

## **SALMON REGION**

The Salmon Region contains portions of the Middle Fork, South Mountains, and Salmon DAUs. The Salmon Region is one of the 3 Regions in the state that has high livestock conflicts, primarily cattle-related. Consequently, livestock depredations and control actions are frequent.

Southern Mountains DAU (29, 30, 30A, 36A, 37, 37A, 43, 44, 48, 49, 50, 51, 58, 59, 59A)

### Abstract

The Southern Mountains DAU was occupied by 9 documented packs during 2008 (Figure 20; Table 12). One pack claimed by Idaho was listed as a border pack. Three packs were eliminated due to chronic livestock depredations. Two of the 6 packs remaining at the end of 2008 also qualified as breeding pairs. Documented mortalities ( $n = 38$ ) included control (agency removal and legal take;  $n = 33$ ), other human (illegal take, vehicle collision, etc.;  $n = 4$ ), and unknown ( $n = 1$ ) causes. Confirmed ( $n = 40$ ) and probable ( $n = 10$ ) wolf-caused losses of cattle were attributed to the Black Canyon, Copper Basin, Doublespring, Lemhi, Moores Flat, and Pass Creek packs; additional losses were attributed to lone/paired or unknown wolves. Confirmed ( $n = 35$ ) and probable ( $n = 21$ ) wolf-caused losses of domestic sheep were attributed to the Doublespring, Lemhi, Moores Flat, Phantom Hill, High Prairie (neighboring DAU pack), and Steel mountain (neighboring DAU pack) packs, as well as unknown wolves. Six wolves were captured by Program personnel that resulted in the placement of 6 new radiocollars.

### Background

The Southern Mountains DAU encompasses a large geographic area from southwest Idaho all the way to the Idaho-Montana border, the Southern Mountains DAU contains a wide diversity of terrain and habitat types. The southwestern portion of this DAU is comprised of a mixture of relatively flat prairie and the rolling, moderately steep Smoky and Soldier Mountain ranges, transitioning to the northeast to steeper, spire-like peaks of the Boulder, White Cloud, Pioneer, and Beaverhead Mountain ranges. These ranges are intersected by several major river drainages, including the South Fork Boise, Big Wood, Big Lost, Little Lost, East Fork Salmon, Salmon, Pahsimeroi, and Lemhi Rivers. Habitat ranges widely and includes grass prairie, Coniferous forest, high desert shrub-steppe, and alpine; this diversity reflects the wide range of variation in annual precipitation across this region. Land ownership is predominantly public (U.S. Forest Service and Bureau of Land Management) within this DAU. Cattle ranching, livestock grazing, and recreation are the dominant uses of the landscape within the Southern Mountains DAU.

### Management Direction

The Wolf Plan indicates current wolf-ungulate conflict levels are low and wolf-livestock conflict levels are high within this DAU. Therefore, wolf numbers in the Southern Mountains DAU are slated to be reduced then stabilized at 2005-2007 levels unless conditions change.

## Documented Resident Packs

### *Copper Basin*

Due to a history of chronic depredations on livestock, the remaining 3 wolves in this pack were removed in late March after a calf was confirmed killed. As such, the Copper Basin pack was no longer extant by the end of 2008 and was therefore not reported as a end-of-year documented pack for 2008.

### *Doublespring*

The high potential for livestock conflict in the upper Pahsimeroi Valley initiated efforts to trap and radiocollar a wolf in the uncollared Doublespring pack to monitor wolf activity in the area. A subadult wolf was subsequently collared in April near an area where wolves were being observed on a frequent basis. Shortly thereafter, this pack was implicated in a spate of livestock depredations (9 confirmed, 1 probable cattle, 3 confirmed sheep), and due to the high likelihood of continued chronic depredations, it was deemed necessary to remove the pack. Five wolves were initially controlled, followed by the radiocollared female after several flights suggested she was the last remaining wolf. However, depredations continued in the area after control efforts, indicating a wolf or wolves remained. Numerous observations of multiple wolves during the fall hunting season substantiated the presence of remnants of this pack in the area. As such, these wolves were retained as a documented wolf pack. This pack was a reproductive pack but not a breeding pair for 2008.

### *Hyndman*

No wolves were being monitored by radio-telemetry at the onset of 2008. Male B93 had last been located in 2006 as a Buffalo Ridge disperser and was not then considered a member of the Hyndman Pack. In late 2008 a report of a gray collared wolf associating with uncollared black wolves initiated a search for missing wolves in GMU49. B93 was found and later seen with 1 uncollared black. This pack was not implicated in any livestock depredations. This third year pack had a minimum of 2 wolves in December 2008, was not reproductive, and was not counted as a breeding pair for 2008.

### *Lemhi*

Radio contact was lost with the only radiocollared wolf in October 2007, leaving this pack's status unknown for 2008. However, a confirmed sighting of 9 wolves (including 6 pups) was reported in the upper Lemhi River drainage in the area the Lemhi pack was known to occupy. It was assumed this observation was the Lemhi pack, and provided verification this pack was a breeding pair in 2008. Multiple depredations on livestock were attributed to this pack over the course of the year, resulting in the lethal control of 1 wolf.

### *Moore's Flat*

No wolves were monitored by radio-telemetry during 2008. Four wolves were killed during an ongoing control action in response to livestock depredations. The wolves killed include B199, previously a member of the Bennett Mountain Pack, which was removed (with the exception of B199) in 2004. B199 had not been monitored in several years due to a non-functioning radiocollar. This second year pack was removed in response to livestock depredations and was not counted as a documented pack at the end of 2008.

### *Pass Creek*

This pack was targeted for helicopter darting to place additional collars after the breeding female's radiocollar was found to have been chewed off, leaving only one radiocollared wolf in the pack. The effort was successful in recollaring the breeding female, and placing a radiocollar on an adult male. The third radiocollared wolf was found dead in May of unknown causes near the pack's den site in a tributary of the East Fork Salmon River. Beginning in May, the Pass Creek pack began chronically depredating on livestock; incremental removal was ineffective at stopping the depredations, and the decision was made to remove the entire pack. A total of six wolves were lethally controlled from May-August, and this pack was removed from the list of documented packs in Idaho.

### *Phantom Hill*

Suspected breeding female B326 and male B333 were monitored by radio-telemetry at the onset of 2008. A minimum of 4 pups was documented in this pack. This pack was confirmed to have killed 1 sheep, fewer than in 2007, the first year this pack was documented. In 2007, this pack was confirmed to have killed 14 sheep and 2 dogs and probably killed 3 additional sheep. This reduction in depredations is likely influenced by proactive nonlethal pilot project initiated by Lava Land and Livestock and implemented by IDFG, Defenders of Wildlife, Sawtooth National Forest, WS, Blaine County, and other owners of affected National Forest sheep grazing allotments. With input from cooperators Defenders of Wildlife hired 3 technicians. These individuals were trained by WS and IDFG and provided telemetry equipment, then given direction to monitor sheep and haze wolves. This effort demonstrated that with proper funding, equipment, training, and effort, proactive management has the potential to be effective at reducing wolf-livestock depredations. This second year pack had a minimum of 9 wolves in December 2008, was reproductive, and was counted as a breeding pair for 2008.

### *Soldier Mountain*

Suspected breeding male B149 was monitored by radio-telemetry at the onset of 2008. He was observed with another wolf during breeding season but was not located after late winter. Biologists documented reproduction when a coyote trapper incidentally captured a female pup (B411) in the fall. Agency personnel traveled to the site and collared the animal. Later the same coyote trapper captured another female wolf (B412), which agency personnel also fitted with a VHF radiocollar. This pack was not implicated in any livestock depredations. This pack had a minimum of 5 wolves in December 2008, was reproductive, and was not counted as a breeding pair for 2008.

### *Documented Border Packs*

#### *Black Canyon (ID)*

This pack was listed as a border pack for the state of Montana for 2007. However, wolf activity near the ID/MT border in late winter and early spring suggested this pack was intending to den within Idaho. Livestock depredations occurring from February through April resulted in the removal of 5 wolves, including a lactating female, providing further evidence this pack had in fact denned within Idaho. The Black Canyon pack's status is currently unknown due to a lack of radiocollared wolves, although the continued presence of multiple adults has been verified through sign (tracks and kills). Black Canyon was counted as a documented border pack, but not a breeding pair, for the state of Idaho in 2008.

### Suspected Packs

#### *Leadore-Hawley Creek*

Sporadic sightings of wolves and wolf sign continued to be reported from this location. Six cattle were confirmed as wolf kills in 2008 in the area thought to be traveled by this suspected pack.

### Other Documented Wolf Groups

#### *B277*

Originally trapped as a member of the Galena pack, wolf B277 was last located via telemetry in May 2007. This wolf's status was unknown until April of 2008 when his carcass was collected along Highway 75 near the Yankee Fork Work Center, having been struck by a vehicle. It is likely this was the wolf observed paired with wolf B283 on several occasions throughout late 2007 and early 2008.

#### *B394*

Wolf B394 was trapped and radiocollared in response to several depredation incidents at the U.S. Sheep Research Station near Humphrey, Idaho, that resulted in 16 confirmed dead sheep (see Upper Snake DAU). Winter aerial counts indicated this wolf is affiliated with an adult black wolf.

#### *SW-64*

Dispersed from the Sage Creek pack of Montana, telemetry locations in 2007/2008 indicated SW-64 was spending time in both Idaho and Montana along the divide southeast of Leadore, Idaho. After being implicated in a number of depredations in both Montana and Idaho, this wolf was removed in a control action.

# Southern Mountains Wolf Activity

2007-08 Known Locations \*

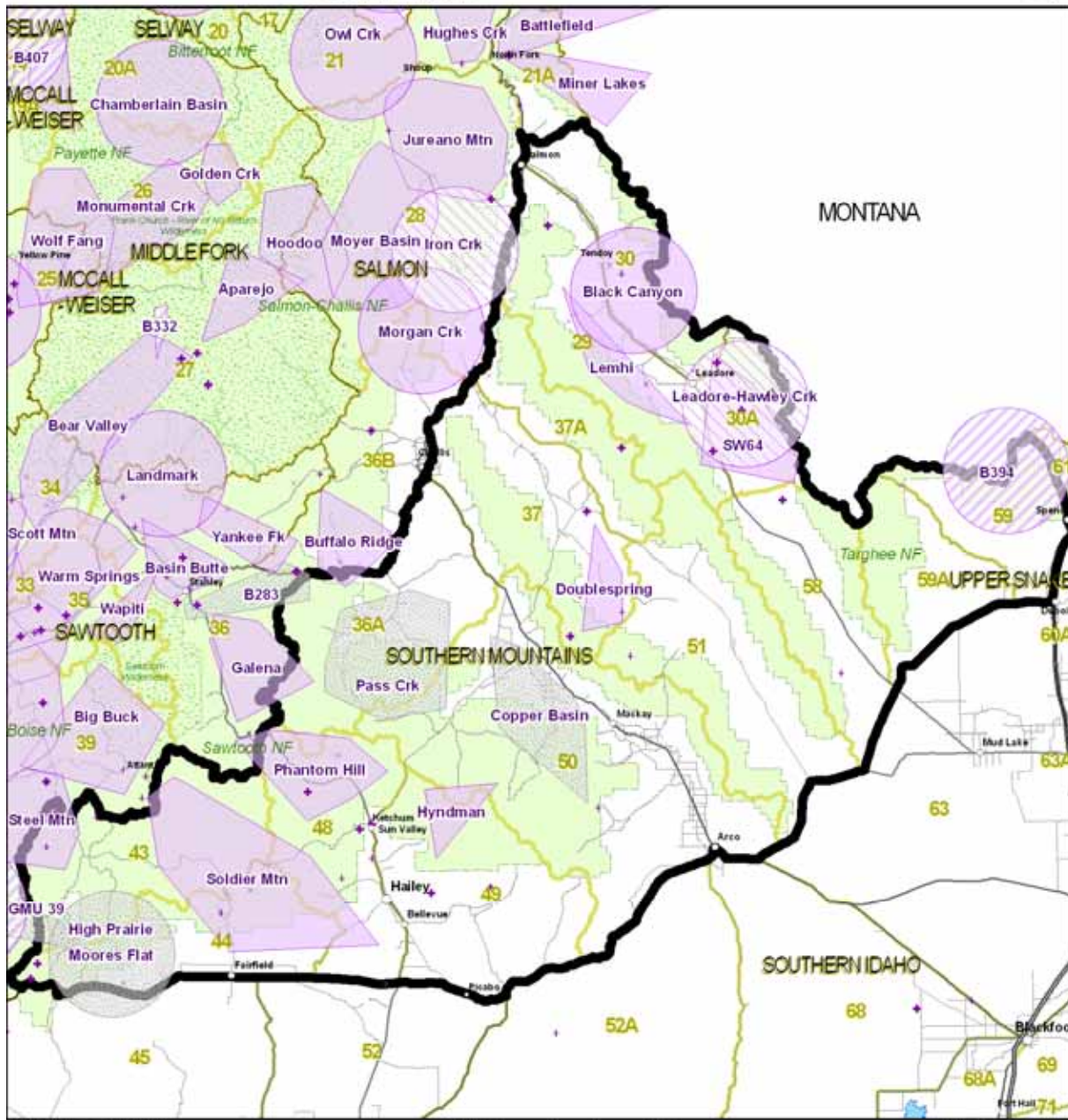
2008 Estimated Locations \*\*

Documented, Suspected and Reported Locations

- Documented Pack
- Documented Group (less than 4 animals)
- Terminated Group

- Documented Pack
- Documented Group (pair or group less than 4 animals)
- Suspected Pack
- Terminated Group

- Multiple Wolves Observed
- Single Wolf Sighted
- Not Specified



\* 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 20. Distribution of documented and suspected wolf packs, other documented groups, and public wolf reports in the Southern Mountains DAU, 2008.



Table 12. 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 49	?				0	2	0	0	0	0	0	0	4(1)	2(13)	0
GMU 50	?				0	1	0	0	0	0	0	0	0	0	0
GMU 51	?				0	0	0	0	0	0	0	0	0	3	0
GMU 59	?				0	0	1	0	0	0	0	0	0	0	0
GMU 59A	?				0	1	0	0	0	0	0	0	1	0	0
<b>SUBTOTAL</b>	<b>0</b>				<b>0</b>	<b>4</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5(1)</b>	<b>5(13)</b>	<b>0</b>
<b>DAU TOTAL</b>	<b>30</b>	<b>14(3)</b>			<b>0</b>	<b>33</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>40(10)</b>	<b>35(21)</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.

## Salmon DAU (GMUs 21, 21A, 28, 36B)

### Abstract

The Salmon DAU was occupied by 7 documented packs during 2008 (Figure 21; Table 13). Five packs were listed as border packs, 4 of which were claimed by Montana. All 4 documented reproductive packs qualified as breeding pairs; the reproductive status of the remaining 3 packs was not determined. Documented mortalities ( $n = 18$ ) included control (agency removal and legal take;  $n = 13$ ), other human (illegal take, vehicle collision, etc.;  $n = 4$ ), and unknown ( $n = 1$ ) causes. Confirmed ( $n = 11$ ) and probable ( $n = 2$ ) wolf-caused losses of cattle were attributed to the Buffalo Ridge, Jureano Mountain, and Moyer Basin packs; and unknown wolves. Probable ( $n = 4$ ) wolf-caused losses of domestic sheep were attributed to the Miner Lakes (MT) border pack. Four wolves were captured by Program personnel that resulted in the placement of 4 new radiocollars.

### Background

The Salmon DAU encompasses 4 GMUs (21, 21A, 28, and 36B). The topography within the Salmon DAU is characterized by steep, mountainous slopes interspersed by river valleys. The habitat consists primarily of timbered hillsides with grass understory, although lower elevations would best be described as arid rangeland comprised of sagebrush/bunchgrass vegetation. Land ownership is primarily public, with approximately 95% under U.S. Forest Service, Bureau of Land Management, or State ownership. Cattle ranching, livestock grazing, mining, timber harvest, and recreation are the dominant human uses in this region.

### Management Direction

The Wolf Plan indicates current wolf-ungulate conflict levels as moderate and wolf-livestock conflict levels as high in this DAU. Therefore, wolf numbers in the Salmon DAU are slated to be decreased then stabilized at lower levels unless conditions change. With relatively high numbers of seasonal and year-round livestock on both grazing allotments and private pasture, livestock-wolf conflict potential within this DAU is high, as evidenced by the number of annual depredation incidents (see Figures 8 and 9). As such, reducing livestock depredations will continue to be an important objective within this DAU through implementation of 10(j) regulations or through regulated harvest once delisted.

### Documented Resident Packs

#### *Buffalo Ridge*

After being involved in multiple depredations in December of 2007, this pack was slated for removal when depredations continued through early winter of 2007/2008, and where incremental removal of wolves proved ineffective. The following control actions resulted in the lethal control of 6 wolves (5 in Salmon and 1 in Southern Mountains DAUs). Continued wolf activity within traditional areas used by this pack indicated multiple wolves remained following control (in August, a radiocollared wolf was shot in defense of livestock, and multiple wolves were heard howling, within an area commonly used by this pack; *see* B283). While not considered a

breeding pair, the presence of multiple wolves within this pack territory warranted their retention as a documented pack for 2008.

#### *Hoodoo*

Reproductive surveys determined that the Hoodoo pack shifted their den area from along the Middle Fork Salmon River to a tributary of Camas Creek, where 4 pups were confirmed. A capture effort in June was successful in adding two additional radiocollars in this pack; however, one newly collared wolf was legally shot in August under a Shoot On Sight (S.O.S.) permit while dispersing from its pack, and the second was illegally killed in early October. One pup was determined to have been struck and killed by a vehicle in October. A minimum of 11 wolves was counted in the pack during winter counts, and it was listed as a breeding pair for 2008.

#### *Jureano Mountain*

Program personnel verified this pack reproduced at least 6 pups at a traditional den site. A capture effort in June resulted in the recapture of wolf B328, caught in the summer of 2007 at the same trap location. Wolf B328 was first fitted with a GPS collar that later failed some time in fall 2007, leaving this pack unmonitored until his recapture in 2008. This wolf was found dead of unknown cause during a November monitoring flight (likely during a dispersal event), again leaving this pack without radiocollared members. Depredations on cattle during the summer prompted WS personnel to lethally remove one wolf. The Jureano Mountain pack was listed as a breeding pair in 2008, but the lack of radiocollared wolves prevented attempts to ascertain a year-end pack count.

#### *Morgan Creek*

The Morgan Creek pack was without radiocollared individuals and its status was unknown for all of 2008.

#### *Moyer Basin*

The Moyer Basin pack reproduced a litter of 5 pups near a traditional rendezvous site in 2008. A subadult female, trapped and fitted with a GPS radiocollar as a pup in 2007, was darted from the ground in July 2008 and refitted with a VHF radiocollar. While typically localized in the Panther Creek drainage for much of the year, this pack was located several miles south of their known home range in Morgan Creek during December telemetry flights. During this time frame, the pack was implicated in the depredations of multiple cattle. As a result, 4 wolves were lethally controlled. Unfortunately, during the control actions both radiocollared wolves were inadvertently killed. Aerial counts taken during control actions indicated 8 wolves remained in the pack, and was also considered a breeding pair for 2008.

#### *Owl Creek*

The Owl Creek pack was without radiocollared individuals and its status was unknown for all of 2008.

#### *Documented Border Packs*

##### *Battlefield (MT)*

See the respective State's annual report for information on this pack.

*Hughes Creek (ID)*

Agency personnel verified the presence of 5 pups during reproduction surveys in early summer of 2008. Unfortunately, the only radiocollared wolf's signal went undetected for the remainder of the year, leaving this pack unmonitored for much of 2008. As such, a year-end pack size count was not obtained. The Hughes Creek pack was considered a breeding pair for 2008.

*Miner Lakes (MT)*

See the respective State's annual report for information on this pack.

*Painted Rocks (MT)*

See the respective State's annual report for information on this pack.

*Sula (MT)*

See the respective State's annual report for information on this pack.

*Suspected Resident Packs*

*Iron Creek*

No reports of wolves or livestock depredations.

*Other Documented Wolf Groups*

*B160*

Wolf B160 was found illegally shot along Highway 75 east of Stanley, Idaho. This animal's radiocollar failed in 2006 as a member of the Morgan Creek pack, and his status was unknown until the carcass was discovered in April of 2008.

*B283*

Radiolocations from female wolf B283 in winter and spring 2008 indicated she had localized with an unknown mate within the Sawtooth National Recreation Area along the White Cloud Peaks range. In spring, a wolf believed to be the animal paired with B283 was killed by a vehicle. B283 was legally shot in defense of livestock with other wolves near Bayhorse Lakes in August, indicating she may have joined with remnants of the Buffalo Ridge pack (see Buffalo Ridge).

*B328*

Wolf B328 was found dead of unknown cause in Iron Creek following a November telemetry monitoring flight. Well south of the Jureano Mountain pack's home range, it is likely this wolf was dispersing from its natal pack at the time of its death.

*B383*

Trapped in June 2008, this wolf was legally killed in August under the authority of a S.O.S. permit, having dispersed from the Hoodoo pack some weeks prior.



Table 13. 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 Salmon 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>															
Battlefield (MT) <sup>j</sup>															
Buffalo Ridge	?	0	NO	NO	0	5	0	0	0	0	0	1	4	0	0
Hoodoo	11	4(1)	YES	YES	0	0	2	0	1	1	2	0	0	0	0
Hughes Creek (ID) <sup>j</sup>	?	5	YES	YES	0	0	0	0	0	0	0	1	0	0	0
Jureano Mountain	?	6	YES	YES	0	1	0	0	1	0	1	0	4(1)	0	0
Miner Lakes (MT) <sup>j</sup>														0(4)	
Morgan Creek	?	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Moyer Basin	8	5	YES	YES	0	4	0	0	0	0	1	0	2(1)	0	0
Owl Creek	?	?	NO	NO	0	0	0	0	0	0	0	0	0	0	0
Painted Rocks (MT) <sup>j</sup>															
Sula (MT) <sup>j</sup>															
<b>SUBTOTAL</b>	<b>19</b>	<b>20(1)</b>			<b>0</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>10(2)</b>	<b>0(4)</b>	<b>0</b>
<b>SUSPECTED PACKS</b>															
Iron Creek	?														
<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>															
<del>B160</del>	0				0	0	1	0	0	0	0	0	0	0	0
<del>B283</del>	0				0	1	0	0	0	0	0	0	0	0	0
<del>B328</del>	0				0	0	0	1	0	0	0	0	0	0	0
<del>B383</del>	0				0	1	0	0	0	0	0	0	0	0	0
Border DAU (Yankee Fork)							1								
<b>SUBTOTAL</b>	<b>0</b>				<b>0</b>	<b>2</b>	<b>2</b>	<b>1</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>															

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>
			reprod. pack	breeding pair <sup>d</sup>											
GMU 36B					0	1	0	0	0	0	0	0	1	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</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>
DAU TOTAL	19	20(1)			0	13	4	1	2	1	4	2	11(2)	0(4)	0

<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 deprecations by non-Idaho border packs that occurred within Idaho are presented here.