

Trends in Hunting on Public and Private Land

Analysis Paper Based on the 2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation



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The conclusions in this analysis paper are the author's and do not represent official positions of the U.S. Fish and Wildlife Service.

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Hunting on Public and Private Land

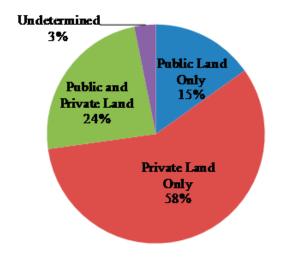
Hunting is a popular wildlife recreational activity for millions of Americans. It is a heritage passed down from generation to generation and is an important part of the American fabric of life and rural culture. There is a critical link between hunting and wildlife conservation as sportspersons in the U.S. have created one of the most successful wildlife conservation programs in the world. However, this lifestyle is showing signs of stress as evidenced by waning hunting license sales. Government agencies and the private sector must assure that wildlife habitat is protected and restored and hunters continue to have adequate access to areas to hunt.

In 2006, 12.5 million hunters hunted on public land, private land, or both in the U.S. More than 80% of hunters accessed private land and 39% used public land to hunt on. Some hunters relied exclusively on public land (1.9 million) while others used private land only (7.2 million). Another 3 million hunters hunted on both public and private land.

Public lands are defined as land owned by local government (such as county parks), State governments (such as State parks and wildlife management areas), or federal governments (such as National Forests and Wildlife Refuges). Private lands include land owned by a private individual, groups of individuals or nongovernmental organizations.

Information on the trends of hunting on private and public land is useful to public land managers in the justification of management goals and to private landowners who are considering alternative income opportunities by allowing hunting access to their land. This report uses information from the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation. The National Survey has been conducted about every five years since 1955 and quantifies the U.S. population (16 years old and older) who participated in these outdoor recreational activities. Due to methodological changes in 1991, survey results prior to 1991 are not comparable.

Figure 1. People Hunting on Public and Private Lands



¹ The North American Wildlife Conservation Model, unmatched anywhere else in the world, has two basic principles: 1) that fish and wildlife belong to all North American citizens and 2) they are to be managed in such a way that their populations will be forever sustained.

Hunters spent over 219 million days afield, with the majority of hunting occurring on private land. During 2006, 4.9 million hunters used public land on 54 million days, representing 25% of all hunting days. The other 75% of all hunting days were spent on private land (164 million days).

Hunting Trends on Public and Private Land

The trend in hunting overall from 1996 to 2006 saw a 10% decline in participation. However, those who hunted only on private land had no statistically significant decline in participation. Conversely, hunting on public land saw a 19% decline from 1996 to 2006.

The biggest decrease occurred for hunters using both public and private land (28% decline during this time period). Does this imply hunters no longer have the time or money to hunt on both public and private land and therefore must choose between the two? If so, private land apparently is the more preferred. Not only were there less hunters on public land but they also spent much less time hunting there.

Days afield on public land dropped 29% from 1996 to 2006. Days spent hunting on private land also decreased but by less than 20%. These results are likely evidence of the success efforts have had to increase public access to private land.

How does public and private land use vary among the different types of hunting? The National Survey breaks hunting down into four major categories: Big Game, Small Game, Migratory Bird, and Other Animals which will be referred to in the following sections.

Table 1. 1991-2006 Hunting on Public and Private Land²

	1991	1996	2001	2006		1996-2006
Hunters and day of hunting					Statistically	Percent
	Number	Number	Number	Number	Significant	Change
Hunters						
Total, all land	14,063	13,975	13,034	12,510	Y	-10
Public land, total	6,204	6,533	5,156	4,901	Y	-25
Public land only	2,115	2,344	1,879	1,888	Y	-19
Public and private land	4,073	4,188	3,277	3,013	Y	-28
Private land, total	11,725	11,383	10,724	10,206	Y	-10
Private land only	7,587	7,195	7,447	7,193	NA	(Z)
Private and Public land	4,073	4,188	3,277	3,013	Y	-28
Days of Hunting						
Total, all land	235,806	256,676	228,368	219,925	Y	-14
Public land ¹	64,707	77,018	60,454	54,433	Y	-29
Private land ²	178,990	198,165	169,795	164,319	Y	-17

¹ Days of hunting on public land includes both days spent soley on public land and those spent on public and private land

² Days of hunting on private land includes both days spent soley on private land and those spent on private and public land. Note: Detail does not add up to total because of multiple response and nonresponse

Y Statistically significant at the 95% confidence interval NNot statistically significant at the 95% confidence interval NA Not applicable (Z) Less than 0.5 percent

² The 95% level of confidence was used when calculating significance of differences.

Big Game Hunting Trends on Public and Private Land

Big game hunting was the most popular type of hunting. An estimated 10.7 million hunters over the age of 15 pursued big game in 2006. Big game is defined as deer, elk, bear, wild turkey, and other big game such as moose. 35% of big game hunters pursued big game on public land for 37 million days. 80% of big game hunters spent 120 million days pursuing big game on private land in 2006. Over 2 million hunters used both public and private land to hunt big game.

The number of big game hunters remained stable from 1996 to 2006. The same was true for big game hunters using private land. During this time period big game hunting participation on public land declined by 23%.

Days afield for big game hunting underwent a slight increase, though it was not statistically significant. Surprisingly, the number of days spent hunting big game on public land did not change and the days spent hunting big game on private land *increased* by 14% from 1996 to 2006. This is great news for states that have sought to increase access to private land. Big game hunting has remained stable at a time when most forms of hunting have decreased; these hunters are spending more time afield on private land. Providing access to private land for hunting, especially for big game, will likely continue to keep the hunting tradition alive.

It is interesting to look at the use of public land only and private land only. In 1991, 20% of big game hunters hunted on public land only and by 2006 this percent had fallen to 16%. Hunting on private land only went the opposite way: 56% of hunters accessed only private land in 1991 and their participation increased to 61% by 2006.

Table 2. 1991-2006 Big Game Hunting on Public and Private Land

	1991	1996	2001	2006		1996 -2006
Hunters and day of hunting					Statistically	Percent
	Number	Number	Number	Number	Significant	Change
Hunters						
Total, all land	10,745	11,288	10,911	10,682	N	-5
Public land, total	4,626	4,937	3,998	3,784	Y	-23
Public land only	2,162	2,353	1,815	1,717	Y	-27
Public and private land	2,451	2,584	2,183	2,066	Y	-20
Private land, total	8,464	8,746	8,748	8,571	N	-2
Private land only	5,990	6,162	6,565	6,504	N	6
Private and Public land	2,451	2,584	2,183	2,066	Y	-20
Days of Hunting						
Total, all land	128,411	153,784	153,191	164,061	N	7
Public land ¹	37,434	43,409	36,070	37,301	N	-14
Private land ²	90,432	105,627	110,283	120,092	Y	14

1 Days of hunting on public land includes both days spent soley on public land and those spent on public and private land

2 Days of hunting on private land includes both days spent soley on private land and those spent on private and public land.

Note: Detail does not add up to total because of multiple response and nonresponse

Y Statistically significant at the 95% confidence interval NNot statistically significant at the 95% confidence interval

Figure 2. Percent of Big Game hunting on public land only

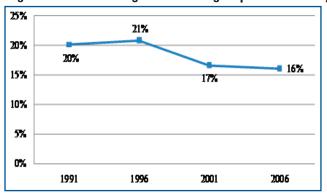
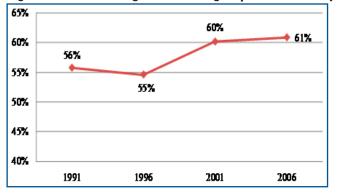


Figure 3. Percent of Big Game hunting on private land only



Small Game Hunting on Public and Private Land Trends

In 2006 4.8 million small game hunters hunted on public and private land. Small game hunting includes hunting for rabbit, quail, squirrel, and other small game animals including birds. 1.7 million hunters (35%) pursued small game on public land for nearly 12.5 million days. On private land, 3.8 million small game hunters spent 38 million days pursuing small game. 857 thousand small game hunters accessed both public and private land in 2006.

Small game hunting had a 31% drop in participation between 1996 and 2006. Refer to a report by U.S. Fish and Wildlife survey staff for a more detailed analysis of the trends in small game hunting by species³.

From 1996 to 2006 small game hunting participation on both public and private land declined by 45%. Unlike big game hunting, hunting small game only on public land had less of a decline (-26%) than hunting only on private land (-29%). The days hunters spent hunting for small game declined regardless of the type of land hunters accessed.

Table 3. 1991-2006 Small Game Hunting on Public and Private Land

	1991	1996	2001	2006		1996-2006
Hunters and day of hunting					Statistically	Percent
	Number	Number	Number	Number	Significant	Change
Hunters						
Total, all land	7,642	6,945	5,434	4,797	Y	-31
Public land, total	2,634	2,655	1,972	1,681	Y	-37
Public land only	1,089	1,110	935	824	Y	-26
Public and private land	1,542	1,545	1,037	857	Y	-45
Private land, total	6,424	5,713	4,345	3,795	Y	-34
Private land only	4,840	4,168	3,308	2,939	Y	-29
Private and Public land	1,542	1,545	1,037	857	Y	-45
Days of Hunting						
Total, all land	77,132	75,117	60,142	52,395	Y	-30
Public land ¹	19,093	20,069	16,170	12,532	Y	-38
Private land ²	57,391	54,993	42,382	38,080	Y	-31

¹ Days of hunting on public land includes both days spent soley on public land and those spent on public and private land

² Days of hunting on private land includes both days spent soley on private land and those spent on private and public land.

Note: Detail does not add up to total because of multiple response and nonresponse

Y Statistically significant at the 95% confidence interval N Not statistically significant at the 95% confidence interval

³ Aiken, Richard, "Trends in Fishing and Hunting 1991-2006: A Focus on Fishing and Hunting by Species" December 2010 < http://library.fws.gov/Pubs/natsurvey2006-trends-fishing-hunting-1991-2006-focus-on-species.pdf>

Migratory Bird Hunting on Public and Private Land Trends

Over 2 million U.S. residents over the age of 16 went migratory bird hunting for 19.8 million days in 2006. Migratory birds are birds that migrate from one region or climate to another such as ducks, geese, and doves. 1.7 million migratory bird hunters accessed private land and 798 thousand hunted on public land in 2006.

Migratory bird hunting had a 25% decline in participation between 1996 and 2006. Migratory bird hunting on public land saw a 29% decline in participation while hunting on private land had a 27% decrease in participation.

The days spent hunting migratory birds on public land declined by 27% and for private land there was a 24% decline in participation. Participation of people who used both public and private land did not have a significant change between 1996 and 2006. This indicates some migratory bird hunters still value access to both private and public land.

Table 4. 1991-2006 Migratory Bird Hunting on Public and Private Land

	1991	1996	2001	2006		1996-2006
Hunters and day of hunting					Statistically	Percent
	Number	Number	Number	Number	Significant	Change
Hunters						
Total, all land	3,009	3,073	2,956	2,293	Y	-25
Public land, total	887	1,117	1,045	798	Y	-29
Public land only	487	641	576	412	Y	-36
Public and private land	400	476	469	386	N	-19
Private land, total	2,454	2,377	2,255	1,740	Y	-27
Private land only	2,046	1,901	1,787	1,354	Y	-29
Private and Public land	400	476	469	386	N	-19
Days of Hunting						
Total, all land	22,235	26,501	29,310	19,770	Y	-25
Public land ¹	5,538	7,809	9,126	5,722	Y	-27
Private land ²	15,512	17,674	19,707	13,441	Y	-24

¹ Days of hunting on public land includes both days spent soley on public land and those spent on public and private land

² Days of hunting on private land includes both days spent soley on private land and those spent on private and public land.

Note: Detail does not add up to total because of multiple response and nonresponse

Y Statistically significant at the 95% confidence interval NNot statistically significant at the 95% confidence interval

Other Animal Hunters on Public and Private Land Trends

Over 1.1 million hunters reported spending 15.2 million days pursuing other animals, such as coyotes, groundhogs, and raccoons. 928 thousand hunters spent 12 million days hunting on private land and 311 thousand hunters accessed public land to hunt other animals for 2.8 million days.

Hunting for other animals saw a decrease in participation between 1996 and 2006. On private land, participation in this type of hunting declined 29% from 1996 to 2006. On the other hand, there was no significant change in the number of hunters who accessed public land to hunt other animals during this time period. However, the days spent hunting other animals on public land saw a 51% decrease from 1996 to 2006. The days hunters pursued other animals on private land also decreased during this time. There was no significant decline in the number of hunters who accessed both types of land which, like migratory birds, may imply equal value for these two types of land for some hunters.

Table 5. 1991-2006 Other Animal Hunting on Public and Private Land

	1991	1996	2001	2006		1996-2006
Hunters and day of hunting					Statistically	Percent
	Number	Number	Number	Number	Significant	Change
Hunters						
Total, all land	1,411	1,521	1,047	1,128	Y	-26
Public land, total	293	394	287	311	N	-21
Public land only	124	155	104	149	N	-4
Public and private land	168	240	184	162	N	-33
Private land, total	1,273	1,307	904	928	Y	-29
Private land only	1,099	1,068	720	766	Y	-28
Private and Public land	168	240	184	162	N	-33
Days of Hunting						
Total, all land	19,340	24,522	19,207	15,205	Y	-38
Public land ¹	2,642	5,731	3,227	2,820	Y	-51
Private land ²	15,655	19,871	16,076	12,248	Y	-38

¹ Days of hunting on public land includes both days spent soley on public land and those spent on public and private land

² Days of hunting on private land includes both days spent soley on private land and those spent on private and public land.

Note: Detail does not add up to total because of multiple response and nonresponse

Y Statistically significant at the 95% confidence interval N Not statistically significant at the 95% confidence interval

Public Access Programs

Many states have created hunter access programs and private landowners deserve to be recognized for the important public benefit they provide by allowing others to use their land. Generally the state will pay a fee to the landowner, usually based on acreage and land quality, and the access to hunt is by walk-in only (Helland, 2006). These programs are designed to benefit landowners, wildlife habitat, and hunters. These programs follow a recommendation by one of the first wildlife policy committees (Leopold, 1930) that hunting at no cost on private land was not in the best interests of wildlife management and landowners should be compensated by the public for providing wildlife and recreation.

Funding sources for public access programs vary widely across states. One federal source is the U.S. Department of Agriculture's Voluntary Public Access and Habitat Incentive Program, known as the "Open Fields" initiative. This program directs the USDA to support existing state-based programs supporting landowners who make their lands accessible for wildlife-related recreational access. The funding is from the federal government but the states continue to manage their program.

Another federal funding source is the U.S. Fish and Wildlife Service's Federal Aid in Wildlife Restoration Program (i.e. Pittman-Robertson funds) generated from an 11% excise tax on sporting arms and ammunition. The Wildlife Restoration Program provides grant funds for restoration of wild birds and mammals and to acquire, develop and manage their habitats. The funds are apportioned to states for projects including access to wildlife resources.

As a result of these successful partnerships between federal and state agencies as well as private individuals, many states have been able to increase the number of acres enrolled in access programs. Some state fish and wildlife directors are placing public access to private land as a high priority for their agencies.

Conclusion References

More than 80% of hunters access private land, making it the most preferred hunting option. Overall hunting participation saw a 10% decline in participation from 1996 to 2006, yet hunting participation on private land was stable. Big game hunting was the most popular; there were no significant declines in the number of hunters on private land, while days spent on private land increased. Small game hunting saw dramatic decreases in both private and public land hunting. This was especially true for hunters who accessed both public and private land. The declines in the number of migratory bird hunters were similar for public and private land. Other animal hunters' participation on public land remained stable between 1996 and 2006 while hunting on private land for other animals decreased. One noteworthy trend in other animal hunting was the number of days spent on public land. Between 1996 and 2006 the days other animal hunters spent on public land decreased by over 50%!

This analysis identified trends in hunting participation on private and public land. With only 5% of the U.S. population engaging in the sport, wildlife managers need new and innovative ways to create hunting opportunities. Lack of access has long been deemed a reason some hunters give up the sport. To help reverse this trend states have created walk-in and similar public access programs. Currently twentysix states have some form of public access program for hunting, fishing, and other wildlife-related recreation (USDA FSA).

The 2011 National Survey results will be available in early 2012. Though most programs for access to private lands are relatively new, their impact may help reverse the downward trend that hunting has seen since 1991. Results from the 2011 National Survey will provide new data about the type of hunting land hunters use. Many states and nonprofits have focused on different demographics such as youths and females to spark new interest in the sport. The key to recruiting new participants is not only teaching the skills but also providing access to land for these new participants to hunt on. Collaboration between state wildlife agencies and private landowners is a crucial part of keeping the hunting tradition going for future generations.

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