

# YELLOWSTONE BISON POPULATION MANAGEMENT ACTIVITIES

This report summarizes the management activities associated with implementation of the Record of Decision for the Final Environmental Impact Statement and Bison Management Plan for the State of Montana and Yellowstone National Park for the time period October 1, 2001 through September 30, 2002. The reporting period for this summary is **15 June through 28 June 2002**.

## Monitoring

No monitoring occurred during this time period.

## Hazing

### North Boundary Area

No hazing was conducted in north boundary area during this time period.

### West Boundary Area

No hazing was conducted in west boundary area during this time period.

## Capture and Testing

### North Boundary Area

No capture and testing was conducted at the Stephens Creek area during this time period.

### West Boundary Area

No capture and testing was conducted at the Horse Butte and Duck Creek facility during this time period.

## Bison Transported to Slaughter

This reporting period – 0 (MTDOL)  
0 (NPS)

Total for this winter – 199 (MTDOL)  
0 (NPS)

## Interagency Bison Management Plan Shooting Operations

Shooting operations may be conducted as part of the Interagency Bison Management Plan (IBMP).

This reporting period – 0 (MTDOL)  
0 (NPS)

Total for this winter – 3 (MTDOL)  
0 (NPS)

## Natural Mortality

Observations of natural mortality are usually limited to road corridors, incidental observations by NPS or field research personnel, or occasional observations from aircraft. Not all mortality reports are received in time for inclusion into the appropriate bi-weekly report and therefore are added to future reports.

Natural Mortality this reporting period – 2

Natural Mortality for this winter – 45

## Natural Mortalities:

- 1 adult male – 6/23/02 – ~0.5 mile from Cygnet Lake/Mary Mountain trail junction (unknown cause)**
- 1 calf (unknown sex) – 6/21/02 – grassy area adjacent to the Old Faithful crosswalk (unknown causes)**
- 1 adult unknown – 5/17/02 – Jasper Creek (unknown causes)
- 1 adult female – 5/8/02 – South of Harlequin Lake trailhead (unknown causes)
- 1 calf of the year (unknown sex) – 5/8/02 - South of Harlequin Lake trailhead (possible starvation?)
- 1 adult female – 4/26/02 – Obsidian Cliff (unknown causes)
- 1 adult female – 4/22/02 – underneath the Firehole River Bridge, near Craig Pass (drowning)
- 1 yearling female – 4/22/02 – behind the Old Faithful cabins, across the Firehole River (unknown causes)
- 1 adult bull – 4/22/02 – behind the boardwalk near the Old Faithful Geyser trail/boardwalk (unknown causes)
- 1 young of the year – 4/22/02 - Daisy Geyser Trailhead, along the Firehole River (stillborn?)
- 1 adult bull – 4/21/02 – Biscuit Basin (unknown causes)
- 1 young of the year – 4/12/02 – Blacktail Ponds (unknown causes)
- 1 adult female – 4/12/02 – Blacktail Ponds (unknown causes)
- 1 adult female – 4/11/02 – along Sentinal Creek (winterkill)
- 1 adult female – 4/11/02 – near Queens Laundry (wolf predation)
- 1 young of the year (unknown) – 4/11/02 – Sentinal Meadow (wolf predation)
- 1 adult female – 4/11/02 – across river from Excelsior Geyser runoff (pregnancy complications?)
- 1 young of the year (unknown) – 4/9/02 - (unknown causes)
- 1 young of the year (unknown) – 4/8/02 – (winterkill)
- 1 sub-adult female – 4/8/02 – Canyon employee trailer park (winterkill)
- 1 unknown adult – 4/3/02 – Pelican Creek just north of Footbridge (unknown causes)
- 1 newborn calf (unknown) – 4/3/02 – 1 mile west of Tanker Curve (abortion/stillborn)
- 1 young of the year female – 3/28/02 – behind Fishing Bridge Hamilton Store (winterkill)
- 1 adult female – 3/27/02 - Bridge Bay Flats on Lake shore (winterkill)
- 1 adult cow – 3/27/02 - Observed at Bridge Bay near road
- 1 bull-3/22/02- Trout Creek (winterkill)
- 1 unknown –3/14/02 - Hellroaring (wolf predation)
- 1 adult female – 2/28/02 - ~1/4 mile west of Madison Junction (winterkill)
- 1 adult female – 2/27/02 – Steamboat Point (winterkill)
- 1 unknown adult – 2/27/02 – Ojo Caliente (unknown causes)
- 1 adult female – 2/24/02 – West of Lamar River Bridge (probable predation)
- 1 unknown adult bison – 2/14/02 - Hillside Springs area near Old Faithful (winterkill)
- 1 cow – 2/14/02 - Midway Geyser Basin (winterkill)
- 1 calf – 2/14/02 - Norris Geyser Basin (probable predation)
- 1 adult female- 2/13/02 – 100 Springs Plane, Norris Geyser Basin (winterkill)
- 1 unknown adult bison – 2/5/02 - Pelican Valley (probable predation)
- 1 unknown adult bison – 2/5/02 - Pelican Valley (probable predation)
- 1 cow – 2/1/02 - Norris Geyser Basin (winterkill)
- 1 calf- 1/31/02 - East of Slough Creek Campground Entrance (abortion)
- 1 calf – 1/24/02 Mary Bay - (wolf predation)
- 1 adult cow bison – 1/11/02 - (winterkill)
- 1 adult bull bison – 12/25/01 - (winterkill)
- 1 unknown adult bison – 12/8/01- Pelican Valley (probable predation)
- 1 unknown adult bison – end of November, 2001 – Clearwater Creek Campground (unknown causes)
- 1 calf (very young) – Observed along Madison River

## Other Mortality

Observations of OTHER mortalities are usually limited to road corridors, incidental observations by NPS or field research personnel, or occasional observations from aircraft. OTHER mortalities are mortalities that are not covered under Natural Mortalities or Management Removals and may include, but are not limited to, animal/vehicle collisions (MVA), research mortalities, or dispatching of sick or injured animals that pose safety concerns.

OTHER mortality this reporting period – 0      Total for this winter – 15

1 adult male – 6/14/02 - MVA  
1 adult male – 6/14/02 - MVA  
2 calves – 6/13/02 – MVA  
2 cows – 6/13/02- MVA  
1 subadult female – 6/7/02 – MVA  
1 adult female – 6/7/02- MVA  
1 yearling (sex unknown) – 6/6/02- MVA  
1 calf (sex unknown) – 5/31/02 – Dispatched (sick)  
1 adult male – 5/21/02- MVA  
1 yearling (sex unknown) – 5/11/02 – MVA  
1 cow – 4/23/02 – Dispatched (broken leg)  
1 cow – 1/25/02 - Dispatched (sick)  
1 calf – 1/2/02 - Snowmobile MVA

## **Bison Aerial Survey June 25, 2002**

**SURVEY DATE, PILOT, TIME:** The monthly bison survey was conducted June 25, 2002. The pilot was Roger Stradley and the aircraft used was a Piper Super Cub. Takeoff from the Gardiner airport for the first half of the survey flight was 0603 hours. The plane landed at the West Yellowstone airport for refueling at 1023 hours. Takeoff for the second half of the survey was 1040 hours and the plane landed back at Gardiner at 1222 hours. Total survey time was 6.03 hours plus 1.5 hours of total ferry time to and from Bozeman for total flight time of approximately 7.53 hours.

**TOTAL BISON COUNTED:** Total bison counted this survey was **3,648 animals**. This total includes **3,037 adults and 611 calves**. A total of 148 groups were located and group size ranged from 1 to 413 bison. Bison calves were distinguished from adults this survey. All bison were located inside Yellowstone National Park.

### **BISON COUNT BY AREA**

**Northern Range:** Survey area included the Stephens Creek area, the Mammoth area, a portion of the Yellowstone River, Hellroaring Creek, Blacktail Plateau area, Tower area, Slough Creek, Specimen Ridge, Lamar River, Soda Butte, Cache Creek, and Calfee Creek areas, and a portion of the Mirror Plateau area. This survey area also includes the Roaring Mountain to Swan Lake Flats area. **Total bison counted was 550 in 40 groups. This total includes 479 adults and yearlings and 71 calves. Group size ranged from 1 to 207 animals.**

**Pelican Valley:** Survey area includes a portion of the Mirror Plateau, Raven, Pelican, Broad, and Astringent Creeks, Pelican Valley, Mary Bay, Turbid Lake, Lake Butte, and areas south of LeHardy Rapids along the Yellowstone River. **Total bison counted was 45 animals in 19 groups. All 45 animals counted were adults and yearlings, there were no calves observed in Pelican Valley this flight.**

**Mary Mountain:** Survey area includes Hayden Valley from Ochre Springs and Elk Antler Creek north to Alum Creek and Trout Creek, lower Sour Creek, the Canyon area, Cascade Creek, Otter Creek, Nez Perce Creek, the Old Faithful/Firehole River complex, Madison Junction area, Cougar Meadows, Cougar Creek, Duck Creek, Madison Valley (in the Park), Madison River, and from Madison Junction along the Gibbon River to the Norris Geyser Basin and Roaring Mountain areas. **Total bison counted was 3,053 in 89 groups. This total includes 2,513 adults and yearlings and 540 calves. Group size ranged from 1 to 413 animals.**

## **Monitoring of Sero-Negative Pregnant Female Bison**

Eighteen sero-negative pregnant female bison received both a vaginal implant and collar mounted radio transmitter at the Duck Creek capture facility this past winter/spring by APHIS and MT FWP personnel as per the Interagency Bison Management Plan. MT FWP and Yellowstone Bison Management Office personnel monitored these collared animals on a time available basis. Data to be collected include whether brucella was

shed at birth sites, abortion rate of these particular individuals, movements (number and locations) across the park boundary and causes of mortality for bison neonates. Sixteen of the eighteen bison gave birth as of this reporting period. As of the end of this reporting period (June 28, 2002), sixteen neonates were still alive. All sixteen vaginal transmitters were recovered however some were found away from the birthing site and no soil or placenta collections were made at those sites. These animals will be followed to determine when the remaining two individuals give birth and whether any of the sixteen calves already observed become mortality victims over the course of the summer.

