

# Oregon Wolf Conservation and Management 2012 Annual Report



*This report to the Oregon Fish and Wildlife Commission presents information on the status, distribution, and management of wolves in the State of Oregon from January 1, 2012 to December 31, 2012*



Oregon Department of Fish and Wildlife. 2013. Oregon Wolf Conservation and Management 2012 Annual Report. Oregon Department of Fish and Wildlife, 3406 Cherry Ave. Salem, OR, 97303



## TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	2
OREGON WOLF PROGRAM OVERVIEW.....	3
Regulatory Status in Oregon.....	3
Minimum Population, Distribution, and Reproduction.....	3
Pack Summaries.....	5
Capture and Monitoring.....	6
Dispersers and Mortalities.....	6
Incidental Take.....	7
LIVESTOCK DEPREDATION MANAGEMENT.....	7
Wolf Depredation Summary.....	7
Agency Actions.....	8
Compensation Program.....	9
Litigation Status.....	10
RESEARCH .....	10
INFORMATION AND OUTREACH.....	11
FUNDING.....	11

### LIST OF TABLES

Table 1. Minimum wolf population .....	3
Table 2. Wolves captured in Oregon in 2012 .....	6
Table 3. Summary of 2012 confirmed wolf depredation incidents in Oregon .....	7
Table 4. ODFW livestock producer assistance measures in 2012 .....	9
Table 5. Funds awarded through the County Block Grant Program in 2012 .....	10

### LIST OF FIGURES

Figure 1: Oregon wolf pack distribution in 2012.....	4
Figure 2. Estimated minimum wolf population in Oregon (2009-2012) .....	4
Figure 3. Number of packs and breeding pairs in Oregon (2009-2012) .....	4
Figure 4. Number of cow and sheep depredation events by month .....	8
Figure 5. Number of confirmed livestock losses by year (2009-2012) .....	8

## EXECUTIVE SUMMARY

Gray wolves in Oregon remained listed statewide as endangered under the Oregon Endangered Species Act (ESA). Wolves occurring west of Oregon Highways 395/78/95 continued to be federally protected as endangered under the federal ESA.

Oregon's wolf population continued to increase in distribution and abundance in 2012 and at year-end the minimum wolf population was 53 wolves in 7 packs. Reproduction was recorded in all packs, and 6 packs met the criteria as breeding pairs. All known resident wolves occurred in Wallowa, Umatilla, Union, and Baker Counties. This marks the first year that the initial conservation population objective number (4 breeding pairs in eastern Oregon) as defined in the Oregon Wolf Conservation and Management Plan (OWP) was reduced.

Seven wolves were captured and collared in 2012 and all but one was fitted with a Global Positioning System (GPS) collar. A VHF collar was deployed on the single pup captured (Snake River Pack) during the year. Two radio-collared wolves dispersed out of state and at year-end approximately 15% (n=8) of the population was radio-collared in 5 (71%) of the known packs. During the year the Oregon Department of Fish and Wildlife (department) collected a total of 5,965 wolf location data points in Oregon. One mortality was documented in 2012 when an un-collared male wolf was found dead on March 16 near Cove, OR.

Eight incidents of wolf depredation were confirmed in 2012, and all were associated with the Imnaha and Umatilla River packs. Confirmed depredations were 4 dead/ 4 injured cows (Imnaha Pack), and 8 dead/1 injured sheep (Umatilla River Pack). Per the OWP, the department and area producers implemented non-lethal measures in Wallowa and Umatilla Counties to minimize depredation. The department developed and implemented a new automated wolf notification system for livestock producers in 2012. The system utilizes GPS locations from collared wolves and notifies potentially affected livestock producers (via text or email) when wolves are in the area of their livestock, and more than 10,000 messages were sent to producers in 2012.

The Oregon Department of Agriculture's compensation program expended approximately \$65,739 in eight counties in 2012. Most funds were used for preventative measures and secondarily for direct payment of confirmed depredations.

A court-ordered stay was issued by the Oregon Court of Appeals on October 5, 2011, preventing the lethal removal of depredating wolves. The stay continued to be in effect throughout 2012 and no wolves were lethally removed.

Public interest in Oregon wolf management remains high and in 2012 the department replaced its monthly wolf reports with a web page that is updated whenever new information is available. In addition, people can sign up to be automatically notified of new wolf information. In 2012 the number of subscribers increased from 597 to 2,194.

In 2012 the department conducted a review of past wolf research and looked at its applicability to Oregon. The review identified future wolf research priorities and made specific recommendations for wolf-ungulate and wolf-predator research.

## 2012 OREGON WOLF OVERVIEW

### Regulatory Status

Federal Listing Status: Wolves occurring west of Oregon Highways 395/78/95 continued to be federally protected as endangered under the federal Endangered Species Act (ESA). The United States Fish and Wildlife Service (USFWS) is in the process of evaluating the classification status of gray wolves currently listed in the contiguous U.S. In the federally listed portion of Oregon, the department implements the OWP under the guidance of the Federal/State Coordination Strategy (March 2011).

State Listing Status: Wolves in Oregon remain listed statewide as endangered under the Oregon Endangered Species Act. The OWP sets a population objective of four breeding pairs for three consecutive years in eastern Oregon before delisting can be considered. A breeding pair is defined as an adult male and adult female with at least two pups at the end of the year.

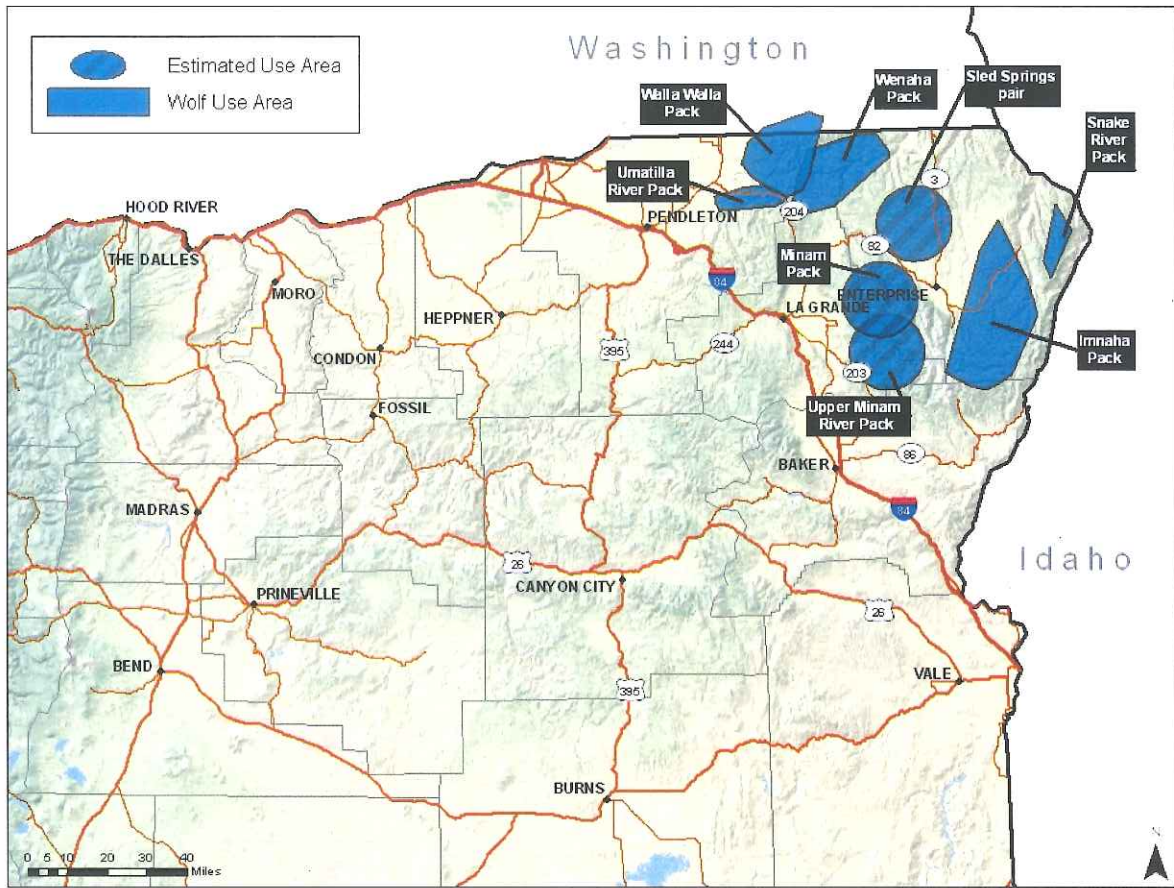
### Population, Distribution, and Reproduction

Minimum Population and Distribution: The 2012 minimum Oregon wolf population is 53 wolves (Table 1), an 83% increase from the previous year. Seven known packs were documented, and all occurred in northeastern Oregon (Figure 1). For monitoring purposes, a pack is defined as four or more wolves traveling together in winter. This minimum population estimate is based solely on wolves that staff verified through direct evidence (data from radio collared wolves, visual observation, remote camera footage, etc.). The actual number of wolves in Oregon is likely greater than this minimum estimate.

Table 1. Minimum wolf population (total = 53) in Oregon on Dec. 31, 2012.

Pack/Area	Adults	Pups	Unknown	Total
<u>Imnaha Pack</u>	2	6		8
<u>Minam Pack</u>	2	2	1	5
Sled Springs Pair	2			2
<u>Snake River Pack</u>	3	3	1	7
<u>Umatilla River Pack</u>	2	2		4
Upper Minam River Pack	2		5	7
<u>Walla Walla Pack</u>	4	2		6
<u>Wenaha Pack</u>	4	7		11
Individuals	2			2
Dispersers	1			1

Underlined packs are counted as breeding pairs



ODFW (RB)

Figure 1: Oregon wolf pack distribution in 2012.

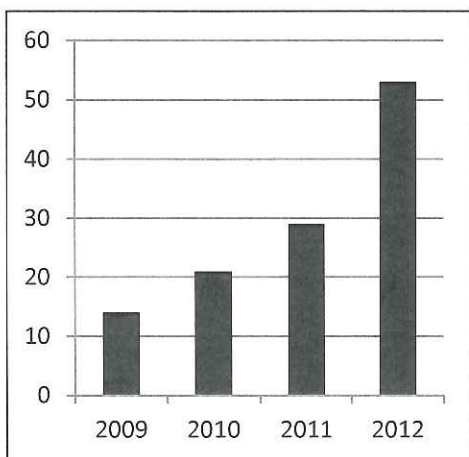


Figure 2. Estimated minimum wolf population in Oregon (2009-2012).

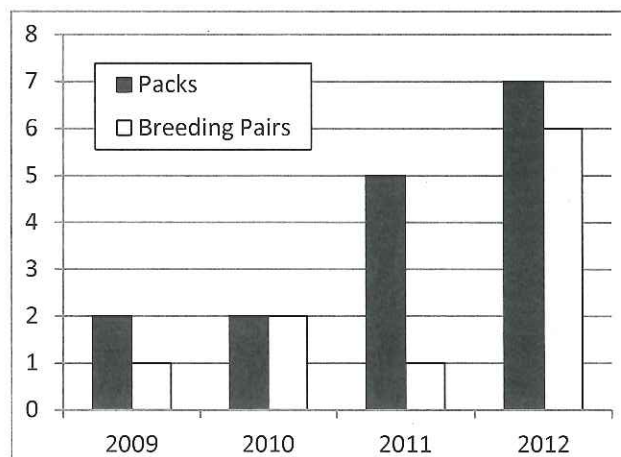


Figure 3. Number of packs and breeding pairs in Oregon (2009-2012).

Reproduction: Six breeding pairs were documented in 2012 (Table 1) which produced at least 22 surviving pups through December 31. The Upper Minam River Pack is known to have produced pups in 2012 but the number of surviving young in December was unknown.

### **Pack Summaries**

Imnaha Pack: The Imnaha Pack was first documented in 2009. Confirmed depredation attributed to this pack in 2012 was four cows killed and four injured – a reduction from 2011. The pack produced six pups in 2012 and was counted as a breeding pair. Both breeding adults of this pack are radio collared and monitoring data for the pack showed a use area of 563 mi<sup>2</sup> – much smaller than the 1245 mi<sup>2</sup> territory used in 2011. During 2012, 85% of the pack's location data points occurred on public land, an increase over 2011 data of 71% public land use.

Minam Pack: The Minam Pack was discovered within the Eagle Cap Wilderness in the northernmost portion of the Minam Unit in June 2012. The pack produced two pups and was counted as a breeding pair.

Snake River Pack: The Snake River Pack was first discovered in the fall of 2011. The pack produced at least three pups in 2012 and was counted as a breeding pair. One pup was collared with a VHF collar in August. All of the pack location data has occurred on public land within the Hells Canyon National Recreation Area.

Umatilla River Pack: A pair of wolves was discovered in 2011 in the northern part of the Mt Emily Unit. The pair produced two pups in 2012 and was counted as a breeding pair. During May, the department confirmed that the pack killed 8 and injured 1 sheep in two depredation incidents at two different locations. Non-lethal measures (fladry) were implemented and no further depredations occurred. The breeding male was radio-collared in June. The GPS data shows the pack using an 80 mi<sup>2</sup> area with 66% of locations on private lands, 28% public land and 6% tribal land.

Upper Minam River Pack: First discovered in August 2012 in the Eagle Cap Wilderness in the Minam Unit. Two adults and five pups were confirmed at that time. Field survey to determine if the pack achieved breeding pair status in 2012 is ongoing.

Wenaha Pack: This pack was first discovered in 2008. In April 2012, the breeding male of the pack was GPS collared and DNA analysis showed that he had been born into the Imnaha pack. In June, a non-breeding adult female wolf was captured and GPS collared. In 2012 the pack produced 7 pups and was counted as a breeding pair. The Wenaha pack used an area of 299 mi<sup>2</sup> in 2012 and was on public land 97% of the time. Though monitoring data showed a small amount of time (2%) spent in Washington, most of the packs locations, and the den, were in Oregon and this pack is counted in Oregon's wolf population.

Walla Walla Pack: This pack was first discovered in 2011. Three yearling Walla Walla wolves were monitored by radio-collars during 2012 and two of the radio-collared yearlings dispersed during the year. The pack produced 2 pups and was counted as a breeding pair. The pack used a 286 mi<sup>2</sup> territory with 57% of locations on public land. Two percent of the data points were in Washington making the Walla Walla pack a border pack.

**Other Confirmed Wolves:** In 2012, a pair of wolves was documented as resident in the Sled Springs Unit. Additional wolf activity was documented in Heppner and Ukiah Units; however it is unknown if the activity is resident wolves or dispersers traveling through the area.

**Capture and Monitoring**

**Capture:** Six wolves were captured and radio-collared by the department in 2012. In addition, one wolf (OR16) was incidentally captured by USDA-APHIS Wildlife Services, radio-collared by department staff, and released unharmed. All adult and subadult wolves captured were fitted with a Global Positioning System (GPS) collar and the lone pup captured was fitted with a VHF collar (Table 2).

Table 2. Wolves captured in Oregon in 2012

Date	Wolf ID#	Age/Color/Sex	Pack	Collar Type	Method
3/28/2012	OR4	Adult, black, male	Imnaha	GPS collar	Helicopter
4/2/2012	OR12	Adult, black, male	Wenaha	GPS collar	Trap
6/10/2011	OR13	Adult, black, female	Wenaha	GPS collar	Trap
6/20/2012	OR14	Adult, gray, male	Umatilla River	GPS collar	Trap
8/2/2012	OR15	Pup, black, male	Snake River	VHF collar	Trap
10/14/2012	OR10	Subadult, gray female	Walla Walla	GPS collar	Trap
11/1/2012	OR16	Subadult, black, male	Walla Walla	GPS collar	Trap

**Monitoring:** Ten radio-collared wolves (VHF and GPS) were monitored in 2012. Two radio-collared wolves had dispersed out of state and at year-end approximately 15% (n=8) of the population was radio-collared in five (71%) of the known packs. The two packs without collared wolves (Minam and Upper Minam River) were discovered during or after June, 2012. During the year, the department collected a total of 5,965 wolf location data points in Oregon and approximately 97% of these data points were collected using the GPS collars. The remaining location data was collected using aerial and ground-based telemetry, remote cameras, tracks and scat identification, and incidental sightings.

**Dispersers and Mortalities**

**Dispersers:** Three radio-collared dispersers were monitored during 2012.

OR7 dispersed from the Imnaha pack in September 2011 and crossed into California in December. He re-entered Oregon March 1, 2012 and spent time in Klamath and Douglas counties. On April 17, he returned to California.

OR11 was VHF radio-collared in 2011 as a pup in the Walla Walla pack. He dispersed during the fall of 2012. He has been located multiple times within the Umatilla River Pack territory.

OR16, a 1 ½ year old Walla Walla wolf, was GPS radio-collared November 1, 2012. On December 19, he crossed into Idaho.

Mortalities: One mortality was documented in 2012 when an un-collared male wolf was found dead on March 16 near Cove, OR. An investigation into the death of the animal revealed that it had been shot. The incident is being investigated by the Oregon State Police and no arrest has been made to date. Genetic analysis of the carcass showed that the wolf had been born into the Imnaha Pack.

**Incidental Take**

One incidental take occurred when a wolf (OR16) was captured incidentally and released on November 1, 2012 by USDA-APHIS Wildlife Services. An Incidental Take Permit, issued to Wildlife Services prior to the take, contained provisions to minimize the risk of incidental capture and to protect wolves if incidentally captured. Though the capture of OR16 did not result in harm to the animal, it was defined as a “take” under OAR 635-100-1170.

**LIVESTOCK DEPREDATION MANAGEMENT**

**Wolf Depredation Summary**

Investigations and Determinations: The department conducted 36 wolf depredation investigations in 5 Oregon counties in 2012. Twenty-six (72%) of the investigations occurred in Wallowa County. In total, the department’s investigations resulted in 8 (22%) *confirmed* determinations, 5 (14%) *probable* determinations, 4 (11%) *possible/unknown* determinations, and 19 (53%) *other* determinations. Confirmed losses in 2012 were 4 dead cattle and 8 dead sheep (Table 3).

Table 3. Summary of 2012 confirmed wolf depredation incidents in Oregon.

Date	Animal(s)	County	Pack Area
1/7/12	Cow (dead adult)	Wallowa	Imnaha
3/8/12	Cows (1 dead adult, 2 injured adults)	Wallowa	Imnaha
5/2/12	Sheep (2 dead ewes, 3 dead lambs)	Umatilla	Umatilla River
5/12/12	Sheep (3 dead rams, 1 injured ram)	Umatilla	Umatilla River
7/26/12	Cow (injured calf)	Wallowa	Imnaha
8/31/12	Cow (dead adult)	Baker	Imnaha
9/3/12	Cow (injured calf)	Wallowa	Imnaha
9/14/12	Cow (dead calf)	Wallowa	Imnaha

The number of depredation incidents in Oregon declined in 2012; a result of fewer cattle depredations attributed to the Imnaha Pack. Depredation of livestock has now been documented during all months of the year in Oregon. However, combined yearly depredation data (n=33) in Oregon shows that most depredation incidents occur in spring and fall months (Figure 4).

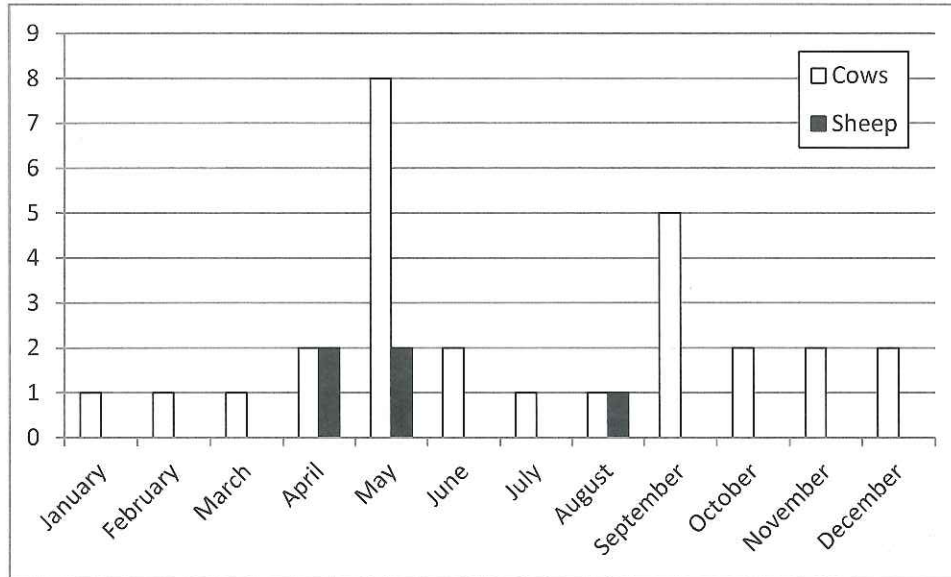


Figure 4. Number of cow and sheep depredation events by month (2009-2012).

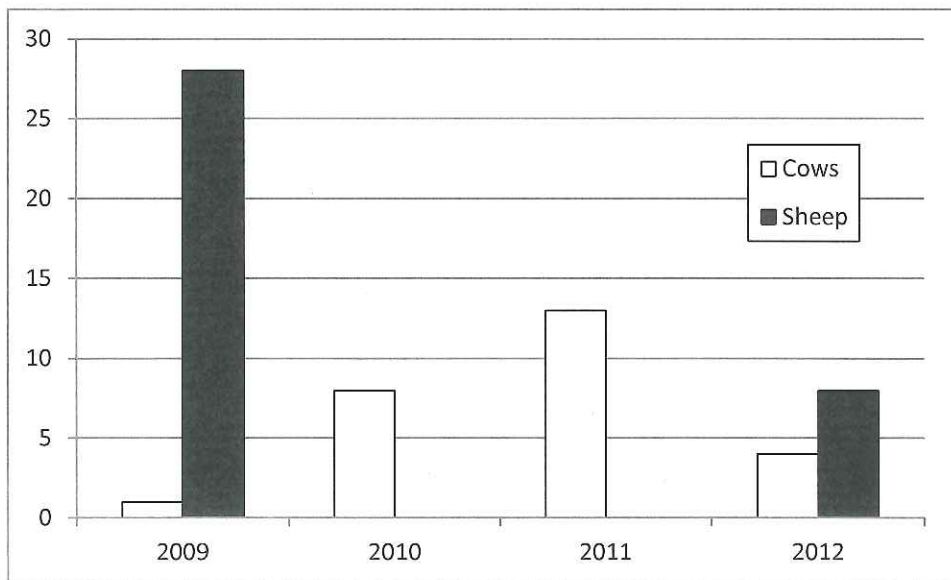


Figure 5. Number of confirmed livestock losses by year (2009-2012).

### Agency Actions

The department and livestock producers implemented non-lethal and preventative control measures to minimize livestock depredation in 2012 (Table 4). In Wallowa County these measures were to minimize depredation by the Imnaha Pack and included the use of electrified fladry, RAG boxes, hazing permits, range riders, increased operator presence, radio receivers to producers, and daily text messaging of wolf locations. In Umatilla County, spring sheep depredation by the newly formed Umatilla River Pack prompted several cooperative fladry projects as well as RAG boxes and text notifications.

Table 4. ODFW livestock producer assistance measures in 2012.

Action Taken	Number	Time Period	Agency/Organization
Radio-Activated Guard Devices	4	Year-round	ODFW/Private
Radio Receivers Issued to Producers	7	Year-round	ODFW
Range Rider	2	Apr-Oct	ODA/County
Hazing/Harassment Permits	15	Year-round	ODFW
Text Messaging	86 producers	Year-round	ODFW
Fladry (7 livestock producers)	3.2 mi	Year-round	ODFW
Feed for night-penned sheep	½ ton	April-Dec	ODFW
Rubber Bullets Issued	1box	May - Dec	ODFW
Caught-in Act Lethal Control Permits	27	Jan-Dec	ODFW

It is important to note that some non-lethal and preventative measures were implemented by individual livestock producers and are not enumerated here. Specifically, the Department is aware that actions such as additional checking of livestock, night penning of sheep, pasture management changes, and carcass removal were completed by several producers to help prevent wolf depredation.

The department developed and implemented a new automated wolf notification system in 2012. The system utilizes GPS locations from collared wolves and notifies livestock producers (via text or email) when wolves are in the area of their livestock. It does not give specific point location data but rather places the locations within predefined polygons which are known to the producers. Livestock operators must have livestock in the area of collared wolves to be eligible to register to receive notification messages.

At year-end, 86 livestock producers in three counties were receiving text or email notifications – Baker (4), Umatilla (22), and Wallowa (60). Since the notification system went online (May 19, 2012) more than 10,200 notification messages were sent to Oregon producers – an increase from 2011 (4,878 messages). Though it is difficult to determine if this system has prevented depredation by wolves, it has clearly been received favorably by most livestock producers.

### **Compensation Program**

The Oregon Department of Agriculture's (ODA) Wolf Depredation Compensation and Financial Assistance County Block Grant Program was fully implemented in 2012. The program provides four types of financial assistance options; 1) direct depredation payment, and 2) missing livestock payment, and 3) preventative measures, and 4) program implementation costs. The department's primary role in this program is twofold; 1) determine if wolf depredation is the cause of livestock death or injury, and 2) delineate areas of known wolf activity. In addition, the department was asked by some counties to provide input on appropriate non-lethal and preventative measures in 2012.

Eight Oregon counties requested and received funds from the County Block Grant Program administered by ODA (Table 5). The amount awarded to Wallowa County covered actual depredation losses through March 3, 2012. Grant awards to counties for the remainder of 2012 will be made in March 2013. In addition, a report of specific prevention expenditures for 2012 will not be completed by ODA until March.

Table 5. Funds awarded through the County Block Grant Program in 2012 (source; Oregon Department of Agriculture, County Wolf Block Grant Award Methodology, Updated 1/30/13)

County	Death/Injury	Missing	Prevention	Implementation	Totals
Wallowa	\$13,230	\$0	\$25,000	\$495	\$38,725
Union	\$0	\$0	\$9,000	\$0	\$9,000
Baker	\$0	\$0	\$7,500	\$495	\$7,995
Umatilla	\$0	\$0	\$15,000	\$495	\$15,495
Grant	\$0	\$0	\$3,000	\$495	\$3,495
Crook	\$0	\$0	\$1,000	\$270	\$1,270
Jefferson	\$0	\$0	\$3,000	\$495	\$3,495
Malheur	\$0	\$0	\$3,000	\$495	\$3,495
Totals	\$13,230	\$0	\$66,500	\$3,240	\$82,970

Note: Approximately \$17,231 of the above awarded funds was unspent in 2012. These will be carried over into 2013 and the anticipated total available funds for 2013 will be approximately \$21, 413.

### LITIGATION

The court-ordered stay which was issued by the Oregon Court of Appeals on October 5, 2011 preventing the lethal removal of depredating wolves continued to be in effect throughout 2012. No wolves were lethally controlled in Oregon as a result. The stay remains in place, pending resolution of litigation challenging the Commission's authority to authorize the killing of listed wolves under the Commission's "chronic depredation" take rules.

### WOLF RESEARCH

The OWP directs the department to conduct relevant research to understand the effects of wolf re-establishment and to inform conservation and management actions. The vested interest of two key constituents, hunters and conservationists, also compels the department to investigate the impact of wolves on elk and deer. Information gained from research in the Northern Rocky Mountains provides insight into potential effects of wolf re-establishment in Oregon. However, several factors set NE Oregon apart from other areas where wolves have been studied. For example, the nearly singular importance of cougar predation on northeastern Oregon elk populations has rarely been documented elsewhere. Furthermore, the role of alternative prey species, differing antlerless harvest levels, and relatively mild climate in Northeast Oregon all may influence the relationship between wolves and ungulates.

To help identify future wolf research priorities the department conducted a review of past wolf research. Identified research recommendations are specific to wolf-ungulate and wolf-predator interactions and include; 1) wolf prey preferences across a variety of ungulate assemblages in NE Oregon; 2) wolf competition with cougars; and 3) shifts in ungulate habitat utilization. Previous research on elk and cougar in NE Oregon will provide comparative data on elk and cougar in some areas.

## INFORMATION AND OUTREACH

The Department relied heavily on its internet-based wolf webpage as a primary information dissemination tool in 2012. The monthly wolf reports page was replaced with a regularly updated page by which new information was provided to the public and media faster and more easily accessible. The update page reduced the department's need to do regular news releases each time there was new wolf information. The new update page was received favorably and the number of subscribers increased from 597 to 2,194 through the year.

Wolf web page traffic was monitored and in 2012 received more than 145,000 views. The highest viewed web page was the Snake River Howling Wolf Pack Video which received more than 40,000 views.

In addition to web-based information the department conducted more than 90 media interviews and 14 formal presentations throughout the state in 2012. Presentations were given to schools, universities, other agencies, agriculture meetings and organizations, sportsman organizations, and conservation groups.

## WOLF PROGRAM FUNDING

Wolf program funding during the 2011-13 biennium (which contains calendar year 2012) is from a variety of sources which includes federal funds from the State Wildlife Grant (SWG) program, Pitman-Robinson (PR) funds and USFWS grants. These federal funds require state match which comes from a combination of Other Fund license dollars, Lottery Funds and non-game Check-off contributions. Two FTE's (NRS3, NRS1) are associated with the program and the total budget allocation for the 2011-13 biennium is \$586,447.