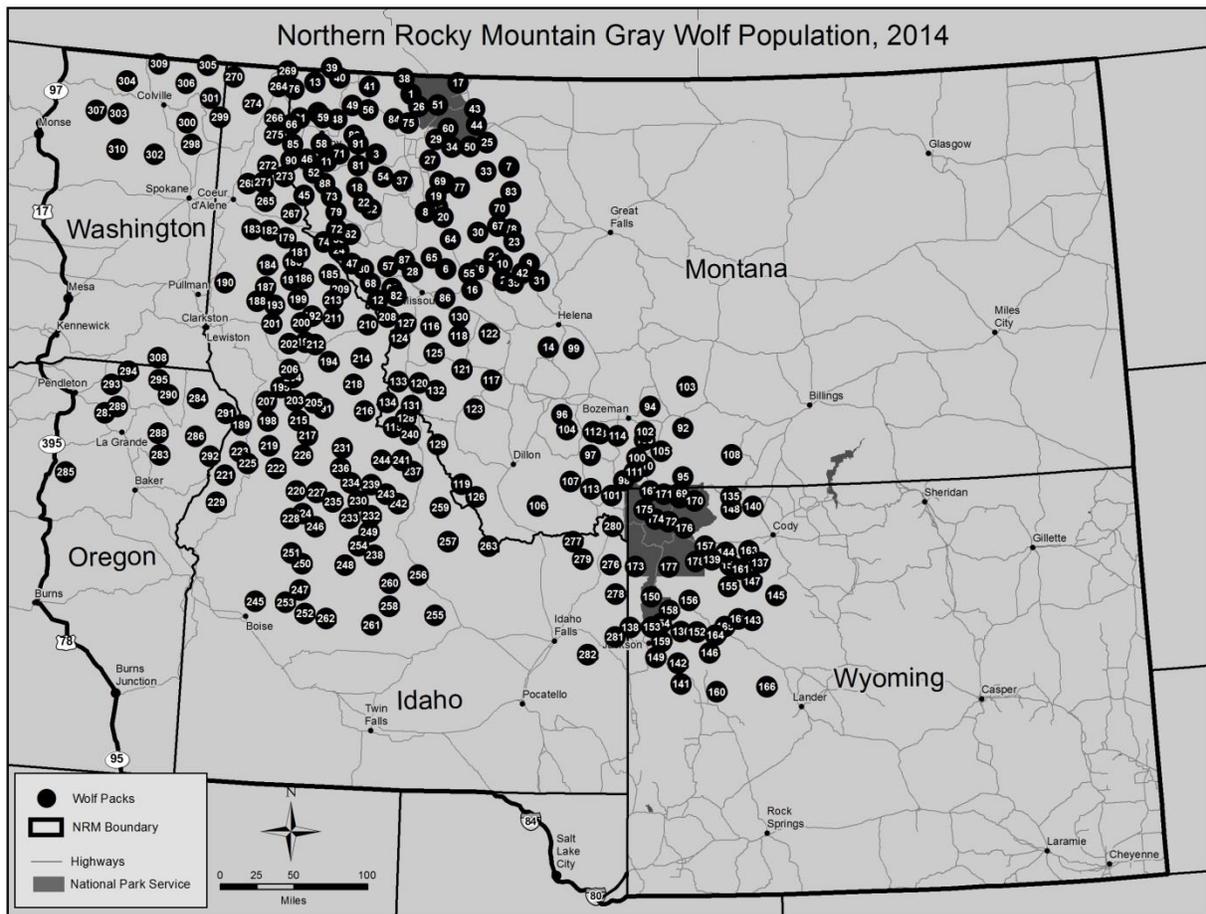


Northern Rocky Mountain Wolf Recovery Program 2014 Interagency Annual Report

A cooperative effort by the U.S. Fish and Wildlife Service, Idaho Department of Fish and Game, Montana Fish, Wildlife and Parks, Wyoming Game and Fish Department, Nez Perce Tribe, National Park Service, Blackfeet Nation, Confederated Salish and Kootenai Tribes, Wind River Tribes, Confederated Colville Tribes, Spokane Tribe of Indians, Washington Department of Fish and Wildlife, Oregon Department of Fish and Wildlife, Utah Department of Natural Resources, and USDA Wildlife Services.



This annual report presents information on the status, distribution, and management of the Northern Rocky Mountain wolf population from January 1, 2014 to December 31, 2014.

Suggested Citation: U.S. Fish and Wildlife Service, Idaho Department of Fish and Game, Montana Fish, Wildlife & Parks, Wyoming Game and Fish Department, Nez Perce Tribe, National Park Service, Blackfeet Nation, Confederated Salish and Kootenai Tribes, Wind River Tribes, Confederated Colville Tribes, Spokane Tribe of Indians, Washington Department of Fish and Wildlife, Oregon Department of Fish and Wildlife, Utah Department of Natural Resources, and USDA Wildlife Services. 2015. Northern Rocky Mountain Wolf Recovery Program 2014 Interagency Annual Report. M.D. Jimenez and S.A. Becker, eds. USFWS, Ecological Services, 585 Shepard Way, Helena, Montana, 59601.

Note to Readers:

Gray wolves are no longer federally listed as an endangered species and are managed under state authority in Idaho, Montana, eastern Oregon, eastern Washington, and north central Utah. Each state is required by post-delisting rules to submit an annual report to the U.S. Fish and Wildlife Service. Wolves in Wyoming were managed by the state for most of 2014. However, on September 23, 2014, wolves were federally relisted in Wyoming as nonessential experimental wolves and are managed under federal authority. The 2014 Interagency Annual Report is comprised of separate sections from Idaho, Montana, Oregon, Washington, Wyoming, and the U.S. Fish and Wildlife Service Northern Rockies Wolf Recovery Program. This report can be viewed at <http://westerngraywolf.fws.gov/annualreports.htm> and may be copied and distributed. You can download the Interagency Report in its entirety and cite the Interagency Report as suggested on the cover. Alternatively, you may download a state report or section of the Interagency Report and cite it individually.

Abstract: Gray wolf (*Canis lupus*) populations were extirpated from the western United States by the 1930s. Public attitudes towards predators changed and wolves received legal protection with the passage of the Endangered Species Act (ESA) in 1973. Subsequently, wolves from Canada occasionally dispersed south and successfully began recolonizing northwest Montana (MT) in 1986. In 1995 and 1996, 66 wolves from southwestern Canada were reintroduced into Yellowstone National Park (YNP; $n=31$) and central Idaho (ID; $n=35$). Recovery goals of an equitably distributed wolf population containing at least 300 wolves and 30 breeding pairs in 3 recovery areas within MT, ID, and Wyoming (WY) for at least 3 consecutive years were reached in 2002. By 2011, wolves were delisted and managed under state authority in MT and ID. Wolves were delisted in WY in 2012, but a federal court relisted WY wolves and returned them to federal authority in September 2014. The NRM wolf population continued to expand west from the original NRM DPS boundary in eastern Oregon (OR) and Washington (WA) into the ESA listed portion of those states. The entire wolf population (including all of OR and WA) on December 31, 2014 was $\geq 1,802$ wolves. The NRM (MT, ID, and WY) wolf population was $\geq 1,657$ wolves in ≥ 282 packs (including ≥ 85 breeding pairs). Based on minimum counts, MT estimated 554 wolves in 134 packs with 34 breeding pairs; ID 770 wolves in 104 packs with 26 breeding pairs; WY 333 wolves in 44 packs with 25 breeding pairs; OR 77 wolves in 15 packs with 8 breeding pairs and WA 68 wolves in 16 packs with 5 breeding pairs. No packs were documented in Utah (UT). We recorded the mortalities of 744 wolves in MT, ID, and WY in 2014. When all forms of human-caused mortality were combined (control, harvest, and other human-caused mortality) 706 wolves were killed in MT, ID, and WY due to human-causes (~29% of the absolute minimum NRM estimated wolf population) including 300 wolves in MT (~35% of the absolute minimum MT estimated population), 342 wolves in ID (~30% of the absolute minimum ID estimated population), and 64 wolves in WY (~16% of the absolute minimum WY estimated population). Total confirmed depredations by wolves in 2014 included 140 cattle, 172 sheep, 4 dogs, 1 horse, and 1 donkey. Private and state agencies paid \$274,885.90 in compensation for wolf-damage to livestock in 2014. Federal, State and Tribal agencies spent approximately \$3,146,006.00 of federal funding for wolf management and research.

INTERAGENCY REPORT TABLE OF CONTENTS

NORTHERN ROCKIES WOLF SUMMARY 2014 (see this document) 1

ACKNOWLEDGEMENTS (see this document) 5

IDAHO (see web for separate file)

Executive Summary ID-ii
Acknowledgements ID-iii
Introduction ID-1
Statewide Summary ID-5
 Wolf population monitoring ID-5
 Research ID-18
 Outreach ID-18
Wolf Management Zone Summaries ID-20
Literature Cited ID-68
Appendix A: Population estimation technique used to determine wolf
 population numbers in Idaho ID-69
Appendix B: Contacts for Idaho wolf management ID-70

MONTANA (see web for separate file)

Montana Executive Summary MT-1
Introduction and Background MT-2
Statewide Program Overview MT-3
Area Summaries MT-14
Outreach and Education MT-22
Law Enforcement MT-22
Funding MT-23
Personnel and Acknowledgements MT-24
Literature Cited MT-26
Appendix 1: Montana Contact List MT-28
Appendix 2: Gray Wolf Chronology in Montana MT-30
Appendix 3: Research, Field Studies, and Project Publications MT-32
Appendix 4: Montana Minimum Counts MT-50
Appendix 5: Montana Wolf Pack Tables by Recovery Area MT-52

WYOMING (see web for separate file)

Executive Summary WY-1
Background WY-2
Monitoring WY-4
Management WY-10
Research WY-15
Outreach WY-16
Funding WY-17
Acknowledgements WY-17

Literature Cited	WY-18
Appendix 1: Federal gray wolf population monitoring and management in Wyoming during 2014	WY-19
Appendix 2: 2014 Wind River Reservation gray wolf population monitoring and management annual report	WY-21

OREGON (see web for separate file)

Executive Summary	OR-2
Oregon Wolf Program Overview	OR-2
Livestock Depredation Management	OR-7
Wolf Research	OR-10
Information and Outreach	OR-10
Funding	OR-11

WASHINGTON (see web for separate file)

Executive Summary	WA-i
Acknowledgements	WA-ii
Introduction	WA-1
Population Monitoring	WA-5
Management	WA-12
Research	WA-17
Outreach	WA-22
Contacts in Washington	WA-24

NORTHERN ROCKIES LIST OF TABLES

- Table 1a. Wolf packs and population data for Montana’s portion of the Northwest Montana Recovery Area, 2014. (see web for separate file)
- Table 1b. Wolf packs and population data for Montana’s portion of the Greater Yellowstone Recovery Area, 2014. (see web for separate file)
- Table 1c. Wolf packs and population data for Montana’s portion of the Central Idaho Recovery Area and Montana statewide totals, 2014. (see web for separate file)
- Table 2a. Wolf packs and population data for Wyoming’s portion of the Greater Yellowstone Recovery Area (outside YNP), 2014. (see web for separate file)
- Table 2b. Wolf packs and population data for Yellowstone National Park’s (YNP) portion of the Greater Yellowstone Recovery Area and Wyoming statewide totals, 2014 (see web for separate file)
- Table 2c. Wolf population data for the Greater Yellowstone Recovery Area, 2014. (see web for separate file)
- Table 3a. Wolf packs and population data for Idaho’s portion of the Central Idaho Recovery Area, 2014. (see web for separate file)
- Table 3b. Wolf packs and population data for Idaho’s portion of the Northwest Montana Recovery Area, 2014. (see web for separate file)
- Table 3c. Wolf packs and population data for Idaho’s portion of the Greater Yellowstone Recovery Area and Idaho statewide totals, 2014. (see web for separate file)
- Table 3d. Wolf population data for the Central Idaho Recovery Area, 2014. (see web for separate file)
- Table 4a. Wolf packs and population data for Oregon inside the Northern Rocky Mountains (federally delisted area), 2014. (see web for separate file)
- Table 4b. Wolf packs and population data for Oregon outside the Northern Rocky Mountains (federally listed area) and Oregon statewide totals, 2014. (see web for separate file)
- Table 5a. Wolf packs and population data for Washington inside the Northern Rocky Mountains (federally delisted area), 2014. (see web for separate file)
- Table 5b. Wolf packs and population data for Washington outside the Northern Rocky Mountains (federally listed area) and Washington statewide totals, 2014. (see web for separate file)
- Table 6a. Northern Rocky Mountain minimum year-end wolf population and breeding pairs by recovery area, 1982-2014. (see web for separate file)

Table 6b. Northern Rocky Mountain minimum year-end wolf population and breeding pairs by state, 1982-2014. (see web for separate file)

Table 7a. Northern Rocky Mountain confirmed wolf depredations by recovery area, 1987-2014. (see web for separate file)

Table 7b. Northern Rocky Mountain confirmed wolf depredations by state, 1987-2014. (see web for separate file)

Table 7c. Confirmed wolf depredations elsewhere in the Northern Rocky Mountains, 2009-2014. (see web for separate file)

NORTHERN ROCKIES LIST OF FIGURES

- Figure 1. Northern Rocky Mountain Gray Wolf Population Area, 2014 (Key: Tables 1a-c, 2a-b, 3a-c, 4a, 5a). (see web for separate files)
- Figure 2. Northwest Montana Wolf Recovery Area (Key: Tables 1a, 3b). (see web for separate files)
- Figure 3. Greater Yellowstone Wolf Recovery Area (Key: Tables 1b, 2a-b, 3c). (see web for separate files)
- Figure 4. Central Idaho Wolf Recovery Area (Key: Tables 1c, 3a). (see web for separate files)
- Figure 5. Oregon/Washington wolf pack locations (Key: Tables 4a-b, 5a-b). (see web for separate files)
- Figure 6a. Northern Rocky Mountain wolf population trends by recovery area, 1982-2014 (excludes Oregon and Washington). (see web for separate files)
- Figure 6b. Northern Rocky Mountain wolf breeding pair trends by recovery area, 1982-2014 (excludes Oregon and Washington). (see web for separate files)
- Figure 7a. Northern Rocky Mountain wolf population trends in Montana, Idaho, and Wyoming: 1982-2014 (excludes Oregon and Washington). (see web for separate files)
- Figure 7b. Northern Rocky Mountain breeding pair trends in Montana, Idaho, and Wyoming: 1982-2014 (excludes Oregon and Washington). (see web for separate files)

NORTHERN ROCKIES WOLF SUMMARY 2014

Wolf Population: In 2014, the NRM wolf population continued to expand west from the original NRM DPS boundary in eastern OR and WA into the ESA listed portions of those states. The entire wolf population (including all of OR and WA) was 1,802 wolves in 313 packs (groups of ≥ 2 wolves living in a defined home range that persisted until December 31, 2014). At least 98 packs met the definition of a breeding pair (packs containing ≥ 1 adult male, ≥ 1 adult female, and two or more pups on December 31, 2014). The wolf population in MT, ID, and WY (hereafter referred to as NRM states) was $\geq 1,657$ wolves in ≥ 282 packs (including ≥ 85 breeding pairs) (Table 1). The minimum recovery goal of an equitably distributed wolf population containing at least 300 wolves and 30 breeding pairs in the NRM states for at least 3 consecutive years (managed to maintain over 150 wolves and 15 breeding pairs in each state) has been exceeded since 2002.

Table 1. NRM states, OR, and WA estimated wolf populations in 2014.

Area	# Wolves	# Packs	# Breeding Pairs
ID	770	104	26
MT	554	134	34
WY	333	44	25
NRM states	1,657	282	85

Area	# Wolves	# Packs	# Breeding Pairs
OR	77	15	8
WA	68	16	5
OR and WA	145	31	13

Area	# Wolves	# Packs	# Breeding Pairs
NRM States	1,657	282	85
OR and WA	145	31	13
Total Wolf Population	1,802	313	98

Wolf Mortality: For strictly comparative purposes, we estimated the absolute minimum number of wolves known to be alive in the NRM states by combining the 2014 minimum population estimate of 1,657 wolves with all known mortalities from all causes ($n=744$). This sum represented an absolute minimum estimate of 2,401 wolves known to have been alive at some point in the NRM states during 2014 (MT=860, ID=1,130, and WY=411). The absolute minimum estimate was only used to compare relative rates of the various causes of mortality to wolves in the NRM states.

We recorded the mortalities of 744 wolves in the NRM states (~31% of the absolute minimum NRM population) in 2014 from causes including natural, misc. human-caused, unknown, harvest, and control. When only human-caused mortality (control, harvest, and other human-caused mortality) was included, 706 wolves (~29% of the absolute minimum NRM estimated wolf population) died due to human-causes (Table 2).

Table 2. Causes of mortality in the NRM states, OR, and WA in 2014. The numbers in parentheses represent the percentage of the absolute minimum estimated wolf population of states and the NRM removed by human-caused mortality.

Area	Natural	Misc. Human	Unknown	Harvest	Control	Total Human-Caused	Total
MT	1	30	5	213	57	300 (35%)	306
ID	2	19	16	256	67	342 (30%)	360
WY	7	15	7	12	37	64 (16%)	78
NRM States	10	64	28	481	161	706 (29%)	744

Area	Natural	Misc. Human	Unknown	Harvest	Control	Total Human-Caused	Total
OR	0	0	0	0	0	0	0
WA	3	4	2	0	1	5	10
OR and WA	3	4	2	0	1	5	10

Wolf Depredations: Although confirmed depredations result in a comparatively small proportion of all livestock losses, wolf damage can be significant to some livestock producers. Total confirmed depredations by wolves in 2014 included 140 cattle, 172 sheep, 4 dogs, 1 horse, and 1 donkey (Table 3). From 2008 through 2013, an average of 189 cattle depredations (range=143-214) and 410 sheep depredations (range=162-749) occurred each year. Sixty-two of 355 (~17%) known wolf packs that existed at some point in 2014 were involved in at least 1 confirmed livestock depredation. One pack killed 59 sheep and was responsible for 34% of the total number of confirmed sheep depredations in 2014.

Table 3. Confirmed livestock depredations in the NRM states, OR, and WA in 2014.

Area	Cattle	Sheep	Dog	Other
Idaho	43	100	3	1 horse
Montana	37	8	1	1 donkey
Wyoming	56	6	0	0
NRM States	136	114	4	2

Area	Cattle	Sheep	Dog	Other
OR	2	30	0	0
WA	2	28	0	0
OR and WA	4	58	0	0

Area	Cattle	Sheep	Dog	Other
NRM States	136	114	4	2
OR and WA	4	58	0	0
Total Depredations	140	172	4	2

State and Private Compensation: Washington and Idaho had not completed processing depredation claims for 2014 when this report was published, but the remaining NRM states spent \$274,885.90 to compensate livestock producers for dead, injured, and missing livestock (Table 4).

Table 4. State and Private compensation spent for wolf damage in the NRM in 2014.

Idaho	---*
Montana	72,267.90
Wyoming	160,258.00
Oregon	42,360.00
Washington	---*
Total compensation	274,885.90*

*WA and ID did not report compensation payments.

Federal Wolf-Livestock Demonstration Funds (Tester Funds): In 2014, the Service made funding opportunities available to states and Tribes that routinely deal with livestock depredation from wolves. The purpose of the Wolf-Livestock Demonstration Project Grant Program was to prevent depredation of livestock and compensate livestock producers for their losses in the Western Great Lakes (Michigan, Minnesota, and Wisconsin), Northern Rocky Mountains (Idaho, Montana, Wyoming, Oregon, and Washington), and the Southwest (Arizona and New Mexico). States and Tribes competed for prevention and compensation grants. Qualifying projects included a 50 percent non-federal cost share (Table 5).

Table 5. Wolf-livestock Demonstration Funds awarded to individual NRM states in 2014.

State	Prevention	Compensation	Total state funding
Idaho	58,152.00	100,000.00	158,152.00
Montana	100,000.00	50,000.00	150,000.00
Wyoming	6,000.00	33,750.00	39,750.00
Oregon	53,000.00	---	53,000.00
Washington	76,348.00	53,056.00	129,404.00
Total Tester Funding	293,500.00	236,806.00	530,306.00

Federal Funding For Wolf Management: State, Federal, and Tribal agencies spent \$3,146,006.00 of federal funding on wolf monitoring, management, control, and research in 2014 (Table 6).

Table 6. Federal money spent on wolves in 2014 by State, Federal, and Tribal agencies.

USFWS Region 1	
USFWS	117,326.00
USDA Wildlife Services	
Idaho W.S.	79,037.00
Oregon W.S.	67,345.00
Washington W.S.	-----
Idaho (IDFG)	1,054,075.00
Nez Perce Tribe	172,980.00
Oregon (ODFW)	237,328.00
Washington (WDFW)	-----
Colville Tribe	153,022.00
Subtotal Region 1	1,881,113.00

USFWS Region 6	
USFWS	156,725.00
USDA Wildlife Services	
Montana W.S.	103,435.00
Wyoming W.S.	31,654.00
Montana (MFWP)	543,963.00
Wyoming (WGFD)	133,166.00
Yellowstone National Park	200,000.00
Grand Teton National Park	60,000.00
Wind River Tribes	
Shoshone and Arapaho F&G	5,750.00
Lander USFWS	18,200.00
Blackfeet Nation	12,000.00
Subtotal Region 6	1,264,893.00
Total federal money funded	3,146,006.00

Litigation: On November 13, 2012, Defenders of Wildlife, Natural Resources Defense Council, Sierra Club, and the Center for Biological Diversity filed suit in the U.S. District Court for the District of Columbia challenging the Service's 2012 Wyoming delisting rule (77 FR 55530). On December 7, 2012, the Humane Society of the United States and Fund for Animals also filed suit in the District of Columbia. These two cases were consolidated by the Court. *See Defenders of Wildlife v. Salazar*, 12-cv-1833-ABJ (D.D.C.). On September 23, 2014, the U.S. District Court for the District of Columbia vacated and remanded the Service's rule to delist wolves in Wyoming. As a result of that decision, the wolf was listed as an endangered species throughout the entire State of Wyoming and is currently managed by the U.S. Fish and Wildlife Service under the 1994 10(j) rule, 50 CFR Part 17.84(i).

ACKNOWLEDGEMENTS

Hundreds of people have assisted with wolf recovery efforts over the years and we are indebted to them all. It would be impossible to individually recognize everybody in this report. Please refer to individual state reports to better understand how many people have contributed to wolf recovery in the NRM.

Major contributions to wolf recovery efforts were provided by Seth Willey and Mike Thabault (USFWS, Denver, CO); Jim Williams (MFWP, Kalispell, MT), Mark Wilson, Jodi Bush, Brent Esmoil, Shawn Sartorius, Michele Franich, Sharon Hooley, and Edith Diaz-Hansen, (USFWS/ES, Helena MT), Pat Hnilicka (USFWS, Lander, WY), Jeff Green (WS, Denver CO), Todd Grimm (WS, ID), Rod Krischke (WS, WY), John Sterber (WS, MT), and Dave Renwald (Bureau of Indian Affairs). Numerous agencies have contributed to the recovery program and we thank the USFS, Bridger-Teton National Forest, Shoshone National Forest, Kootenai National Forest, Flathead National Forest, Lewis and Clark National Forest, GNP, YNP, GTNP, National Elk Refuge, Lost Trail National Wildlife Refuge, U.S. Bureau of Indian Affairs, Confederated Salish-Kootenai Tribes, the Blackfoot Tribe, WGFD, MFWP, and IDFG. We thank John Shivick and Kevin Bunnell (UT DOW) and Mike Linnell (UT WS) for their assistance. Laboratory work was performed by the MFWP laboratory in Bozeman, MT, the USFWS Forensics Laboratory in Ashland, OR, and Matson's Laboratory in Milltown, MT. Veterinarians providing services and advice to wolf recovery programs included Drs. Clarence Binninger, Charlene Esch, Jennifer Ramsey, Tom Roffe, and Mark Drew. We thank our legal advisors Tyson Powell and Dana Jacobson (DOI) and Michael Eitel, Bridget McNeil, Kristen Gustafson, Sato Ayako, Eric Peterson, and David Gayer (DOJ) for their hard work and advice.

We thank our pilots Dave Hoerner of Red Eagle Aviation, Lowell Hanson of Piedmont Air Services, Joe Rahn and Greg Thielman of MFWP; Joe Rimensberger of Osprey Aviation, Tim Graff and Eric Waldorf of WS, Bob Hawkins and Dave Stinson of Sky Aviation, Jim Pope of Leading Edge Aviation, Roger Stradley of Gallatin Flying Service, Pat and Mike Dorris, Rod Nielson and Jon Ugland of McCall Aviation, Mike Dorris of Sawtooth Flying Service; Doug Gadwa, Brandon Startin, and Joe Myers of Inter-State Aviation, John Romero of Owyhee Aviation, Leroy Brown and Jack Fulton of ID Helicopters, Mark Shelton of Native Range Capture Services, Dave Parker of Northern Air, Jess Hagerman of Northwest Helicopters, and

John Blakely in Idaho. Their safety, skill and cooperation greatly contributed to wolf recovery efforts.

Many private organizations have lent their support to the program including National Fish and Wildlife Foundation, Wolf Education and Research Center, DOW, DeVlieg Foundation, Rocky Mountain Elk Foundation, Snowdon Wildlife Sanctuary, Twin Spruce Foundation, CA Wolf Center, Yellowstone Park Foundation, and Plum Creek Timber Company. The efforts of many individuals who have contacted us to report wolf sightings are greatly appreciated. The numerous ranchers and other private landowners whose property is occasionally used by wolves, sometimes at great cost to the owner, and hunters who increasingly share the harvestable surplus of big game populations with wolves deserve our respect, service, and understanding.