

SCHOOL OF ENVIRONMENT AND NATURAL RESOURCES

Characterizing Potential for Recreational Access and Habitat Conservation within Ohio's Private Landscape: Scioto Watershed

A Report from the Terrestrial Wildlife Ecology Lab



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

In Collaboration
with the Ohio
Division of Wildlife



About the Terrestrial Wildlife Ecology Lab

The Terrestrial Wildlife Ecology Laboratory (TWEL) works to contribute information and expertise to support effective stewardship of Ohio's wildlife resources and promotes understanding of ecological and social factors that affect wildlife and natural resources nationally and internationally.

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Contact Information:

Dr. Gabriel R. Karns, Visiting Assistant Professor, SENR (karns.36@osu.edu)

Dr. Kristina M. Slagle, Postdoctoral Scholar, SENR (slagle.44@osu.edu)

Dr. Jeremy T. Bruskotter, Professor, SENR (bruskotter.9@osu.edu)

2021 Coffey Rd, Columbus, OH 43210
School of Environment and Natural Resources
The Ohio State University

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Executive Summary

Aligning wildlife and land conservation with recreational opportunity is a perennial challenge in Ohio and elsewhere. Ohio is not particularly rich in state- or federally-owned forests or wildlife areas as compared to neighboring states; however, the Cooperative Hunting, Trapping, and Fishing Program (CHP) has provided additional public access options to sportsmen and women through willing private land cooperators. Likewise, since 2004, the Scioto CREP has provided up to 70,000 acres of private lands for conservation. In order to examine ways in which these existing programs might be leveraged for overlaps in conservation and recreation, we surveyed CHP landowners in 2018, and we repeated the survey in 2019 with landowners selected from counties in the Scioto watershed (response rate 18.2%).

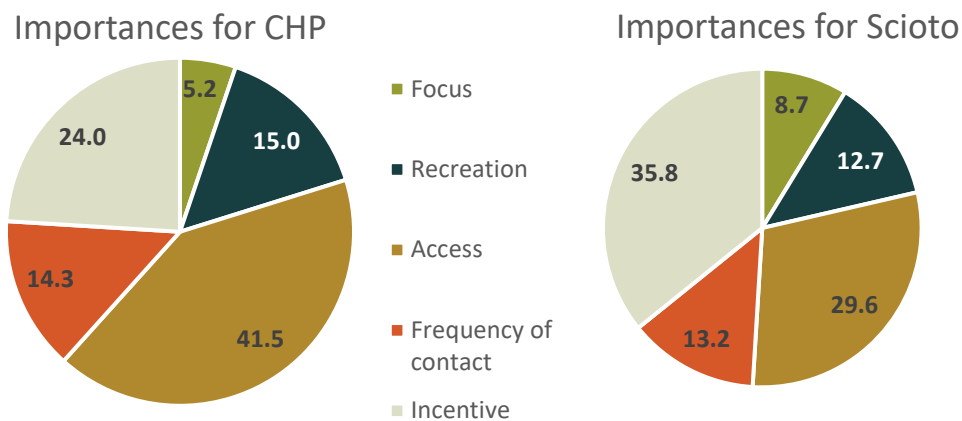
Key Findings:

- ❖ Among Scioto landowners, we found that , **3 in 4 indicated it was the first time they had heard of the CHP program (76%)**, while roughly 1 in 5 said that they had heard of the program, but that the present property was not enrolled (18.1%).
- ❖ Nearly all CHP participants allowed friends and family to hunt their property (92.8%), compared to two-thirds of Scioto landowners. Similarly, over twice as many CHP participants (56.2%) allowed trapping on their property by friends and family as did Scioto landowners (24.5%), **suggesting a fairly sharp contrast in either the activities Scioto landowners find acceptable on their land, or between the preferred outdoor activities of owners’ friends and family**. When asked specifically about their support or opposition of hunting and trapping, Scioto landowners reported low opposition to both (9.2% and 26.8%, respectively), lending some support to the latter explanation—that Scioto landowners’ friends and family may not participate in hunting or trapping, thus leaving limited opportunity to allow it on the property.
- ❖ **Most landowners in the CHP (66.2%) and Scioto watershed (83.5%) do not currently participate in conservation programs**, perhaps due to participation caps on the programs (Section 5).
- ❖ Among Scioto landowners that do participate in conservation programs of some sort, nearly all of the potential benefits of enrolling in these programs were rated as “very” or “extremely” important. **Lower proportions of CHP participants and Scioto landowners rated the importance of guidance from professionals on habitat management as “very” or “extremely” important (Figure 5.2 in report)**. Similarly to the CHP participants, the high importance of almost every benefit creates some difficulty in determining high priority benefits that might influence enrollment.

Program Choice and Preferences

To address this anticipated shortfall of benefit importance ratings, we conducted choice experiments, whereby we allowed respondents to select from sets of hypothetical programs aimed at enhancing conservation and recreation on private lands. By systematically randomizing potential aspects of various programs, we gained insight into which aspects respondents might prioritize when considering future enrollment (aspects, or “factors”, and their levels can be found in Tables 6.1 in report). The relative importance for each aspect is reflected in the pie charts below for both CHP and Scioto participants (Figure E.S.1). These results suggest **that control over access was the most important attribute predicting program enrollment among landowners already enrolled in CHP, while Scioto landowners placed more importance on the \$2-5 per acre incentive.**

Figure E.S.1 Pie charts displaying relative importances of each aspect (“factor”) for CHP participants and Scioto landowners.



We randomly sampled Scioto CREP payment recipients to receive a nearly identical survey, but with a different set of program parameters, primarily increasing the incentive to a max of \$40/acre and probing nuances in control over access (see Table 6.4 in report for details). **Respondents in this pilot sample placed the highest importance on the \$40 incentive, and opportunities to limit recreational access to specific times of year or for certain species (Tables 6.5 and 6.6 in report).**

Implementing Change

Scioto landowners, CHP participants, and Ohioans in general show a wide mix of wildlife value orientations, and are significantly different from one another in the proportion of each of 4 wildlife value types (Section 3). However, a [memo](#) on agency culture at Ohio Division of Wildlife from 2018 suggests that a large majority of agency employees hold the same utilitarian (or traditionalist) value orientation (82.9%)—more than Ohioans generally, CHP participants, or Scioto landowners. **These numbers suggest that as they seek to expand access, managers should expect that they may not share values with Scioto landowners, and perhaps adjust outreach accordingly to capture the greater range of values on the landscape in Ohio.** In particular, the lack of importance of hunting as an aspect of program selection (either for or against) provides an opening to expand the scope of the program to include other wildlife-related pursuits, and perhaps garner both wider public support and additional buy-in from landowners who do not necessarily share utilitarian values.

Introduction

Private land provides 80% of the wildlife habitat in the United States (Benson, 2001), and public lands containing wildlife habitat suitable for outdoor recreation are limited in many regions of the country. Consequently, many hunters and outdoor enthusiasts rely on private lands for their recreation. Nationally, 85% of hunters report that they at least partially rely on private land for hunting, and 64% of hunters rely entirely on private lands for hunting (U.S. Department of the Interior et al., 2016). The need to turn to private land for hunting opportunities is even greater in the eastern half of the United States. For example, according to GIS estimates in Ohio only 3% of the huntable lands are public.

Much like outdoor recreational opportunity, successful wildlife conservation in Ohio is dependent on private landowners. Since 2004, the Scioto Conservation Reserve Enhancement Program (CREP) has aimed to increase wetlands and other nutrient-limiting land management practices via incentive payments to farmers who implement conservation practices (U.S. Department of Agriculture, 2011). This program is subject to variable congressional funding, fluctuating commodity prices (Barnes et al., 2019), and in Ohio specifically, shifting patterns of farm ownership and agricultural activity (Becot et al., 2020). This may be mitigated by funding opportunities presented by the Voluntary Public Access and Habitat Incentive Program and the conservation programs within the recently passed Great American Outdoors Act; however, specific program level implications are unclear.

The Cooperative, Hunting, Trapping, and Fishing Program (hereafter CHP) is Ohio's program for providing private land access to the public. At the time of the report, total CHP landowners numbered 757 representing 165,380 acres. Enrolled lands are not evenly distributed statewide, and District 2 represents over half of the total program both in terms of participants and enrolled property acres. In recent years, the program has suffered substantial decline for a host of reasons including but not limited to the following: decreased emphasis within the Ohio Division of Wildlife, aging landowners, land use conversion and development pressures, and emerging markets for recreational leasing.

In 2018 we performed a landowner survey and a hunter survey in order to evaluate the current program, and to inform future programs with similar aims. In 2019, we completed a similar study to determine the differences and similarities between CHP participants and landowners in the Scioto watershed, where concerns around land conservation and recreational access share substantial overlap. The report that follows focuses primarily on these comparisons, as well as choice-based experiments testing parameters for potential land access programs.

Section 1: Methods

Survey Design and Sampling

The survey instrument was designed to replicate the survey sent to participants in CHP in 2018. Minor changes were made to some items to reflect that these landowners were not necessarily enrolled in CHP (Appendix A). The choice experiment included for CHP participants was replicated for landowners in the Scioto watershed, while a subset of landowners received a modified choice experiment (hereafter, pilot), meant to test the parameters of a future, hypothetical program that could enhance incentives already received by participants in the Scioto CREP.

Landowners in the Scioto watershed were identified by first selecting counties with 15% or more of their landmass within the Scioto watershed boundaries (N = 22; Table 1.1.) We contacted auditor offices in each county in Spring 2019, and requested lists of landowners with holdings greater than 10 acres. Using the Google search engine, we cleaned lists to remove all landowner listings that could clearly be identified as a business, church, school or other organization. We sampled 430 landowners from each of the 22 counties (N = 9,460).

The pilot experiment only held relevance for CREP payment recipients, as the Ohio Division of Wildlife (ODW) anticipated a possible program to enhance CREP payments to maintain participation and increase acreage available to recreationists (particularly hunters). We received lists of 2017 CREP payment recipients from USDA Farm Service Agency in January 2018, and used these lists as our sampling frame. In cooperation with ODW staff, we selected 7 counties with particularly high rates of expiring CREP contracts (thus at risk for losing land in conservation) and with particularly low acreage of public lands available for recreation. We sampled 172 CREP payment recipients with landholdings of 10 acres or more in each of the 7 pilot counties (N = 1,204).

Survey Implementation

In mid-July of 2019 survey packets (cover letter, survey, and return envelope) were mailed to landowners in both samples. In August 2019, landowners were sent a reminder postcard, and about one month later, landowners who had not yet responded were sent a final survey packet (cover letter, survey, and return envelope). In each mailing, respondents were given the opportunity to take an identical survey online via a link from the survey platform Qualtrics, to improve response times and reduce costs associated with duplicate mailings and data entry.

Of the 9,460 Scioto landowners contacted, 1,511 responded, for an adjusted response rate of 18.2%. Of the 1,204 landowners contacted in the pilot area, 298 responded, for an adjusted response rate of 30.1% (See Table 1.1 for a breakdown of responses by county).

Table 1.1 Responses (N) by County

County	Watershed Respondents	Pilot Respondents
Adams	72	--
Champaign	79	--
Clinton	65	--
Crawford	64	--
Delaware	66	--
Fairfield	75	--
Fayette*	50	36
Franklin	49	--
Hardin*	50	35
Highland	69	--
Hocking	88	--
Jackson	73	--
Logan	99	--
Madison*	73	34
Marion*	60	47
Morrow	69	--
Pickaway*	63	37
Pick	63	--
Ross*	62	39
Scioto	61	--
Union*	76	62
Vinton	76	--
Unknown County	9	7
Total	1511	297

*Counties included in the pilot area

Section 2. Respondent Demographics

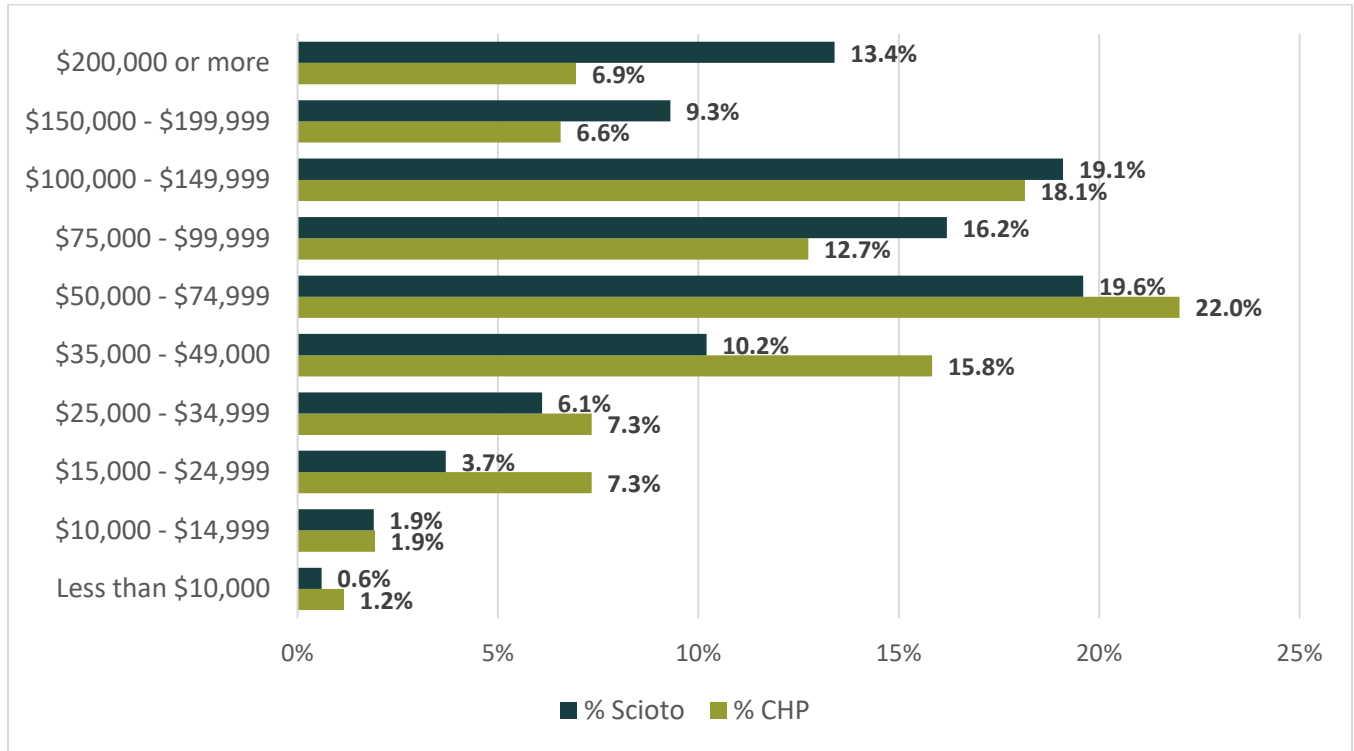
Overall, Scioto landowners had fewer years at their residence than CHP participants (28 vs. 40 years, respectively; Table 2.1). Fewer Scioto landowners were agricultural producers (43% vs. 61%), and they earned less gross income from agricultural production than CHP participants (\$61,355.49 vs. \$109,142.50, respectively), though this number varied widely. Likewise, CHP participants reported earning about twice as much of their yearly income from their property as Scioto landowners (31% vs. 16%).

Table 2.1 CHP and Scioto landowner demographics.

Demographic	CHP (N = 361)	Scioto (N = 1,439)
Average Age (SD)	69.5 (11.9)	63.9 (12.5)
% Female	16.4%	25.6%
% 1-4 children over 18	80.5%	75.0%
% any children under 18	7.4%	14.4%
Level of education: Mean (SD)	4.4 (1.6)	4.9 (1.6)
Less than 9th grade (1)	2.0%	1.5%
9th grade to 12th grade, no diploma (2)	2.8%	1.6%
High school diploma or equivalent (3)	35.6%	22.7%
Some college, no degree (4)	20.5%	19.6%
Associate's degree (5)	8.3%	8.5%
Bachelor's degree (6)	13.1%	24.0%
Graduate or professional degree (7)	17.7%	22.2%
Average Years at current residence (SD)	40.2 (19)	27.9 (20.0)
Where respondents grew up: Mean (SD)	4.3 (1.1)	4.0 (1.3)
Large city	2.3%	5.9%
Large town or suburb	4.3%	9.1%
Small town	18.6%	19.8%
Rural (non-agricultural)	7.4%	11.9%
Farming/agricultural-based	67.3%	53.3%
% Agricultural producers	60.9%	43.1%
Average gross income from production (SD)	\$109,142.50 (205,237)	\$61,355.49 (167,706)
Average % of respondent income from property (SD)	30.5% (34.1)	15.7% (51.5)

On average, Scioto landowners reported slightly higher household incomes than CHP participants (\$75,000 to \$99,999 vs. \$50,000 to \$74,999; Figure 2.1).

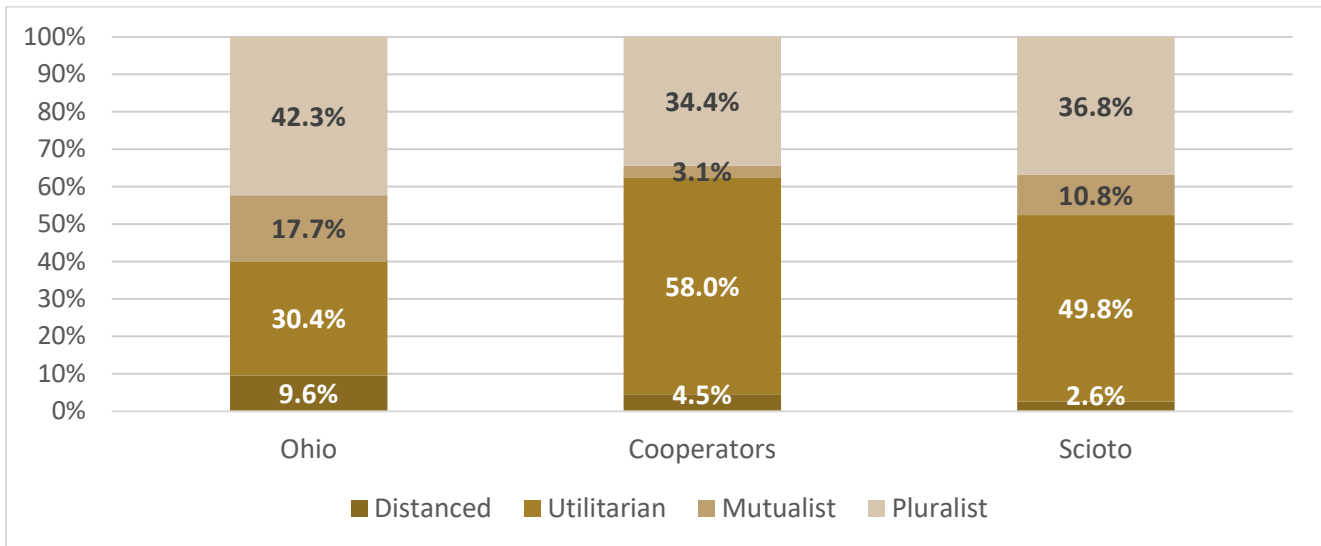
Figure 2.1 Landowner's total annual household income before taxes.



Section 3. Wildlife Value Orientations

We assessed wildlife value orientations (WVOs; Manfredo et al 2009, Teel & Manfredo 2010) of CHP landowners and Scioto landowners in order to understand how similar or different respondents were to Ohio citizens in general. Respondents answered a set of items which are used to assess value orientations toward wildlife management. Taken together, these items are used to classify landowners into groups (WVO types) with similar beliefs about wildlife: utilitarian (also called traditionalists in similar work), mutualist, pluralist, or distanced. Utilitarians tend to view wildlife as existing for the benefit of humans, while mutualists believe humans and wildlife should co-exist, and pluralists share beliefs with both utilitarians and mutualists. People that are distanced generally do not have clear ideas of how they think wildlife should be managed and are typically less interested in wildlife issues. WVO types for Ohioans from data collected in 2016 were statistically the same among rural Ohioans and Ohioans living in metropolitan statistical areas, and so are combined below (Figure 3.1).¹ However, the Ohio distribution differs from CHP participants and Scioto landowners, where nearly twice as many CHP participants hold utilitarian beliefs about wildlife management as Ohioans in general ($X^2(6, N=2193) = 455.04, p < .001, \text{Cramer's } V = 0.32$). This difference was not as stark between CHP and Scioto landowners, which suggests that while there may be no difference between rural and urban Ohio residents, landownership in particular may either drive or reflect a difference in wildlife value orientations.

Figure 3.1 Distributions of WVO Types for Ohioans, Cooperators, and Scioto Landowners

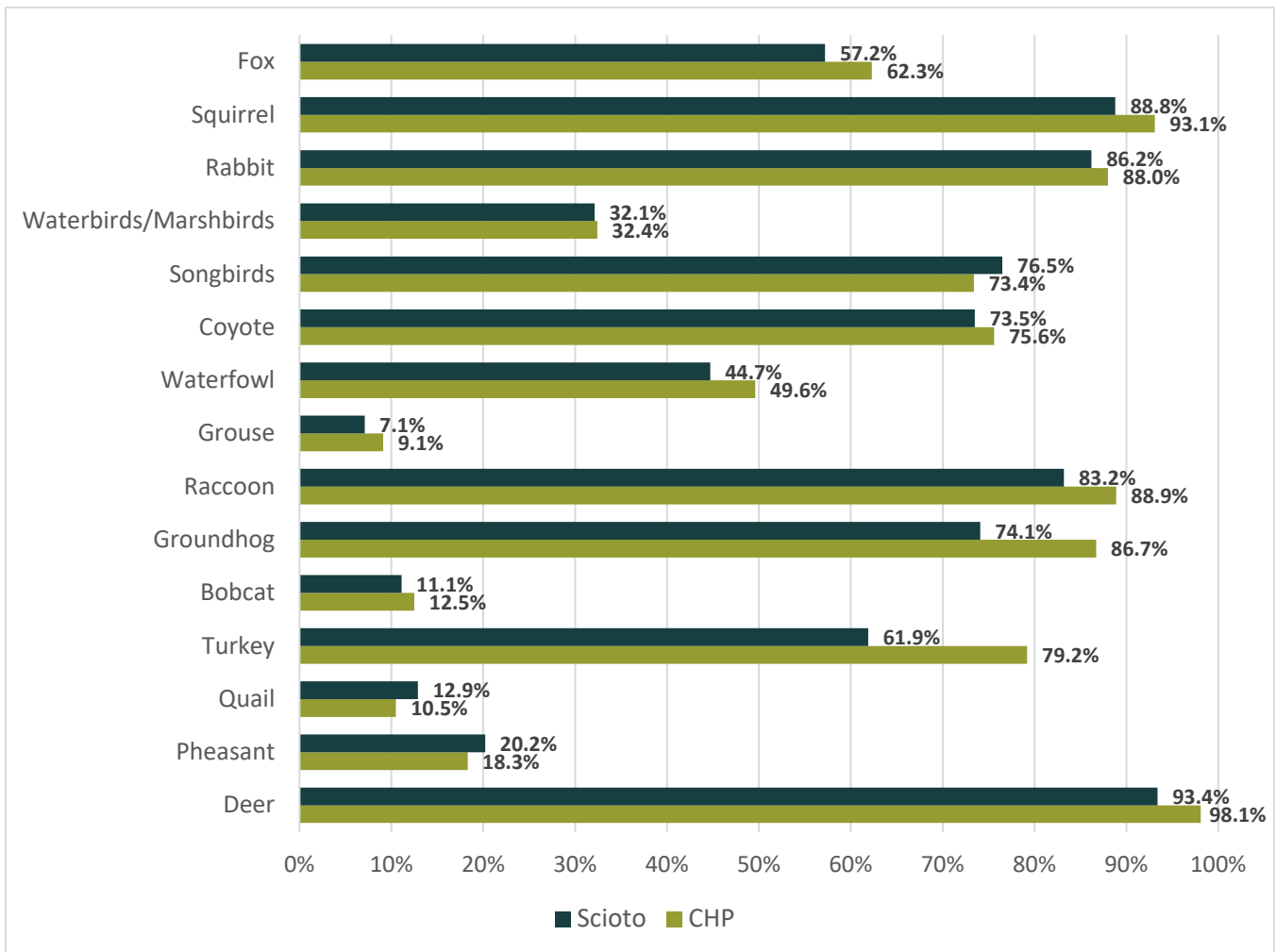


¹ Methodological details of data collection for 2016 can be found in Slagle, Dietsch, & Bruskotter (2019). While the distribution presented here differs slightly from the [America's Wildlife Values report for Ohio](#), these differences are likely due to small differences in data collection and measurement error, and do not change the implications of this report.

Section 4. Wildlife and Recreation on Property

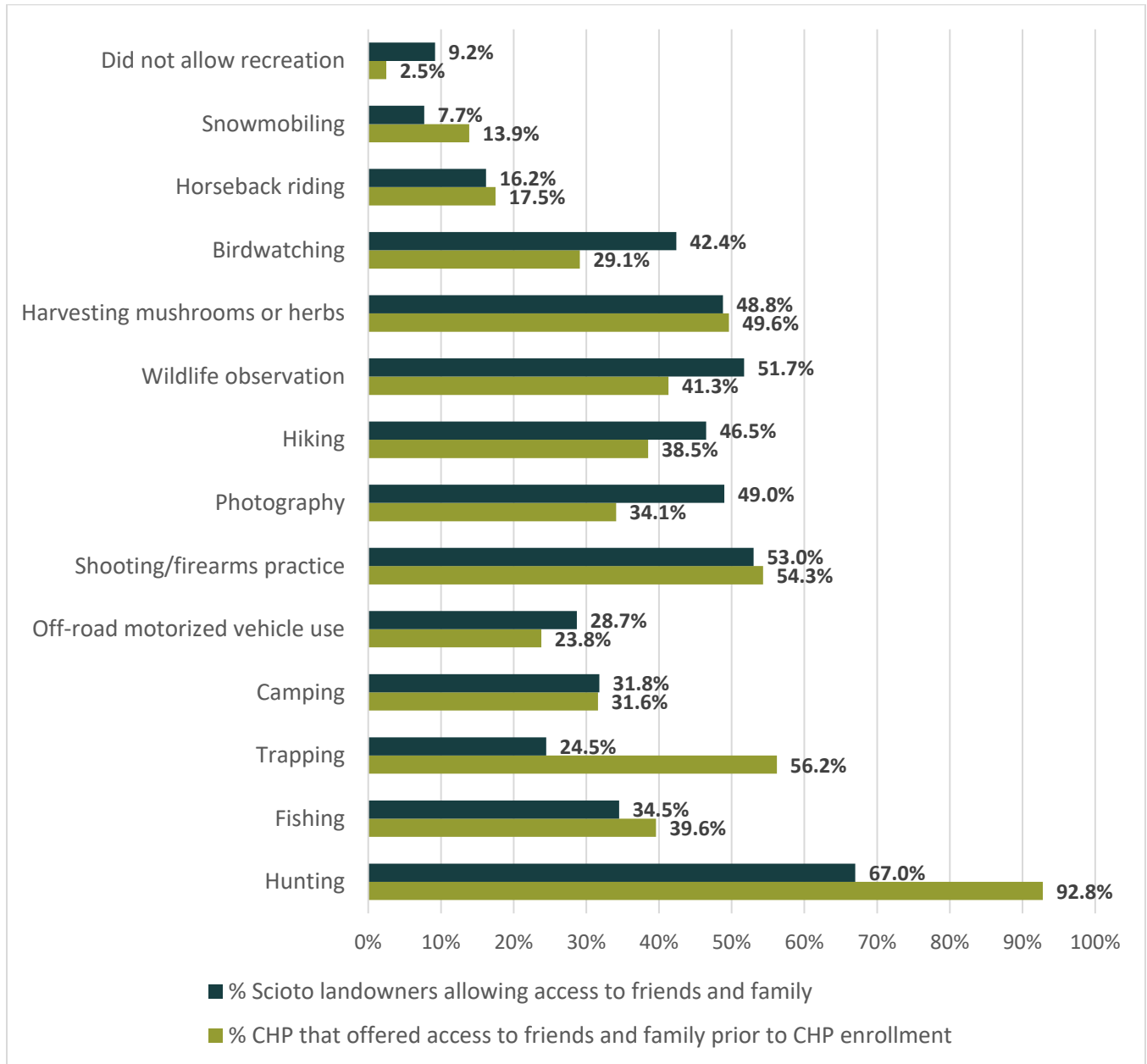
Landowners were asked which of several species they or others saw on their property in the past year (Figure 4.1). Over half of both Scioto landowners and CHP respondents reported observing ≥ 10 out of the 15 wildlife species listed. Percent of respondents viewing various species were similar across groups, except for turkey (79.2% of CHP and 61.9% of Scioto) and groundhogs (86.7% of CHP and 74.1% of Scioto). Scioto landowners and CHP participants considered roughly equivalent amounts of their property to be wildlife habitat (53.3% and 55.5%, respectively).

Figure 4.1 Wildlife Seen on CHP Properties



Scioto landowners were asked which of several outdoor activities they allowed friends and family to do on their property, while CHP participants were asked which activities they allowed prior to enrollment in the access program (Figure 4.2).

Figure 4.2 Activity access to property for friends and family

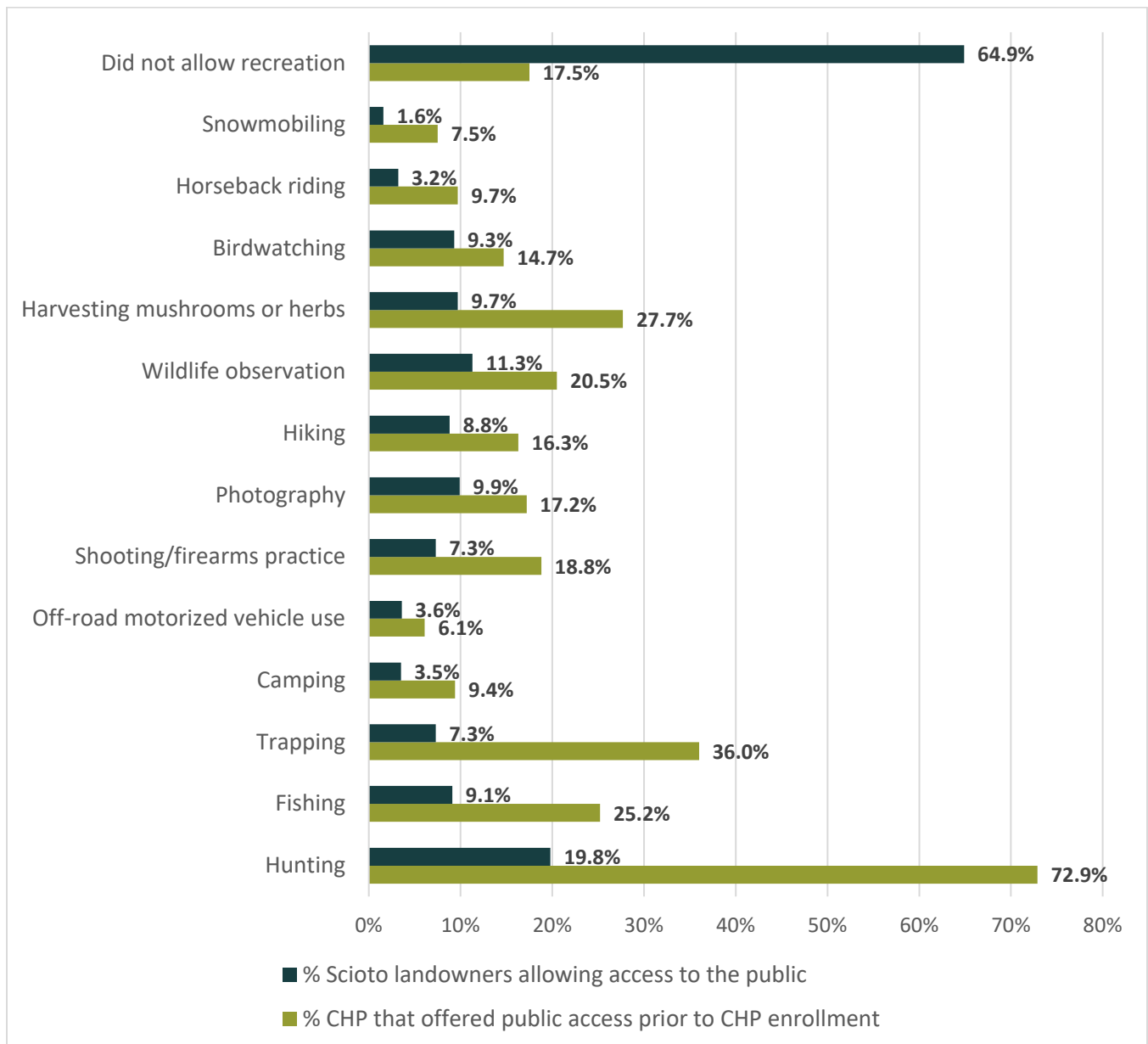


Slightly more Scioto landowners allowed non-consumptive activities (i.e. birdwatching, photography, hiking, and wildlife observation) among friends and family than CHP participants, while **nearly all CHP participants allowed friends and family to hunt their property (92.8%), compared to two-thirds of Scioto landowners. Similarly, over twice as many CHP participants (56.2%) allowed trapping on their property by friends and family than did Scioto landowners (24.5%), suggesting a fairly sharp contrast in either the activities owners find**

acceptable on their land, or between the preferred outdoor activities of owners' friends and family. When asked specifically about their support of hunting and trapping, Scioto landowners reported low opposition to both (9.2% and 26.8%, respectively), lending some support to the latter explanation—that Scioto landowners' friends and family may not participate in hunting or trapping, thus leaving limited opportunity to allow it on the property.

Scioto landowners and CHP participants were also asked about the same activities allowed for the public on their property (Figure 4.3).

Figure 4.3 Activity access to property for the public



Roughly two in three Scioto landowners reported not allowing recreation by the public on their lands, while fewer than one in five CHP participants reported the same prior to enrolling in CHP. For all types of recreation, fewer Scioto landowners reported allowing public access to their property, with the largest gap between Scioto landowners and CHP participants being hunting—**73% of CHP participants allowed hunting by the public before they enrolled in CHP, while just 19.8% of Scioto landowners said the same.**

When CHP participants were asked how many hunters they approved for access and denied access to hunt on their CHP property in the 2017-2018 season, 64% of the landowners approved access for 6 or more hunters while only 19.5% denied access to 6 or more hunters (Figure 4.4). By comparison, 7.6% of Scioto landowners granted access to 6 or more hunters in the previous year (Figure 4.5), however, due to an adjustment in measurement between the two surveys, we can determine that 60.3% of Scioto landowners granted access to between 1 and 5 hunters in the previous year. **In combination with Figures 4.2 and 4.3, we expect that the hunters being granted access by Scioto landowners are generally friends and family, though we did not ask this explicitly.**

Figure 4.4 Hunters Granted or Denied Access by a CHP Landowner

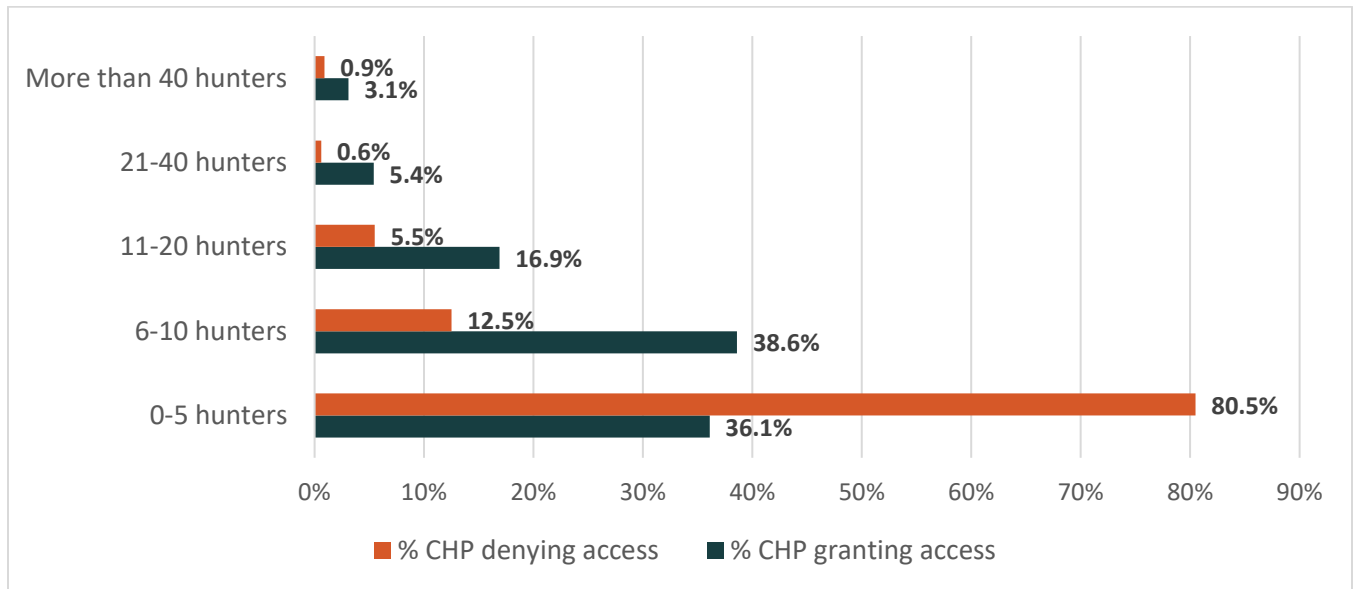
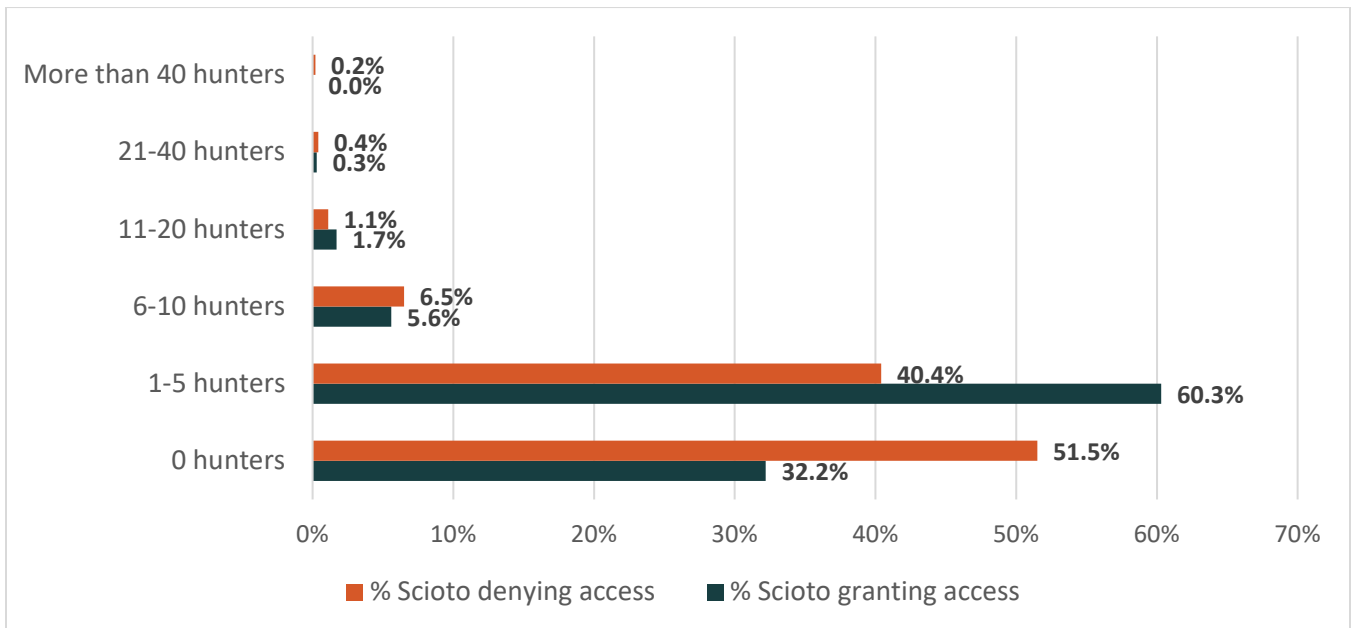


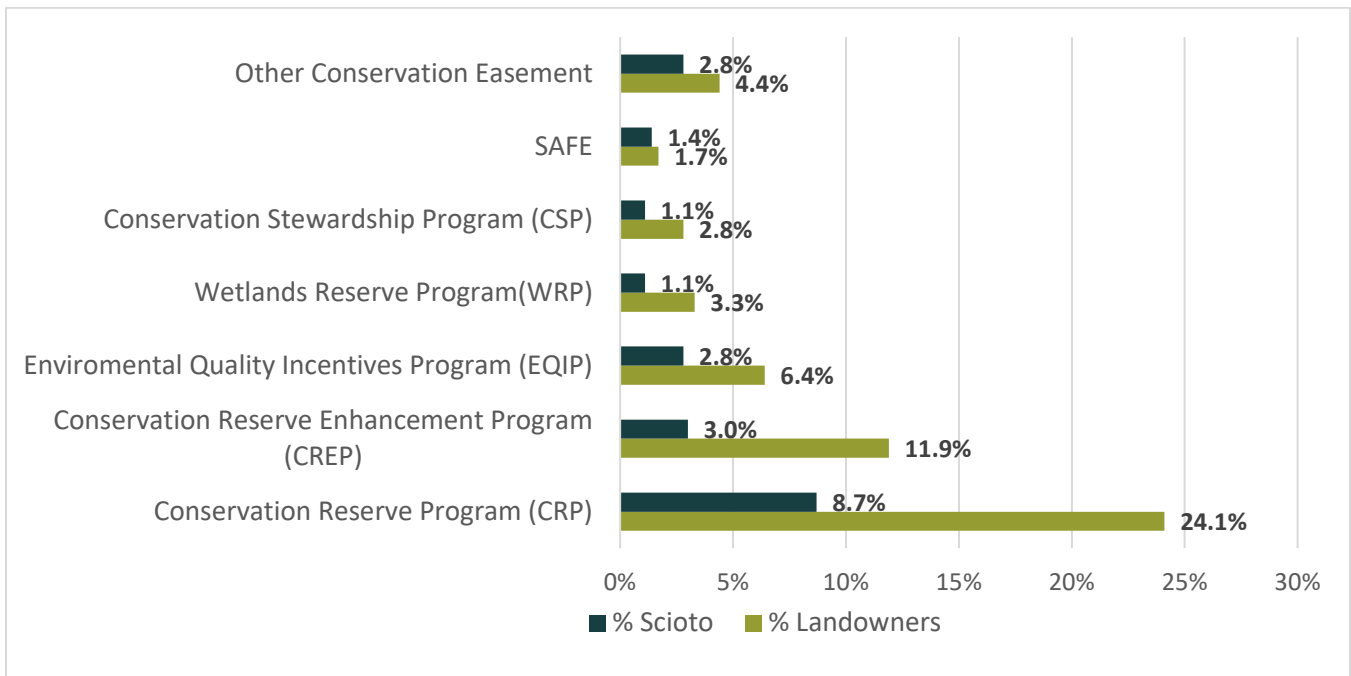
Figure 4.5 Hunters Granted or Denied Access by a Scioto Landowner



Section 5. Conservation Programs on Property

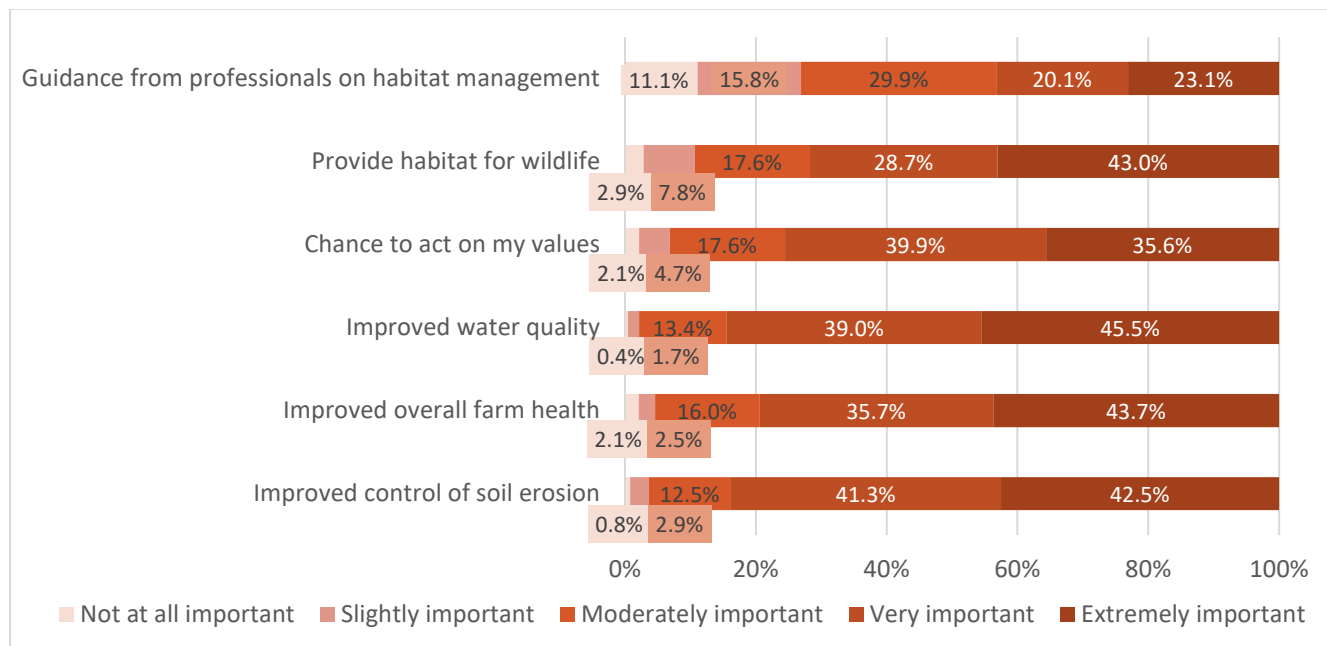
Most landowners in the CHP (66.2%) and Scioto watershed (83.5%) do not participate in conservation programs, perhaps unsurprising given the difference in agricultural producers within each group (Table 2.1). However, of respondents that did report participation in ≥ 1 conservation program, the Conservation Reserve Program was most common (24% CHP, 8.7%; Figure 5.1). As a rough proxy for the conservation-mindedness of CHP landowners, at least as can be gauged by participation in governmental assistance programs as compared to general agricultural producers statewide, CHP landowners are roughly comparable to Ohio farmers in general in this regard. Young (2014) reported 41% of agricultural producers participate in ≥ 1 conservation program; 30.3% of Ohio farmers were enrolled in Conservation Reserve Program.

Figure 5.1 Enrollment in Conservation Programs



Scioto landowners who indicated participation in conservation programs were asked about the importance of several potential benefits of enrollment in the program (Figure 5.2). Five of the 6 benefits listed were ranked as very important or extremely important by between 72% and 84.5% of respondents. **Similarly to the CHP participants, the high importance of almost every benefit creates some difficulty in determining high priority benefits that might influence enrollment, with the same notable exception of the perceived lack of importance of guidance from professionals on habitat management.**

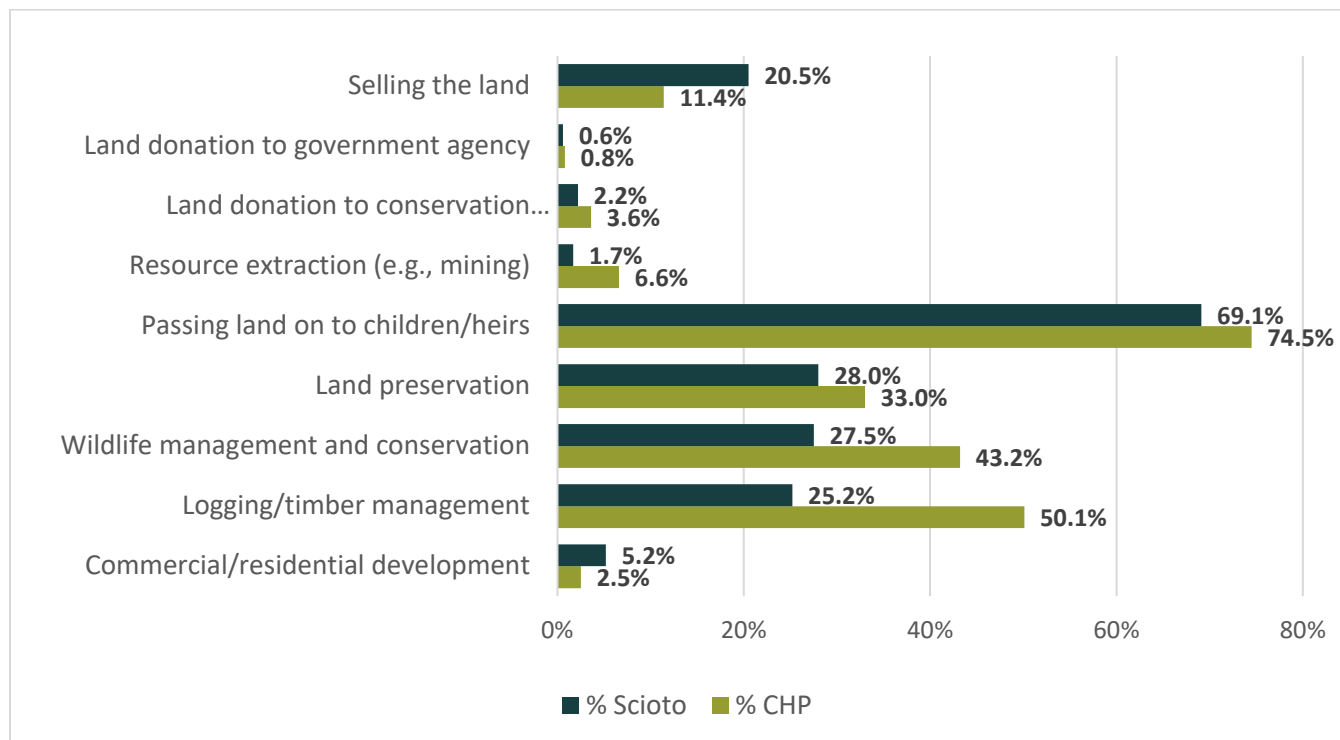
Figure 5.2 Importance of various benefits from conservation program enrollment among Scioto landowners.



We provided a brief description of the CHP program, and asked Scioto landowners about their awareness of the CHP program. Of those that responded, **3 in 4 indicated it was the first time they had heard of the CHP program (76%)**, while roughly 1 in 5 said that they had heard of the program, but that the present property was not enrolled (18.1%). Less than 1% said that some portion or all of their property is currently enrolled (0.7%), or that the property was enrolled but has been removed from the program (0.3%), while 5% provided some other response.

Scioto landowners and CHP participants were asked what long-term plans they had for their properties (Figure 5.3). They were given a list of possible future plans and asked to select all that apply. For both groups, the most commonly selected were passing land on to children/heirs (CHP: 74.5%, Scioto 69.1%). More CHP participants than Scioto participants reported plans to preserve the land (33% vs. 28%, respectively), and dedicate it to wildlife management and conservation (43% vs. 28%, respectively).

Figure 5.3 Landowner's Long-Term Plans for property



Section 6. Public Access Program Scenarios Preferred by Landowners

In order to better understand the preferences of current participants in the CHP compared to landowners generally in the Scioto watershed, we used Sawtooth v. 9.8.1 for conjoint analysis (Sawtooth Software, 2019) to construct a discrete choice experiment that probed parameters of potential programs that might result in a greater or lower likelihood of enrollment (Table 6.1). Participants were shown eight possible scenarios with two hypothetical programs each and asked to select which program they would prefer to enroll in, with an option to select “neither” if neither program suited their preferences. We used Hierarchical-Bayes modeling in Sawtooth to determine the relative importance of each program attribute and level, and **we found that control over access was the most important attribute predicting program enrollment among landowners already enrolled in CHP, while Scioto landowners placed more importance on the incentive (Table 6.2). CHP participants wished to maintain as much control as possible over who was given permission to be on their land (Table 6.3). Likewise, Scioto landowners wished to maintain control over permission for access, however, they showed a stronger preference for ODW to share their information on a case-by-case basis, rather than having their contact information shared on the ODW website.**

Table 6.1 Possible program parameters in discrete choice experiment

Choice attribute	Level	Description in survey
Focus of program	Hunt	This program aims to match hunters seeking areas to hunt with landowners willing to grant access to their land.
	Rec	This program aims to match people seeking land for wildlife recreation with landowners willing to allow access to their land.
Hunting access required?	Yes	Once per year, must be willing to grant access to at least 1 hunter outside of your immediate family.
	No	There is no requirement on the types of recreation allowed on enrolled land.
Access controlled?	Posted on website	You handle all inquiries and decisions about access to your land. The Division of Wildlife places your contact information on their website so people can ask for permission.
	Seek info from ODW	You handle all inquiries and decisions about access to your land. The Division of Wildlife shares your contact information with people that contact them seeking access.
	ODW decides access	The Division of Wildlife handles inquiries and decisions for access to your enrolled land, using your pre-specified criteria.
Length of time between WO contact	2Y	A wildlife officer contacts you every 2 years to determine continued participation in the program.
	4Y	A biologist visits once per year to assess habitat quality/type and recreation opportunities, as well as offer advice on habitat improvement opportunities. A wildlife officer visits once every 4 years to determine continued participation.
Incentive	Signs	You receive "Parking Area" and "Hunting with Permission" signs and hunting permission slips.
	\$2 per acre	You receive \$2 per acre enrolled.
	\$5 per acre	You receive \$5 per acre enrolled.
Prefer not to enroll	NONE	

Table 6.2 Relative attribute importance from hierarchical-Bayes estimation for each sample

Choice attribute	CHP (n = 349)		Scioto (n = 1242)	
	Average Importances	SD	Average Importances	SD
Focus	5.19646	4.07599	8.7172	3.63504
Recreation	14.97331	9.99836	12.6722	11.85782
Access	41.49818	15.65686	29.57662	8.77035
Frequency of contact	14.30796	9.48698	13.24054	5.28119
Incentive	24.02408	11.66098	35.79343	9.35961

Table 6.3 Hierarchical-Bayes model for program choice for each sample

Choice attribute	Level	CHP (n = 349)		Scioto (n = 1242)	
		Average Utilities	SD	Average Utilities	SD
Focus of program	Hunt	4.88023	15.78625	15.61699	17.71483
	Rec	-4.88023	15.78625	-15.61699	17.71483
Hunting access required?	Yes	27.37031	35.76011	-5.62849	43.02973
	No	-27.37031	35.76011	5.62849	43.02973
Access controlled?	Posted on website	58.02844	39.36895	-53.72047	61.95132
	Seek info from ODW	66.69316	32.66936	36.32768	17.56094
	ODW decides access	-124.7216	66.24108	17.3928	71.25748
Length of time between WO contact	2Y	17.39692	39.27031	26.45456	23.88501
	4Y	-17.39692	39.27031	-26.45456	23.88501
Incentive	Signs	44.32581	63.86285	-96.96347	55.75394
	\$2 per acre	-39.6754	25.21311	47.00105	36.77151
	\$5 per acre	-4.65041	46.62843	49.96242	37.68793
Prefer not to enroll	NONE	109.05179	250.93763	933.22637	634.0903

We also tested potential parameters for a program aimed at enhancing the Scioto CREP program, and bringing additional acreage into recreational opportunity for Ohioans in counties where public land for recreation is particularly scarce. We selected 7 counties in the Scioto watershed that were determined to represent the largest potential acreage losses to the Scioto CREP in the next 3 years, and sampled CREP payment recipients from 2017 (hereafter, pilot sample). We used identical mailing methods and timelines as the overall Scioto watershed sample. Similar to the CHP/Scioto experiment, we assessed several factors and levels (Table 6.4) for potential program parameters. Again, participants were shown eight possible scenarios with two hypothetical programs each and asked to select which program in which they would prefer to enroll, with an option to select “neither” if neither program suited their preferences. We again used Hierarchical-Bayes modeling in Sawtooth to determine the relative importance of each program attribute and level. **Respondents in this pilot area placed the highest importance on the \$40 incentive, and opportunities to limit recreational access to specific times of year or for certain species (Tables 6.5 and 6.6).**

Table 6.4 Possible program parameters in discrete choice experiment for pilot program

Choice attribute	Level	Description in survey
Recreational Use	Hunt	In this program, you are required to allow at least 1 hunter, trapper, or fisherman outside of your immediate family, friends, or acquaintances.
	Rec	In this program, you are required to allow at least one recreationist (e.g. hunter, wildlife photographer, birder, etc.) outside of your immediate family, friends or acquaintances.
Time of use	Year Round	You are required to allow public access to the land for the allowed recreational activities year-round/during all legal seasons for specific activities.
	Limit	You are allowed to limit recreational access to specific times of year or for certain species.
Access management	Maintain control	You decide who receives permission to access your property for all allowed recreational activities, and maintain contact lists for anyone using the property under this agreement. Recreationists are periodically surveyed by ODW to confirm access and assess satisfaction.
	ODW decides access	Ohio Division of Wildlife determines permissions for access by using a tech application that gives real-time permission to recreationists and monitors usage of the property.
Incentive	Signs	You receive permission slips for recreationists seeking access on your land, and “Access by permission only” signs with ODW logo.
	\$10 per acre	You receive \$10 per acre enrolled.
	\$20 per acre	You receive \$20 per acre enrolled.
	\$40 per acre	You receive \$40 per acre enrolled.
Prefer not to enroll	NONE	

Table 6.5 Relative attribute importance from hierarchical-Bayes estimation (N = 268)

Choice attribute	Average Importances	SD
Focus of program	10.47112	3.74369
Time of use	31.7306	10.59144
Access management	16.8037	8.91921
Incentive	40.99458	10.10785

Table 6.6 Hierarchical-Bayes model for program choice (N = 268)

Choice attribute	Level	Average Utilities	SD
Focus of program	Hunt	17.03697	14.31557
	Rec	-17.03697	14.31557
Time of use	Year-round	-62.54709	23.75565
	Limit	62.54709	23.75565
Access management	Maintain control	32.31115	20.09918
	ODW decides access	-32.31115	20.09918
Incentive	Signs	11.87223	41.58468
	\$10 per acre	-85.5843	32.04037
	\$20 per acre	8.68595	20.82698
	\$40 per acre	65.0261	27.21569
Prefer not to enroll	NONE	379.3422	227.5421

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Appendix A: Scioto Landowner Survey Questions

The following questions are specific to your land in Ohio that is enrolled in the Conservation Reserve Program (CRP) or a specific Conservation Reserve Enhancement Program (CREP). Please answer them to the best of your knowledge. Are you the primary decision maker with regards to land management decisions for this land?

- No → please pass this survey to the primary decision maker to complete and return, or simply stop and return this survey so we can mark your response.
- Yes

Section A. About your land

1. Have you or others that have spent time on this property seen any of the following wildlife on the property in the last year? *(Check all that apply)*

- | | | |
|--------------------------------------|--|------------------------------------|
| <input type="checkbox"/> Deer | <input type="checkbox"/> Waterfowl | <input type="checkbox"/> Raccoon |
| <input type="checkbox"/> Pheasant | <input type="checkbox"/> Coyotes | <input type="checkbox"/> Grouse |
| <input type="checkbox"/> Quail | <input type="checkbox"/> Songbirds | <input type="checkbox"/> Groundhog |
| <input type="checkbox"/> Turkey | <input type="checkbox"/> Waterbirds/Marshbirds | <input type="checkbox"/> Squirrel |
| <input type="checkbox"/> Bobcat | <input type="checkbox"/> Rabbit | <input type="checkbox"/> Fox |
| <input type="checkbox"/> Other _____ | | |

2. What percent of this property would you consider to be wildlife habitat? _____%

3. Is this property enrolled in any of the conservation programs listed below? *(Check all that apply. If this property is not enrolled in any of these conservation programs, skip to Section B.)*

- | | |
|--|--|
| <input type="checkbox"/> Conservation Reserve Program | <input type="checkbox"/> Wetlands Reserve Program (WRP) |
| <input type="checkbox"/> Conservation Reserve Enhancement Program (CREP; e.g. Scioto, Big Walnut, Western Lake Erie) | <input type="checkbox"/> Conservation Stewardship Program (CSP) |
| <input type="checkbox"/> Environmental Quality Incentives Program (EQIP) | <input type="checkbox"/> SAFE (e.g. Monarch, Quail, Grassland Complex, Pheasant) |
| | <input type="checkbox"/> Other conservation easement |
| | <input type="checkbox"/> I don't know |

3a. There are a variety of benefits associated with conservation programs. How important are the following benefits of these program to you?

<i>(Circle one for each item)</i>	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Improved control of soil erosion	1	2	3	4	5
Improved overall farm health	1	2	3	4	5
Improved water quality	1	2	3	4	5
Chance to act on my values	1	2	3	4	5
Provide habitat for wildlife	1	2	3	4	5
Guidance from professionals on habitat management	1	2	3	4	5

Section B. Your thoughts on wildlife

<p>1. Generally speaking, do you oppose or support regulated public <u>hunting</u> as a recreational activity?</p> <p><input type="checkbox"/> Strongly oppose</p> <p><input type="checkbox"/> Oppose</p> <p><input type="checkbox"/> Neither oppose nor support</p> <p><input type="checkbox"/> Support</p> <p><input type="checkbox"/> Strongly support</p>	<p>2. Generally speaking, do you oppose or support regulated public <u>trapping</u> as a recreational activity?</p> <p><input type="checkbox"/> Strongly oppose</p> <p><input type="checkbox"/> Oppose</p> <p><input type="checkbox"/> Neither oppose nor support</p> <p><input type="checkbox"/> Support</p> <p><input type="checkbox"/> Strongly support</p>
--	---

3. Please indicate how strongly you disagree or agree with the following statements.

<i>(Circle one for each item)</i>	Strongly disagree	Disagree	Somewhat disagree	Neither disagree or agree	Somewhat agree	Agree	Strongly agree
Fish and wildlife are on earth primarily for people to use.	1	2	3	4	5	6	7
I feel a strong emotional bond with animals.	1	2	3	4	5	6	7
Humans should manage fish and wildlife populations so that humans benefit.	1	2	3	4	5	6	7
I value the sense of companionship I receive from animals.	1	2	3	4	5	6	7
The needs of humans should take priority over fish and wildlife protection.	1	2	3	4	5	6	7
I take great comfort in the relationships I have with animals.	1	2	3	4	5	6	7
I care about animals as much as I do other people.	1	2	3	4	5	6	7
People who want to hunt should be provided the opportunity to do so.	1	2	3	4	5	6	7

4. Please indicate how strongly you disagree or agree with the following statements.

<i>(Circle one for each item)</i>	Strongly disagree	Disagree	Somewhat disagree	Neither disagree or agree	Somewhat agree	Agree	Strongly agree
Hunting does not respect the lives of animals.	1	2	3	4	5	6	7
Animals should have rights similar to the rights of humans.	1	2	3	4	5	6	7
I view all living things as one big family.	1	2	3	4	5	6	7
We should strive for a world where there's an abundance of fish and wildlife for hunting and fishing.	1	2	3	4	5	6	7
Wildlife are like my family and I want to protect them.	1	2	3	4	5	6	7
Hunting is cruel and inhumane to animals.	1	2	3	4	5	6	7
It is acceptable to use fish and wildlife in research even if it may harm or kill some animals.	1	2	3	4	5	6	7
It is acceptable for people to kill wildlife if they think it poses a threat to their property.	1	2	3	4	5	6	7
It is acceptable for people to kill wildlife if they think it poses a threat to their life.	1	2	3	4	5	6	7
It would be more rewarding to me to help animals rather than people	1	2	3	4	5	6	7
We should strive for a world where humans and fish and wildlife can live side by side without fear.	1	2	3	4	5	6	7

Section C. Choosing land management programs

Below is a series of 8 hypothetical scenarios that describe 2 programs in which you might choose to enroll to manage your land. Some of these program descriptions may seem unlikely, however, we are still interested in your opinions. The abbreviation “ODW” refers to the Ohio Division of Wildlife. For each scenario, please select the one choice with the characteristics you prefer by checking the appropriate box below that choice. If you prefer neither, please select the option on the far right indicating that you would not enroll.

Scenario 1. Which program would you enroll in? (Check one)

Program 1	Program 2	Neither
<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 recreationist (e.g. hunter, wildlife photographer, birder, etc.) outside of your immediate family, friends or acquaintances. ❖ Public access must be allowed for outdoor recreational activities year-round/during all legal seasons for specific activities. ❖ ODW determines permissions for access by using a tech application that gives real-time permission to recreationists and monitors their usage of the property. ❖ You receive \$20 per acre enrolled. 	<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 hunter, trapper, or fisherman outside of your immediate family, friends, or acquaintances. ❖ Public access must be allowed for outdoor recreational activities year-round/during all legal seasons for specific activities. ❖ You manage access to your property for all allowed recreational activities, and maintain contact lists for anyone using the property under this agreement. Recreationists are periodically surveyed by ODW to confirm access and assess satisfaction. ❖ You receive \$10 per acre enrolled. 	<p>If these were my only two choices, I would not enroll.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scenario 2. Which program would you enroll in? (Check one)

Program 1	Program 2	Neither
<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 recreationist (e.g. hunter, wildlife photographer, birder, etc.) outside of your immediate family, friends or acquaintances. ❖ You may limit public recreational access to specific times of year or for certain species. ❖ You manage access to your property for all allowed recreational activities, and maintain contact lists for anyone using the property under this agreement. Recreationists are periodically surveyed by ODW to confirm access and assess satisfaction. ❖ You receive permission slips for recreationists seeking access on your land, and “Access by permission only” signs with ODW logo. 	<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 hunter, trapper, or fisherman outside of your immediate family, friends, or acquaintances. ❖ You may limit public recreational access to specific times of year or for certain species. ❖ ODW determines permissions for access by using a tech application that gives real-time permission to recreationists and monitors their usage of the property. ❖ You receive permission slips for recreationists seeking access on your land, and “Access by permission only” signs with ODW logo. 	<p>If these were my only two choices, I would not enroll.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scenario 3. Which program would you enroll in? (Check one)

Program 1	Program 2	Neither
<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 hunter, trapper, or fisherman outside of your immediate family, friends, or acquaintances. ❖ Public access must be allowed for outdoor recreational activities year-round/during all legal seasons for specific activities. ❖ You manage access to your property for all allowed recreational activities, and maintain contact lists for anyone using the property under this agreement. Recreationists are periodically surveyed by ODW to confirm access and assess satisfaction. ❖ You receive \$40 per acre enrolled. 	<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 recreationist (e.g. hunter, wildlife photographer, birder, etc.) outside of your immediate family, friends or acquaintances. ❖ You may limit public recreational access to specific times of year or for certain species. ❖ ODW determines permissions for access by using a tech application that gives real-time permission to recreationists and monitors their usage of the property. ❖ You receive \$40 per acre enrolled. 	<p>If these were my only two choices, I would not enroll.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scenario 4. Which program would you enroll in? (Check one)

Program 1	Program 2	Neither
<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 hunter, trapper, or fisherman outside of your immediate family, friends, or acquaintances. ❖ Public access must be allowed for outdoor recreational activities year-round/during all legal seasons for specific activities. ❖ You manage access to your property for all allowed recreational activities, and maintain contact lists for anyone using the property under this agreement. Recreationists are periodically surveyed by ODW to confirm access and assess satisfaction. ❖ You receive \$20 per acre enrolled. 	<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 recreationist (e.g. hunter, wildlife photographer, birder, etc.) outside of your immediate family, friends or acquaintances. ❖ You may limit public recreational access to specific times of year or for certain species. ❖ You manage access to your property for all allowed recreational activities, and maintain contact lists for anyone using the property under this agreement. Recreationists are periodically surveyed by ODW to confirm access and assess satisfaction. ❖ You receive \$10 per acre enrolled. 	<p>If these were my only two choices, I would not enroll.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scenario 5. Which program would you enroll in? (Check one)

Program 1	Program 2	Neither
<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 hunter, trapper, or fisherman outside of your immediate family, friends, or acquaintances. ❖ You may limit public recreational access to specific times of year or for certain species. ❖ ODW determines permissions for access by using a tech application that gives real-time permission to recreationists and monitors their usage of the property. ❖ You receive \$40 per acre enrolled. 	<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 recreationist (e.g. hunter, wildlife photographer, birder, etc.) outside of your immediate family, friends or acquaintances. ❖ You may limit public recreational access to specific times of year or for certain species. ❖ ODW determines permissions for access by using a tech application that gives real-time permission to recreationists and monitors their usage of the property. ❖ You receive \$20 per acre enrolled. 	<p>If these were my only two choices, I would not enroll.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scenario 6. Which program would you enroll in? (Check one)

Program 1	Program 2	Neither
<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 hunter, trapper, or fisherman outside of your immediate family, friends, or acquaintances. ❖ Public access must be allowed for outdoor recreational activities year-round/during all legal seasons for specific activities. ❖ ODW determines permissions for access by using a tech application that gives real-time permission to recreationists and monitors their usage of the property. ❖ You receive permission slips for recreationists seeking access on your land, and “Access by permission only” signs with ODW logo. 	<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 recreationist (e.g. hunter, wildlife photographer, birder, etc.) outside of your immediate family, friends or acquaintances. ❖ Public access must be allowed for outdoor recreational activities year-round/during all legal seasons for specific activities. ❖ You manage access to your property for all allowed recreational activities, and maintain contact lists for anyone using the property under this agreement. Recreationists are periodically surveyed by ODW to confirm access and assess satisfaction. ❖ You receive \$40 per acre enrolled. 	<p>If these were my only two choices, I would not enroll.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scenario 7. Which program would you enroll in? (Check one)

Program 1	Program 2	Neither
<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 hunter, trapper, or fisherman outside of your immediate family, friends, or acquaintances. ❖ You may limit public recreational access to specific times of year or for certain species. ❖ You manage access to your property for all allowed recreational activities, and maintain contact lists for anyone using the property under this agreement. Recreationists are periodically surveyed by ODW to confirm access and assess satisfaction. ❖ You receive \$20 per acre enrolled. 	<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 recreationist (e.g. hunter, wildlife photographer, birder, etc.) outside of your immediate family, friends or acquaintances. ❖ Public access must be allowed for outdoor recreational activities year-round/during all legal seasons for specific activities. ❖ ODW determines permissions for access by using a tech application that gives real-time permission to recreationists and monitors their usage of the property. ❖ You receive \$10 per acre enrolled. 	<p>If these were my only two choices, I would not enroll.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Scenario 8. Which program would you enroll in? (Check one)

Program 1	Program 2	Neither
<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 recreationist (e.g. hunter, wildlife photographer, birder, etc.) outside of your immediate family, friends or acquaintances. ❖ You may limit public recreational access to specific times of year or for certain species. ❖ You manage access to your property for all allowed recreational activities, and maintain contact lists for anyone using the property under this agreement. Recreationists are periodically surveyed by ODW to confirm access and assess satisfaction. ❖ You receive \$10 per acre enrolled. 	<ul style="list-style-type: none"> ❖ This program requires you to allow at least 1 hunter, trapper, or fisherman outside of your immediate family, friends, or acquaintances. ❖ Public access must be allowed for outdoor recreational activities year-round/during all legal seasons for specific activities. ❖ ODW determines permissions for access by using a tech application that gives real-time permission to recreationists and monitors their usage of the property. ❖ You receive permission slips for recreationists seeking access on your land, and “Access by permission only” signs with ODW logo. 	<p>If these were my only two choices, I would not enroll.</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section D. Recreation on your land

1. Completing the sentence below, please check the box below the modifier that best describes your opinion. Boxes indicate the degree to which each item is represented by the word on the left (e.g. 3 = "Extremely Necessary") versus the word on the right (e.g. -3 = "Extremely Low Priority").

"Generally speaking, granting access to my property to members of the public, whether through permission, leasing, or other means, is..."

		Extremely	Quite	Slightly	Equal Balance	Slightly	Quite	Extremely	
a.	Necessary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Low Priority
b.	Beneficial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Harmful
c.	Pleasant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Unpleasant
d.	Valuable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Worthless

2. Do you allow family and friends to engage in any of the following types of recreation on this property? (Check all that apply. If none, check "I do not allow any recreation of this type")

- I do not allow any recreation of this type
- Fishing
- Trapping
- Camping
- Off-road motorized vehicle use
- Shooting/firearms practice
- Photography
- Other _____
- Hiking
- Wildlife observation
- Harvesting mushrooms or herbs
- Birdwatching
- Horseback riding
- Snowmobiling
- Hunting

3. Do you allow members of the public (outside of family and friends) to engage in any of the following types of recreation on this property? (Check all that apply. If none, check "I do not allow any recreation of this type")

- I do not allow recreation of this type
- Fishing
- Trapping
- Camping
- Off-road motorized vehicle use
- Shooting/firearms practice
- Photography
- Other _____
- Hiking
- Wildlife observation
- Harvesting mushrooms or herbs
- Birdwatching
- Horseback riding
- Snowmobiling
- Hunting

4. Over the previous calendar year, during which months of the year did you allow any type of recreation on your land (if any)? (Check all that apply)

- | | | |
|-----------------------------------|---------------------------------|------------------------------------|
| <input type="checkbox"/> January | <input type="checkbox"/> May | <input type="checkbox"/> September |
| <input type="checkbox"/> February | <input type="checkbox"/> June | <input type="checkbox"/> October |
| <input type="checkbox"/> March | <input type="checkbox"/> July | <input type="checkbox"/> November |
| <input type="checkbox"/> April | <input type="checkbox"/> August | <input type="checkbox"/> December |

5. If you allow hunting on this property, which of the following species do you allow hunters to take? If you do not allow hunting, please check the box "I do not allow hunting", otherwise, check all that apply.

- | | |
|---|------------------------------------|
| <input type="checkbox"/> I do not allow hunting for any species | <input type="checkbox"/> Deer |
| <input type="checkbox"/> Pheasant | <input type="checkbox"/> Waterfowl |
| <input type="checkbox"/> Quail | <input type="checkbox"/> Coyotes |
| <input type="checkbox"/> Turkey | <input type="checkbox"/> Rabbit |
| <input type="checkbox"/> Grouse | <input type="checkbox"/> Squirrel |
| <input type="checkbox"/> Groundhog | <input type="checkbox"/> Fox |
| <input type="checkbox"/> Raccoon | |
| <input type="checkbox"/> Other _____ | |

<p>6. In the past year, approximately how many hunters have you <u>granted permission</u> to hunt on this property?</p> <p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> 1-5</p> <p><input type="checkbox"/> 6-10</p> <p><input type="checkbox"/> 11-20</p> <p><input type="checkbox"/> 21-40</p> <p><input type="checkbox"/> More than 40</p>	<p>7. In the past year, approximately how many hunters have you <u>refused permission</u> to hunt on this property?</p> <p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> 1-5</p> <p><input type="checkbox"/> 6-10</p> <p><input type="checkbox"/> 11-20</p> <p><input type="checkbox"/> 21-40</p> <p><input type="checkbox"/> More than 40</p>
--	--

The ODNR Division of Wildlife’s Cooperative Hunting, Trapping & Fishing Program (hereafter, Cooperative Hunting Program) aims to match hunters in need of lands to hunt with landowners willing to allow hunting on their lands. Landowners voluntarily enroll into the program, and participate in every other year meetings with wildlife officers to evaluate participation in the program.

8. Which of the following best describes your interaction with the Cooperative Hunting Program? (Check one)

- This is the first time I have heard of the program.
- I have heard of the program but this property is not enrolled.
- Some portion or all of my property is currently enrolled
- This property was enrolled but has been removed from the program.
- Other (please explain) _____

Section E. About You

1. Are you? (Check one)

- Male
- Female

2. What year were you born (YYYY)? _____

3. How many children do you have that are under the age of 18? _____

4. How many children do you have that are over the age of 18? _____

5. What is the total acreage of the land you own in Ohio? _____ acres

6. How many years have you lived at your current residence? _____

7. Do your long-term plans for your land in Ohio include any of the following? (Check all that apply)

- Commercial/residential development
- Logging/timber management
- Wildlife management and conservation
- Land preservation
- Passing land on to children/heirs
- Resource extraction (ex: mining, fracking)
- Land donation to conservation organization
- Land donation to government agency
- Selling the land
- Other _____

8. Are you an agricultural producer?

- No
- Yes → What was the gross monetary yield of this property last year? \$ _____

9. Have you experienced commercial crop damage due to wildlife in the past 2 years?

- No
- Yes

11. How would you describe the community in which you were raised? (Check one)

- Large city
- Large town or suburb
- Small town
- Rural (non-agricultural)
- Farming/agricultural-based

10. Have you experienced garden damage due to wildlife in the past 2 years?

- No
- Yes

12. Please indicate the extent to which you identify yourself as a/an...

(Circle one for each item)	Not at all	Slightly	Moderately	Strongly	Very Strongly
Environmentalist	1	2	3	4	5
Conservationist	1	2	3	4	5
Hunter	1	2	3	4	5
Farmer/Rancher	1	2	3	4	5
Property Rights Advocate	1	2	3	4	5
Land Steward	1	2	3	4	5

13. Have you participated in any of the following recreational activities in the last 5 years? (Check all that apply. If none, check "I did not do any of these activities")

- | | |
|---|--|
| <input type="checkbox"/> I did not do any of these activities | <input type="checkbox"/> Hiking |
| <input type="checkbox"/> Fishing | <input type="checkbox"/> Wildlife observation |
| <input type="checkbox"/> Trapping | <input type="checkbox"/> Harvesting mushrooms or herbs |
| <input type="checkbox"/> Camping | <input type="checkbox"/> Birdwatching |
| <input type="checkbox"/> Off-road motorized vehicle use | <input type="checkbox"/> Horseback riding |
| <input type="checkbox"/> Shooting/firearms practice | <input type="checkbox"/> Snowmobiling |
| <input type="checkbox"/> Photography | <input type="checkbox"/> Hunting |
| <input type="checkbox"/> Other _____ | |

14. How much formal education have you completed? (Check one)

- | | |
|--|--|
| <input type="checkbox"/> Less than 9 th grade | <input type="checkbox"/> Associate's degree |
| <input type="checkbox"/> 9 th grade to 12 th grade, no diploma | <input type="checkbox"/> Bachelor's degree |
| <input type="checkbox"/> High school diploma or equivalent (for example, GED) | <input type="checkbox"/> Graduate or professional degree |
| <input type="checkbox"/> Some college, no degree | |

15. What is your approximate annual household income from all sources before taxes? (Check one)

- | | |
|--|--|
| <input type="checkbox"/> Less than \$10,000 | <input type="checkbox"/> \$50,000 - \$74,999 |
| <input type="checkbox"/> \$10,000 - \$14,999 | <input type="checkbox"/> \$75,000 - \$99,999 |
| <input type="checkbox"/> \$15,000 - \$24,999 | <input type="checkbox"/> \$100,000 - \$149,999 |
| <input type="checkbox"/> \$25,000 - \$34,999 | <input type="checkbox"/> \$150,000 - \$199,999 |
| <input type="checkbox"/> \$35,000 - \$49,999 | <input type="checkbox"/> \$200,000 or more |

16. What percent (if any) of your household income is derived from the property itself? (e.g. farming, timber, mineral rights) _____%

Please make any additional comments you may have in the space below.

Thank you!



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

Terrestrial Wildlife Ecology Lab (TWEL)
School of Environment and Natural Resources
210 Kottman Hall
2021 Coffey Road
Columbus, OH 43210

Phone: 614-688-4289
Dennis Hull, Program Manager: hull.135@osu.edu

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