

## **Clearwater Region**

The Clearwater Region encompasses 4 DAUs; Palouse-Hells Canyon, Dworshak-Elk City, Lolo, and Selway.

### Palouse – Hells Canyon DAU (GMUs 8, 8A, 11, 11A, 13, and 18)

#### Abstract

The Palouse-Hells Canyon DAU was home to 2 documented packs during 2008 (Figure 11; Table 3). The Giant Cedar pack qualified as a breeding pair. No reproductive information was obtained regarding the Cold Springs pack. Documented mortalities ( $n = 2$ ) included control (agency removal and legal take;  $n = 1$ ) and natural ( $n = 1$ ) causes. Confirmed ( $n = 1$ ) wolf-caused losses of cattle were attributed to unknown wolves. One wolf was captured by Program personnel that resulted in the placement of a new radiocollar.

#### Background

That portion of the Palouse-Hells Canyon DAU encompassed by GMUs 8, 8A, and 11A contain portions of the highly productive Palouse and Camas prairies. Dry-land agriculture began in this area in the 1880s and, until the 1930s, large areas of native grassland existed. Currently, virtually all nonforested land is tilled, and only small, isolated patches of perennial vegetation remain but are regularly burned or treated with herbicides. Timber harvest in the corporate timber, private timber, state land, and federal land areas of GMU 8A increased dramatically through the 1980s and 1990s, creating vast acreages of early successional ungulate habitat (IDFG 2007). Wolves are not expected to be able to establish packs in nonforested habitat in this region due to high potential for human conflict.

Habitat within this DAU encompassed by GMUs 11, 13, and 18 varies widely from steep, dry, river-canyon grasslands having low annual precipitation to higher elevation forests with greater precipitation. This area contains large tracts of both private and publicly-owned land: GMU 11 is mostly private land except for Craig Mountain Wildlife Management Area along the Snake and Salmon Rivers. Craig Mountain, a prominent feature in GMU 11, has been extensively logged. GMU 13 has been mostly under private ownership since settlement and is managed mostly for agriculture and livestock. GMU 18 is one-third private ownership located at lower elevations along the Salmon River. Road density is moderate, and access is restricted in many areas. The majority of the Hells Canyon Wilderness Area, which was designated in 1975, is in GMU 18 (IDFG 2007).

#### Management Direction

As outlined in the Wolf Plan, wolf numbers in the Palouse-Hells Canyon DAU are slated to be stabilized at 2007 levels. The potential for livestock conflicts is high, therefore populations would likely remain low due to continued agency control of problem wolves..

### Documented Resident Packs

#### *Cold Springs*

Despite a report of a wolf pup seen by an Idaho County Deputy, multiple investigations of areas previously used, and throughout the defined home range, by this pack failed to detect evidence of wolves. The status of this pack was unknown and it was not considered a breeding pair for 2008.

#### *Giant Cedar*

Male wolf B308 dispersed from the Giant Cedar pack in November 2007, leaving female B256 as the lone remaining radiocollared pack member. Examination of an historic home site led a biologist to a litter of at least 2-3 pups. B256's signal was detected on mortality mode in early July; a field necropsy determined that she was likely killed by a mountain lion. After B256's death a capture operation was initiated to place new radiocollars on pack members. Two pups were captured, one of which, female B401, was successfully instrumented. The Giant Cedar pack was a breeding pair in 2008 and had a minimum of 7 wolves.

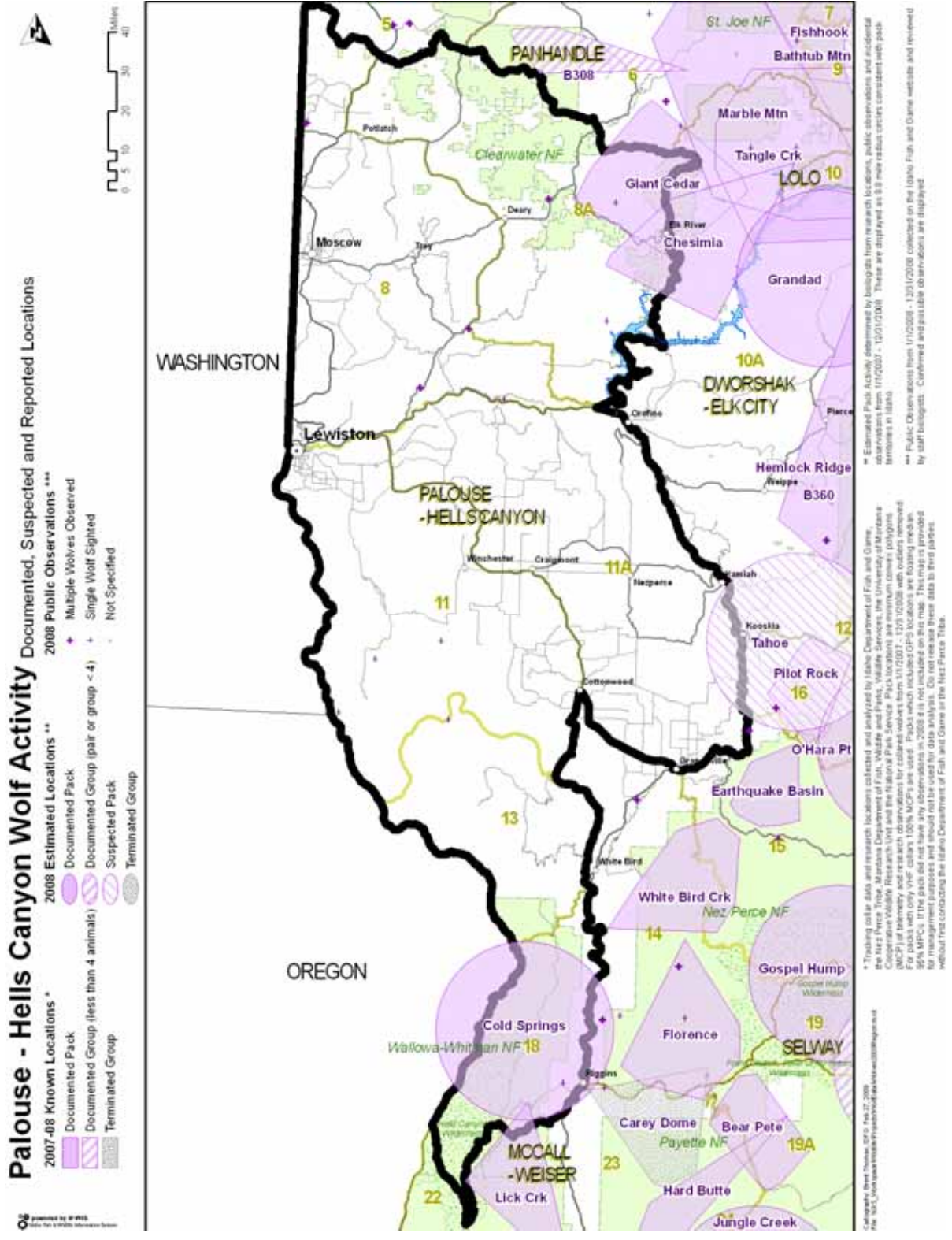


Figure 11. Distribution of documented and suspected wolf packs, other documented groups, and public wolf reports in the Palouse – Hells Canyon DAU, 2008.

Table 3. End of year summary of estimated pack size, natality, mortality, dispersal, monitoring status, wolf captures, and livestock depredations for documented and suspected wolf groups within Idaho Department of Fish and Game Palouse-Hells Canyon Data Analysis Unit, 2008.

Wolf group <sup>a</sup>	Min. no. wolves detected <sup>b</sup>	Reproductive status			Documented mortalities				Known dispersal	Monitoring status			Confirmed & (probable) wolf-caused livestock losses		
		Min. no. pups prod. (died) <sup>c</sup>	Reported as		Natural	Control <sup>e</sup>	Other human <sup>f</sup>	Unknwn <sup>g</sup>		Active radio collars	No. wolf captures <sup>h</sup>	No. wolves missing <sup>i</sup>	Cattle	Sheep	Dogs
			reprod. pack	breeding pair <sup>d</sup>											
<b>DOCUMENTED PACKS</b>															
Cold Springs	?	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Giant Cedar	7	2	YES	YES	1	0	0	0	1	1	1	0	0	0	0
<b>SUBTOTAL</b>	<b>7</b>	<b>2</b>			<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SUSPECTED PACKS</b>															
<b>SUBTOTAL</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>OTHER DOCUMENTED GROUPS</b>															
<b>SUBTOTAL</b>					<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>UNKNOWN</b>															
GMU 11A	?				0	1	0	0	0	0	0	0	1	0	0
<b>SUBTOTAL</b>	<b>0</b>				<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>DAU TOTAL</b>	<b>7</b>	<b>2</b>			<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>

<sup>a</sup> Documented packs = territorial groups of wolves usually consisting of an adult male and female and their offspring from one or more generations, and has the potential to reproduce (2 adults of opposite sex). Suspected packs = geographic areas where wolf pack presence was suspected but not verified, or where wolf presence was verified but did not meet documented pack status. Other documented groups = verified groups not meeting either documented or suspected pack status (e.g., lone wolves, potential mated pairs, etc.). Unknown = geographic areas where wolf presence was previously unverified and/or no data on group status was known.

<sup>b</sup> Summing this column does not equate to number of wolves estimated to be present in the population.

<sup>c</sup> Number in parentheses indicates known pup mortality; pup mortalities tallied in the appropriate column in “documented mortalities.”

<sup>d</sup> Breeding pairs are the measure of Federal and State wolf recovery and management goals. A breeding pair is defined as “an adult male and a female wolf that have produced at least 2 pups that survive until December 31 of the year of their birth...”

<sup>e</sup> Includes agency lethal control and legal take.

<sup>f</sup> Includes all other human-related deaths.

<sup>g</sup> Does not include pups that disappeared before winter.

<sup>h</sup> Includes wolves captured for monitoring purposes during 2008. Most, but not all, were radiocollared.

<sup>i</sup> Radiocollared wolves that became missing in 2008.

## Dworshak-Elk City DAU (GMUs 10A, 14, 15, and 16)

### Abstract

The Dworshak-Elk City DAU is composed of IDFG GMUs 10A, 14, 15, and 16 and was home to 11 documented resident packs during 2008 (Figure 12; Table 4). Four of 5 reproductive packs qualified as breeding pairs. The Hemlock Ridge pack was determined to be non-reproductive and the reproductive status of 5 packs was unknown. Documented mortalities ( $n = 8$ ) included unknown ( $n = 4$ ), control (agency removal and legal take;  $n = 3$ ), and other human (illegal take, vehicle collision, etc.;  $n = 1$ ) causes. Confirmed ( $n = 2$ ) and probable ( $n = 3$ ) wolf-caused losses of cattle were attributed to the White Bird Creek pack and unknown wolves. No domestic sheep losses were recorded. One dog was confirmed killed by the Pilot Rock pack. One wolf was captured by Program personnel that resulted in the placement of a new radiocollar.

### Background

That portion of the DAU encompassed by GMU 10A is three-fourths timberland and one-fourth open or agricultural lands, is bisected by canyons leading to the Clearwater River. During the 1980s and 1990s, timber harvest occurred on almost all available state and private land as demand for timber and management of these lands intensified. That portion of the DAU encompassed by GMUs 14, 15, and 16, is predominantly in public ownership with privately-owned portions at lower elevations along the Clearwater and Salmon Rivers. A small segment of this DAU is federally designated Wilderness. Productive conifer forests with intermixed grasslands characterize the majority of this area. Many forested areas have become overgrown with lodgepole pine and fir due to fire suppression during the past 40 years (IDFG 2007).

Major river drainages included in, or bordering upon, this DAU include the Salmon, South Fork Clearwater, Middle Fork Clearwater, main stem Clearwater, North Fork Clearwater/Dworshak Reservoir, lower portion of the Selway, Crooked, American, Red, and Lolo Creek.

### Management Direction

According to the Wolf Plan, the Dworshak-Elk City DAU has moderate levels of wolf-livestock and wolf-ungulate conflicts due to interspersed private and public land. The management direction for this DAU is to initially decrease the population and then stabilize it at lower numbers. Management goals include reducing wolf conflicts on private land and balancing predator and prey abundance within this DAU.

### Documented Resident Packs

#### *Chesimia*

The telemetry signal of the sole radiocollared wolf, female B222, in this pack was detected on mortality mode during the June monitoring flight. Investigation of the site did not reveal cause of death. The livestock operator in this pack's territory believed there was evidence of reproduction, but extensive efforts by Program personnel to verify the presence of pups were unsuccessful. An extended capture effort was undertaken based on persistent wolf sign detected, however no

wolves were caught. Based on tracks observed minimum estimated pack size was 3 wolves. The Chesimia pack was not considered a breeding pair for 2008.

#### *Coolwater Ridge*

Two subadult males, B344 and B346, were captured and radiocollared in 2007, but only 1 aerial location was obtained on B346 before contact was lost. B344 was monitored until February 2008, at which time it also went missing. Without the aid of radiocollared wolves, efforts to determine reproductive status were unsuccessful. B344 dispersed from the pack, as it was subsequently located north of McCall, ID. The Coolwater Ridge pack was not reported as a breeding pair in 2008 and there was no official pack size estimate.

#### *Earthquake Basin*

Wolves B274 and B275 were present with the pack through winter 2007/2008, however B275 was not located after March 2008. Investigation of a historic rendezvous site yielded a minimum pup count of 4. In addition, 3 gray and 1 black adult-sized wolves were seen, while B274 was present but not observed. Based upon field observations, this pack was estimated to contain a minimum of 9 wolves. The Earthquake Basin pack was considered a breeding pair for 2008.

#### *Eldorado*

Radio-tracking of possible breeding female B301 led a biologist to a rendezvous site where 4 gray pups were observed. Male B281 remained with the pack as well. An aerial observation provided the year-end count of 8 wolves. The Eldorado Creek pack was considered a breeding pair for 2008.

#### *Florence*

An aerial observation of 9 gray wolves, including males B200 and B201, was obtained in March 2008. This was the first known instance of this pack on the south side of the Salmon River outside of their previously defined home range. During a May monitoring flight B201's signal was detected on mortality mode at the same location where the pack was seen in March. Examination of the site revealed that B201 and a second wolf had died there (tallied for McCall-Weiser DAU). An investigation of these mortalities was opened by USFWS Law Enforcement agents. These carcasses were located within approximately 0.5 miles (0.8 km) of where B309's carcass (see Carey Dome pack in McCall-Weiser DAU) was discovered in February. Florence pack member B200 has not been located since March. Visits to historic den and rendezvous sites failed to detect wolf presence, so pack size and reproductive status were unknown. The Florence pack was not considered a breeding pair for 2008.

#### *Grandad*

A report received from mid-September 2007 indicated a possible location of a rendezvous site and 2 gray wolves were purportedly observed there. This site was examined in 2008 and evidence of pup presence elevated this group's status from a suspected to documented pack. Based on wolf sign, at least 1 pup was produced, but the Grandad pack did not qualify as a breeding pair for 2008 and pack size was a minimum of 3.

### *Hemlock Ridge*

In January 2008, B207, B210, B329, and B330, were being monitored in this pack. However, after January only B330 was detected in this pack's home range while the others were unaccounted for. All previously known home sites were visited, but no evidence of reproduction was found, although wolf sign indicated that at least 4 wolves still resided in the area. A capture effort in mid-August resulted in the radiocollaring of male B397. Ground monitoring of B397 failed to lead to evidence of a litter. B210's radio signal was eventually detected and monitored in adjacent pack territories for a brief period during summer before going missing again. The Hemlock Ridge pack was not considered a 2008 breeding pair.

### *O'Hara Point*

Very little wolf sign was detected in a brief survey along the American River and adjacent roads surrounding their known home sites. Pack size and reproductive status of the O'Hara Point pack were not known and it was not reported as a breeding pair in 2008.

### *Pilot Rock*

Adult female wolf B342 was radiocollared by WS personnel in 2007. B342's aerial locations for January through August 2008 were north of previous locations and overlapped those of the suspected Tahoe pack, making pack affiliation of this wolf difficult to ascertain. Inspection of known home sites was conducted in mid-September, but no evidence of wolf occupancy was located at those sites, and B342's telemetry signal was not detected. While conducting field work in the area, a Program biologist spoke with U.S. Forest Service personnel stationed there and viewed video footage of at least 6 gray pups, as well as 2 adult-sized wolves. The Pilot Rock pack was confirmed to have killed 1 hunting dog. Minimum pack size was estimated to be 8 wolves based on the video. This pack qualified as a breeding pair for 2008.

### *Red River*

Sole radiocollared pack member B318 was not located during 2008 and was considered a missing wolf by the end of the year. The absence of radiocollared wolves in this pack during 2008 made monitoring difficult. Investigation of the likely 2007 den site suggested, based upon amount of wolf sign observed, that the pack had re-used this site in 2008, but had already vacated it. Further ground tracking efforts failed to locate evidence of reproduction. In late July, 3 adult wolves were heard howling in the vicinity of the Red River Wildlife Management Area, confirming the continued presence of the pack. A subadult wolf was legally killed in this pack's territory. The Red River pack was not considered a breeding pair for 2008.

### *White Bird Creek*

Radiocollared male B285 was searched for in the vicinity of his May aerial locations in the hope that he would lead biologists to a rendezvous site. His signal was never detected in this area, but biologists did locate a litter of 4 pups, as well as observe 3 adult-sized wolves. Due to 2 confirmed cattle losses, 2 wolves were lethally controlled within this pack's territory that were assigned as White Bird Creek pack members, including a black individual (no black wolves were previously documented in this pack). A hunter discovered a radiocollared wolf dead on the eastern edge of this pack's home range in November, which was eventually identified as wolf NW243, a disperser from the Ashley Lake pack in northwestern Montana. The White Bird Creek pack was reported as a breeding pair in 2008.

### Suspected Packs

#### *Tahoe*

Female B320 was captured in May 2007 during a control action implemented by WS. B320 was aeri ally monitored until August 2007, at which time her signal was detected on mortality mode. For much of 2008, B342 (captured as a member of the neighboring Pilot Rock pack) was aeri ally located in areas almost completely overlapping those previously occupied by B320. Private land inhibited efforts to ground monitor B342, so no data was collected pertaining to number of wolves present or reproductive status. It was not known whether B342 left the Pilot Rock pack and joined the wolves of the Tahoe group, the Pilot Rock pack expanded its territory to encompass the Tahoe group's, or some other scenario.

### Other Documented Wolf Groups

#### *B310*

Originally a member of the Tangle Creek pack, male wolf B310 dispersed in winter 2007/2008 and has localized south of Dworshak Reservoir.

#### *B360*

This wolf was captured as an adult member of the Marble Mountain pack in September 2007. It remained with that pack until January 2008, at which time contact with it was temporarily lost. B360 was located again in April near the northern portion of Dworshak Reservoir's Little North Fork Clearwater River arm. It crossed the reservoir and remained in the vicinity on the south side at least through mid-June when it again went missing. The wolf was found again in September approximately 33 miles (53 km) south of its previous location. During October monitoring flights, B360 was observed with a second gray wolf and was believed to have formed a potential breeding pair for 2009.

#### *NW243*

This wolf's carcass was discovered by a hunter in November on the eastern fringe of the White Bird Creek pack's territory; the mortality site was approximately 175 miles (282 km) from the last known location in the Ashley Lake pack territory (Northwest Montana Recovery Area) in September 2007. Cause of death was unknown at the time of discovery.

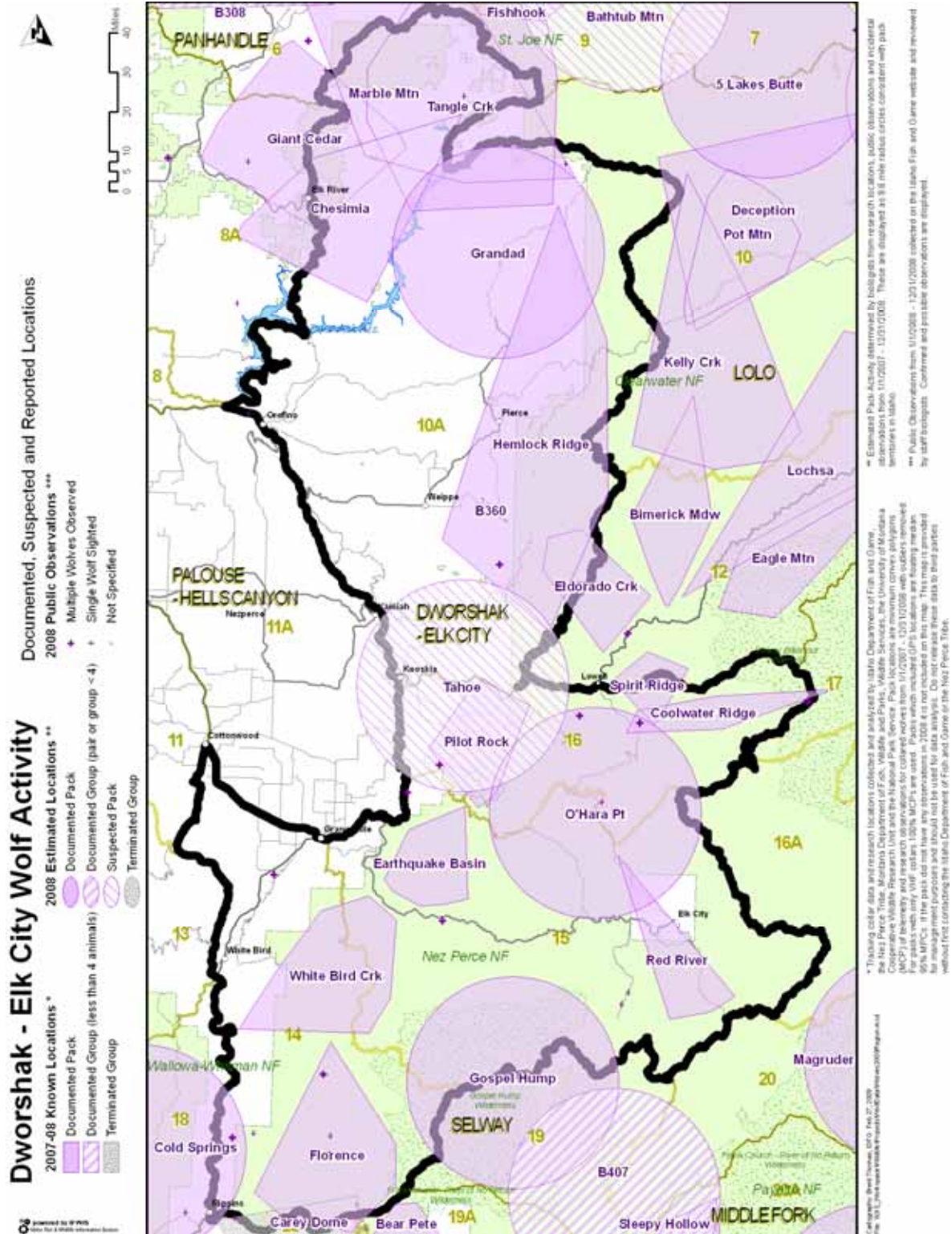


Figure 12. Distribution of documented and suspected wolf packs, other documented groups, and public wolf reports in the Dworshak – Elk City DAU, 2008.

Table 4. End of year summary of estimated pack size, natality, mortality, dispersal, monitoring status, wolf captures, and livestock depredations for documented and suspected wolf groups within Idaho Department of Fish and Game Dworshak-Elk City Data Analysis Unit, 2008.

Wolf group <sup>a</sup>	Min. no. wolves detected <sup>b</sup>	Reproductive status			Documented mortalities				Known dispersal	Monitoring status			Confirmed & (probable) wolf-caused livestock losses		
		Min. no. pups prod. (died) <sup>c</sup>	Reported as		Natural	Control <sup>e</sup>	Other human <sup>f</sup>	Unknwn <sup>g</sup>		Active radio collars	No. wolf captures <sup>h</sup>	No. wolves missing <sup>i</sup>	Cattle	Sheep	Dogs
			reprod. pack	breeding pair <sup>d</sup>											
<b>DOCUMENTED PACKS</b>															
Chesimia	3	?	NO	NO	0	0	0	1	0	0	0	0	0	0	0
Coolwater Ridge	?	?	NO	NO	0	0	0	0	1	0	0	0	0	0	0
Earthquake Basin	9	4	YES	YES	0	0	0	0	0	1	0	1	0	0	0
Eldorado Creek	8	4	YES	YES	0	0	0	0	0	2	0	0	0	0	0
Florence	?	?	NO	NO	0	0	0	0	0	0	0	1	0	0	0
Grandad	3	1	YES	NO	0	0	0	0	0	0	0	0	0	0	0
Hemlock Ridge	4	0	NO	NO	0	0	0	0	0	2	1	3	0	0	0
O'Hara Point	?	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Pilot Rock	8	6	YES	YES	0	0	0	0	0	1	0	0	0	0	1
Red River	3	?	NO	NO	0	1	0	0	0	0	0	1	0	0	0
White Bird Creek	7	4	YES	YES	0	2	0	0	0	1	0	0	2	0	0
<b>SUBTOTAL</b>	<b>45</b>	<b>19</b>			<b>0</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>7</b>	<b>1</b>	<b>6</b>	<b>2</b>	<b>0</b>	<b>1</b>
<b>SUSPECTED PACKS</b>															
Tahoe	?				0	0	0	0	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>OTHER DOCUMENTED GROUPS</b>															
Border DAU (Giant Cedar)							1								
Border DAU (Spirit Ridge)								1	0						
B310	1				0	0	0	0	0	1	0	0	0	0	0
B360	2				0	0	0	0	0	1	0	0	0	0	0
NW243	0				0	0	0	1	0	0	0	0	0	0	0
<b>SUBTOTAL</b>	<b>3</b>				<b>0</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>UNKNOWN</b>															

Table 4. Continued.

Wolf group <sup>a</sup>	Reproductive status				Documented mortalities				Known dispersal	Monitoring status			Confirmed & (probable) wolf-caused livestock losses		
	Min. no. wolves detected <sup>b</sup>	Min. no. pups prod. (died) <sup>c</sup>	Reported as		Natural	Control <sup>e</sup>	Other human <sup>f</sup>	Unknwn <sup>g</sup>		Active radio collars	No. wolf captures <sup>h</sup>	No. wolves missing <sup>i</sup>	Cattle	Sheep	Dogs
			reprod. pack	breeding pair <sup>d</sup>											
GMU 10A					0	0	0	1	0	0	0	0	0(1)	0	0
GMU 14					0	0	0	0	0	0	0	0	0(2)	0	0
<b>SUBTOTAL</b>					<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0 (3)</b>	<b>0</b>	<b>0</b>
<b>DAU TOTAL</b>	48	19			0	3	1	4	1	9	1	6	2(3)	0	1

<sup>a</sup> Documented packs = territorial groups of wolves usually consisting of an adult male and female and their offspring from one or more generations, and has the potential to reproduce (2 adults of opposite sex). Suspected packs = geographic areas where wolf pack presence was suspected but not verified, or where wolf presence was verified but did not meet documented pack status. Other documented groups = verified groups not meeting either documented or suspected pack status (e.g., lone wolves, potential mated pairs, etc.). Unknown = geographic areas where wolf presence was previously unverified and/or no data on group status was known.

<sup>b</sup> Summing this column does not equate to number of wolves estimated to be present in the population.

<sup>c</sup> Number in parentheses indicates known pup mortality; pup mortalities tallied in the appropriate column in “documented mortalities.”

<sup>d</sup> Breeding pairs are the measure of Federal and State wolf recovery and management goals. A breeding pair is defined as “an adult male and a female wolf that have produced at least 2 pups that survive until December 31 of the year of their birth...”.

<sup>e</sup> Includes agency lethal control and legal take.

<sup>f</sup> Includes all other human-related deaths.

<sup>g</sup> Does not include pups that disappeared before winter.

<sup>h</sup> Includes wolves captured for monitoring purposes during 2008. Most, but not all, were radiocollared.

<sup>i</sup> Radiocollared wolves that became missing in 2008.

## Lolo DAU (GMUs 10 and 12)

### Abstract

The Lolo DAU consists of IDFG GMUs 10 and 12. During 2008 it was home to 10 documented packs tallied for Idaho and 2 border packs tallied for Montana (Figure 13; Table 5). Six of 8 reproductive packs qualified as breeding pairs; the reproductive status of 2 packs was unknown. Documented mortalities ( $n = 5$ ) included other human (illegal take, vehicle collision, etc.;  $n = 2$ ) and unknown ( $n = 3$ ) causes. There were no confirmed or probable wolf-caused losses to domestic cattle or livestock. Confirmed ( $n = 6$ ) wolf-caused losses of domestic dogs were attributed to unknown wolves northwest of Lowell, ID. Six wolves were captured by Program personnel that resulted in the placement of 5 new radiocollars.

### Background

Lands within this DAU are almost entirely publicly-owned and administered by the U.S. Forest Service. The southern portion of the DAU is within the Selway-Bitterroot Wilderness Area. Historically, ungulate habitat productivity was high in this DAU. However, habitat productivity has decreased following decades of intensive fire suppression. Approximately one-third of the DAU has good access for motorized vehicles with medium road densities. The remaining portion has low road densities with good trails. Until the 1930s, wildfires were the primary habitat disturbance mechanism in this DAU. Between 1900 and 1934, approximately 70% of the Lochsa River drainage was burned by wildfires. Between 1926 and 1990, over 1,900 km of roads were built in this area to access marketable timber. State Highway 12 along the Lochsa River was completed in 1962 and became the primary travel corridor. In 1964, most of the southern portion of GMU 12 was designated as part of the Selway-Bitterroot Wilderness (IDFG 2007).

### Management Direction

As outlined in the Wolf Plan, current wolf-ungulate conflict levels are high and wolf-livestock conflict levels are low (no livestock grazing) within this DAU. Wolf management direction for the Lolo DAU calls for initially reducing and then maintaining wolf numbers at stable but lower levels, primarily to alleviate identified conflicts with ungulate populations.

### Documented Resident Packs

#### *Bimerick Meadow*

Monitoring radiocollared females B289 and B398 (newly captured in 2008) led to the location of a rendezvous site where a single gray pup was observed in late August. This pack was not a breeding pair in 2008 due to documentation of only 1 pup.

#### *Deception*

Probable breeding female B213's signal was detected on mortality mode during a monitoring flight in December 2007; the radiocollar was believed to be beneath the ice of the North Fork Clearwater River. The carcass was recovered in mid-August; no cause of death could be ascertained. B352, radiocollared as a 4-month-old pup in 2007, was found dead of illegal cause in February 2008. The sole remaining radiocollared wolf, probable breeding male B354, did not

localize his movements during the denning season, nor throughout the summer, which suggested the pack did not produce a litter of pups; it was unlikely that there was a breeding-age female in the pack after B213's death. Field efforts failed to locate evidence of reproduction. This pack was not reported as a breeding pair for 2008.

#### *Eagle Mountain*

An outfitter inadvertently discovered this pack's den site in the Selway-Bitterroot Wilderness where 1 pup was observed. By the time a capture effort was initiated after receiving this report, the pack had abandoned the site. Trapping was attempted due to continued wolf activity, and two wolves were briefly captured but managed to pull free from the traps. Without the aid of radiocollared wolves in this pack, further efforts to count pups were not undertaken. Founding pack member male B136's radiocollar has likely expired, and female B295 has not been located since late 2007. This pack was reproductive, but was not considered a breeding pair for 2008.

#### *Five Lakes Butte*

An interview with the outfitter/guides that operate near this pack's traditional home site provided information that there was no wolf activity occurring there in 2008 (similar to 2007), so no further effort was made on this pack. This pack was not considered a breeding pair.

#### *Kelly Creek*

Four pups and 4 adult-sized wolves, including B237, were accounted for at a new rendezvous site for this pack in September. During the October monitoring flight, B237's signal was detected on mortality mode; her remains were collected and USFWS Law Enforcement opened an investigation. Based upon field observations, pack size was estimated at a minimum of 7 wolves. The longstanding Kelly Creek pack, no longer with a radiocollared member, was reported as a breeding pair in 2008.

#### *Lochsa*

Female wolf B345, the sole radiocollared member of this pack, led a biologist to a rendezvous site where 5-6 pups were located. Two adult-sized wolves were also observed there. An aerial observation of at least 15 wolves provided the official pack size estimate. The Lochsa pack was considered a breeding pair for 2008.

#### *Pot Mountain*

Capture efforts conducted in this area throughout spring and summer resulted in the placement of 2 GPS radiocollars; one on female B382 and another on male B393. A third wolf was caught, but died from capture-related cause. Minimal ground tracking efforts were undertaken and no documentation of reproduction was obtained. Minimum pack size was estimated at 11 based on aerial observation (including multiple pups) and this pack was reported as a 2008 breeding pair.

#### *Spirit Ridge*

Subadult female B339's signal was detected on mortality mode in January. A site investigation was attempted, but snow conditions were such that the mortality site could not be reached. The mortality beacon was finally found in July at the pack's rendezvous site; it was believed wolves had carried the radiocollar there from where it had originally been detected. Eight pups were observed; the largest litter recorded in Idaho in 2008. Two wolves were radiocollared, adult male

B387 and subadult female B388. B388 was found dead 1 month after capture; cause of death could not be ascertained due to carcass decomposition. The Spirit Ridge pack qualified as a breeding pair for 2008.

### Documented Border Packs

#### *Big Hole (ID)*

The Big Hole pack was officially counted as an Idaho pack in 2008. Fieldwork was a coordinated effort between the Nez Perce Tribe, Montana Department of Fish, Wildlife and Parks (MTFWP), and University of Montana personnel. Male B348 made an extraterritorial foray from the pack. It was located with radiocollared pack mate B347 within the home range in January, but was found approximately 48 miles (77 km) northwestward in March. By June B348 had returned to the Big Hole pack's territory, where it remained into September before contact was lost again. Two pups were observed, though based upon howling a minimum of 3 pups was estimated. This pack qualified as a breeding pair for Idaho in 2008. Two wolves that died in Montana (including one pup and B151) were attributed to this pack but not tallied in the Idaho report.

#### *Bitterroot Range (MT)*

This documented border pack was tallied for Montana in 2008. See the respective State's annual report for information on this pack.

#### *Brooks Creek (MT)*

This documented border pack was tallied for Montana in 2008. See the respective State's annual report for information on this pack.

#### *Fish Creek (ID)*

The Fish Creek pack denned in Idaho for the third consecutive year in 2008. Ground-tracking of radiocollared wolves B235 (suspected breeding female) and B236 (adult male) in the Kelly Creek drainage in late July, where aerial locations during denning season suggested a rendezvous site would be found, failed to detect either of those wolves or provide evidence of pups. In early September a biologist located a rendezvous site approximately 6 miles (10 km) from where the initial attempt was made. At this site 5 pups were observed, along with both radiocollared wolves and 8 uncollared adult-sized wolves. B236's signal was detected on mortality mode in December; the site has yet to be investigated. This border pack was considered an Idaho breeding pair for 2008.

### Other Documented Wolf Groups

#### *Saturday*

Biologists verified at least 2 wolves in this group based on track evidence in 2007. No field effort was undertaken in 2008.



Table 5. End of year summary of estimated pack size, natality, mortality, dispersal, monitoring status, wolf captures, and livestock depredations for documented and suspected wolf groups within Idaho Department of Fish and Game Lolo Data Analysis Unit, 2008.

Wolf group <sup>a</sup>	Min. no. wolves detected <sup>b</sup>	Reproductive status		Documented mortalities				Known dispersal	Monitoring status			Confirmed & (probable) wolf-caused livestock losses			
		Min. no. pups prod. (died) <sup>c</sup>	Reported as		Natural	Control <sup>e</sup>	Other human <sup>f</sup>		Unknwn <sup>g</sup>	Active radio collars	No. wolf captures <sup>h</sup>	No. wolves missing <sup>i</sup>	Cattle	Sheep	Dogs
			reprod. pack	breeding pair <sup>d</sup>											
<b>DOCUMENTED PACKS</b>															
Big Hole (ID) <sup>j</sup>	6	3	YES	YES	0	0	0	0	0	1	0	1	0	0	0
Bimerick Meadow	3	1	YES	NO	0	0	0	0	0	2	1	0	0	0	0
Bitterroot Range (MT) <sup>j</sup>															
Brooks Creek (MT) <sup>j</sup>															
Deception	1	?	NO	NO	0	0	1	0	0	1	0	0	0	0	0
Eagle Mountain	3	1	YES	NO	0	0	0	0	0	0	0	2	0	0	0
Fish Creek (ID) <sup>j</sup>	15	5	YES	YES	0	0	0	0	0	1	0	0	0	0	0
Five Lakes Butte	?	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Kelly Creek	7	4	YES	YES	0	0	0	1	0	0	0	0	0	0	0
Lochsa	15	5	YES	YES	0	0	0	0	0	1	0	0	0	0	0
Pot Mountain	11	2	YES	YES	0	0	1	0	0	2	3	0	0	0	0
Spirit Ridge	9	8	YES	YES	0	0	0	2	0	1	2	0	0	0	0
<b>SUBTOTAL</b>	<b>70</b>	<b>29</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>9</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SUSPECTED PACKS</b>															
<b>SUBTOTAL</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>OTHER DOCUMENTED GROUPS</b>															
Saturday	?												0	0	0
<b>SUBTOTAL</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>UNKNOWN</b>															
	?				0	0	0	0	0	0	0	0	0	0	6
<b>SUBTOTAL</b>	<b>0</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>
<b>DAU TOTAL</b>	<b>70</b>	<b>29</b>			<b>0</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>0</b>	<b>9</b>	<b>6</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>6</b>

<sup>a</sup> Documented packs = territorial groups of wolves usually consisting of an adult male and female and their offspring from one or more generations, and has the potential to reproduce (2 adults of opposite sex). Suspected packs = geographic areas where wolf pack presence was suspected but not verified, or where wolf presence

Table 5. Continued.

was verified but did not meet documented pack status. Other documented groups = verified groups not meeting either documented or suspected pack status (e.g., lone wolves, potential mated pairs, etc.). Unknown = geographic areas where wolf presence was previously unverified and/or no data on group status was known.

<sup>b</sup> Summing this column does not equate to number of wolves estimated to be present in the population.

<sup>c</sup> Number in parentheses indicates known pup mortality; pup mortalities tallied in the appropriate column in “documented mortalities.”

<sup>d</sup> Breeding pairs are the measure of Federal and State wolf recovery and management goals. A breeding pair is defined as “an adult male and a female wolf that have produced at least 2 pups that survive until December 31 of the year of their birth...”.

<sup>e</sup> Includes agency lethal control and legal take.

<sup>f</sup> Includes all other human-related deaths.

<sup>g</sup> Does not include pups that disappeared before winter.

<sup>h</sup> Includes wolves captured for monitoring purposes during 2008. Most, but not all, were radiocollared.

<sup>i</sup> Radiocollared wolves that became missing in 2008.

<sup>j</sup> Border pack officially tallied to (STATE); territory known/likely shared with Idaho. Data on these packs can be found in Rocky Mountain Wolf Recovery 2008 Annual Report; data for mortalities and/or depredations by non-Idaho border packs that occurred within Idaho are presented here.

## Selway DAU (GMUs 16A, 17, 19 and 20)

### Abstract

The Selway DAU is composed of IDFG GMUs 16A, 17, 19, and 20; and was home to 6 documented packs during 2008; 3 border packs tallied for Montana reside adjacent to this DAU (Figure 14; Table 6). The reproductive status was not known for any of the resident ID packs. One mortality of unknown cause was documented. This predominantly Wilderness DAU does not contain any domestic cattle and sheep consequently no livestock losses were reported. Minimal wolf capture efforts were undertaken in this DAU during 2008.

### Background

Habitat varies throughout the DAU from high-precipitation, forested areas along the lower reaches of the Selway River to dry, steep, south-facing ponderosa pine and grassland habitat along the Salmon River. Many areas along the Salmon River have a good mix of successional stages due to frequent fires within the wilderness. Fire suppression within portions of the Selway River drainage has led to decreasing forage production for big game. Road densities are low. Noxious weeds, especially spotted knapweed, have encroached upon many low-elevation areas. Due to the rugged and remote nature of this zone, human impacts have been very limited. In 1964, almost all of GMU 17 and a small portion of GMU 16A were included in the Selway-Bitterroot Wilderness. Most of GMU 19 became part of the Gospel Hump Wilderness in 1978, and in 1980, part of GMU 20 was included in the Frank Church River-of-No-Return Wilderness (IDFG 2007).

### Management Direction

According to the Wolf Plan, current levels of wolf-ungulate conflicts are high and wolf-livestock conflicts are low (no livestock grazing). Therefore wolf numbers in the Selway DAU are slated to be reduced and then maintained at stable but lower levels, primarily to reduce impacts on ungulate populations, which are not meeting management objectives.

### Documented Resident Packs

#### *Battle Ridge*

No field effort was conducted on this pack in 2008. This pack was not reported as a breeding pair for 2008.

#### *Gospel Hump*

No radiocollared wolves remained in the pack, making monitoring difficult. No reports were received of wolf activity in this pack's home range and there was no field effort made to locate the pack during 2007 and 2008. A wolf (B407) captured and radiocollared in the Sleepy Hollow pack's territory (south side of the Salmon River) was subsequently aerially located in the eastern portion of the Gospel Hump pack's previously defined home range. The Gospel Hump pack was not reported as a breeding pair in 2008.

### *Indian Creek*

This pack did not count as a breeding pair for 2008 as there was no field effort conducted.

### *Magruder*

This pack, which has not had a radiocollared member since 2005, was dropped from the list of documented packs at the end of 2007 due to lack of verified activity. In July 2008, a biologist heard 3-4 wolves howling from the general vicinity of where a wolf from this pack was trapped in 2004. This group was reinstated as a documented pack, but no information was obtained regarding reproductive status. This pack was not considered a breeding pair.

### *Pettibone Creek*

A biologist detected at least 2 wolves, based on tracks, in mid summer, but without radiocollared wolves, further effort to document pack size and reproductive status was unsuccessful. A trapping effort was unsuccessful. This pack was not counted as a breeding pair for 2008.

### *Selway*

B355's signal was detected on mortality mode during the May monitoring flight; its remains were investigated but cause of death was not ascertained. The remaining radiocollared wolf, B356, was located during much of 2008 in the Selway River corridor. Investigation of a traditional rendezvous site failed to detect evidence of pack occupancy or the presence of pups, and coupled with B356's locations it was believed that if the pack produced a litter it was probably along a remote stretch of the Selway River. The Selway pack was not reported as a breeding pair in 2008 and there was no estimate of pack size.

### *Documented Border Packs*

#### *Lake Como (MT)*

This documented border pack was tallied for Montana in 2008. See the respective State's annual report for information on this pack.

#### *Trapper Peak (MT)*

This documented border pack was tallied for Montana in 2008. See the respective State's annual report for information on this pack.

#### *Watchtower Creek (MT)*

This documented border pack was tallied for Montana in 2008. See the respective State's annual report for information on this pack.

### *Other Documented Wolf Groups*

#### *Roaring Lion*

No field effort was undertaken in 2008. This group likely spends some time in Montana as well.

#### *B266*

This wolf was captured in 2006 as a member of the Timberline pack, but was last located in that pack's home range in April 2007. A mortality signal was obtained during the August monitoring flight in the central portion of the Selway-Bitterroot Wilderness. U.S. Fish and Wildlife Service

Law Enforcement agents attempted to investigate the site, but were unable to reach it, so the fate of this wolf was officially recorded as a suspected mortality.

*B407*

Male B407 was radiocollared while a capture effort was underway for the Sleepy Hollow pack (Middle Fork DAU). Within 5 days it was aurally located on the north side of the Salmon River and has continued to be located in the Selway DAU. B407 was observed with another gray wolf and was presumed to be part of a potential breeding pair for 2009.

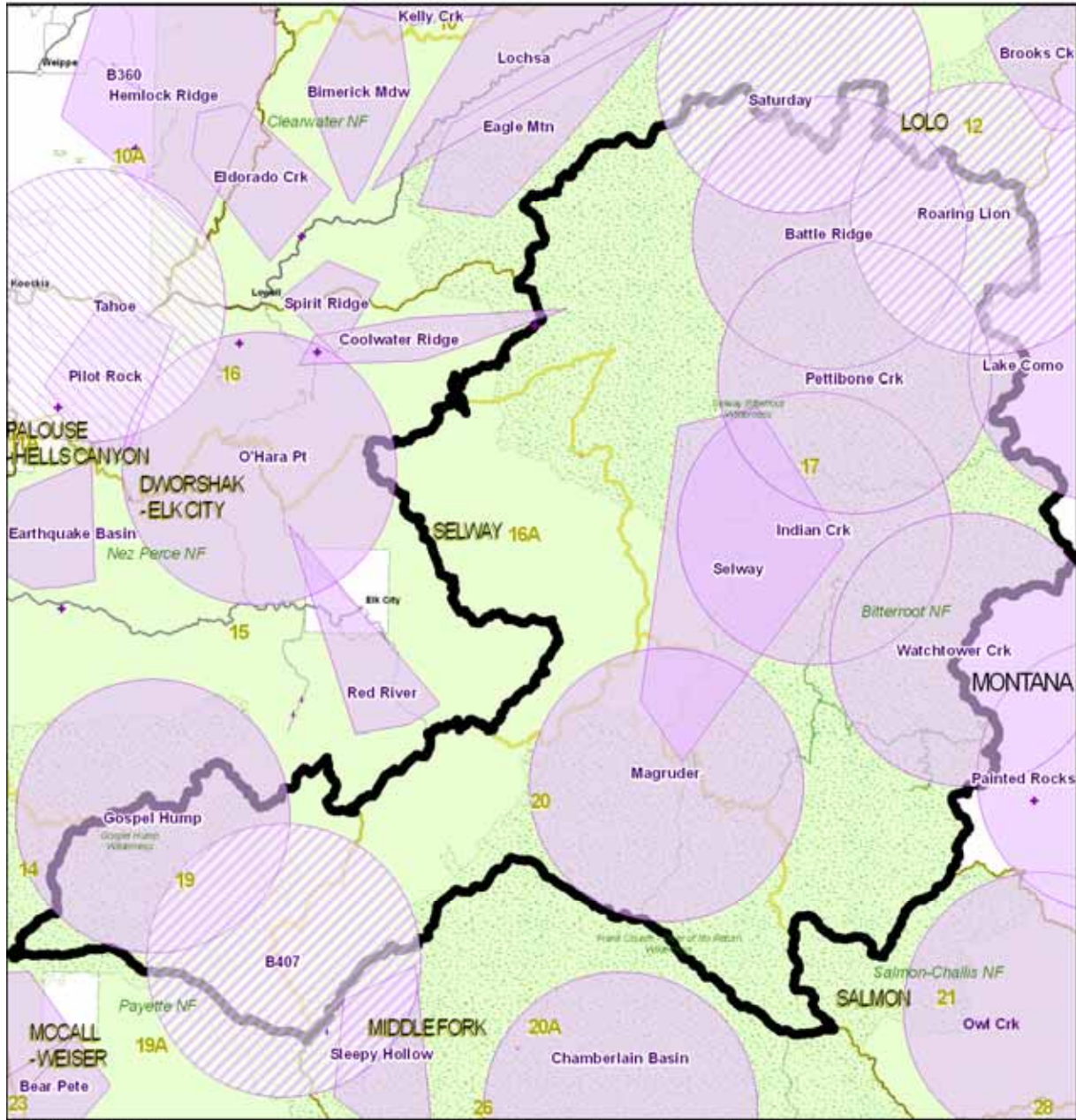
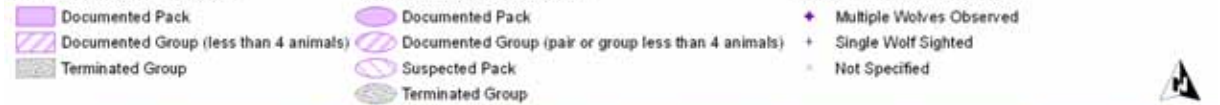
# Selway Wolf Activity

2007-08 Known Locations \*

2008 Estimated Locations \*\*

Documented, Suspected and Reported Locations

2008 Public Observations \*\*\*



\* Tracking collar data and research locations collected and analyzed by Idaho Department of Fish and Game, the Nez Perce Tribe, Montana Department of Fish, Wildlife and Parks, Wildlife Services, the University of Montana Cooperative Wildlife Research Unit and the National Park Service. Pack locations are minimum convex polygons (MCP) of telemetry and research observations for collared wolves from 1/1/2007 - 12/31/2008 with outliers removed. For packs with only VHF collars 100% MCPs are used. Packs which included GPS locations are floating median 95% MCPs. If the pack did not have any observations in 2008 it is not included on this map. This map is provided for management purposes and should not be used for data analysis. Do not release these data to third parties without first contacting the Idaho Department of Fish and Game or the Nez Perce Tribe.

\*\* Estimated Pack Activity determined by biologists from research locations, public observations and incidental observations from 1/1/2007 - 12/31/2008. These are displayed as 9.8 mile radius circles consistent with pack territories in Idaho.

\*\*\* Public Observations from 1/1/2008 - 12/31/2008 collected on the Idaho Fish and Game website and reviewed by staff biologists. Confirmed and possible observations are displayed.

Figure 14. Distribution of documented and suspected wolf packs, other documented groups, and public wolf reports in the Selway DAU, 2008.

Table 6. End of year summary of estimated pack size, natality, mortality, dispersal, monitoring status, wolf captures, and livestock depredations for documented and suspected wolf groups within Idaho Department of Fish and Game Selway Data Analysis Unit, 2008.

Wolf group <sup>a</sup>	Min. no. wolves detected <sup>b</sup>	Reproductive status			Documented mortalities				Known dispersal	Monitoring status			Confirmed & (probable) wolf-caused livestock losses		
		Min. no. pups prod. (died) <sup>c</sup>	Reported as		Natural	Control <sup>e</sup>	Other human <sup>f</sup>	Unknwn <sup>g</sup>		Active radio collars	No. wolf captures <sup>h</sup>	No. wolves missing <sup>i</sup>	Cattle	Sheep	Dogs
			reprod. pack	breeding pair <sup>d</sup>											
<b>DOCUMENTED PACKS</b>															
Battle Ridge	?	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Gospel Hump	?	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Indian Creek	?	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Lake Como (MT) <sup>j</sup>															
Magruder	3	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Pettibone Creek	2	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Selway	?	?	NO	NO	0	0	0	1	0	1	0	0	0	0	0
Trapper Peak (MT) <sup>k</sup>															
Watchtower Creek (MT) <sup>j</sup>															
<b>SUBTOTAL</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SUSPECTED PACKS</b>															
<b>SUBTOTAL</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>OTHER DOCUMENTED GROUPS</b>															
Roaring Lion (ID) <sup>j</sup>	?				0	0	0	0	0	0	0	0	0	0	0
B266	?				0	0	0	0	0	0	0	0	0	0	0
B407	2				0	0	0	0	0	1	0	0	0	0	0
<b>SUBTOTAL</b>	<b>2</b>				<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>UNKNOWN</b>															
<b>SUBTOTAL</b>	<b>0</b>				<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>DAU TOTAL</b>	<b>7</b>	<b>0</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<sup>a</sup> Documented packs = territorial groups of wolves usually consisting of an adult male and female and their offspring from one or more generations, and has the potential to reproduce (2 adults of opposite sex). Suspected packs = geographic areas where wolf pack presence was suspected but not verified, or where wolf

presence was verified but did not meet documented pack status. Other documented groups = verified groups not meeting either documented or suspected pack status (e.g., lone wolves, potential mated pairs, etc.). Unknown = geographic areas where wolf presence was previously unverified and/or no data on group status was known.

<sup>b</sup> Summing this column does not equate to number of wolves estimated to be present in the population.

<sup>c</sup> Number in parentheses indicates known pup mortality; pup mortalities tallied in the appropriate column in “documented mortalities.”

<sup>d</sup> Breeding pairs are the measure of Federal and State wolf recovery and management goals. A breeding pair is defined as “an adult male and a female wolf that have produced at least 2 pups that survive until December 31 of the year of their birth...”.

<sup>e</sup> Includes agency lethal control and legal take.

<sup>f</sup> Includes all other human-related deaths.

<sup>g</sup> Does not include pups that disappeared before winter.

<sup>h</sup> Includes wolves captured for monitoring purposes during 2008. Most, but not all, were radiocollared.

<sup>i</sup> Radiocollared wolves that became missing in 2008.

<sup>j</sup> Border pack officially tallied to (STATE); territory known/likely shared with Idaho. Data on these packs can be found in Rocky Mountain Wolf Recovery 2008 Annual Report; data for mortalities and/or depredations by non-Idaho border packs that occurred within Idaho are presented here.