

## **Wildlife Tourism on Pennsylvania Public Lands**

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### **Executive Summary**

This research examined the characteristics of wildlife tourists and their non-consumptive use of wildlife assets on Pennsylvania public lands, with a special focus on Pennsylvania State Game Lands, which are administered by the Pennsylvania Game Commission. The research also reviewed policy issues surrounding the access and use of Pennsylvania State Game Lands, and gathered input on public policies that govern these lands.

For this research, wildlife tourists are broadly defined as those who engage in non-consumptive or non-lethal wildlife activities for leisure purposes. The research collected information from hunters, non-hunters, and public policy stakeholders through two surveys. Data from the surveys were summarized to present a profile of current wildlife tourists and Pennsylvania's available wildlife tourism product. The research also summarized findings on policy issues related to permits and land use access for non-hunters and non-hunting activities.

Based on the research results, the research offers several policy considerations as follows:

- 1) Allow the Pennsylvania Game Commission to focus on science-based land and wildlife management;
- 2) Encourage greater communication between tourism stakeholders and wildlife stakeholders through the Pennsylvania Travel and Tourism Partnership or another suitable outlet;
- 3) Present simplified, visible, harmonious land use guidelines;
- 4) Increase fines for abusive users;
- 5) Implement an information campaign on the funding reality of Pennsylvania State Game Lands (SGLs);
- 6) Implement selective secondary-user activities-based and voluntary donation-based permitting;
- 7) Implement secondary permitting on SGLs with greater secondary use, typically closer to urban centers;
- 8) Increase permit fees for non-resident hunters; and
- 9) Conduct a hunting tourism study to better understand the economic impacts of hunting tourism.

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## Introduction

This research describes the characteristics of Pennsylvania's wildlife tourists and their interest in wildlife assets on publicly administered lands, and highlights the use of State Game Lands (SGLs) by non-hunters. It includes a demographic profile of wildlife tourism activities on public lands by non-hunters and a profile of where these activities are taking place. It also examines the awareness of wildlife tourists of land ownership and includes an analysis of user attitudes toward the willingness to pay for access to State Game Lands, which are currently administered by the Pennsylvania Game Commission (PGC). Subsequently, policy implications are described and public policy considerations are presented.

## Literature Review and Terminology

Often considered a form of ecotourism, wildlife viewing is defined as the non-lethal recreational watching of wild animals in their natural habitat as opposed to captivity. Wildlife tourists can be segmented as "specialists" or "generalists." This refers to their consumption of a focal species (or habitat), in particular, or wildlife, in general. Furthermore, wildlife tourists exhibit a range of engagement with wildlife tourism experiences from generalist to specialist, which stems from wildlife as a peripheral or primary motivation for travel (Curtin 2010).

In recent decades, wildlife viewing has become a major recreational activity for millions around the world and has emerged as a thriving commercial industry that is anticipated to grow at a faster rate than tourism in general (Curtin 2010, Mintel 2008). Likewise, these activities are on the rise in Pennsylvania. According to the 2014 Statewide Outdoor Recreation Plan, "*bird watching and wildlife watching both saw big gains in participation over the last 10 years*" (pg. 17). Therefore, when viewed as a tourism asset, wildlife presents a potential economic benefit to Pennsylvania's rural areas.

A discussion of wildlife tourism has multi-faceted considerations. According to the U.S. Fish and Wildlife Service's National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, in Pennsylvania, "*two types of wildlife-watching activity are reported: (1) away-from-home activities and (2) around-the-home activities*" (U.S. Census 2011, pg. 3). This threshold, which is based on distance, is somewhat consistent with academic literature, as recreation is typically close to or "around-the-home," and tourist activity is "away-from-home." The industry-accepted distance threshold between recreation and tourism is typically 50 miles one way from one's usual environment (i.e. their usual place of residence and work). However, there are other variables that contribute to the distinction between the two. This study considered wildlife recreation and wildlife tourism simultaneously, including those who are both "around-the-home" and "away-from-home" consumers, depending on the season. As such, the expression *wildlife enthusiast* is used in this research as an all-encompassing term.

Recreation versus tourism is not the only terminology distinction used for wildlife-related activities or wildlife associated recreation. The U.S. Fish and Wildlife Service categorize these activities as *hunting*, *fishing*, and *wildlife watching*. Some related research uses the distinction of *game* and *non-game* activities. Other research uses the term *consumptive* for hunting activities and *non-consumptive* for wildlife watching, photographing, and/or feeding. Wildlife-related activities classifications are not mutually exclusive. For example, in 2011, 3.6

million people participated in wildlife-watching activities in Pennsylvania. The “*sum of anglers, hunters, and wildlife watchers exceeds the total number of participants in wildlife-related recreation because many of the individuals engaged in more than one wildlife-related activity*” (USFWS 2011, pg. 5). This research found this same interrelationship for Pennsylvania’s wildlife enthusiasts.

The research looked to develop a profile of people who engage in non-consumptive wildlife activities in Pennsylvania and understand the extent of non-consumptive uses of SGLs. This dual assignment presented unique complexities for public policy consideration. While the Pennsylvania Game Commission (PGC) is the state’s primary wildlife governing authority, it is not solely responsible for public lands that maintain wildlife tourism potential.

Although SGLs are publicly administered lands, they are distinct from other types of public lands, such as State Parks, State Forests, and other state protected areas, which are typically managed by the Pennsylvania Department of Conservation and Natural Resources (DCNR). SGLs are part of PGC’s entire wildlife management mission. The primary purposes of these lands are for the management of habitat for wildlife and the provision of opportunities for lawful hunting and trapping. Secondary recreational uses are permitted in accordance with the PGC’s regulations. These regulations are detailed in Title 58 Recreation Code, Subchapter C. STATE GAME LANDS. Overall, the PGC has been purchasing land since 1920, with a stated recreation and varied consumption use:

*“for inclusion in its State Game Lands system, which currently contains about 300 separate tracts comprising a total of more than 1.5 million acres. Each State Game Lands has an individual management plan designed to improve wildlife habitat and provide recreational opportunities. Plans are carried out by the agency’s Food and Cover Corps. Hunters, anglers, hikers, birdwatchers and other wildlife enthusiasts are welcome on State Game Lands.”* (PGC 2017)

Furthermore, SGLs are unique when compared to State Parks, State Forests, and other protected areas because they are overseen by a separate governmental administrative unit, PGC. Unlike other state departments, PGC does not report to the Governor. The Governor appoints commission members, who act independently.

Current research shows that the public does not understand the distinct structure of PGC, and, in turn, the unique funding of PGC. In a report submitted to PGC entitled, *Pennsylvania Residents’ Opinions on and Attitudes toward Nongame Wildlife*, an open-ended question asked Pennsylvania residents about funding sources for PGC and the Pennsylvania Fish and Boat Commission:

*“While the top two responses are important funding sources (hunting licenses and fishing licenses—named, respectively, by 35% and 34% of residents), the third and fourth responses, “taxes” and “general state taxes,” both being somewhat vague, demonstrate a lack of real knowledge about funding sources.”* (Responsive Management, 2014, pg. 54)

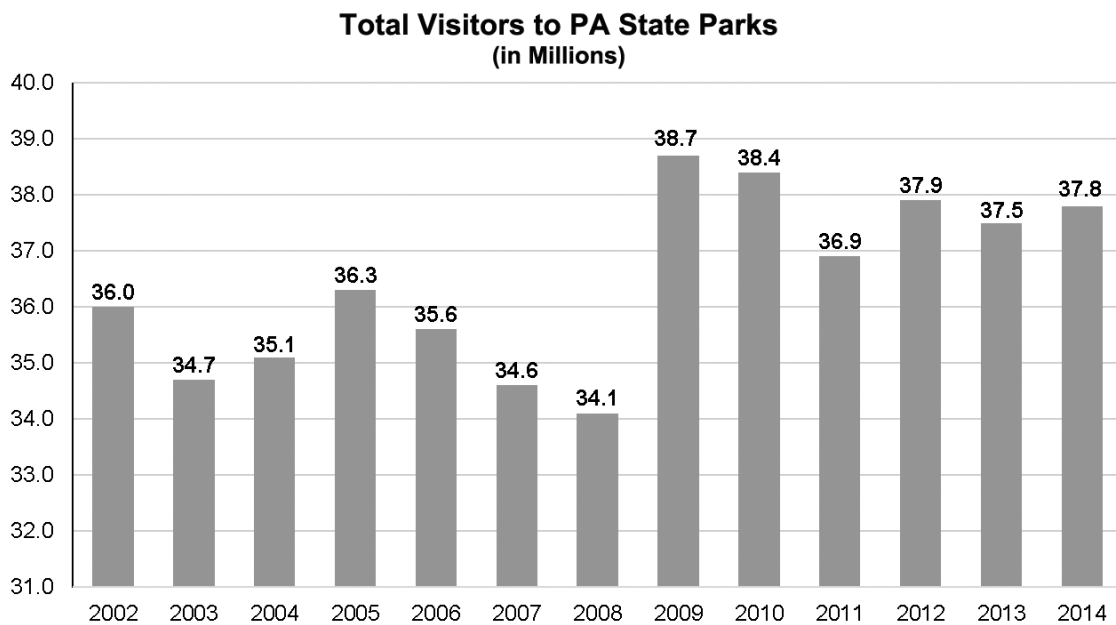
Of note, several very important sources did not receive significant mention, such as excise taxes on hunting equipment, fishing equipment, motorboat fuel, and general U.S. Fish and Wildlife Service funding:

*“These taxes are part of the Federal Aid in Wildlife Restoration Act (known as the Pittman-Robertson Act) and the Federal Aid in Sport Fish Restoration Act (known as the Dingell-Johnson Act), including the latter Act’s amendment, the Aquatic Resources Trust Fund (known as the Wallop-Breaux Amendment)”* (Responsive Management, 2014, pg. 54)

This demonstrates an additional layer of complexity that was critical to the design of this study. That is, the perception of public lands, their administration, their funding, and their intended use.

There is a distinct difference between traditionally public, taxpayer-funded lands, like State Parks and Forests, and SGLs. Some of this difference is also apparent in orientation to the commercial tourism industry. For example, State Parks are actively recognized as part of the tourism industry. For example, the Pennsylvania Department of Community and Economic Development’s (DCED) Office of Marketing, Tourism & Film includes State Parks as tourism assets and has presented DCNR’s visitation data in its review of the economic impact of tourism statewide (see Figure 1).

**Figure 1: Total Visitors to Pennsylvania State Parks**



Source: Pennsylvania Department of Conservation and Natural Resources.

Terminology is also different with consideration of SGLs. Non-licensed or non-hunting users of SGLs are known as “secondary users.” However, primary and secondary users of SGLs can be one in the same. This means that those who are licensed to hunt or furtake on SGLs may also participate in activities considered as secondary uses such as hiking, birding, wildlife watching, horseback riding, rock climbing, mountain biking, or other ways that individuals access natural settings to enjoy or convene with wildlife.

The broad and often conflicting means of access and use on SGLs have been a point of contention. For example, in response to the preparation of this research, the president of the United Sportsmen of Pennsylvania (USP) took issue with the wording of the 2016 grant proposal outline stating:

*“The paragraph under the header of 'Wildlife Tourism on Public Lands in Pennsylvania' and the first sentence “SGLs and other public lands in Pennsylvania” are both incorrect and misleading to the general public. SGLs are not public lands in the sense that general tax dollars have provided them, maintain them, or expand their acreage.”* (Letter to Dr. Susan Ryan, 2016)

There are those who view non-hunting users on game lands as privileged guests. Some say they have no place on these lands. These users argue that additional use of SGLs is damaging and not compatible with game use:

*“Some secondary uses have striking contrasts to game land intended use. Bird watching and bird shooting are obviously distinctly different and those differences can extend all the way to human safety.... It would be ludicrous to suggest hunting in an aviary, and the same correlation must be understood in this example by birdwatchers, that birdwatching in the midst of a hunting area is equally ludicrous.”* (USP, Letter to Dr. Susan Ryan 2016)

This quote is revealing of the convictions related to SGL use and evidence of the polarity of user groups.

The view of the USP is not the only contentious perspective with regard to SGLs. Some view the problem only with illegal trails, non-compliance, and abusive users. Certain groups feel vilified by one user group and vice versa. Some feel that a fee-based permit will open up more unwanted access to SGLs through the creation of secondary user entitlement. Others feel the fees can be used to offset the costs of damages caused to SGLs by these same users and possibly generate much needed funds for maintenance. Many question the costs and practicalities licensure and enforcement of such a permitting system. In contrast, a fee-based system is argued to be a significant deterrent to irresponsible users or a mechanism to limit use. Arguments also point to such a secondary user permit as being a vehicle to educate and inform about the responsible use of SGLs. Secondary user groups have argued that current closures on SGLs are too prohibitive; the SGL system, in essence, unfairly sequesters some of the Commonwealth's most valuable natural heritage for one group exclusively, penalizing non-hunters. Still others point to secondary use as non-lethal and therefore they should have free access as they are not harvesting a product from SGLs.

Many point to a less absolute means of consumptive versus non-consumptive/game versus non-game users. These users purport coexistence. These groups cite other examples of state and federal game lands being successfully managed for multiple uses outside and within hunting season. These secondary users tout the economic benefits that they bring to local communities from their outdoor recreation and tourism activities. A broader perspective on secondary users is maintained in the results of this research because, fundamentally, outdoor recreation (directly wildlife-related or not) overlaps in form and function, as do the intended, perceived, and actual uses of SGLs.

While users, such as equestrians, climbers, and mountain bikers (among others), are perhaps not primarily wildlife tourists, they were included in the research because their activities involve enjoyment of habitat and

wildlife watching and they are involved in the ongoing contention of paid versus unpaid access and non-access to SGLs. The research sought to reconcile some of these levels of use by approaching all possible stakeholders since so many voices have come to the table to voice their opposition, favor, or indifference regarding this issue.

### **State Game Lands Policy Focus Complexities**

This research was designed to describe wildlife tourism on Pennsylvania's public lands from the perspective of wildlife tourists and wildlife tourism stakeholders. The research was designed to investigate and determine related policy strengths and weaknesses from both a market (i.e. the consumer) and product (i.e. that which is consumed) perspective. This is especially important since wildlife tourism, while non-lethal, can threaten conservation status of targeted animal populations and resource depletion compromises the economic viability of this form of tourism. Since wildlife viewing involves policy-related issues related to parks, protected areas, and property rights, this complex policy backdrop has major implications for wildlife tourism and its management.

In Pennsylvania, tourism policy and state-recognized destination marketing/management are motivated by economic development. The concept of development implies change and possibly resource exploitation. Wildlife policy is inherently designed around conservation and maintaining a status quo. The merger of tourism and wildlife public policy presents the conflicting motivations of change and sameness simultaneously. Statewide destination management and planning typically do not include wildlife agencies. Similarly, wildlife planning does not typically include tourism agencies.

For example, to maintain access to U.S. Fish and Wildlife Service State and Tribal Wildlife Grants – the nation's core program to prevent wildlife from becoming endangered – Pennsylvania recently updated the Pennsylvania Wildlife Action Plan, which was first published in 2005 (PGC & PFBC 2015). This plan is a non-regulatory, proactive conservation blueprint to prevent Species of Greatest Conservation Need (SGCN) from requiring federal protection under the Endangered Species Act. Many partners contributed to the revision of the Action Plan, but none of the government or non-government organizations were specific tourism stakeholders (see Figure 2).

**Figure 2: 2015-2020 Statewide Wildlife Action Plan, Chapter 7, Partner Coordination Agencies and Organizations Comprising the Pennsylvania Wildlife Action Plan Advisory Committee**

|  |  |
|--|--|
| <p><b>Federal Agencies</b></p> <hr/> <p>USFWS-State College Office &amp; Northeast Fishery Center<br/>         USFWS-Landscape Conservation Cooperatives (North Atlantic, Appalachian, Upper Midwest Great Lakes)<br/>         USDA-APHIS (U.S. Department of Agriculture-Animal and Plant Health Inspection Service)<br/>         USDA-NRCS (U.S. Department of Agriculture-Natural Resource Conservation Service)<br/>         USDA-FS Allegheny National Forest (U.S. Department of Agriculture-Forest Service)<br/>         USGS-PA CFWRU (U.S. Geological Survey – PA Cooperative Fish and Wildlife Research Unit)<br/>         USGS-PA WSC (U.S. Geological Survey – PA Water Science Center)</p> <p><b>State Agencies</b></p> <hr/> <p>PADCNR (Pennsylvania Department of Conservation and Natural Resources)<br/>         PACD (Pennsylvania Association of Conservation Districts)<br/>         PSU (Pennsylvania State University)</p> | <p><b>Non-Governmental Organizations</b></p> <hr/> <p>AFS (American Fisheries Society – PA Chapter)<br/>         American Rivers<br/>         Audobon Pennsylvania<br/>         CBF (Chesapeake Bay Foundation)<br/>         PABS (Pennsylvania Biological Survey)<br/>         PALTA (Pennsylvania Land Trust Association)<br/>         TNC (The Nature Conservancy)<br/>         TWS (The Wildlife Society – Pennsylvania Chapter)<br/>         WPC (Western Pennsylvania Conservancy)</p> <p><b>Organizations with Multi-State Authorities</b></p> <hr/> <p>DRBC (Delaware River Basin Commission)<br/>         SRBC (Susquehanna River Basin Commission)</p> |
|--|--|

**Source:** <http://www.pgc.pa.gov/Wildlife/WildlifeActionPlan/Documents/SWAP-CHAPTER-7.pdf>.

In tourism, places are products that are consumed by visitors. Pennsylvania participates in tourism marketing planning but does not have a statewide tourism plan. Marketing planning involves a comprehensive strategy for the promotion and subsequent sale of a destination (i.e. Pennsylvania as a tourism product, which is in turn consumed by the visitors or tourism market). A marketing plan does not provide a comprehensive strategy for the responsible development of the destination itself, but only how to sell that destination through increased tourist consumption. Essentially, Pennsylvania’s tourism planning outlines the sale and promotion of the state, but does not plan the overall responsible caretaking and development of the destination itself. Planning for marketing tourism destinations is not the same as planning and managing tourism destinations.

Throughout the years, the matter of secondary user permits has been discussed by PGC, with anecdotal evidence going back to the formation of an “ad hoc” land use committee in 2001. At that time, the matter was dismissed because it was understood that the federal Pittman-Robertson funding would be diminished dollar-for-dollar for any income derived from “non-hunting use” (i.e. what has been termed secondary use for SGL purposes).

Surveys commissioned by the PGC in 2014 have indicated that sportsmen and women support non-consumptive users paying to use game lands. Some have taken exception to that finding noting that the wording in the survey was confusing (PGC, October 9, 2014). There was debate between the validity of findings and a



measurement of public opinion at the September 2014 and January 2015 PGC Meetings and it is apparent that public commentary has yielded no further consensus on the matter.

### **SGL Secondary User Permit Issue Simplified**

Pennsylvania subscribes to the North American Model of Wildlife Conservation. According to the Association of Fish and Wildlife Agencies (AFWA), this model “is the world’s most successful system of policies and laws to restore and safeguard fish and wildlife and their habitats through sound science and active management” (2017). This model views hunting and angling as:

*“the cornerstones of the North American Model with sportsmen and women serving as the foremost funders of conservation. Through self-imposed excise taxes on hunting, shooting, archery and angling equipment, and a tax on boating fuels, these conservationists have generated more than \$14 billion for wildlife and habitat conservation since 1937.” (AFWA 2017)*

Within this model, PGC is the government agency responsible for the administration of SGLs. These lands are:

*“Funded primarily by hunting and furtaker license sales; State Game Lands timber, mineral and oil/gas revenues; and a federal excise tax on sporting arms and ammunition; the Commission is almost entirely supported by hunters and trappers, or assets that have been procured with license dollars. The Commission does not receive state General Fund appropriations. More than half its annual revenue comes from license sales, a relatively fixed income source. License fees cannot be increased without approval of the General Assembly, and fee increases have historically come only about every 10 years.”* (<http://www.pgc.pa.gov/>)

This funding structure and its direct relationship to hunting and furtaking license sales is the core of the user access and permission debate this study was tasked to analyze. Simplified and in complement with the contextual introduction above, the dominant perspectives about SGLS are presented below. This presents an important setting for understanding wildlife enthusiasts and public policy matters related to SGLs specifically.

#### *Perspective One: State Game Lands Should Be Exclusively For Primary Users*

All secondary users are disruptive to animal habitat and therefore limit available game. SGLs are not funded through public allocation and therefore should not be publicly available except to those who contribute to these lands most directly, which are primary users.

#### *Perspective Two: Secondary Users Should Have A Permit To Use State Game Lands*

A user permit should be required for all secondary users. This would create a more complete accounting for people using the SGLs. The permit process would also be a conduit for education of secondary users. Permit fees would generate some funds to continue supporting SGLs. Many primary and secondary users see the logic in this and support the idea of increased accountability and funding.

### *Perspective Three: Primary and Secondary Users Can Share State Game Lands*

Primary and secondary users can and have coexisted and both can therefore continue to enjoy the lands through mutual respect. This coexistence can be enhanced through attention to reinforcement of codes of conduct, especially around hunting seasons. Similar to primary users, those secondary users in violation of codes of conduct should be fined.

### *Perspective Four: Some Secondary Uses Should Require A Permit With/Without A Fee*

Some wildlife activities are more consumptive than others. The more consumptive activities should require a permit and/or a fee for those permits. Equipment intensive activities and large groups, especially those charging a fee for group activities, should be distinct from other secondary users and therefore should require a fee-based permit administered in the manner of hunting, fishing, and boating licenses.

### *Perspective Five: Some Users Are Abusive And Should Be Financially Responsible*

This final view holds that some primary and secondary users abuse existing rules. Those rules, therefore, should be dramatically enforced through severe fines. These fines would act as a deterrent of abuse and provide funding for SGLs. Both user groups would be satisfied with this outcome, should it not stretch the existing enforcement infrastructure on SGLs.

## **Goals and Methodology**

The research goals were to examine the characteristics of wildlife tourists and their non-consumptive use of wildlife assets on Pennsylvania public lands, and to review central policy issues surrounding Pennsylvania State Game Land access and use. The research also looked to gather public policy input on policies that govern State Game Lands.

To conduct the research, the researcher surveyed wildlife tourists, some of whom are technically recreational in nature, and wildlife tourism policy stakeholders, who provide or have oversight of the wildlife tourism product such as (but not limited to) government organizations, conservation groups, nonprofits, and wildlife tourism businesses.

## **Wildlife Tourist Surveys**

It is impossible to survey every wildlife tourist. Therefore, the research used sampling to ensure that those who are surveyed represent the whole. For the wildlife tourism survey, a non-probability sampling strategy was employed since the wildlife tourism population is not known nor is there a logical and available sampling frame (i.e. a list of all members of the population). Non-probability sampling is used when the population studied is not clearly defined and cannot be precisely quantified. Therefore, figures of statistical representation, such as confidence level and interval, cannot be reported. In this case, the total estimated number of wildlife tourists cannot be used in proportion to the total number of survey responses. A response number can be reported but a response rate cannot.

A combination of two survey formats was used to collect data about wildlife tourists and ensure maximum statistical representation. This included an electronic and self-mailer format. To solicit responses, an extensive electronic referral program, paid advertising, email harvesting, press releases, guest articles, and social media campaigns via Twitter and Facebook were used.

Additionally, a countertop survey display program was implemented with 13 partners statewide. These displays contained a self-mailer survey for guest/customer pick up and completion. Surveys were returned to the California University Tourism Research Center via U.S. mail.

Combined, the total number of usable survey responses was 2,363.

### **Wildlife Policy Stakeholder Survey**

The public policy stakeholder survey was sent via email blast with a survey invitation and survey link. Emails were harvested from public directories and electronic documents to continue to construct and refine the policy stakeholder sampling frame of 562 possible survey respondents.

The sampling strategy for the wildlife public policy stakeholder survey was a modified probability sample. While a sampling frame was constructed, the research question did not lend itself to the possibility of a total population being absolutely known (i.e. a stakeholder is broadly and variably defined). Furthermore, due to bounced invitations from bad emails, spam filters, email clutter settings, and email user oversight, some email invitations were not received and/or opened in spite of reminders. Therefore, an accurate confidence interval could not be provided. Overall, the total number of useable wildlife public policy stakeholder survey responses was 216.

## **Research Findings**

### **Wildlife Centers, Nature, and Environmental Education Centers in Pennsylvania**

The researcher developed a working definition of key wildlife tourism and wildlife-associated recreational facilities for the study. This involved an electronic scan of available information on wildlife from a visitor perspective using 22 keywords where wildlife activities were formally permitted. A comparison was made to establish consistencies between each site's characteristics and a classification system was developed using a manual coding system that emerged from these consistent data patterns. The following definition was developed:

*A wildlife nature or environmental education center is a designated area directed toward non-lethal recreational consumption of wildlife in an outdoor setting. A center will have some form of visitor construct such as a visitor center (building with services such as parking, picnic areas, restrooms, gift shop, concessions, meeting or classrooms etc.) programming, observation decks, or other facilities intended to receive the public. These are not zoos or animal exhibits where animals are contained and displayed for visitor entertainment. For the purposes of this project, a wildlife nature or environmental education center focuses on habitats that are native to Pennsylvania although other habitats or species may be present.*

*These centers may be operated by a municipal, county, state or federal entity or within the context of a publicly administered, managed, or owned lands and be multi-purpose/multi-use. However, the definitive*

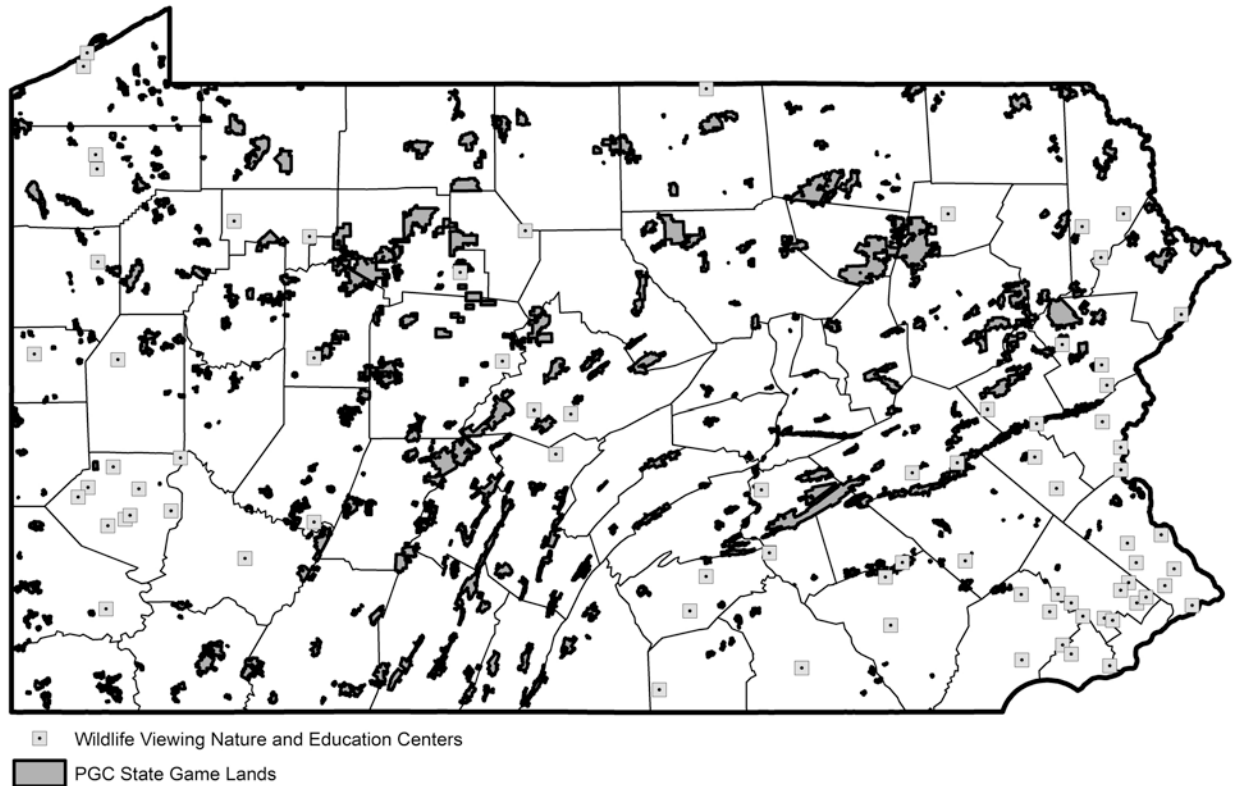
*characteristic is there is purposeful positioning to receive the non-lethal wildlife consumer although the center or area may be multi-functional and include facilities for hunters.*

Since possible placement locations were being compiled to intercept wildlife tourist survey respondents, it seemed like a natural extension of the study to be as comprehensive as possible and extend the survey placement into all possible wildlife, nature, and environmental education centers. Subsequently, a comprehensive inventory of these wildlife nature and/or environmental education centers was developed using a combination of keyword searches and search engine data mining tools.

These centers comprise part of Pennsylvania's wildlife tourism product and therefore represent an important point of consideration for public policy and wildlife tourism in Pennsylvania. These centers provide formal and developed tourism product in contrast to the core issue of SGLs, which are not formally presented or recognized as established tourism product. The research found that these centers exist mainly as a recreational outlet for the "close-to-home" wildlife enthusiast. While potential exists to formalize these centers as ready tourism product, these centers already exist to satisfy non-consumptive user demand in addition to others lands that are more purpose-designed and managed for outdoor wildlife-related recreation, such as State Parks and State Forests.

The inventory revealed a total 81 centers in Pennsylvania (see Figure 3). This inventory revealed that a significant formal wildlife enthusiast and wildlife tourism infrastructure exists for non-consumptive wildlife tourism activities in Pennsylvania. This suggests that a tourist product is readily available and well established for prospective tourism development. This inventory also constitutes a list of wildlife tourism partners for possible networking and information dissemination. Geo-spatial analysis also reveals that many of these centers border or are adjacent to SGLs. Therefore, formal and informal products have established a symbiotic relationship already without formal public policy intervention. This is a positive finding since many times in this research there are themes of intrinsic cooperation, compatibility, and co-existence reasserted by both study populations.

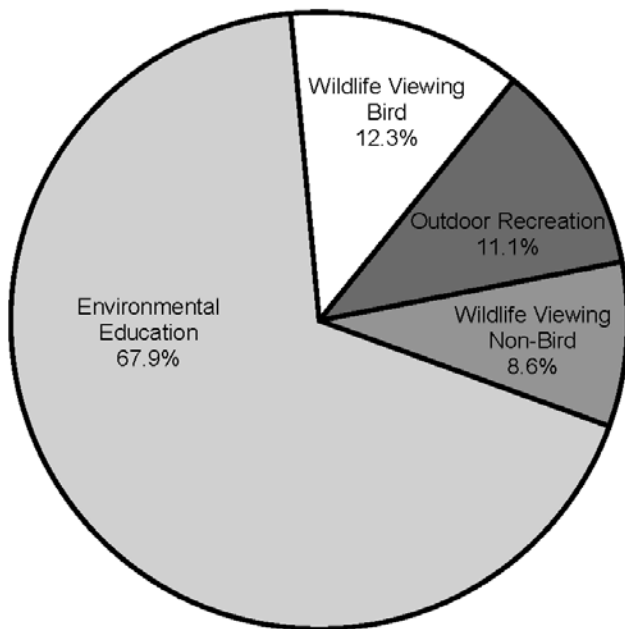
**Figure 3: Wildlife Viewing Nature and Education Centers**



### *Center Classification and Ownership*

A classification system was developed to describe each center by primary type. These classifications included environmental education, wildlife viewing with a birding focus, outdoor recreation, and wildlife viewing with a general or non-bird focus. The research determined that approximately 68 percent of Pennsylvania’s wildlife viewing, nature, and education centers were primarily focused on environmental education (see Figure 4). This demonstrates an overall dominant education orientation to these centers with broad appeal to prospective “home” (recreationalist) or “away” (tourist) wildlife enthusiasts.

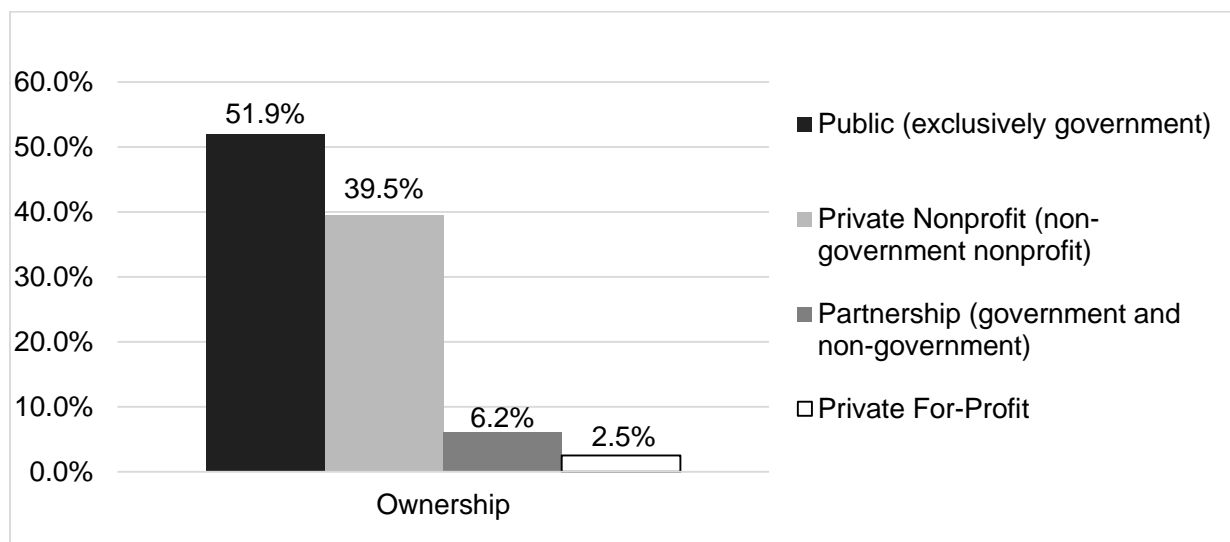
**Figure 4: Wildlife Center Classification by Primary Purpose**



Total does not add up to 100 percent due to rounding error.

An analysis of ownership as either public, nonprofit, partnership, or private-for-profit revealed that the majority of these centers exist in the public sphere (see Figure 5).

**Figure 4: Wildlife Center Classification by Ownership**



Total does not add up to 100 percent due to rounding error.

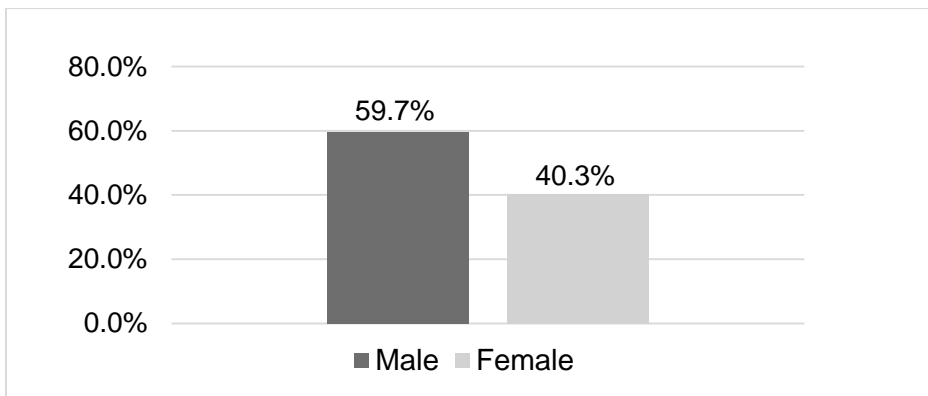
## Wildlife Tourist Survey

### Respondent Demographics

To develop the demographic profile of wildlife tourists, the survey included general questions about age and identified gender. Any respondent under age 18 were scrubbed from the database since Institutional Review Board approvals did not permit data collection from minors. Respondent ages ranged from 18 to 90 years old. The mean age was 54, with a standard deviation of 14.4. The median age of respondents was 56, and the most common age reported was 64. The U.S. Census describes middle age as the period between early adulthood and old age, which is usually defined generally as ages 45 to 65.

The majority of respondents were male (approximately 60 percent). This is slightly higher in distribution than the general U.S. population, which is approximately 49.1 percent male and 50.9 percent female (U.S. Census 2010). This suggests that the male/female ratio is significant for the sample. Therefore, those participating in wildlife-related activities or those in wildlife settings are typically middle-aged males (see Figure 6).

**Figure 5: Wildlife Tourist Survey: Respondent Gender**



To learn the points of origin of wildlife tourists/enthusiasts, the survey asked respondents to provide their residential ZIP code. Most respondents were from Pennsylvania and surrounding states.

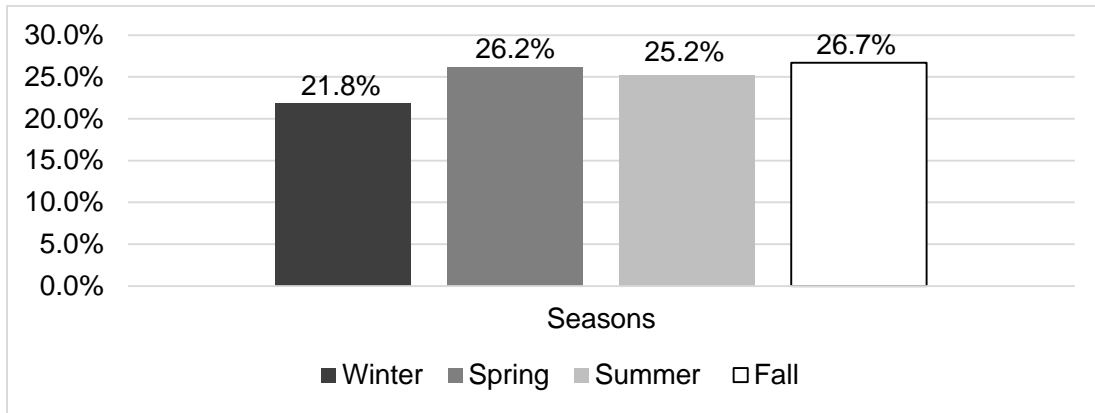
### Outdoor Wildlife-Related Activities and Activities in Wildlife Settings

Respondents were asked about their wildlife-related activities and activities in wildlife settings. This included the question: *How many days per year do you typically participate in wildlife-related activities outdoors and/or activities in wildlife settings outdoors in Pennsylvania?* Responses ranged from 1 day to 365 days. The mean response was 105.95 days, with a standard deviation of 100.70, which indicates a high degree of variability in the data. The median number of days was 65 and the most frequent number of days reported was 100.

Respondents were asked a multiple response question: *In which seasons do you participate in wildlife-related activities outdoors and/or activities in wildlife settings outdoors?* There was activity in each of the four seasons.

However, fall and spring had slightly more participation, with winter being the least active wildlife activity season (see Figure 7).

**Figure 7: Wildlife Tourist Survey: Participation Seasons**

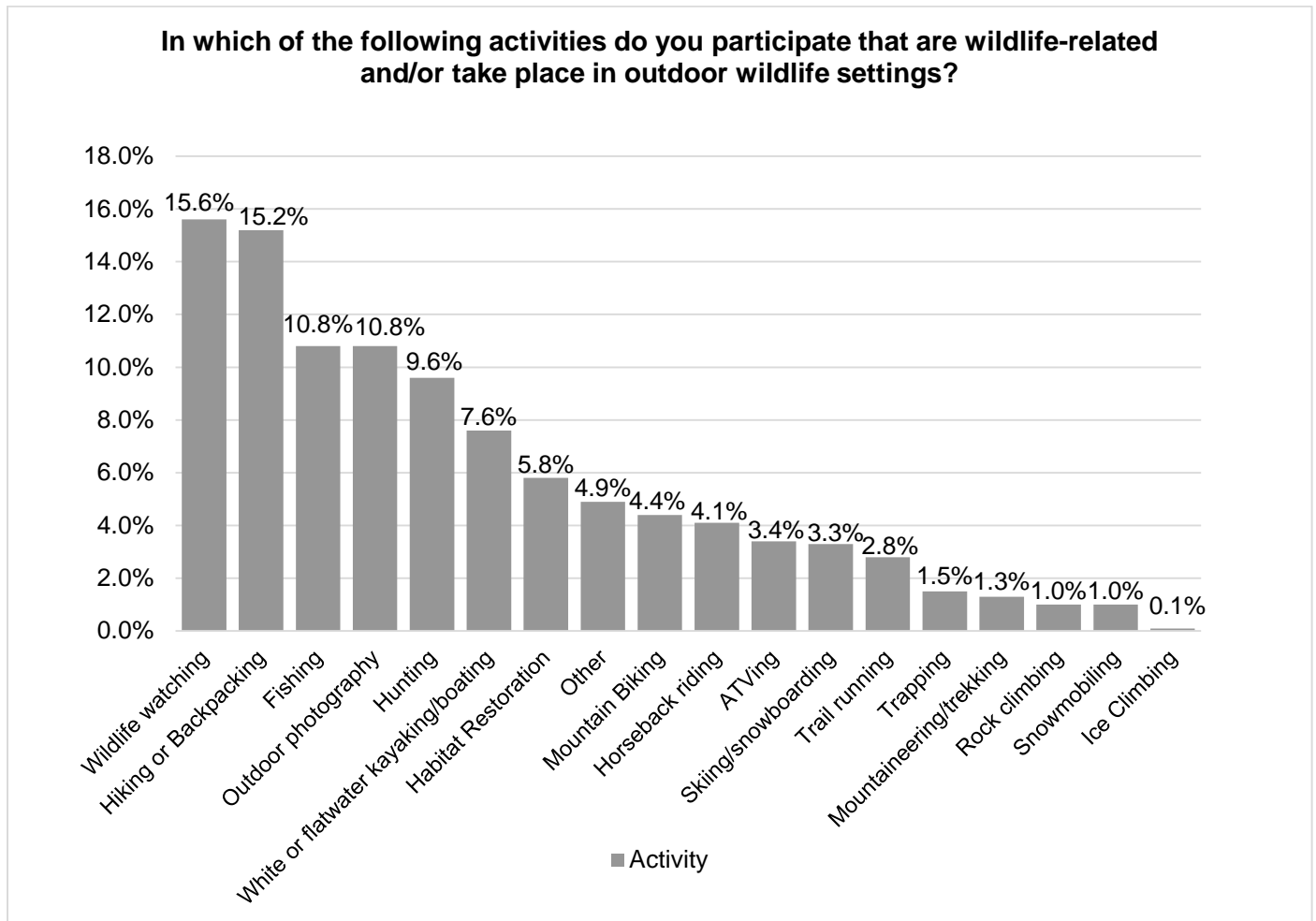


Total does not add up to 100 percent due to rounding error.

After days and seasons of participation were established, survey respondents were asked in a multiple response question about their wildlife activities and activities in wildlife settings: *In Pennsylvania, which of the following activities do you participate in outdoors that are wildlife-related and/or take place in outdoor wildlife settings?* The highest percentage was for general wildlife watching (15.6 percent of responses), followed by hiking/backpacking (15.2 percent), fishing (10.8 percent), outdoor photography (10.8 percent), and hunting (7.6 percent) (see Figure 8).

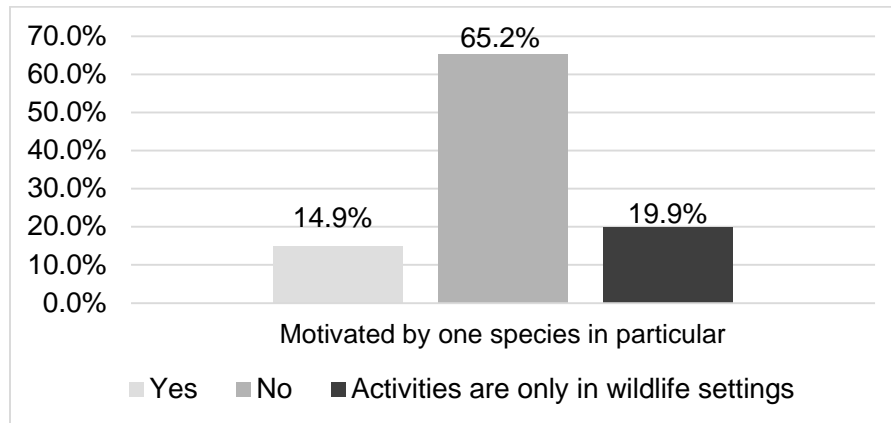


**Figure 8: Wildlife Tourism Activities, 2016**



This activities question was followed by a species motivation question: *Are these activities noted above motivated by one wildlife species in particular?* Most respondents were not motivated by one species in particular (65.2 percent) (see Figure 9). Furthermore, almost 20 percent indicated that their activities were only in wildlife settings and not necessarily related to wildlife in particular.

**Figure 9: Species Motivation**



### *Party Composition and Trip Range*

The wildlife tourist survey also inquired about the group composition for wildlife-related activities and activities in wildlife settings. Respondents were asked to estimate their typical group size: *Within in the past year, what is the typical number of people with you when you participate in outdoor wildlife-related activities and/or activities in outdoor wildlife settings (i.e. what is the typical size of your group, if alone, please say 1 person)?* Party size ranged from one person to 50 people. Mean party size was 2.11, with a standard deviation of 3.23. The median was two. The most frequent party size was one. This suggests that the typical wildlife tourist is more solitary or participates in smaller groups comprised mainly of pairs.

Respondents were also asked about their typical trip range: *Approximately how many miles one-way from home do you usually travel to participate in outdoor wildlife-related activities and/or activities in outdoor wildlife settings?* The mean was 42.22 miles, with a standard deviation of 108.35. The median distance was 20 miles. The most frequent distance traveled was 10 miles. The values ranged from 0 to 3,000 miles. This finding reveals that most wildlife enthusiasts are recreationalists (close-to-home) and on the threshold of outdoor recreationalist to wildlife tourist (again, tourist activity suggests a range of 50 miles one way from the travelers' usual environment, such as home or work).

Pennsylvania's wildlife tourists typically conduct their activities in groups of two or alone and typically travel within or close to the 50-mile, recreation-tourism distance threshold.

### *Types of Lands*

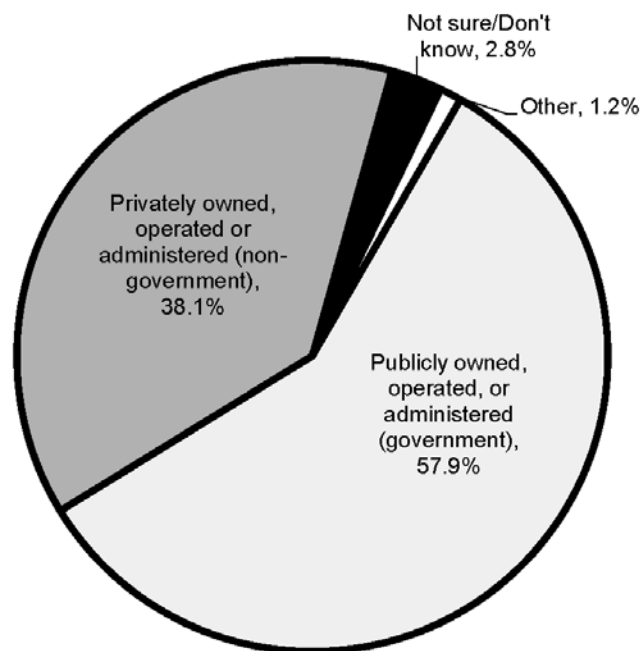
Wildlife tourists were asked about the types of lands used for wildlife-related activities and/or outdoor activities in wildlife settings: *How would you describe the ownership, operation, or administration of the type of lands in Pennsylvania where you typically enjoy outdoor wildlife-related activities and/or outdoor activities in wildlife settings?* The question was worded in this way to ensure that it accounted for lands such as SGLs, which do not receive public tax revenue appropriations, and therefore may have been deemed by some respondents as

not public. Public lands, in this broad sense, included lands not just publicly funded but those that are managed or administered by a government (or public) body.

Most respondents (97.2 percent) were aware of the land type used, with only 2.8 percent indicating that they did not know or were not sure (see Figure 10). Furthermore, approximately 57.9 percent of respondents said they used publicly owned, operated, or administered lands and 38.1 percent said they pursued activities on non-government lands. Therefore, most wildlife tourism activity in Pennsylvania is within the sphere of influence for public policy as implemented for public lands.

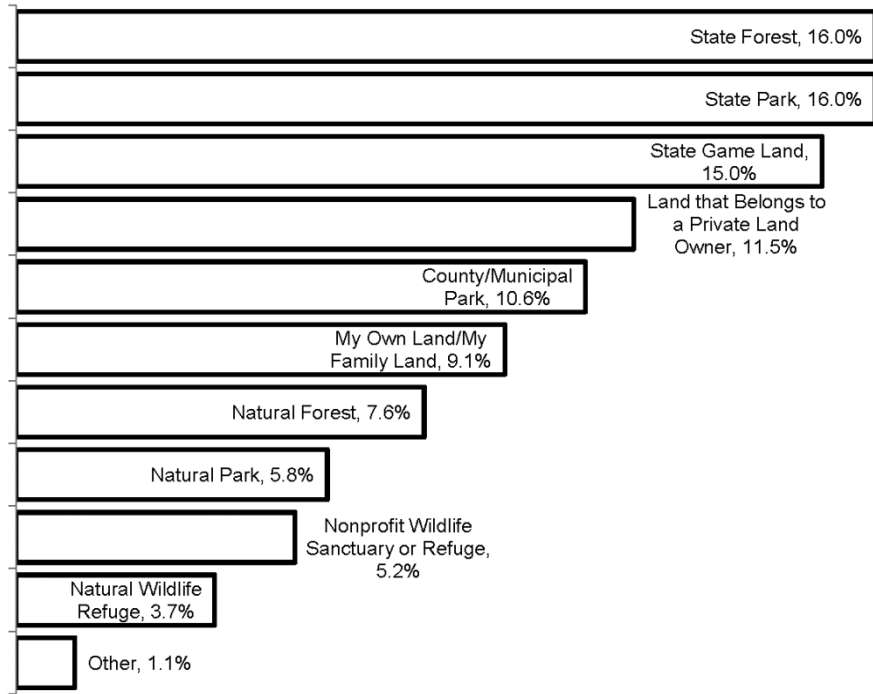
**Figure 10: Lands Where Wildlife Activities Take Place**

**Where do you typically enjoy wildlife-related activities and/or outdoor activities in wildlife settings?**



Respondents were also asked: *More specifically, please check all of the land types in Pennsylvania where you participate in outdoor wildlife-related activities and/or outdoor activities in wildlife settings.* The majority (57.6 percent overall) said they used state (47 percent) or local (10.6 percent) public lands, with SGLs accounting for 15 percent of that distribution (see Figure 11).

**Figure 11: Types of Land Used for Wildlife-Related Activities**



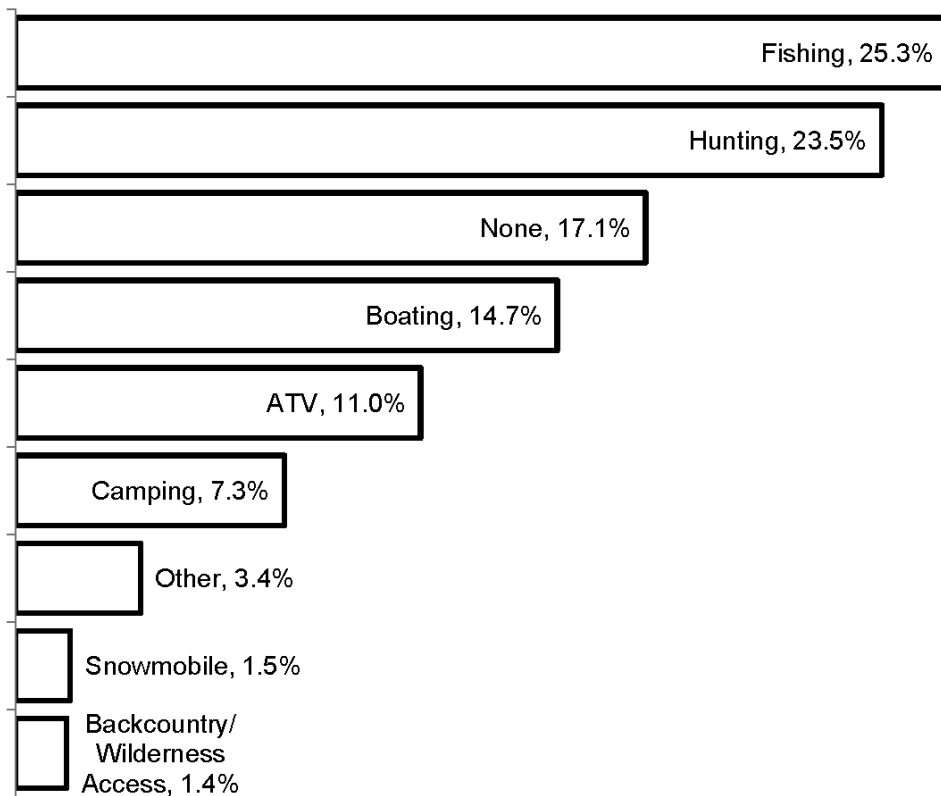
*Total does not equal 100 percent because of multiple responses.*

**Land Access and Permits**

Since a focal point of the research was to examine secondary user’s willingness to pay for using SGLs, the survey asked respondents about the types of licensing and permits they maintained. Respondents were asked: *What type of licenses or permits do you currently maintain to participate in outdoor wildlife-related activities or to access outdoor wildlife settings?* Respondents were asked to check all that apply to account for maintenance of multiple license types. Fishing and hunting licenses were the most dominant, comprising almost half (48.8 percent) of the licenses maintained to participate in outdoor wildlife activities or to access outdoor wildlife settings (see Figure 12). Also noteworthy is that 17.1 percent of respondents did not maintain any license to enjoy outdoor wildlife-related activities or to access outdoor wildlife settings.

**Figure 12: Types of Licenses or Permits Maintained**

**What type of licenses or permits do you currently maintain to participate in outdoor wildlife-related activities or to access outdoor wildlife settings?**



*Total does not equal 100 percent because of multiple responses.*

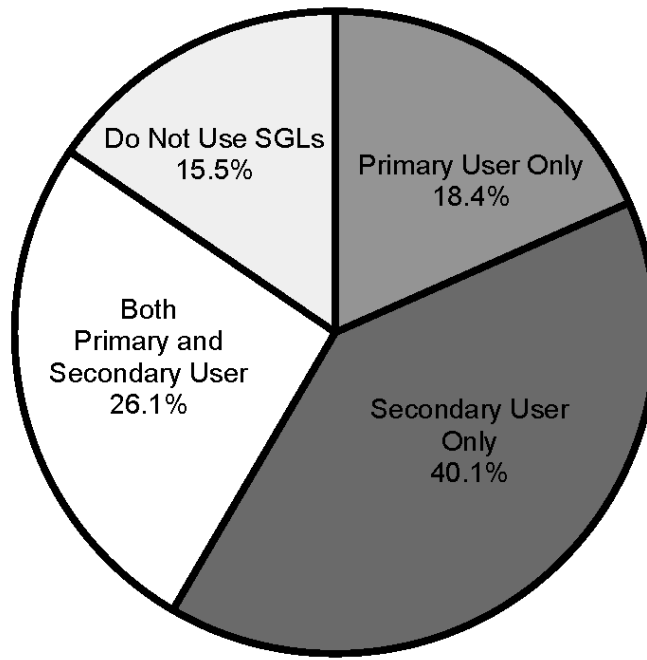
Respondents were asked to estimate their total expenses within the past year for these licenses and permits. As with all dollar related questions, this is a best guess estimate. Therefore, the amounts given should be considered as an estimate rather than an accurate economic impact indication. Respondents were asked: *In the past year, what is your best estimate of dollars that you have spent on fees, licenses, and/or permits to participate in outdoor wildlife-related activities and/or activities in outdoor wildlife settings in Pennsylvania?* The mean response was \$193.47, with a standard deviation of \$584.65. This data set had a large range from, \$0 to \$10,000, which may explain the higher standard deviation. The most frequent response was \$0, and the median was \$70. The sum of all reported spending from survey respondents was \$456,196 on fees and licenses in the past year.

#### *State Game Land Use, Knowledge, and Opinions*

Wildlife tourists were asked if they were primary or secondary users in reference to SGLs (see Figure 13). This was a single response question. Only 18.4 percent of respondents said they were primary users only, 40.1 percent said they were secondary users only, and 26.1 percent considered themselves a combination of primary

and secondary users. When considering multi-use and secondary use only, this indicates that 66.2 percent of wildlife tourists engage to some degree in secondary use activities on SGLs.

**Figure 13: Type of SGL User**

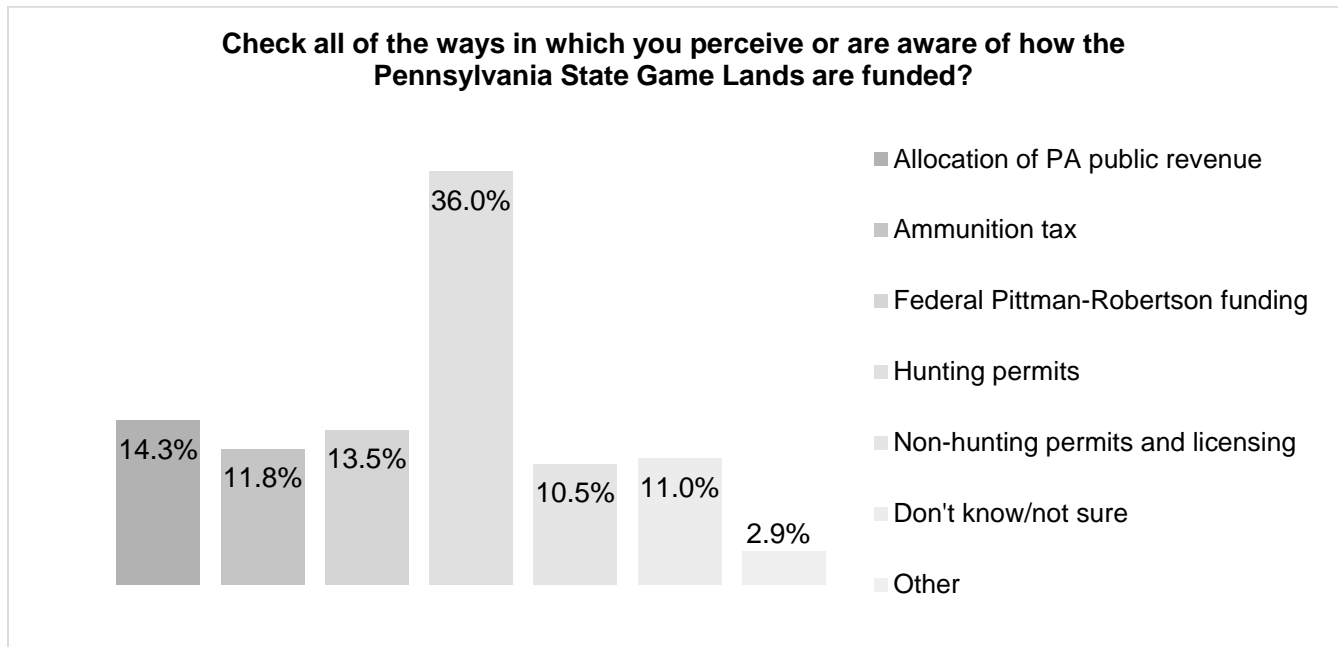


*Total does not equal 100 percent due to rounding error.*

When considering other SGL related questions, it is important to note that 15.5 percent of wildlife enthusiasts do not use SGLs. This may be due to a lack of knowledge about SGLs.

Wildlife tourist survey respondents were asked about their awareness of SGL funding: *Please check all of the following ways in which you perceive or are aware that the Pennsylvania State Game Lands are funded.* This was a multiple response question. Overall, 36 percent indicated that SGLs were funded through hunting permits, 14.3 percent said Pennsylvania public revenues, and 11 percent said they did not know (see Figure 14). These combined responses indicate that approximately 25 percent of wildlife tourists have an inaccurate or uninformed perspective on SGL funding.

**Figure 14: SGL Funding**



Total does not equal 100 percent because of multiple responses.

Respondents were asked about their willingness to pay for a secondary user permit: *Even if \$0, how much would you be willing to pay for a secondary use permit on SGLs?* The range of responses was from \$0 to \$500. The mean response was \$14.70, with a standard deviation of \$23. The median was \$10 and the most frequent response was \$0.

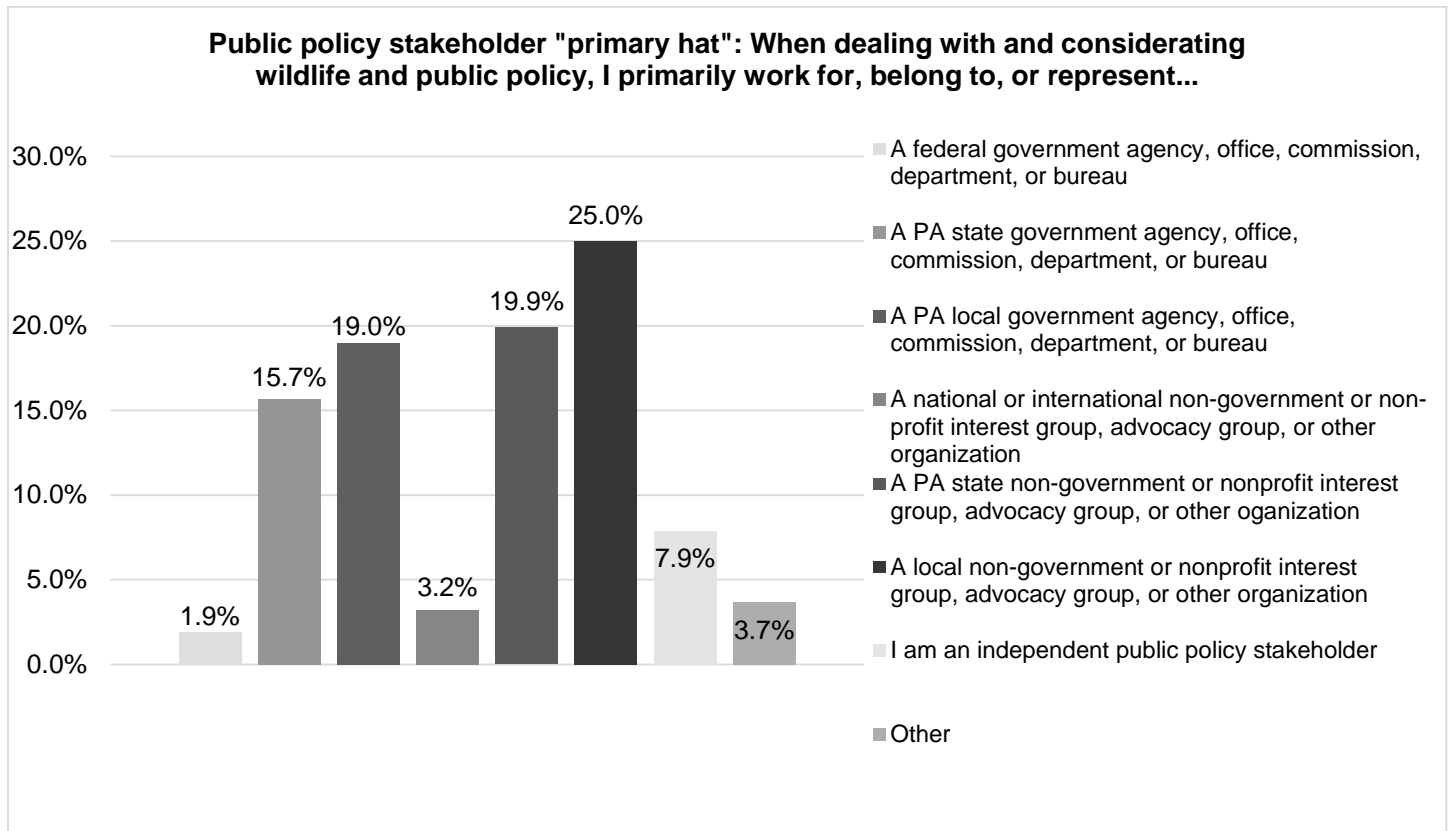
### **Wildlife Tourism Public Policy Stakeholder Survey**

The wildlife tourism public policy survey queried those who were identified as influencers of tourism, wildlife, or public lands policy, also known as wildlife tourism public policy stakeholders. Respondents were asked about activities permitting and SGL knowledge and opinions. The questions related to policy were analyzed and classified into content areas or themes, and were used to further simplify and summarize otherwise more complex qualitative (i.e. non-numerical) sets of information. The results related to policy are included in the conclusions and policy considerations.

#### *Respondents' Affiliation*

The survey asked respondents about their primary and secondary affiliations: *When dealing with and considering wildlife and public policy, you may “wear many hats” but have one that defines you the most. I primarily work for, belong to, or represent.* The highest distribution of respondents' primary affiliation was from a local, non-government or non-profit interest group, advocacy group, or other organization.

**Figure 15: Primary Role of Public Policy Stakeholder Respondents**

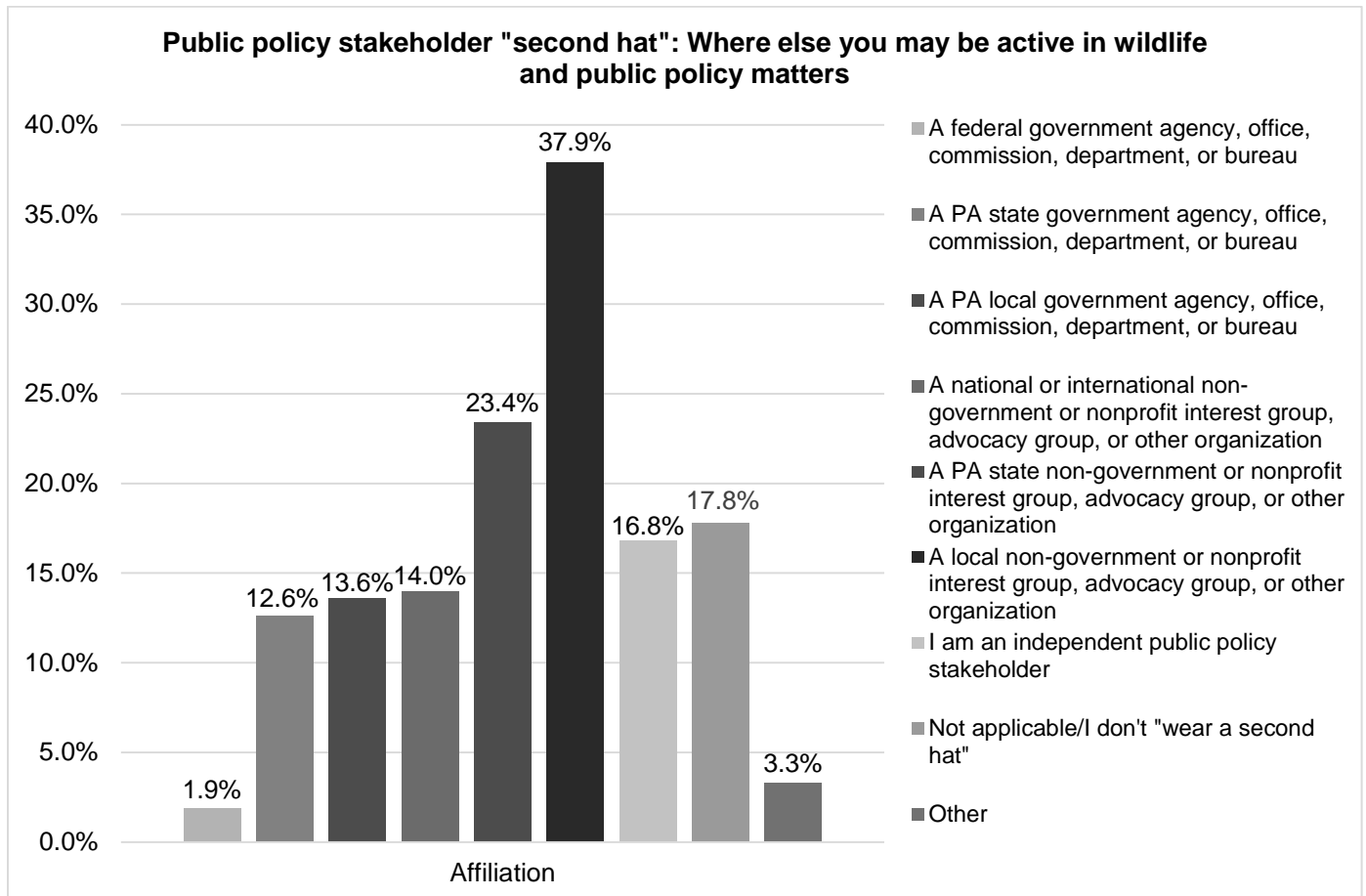


Total does not equal 100 percent because of rounding error.

Wildlife policy stakeholders were also asked about their secondary affiliation, recognizing that many respondents would maintain status within several types of organizations within their work, personal, and volunteer lives. Respondents were asked: *Where else are you active in wildlife and public policy matters? I work for, belong to and/or represent.* The majority of secondary affiliations (37.9 percent) were a local non-government or nonprofit interest group, advocacy group, other organization. This is similar to the highest distribution for the primary affiliation question, which indicates that many whose primary affiliation may be at a different scale also have a secondary local affiliation. These affiliation questions coupled together also illustrate that local participation and input was well represented from a local stakeholder level (see Figure 16).



**Figure 16: Secondary Role of Public Policy Stakeholder Respondents, 2016**

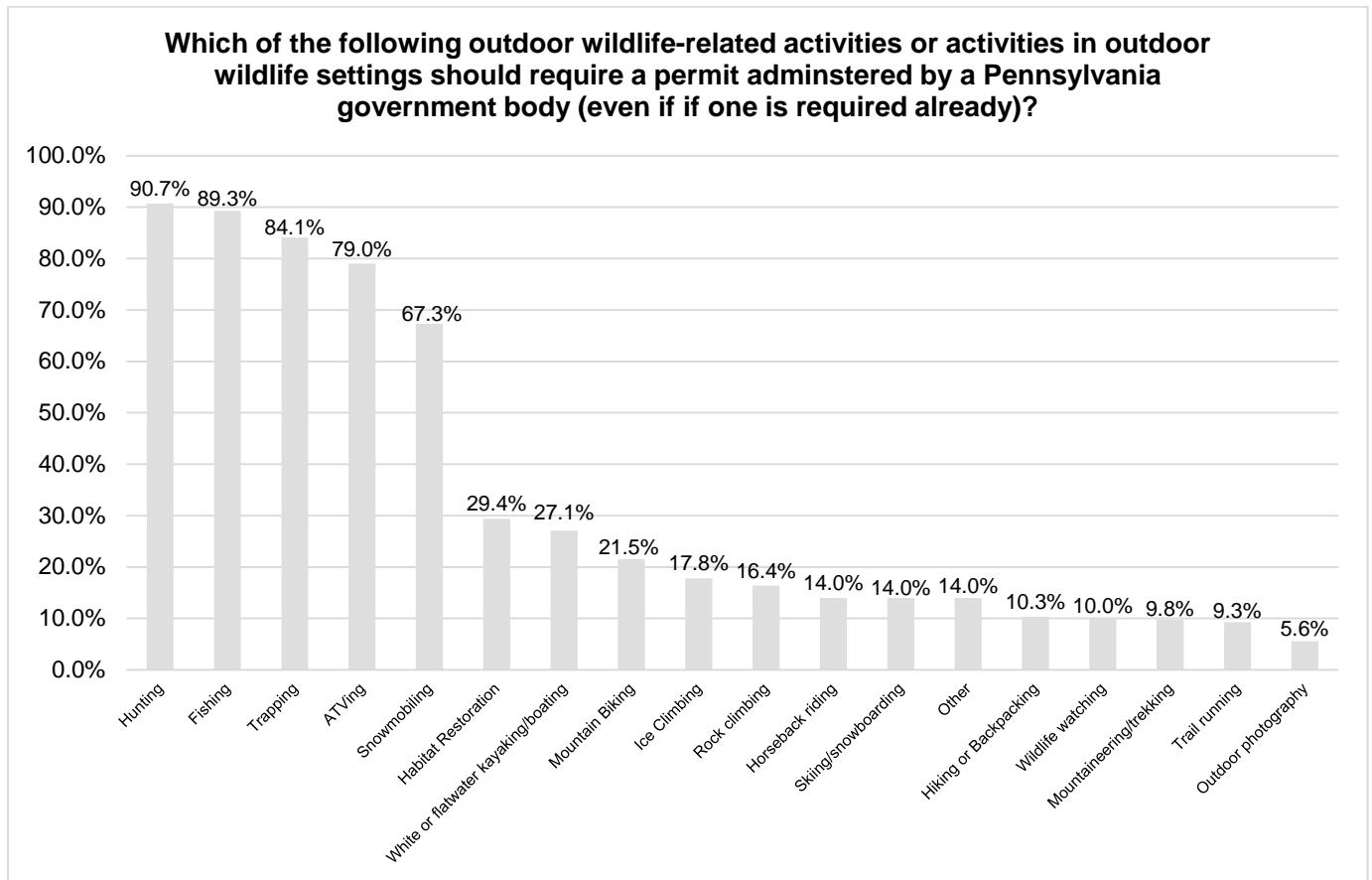


*Total does not equal 100 percent because of multiple responses.*

### *Land Access and Permits*

Once primary and secondary affiliations were established, respondents were asked multiple response questions about land access and permits: *Based on your personal opinion and not necessarily the official point of view of your group, agency, organization, or employer, which of the following outdoor wildlife-related activities or activities in outdoor wildlife settings should require a permit administered by a Pennsylvania government body (even if one is required already)?*

**Figure 17: Activities That Should Require a Permit**



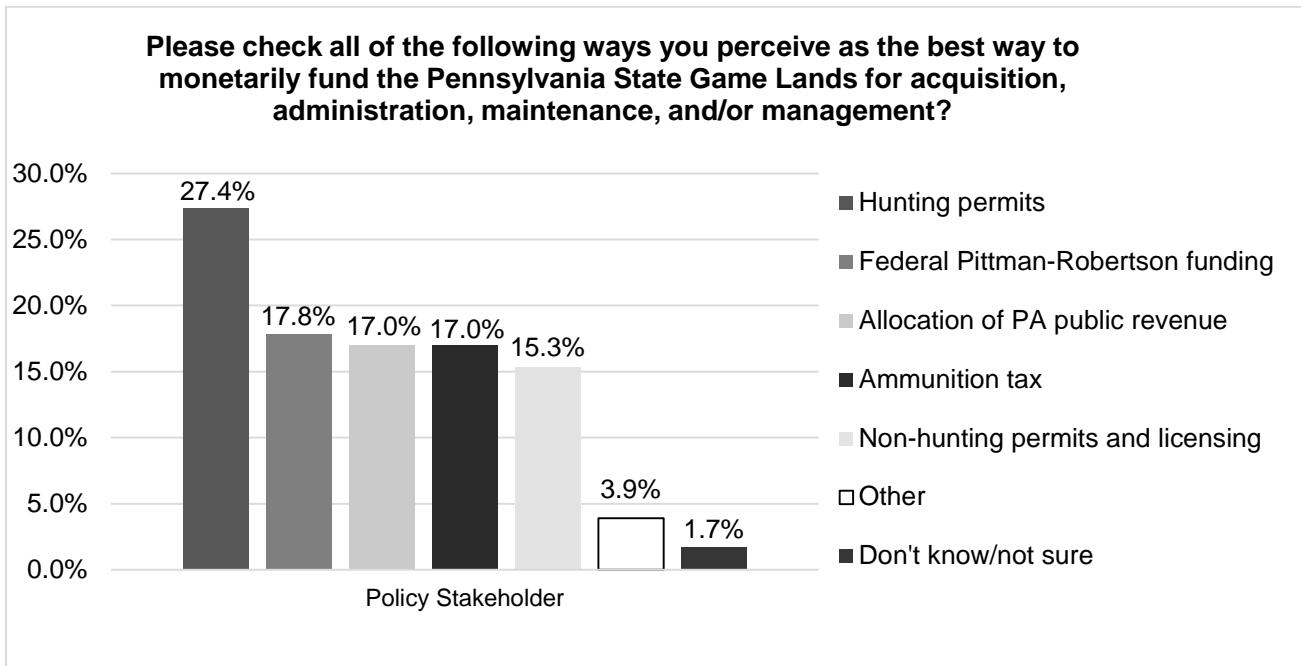
*Total does not equal 100 percent because of multiple responses.*

The overwhelming majority of stakeholders indicated that hunting (90.7 percent), fishing (89.3 percent), trapping (84.1 percent), ATVing (79.0 percent), and snowmobiling (67.3 percent) should require a permit in wildlife settings administered by a Pennsylvania government body. There was a natural break in the data for subsequent activities from habitat restoration (9.4 percent) to outdoor photography (5.6 percent). The highest ranked activities currently require permits (see Figure 17). This indicates that current permitting was deemed appropriate by the stakeholder population.

#### *State Game Lands Knowledge and Opinions*

The next section of the survey asked the public policy stakeholders about SGL funding: *Please check all of the following ways you perceive as the best way to monetarily fund the Pennsylvania State Game Lands for acquisition, administration, maintenance, and/or management?* The majority of respondents indicated hunting permits (27.4 percent), followed by federal Pittman-Robertson Funding (17.8 percent). Interestingly, 17.0 percent indicated the allocation of Pennsylvania public revenue, which is not part of the funding structure for SGLs (see Figure 18).

**Figure 18: Funding SGLs**



*Total does not equal 100 percent because of multiple responses.*

At its conclusion, the survey included two, open-ended questions for public policy input:

- *What do you like and/or dislike about policies that currently govern the lands and the wildlife on those lands for non-consumptive users (i.e. non-hunters)? Please comment on State Game Lands (SGLs) specifically; and,*
- *What do you like and/or dislike about the policies that currently govern those lands for consumptive user (i.e. hunters)? Please comment, if you want, about SGLs specifically.*

These narratives were summarized and prioritized as part of the policy considerations section.

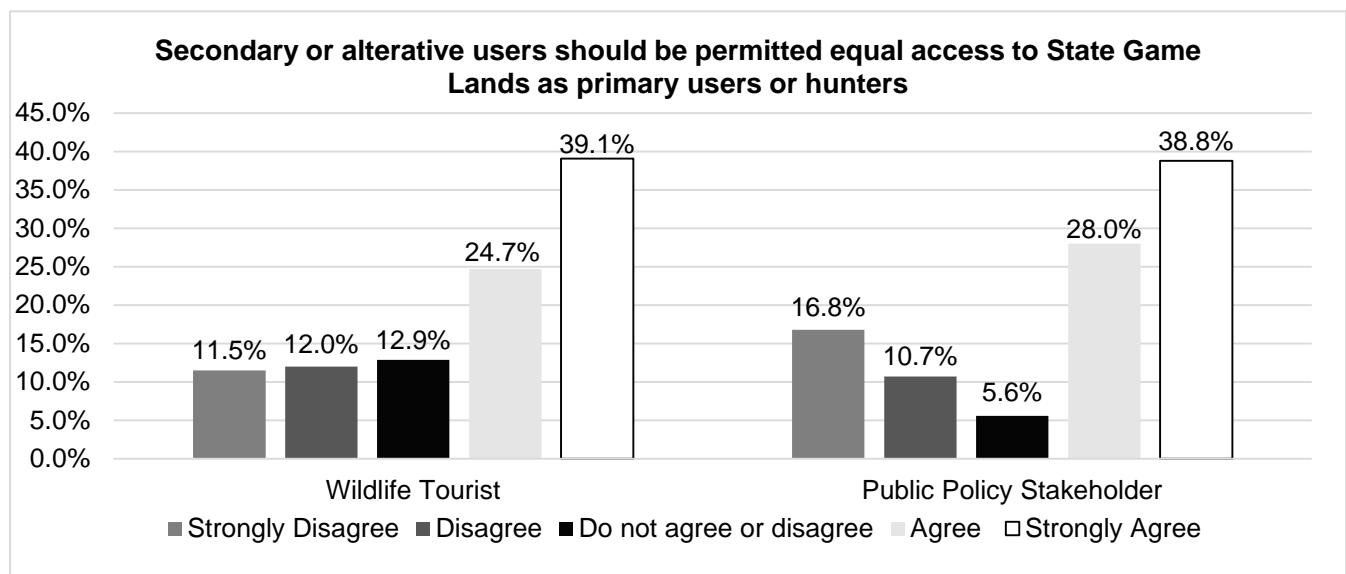
#### *State Game Land Use Opinion Comparisons*

For continuity and comparison between wildlife tourists and wildlife public policy stakeholders, the surveys included a series of Likert-scale questions with the options of strongly disagree, disagree, do not agree or disagree, agree, and strongly agree:

- *Secondary or alterative users should be permitted equal access to State Game Lands as primary users or hunters;*
- *Secondary or alterative users of Pennsylvania State Game Lands should be required to have a permit to the use the land; and,*
- *Secondary or alternative users of Pennsylvania State Game Lands should pay for a permit to use the land.*

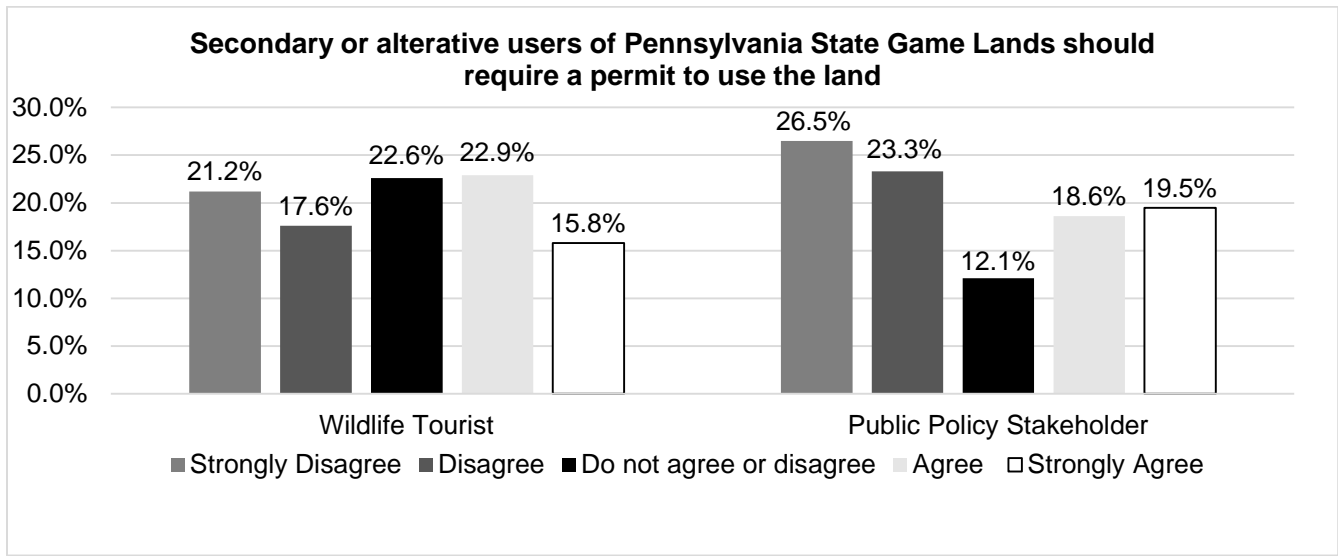
In their design, these questions intended to qualify access alone, access with a permit, and/or access with a paid permit. More than half of each group of respondents either agreed or strongly agreed that secondary users should be provided equal access to SGLs (63.8 percent of wildlife tourists; 66.8 percent of public policy stakeholders). A smaller proportion of each group agreed or strongly agreed with the requirement of a secondary user permit (38.7 percent of wildlife tourists; 38.1 percent of public policy stakeholders). Similar proportions agreed or strongly agreed on the topic of a permit with payment (39.6 percent of wildlife tourists; 38.1 percent of public policy stakeholders). This consistency is somewhat indicative that most respondents did not distinguish between a permit and a fee-based permit. These findings are summarized in Figures 19, 20, and 21.

**Figure 19: Allowing Equal Access to Secondary Users**



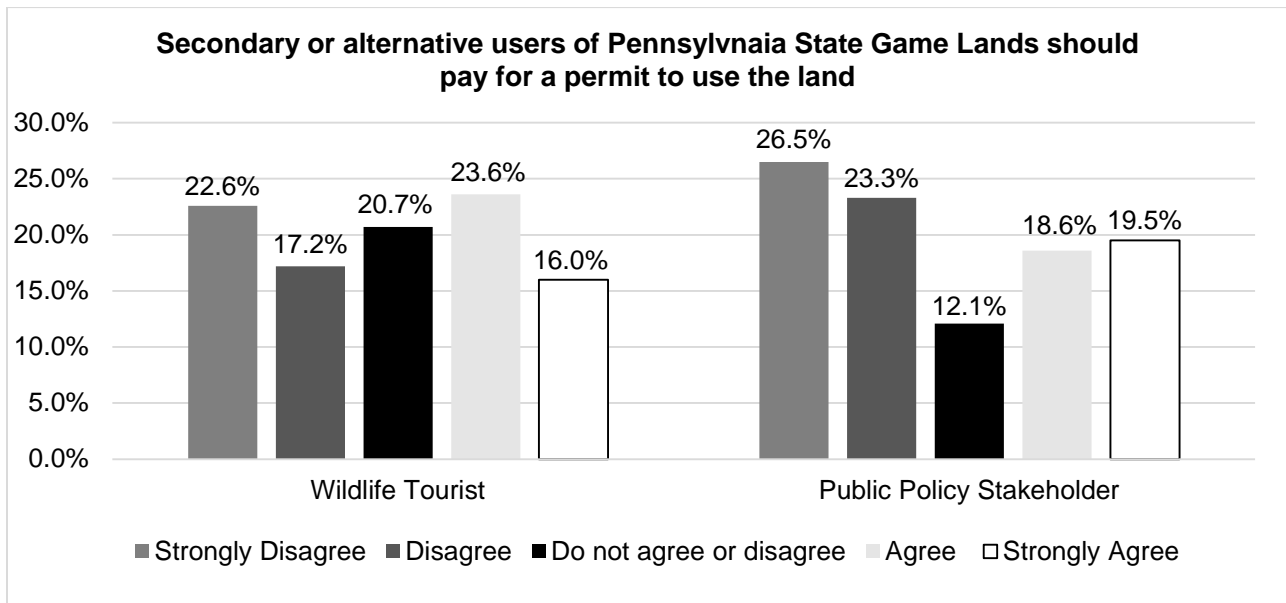
*Total does not add up to 100 percent due to rounding error.*

**Figure 20: Requiring Secondary Users to Have Permits**



Total does not add up to 100 percent due to rounding error.

**Figure 21: Requiring Secondary Users to Pay for Permits**



Total does not add up to 100 percent due to rounding error.

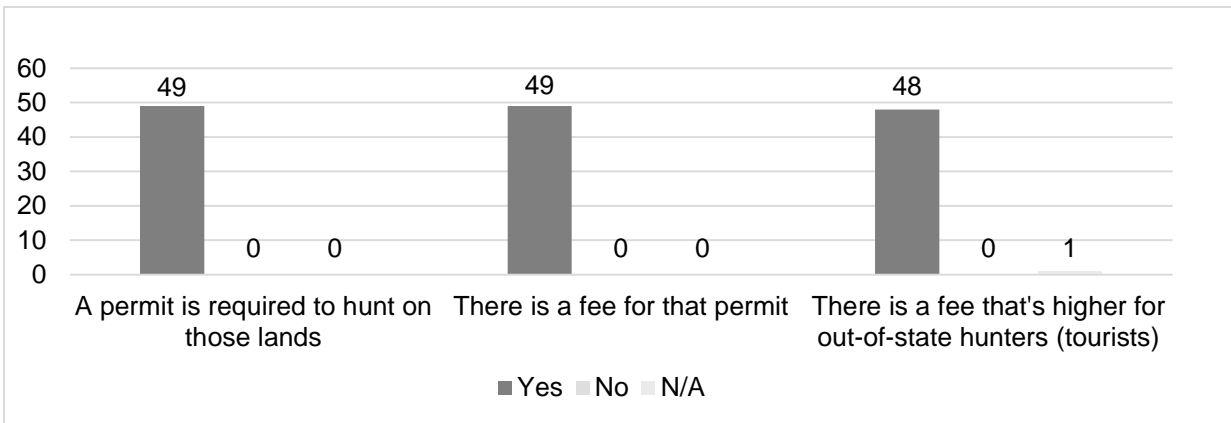
**Hunting Land Administration, Use, and Permitting in Other States**

The research inventoried the administration of hunting land across all U.S. states to determine if it was similar to the way Pennsylvania administers its hunting lands. To make uniform comparisons, the researcher developed the following definitions based on a comprehensive scan of state government hunting regulations in other states:

*A State Game Land is a state owned, administered, and/or managed land that is designated primarily for the consumptive use of wildlife (i.e. hunting). These lands provide natural settings for wildlife. These lands may be multi-purpose but are distinct from State Parks and State Forests. A primary user is a hunter or consumptive user of wildlife. His/her primary purpose is lethal consumption of wildlife. A secondary user enjoys wildlife less-consumptively or through non-lethal consumption. These are non-hunters.*

The inventory was completed using internet and metasearch engines to locate the official state agency, organization, department, commission, or division for each state’s game land, hunting lands, or equivalent statuses. The research determined that all states have a state game lands system or equivalent. All states required a hunting permit to access these lands and charged a fee for that permit. Furthermore, almost all states distinguished between permits for state residents and non-residents (or hunting tourists) and the fee for out-of-state hunters was higher than that of state residents. Georgia’s hunting lands, managed by the Georgia Wildlife Resources Division, at the time of the inventory, did not have clear guidelines for out-of-state hunters. Therefore, the research determined that Georgia did not maintain a separate license for out-of-state residents and did not charge a higher fee for out-of-state residents (marked N/A in Figure 22.) (See Figures 22 and 23.)

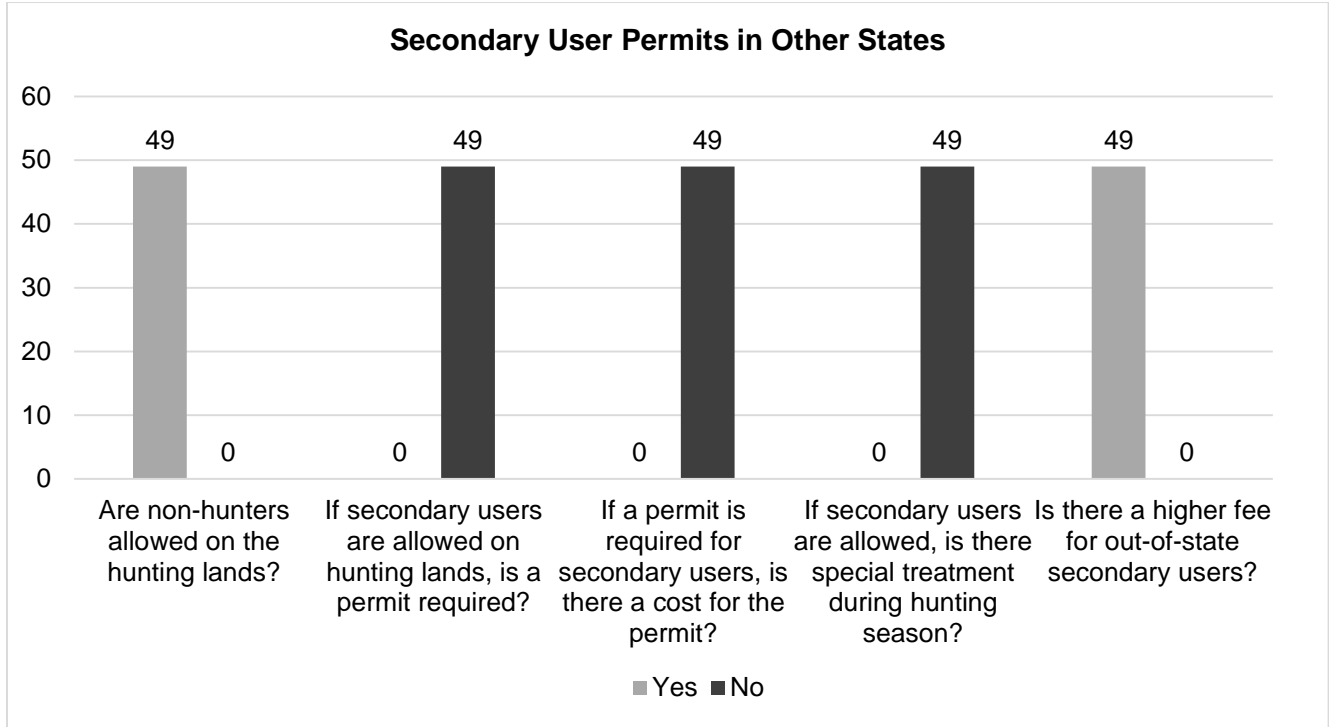
**Figure 22: Hunting Lands Permits for Hunters in Other States**



In almost every other state, secondary users were allowed on designated hunting lands. Connecticut had somewhat unclear distinctions between primary and secondary users at the time the hunting lands inventory was conducted. However, the research eventually determined that non-hunters were allowed on state hunting lands. No states required a permit of all secondary users, and no cost was attributed to secondary users from the state or out-of-state sources. All states made distinctions for secondary use during hunting season, such as rules, user demarcation, and/or access times that had to be followed by secondary users. This includes some requirements, such as using blaze orange on hunting lands. It also includes recommendations for secondary users to avoid certain areas during firearm seasons to ensure that they do not interfere with hunters, and precautions in certain areas, such as valleys, or during certain times of the day, such as dusk or dawn. In general, there is a distinction

made that hunters have priority during hunting season and that a certain amount of common sense or due diligence is necessary for secondary users.

**Figure 23: Secondary User Permits in Other States**



### Conclusions and Policy Considerations

This research examined the characteristics of wildlife tourists and their non-consumptive use of wildlife assets on Pennsylvania public lands, and reviewed central policy issues surrounding Pennsylvania State Game Land access and use. It focused on the use of State Game Lands by secondary users and explored the support for secondary user permits and payments.

The data gathered indicated that secondary user permits and payments are divisive among a broad and representative group of wildlife enthusiasts, both consumptive and non-consumptive. The considerations presented in the following section strive to satisfy concerns of many types of users, although like all policy considerations, it is doubtful all users will be equally content.

It is important to note that the following considerations do not include the more intensive policy considerations submitted by some research respondents since they involved more dramatic policy instruments, such as taxing secondary user equipment, completely reorganizing agencies, changing the commissioner system in Pennsylvania, abolishing PGC completely, merging PGC into other organizations, merging PGC and PFBC, extensively extracting/selling SGLs resources (i.e. oil, gas, wildlife, timber), and diverting the county occupancy tax (tourism promotion) revenue to public land management and/or local land tax payments for SGLs. This

research does not invalidate this public policy input but chose to focus on those considerations that were more pragmatic, worked within established public programs, and reemerged thematically in the data analysis as reasonably feasible. All public policy considerations made in this report reflect the results of objective data analysis as described in the previous sections.

### **SGL Land Management Strategies**

Public policy can either manage demand (the user) or supply (the land). For supply side management, two possible land management strategies can be levied for the management of publicly administered, managed, or owned lands: a restriction on use, time, and space, or a combination of restrictions on use, time, and/or space. These are currently in use in various forms for SGLs. This demonstrates precedent for the subsequent policy considerations.

SGLs currently maintain activity-based land management strategies. For example, different types of activities present different intensities of consumption and land user conflicts such as biking, horseback riding, and snowmobiling.

SGLs recognize compatibility issues by restricting activities in some areas and not in others. Furthermore, different activities require different permits. Hunting is different than trapping. Shooting ranges require an additional permit fee in the amount of \$30. These active strategies set a precedent for permit restrictions based on the intensity of use and activity type.

SGLs also employ temporal land management strategies. Temporal refers to things related to time or when the land is used, such as the time of year, month, week, or day. For example, SGLs are currently managed by season for different species throughout the calendar year. SGLs also have restrictions for primary users based on time of the week as Sunday hunting is prohibited. However, this application is not universally applied as certain species, such as coyotes and crows, have no Sunday hunting restrictions. This illustrates that PGC recognizes temporal management strategies and employs these to restrict activities by season.

SGLs also currently employ spatial strategies for land management. Spatial strategies are those that related to the use of land area itself. Temporal strategies regulate “when,” while spatial strategies regulate “where.” For example, the lands themselves have distinct boundaries, and distinctions are made for greater contact between user types, such as along the Appalachian Trail. Spatial strategies include management by zoning and access, such as roads, gates, parking areas, and trails.

Using strategies such as those described above to elicit a desired user behavior and to preserve the consumed resource (wildlife and its habitat) is known in recreation and tourism management as “visitor management.” Visitor management can be hard or soft. Hard visitor management approaches involve physical management, regulatory management and economic management. For example, gates and fences are forms of hard management. Soft approaches make use of visitor education and codes of conduct. Signs, such as those to regulate activities on SGLs, are examples of soft management (see Figure 24).



**Figure 24: Examples of Soft Management**



Source: <http://www.pgc.pa.gov/HUNTTRAP/STATEGAMELANDS/Pages/default.aspx>.

While visitor management approaches have merit and have met with some success, they also have tended to assume that the visitor is guilty until proven innocent (Mason 2016). Such approaches have also tended to ignore the concept of the visitor experience. In the case of the policy focus surrounding SGLs, the visitor is the land user. Therefore, the use of some management techniques compromises the experience for the user and in turn degrades the quality of experience delivered on SGLs. For example, with too many management features (e.g. gates, fences, and signs), SGLs lose their natural wildlife setting characteristics. Without a quality experience, especially by hunters, SGLs lose their mainstay funding source, which is the primary user. Therefore, extensive and invasive visitor management was not recommended or is recommended with great care.

The series of recommendations below consider these land use and visitor management strategies that are consistent with the findings of the research. The wildlife tourist survey provided a general baseline of information including a demographic and land use user profile. The public policy stakeholder survey informed policy recommendations tied to the review of hunting lands in other states.

### **Considerations for Government Agencies and Departments**

#### *Consideration One: Allow PGC to Focus On Its Mission*

The PGC's mission is to primarily manage wildlife and not people. The survey respondents commended PGC for its wildlife management. However, it was criticized for not adapting to the evolving patterns of land use and recreational activities. The prevailing thought on this theme was that popular opinion overrides the necessary science of wildlife management. Where the scientific practices of the PGC were noted specifically, the recurring theme was that its wildlife management overemphasized deer, and, therefore, the interests of deer hunters. These critiques extended the consideration that PGC be more inclusive in its species consideration as a wildlife management agency and not function as a deer management and deer hunter appeasing agency. As such, the research findings indicated that PGC should continue to pursue its core science-based mission and allow the SGL permit matter to be resolved within the recommendations made below.

### *Consideration Two: Greater Agency Coordination and Focus*

Agency coordination exists but not to a sufficient extent, especially where tourism is concerned. For example, since 2011, the Association of Fish and Wildlife Agencies has recognized the need for cohesion, with its Wildlife Viewing and Nature Tourism Working Group (2017), “which addresses a national need for a cohesive voice and a more fluid organized approach to regional, state and local wildlife viewing/watchable wildlife concerns.” In this model, it is suggested that a more cohesive discussion be mirrored at the state level. Both the PGC and PFBC are represented on the Association of Fish and Wildlife Agencies (<http://www.fishwildlife.org>). Ample collaboration currently exists between major natural heritage resource administration and management. These agencies recently co-produced the *Pennsylvania Wildlife Action Plan 2015-2025*. This collaboration and resource sharing is currently demonstrated by the PA Outdoor Shop, which allows outdoor enthusiasts to purchase wildlife licenses and/or fishing/boating licenses through a centralized transaction portal at <https://www.pa.wildlifelicense.com>.

An excellent collaborative example also exists between the several public departments and commissions through the Pennsylvania Natural Heritage Program (PNHP), which is:

*“a partnership between the Western Pennsylvania Conservancy, the Department of Conservation and Natural Resources, the PA Fish and Boat Commission and, the PA Game Commission, in cooperation with the U.S. Fish & Wildlife Service and is a member of the International Network of Heritage Programs called NatureServe.” (PNHP 2017).*

Therefore, there is demonstrated collaboration between those departments, agencies, commissions, and related organizations that administer, manage, and/or own public lands in Pennsylvania. However, the collaboration seems to have a gap when the component of tourism, not necessarily recreation, is attached to wildlife in the form of wildlife tourism.

Where collaboration exists, a tourism focus does not for SGLs. However, PGC is involved in the tourism industry. PGC is responsible for several projects at its Middle Creek and Pymatuning wildlife management areas and the Winslow Hill Elk Viewing Area in Benezette Township, Elk County. However, it is not broadly involved and therefore experienced in management of available wildlife product from a tourism consumption perspective. VisitPA.com is the official tourism website of Pennsylvania through DCED. All SGLs are listed in the directory of tourism attractions, and, therefore, are considered assets of interest to existing and potential visitors. Therefore, PGC has an indirect stake in tourism and Pennsylvania’s developed tourist assets. It has a relationship to DCED but none that is directly and mutually collaborative as with DCNR and PFBC.

Legislative issues for tourism public policy are largely advocated in a consolidated capacity for the tourism industry by the Pennsylvania Association of Travel & Tourism (PATT). PATT recognizes the need for specific industry councils, such as the destination management organization council, and the pending additions of the: attraction council; lodging council; travel media council; arts/cultural/museum council; and retail and shopping council (<https://www.pattravelandtourism.org>).

However, wildlife tourism in its many forms (nature-based tourism, ecotourism, or species specific tourism) is not part of PATT’s formal dialogue. It should be. A breakout session on wildlife tourism as an education and

outreach opportunity at a PATT-sponsored (or other professional tourism industry organization) event would be a good way to initiate a connection.

Special events, touring, and outdoors were the top three marketable trip types for Pennsylvania overnight travelers in 2014, which is the last publicly available year of tourism market profile and economic impact reporting at the time of this research report (Longwoods 2015). This warehouse of tourism data is known as a Tourism Satellite Account. The state Tourism Satellite Account provided by Tourism Economics considers “recreation” to include spending at attractions and on activities both indoor (e.g., bowling) and outdoor (e.g., hiking). This is far too broad to fully account for the niche or specialized interest area of wildlife tourism.

Except for those in the Pennsylvania Wilds tourism region (see Figure 25), Tourism Promotion Agencies (TPA) are generally not part of the extended wildlife tourism conversation. This would allow each jurisdiction to determine if wildlife tourism suits them and have a ready networking foundation within which to operate.

**Figure 25: Pennsylvania Office of Tourism Regions**



## **User and Stakeholder Outreach Recommendations**

### *Consideration Three: Simplified Presentation for Harmonious Use Guidelines*

To reduce land use conflicts and negative user impacts, hard and soft management techniques may be incorporated so that users can more clearly understand what is expected of them while using game lands. Hard intervention techniques include gates and trail access, and soft intervention techniques, while not as persuasive, include signage.

In addition to local TPA brochure display programs, another outlet of information for wildlife tourists is the Pennsylvania on Display program (<http://www.pennsylvaniaondisplay.com>). These are Pennsylvania-branded brochure racks in Rest Areas, Welcome Centers, and Turnpike Plaza locations. Where wildlife tourist traffic is higher, these displays may prove a useful conduit of wildlife information, in general, and for all public land use, including SGLs, specifically. The agency cross-over and jurisdiction is not generally known or understood by visitors. So, while state departments and commissions, such as DCNR, DCED, PFBC, and PGC, maintain their own information outlets, a coordinated and collaborative effort for wildlife tourists would be beneficial to visitor understanding and appreciation, and for the harmonious consumption of lands that are most compatible to their desired activities. The official Pennsylvania brand gives this information additional credibility and visibility for travelers.

### *Consideration Four: Grassroots Outreach on Funding*

The research revealed that part of the divisiveness associated with the use of SGLs is a lack of information on how these lands are administered and funded. A simple fact sheet with an electronic referral and a public relations campaign are recommended to keep the implementation expense minimal while maximizing impact. The PGC is a well-established and effective provider of wildlife education and outreach. While the information is available electronically via <http://www.pgc.pa.gov/>, it is not widely available and visible in places where a secondary user would organically find it. A simple dissemination strategy and/or signage program at SGL access points would serve as a friendly reminder to all users that primary users of SGLs are the financial supporters of the land and that secondary users are welcome guests.

A signage program for Hunter Special Access currently exists to remind hunters to respect private lands (see Figure 26).

**Figure 26: Signage Examples**



Source: <http://www.pgc.pa.gov/>.

A slight modification of the signage above directed to secondary users would be an effective form of communication. For example:

*This Land Is Open To You Through The Courtesy Of Hunters. Cooperating With Pennsylvania Game Commission Through Paid Hunting Licenses. Respect And Protect This Privilege.*

*Wildlife Enthusiasts! Through the Courtesy Of Hunter & Trapper License Fees You May Recreate Here. The Lands Do Not Receive Revenue From Pennsylvania Public Funds. Please Respect This Privilege.*

### **Permit Considerations for SGLs**

#### *Consideration Five: Increased Consequences for All Abusive Users*

The theme of appropriate use was consistent throughout the public policy stakeholder survey responses. This input confirmed the initial hypothesis that abusive users and not all users were the source of perceived land misuse. This feedback suggests that most users do not cause problems and that a unilateral secondary user permit would create more cumbersome rules for users to follow. Therefore, punishing those who do not follow the established rules of use is a better approach. Those who commit prohibited acts on SGLs should be held accountable accordingly.

While Act 54 of 2010 significantly increased fines and revocation periods for serious violations, there should be consideration for increases for less serious violations:

*“A person charged with violating the Game and Wildlife Code will have the charges adjudicated before a Magisterial District Judge or Court of Common Pleas having jurisdiction. In addition to imposing fines, the court may also order the revocation of hunting and furtaking privileges. Absent a court order, the Game Commission may suspend the hunting and furtaking privileges of persons convicted of violating the Game and Wildlife Code. While revocation can be assessed for any violation, it’s generally reserved for significant violations that affect the safety of people or property, or impact the valuable resources of the commonwealth.”* (<http://www.pgc.pa.gov/HuntTrap/Law>)

In this manner, current structures of enforcement (including the volunteer-based Deputy Wildlife Conservation Officers program currently administered by PGC) for SGLs can be used with a higher monetary penalty and extend to revocation of secondary user privileges. This may be a sufficient deterrent to those who may misuse the lands and provide a possible revenue stream for future enforcement.

#### *Consideration Six: Selected Secondary Activity and Donation-Based Permitting*

Current Pennsylvania code provides discretion for limits on selective secondary recreational uses when in conflict with primary uses.

*“The Director has the authority to close State game lands or portions thereof, to recreational or other uses, when the specified uses may be or have become detrimental to those lands or the flora or fauna thereon, or where the uses conflict with legal hunting, furtaking or fishing activities or the Commission’s management or administration of State game lands. The closure may be seasonal or year-round and shall remain in effect until the Director removes the restrictions.”* (Pennsylvania Code Subchapter C. STATE GAME LANDS)

The results of this study do not recommend the implementation of a universal secondary user permit, although it is completely within the discretion of PGC to do so, and secondary users should appreciate that.

If a secondary user permit program is implemented, it should be no more than \$15 and levied on the most consumptive activities, especially those that are equipment-based, not already permitted or restricted, and/or involve significant disruption of habitat. These include: habitat restoration; mountain biking; ice/rock climbing; horseback riding; tour operation participants; and large groups of any secondary activity.

Most extractive (hunting and fishing) and equipment intensive activities are already part of the public lands permitting structure (i.e. off highway vehicles like ATVs and snowmobiles; non-motorized and motorized boats).

The activities recommended above are those that present similar consumptive and disruptive potential but currently do not typically require permits. Habitat restoration for some may be interpreted as a natural extension of wildlife rehabilitation permits already administered by the PGC. A tour operator is anyone who collects fees for the organization and/or guiding of individuals for secondary activities on SGLs. This can include organized activities like group organized rides, birding, outfitting, and guiding. The extent of SGL commercial tour operation is not known as it was a variable of wildlife-related activities that emerged from the research.

The research findings classified large groups as those of 10 or more participants in an organized group (arriving and departing from the same location collectively through coordination). This is consistent with PGC’s special-use, non-fee-based permitting program that covers:

*“Anyone wishing to conduct an activity that requires Game Commission authorization; including any activity or event involving more than 10 persons, which may conflict with the intended purposes or uses of property, or poses a potential environmental or safety problem,”*  
(<http://www.pgc.pa.gov/HuntTrap/StateGameLands/Pages/SpecialRequestsonGameLands.aspx>)

Data from the study suggest that these large groups, while less frequent, more negatively impact SGLs as compared to individual users, and therefore should be subject to a fee-based permit.

Furthermore, the research results suggest that, in lieu of a formal permit program, individuals of secondary activities may be encouraged, through signage and public information sources, to donate an appropriate amount to offset their use of SGLs. The Pennsylvania Departments of Agriculture and Conservation and Natural Resources, along with PGC and state legislators, for example, have an established service-based involvement in programs, such as Hunters Share the Harvest (<http://www.sharedeer.org/>). This program is set up to obtain monetary donations online. It receives wide participation and monetary contributions as a program where PGC acts as a referrer and endorsee. This program serves as a service-based model for a donation-based secondary user permit system.

The PA Outdoor Shop is a conduit for information and payment collection. It could be extended to facilitate an online donation-based permit, with the suggested donation of \$15 annually (an amount that emerged from the results of the research). At the PGC's discretion and barring legal restrictions, the donations could be diverted to established partner organizations. For example, PGC has authorized the following organizations to act as advisors to applicants for SGL Special Use Permits:

- Keystone Trails Association;
- PA Appalachian Trails Committee;
- PA Equine Council;
- PA Chapter International Mountain Bicycling Association; and,
- PA State Snowmobile Association. (<http://www.pgc.pa.gov/>)

During the online checkout process, the “shopping cart” could be populated with these partner organizations and donors could select those that should receive the funds. Then PGC, if legally restricted to accept donations of this type directly, could act as a pass-through organization to divert the donation where it will be directly accepted and used to support SGL maintenance.

Following the examples above, the precedent and infrastructure to collect funds from secondary users exists. The research strongly suggests that most secondary users are willing to voluntarily contribute funds outside of a cumbersome and formal mandatory permitting process.

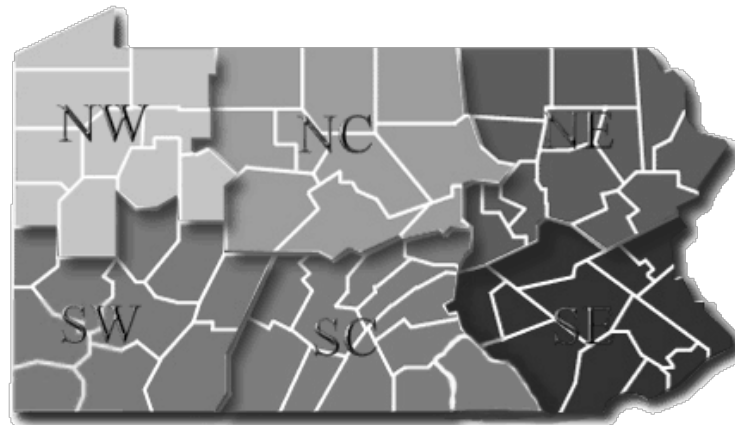
#### *Consideration Seven: Selective Game Land Secondary User Permits*

Up until now, the conversation about permitting has treated SGLs as a cohesive entity. These lands are anything but cohesive. Each has its own spatial context (i.e. land setting), habitat, and user dynamic. This is why each SGL has its own management plan. The permitting question should respond to the needs of each game land's local area.

When SGLs are within close proximity to an urban center, there is a greater propensity for land use conflicts because there is proximity to a larger group of available users. Therefore, these lands should focus closer attention on implementing a selective secondary user permit program. It is recommended that, before a universal policy for activities-based SGL secondary user permits is administered, SGL closer to urban centers pilot a selective user permit program.

If an SGL-by-SGL consideration is not feasible, a broader region-by-region approach may be. Of the six PGC regions, those in the Southeast Region (serving Berks, Bucks, Chester, Dauphin, Delaware, Lancaster, Lebanon, Lehigh, Montgomery, Northampton, Philadelphia, and Schuylkill counties), for example, are more likely to experience a higher volume of secondary user traffic due to their proximity to higher density population centers (see Figure 27).

**Figure 27: Six Pennsylvania Game Commission Regions, 2016**



Source: <http://www.pgc.pa.gov>.

*Consideration Eight: Increase Permit Fees for Non-Resident Primary Users*

The current fee for a non-resident hunter is \$101.90. Other fee structures for non-residents are determined by species, participant age, and equipment. While the fee structure is not identical when compared state-to-state, the hunting lands inventory conducted as part of this research demonstrated that Pennsylvania’s system presents an attractive value for hunting tourists and has room for a modest increase.

Those who use SGLs as true wildlife tourists (not recreationalists) are more likely to be primary users as well. A hunting permit with a higher out-of-state fee is universal throughout the U.S. so a modest non-resident increase would not be wholly discouraging. Extended research would be needed to determine the best amount for the recommended increase.

**Additional Research**

*Consideration Nine: Hunting Tourism Study*

According to the U.S. Census, 3.2 million people enjoy wildlife-related activities “around- the-home” (2011). However, when considering per person economic impacts, “away-from-home” visitors have significantly higher economic impact due to their travel-related purchases for lodging, subsistence, and transportation (U.S. Census 2011).



One consistent and partial funding mechanism for tourism promotion to the 53 state Convention and Visitors Bureaus (CVBs) and Tourism Promotion Agencies (TPAs)<sup>1</sup> is the hotel occupancy tax (PA Chapter 38 Tax Code). Therefore, “away-from-home” wildlife tourists potentially contribute more directly to tourism promotion funds. This study provided a general wildlife tourist/wildlife enthusiast profile. However, it did not focus on hunting as a tourism activity or focus on the distinct economic contribution potential of hunting tourism.

The Center for Rural Pennsylvania funded a study in the past that documented the economic impact of hunting, fishing and trapping and other studies that looked at the future of hunting in Pennsylvania. An additional study could build on this foundation by approaching hunting as an outdoor activity from the perspective of tourism, which, again, is distinct from recreation. The greatest distinction is that of economic development potential through tourism. Tourism is an interrelated system of tourism transportation, lodging, attractions, hospitality, and tourist facilities and services. Additional research would develop a more complete picture of those who travel to and within Pennsylvania to lethally consume wildlife as a primary motivation for travel.

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<sup>1</sup> CVBs and TPAs are also known as Destination Marketing or Management Organizations, DMOs.

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