

West District

2010 Bison Relocation Summary

Overview and Statistics

Westside bison operations began on May 4, 2010 and ended on June 21, 2010. Twenty-two separate operations were conducted requiring 993 National Park Service employee man-hours. The initial relocation efforts to meet the projected May 15th date began on May 11, 2010. Between May 11th and May 13th an average of 9 NPS Law Enforcement Rangers and 7 NPS employee from 6 Districts (Mammoth, Old Faithful, Canyon, Snake River, Lake, and West) were assigned to the incident each day. This initial relocation effort represented 407 hours out of the 993 total NPS man-hours. Horses arrived at the West District corrals on May 1, 2010. Five horses were used for relocation efforts for a total of 641 miles. MTDOL helicopter was used for 13 of the 22 operations for a total of 32.9 flight hours inside Yellowstone National Park. A total of 2903 bison were hazed during the twenty-one hazing operations.

Operation

Bison operations began on May 4th when Montana Dept. of Livestock (MT-DOL) located 18 bison in Zone 3/ Red Canyon/HWY 287. On May 5th 150 bison were relocated from Zone 3/South Fork to Zone 2/Madison Arm Road. Between May 5th and May 11th all relocation efforts were focused on moving bison from Zone 3/South Fork to Zone 2 locations along the Madison Arm Road. During this time period 289 bison were moved from Zone 3/South Fork. On May 18th 83 bison, May 20th 9 bison and June 7th 21 bison were moved from Zone 3/South Fork. On June 19th four bison (1 bull, 2 cows and a calf) were observed in Zone 3/South Fork on property that did not have cattle allotments. These bison were observed on June 21st in Zone 2/South Fork and hazed back into YNP. During spring bison operations 420 bison were moved from Zone 3 locations.

Between May 10th and May 13th the objective was to move all bison from Zones 3 and 2 back into YNP. Bison were hazed by helicopter under operational control of MT-DOL and interagency riders on horseback. Herds of cow/calves ranged in size from 35 to 250. In anticipation of bison moving from outside the park boundary, 45 bison from Cougar Meadows and 160 from Seven-Mile Meadow were hazed to Madison Junction and Terrace Meadows, 14 miles from the western boundary. This brought the total bison in Cougar Meadows to 450. Bison continued to be hazed from Barns Hole inside YNP toward Madison Junction. On An additional 75 bison were hazed by helicopter from Cougar Meadows to Seven-Mile Meadow where they walked toward Madison Junction. By the end of the operational period on May 13th all bison were out of Zone 3 and 2 and back into Zone 1, YNP.

Between Friday May 14th and Monday May 17th no bison hazing and/or monitoring operations were scheduled. May 15th 145 bison independently walked from Cougar Meadows to Madison Junction. Operations began again on Tuesday May 18th when 83 bison were hazed from the South Fork/Zone 3 to

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Barns Hole/Zone 1 YNP. On May 19th 152 bison were hazed from Horse Butte/Zone 2 to Barns Hole/Zone 1 YNP. Also on May 19th 110 bison were hazed from Barns Hole/Zone 1 to Seven Mile Meadows. These bison independently walked from Seven Mile Meadow to Madison Junction during the evening of May 19th. On May 20th 160 bison were hazed from Barns Hole/Zone 1 to Seven Mile Meadows. Nine bison were hazed from the South Fork/Zone 3 with an additional 14 bison picked up in Zone 2 along the way to Barns Hole/Zone 1 YNP. At the end of the May 20th operational period 30 bison remained on Horse Butte, 8 in the Duck Creek Area and 7 on the South Fork in Zone 2.

Between Friday May 21th and Monday May 24th no bison hazing and/or monitoring operations were scheduled. On Tuesday May 25th 150 bison were hazed from the South Fork/Zone 2 to Cougar Meadows/Zone 1 YNP. On May 26th 170 bison were hazed from Cougar Meadows/Zone 1 to Seven Mile Meadows. This herd independently walked from Seven Mile Meadow to Madison Junction during the evening of May 26th. An additional 140 bison were hazed from Horse Butte/Zone 2 to Cougar Meadows/Zone 1 YNP. On May 27th 200 bison were hazed inside YNP from Cougar Meadows/Zone 1 to Seven Mile Meadows. Three bulls were hazed from Duck Creek/Zone 2 to Cougar Creek/Zone 1 YNP. One bull was hazed from the city limits of West Yellowstone to Barns Hole. On the morning of May 27, 75 to 100 bison were observed walking south from Madison Junction to Fountain Flats. At the end of the operational period all bison were in Cougar Meadows/Zone 1 or in the Madison Corridor of YNP.

Between Friday May 28th and Tuesday June 1st no bison hazing and/or monitoring operations were scheduled. On June 2nd 110 bison were hazed from the South Fork/Zone 2 to Cougar Meadows. An additional 90 bison were added to the herd between the boundary of YNP and Cougar Meadows. An additional 20 bison that were along the boundary in the vicinity of the Transfer Station were hazed to Cougar Meadows. On June 3rd 45 bison were hazed by helicopter from the Galanis's property on Horse Butte/Zone 2 to Cougar Meadows. While hazing to Cougar Meadows an additional 96 bison were added to the herd inside YNP and hazed to Cougar Meadows. At the end of the operational period no bison were observed outside the west boundary of YNP.

Between Friday June 4th and Sunday June 6th no bison hazing and/or monitoring operations were scheduled. On June 7th 21 bison were hazed from the Denny Creek Road/Zone 3 to Cougar Meadows. An additional 15 bison were picked up along the Madison Arm Road/Zone 2 and hazed to Cougar Meadows. On June 8th 42 bison were hazed from Cougar Meadows/Zone 1 to Madison Junction fourteen miles inside the west boundary of YNP. Four bison were hazed from the Madison Arm Road/Zone 2 to Barns Hole/Zone 1 YNP.

Between Wednesday June 9th and Sunday June 20th no hazing and/or monitoring operations were scheduled. On Saturday June 19th three cows and a calf were observed on private land along the South Fork/Zone 3 by MT-DOL office Shane Grube. Grube decided to leave the bison in place until June 21st when they were hazed from the South Fork/Zone 2 along the Madison Arm Road to 0.5 miles inside YNP.

Operational Facts

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- During weekend breaks from operational activity bison traveled back from YNP/Zone 1 to Horse Butte, South Fork/Zone 2 areas.
- Bison that were hazed from Cougar Meadows to Seven Mile Meadows independently walked east to Madison Junction
- Bison that grazed in the Madison Junction area independently walked south to Fountain Flats
- Cow/calf herds were harder to haze than previous years. Early hazing events were not able to make the intended destination i.e. Cougar Meadows.
- The majority of hazing events would not have been possible without the use of the MT-DOL helicopter.
- There were 11 separate breaches of Zone 3 for a total of 457 bison.

Aviation

MT-DOL helicopter and/or a contract helicopter were involved in hazing bison from Horse Butte and the South Fork into YNP. The helicopter also hazed bison from Cougar Meadows to Seven-Mile Meadows inside YNP. The helicopter worked well when trying to move bison long distances through vast meadows and re-growth lodgepole forests. The helicopter was under MT-DOL operational control. YNP Fire Cache conducted flight following for the helicopter while operating within the boundary of YNP. The helicopter was involved on 13 hazing missions for a total of 32.9 flight hours inside YNP. Helicopter operations were conducted within DOI aviation policies and guidelines. There were no safety issues or policy concerns identified during helicopter operations.

A no-fly-zone was implemented for a portion of Cougar Meadows to protect the Cougar Wolf Pack den site. During several hazing events in YNP the helicopter flew over grizzly bears and wolves.

Visitor Impacts

During normal operations hazing bison from Zone 2 into Zone 1, there is minimal if any impacts to YNP visitors. Impacts become substantial when bison operations are conducted solely in YNP and Zone 1. On May 12th and June 8th when bison were hazed from Seven-Mile Meadows to Madison Junction traffic on the West Entrance road was backed up four - five miles and delayed for 2 hours.

On seven occasions bison were hazed from Cougar Meadows to Seven Mile Meadows. Traffic was stopped on the West Entrance Road during these events for 45 minutes while the bison swam the Madison River and were hazed across Seven Mile Bridge to eastern end of Seven Mile Meadows.

During planned events the West Entrance, YNP Communication Center, West Yellowstone Visitor Center and the Old Faithful District were notified. On one occasion YNP Public Affairs Office emailed business owners in West Yellowstone notifying them of extended delays and recommending visitors enter the park by a specific time to avoid being delayed.

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Law Enforcement

Members of the Buffalo Field Campaign (BFC) were active each day bison operations were being conducted. They were very verbal this year and continuously tested the “lawful order” from law enforcement officers outside YNP. A proactive approach was emphasized between NPS Rangers and members of BFC. Director of BFC Mike Meese was contacted on three separate occasions in an effort to be proactive and educational. Open communication and dialog enhanced understanding and expectations on both sides. BFC personnel will comply if given direct and articulate orders from law enforcement personnel. They routinely followed hazing operations into Cougar Meadows, Seven Mile Meadows and Madison Junction. BFC documented operations with video and still cameras. Although members of BFC were given several lawful orders while inside YNP they were far more compliant and respectful to YNP Rangers. The following violation notices were issued:

Entering a Bear Management Area – two violation notices issued by YNP Ranger Brunton

Expired Registration – Gallatin County Sherriff, outside YNP

No Insurance – Gallatin County Sheriff, outside YNP

No Driver’s License – Gallatin County Sheriff, outside YNP

There were three hazing operations outside YNP that did not have agency law enforcement officers present. These operations did have NPS employees involved in the hazing operation. There were also occasions when there was minimal agency officers involved compared to the number of BFC members following and interfering with hazing operations.

Lessons Learned

“What worked well?”

- West District Maintenance maintained the corrals during the winter months to facilitate operational readiness by May 1st.
- Horses arrived at West on May 1, 2010
- Ross and Whitman traveled to Stephen’s Creek for horse training and familiarization with new bison horses
- Training and annual leave was cancelled during May hazing operations. This increased flexibility and available resources
- Housing for the trail crew packers was activated by May 1, 2010. This allowed them to stay at West and not travel back and forth from Mammoth each day.

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- Coordinating YNP research flights with bison operations worked well. The maps they produce assisted with location bison and estimating the number of bison outside YNP.
- Although the helicopter works well for hazing bison, it has a negative impact on visitor experience and disturbance of other wildlife i.e. bears and wolves.
- Rick Wallen's bison ecology team was a great asset to bison operations. It's very helpful to have the team assessing the health of bison during hazing operations and interpreting how bison use the landscape. Tracking collared bison helped identify bison movements within YNP and ones that returned to areas outside YNP.
- Dave Ross is the dedicated Bison Operation Supervisor. Dave coordinated horse operations and assigning riders. This command and control structure works well for scheduling, communication and operational effectiveness.
- Experienced horse riders with bison hazing experience were brought in from other areas of the park. This should continue to be encouraged.
- Madison Ranger Gary Nelson was instrumental in tracking bison movements along the Madison Corridor.
- Incident Action Plans were completed for six major haze back events inside YNP. This greatly enhances the organizational efficiency, safety and operational understanding for individuals assisting from other districts and agencies.
- Assistance from other Districts was great and very much appreciated.
- Involving YNP Public Affairs Office during events that would disrupt visitor activities.

“What requires attention”

- Horses were brought to West from Stephen's Creek that were not ready for bison hazing or even general riding. NPS employees were bucked off horses approximately 6 times. Trained bison horses are instrumental in operational effectiveness and rider safety.
- GPS collars on bison would be a great asset in helping to understand bison movements from YNP to areas around Horse Butte and the South Fork.
- Two rangers were in the Federal Law Enforcement Academy during bison operations. They typically are assigned to bison operations. This was difficult to adjust to and should not be a typical scenario.
- Wait for “green-up” before moving bison back into YNP and the Madison Corridor
- Communicate with wildlife managers for locations of wolf den sites and other sensitive species.
- Law enforcement presence for all hazing operations outside YNP that involve NPS employees.
- Identify other backcountry rangers in YNP to with horse experience to assist with hazing operations.