



The Survivors

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As everyone knows, wolves were reintroduced to Yellowstone National Park in 1995–96. Fourteen wolves were captured in Alberta in January 1995 and released in March 1995. Seventeen wolves were captured in British Columbia and released in April 1996. From these 31 wolves, the number in the greater Yellowstone area has grown to a projected population of 260 wolves by the end of 2002.

Just 3 of the original 31 wolves are known to survive: male 2 (radio collar number), female 41, and

female 42. Their cohorts died from a variety of causes: 1 perished from burns when she fell into a hot spring, 5 are known to have been killed by other wolves, 2 were killed accidentally by vehicles, 7 were killed illegally, 5 were killed because of livestock depredations, 3 died of unknown causes, 2 succumbed to natural causes, and 1 each was killed by a moose, an elk and an avalanche.

Who are these three survivors? How have they managed to stay alive? Their histories provide a glimpse of the complex dynamics of



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Male 21 and female 42 are the alphas of the Druid Peak pack.

the Yellowstone wolf population.

Black male wolf 2, born in 1994, was captured with five other wolves from the Petite Lake pack near Hinton, Alberta, 550 miles north of Yellowstone, in January 1995 and released in March 1995 from the Crystal Creek acclimation pen on the northern Yellowstone elk winter range. That fall, he was radio-located near gray female wolf 7, also born in 1994, captured from the McLeod pack and released from the Rose Creek pen several miles up the valley from the Crystal Creek pen. Wolf 7



had dispersed immediately on release from the pen and was living alone on the Blacktail Deer Plateau.

By spring 1996, it was clear that wolves 2 and 7 had paired, becoming the alphas of the first naturally formed pack in Yellowstone in 60 years. They were named the Leopold pack, in honor of Aldo Leopold, who had urged restoration of wolves to Yellowstone in 1944. The pack has been one of the most stable and productive packs in the park. Wolves 2 and 7 produced 3 pups in 1996, 5 in 1997, 5 in 1998, 1 in 1999, 10 in 2000, 4 in 2001, and 8 in 2002. Wolf 7 was killed in 2002 by other wolves, but her pups survived.

Wolves 2 and 7 had remained mated for eight years and survived by avoiding vehicles on park roads, staying within the park boundary and away from armed wolf haters, not taking livestock (in which case they

could have been killed), and until 2002, avoiding conflicts with other wolf packs. The pack's territory, at 41 square miles, is the smallest of the park's packs. Even so, wolves from the Nez Perce pack have invaded their core territory twice in the past year, and Tower pack wolves were also seen in Leopold territory. The Geode Creek pack, a spin-off from the Druid Peak pack, was most likely responsible for the death of alpha female 7.

After female 7's death, male 2 maintained his alpha status but apparently did not choose a new mate. In mid-December 2002, however, male 2 appeared to have been deposed and was seen apart from the Leopold pack with four other pack members, perhaps searching for a new mate. An adult female from the Geode Creek pack has been seen with them several times and could be male 2's new mate.



Douglas Smith, National Park Service

Six wolves, including male wolf 2, were released in March 1995 from the Crystal Creek acclimation pen on the northern Yellowstone elk winter range.

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The other two survivors of the reintroduction are females 41 and 42. These sisters were captured in January 1996 east of Williston Lake, British Columbia, an area chosen because its terrain and prey base are similar to Yellowstone's. They were held in the Rose Creek pen with another sister, 40; their mother, 39;

and alpha male 38 from the Prophet pack. All five were released from the pen in late April 1996 and became the Druid Peak pack.

For a time, female wolves 41 and 42 bided their time as subordinates, first to their mother, 39 (who lost her alpha status when she dispersed in late 1996 and returned in 1997 to be driven out by 40 and 42), and then to their sister, 40, who ruled the pack with a ferocious temperament. Their "stepfather," alpha male 38, sired pups in 1997 with both 41 and 42, who apparently shared a den, from which 5 pups survived.

Female wolf 41 dispersed from the Druid Peak pack in 1997, paired with a Rose Creek male, and founded the Sunlight Basin pack. Although the pack lives close to livestock, it has killed relatively few. In 1999,

female 41 bore 7 pups; in 2000, 4 pups; in 2001, 5 to 7 pups; and in 2002, 6 pups. Now completely gray, she has maintained her alpha status.

In late November 1997, on a trip east of the park, Druid Peak alpha male 38 and male 31 were illegally shot. Shortly thereafter, black male 21 joined the Druid Peak pack to become its alpha male. In 1998, alpha female 40 had 2 pups, but only 1 survived. In 1999, only 2 of 6 pups born survived.

In 2000, alpha female 40 was killed, most likely by three of the pack's other four adult females (see "The Death of a Queen," *International Wolf*, Winter 2000). That year all five Druid Peak females (40, 42, 103, 105 and 106) came into estrus and were seen copulating with alpha male 21. Female 42 denned four miles west of 40's den and was joined by her niece, 103, and her daughter, 105. Female



Wolves 2, 41 and 42 are members of the Leopold, Sunlight Basin and Druid Peak packs, respectively.

Female 42, the alpha female of the Druid Peak pack, is one of the 3 surviving wolves of the original 31 released in Yellowstone National Park in 1995–96.

Isaac Babcock



the alphas of the first naturally formed pack in Yellowstone in 60 years.



106 denned three miles east of 40's den.

On the evening of May 7, 2000, 40 was seen attacking her sister, 42, and 105; then they all headed toward 42's den. The following morning, 40 was found mortally wounded, probably by 42, 103 and 105. After 40's death, alpha male 21 tended her pups and then went to the den of 42, who carried her pups to 40's den. Female 106 then moved her pups to 40's den, resulting in 21 pups grouped there, and a pack of 27 wolves. The pack grew to 37 in 2001 when 11 pups joined the 26 surviving Druids.

By late 2001, the huge pack had split into four subgroups; wolves from the Druid Peak pack linked up with wolves from other packs to form three new packs. Female 42 continues to be the alpha of the Druid Peak pack and seems to rule the pack in a more benign manner than did her sister, 40.

Because of the location of their den, just a few hundred yards from the Mammoth to Cooke City road, the Druid Peak pack is arguably the world's most observed wild wolf pack. As of June 2002, about 100,000 visitors to the park had seen the Druid Peak wolves.

But their location also places the wolves in jeopardy when they try to cross the road. One Druid Peak yearling male was killed by a vehicle on a dark night in 2000. Near the den in 2001, wolves were seen trying to cross the road 689 times; they got across 473 times and failed 216 times. Park employees asked drivers to pause or slow to allow them to cross.



The Leopold pack, founded by male 2 and female 7, has been one of the most stable and productive packs in Yellowstone.

Douglas Smith, National Park Service

To reduce the hazard, the Wolf Project, funded by Twin Spruce Foundation, Defenders of Wildlife, and the Wolf Education and Research Center through the Yellowstone Park Foundation, hired two people to direct traffic, monitor wolf activity, and educate people about park wildlife. These efforts may decrease one of the many hazards for wolf 42 and give visitors a chance to see one of the last three original Yellowstone wolves. ■

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For additional information about Yellowstone's wolves:

see Ralph Maughan's Web site at <http://www.forwolves.org/ralph/wpages/1995wolftable.htm> and <http://www.forwolves.org/ralph/wpages/1996wolftable.htm>.

Male Wolf 2 Killed in Fight

Black male wolf 2, the alpha male of the Leopold pack, was found dead on December 31, 2002, about a mile from the den site of the Geode Creek pack.

Traveling alone, he was killed in a violent fight, most likely by Geode Creek wolves. He was the last survivor of the 14 wolves released in Yellowstone in 1995.