

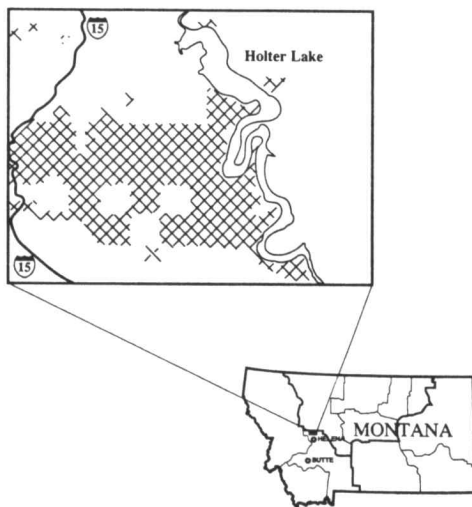
Horse Removal at the Sleeping Giant

Rich Adams

When the Bureau of Land Management's (BLM) Butte District acquired a large portion of the landmark Sleeping Giant area in the early '80's, we discovered we had also inherited a band of about 25 horses which were running at large through the steep and forested terrain.

The Sleeping Giant is about 10,000 scenic acres fronting the Upper Missouri River just north of Helena and boasts some very high multiple-use values. Habitat for elk, mule deer and mountain goats, livestock grazing, recreation, and historic and potential bighorn sheep habitat are among some of the primary resource values.

Location Map
Sleeping Giant Study Area



The cross hatching is public lands administered by the Headwaters Resource Area, BLM.

The Montana Department of Fish, Wildlife, and Parks (FW&P) and BLM planned to transplant bighorn sheep into the area to reestablish the herd. This plan had to be put on hold because of the horses. Much of the sheep's projected range overlapped the area used by the horses. They were severely impacting both uplands and riparian zones. We knew that if the horses were left unattended, the problem would only get worse.

To begin the process, we put together the Headwaters Resource Area horse brigade. First we attempted to locate the owner(s) of the feral animals. A local individual claimed ownership of some of the horses and removed 13 head in 1987. The remaining horses were deemed to be in trespass and planning got underway to remove them.

The following fall, BLM horse wranglers from the Pryor Mountain Wild Horse Range attempted to remove the remaining horses. The Montana Department of Livestock

provided a helicopter to haze the animals toward the riders. After five days only three horses were captured and the operation was suspended.

Between April, 1989, and June, 1990, two local individuals made three more attempts to capture them. Four head were removed through these efforts.

A proposal to use BLM horse wranglers from Wyoming along with a helicopter was rejected because of a projected cost of \$35,000, considerably more than the district could afford.

The Headwaters Resource Area was left with three realistic options. The first was to allow the unmanaged horses to stay in the area. The second was to shoot them. The third was to revive a previously discarded idea of tranquilizing and slingloading them out with a helicopter.

The first two options were quickly dismissed as unacceptable to management. A consensus evolved that tranquilizing by darting and slingloading was the way to go. Larry Rau, wildlife biologist, had originally come up with the idea of using helicopters to dart the animals. He then went on to secure the funding through the Challenge Cost Share program (private individuals or groups contribute funds for projects or studies and BLM matches those funds) and made arrangements to borrow two slings from the Utah Department of Wildlife. Larry negotiated with FW&P and the Department of State Lands (DSL) for the use of their aircraft. Larry arranged for Dick Kinyon, a veterinarian from Conrad, Montana, to do the darting.

I wrote the Air Operation Plan which coordinated the aircraft, arranged for use of a corral to temporarily place the slung horses, and for transportation of the collected animals to a holding facility in Helena. Because of the types of drugs used in the operation, a 30-day quarantine period was required prior to sale.

The procedure had never been attempted before. It met with considerable skepticism throughout the planning process and during the operation.

The Operation

Three aircraft and sixteen people were involved. The FW&P Hughes 500 helicopter, was used by the veterinarian in the darting operation. A DSL Bell 205 helicopter was used to sling horses and transport personnel. The FW&P also provided a Cessna 182 airplane to locate the horses and keep track of them while the vet worked with the tranquilized horses.

There were two ground crews, a mountain crew consisting of four people and a two-person crew located at the corral. Three additional people helped load the captured horses into a trailer.



The Hughes 500 lifts off to dart a horse located by the Cessna 182. The Bell 205 waits for a darted horse. All photos by Millard Hulse, Public Affairs.

A coordinator directed all the aircraft during the operation to insure safety measures were followed. Others involved were the project manager, three pilots, a helicopter manager and an observer in an airplane.

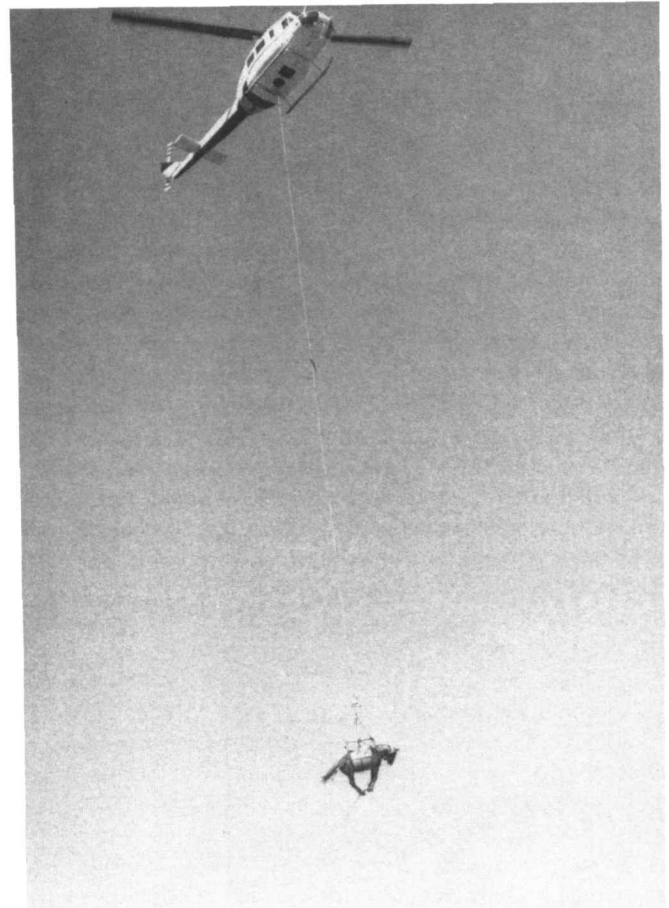
The Hughes 500 proved to be a nimble ship that was able to get the veterinarian in close for darting and landing near the horses to remove the darts. The Bell 205 was too big to get into some of the tight spots, making it necessary for the mountain crew to walk to the downed horse.

Dr. Kinyon used Carfentanil and Dormosedan to immobilize the horses. Carfentanil is a very potent drug that can prove fatal to humans at very small dosages if it gets in the eyes or in an open wound. The dosages were determined by the weight of the animal to be captured. Adult animals (900–1,200 lbs.) got eight mgs. of Carfentanil and 1 cc. of Dormosedan; yearlings and colts (200–500 lbs.) received six mgs of Carfentanil and 3/4 cc. of Dormosedan.

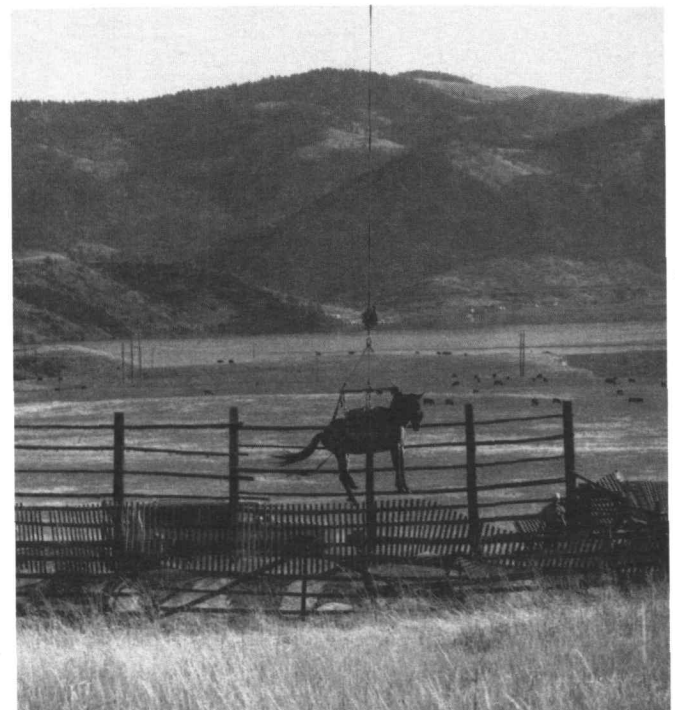
The dosages are very high when compared to the 3 mgs. and 3.9 mgs. used for elk or moose, respectively. The horses' physiological make-up and the stressful situation required a larger dosage. At the corral, 300 mgs. of Naloxone I.M. and 20 mgs. of Diprenorphine S.Q. were administered as reversal drugs for the narcotics.

The procedure started when Dr. Kinyon darted a horse and then stabilized it once the drugs took affect. The mountain crew would arrive at a landing zone near the horse, bringing the sling set-up, extra ropes, a halter, and cloth to cover the horse's eyes.

The darted horse was then placed in the sling and secured. A metal bar was attached to rings on the sling and then to a hundred-foot cable from the helicopter. The lead rope on the halter was tied to the bar to keep the



The Bell 205 transporting a darted horse to the corral.



A horse is lowered into the corral. The sling set-up is the same type used to transport moose. The hills in the background are similar to the Sleeping Giant area.

horse's head up to prevent congestion in their upper airway. A tag rope was attached to a foot.

The darting and slinging portion of the operation took from 10 minutes to an hour depending on the size of the horse and where it was stabilized. The trip to the corral took less than three minutes. Once a horse was airborne, the mountain crew hiked to a pick-up point.

The corral crew guided the load in, using the tag rope to prevent the horse from swinging into the corral rails. Once the horse was on the ground, the crew removed the sling and put on another halter and a rump rope to aid in loading. Dr. Kinyon checked the animal and administered the antidote along with a dose of vitamin E, selenium, and penicillin to reduce the shock of tranquilizing.



Merle Good, Project Manager and Area Manager for the Headwaters Resource Area, checks on a horse that has been administered one of the reversal drugs. Dr. Kinyon, on the left, prepares the other injection.

The horse would revive in a few minutes and the fun would begin. The horses were loaded into a trailer for transportation to Helena. Sometimes this went smoothly and the horse loaded quickly into the trailer, but more often it took several tries and much coaxing.

Fourteen horses were darted in the two and one-half day operation. Twelve head were successfully removed from the mountain but two mares died after darting. Their deaths were attributed to drug reaction, stress, and advanced pregnancy.



A horse is being coaxed into the trailer to await transportation to Helena.

After the operation was completed we discovered that two yearling horses had been missed. Their sexes are unknown. As of late March, neither horse had been seen by the FW&P biologist during late winter surveys.

The gathered horses were inspected by the state brand inspector to determine ownership. None were branded. I photographed and documented each animal's color and physical markings. If a captured horse was found in the area I would be able to locate the person responsible for releasing the animal.

Conclusion

The total cost of the operation was about \$14,000. Aircraft rental was \$8,465; the veterinarian cost \$3,400; per diem for the crews was \$1,000; and pasture and transportation costs accounted for the rest. The bureau recouped \$1,933 from the sale of the horses.

To my knowledge, this was the first time that horses have been darted and slingloaded from public lands. This was a potentially dangerous undertaking with ample opportunities for someone to get hurt, equipment to be damaged, or horses killed. Everyone involved felt the operation was very successful and a fine example of how three different agencies can work together to accomplish a common objective. The techniques developed, tested, and refined during this operation could be used throughout the bureau and by other agencies.