial forest owners. Specific, targeted research is needed to understand how subgroups of private landowners could be motivated to allow more public access to their properties. In addition to quantitative studies, such as mail surveys, qualitative research (e.g., personal interviews, focus groups) could provide the rich description and detailed understanding DEC personnel will need to design effective access incentive programs for specific types of landowners.

Recommendations

Pilot test location Findings suggest that the Central Western region contains the most landowners who might be willing to enter access agreements with DEC, so the Central Western Region appears to be the most promising location in which to pilot test an access program.

Participation incentives Findings suggest that, to attract substantial numbers of landowner participants, access agreements should include provisions for liability protection, an annual payment, a designated DEC contact person, and be relatively short in duration.

Defining target audiences Private landowners are not a monolithic group. The incentives that would be most attractive to owners of small parcels may be different than those most attractive to owners of large parcels, for example. To be most effective, wildlife managers should consider developing a program or programs targeted at specific types of landowners. To inform development of such programs, managers should consider small group meetings to discuss landowner incentive programs with representatives of particular landowner groups (e.g., private forest owners, farmers). For example, small group meetings with representatives of the New York Forest Owners Association (NYFOA) or the New York Farm Bureau could provide information about specific incentive programs that would be attractive to members of their organizations.

Messaging Findings on landowner concern about wildlife-related property damage have implications for communication. Many landowners hold little or no concern about wildlife-related property damage, so promoting the ability of hunting or trapping access to alleviate wildlife-related property damage is unlikely to motivate such landowners to participate in access programs. On the other hand, a smaller proportion of landowners do hold high levels of concern about wildlife-related damage, and that subset of landowners is more likely to consider participating in hunting or trapping access programs. These findings suggest that communications promoting the ability of hunting or trapping access to alleviate wildlife-related property damage would resonate with, and may attract, landowners most likely to consider participation in an access program.

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APPENDIX A: SURVEY INSTRUMENT

Wildlife-Related Recreation on Private Lands in New York State:

Views of Landowners

Research conducted for the
NYS Department of Environmental Conservation
Division of Fish and Wildlife

by the
Center for Conservation Social Sciences
Department of Natural Resources & the Environment
Cornell University

Many private landowners provide opportunities to hunt, trap, or watch wildlife in New York State. The New York State Department of Environmental Conservation (DEC) is sponsoring this survey to learn more about the views of landowners who do and do not provide access to their properties for wildlife-related recreation, specifically for hunting. The DEC is focusing on land that is at least 50 acres in size that would allow safe hunting and trapping.

The information that you and others provide in this survey will help DEC better understand the interests of today's landowners, and it will help DEC design programs to support landowners better in the future.

We would like input from EVERYONE who receives this questionnaire, so that the results are representative of all private landowners in your region. If you are not comfortable answering a question, you may skip that question.

Please complete this questionnaire as soon as you can, seal it, and drop it in any mailbox; ***return postage has been pre-paid***. Your identity will be kept confidential and the information you give us will never be associated with your name.

THANK YOU FOR YOUR HELP!

ABOUT YOUR LAND IN NEW YORK STATE

**Note: All questions refer to parcels of land you own in New York State.*

1. **What is the total number of acres of land you own in New York State?** (W*rite a number.*)

   _____ acres

2. **List the county or counties your land is located in.** (W*rite the county name or names.*)

   County 1: _____

   County 2: _____

   County 3: _____

3. **On the land that you own, about how many acres fall into the following categories?** (*Write an approximate number of acres on each line.*)

	# of acres:	
Forest or shrublands	_____	acres
Nonagricultural fields (ex: grasslands, old fallow fields)	_____	acres
Agricultural fields (ex: hay, row crops)	_____	acres
Wetlands (ex: marshes, beaver ponds, swamps, or open water)	_____	acres

4. **Do you have a seasonal or year-round residence on a parcel of land that is at least 50 acres in size?** *(Circle one number.)*

   1 Yes
   2 No

YOUR CONCERNS ABOUT WILDLIFE

5. **Below is a list of concerns that landowners may have related to wildlife. Please indicate how concerned <u>you</u> are about each on the land you own in New York State.** *(Circle one number per line.)*

	Not at all concerned	Slightly concerned	Moderately concerned	Very concerned
a. Crop damage by deer	1	2	3	4
b. Crop damage by wildlife other than deer	1	2	3	4
c. Damage to forests by deer	1	2	3	4
d. Wildlife predation on farm animals	1	2	3	4
e. Other wildlife-related property damage (ex: flooding by beaver, tree damage by porcupine)	1	2	3	4
f. Low numbers of game (ex: deer, turkey) or other wildlife	1	2	3	4

HUNTING, TRAPPING, AND WILDLIFE WATCHING ON YOUR LAND

6. Do you or members of your family hunt or trap on your land? *(Circle one number.)*

	Yes	No
a. Do you or your family <u>hunt</u> on your land?	1	2
b. Do you or your family <u>trap</u> on your land?	1	2

7. Do you allow anyone <u>else</u> to hunt or trap on your property? (*Circle one number per line.*)

	Yes	No
a. Do you allow anyone else to <u>hunt</u>?	1	2
b. Do you allow anyone else to <u>trap</u>?	1	2

8. **Given the amount of land that you own, how many people are you comfortable allowing to hunt and/or trap at the same time, including yourself, close friends and/or family?** *(Circle one response per line.)*

# of <u>hunters</u>	0	1-2	3-5	6+
# of <u>trappers</u>	0	1-2	3-5	6+

9. Do you currently allow access for watching or photographing wildlife on your land? (*Circle one answer.*)

1 Yes

2 No

INTEREST IN ACCESS INCENTIVE AGREEMENTS

Some states have programs to encourage private landowners to grant more access for wildlife-related recreation. In these programs, private landowners with wildlife habitat and suitable properties voluntarily agree to provide public access in exchange for incentives and/or services provided by the state. Certain restrictions are often in place to provide controlled access for the safety of the landowner, and to provide safe hunting, trapping, and other wildlife-related recreation. Questions in this section will help DEC understand landowners' interest in and opinions about access incentive agreements.

10. How likely are you to <u>consider</u> <u>participating</u> in a DEC program to allow public access for the following activities on your land? *(Circle one number per line.)*

How likely to <u>consider</u> participating in a program to allow public access to:	Definitely not	Probably not	Possibly consider	Definitely consider
a. Hunt big game (deer, bear) with a bow or crossbow	1	2	3	4
b. Hunt big game (deer, bear) with a firearm (muzzleloader, shotgun, rifle)	1	2	3	4
c. Hunt small game (ex: squirrels)	1	2	3	4
d. Hunt furbearers (ex: bobcat, coyote, raccoon)	1	2	3	4
e. Hunt waterfowl (ex: ducks, geese)	1	2	3	4
f. Hunt turkey	1	2	3	4
g. Trap furbearers (ex: coyote, beaver, muskrat)	1	2	3	4
h. Watch or photograph wildlife	1	2	3	4

11. Please indicate whether you agree or disagree with each statement about how you could be affected (positively or negatively) by allowing public access for hunting in exchange for incentives or services. *(Circle one per line.)*

An agreement to allow public access to my land <u>for hunting</u> could:	Strongly Disagree	Moderately Disagree	Moderately Agree	Strongly	Not Applicable /Do not know
a. Help offset property taxes	1	2	3	4	9
b. Expose me to legal liabilities	1	2	3	4	9
c. Help control problems with some wildlife (ex: deer)	1	2	3	4	9
d. Lead to property damage	1	2	3	4	9
e. Be an invasion of my privacy	1	2	3	4	9
f. Help me get assistance with habitat management	1	2	3	4	9
g. Compromise safety around my home	1	2	3	4	9
h. Give me a chance to get to know hunters	1	2	3	4	9
i. Conflict with hunting by myself, friends, or family	1	2	3	4	9
j. Make it harder for me to control who is on my land	1	2	3	4	9
k. Reduce predation on my farm animals	1	2	3	4	9
l. Conflict with farming or other uses of my land	1	2	3	4	9

12. To what extent would the following measures encourage you to participate in a program that allowed public access to your land for <u>hunting</u>? *(Circle one number per line.)*

	Makes no difference	Might encourage	Likely to encourage	Definitely would encourage
Having the ability to limit the number of hunters allowed at a time	1	2	3	4
Having the ability to limit public access to specific hunting seasons (ex: spring turkey only)	1	2	3	4
Having control over type of hunting allowed (ex: bow hunting only)	1	2	3	4
Getting technical assistance to develop a wildlife or habitat management plan	1	2	3	4
Getting trees, shrubs, or seeds to enhance wildlife habitat on my land	1	2	3	4
Having a DEC contact person if I have issues with public use of my land	1	2	3	4
Limiting participation to hunters who complete a screening process	1	2	3	4
Limiting the length of an access agreement	1	2	3	4
Liability protection to cover some public use of my land	1	2	3	4
Receiving an annual payment based on number of acres enrolled	1	2	3	4

THANK YOU FOR YOUR INPUT!

(Please use the space below to offer any comments.)

Please email PrivateLandsConservation@dec.ny.gov if you are interested in corresponding more about participating in a New York private lands access program.

To return this questionnaire, simply seal it and drop it into the nearest mailbox. Postage has already been provided.

APPENDIX B: RESPONDENT-NONRESPONDENT COMPARISONS

Table B1. Outcome of contacts with nonrespondents, 2021 landowner survey.

Outcome	Records	
	n	%
No answer	534	30.99
Answering machine	398	23.10
No longer in service / disconnected	208	12.07
Respondent Refusal	198	11.49
Wrong Number	185	10.74
Busy	26	1.51
Do Not Call List	24	1.39
Respondent not available permanently	22	1.28
General callback	13	0.75
Privacy Manager	13	0.75
Business Number	12	0.70
Fax Number	12	0.70
Household Refusal	10	0.58
Schedule callback	9	0.52
Hostile Interrupt	4	0.23
Language Barrier	3	0.17
Completes	**52**	3.02
TOTAL RECORDS DIALED	**1723**	100.00

Table B2. Comparison of respondents to nonrespondents on whether they had a seasonal or part-time residence.

	Respondents (n) %	Nonrespondents[a] (n) %
Yes	(1,342) 72.9	(33) 66.0
No	(498) 27.1	(17) 34.0
Total	(1,840) 100.0	(50) 100.0

[a]chi square= 1.18, df=1 , p= 0.277 (NS)

Table B3. Comparison of respondents to nonrespondents on whether they or family members hunt on their own land.

	Respondents (n) %	Nonrespondents[a] (n) %
Yes	(1,231) 64.1	(33) 66.0
No	(689) 35.9	(17) 36.5
Total	(1,920) 100.0	(50) 100.0

[a]chi square=0.073, df=1 , p=0.783 (NS)

Table B4. Comparison of respondents to nonrespondents on whether they allow anyone other than family members to hunt on their land.

	Respondents (n) %	Nonrespondents[a] (n) %
Yes	(1,227) 63.9	(30) 60.0
No	(692) 36.1	(21) 40.0
Total	(1,919) 100.0	(50) 100.0

[a]chi square= 0.32, df=1 , p=0.567 (NS)

Table B5. Comparison of respondents to nonrespondents on whether they or family members trap furbearers on their own land.

	Respondents (n) %	Nonrespondents[a] (n) %
Yes	(210) 11.2	(12) 24.0
No	(1,672) 88.8	(38) 76.0
Total	(1,882) 100.0	(50) 100.0

[a]chi square=7.89, df=1 , p=0.004

Table B6. Comparison of respondents to nonrespondents on whether they allow anyone other than family members to trap furbearers on their land.

	Respondents (n) %	Nonrespondents[a] (n) %
Yes	(411) 22.0	(14) 28.0
No	(1,454) 78.0	(36) 72.0
Total	(1,865) 100.0	(50) 100.0

[a]chi square= 1.00, df=1 , p= 0.316 (NS)

Table B7. Comparison of respondents to nonrespondents on number of hunters they are comfortable allowing on their land at one time.

	Respondents (n) %	Nonrespondents[a] (n) (%)
0 hunters	(341) 17.9	(11) 22.0
1 – 2 hunters	(697) 36.6	(12) 24.0
3 – 5 hunters	(718) 37.7	(21) 42.0
6+ hunters	(147) 7.7	(6) 12.0
Total	(1,903) 100.0	(50) 100.0

[a]chi square=3.96, df=3 , p= 0.265 (NS)

Table B8. Comparison of respondents to nonrespondents on number of trappers they are comfortable allowing on their land at one time.

	Respondents (n) %	Nonrespondents[a] (n) (%)
0 trappers	(1,093) 63.6	(31) 62.0
1 – 2 trappers	(544) 31.7	(16) 32.0
3 – 5 trappers, or 6+ trappers	(81) 4.7	(3) 6.0
Total	(1,718) 100.0	(50) 100.0

[a]chi square= 0.190, df=2 , p= 0.909 (NS)

Table B9. Comparison of respondents to nonrespondents on whether they allow access for wildlife watching or photography.

	Respondents (n) %	Nonrespondents[a] (n) %
Yes	(495) 26.4	(19) 38.0
No	(1,381) 73.6	(31) 62.0
Total	(1,876) 100.0	(50) 100.0

[a]chi square= 3.35, df=1 , p=0.066 (NS)

Table B10. Comparison of respondents to nonrespondents on likelihood of participating in a program to allow big game hunting with a bow or crossbow.

	Respondents (n) %	Nonrespondents[a] (n) (%)
Definitely not	(1,446) 75.7	(22) 44.0
Probably not	(235) 12.3	(12) 24.0
Possibly consider	(169) 8.8	(13) 26.0
Definitely consider	(60) 3.1	(3) 6.0
Total	(1,910) 100.0	(50) 100.0

[a]chi square= 28.50, df=3 , p<0.001

Table B11. Comparison of respondents to nonrespondents on likelihood of participating in a program to allow big game hunting with a firearm.

	Respondents (n) %	Nonrespondents[a] (n) (%)
Definitely not	(1,497) 78.3	(25) 50.0
Probably not	(222) 11.6	(11) 21.0
Possibly consider	(137) 7.2	(11) 22.0
Definitely consider	(55) 2.9	(3) 6.0
Total	(1,911) 100.0	(50) 100.0

[a]chi square= 25.27, df=3 , p<0.001

Table B12. Comparison of respondents to nonrespondents on likelihood of participating in a program to allow furbearer trapping.

	Respondents (n) %	Nonrespondents[a] (n) (%)
Definitely not	(1,369) 71.8	(21) 42.0
Probably not	(213) 11.2	(12) 24.0
Possibly consider	(220) 11.5	(12) 24.0
Definitely consider	(105) 5.5	(5) 10.0
Total	(1,907) 100.0	(50) 100.0

[a]chi square=21.19, df=3 , p<0.001

Table B13. Comparison of respondents to nonrespondents on likelihood of participating in a program to allow wildlife watching.

	Respondents (n) %	Nonrespondents[a] (n) (%)
Definitely not	(963) 50.6	(12) 24.0
Probably not	(258) 13.6	(8) 16.0
Possibly consider	(420) 22.1	(14) 28.0
Definitely consider	(263) 13.8	(16) 32.0
Total	(1,904) 100.0	(50) 100.0

[a]chi square=19.17, df=3 , p<0.001