

## INVESTIGATION TEAM REPORT

### Fatality of Erwin Evert from a bear attack in Kitty Creek on the Shoshone National Forest on June 17, 2010

July 16, 2010

#### Investigation Team members<sup>1</sup>:

Alberta Sustainable Resource Development Fish and Wildlife Division and  
Foothills Grizzly Research Project - **Gordon Stenhouse** Research  
Scientist, Program Leader, Hinton, Alberta, Canada  
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Montana Fish, Wildlife and Parks Department - **Kevin Frey**, Bear Management,  
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US Fish and Wildlife Service - **Tim Eicher**, Special Agent, Cody, WY  
US Fish and Wildlife Service - **Chris Servheen**, Grizzly Bear Recovery  
Coordinator, Missoula, MT  
US Forest Service - **Andy Pils**, Wildlife Biologist, Shoshone National Forest,  
Cody, WY  
US Forest Service - **Terry Root**, District Ranger, Shoshone National Forest,  
Cody, WY  
US Geological Survey - **William Andrie**, Regional Safety Manager, Denver, CO  
US National Park Service - **Kerry Gunther**, Bear Management Supervisor,  
Yellowstone National Park, WY  
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Supervisor, Cody, WY  
Wyoming Game and Fish Department - **Brian Nesvik**, Regional Supervisor,  
Cody, WY

#### Summary:

Erwin Evert, a local seasonal resident of the Kitty Creek area, was killed by an adult male grizzly bear (designated bear #646) on June 17, 2010. The location of the fatality was the site where an adult male grizzly bear was captured, immobilized, and radio collared earlier that day by a 2-man field crew of the Interagency Grizzly Bear Study Team (IGBST) traveling on horses. The field crew had captured and handled this bear, left the bear as he recovered from immobilization at approximately 1230 hours, and removed trap site closure signs as they left. They immobilized and radio collared an adult female grizzly (designated bear #628 from a previous capture) further up the same drainage after they left the adult male. As the field crew returned to the trailhead, they encountered Mr. Evert's wife at approximately 1815 hours who asked if they had seen her husband who was hiking on foot and was overdue. The field crew leader left the pack stock with his partner and rode up the trail looking for Mr. Evert. The crew leader found Mr. Evert dead due to a bear mauling at the site where the adult male grizzly had been captured earlier that day. No bear was

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<sup>1</sup> Listed alphabetically by agency affiliation.

seen in the area at this time by the crew leader. Mr Evert's body was recovered by Park County Sheriff's Department, USFS, WYGF, and USGS/IGBST personnel and returned to the trailhead by 0030 hours on 6/18/2010. Mr. Evert's body was not consumed by the bear. On June 19, 2010 bear #646 was killed by management agencies. Subsequent to removal of the bear, DNA from hair from bear #646 was matched to DNA from bear hair recovered from Mr. Evert's body.

**Format of this report:**

This report is an interagency investigation team report of a grizzly-human incident resulting in a human fatality as per p. 59 of the Interagency Grizzly Bear Guidelines (see end of Appendix 2). The report summarizes the incident, the investigation of the incident, resolution or response to the incident, and presents information gathered as part of the investigation team effort. The investigation team is made up of state and federal agency staff involved in responding to the incident and 2 outside expert members who had no prior involvement in this incident but who combined have more than 40 years in capture and handling of grizzly bears for both management and research. Because this incident involved bear capture operations, no people involved in these capture operations or their supervisors were members of the investigation team. The team collected written statements from people directly involved and interviewed other people who talked to Mr. Evert prior to this death. After reading the written statements of the field crew and their supervisors the investigation team questioned them via conference call to clarify some issues. Written statements and interviews and other informational materials are appendices to this report. The team attempted to reconstruct the incident as much as possible given the information available. The lack of witnesses does not allow precise understanding of what transpired. The team made every effort to reconstruct the incident while avoiding speculation.

**Situation:**

Grizzly bear capture operations began as part of normal IGBST operations and procedures (Appendix 1) in the Kitty Creek drainage 27 May 2010 and trapping continued until 17 June 2010 with a break for days off (Table 1). The Wyoming Game and Fish Department (WYGF) and the Shoshone National Forest were notified by the IGBST of this trapping operation. Grizzly trapping operations complied with federal permits (Appendix 2; Note: A condition of the WYGF permit required the use of warning signs at baited sites). The trap sites used by the IGBST were in compliance with the Shoshone National Forest Special Order 04-00-104 on Food Storage which requires that animal carcasses and/or parts be at least 200 yards from a National Forest System Trail and at least 1/2 mile from a camping or sleeping area. The IGBST had written recommendations for safety precautions, but no specific protocols on warning signs (Appendix 3). Trapping operations are conducted by the IGBST to meet the objectives of the Study Team (Appendix 4). These operations are conducted throughout the Greater Yellowstone Area (GYA) in an effort to maintain a sample of radio-collared bears well distributed throughout the GYA. Data from these radio-collared bears are

used to measure and improve the effectiveness of management actions, to calculate population trend, to assess the impacts of human activities on bears and bear habitat, and to document mortality rates and causes. Results of the monitoring of radioed bears is produced in peer-reviewed scientific papers and is available at the IGBST website:

<http://www.nrmssc.usgs.gov/science/igbst/detailedpubs>

Kitty Creek is a drainage of the North Fork of the Shoshone River south of U.S. Hwy. 20. At the bottom of the Kitty Creek drainage, there are 14 private cabins authorized under special use permits on Forest Service land. Forest Service Road #448 branches off US 20 along lower Kitty Creek and provides access to the Kitty Creek Cabins. Road #448 is visible from most of these cabins. Near the most southerly (uppermost) cabin, the road is blocked and Kitty Creek Trail #756 continues up the drainage. Road #448 used to continue further up the drainage beyond the cabins in Kitty Creek, but this portion of the road was decommissioned in the late 1990's and is not currently used for motorized travel. This decommissioned road parallels trail #756.

The IGBST field crew consisted of Chad Dickinson and Seth Thompson. They were using horses to access the Kitty Creek area in order to carry their equipment beyond motorized routes. They placed several foot snare trap sites in Kitty Creek at different time periods (Table 1). These trap sites were operated by placement of baits (i.e., game meat and rumen) in the vicinity of snare sites. At each site, closure signs were placed in the area during trapping operations. Throughout the trapping period capture sites and methods were revised or abandoned based on activity at the site (a chronological list of site use is presented in Table 1). The location of these trap sites is shown in Appendices 5 and 6.

No bears were captured from 27 May to 16 June although several sites were visited by bears as evidenced by tracks and sprung snares. On 17 June, an adult male grizzly bear (#646, never previously captured) was captured at site #3 and an adult female grizzly bear (#628, previously captured once) was captured at site #2 (Appendices 5, 6). The adult male was immobilized and handled first and then the adult female was immobilized and handled. The chronological timeline of activities on 17 June is presented in Table 2. The adult male grizzly bear captured at site #3 was immobilized and fitted with a radio collar. The bear began to show signs of recovery from the immobilizing drugs with his head up at 1230 hours. At that time, with the bear showing signs of recovery, the crew removed the snare equipment and closure signs in the area and left site #3. They removed the closure signs because this was the last day of trapping in Kitty Creek and they were not returning to this area, and the weather was cold and windy with intermittent snow showers and they believed it was unlikely that anyone would be hiking this far off maintained trails in this weather. The female grizzly bear captured at site #2 was immobilized starting at 1444 hours. At 1710

hours, the female bear was standing and recovering from the immobilization drugs so the crew pulled the snare equipment and signs and left the area.

As they rode out of Kitty Creek at the bottom of the trail, the crew encountered the wife of Mr. Erwin Evert who asked if they had seen her husband as he was overdue and he was hiking in Kitty Creek. The crew leader, Chad Dickinson, immediately rode back up Kitty Creek looking for Mr. Evert. Chad Dickinson found Mr. Evert's body approximately 21 yards from where male grizzly bear #646 was captured and was left recovering at site #3. Mr. Dickinson immediately returned without dismounting and reported what he had found to Mrs. Evert and Mark Bruscano, Bear Management Supervisor for the Wyoming Game and Fish Department, who had stopped to visit with the crew when he saw their truck as he was driving by. At that time, the incident was reported to the Park County Sheriff's Department and procedures began to investigate the death and to recover Mr. Evert's body. Details of these events are reported in the statements of Chad Dickinson (Appendix 7), Seth Thompson (Appendix 8), Mark Bruscano (Appendix 9), and the Park County Sheriff's Office CAD Incident Report (Appendix 10), and the Park County Sheriff's Incident Report (Appendix 11). Notes on the incident and discussions with the field crew from IGBST supervisors Chuck Schwartz, Mark Haroldson, and Jeff Kershner of the USGS in Bozeman, Montana are presented in Appendix 12.

### **Detailed Information:**

#### Actions of Mr Erwin Evert:

Mr. Erwin Evert and his wife Yolanda have lived seasonally in a cabin at the mouth of Kitty Creek for 40 years. This cabin is within view of the road accessing Kitty Creek so the field crew was visible from the cabin as the crew rode horses up Kitty Creek each morning and returned each afternoon/evening. Mr. Evert was reported to be a strong hiker who liked to hike regularly up Kitty Creek and to hike off trail in steep terrain (see Appendix 13). Mr. Evert was a botanist who recently completed a book on vascular plants of Yellowstone. During the research for his book Mr. Evert hiked extensively throughout the Yellowstone ecosystem. Mr. Evert was seen at least twice at his cabin by the IGBST field crew as they rode by on horses and he waved to them. Mr. Evert reportedly did not carry bear spray or a weapon when he hiked in bear country (see Appendix 13) and no bear spray or weapon was found at the incident site.

On the morning of the incident (6/17/2010) Mr. Evert and his daughter Mara talked by telephone. Mr. Evert reportedly told his daughter during that conversation that he had hoped to be able to "catch up with the guys [the IGBST field crew] to find out what was going on" (Appendix 14). Mrs. Evert stated that she and Mr. Evert had seen the field crew "go up that morning and that Erwin was anxious to talk with them to see what they were up to" (Appendix 14). Mr. Evert left his cabin at approximately 1245 hours to hike in Kitty Creek and told his wife he would return no later than 1630 hours (Appendix 14).



Other People Seen in the Trapping Area:

On 31 May 2010, the IGBST field crew talked to a cabin resident at a cabin in Kitty Creek about their bear capture efforts. Chad Dickinson says in his statement that this cabin resident was staying at the most southern cabin in the drainage. On 10 June 2010, the IGBST field crew encountered a “dude” ride from the Crossed Sabers Guest Ranch. Chad Dickinson, in his statement, states that the leader of the dude ride asked the crew if they had any luck, indicating they already knew the crew was trying to capture bears in the area. Chad further states that this Ranch was making 1-2 hour rides on the portion of the decommissioned road that parallels the main trail. These were the only 2 encounters with people in the drainage that the field crew had from 27 May to 17 June. At no other time did the field crew encounter any people hiking or riding in the area.

Statement of Chuck Neal:

Mr. Chuck Neal was a friend of Erwin Evert and had hiked with him and spoken with him about grizzly bears. Mr Neal was interviewed by USFWS Special Agent Tim Eicher on 9 July 2010 (Appendix 13). Mr. Neal stated that he and Mr. Evert had known each other for 20 years and had become personal friends, hiking in many areas together. Mr. Neal stated that on 9 June 2010, Mr. Evert telephoned him and told him he had seen a sign saying, “Dangerous Bear” while hiking up the Kitty Creek drainage. Mr. Evert told Mr. Neal he had seen 3 men ride by his cabin on days prior to 9 June 2010<sup>2</sup>. Mr. Evert asked Mr. Neal about these signs. Mr. Neal told Mr. Evert that the field crew was either running hair snare traps or live capture sites and that, “You don’t want to be anywhere near there” (Appendix 13). There was no indication from Mr. Neal’s conversation with Mr. Evert as to where in Kitty Creek Mr. Evert saw the “Dangerous Bear” sign.

Mr. Neal said that based on conversations with Mr. Evert’s wife and daughter, Mr. Neal understood that Mr. Evert was planning to take his “usual hike” up Kitty Creek on 17 June. Mr. Neal stated that he thought Mr. Evert left about 1300 hours and told his wife he would be back at about 1600 hours. Mr. Neal stated that, “the hike” that he thought Mr. Evert went on usually went up the ridge to the east, down the ridge to the south to Kitty Creek and then returned down Kitty Creek (see map at end of Appendix 13). Mr. Neal stated that Mr. Evert’s normal pattern was this route although sometimes he would make this loop in the opposite direction, hiking up Kitty Creek first. The route that Mr. Neal referred to would not have brought Mr. Evert to trap sites #1, #2, or #3 (see Appendix 6).

Signs Used Around Trap Sites:

Two different signs were used by the IGBST field crew in Kitty Creek. The first sign (Appendix 15) says, “Danger – Bear Trap in the Area. The area behind this sign is temporarily closed. The closure is in effect from \_\_\_\_ to \_\_\_\_.” The dates

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<sup>2</sup> This origin of this statement by Mr. Evert is unknown because at no time prior to June 9 did the field crew consist of more than 2 people on horses.

on the signs deployed starting on 9 June stated, “The closure is in effect from 6/9/10 to 6/18/10.” This sign type was used at all trap sites. The other sign type (Appendix 16) stated, “Closed. Area behind this sign is closed to human travel – Dangerous Bear.” This “Dangerous Bear” sign was only used at trap site #2 because the field crew was out of copies of the “Danger – Bear Trap in the Area” sign to place at trap site #2 when they put in that site on June 9. The field crew did put up 4 of the “Danger – Bear Trap in the Area” signs when they returned to this site after June 9 in addition to the 3 “Dangerous Bear” signs placed there on June 9 (Appendix 17). Thus, the “Dangerous Bear” sign seen by Mr. Evert and reported to Chuck Neal on 9 June 2010 was at trap site #2, indicating that Mr. Evert visited trap site #2 after the field crew left that site. Trap site #2 is approximately 1,000 feet away from and uphill from the main trail in the creek bottom. The chronology of crew activities on 9 June (Appendix 18) shows that the crew began trapping operations and rode past the cabins at approximately 1000 hours. They first rode to site #1 and then rode up the drainage looking for a new site. At approximately 1400 hours, they began putting in snares and placing signs at site #2. They left site #2 at approximately 1600 hours and rode down the trail and the decommissioned road past the cabins at approximately 1730 hours. The route followed by the trapping crew included some time on the decommissioned road and some time on the main trail (Appendix 19). Mr. Evert called Mr. Neal and reportedly told him about seeing the “Dangerous Bear” sign the evening of 9 June 2010. The field crew did not see Mr. Evert hiking in Kitty Creek on 9 June. This indicates that either Mr. Evert went up the drainage after approximately 1730 hours when the crew had already left the drainage or that he followed another route such as his “usual hike” outlined by Mr. Neal in his statement (Appendix 13). This “usual hike” would have taken Mr. Evert up the ridge and southward along the ridgeline before finally descending to the Kitty Creek drainage, upstream from where site #2 was placed on 9 June.

#### The Incident Site:

The incident site (site #3) was put in on 12 June 2010 and the site above it (site #1) was removed along with the snares and warning/closure signs on 14 June (see Appendix 4). Site #3 was 1,700 feet (straight line distance) away from and approximately 320 feet higher in elevation than the main trail in the bottom of the Kitty Creek drainage. Site #3 was 3700 feet (straight line distance) from the uppermost cabin in the Kitty Creek drainage and there was no maintained trail to this site. When the site was placed in the area, there was no previous evidence of human activity or access to the area. The crew placed 5 warning/closure signs stating “Danger – Bear Trap in the Area” at Site #3 (Appendix 20). These signs were placed below the site along the obvious access route from the main trail the field crew used. The access route became more obvious over time with the daily use of the trapping crew. All signs and snare equipment were removed by the field crew when they left the site as the bear was recovering on 17 June 2010. The weather at the time they left the bear at 1230 hours was windy and overcast with intermittent snow showers. The snare tree where the bear was captured is approximately 10 yards from the access route used by the crew to

access the site daily. Mr. Evert's body was found approximately 21 yards north of the snare tree (see map, Appendix 9). The site of the initial attack, as indicated by personal effects found there (i.e. eye glasses), is approximately 6 yards from where Mr. Evert's body was found. The trap site is medium density, mixed age conifer stand with varying sight distances depending on the direction from which the trap site is viewed (Photo 1).



Photo 1. View of incident site approaching uphill from direction of main trail. Snare attachment tree (lighter colored) is at left. Victim found at far right of picture. Bear was left recovering from immobilization drugs (see Handling of Bear after Capture) adjacent to snare attachment tree.

#### Removal of the Bear:

On Friday, 18 June 2010 at approximately 1300 hours, male grizzly bear #646 was located via telemetry approximately ½ mile east of the incident site on the east side of Kitty Creek. Later that afternoon, Mark Bruscino and Chris Servheen discussed the situation as to what to do with male grizzly #646 suspected of killing Mr. Evert. At that point, the Wyoming Game and Fish Laboratory was attempting to match DNA from blood and/or hair taken from captured male grizzly bear #646 and DNA from grizzly bear hair recovered from Mr. Evert's body. Given that there were no witnesses to Mr. Evert's death, it could not be determined what exactly happened. At that time, it was decided that Wyoming Game and Fish agents would attempt to capture the bear pending the lab results





Photo 2. Person in foreground is at approximate location of initial attack and approximately 5 yards uphill from fatality site. Horse trail from several days of crew access to Site # 1 uphill from here can be seen at left. Snare site where bear was left recovering is out of photo to the left.



Photo 3. Location where body was found by small broken tree to the immediate left of large tree. Site is approximately 21 yards from snare tree.

matching the DNA from the captured bear to the bear hair found on Mr. Evert. Friday evening, the Wyoming Game and Fish Department set several culvert

traps in the lower portion of Kitty Creek. If the bear could not be captured by Saturday morning, Servheen and Bruscino agreed the bear would be destroyed to err on the side of public safety. There was also a concern that given the difficulty of keeping radio collars on adult males, that grizzly bear #646 might remove his collar and there would be no way to find him. Discussions were held by phone with Wildlife Services and authorization was given by Chris Servheen, as per 50 CFR 17.40, for Wildlife Services and Wyoming Game and Fish to remove the bear if it was not captured by Saturday morning.

The culvert traps in Kitty Creek were checked early Saturday morning (19 June 2010) and no bears had been captured. A search was then initiated by helicopter and bear #646 was located with telemetry and shot in Kitty Creek at approximately 0715 hours, approximately 2 miles upstream from where Mr. Evert's body was found (see Appendix 9 for details and Appendix 6 for location). The head, paws, stomach contents, and radio collar were recovered from the dead bear and taken to the Wyoming Game and Fish Laboratory. At 1400 hours on 19 June 2010, the Wyoming Game and Fish Laboratory confirmed that DNA from grizzly bear #646 matched the DNA in grizzly bear hair found on Mr. Evert's body concluding that this was the bear involved in Mr. Evert's death.

#### Cause of Death of Mr. Evert:

Mr. Evert received numerous severe bite wounds. The cause of death was a bite to the head. Mr. Evert's body was not consumed by the bear.

#### Handling of Bear #646 after capture:

The detailed capture/handling form for grizzly bear #646 is attached as Appendix 21. This bear was captured in a foot snare by its right front foot using standard capture procedures (see Appendix 1). The bear was estimated to be an 8-10 year old male and had never been captured prior to this date. The bear was immobilized using Telazol (tiletamine/zolazepam) at a 285 mg/ml concentration. The initial dosage was 5 ml delivered at 0906 hours using a CO<sub>2</sub> pistol. The bear lay down under the effects of the drug at 0913 hours. At 0915 hours, the animal was insufficiently immobilized so an additional 1.0 ml was given with a hand syringe to assure full immobilization. At 0954 hours, the bear began to move his head and was given an additional 1.2 ml in the hindquarter. Telazol (tiletamine/zolazepam) has long been a drug used in bear immobilization due to the predictable nature of its anesthetic effects, it causes minimal depression of physiological functions, and it can be administered safely over a wide range of dosages. It is recognized that bears anesthetized with Telazol (tiletamine/zolazepam) may have prolonged recovery lasting many hours particularly if multiple doses are administered (Cattet et al. 1997<sup>3</sup>). By 1048 hours, the bear began licking and blinking as it recovered from the immobilization. At 1230 hours, the bear was holding his head up, swaying it from side to side and the field crew left the site. It was noted that the bear had a large

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<sup>3</sup> Cattet, M.R.L., N.A. Caulkett, S.K. Polischuk, and M.A. Ramsay. 1997. Reversible immobilization of free-ranging polar bears with metomidine-zolazepam-tiletamine and atipamezole. *Journal of Wildlife Diseases*. 33:611-617.



open wound behind its left shoulder with numerous scars and fight wounds on its head and neck. These wounds were both old and new and were due to fighting with other grizzly bears. Such wounds are common on adult male grizzly bears especially during the breeding season in June and July. Due to the large bite injury in his left shoulder the bear was administered 12 ml of the antibiotic Tetradure (oxytetracycline) as a normal precaution to minimize infection in wounded bears.

#### Timeline of operations:

The timeline of capture operation in Kitty Creek in 2010 is presented in Table 1.

<b>Table 1. Timeline of IGBST Trapping Effort 2010, Kitty Creek, SNF</b>			
<b>Dates</b>	<b>Kitty Creek (Site #1) (UTM 589588 x 4921808)</b>	<b>Upper Kitty Creek (Site #2) (UTM 589772 x 4920839)</b>	<b>Middle Kitty Creek (Site #3) (UTM 589925 x 4921827) - incident site</b>
<b>27-May-10</b>	set 2 snares		
<b>28-May-10</b>	set		
<b>29-May-10</b>	set		
<b>30-May-10</b>	set		
<b>31-May-10</b>	set		
<b>1-Jun-10</b>	2 snares sprung, reset		
<b>2-Jun-10</b>	2 snares sprung, reset 3rd snare		
<b>3-Jun-10</b>	snares sprung for days off by IGBST		
<b>4-Jun-10</b>	off		
<b>5-Jun-10</b>	off		
<b>6-Jun-10</b>	off		
<b>7-Jun-10</b>	off		
<b>8-Jun-10</b>	off		
<b>9-Jun-10</b>	reset 2 snares	set 1 snare	
<b>10-Jun-10</b>	set	set	
<b>11-Jun-10</b>	set	set	
<b>12-Jun-10</b>	2 snares sprung, reset	set	set 2 pail <sup>4</sup> sets
<b>13-Jun-10</b>	2 snares sprung, did not reset	sprung by marten, reset	set
<b>14-Jun-10</b>	pulled site, bait & signs removed	set	both pails sprung, reset 1, set 2 more snares
<b>15-Jun-10</b>		set	1 snare sprung, 4 snares set
<b>16-Jun-10</b>		snare sprung, reset as trail set	4 snares sprung, reset 3 snares
<b>17-Jun-10</b>		captured GB 628, site pulled	captured GB 646, site pulled

<sup>4</sup> A pail set consists of a 5 gallon bucket with a lid that is cut out approximately 4" by 8". This allows the bear to place his paw inside the bucket to pull on the bait. The bucket is placed on the tree at a height of approximately 5 to 6 feet. The bucket and snare are hung at a height so that a bear can place its paw on the ground when caught.

The timeline for the day of the incident is presented in Table 2.

<b>Table 2. Time Line of Incident Day 6/17/2010</b>		
<b>Mr. Evert's actions</b>	<b>Time</b>	<b>Description of event by IGBST crew</b>
	0730 am	Left truck and trailer at Hwy
	0830 am	Arrived at Middle Kitty Creek Site (Site #3)
	0906 am	Darted bear 646
	0912 am	Sent Spot Messenger Mark Haroldson
	0915 am	Bear down
	1048 am	Recovery started
	1230 pm	Male bear holding head up, swaying. Site shut down, pulled signs, we left site.
	1315 pm	Arrived at Upper Kitty Creek Site (Site #2)
	1418 pm	Darted female bear 628
	1423 pm	Sent Spot Messenger to Mark Haroldson
	1444 pm	Darted female bear 628 second time, first dart did not inject
	1450 pm	Female bear down
Evert leaves* (Neal)	1300 pm	
	1540 pm	Female bear recovery started
	1547 pm	Female bear holding head up
	1710 pm	Female bear standing, we left site, pulled signs
	1815 pm	Made contact with Mrs. Evert while riding by her cabin
	1840 pm	Rode back to Middle Kitty Creek Site (Site #3) and discovered Mr. Evert's body
	1910 pm	Rode back down to Mrs. Evert's cabin, spoke with Mrs. Evert and Mark Bruscino
	2000 pm	Rode back to incident site with Mark Bruscino and Deputy Pennell
	2045 pm	Arrived at incident site with Mark Bruscino and Deputy Pennell
	2100 pm	Rode back down to cabin area
	2150 pm	Rode back to incident site with Search and Rescue personnel **
	0030 am 6/18/2010	Arrived back at cabin area with Mr Evert's body

\* Mr. Evert leaves cabin to hike in Kitty Creek area. Mr. Neal reported that Mr. Evert left approximately 1300 hours.

\*\* Between 2150 hours and 0030 hours, Chad Dickinson has no recollection of time in relation to arriving back at the site and when they left the site with Mr. Evert's body.

### **Finding of the Investigation Team:**

Mr. Erwin Evert was killed by a grizzly bear in the afternoon of 17 June 2010 in Kitty Creek on the Shoshone National Forest. The bear that killed Mr. Evert was an estimated 8-10 year old<sup>5</sup> adult male grizzly bear #646. A 2-man field crew from the IGBST captured, immobilized, and left bear #646 to recover from the immobilizing drugs at the site where Mr. Evert was killed. The location of the capture site was approximately 1,700 feet away from a well-used trail in the bottom of the Kitty Creek drainage. The field crew saw no evidence of human visitation to any trapping sites (other than them) from the start of operations on 27 May to 17 June when trapping operations in Kitty Creek were stopped (see

<sup>5</sup> The precise age will be obtained at a later date by laboratory sectioning of a tooth sample.

Table 1). The field crew did encounter a guest ranch horse ride group along the main trail in the bottom of the drainage one time during the trapping period.

Mr. Evert was reported to be an avid hiker and had lived seasonally in a cabin in the lower portion of Kitty Creek for some 40 years. The field crew regularly rode horses by Mr. Evert's cabin each day as they rode up the drainage to check trapping sites and on at least 2 occasions, they observed Mr. Evert and he waved to them. Mr. Evert did not attempt to talk to the field crew when he saw them pass his cabin. On 9 June 2010, Mr. Evert phoned Mr. Chuck Neal, a friend of his, and told him he had seen an agency area closure sign on that day indicating there was a "dangerous bear" in the area. Mr. Evert asked Mr. Neal what this meant and Mr. Neal told him he did not want to be around those areas as bear capture or hair snare operations were likely ongoing. The sign type Mr. Evert referred to was only used at site #2 while a different warning/closure sign type was used at the incident site (site #3, which did not exist yet on 9 June).

On the day of the incident, 17 June 2010, Mr. Evert phoned his daughter and told her he intended to hike up the drainage to, "catch up with the guys" and "find out what was going on." (Appendix 13) On 17 June 2010, while the field crew was riding past Mr. Evert's cabin on their way out, they were approached by Mrs. Evert who asked if they had seen her husband who had gone for a hike in Kitty Creek was overdue. The crew leader, Chad Dickinson, immediately rode his horse up the drainage looking for Mr. Evert and rode to Site #3 site where adult male grizzly #646 had been captured and left to recover from immobilization at approximately 1230 hours that day. Mr. Dickinson found Mr. Evert's body approximately 21 yards from the location where grizzly bear #646 had been left earlier that day.

Mr. Evert hiked approximately 1,700 feet off the main trail to the location of site #3 where the bear was recovering from immobilization. Mr. Evert had previously told Mr. Neal that he had seen signs about a "dangerous bear" while he was hiking in Kitty Creek, but the signs referenced by Mr. Evert to Mr. Neal were placed at site #2 and not the same signs that were used at site #3, the incident site. There is no evidence that Mr. Evert had ever been to site #3, the incident site, prior to 17 June 2010 (Site #3 did not exist on 9 June when Mr. Evert said he saw the "dangerous bear" sign).

June 17 was the last day the field crew was operating in Kitty Creek and as they left the incident site and another site further up the drainage where they also captured a grizzly bear on 17 June, they removed all closure signs and snares because they were leaving the drainage and were not returning. There were no warning or closure signs at the incident location when Mr. Evert approached this site where he was killed.

Bear #646 was killed by management agencies on the morning of 19 June 2010 in order to err on the side of public safety because there were no witnesses to

exactly what happened when Mr. Evert was killed by the bear. Subsequent to the removal of the bear, DNA from bear #646 was matched to bear hair recovered from Mr. Evert's body.

In a separate report, the investigation team will make recommendations to minimize such incidents in the future for consideration by agencies involved in capture and handling of grizzly bears.

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- Appendix 13 – Interview with Chuck Neal
- Appendix 14 – Statement of Terry Root
- Appendix 15 – "Bear Trap in the Area" warning/closure sign
- Appendix 16 – "Dangerous Bear" warning sign
- Appendix 17 – Map of site #2
- Appendix 18 – Chronology of crew activities on 9 June 2010
- Appendix 19 – Route taken by field crew on 9 June 2010
- Appendix 20 – Map of Site #3 locations of warning/closure signs and snare
- Appendix 21 – Capture form for grizzly bear #646



## **Northern Rocky Mountain Science Center Policy for Utilization of Animals in Research**

While it may be necessary for NRMSC staff to capture, handle, manipulate, perform surgery and/or euthanize animals to achieve research objectives, the welfare of individual animals and their populations should be of highest priority and must be insured by the researcher. Minimization of stress and pain to the animals under investigation is not only morally correct, but essential for ensuring quality of data collected and reduction of negative public perceptions. All studies conducted by or supported by U.S. Geological Survey, Biological Resources Division, Northern Rocky Mountain Science Center involving maintaining or handling live animals will conform to the Animal Welfare Act (AWA), Interagency Research Animal Committee (IRAC), and the Good Laboratory Practices Act (GLP). Under the AWA, NRMSC is required to establish and maintain an Animal Care and Use Committee (ACUC).

1. The ACUC committee responsibilities will include:
  - a. Review and evaluate all new study plans or proposals involving the use of live animals in research. All reviews will be returned to the submitting principle investigator within 10 working days with recommendations for changes to comply with existing policy and regulations or signed approval of the study plan.
  - b. Maintain records of reports, minutes of meetings, and review results for a minimum of 3 years and provide a library of suggested species care protocols.
  - c. Review every 5 years the Center's program for the humane care and use of animals.
  - d. Review concerns expressed by employees or public involving care and use of animals at the Center, with anonymity to those who desire it.
  - e. Evaluate and make appropriate recommendations to the Center Director, for the Standard Operating Procedures, administrative structure, performance and delivery of animal care at the Center as deemed necessary.
  - f. Annual inspection of all animal holding facilities.
  - g. Annual reporting of animal welfare uses to BRD and to APHIS as required.
  - h. Unless otherwise notified, the Committee will assume the project leader will insure that research carried out and/or supported at other institutions are reviewed and placed under the jurisdiction of an institutional Animal Care Committee.
2. A completed BRD/NRMSC/ACUC approval application form (Appendix 1) must accompany any study plan or proposal submitted to the Institutional Animal Care and Use Committees (IACUC) for review.

Acceptable guidelines for animal use have been provided by professional societies such as the American Society of Mammologists, American Society of Ichthyologists and Herpetologists, American Fisheries Society, The Wildlife Society, Society for the Study of Amphibians and Reptiles, American Ornithologists' Union, etc. Copies of these guidelines and others are available from the NRMSC ACUC committee chair.

## Appendix 1

### U.S.G.S. Biological Resources Division, Northern Rocky Mountain Science Center Outline for Proposal of Live Animal Use for Research

Instructions: Complete and return this form to the chair of the ACUC with a copy of the study plan. Attach additional pages as necessary.

#### I. Background

1. Study Plan Title: Population dynamics of the Yellowstone grizzly bear
2. Principle Investigator(s): Charles Schwartz, Mark Haroldson  
Contact telephone number(s): (406) 994-5043
3. Other Personnel: Chad Dickinson, Craig Whitman
4. Consulting Veterinarian: John Murnane  
Contact telephone numbers: 1-800-737-2085 Voice mail box 44131
5. (a) Proposed starting date. The IGBST began grizzly bear capture operations in 1975. The current capture operation designed to monitor survivorship of adult female grizzly bears in the Yellowstone Ecosystem began in 1986. (b) Duration: Capture operations will continue annually (1 May-30 December) until completion of initial monitoring period (6 years after successful completion of delisting proposal) stated in Grizzly Bear Conservation Strategy (USFWS 2003). Black bear captures routinely occurred incidentally to grizzly bear capture operations. In 1999, we began radio instrumenting captured black bears for use in 2 approved studies (see below).

#### II. Species Information

1. Species to be used (scientific and common names): *Ursus arctos*/grizzly bear, and American black bear (*Ursus americanus*)
2. (a) Is this species protected? Grizzly bears (Yes), black bears (hunted in ecosystem, not in Yellowstone National Park)  
(b) If so, how and where? Grizzly bear under Endangered Species Act  
(c) If so, do you have or applied for appropriate permits? Grizzly bear (Yes), Black bear (yes),

Provide permit numbers and source: Yellowstone National Park (Permit #0165, 5056, 0073), Grand Teton National Park (0021, 0020), Fish and Wildlife Service (50 CFR 17.40), Montana Fish, Wildlife and Parks (1429), Wyoming Game and Fish Department (439), Idaho Department of Fish and Game (930520)

3. Quantity, sex and age of animals to be used in study: Grizzly and black bears are secretive, wide ranging, and prefer remote settings away from human developments. Thus the number of study animals is often dictated by how many animals can be caught given current funding and staffing levels, rather than the desired number. Number of bears captured annually varies from 20-50 individuals depending on food availability, and management requirements. All grizzly bears captured are marked and instrumented with the exception of dependent offspring (cubs or yearlings). All grizzly bears involved in nuisance activity within the USFWS Grizzly Bear Recovery Zone and captured and handled by state wildlife authorities (WY, ID, MT) are instrumented and data from these individuals are included in IGBST databases. IGBST's goal is to maintain collars on 25 adult female grizzly bears that are well distributed throughout the Grizzly Bear Recovery Zone. Ideally we would have adult female grizzly bears instrumented in 18 of 18 Bear Management Units within the Grizzly Bear Recovery Zone. However this ideal is unobtainable given extremely low bear densities in several BMUs and current funding levels. The 1994 Population Task Force on the Yellowstone Grizzly Bear established the current goal of 25 females. This task force was convened at the request of the USFWS Grizzly Bear Recovery Coordinator and was composed of expert population biologist and grizzly bear biologists.

Black bears are also captured as part of research projects evaluating the sympatric relationships among grizzly and black bears in Yellowstone and Grand Teton National Parks, these bears are fitted with neck collars and ear-tag transmitters of the same design used on grizzly bears. Normally 10-15 bears are handled.

4. Source of animals: Wild, free-ranging grizzly and black bears are attracted to selected trap sites using naturally occurring lures, primarily road-killed ungulates. Captured bears are handled and released on-site in research operations. All bears captured and handled by other state or federal agencies during management actions are instrumented and become study animals. IGBST occasionally assists other state and federal agencies involved in nuisance bear management actions because of our expertise and/or the need for additional help during busy management years which occur when natural foods fail.

III. Rationale for and appropriateness of the species and numbers of animals used. As required by IRAC, provide an explanation of the appropriateness of the species and the minimum numbers used to obtain valid results.

The Interagency Grizzly Bear Study Team (IGBST) was initiated in 1973 by the Department of Interior. Initial members were the National Park Service, Forest Service, U.S. Fish and Wildlife Service, and since 1974 the States of Idaho, Montana, and Wyoming. The USGS Biological Resources Division, Northern Rocky Mountain Science Center, currently administers the IGBST. Objectives of

the study are to determine the status and trend of the grizzly bear population, the use of habitats and food items by the bears, and the effects of land management practices on the bear population. The IGBST conducts research that provides information needed by various agencies for immediate and long-term management of grizzly bears (*Ursus arctos horribilis*) inhabiting the Yellowstone area. With increasing demands on many resources in the area, and potential declines in several important grizzly bear foods, current quantitative data on grizzly bears numbers and habitat relationships are required for formulation of management decisions that will insure survival of the population. Current efforts emphasize enumerating the population, estimating age and sex specific survival rates, and developing a GIS-based Cumulative Effects Model and assessing the effects of land use practices. All of these efforts require radio-instrumented grizzly bears. Our goal to maintain collars on 25 adult female grizzly bears distributed throughout the ecosystem. However, all independent grizzly bears captured are marked. Over the last several years we have monitored 50-70 individual bears annually in the ecosystem. The IGBST, with its member agency partners, is the sole collector of detailed, quantitative information on grizzly bears in the Yellowstone Ecosystem

- IV. Written narrative for alternatives to painful procedures. As required by AWA Section 13(a) (3) (B) 9 CFR, Part 2, Section 2.31 (d) (1) (ii) provide a narrative of databases searched, sources consulted, and alternatives considered so that no other sources of animals or techniques were available to prevent a painful or distressful procedure.

The IGBST, with its member agency partners is the sole collector of detailed, quantitative information on grizzly bears in the Yellowstone Ecosystem. There is currently no practical alternative to capturing and radio instrumenting grizzly bears to determine survival rates and habitat use. Marking black bears is necessary to evaluate food competition and resource partitioning between the sympatric bear species. Proposed methodology for enumerating the population will employ a mark-resight experiment that will also require radioed bears. Estimates suggest this experiment will require that roughly 10% of the population be marked. Current estimates also suggest that the current population is 200-600 bears. We currently have approximately 50 bears instrumented in the ecosystem, which meets the requirements for this test.

What length of time may the animal suffer from stress or pain? Culvert traps and/or foot-snares capture methods are not inherently painful. Struggles of the restrained individual in a foot-snare are likely painful, but bears quickly learn the limits of the restraint. The most stressful period for captured bears is when humans arrive at the trap site. We make every effort to minimize this period of assessment and preparation (10-20 minutes). Captured bears are anesthetized as quickly as possible. None of the marking procedures completed while a bears is

anesthetized (ear tagging, pulling a vestigial premolar, or drawing blood) are very invasive and cause only minor discomfort which should abate in less than 24 hours.

## V. Care and Housing

1. Where and how will the animals be housed? No animals are held by IGBST. All research animals are released at capture sites. During nuisance bear situations when IGBST capture and/or handling assistance is requested by other federal (Park Service) or state management authorities, no bears are held more than 48 hours while disposition of the problem bears is resolved (via consultation among state and federal wildlife and land management authorities, Nuisance Bear Guidelines, USFWS Grizzly Bear Recovery Plan, [1993]). Should such events occur, bears are confined in a culvert trap/transport container. Bears are monitored for signs of distress. Food (natural foods such as fresh ungulate meat from road kills), water, and shelter from temperature extremes are provided. Care is taken to maximize bear comfort and minimize stimulation, stress, temperature extremes, and contact with humans. The problem bear is either relocated or removed from the population by other state or federal authorities, not IGBST.
2. Do other IACUC protocols apply through other facilities or organizations? (If so provide a copy.) NO.
3. Length of time of housing? Not applicable.
4. Purpose of housing (i.e. holding, breeding, etc.)? Not applicable.
5. Describe any abnormal behavioral or physical conditions the animal may be exposed to. Not applicable.
6. How will the animals be housed? Type of caging, number of animals to a cage, size of caging and any restraints. Not applicable.
7. Describe the type of food and food source. Not applicable.
8. Describe method, quantity and frequency of feeding. Not applicable.
9. Describe frequency and method of cleaning, including any chemicals used, individual cleaning tools, etc. Not applicable.

## VI. Handling

1. Describe any capture or handling method. Bears near roads are captured primarily in culvert traps. Bears in backcountry settings away from roads are captured with



culvert traps (Yellowstone and Grand Teton National Parks), or with Aldrich leg-hold snares. Backcountry trap sites are chosen to optimize capture potentials and minimize conflicts with recreational users. Extensive experience, usually through an unofficial apprenticeship, with snare capture of grizzly bears is an essential requirement for trapping crew leaders. Since the current grizzly bear monitoring effort began in 1986 there have been no mortality or serious injury to grizzly bears associated with research trapping.

Handling procedures and morphological measurements are as follows. Blood samples are taken from the femoral or cephalic vein to screen the general health of handled bears and determine a DNA genotype. A vestigial premolar (PM<sub>1</sub>) is obtained from all independent bears for age determination via counts of cementum annuli of sectioned teeth. Bears are ear-tagged, lips tattooed, and PIT-tagged to insure that the individual can be recognized with certainty upon subsequent capture. All adult bears are instrumented with motion-sensitive transmitters (Telonics, Mesa, AZ) that have breakaway canvas inserts fitted on the collars. Independent subadult bears are instrumented with motion-sensitive transmitters on expandable collars (Blanchard 1985), ear-tag transmitters or glue-on-hair transmitters. No recaptures of bears collared by the IGBST during research trapping efforts conducted since 1986 have exhibited any adverse effects to wearing the radio collars. Deployed collars are typically retained by adult females for approximately 2½ years before the canvas spacer breaks, and 1½ years by males.

Black bears may be immobilized in the den following the protocol described by Rogers (1977) and Schwartz and Franzmann (1991). In general, bears are located in the den via telemetry. Once located, the entrance to the den is cleared of snow and access determined. Bears are immobilized as per item 5 below. Drug is administered via jab stick. Once immobilized bears are removed from the den or recollared in the den, depending upon circumstances. Bears are kept warm and dry by placing them in a down sleeping bag with only the head uncovered. Once processed, immobilized bears are returned to the den and positioned in a sternal posture. The entrance to the den is then covered with conifer bows and then with snow to ensure adequate insulation from ambient temperatures.

2. How often are traps checked or animals handled? All traps are checked daily, before noon during research trapping operations. Length of traplines and number of sets are adjusted so that all traps can be checked, and animals cleared from traps before the high ambient air temperatures might present a problem for captured animals.
3. Describe any injuries that may occur from this method. The most common type of injury is minor abrasions or lacerations. Rarely have we encountered more severe injuries that were a result of the capture. To date we have not had a broken limb as a result of our trapping efforts in either snares or culvert traps. We have

encountered the occasional broken tooth, but this is fairly uncommon and in the last 2 years we have fixed and/or destroyed all of our culvert traps that had a mesh size where this problem has occurred. It should be an extremely rare occurrence in the future.

4. Describe other methods considered and why they were rejected. A risk assessment was completed in 1986. At that time, culvert trapping was the only capture method (of culvert, foot snares, or helicopter darting) for which the risk of mortality was low enough for acceptance by IGBST member agencies. Since that initial assessment, experts in the use of snare techniques have demonstrated low injury rates and zero mortality for this technique in the ecosystem.

Free darting from helicopter has yet to be demonstrated successfully in the ecosystem but expertise and low risk of mortality has been demonstrated in other ecosystems. This method may be attempted in special circumstances in the future.

5. What types of manipulations are required during handling? Describe all methods of restraint used, including catch poles, straps, anesthetics etc.

Captured bears are anesthetized using Telazol (A. H. Robins, Richmond, VA) at a dosage rate of 3.3-3.6 mg/lb of bear weight. Initial applications of drugs are accomplished via remote injections using Palmer Cap-Chur darts, or Pneu-Darts fired from CO<sub>2</sub> pistols, or jab sticks. Occasionally remote injection will require the use of Palmer darts fired from a Palmer Cap-Chur rifle. The general rule of thumb for bear handlers is to use the remote injection method that will cause the least amount of tissue trauma. Thus bears in culvert traps are drugged using a jab sticks or CO<sub>2</sub> pistols. Aggressive bears in snares are drugged using a Cap-Chur rifle. During handling, bears are "anchored", usually to a tree using an Aldrich foot snare, in case an instance of "remarkable recovery" should occur during the handling procedures. To date we have not experienced this phenomenon while using Telazol

7. How long will the animals be restrained? The maximum length of time an animal would be restrained would be 24 hours if it happened to be caught immediately after traps had been checked for the day. However, bear activity peaks are crepuscular, thus bear activity typically declines as the heat of the day approaches. Therefore most captures probably occur early evening and later when bear activity increases. Although IGBST does not have extensive data on time of captures, years of experience suggest this is indeed the case. Thus most bears are probably in the traps less than 12 hours prior to handling. All bears handled during research capture operations are placed in the shade or otherwise protected from the weather and allowed to recovery on site.
8. How will the animal be monitored to prevent overt risk or stress? Immediately

after bears are anesthetized, an assessment as to the basic well-being of the individual is made. This includes assessing temperature, heart rate, respiration rates, and a physical exam to check for wounds or injuries. Vital rates are monitored periodically throughout the handling process and are recorded on standard capture forms. In addition, all bears handled by IGBST are monitored with pulse oximetry and given oxygen therapy via nasal insufflation. IGBST personnel are also trained to administer IV fluids to bears that might be pre-disposed to dehydration (lactating females, bears captured in snares).

Temperature of the animal during summer is a critical attribute to monitor because bears do not thermal regulate well while immobilized and hyperthermia is a potential problem. Normal body temperatures (rectal) range from 98-100 degrees Fahrenheit. If temperatures exceed 102 degrees, immediate action is taken to reduce the core body temperature. This is usually accomplished by exposing the ventral surface of the bear and dousing with cold water. If high core temperatures persist, cold water enemas can be administered. Observed heart and respiration rates are highly variable and influenced by sex and age classes, and individual behavioral response to the capture event. If respiration becomes shallow and thready, and/or the rate drops below 3/minute, increased monitoring is warranted. If this situation persists all other normal handling procedures are curtailed. If respiratory or cardiac arrest occurs, cardiopulmonary resuscitatory techniques are initiated including but not limited to mouth to nose artificial respiration, endotracheal intubation and oxygen insufflation, and pharmacological intervention such as IV or IC epinephrine.

## VII. Surgical Procedures

1. Does the procedure expect survival or non-survival? Anytime animals are anesthetized using remote injection under field conditions there is an inherent risk of mortality. However, IGBST has had no capture mortalities associated with research capture operations since the current monitoring of bears began in 1986.
2. If surgery is involved, describe the reason for the procedure: Tooth is taken for age determination.
3. Describe any surgical procedure: Extraction of vestigial premolar.
4. Describe any anesthetic used or injections given including proposed dosages. See section VI, number 5.
5. How will the anesthetic be administered? See section VI, number 5.
6. Who will be in charge of the surgery and anesthetic? Lead Trapper at the site.
7. What of type training have they received in this method?

## **Personnel:**

**Charles C. Schwartz.** Dr. Schwartz has 21 years of field experience handling black, brown and polar bears in Alaska. This field experience spans ecosystems from arctic pack-ice and tundra to boreal forest of central and south-central Alaska. Capture experience included use of helicopter, culvert traps, and foot snares. Dr. Schwartz was licensed through the Drug Enforcement Administration to purchase and test controlled drugs listed on schedules 2, 3, 3n, 4, and 5. He tested new immobilization and adjunct drugs that had potential application to wildlife management. He is proficient in capture and immobilization techniques of ungulates and carnivores. He has completed several courses in immobilization and restraint of wildlife and co-taught such a course as part of a foreign exchange project in Pakistan. As an employee of the Alaska Department of Fish and Game, Dr. Schwartz was a member of the Animal Welfare Committee. He has authored or coauthored the following manuscripts:

Schwartz, C. C., T. R. Stephenson, and K. J. Hundertmark. 1997. Xylazine immobilization of moose with yohimbine or tolazoline as an antagonist: a comparison to carfentanil and naltrexone. *Alces* 33:33-42.

Schwartz, C. C., K. J. Hundertmark, and W. R. Lance. 1991. Effects of R51163 on intake and metabolism in moose. *J. Wildl. Dis.* 27:119-122.

Franzmann, A. W., C. C. Schwartz, and D. C. Johnson. 1987. Monitoring status (condition, nutrition, health) of moose via blood. *Swedish Wildl. Res. Suppl.* 1:281-288.

Franzmann, A. W., C. C. Schwartz, and D. C. Johnson. 1987. Anesthesia of moose for vasectomy using carfentanil/xylazine and reversal with naloxone/yohimbine. *Alces* 23:221-226.

Franzmann, A. W., C. C. Schwartz, D. C. Johnson, J. B. Faro, and W. B. Ballard. 1984. Immobilization of moose with carfentanil. *Alces* 20:259-282.

Franzmann, A. W., and C. C. Schwartz. 1982. Capture techniques used on Alaskan ungulates and carnivores. *Proc. Western States Vet. Conf.*, Las Vegas, Nevada.

Franzmann, A. W., C. C. Schwartz, and D. C. Johnson. 1982. Chemical immobilization of moose at the Moose Research Center, Alaska (1968-1981). *Alces* 18:94-115.

**Mark Haroldson.** Mark has 33 seasons of field experience handling black and grizzly bears. He has 24 seasons of bear handling experience in the Yellowstone ecosystem working for the Interagency Grizzly Bear Study Team, primarily in the role of trapping team leader. He has captured over 200 and handled over 300 grizzly bears in the Yellowstone ecosystem and over 1,000 bears in total during his career.

Within the last 17 years he has completed 13 formal training courses to keep current with new techniques in wildlife immobilization. During June of 1991, he completed a 24-hour course in wildlife restraint at the Caines Veterinary Teaching Center in Boise, ID. During August of 1996 he completed a 16-hour course in wildlife capture and handling sponsored by the MT Department of Fish, Wildlife and Parks at Bozeman, MT. He was a consultant for the "Manual for Handling Bears for Managers and Researchers" written by James Jonkel for the USFWS. Beginning in 1998, the IGBST along with Mark Haroldson and veterinarian Dr. John Murnane initiated an Advanced Immobilization and Emergency Anesthetic course. This course consists of 24 hours of class room and field studies. This course is held annually and is attended by all IGBST field personnel.

Mark has also successfully completed 112 hours of USGS Basic and Refresher Firearms Safety courses. These courses provide training for the use of firearms for defense against wild animals.

**Chad Dickinson.** Chad has 16 seasons of field experience handling black and grizzly bears. All of his bear handling experience has taken place in the Yellowstone ecosystem working for the Interagency Grizzly Bear Study Team. He has captured and/or handled approximately 300 grizzly bears and 100 black bears in the Yellowstone ecosystem. Capture methods include culvert traps and Aldrich foot snares. Chad also has 3 seasons handling approximately 25 bighorn sheep for the USGS in Glacier National Park. Capture methods consisted of free range darting.

Within the last 13 years Chad has completed 14 formal training courses involving the capture and immobilization of wildlife. During August of 1996 and 2006, Chad completed a 16 hour course in wildlife capture and handling sponsored by MT FWP at Bozeman, MT. During April of 1997, Chad completed a 16-hour wolf field technique workshop sponsored by the U.S. Fish and Wildlife Service, National Park Service, and Yellowstone Gray Wolf Restoration Project. From 1998 to 2009, Chad has completed 240 hours of Advanced Immobilization and Emergency Anesthetics courses sponsored by the IGBST.

Chad has also successfully completed 144 hours of USGS Basic and Refresher Firearms Safety Training. He is currently the USGS Firearms Safety Program Manager and a certified USGS firearms safety instructor

Chad has also worked for MT FWP, Wildlife Research Lab in Bozeman, MT. Because of various state wildlife projects throughout Montana, Chad was able to remain current with new techniques in wildlife handling and immobilization.



While working for the Wildlife Research Lab he assisted with the capture and handling of mule deer using clover traps, bighorn sheep using helicopter net gunning, and bison with dart guns in Yellowstone National Park. Other duties included necropsies and field sampling of specimens.

Chad has also worked with the Greater Yellowstone Wolverine Project primarily as a winter trapping and handling crew leader. Chad has captured and handled approximately 10 wolverines.

**Craig Whitman.** Craig has continuously worked as a seasonal Wildlife Technician since 1988 and has 16 seasons of field experience specifically capturing and handling black and grizzly bears. He has trapped black bears in Northern Maine for three seasons and black bears and grizzly bears in the Selkirk, Cabinet – Yaak, Northern Continental Divide, and Yellowstone Ecosystems. He has worked the last ten years as a seasonal trapping crew leader for the Interagency Grizzly Bear Study Team and previously trapped bears for the U.S. Fish and Wildlife Service, Idaho Department of Fish and Game, and Maine Department of Inland Fisheries and Wildlife. He has captured and /or handled approximately 211 grizzly bears and 426 black bears; including at least 50 adult black bears handled in den situations. Capture methods employed have included Aldrich foot snares and culvert traps. Craig has also lead or assisted with management captures of black and grizzly bears in Yellowstone National Park, Grand Teton National Park, Idaho and Montana. Over the past several years Craig has provided extensive field hands on training for primary bear capture and handling personnel in Yellowstone National Park, Grand Teton National Park and the Idaho Department of Fish and Game.

Since graduation from the University of Maine in 1992 and Penn State in 1989, Craig has attended 10 formal training courses involving the immobilization, and handling of wildlife. In July 1998 Craig attended a 24 hour course in Wildlife Handling with Veterinary Perspectives presented by Dr. Mark Johnson DVM with Wildlife Veterinary Resources. From 1998 to 2009 Craig has completed 164 hours in Advanced Immobilization and Emergency Anesthetic Techniques presented by Dr. John Murnane DVM during 9 course sessions.

Craig has successfully completed 88 hours of USGS Basic and Refresher Firearms Safety Courses. He additionally has completed 24 hours of firearms safety instruction with the Idaho Department of fish and Game and 8 hours of firearms safety instruction with the U.S. Fish and Wildlife Service. Craig has also gained experience handling firearms while serving in the U S Army and has used firearms annually for hunting and sport shooting since 1977.

Craig has worked as a crew leader for the Hornocker Wildlife Institute on the Yellowstone Cougar Study Phase II, during which he captured and handled 15

cougars in remote backcountry areas. While working for the Idaho Department of Fish and Game Craig handled 80+ white-tailed deer in clover traps and captured 31 elk calves by hand while working as part of a two person helicopter crew. While working for various other projects Craig has handled and collected samples from 80 immature bald eagles and 175 trumpeter swans. While employed as a student at the University of Maine Craig assisted with all aspects of 500+ immobilizations of 30 captive fishers under lab conditions for the weekly collection of blood samples and morphological measurements as part of a reproductive study. Craig has also gained considerable experience conducting field necropsies on large mammals and birds and identifying prey species from hair, feather, scale and bone remains while working on numerous projects.

Craig has safely conducted 540 hours of aerial radio telemetry on various elk projects in Central Idaho and a cougar project in Yellowstone National Park. While working on two cougar projects, he conducted thousands of hours of ground radio telemetry, approaching to within 100 meters of day bedded cougars partly encircling the cats then leaving the area without disturbing them to obtain pinpoint locations to be thoroughly searched later for prey remains, scats and beds.

**Dr. John B. Murnane, D.V.M.** (contract veterinarian) has had over 18 years involvement with wildlife capture and immobilization as wildlife biologist/technician and as a Doctor of Veterinary Medicine. Specifically Dr. Murnane has had 15 years of direct involvement with grizzly bear immobilization as a trap team leader or instructor to Montana Fish, Wildlife and Parks, Glacier National Park, Yellowstone National Park, and Interagency Grizzly Bear Study Team personnel. Dr. Murnane has had primary responsibilities with grizzly bear capture in the Northern Continental Divide, Yellowstone, and Selkirk Ecosystems. Dr. Murnane has been professionally and extensively trained in the pre, peri, and post anesthetic/capture techniques, protocols, and concerns including emergency treatment of anesthetic complications in multiple carnivore and ungulate species.

In addition to the standard veterinary training, Dr. Murnane completed an externship at the Denver Zoo in 1993. Dr. Murnane has extensive experience in not only chemical immobilization but in physical restraint methods, drive nets, clover traps, and corral traps. Dr. Murnane has a current veterinarian license in the state of Montana, and is a Veterinary Medical Officer (Intermittent Status) for the USDA-APHIS Veterinary Science Lab with specific duties to provide capture support to the Yellowstone Bison Brucellosis Epidemiology Study. He is authorized by the Drug Enforcement Agency to use Carfentanil Citrate, a powerful opioid anesthetic.

Dr. Murnane has captured and/or handled 80+ grizzly bears, 350-420+ black

bears, 150-200+ bighorn sheep, 30-60+ bison, 30-70+ elk, 20-60+ deer, and 20-40+ mountain lions as well as performed, or been involved with multiple hundreds of domestic canid, felid, equid, and bovid anesthetic episodes.

Dr. Murnane is a contracted instructor for the Montana Department of Fish, Wildlife and Parks, with specific duties to teach grizzly bear, black bear, mountain lion, and wolf capture, immobilization and anesthetic techniques to their wardens and biologists.

8. What type of pre and post-surgical care will be provided? Researchers remain at capture sites and monitor the recovery of all grizzly bears until they are once again ambulatory. We do this primarily to assure ourselves as to the condition of the bear handled, and secondarily to protect an individual whose abilities have been compromised by the anesthetic. On occasion we have had to protect recovering bears from other free ranging bears that have ventured into trap sites. This is accomplished by either hazing free ranging bears with non-lethal deterrents or transporting the anesthetized bear away from the original trap site.
9. Describe other procedures, drugs, frequency, etc. that may be used during the study. See attached prescriptions and protocols (from Murnane).

#### VIII. Transportation

1. What is the purpose of transporting the animal? The only transport by IGBST involves problem or nuisance bears that are being relocated under the Nuisance Bear Guidelines of the Grizzly Bear Recovery Plan, and at the request of one of our partner agencies that have wildlife management authority.
2. What method of transportation will be used? Bears are transported using wheeled culvert traps if the management authorities agree upon a relocation site with road access. Specially designed aluminum culvert traps are used if it is decided to fly the bear into a backcountry site using a helicopter.
3. What type of restraint, caging etc. will be used during transportation? Bears are transported in culvert traps (see section above) only if they have recovered fully from any prior anesthesia. This is important because bears can then take care of themselves during transport (i.e. maintain a clear airway, thermal regulate, balance).
4. How will the animal be monitored during transportation? Bears are periodically checked visually during transport, usually during any vehicle stops.

5. What safeguards have been provided to prevent escape, injury or overt stress? Traps are locked shut during transport to prevent doors being raised inadvertently. Portions of the transporting culvert trap that can be seen through are covered (using canvas traps) during transport. This tends to keep bears calm and prevents the public from causing the animal unnecessary distress. During periodic stops on hot days bears are cooled with water if panting is evident.

IX. Marking

1. What is the purpose of marking the animal? See section VI, number 1.
2. What alternative methods were considered? DNA methodology is experimental and expensive at this time.
3. Is the marking technique potentially hazardous? See section VI, number 1,
4. Is restraint or anesthetics required? Yes, see section VI, number 1 and 5

X. Disposition of Animals after the Study and Euthanasia

1. What will be done with the animals upon completion of the study? Bears will remain free ranging. Collars or other telemetry packages will drop or be shed with wear.
2. If euthanasia is considered, provide the method to be used including any drugs, personnel, training in the technique, etc. Euthanasia by IGBST personnel is warranted only if an injury that will prevent an individual bear's ability to survive is evident during backcountry trapping operations and the trapping crew is unable to transport the bear to obtain an additional assessment from our vet or state vet labs. Bears with severe debilitating injuries could also become a threat to human safety. For humane and safety reasons bears exhibiting debilitating injuries will be euthanized. Such bears will be anesthetized with Telazol and euthanized by a lethal injection of a prescription euthanasia solution (Beuthanasia), gunshot (high caliber firearm), or by exsanguinations.

All euthanasia will be conducted in accordance with the guidelines established by the American Veterinarian Medical Association.

3. How and where will dead animals be disposed of? Will permits be required? If IGBST crews euthanize a bear, or mortality occurs during handling, the remains will be taken to the state vet lab in which state the incident occurred for necropsy. If remote location prevents retrieval of the entire carcass, the bear will be euthanized by gunshot (not Beuthanasia), and the head and claws will be procured and deposited with the appropriate state or federal authorities. The USFWS Grizzly Bear Recovery Coordinator and other appropriate state and federal

authorities will be notified of any mortality.

#### Literature Cited

- Blanchard, B. 1985. Field techniques used in the study of grizzly bears. Interagency Grizzly Bear Study Team report. National Park Service, Bozeman, Montana
- Rogers, L. L. 1977. Social relationships, movements, and population dynamics of black bears in north-eastern Minnesota. Ph. D. Thesis, Univ. Minnesota, Minneapolis. 194pp.
- Schwartz, C. C. and A. W. Franzmann. 1991. Interrelationship of black bears to moose and forest succession in the northern coniferous forest. Wildlife Monograph 113:58pp.
- U.S. Fish and Wildlife Service (USFWS). 1993. Grizzly bear recovery plan. U.S. Fish and Wildlife Service, Missoula, Montana.
- U.S. Fish and Wildlife Service (USFWS). 2003. Final Conservation Strategy for the grizzly bear in the Yellowstone Ecosystem. U.S. Fish and Wildlife Service, Missoula, Montana

Attachments: 1) IGBST Drug Prescription, 2) IGBST Immobilization Protocol for Grizzly Bears.

1) Interagency Grizzly Bear Study Team Drug Prescription

February 2, 2009

#### Interagency Grizzly Bear Study Team Drug Prescription

The following constitutes a prescription for the use of the below pharmacological agents in use and support of the capture and immobilization effort of the Interagency Grizzly Bear Team (IGBST). Specifically this authority and relationship applies only to Dr. Charles Schwartz /or his designated agents.

This documents a valid patient client relationship in accordance with the Animal Medical Drug Use Clarification Act (AMDUCA).

**ATTACH ANCHOR SNARE IMMEDIATELY FOR ALL ANESTHESIED GRIZZLY BEARS!**

## Grizzly Bears

### **Telazol by Intramuscular (IM) injection 3.2-3.6 mg/lb.**

Note: Consider *Atropine sulfate* (.02mg/lb) for prevention of bradycardia for all bears anesthetized with Alpha-2 agonists. (Xylazine or medetomidine or their combinations).

*Note: Be prepared for spontaneous arousal of all bears anesthetized with alpha 2 agonists.*

### **Ketamine/Xylazine by Intramuscular (IM) injection**

3.6 mg/lb Ketamine plus 1.8 mg/lb Xylazine. A syringe loaded with 1/2 the initial dose is to be drawn up and at hand at all times. It should be administered at 25 minutes after the initial dose, a subsequent 1/2 dose should be redrawn and be ready to be administered should the immobilization require anesthesia beyond 70 minutes.

### **Yohimbine to antagonize Xylazine .05-.07 mg/lb IM or IV**

## Grizzly and Black Bears

### **Xylazine/Telazol (XTZ) IM injection.**

Grizzly bears at 3.07 to 3.2 mgs/lb Black bears at 2.65 mgs/lb

Preparation: Solute 500 mg of Telazol in 330 mg of Xylazine. Resulting mixture depends on volume (3.7 ml). MG/ML = 500 mg TZ + 330 mg Xy/ total volume.

Example: 1 –500mg vial of Telazol resulted in 3.3mls of 100mg/ml Xylazine (330mgs of X) = 830mg of drug total in 3.7 mls of volume (3.3 from X and 0.4mls added to total volume from the volume of the Telazol after it goes into solution). This results in an equation 830mg/3.7mls = 224mgs/ml.

### **Yohimbine for antagonize of Xylazine .05-.07 mg/lb IM or IV**

OR

**Atipamezole** @ 0.06mg/lb, ½ IM-½ SQ.

Administer antagonist no sooner the 60 minutes post induction injection.

### **Medetomidine/Telazol (MZZ) IM**

Try first on Black Bears. Records of time to: induction, immobile (safe to handle), head up, and ambulatory are required on all XTZ or Medetomidine/TZ anesthesia until further notice.



0.012 mg/lb Medetomidine + 2.1 mg/lb Telazol

Alternative dosing schedule:

Small Bear – 33-66 lbs	1.25 mg M/62.5 mg TZ
Medium Bear- 88-265 lbs	5 mg M/250 mg TZ
Large Bear- >265 lbs	10 mg M/500 mg TZ

Supplemental dosing to extend down-time:

Give IM only in .5mg increments to yearlings and 1.0 mg increments in adults.

**Atipamezole for MZT antagonist @ 0.06mg/lb (5mg/mg of Medetomidine given)**  
½ IM-½ SQ. no sooner then 60 minutes post inductions injection

## **Black Bears:**

Telazol- 3.0- 3.6 mg/lb IM

Ketamine/Xylazine: 2.0 mg/lb Ketamine plus 1.0 mg/lb Xylazine IM

Xylazine/Telazol (XZT) IM, 2.4 mgs/lb (1.4 mgs/lb Xylazine + 1.0 mgs/lb Telazol)

Yohimbine- .05-.07 mg/lb IM or IV if Xylazine reversal desired OR

Atipamezole @ 0.06mg/lb, ½ IM-½ SQ

## **Supplemental Dosing**

**ALL ABOVE DOSES EXCEPT YOHIMBINE MAY BE REPEATED AS NECESSARY IN ½ DOSES TO MAINTAIN ANESTHESIA UNLESS OTHERWISE SPECIFIED.**

### **Ketamine**

1-3 mg/lb IV for extending anesthesia 20-30 minutes.

Follow with 5-10mg diazepam IV. To prevent rigid, rough Cyclohexane type recoveries.

**Xylazine (should be given in combo with Ketamine @ above dose. Xylazine is not a good anesthetic when used alone)**

**0.5 mg/lb IV for:**

- **extending anesthesia 20-30minutes**
- **supplemental anesthesia when heart rate from Telazol remains above 120 BPM**

Administer Atropine Sulfate (.02mg/lb) to all animals receiving Xylazine and medetomidine.

## ANCILLARY PRESCRIPTION FOR NON TARGET CAPTURES

### **Mountain Lion**

#### **Ketamine/Xylazine-\*Combination of Choice\***

2.6mg/lb Ketamine plus 0.4mg/lb Xylazine IM

Reverse with Yohimbine if desired, not necessary, no sooner than ½ hour

Post initial injection, 0.05-.07 mg/lb IV or IM

Ketamine Alone: 5-7 mg/lb IM

Telazol: 3.6 mg/lb IM. Last Preference-Emergency Use Only Post immobilization Seizures and death have been reported in Telazol immobilizations of Mountain Lions at the Henry Doreley Zoo, Omaha, Nebraska.

### **Wolves**

#### **Ketamine/Xylazine Combination of Choice**

4.5-5.0 mg/lb Ketamine plus 0.9-1.0 mg/lb Xylazine IM

Telazol/Xylazine

4.5-5.0 mg/lb Telazol plus 0.75 mg/lb Xylazine

Yohimbine-for reversal of Xylazine

0.05-0.07 mg/lb IM or IV. No sooner than 30 minutes post initial injection.

### **Coyotes**

Telazol-4.5-5.0 mg/lb IM

Ketamine-2mg/lb plus Xylazine 1mg/lb.

Yohimbine- 0.05-0.07 mg/lb

No sooner than 30 minutes post initial injection.

### **Foxes**

Telazol: 4.5-5.0 mg/lb

Ketamine: 9.0 mg/lb plus Xylazine 0.5 mg/lb

Yohimbine for Xylazine reversal 0.05-0.07 mg/lb

No sooner than 30 minutes post initial injection.

### **Ungulates**

The drug of choice for North American ungulates is Carfentanil Citrate. Immobilization conjoined with mandatory Naltrexone reversal. Cyclohexane (Ketamine/Tiletamine) and Alpha 2 agonist Xylazine vary widely in their performance, quality and safety of immobilization. Whenever possible use physical restraint to remove non target ungulates from capture devices

except for moose.

The below doses are for those situations where physical restraint is not possible, emergency situations or for moose captures when a Carfentanil user is not available. \*Carfentanil use requires special licensing and training and is beyond the scope of this prescription.

This prescription for ungulates is specifically limited to the removal of non-target captures in the course of the USGS - Interagency Grizzly Bear Study Team capture efforts. It does not include or authorize the use of these drugs in other ungulate capture, management, research, free ranging or other circumstances.

## **Moose**

Telazol- 2.5 mg/lb Telazol IM

Ketamine- 2.0 mg/lb plus 0.5 mg/lb Xylazine

Reversal recommended-0.05-0.07 mg Yohimbine IM or IV

## **Elk**

1.5 mg/lb Telazol plus 0.2 mg/lb Xylazine IM

Reversal recommended

Yohimbine 0.05-0.07 mg/lb IM or IV

## **Supplemental Drugs Emergency**

**Atropine:** 0.5mg/ml dose form as peri-anesthetic agent to decrease hyper-salivation or for Treatment of bradycardia 0.02mg/lb IM or SQ- 1cc/25 lbs  
For Cardiac arrest 0.02 mg/lb-(1cc/25lb) IV Initiate CPR.

**Do not use Atropine in Ungulates.**

**Epinephrine:** 1:1000 dose form 0.1mg/lb IV (1ml/10 lbs)  
or 0.2 mg/lb (2 ml/10 lbs) via endotracheal tube For Cardiac Arrest. Initiate CPR.

**Diazepam:** for treatment/ prevention of seizures 10 mg IV slowly (15+sec) repeat if necessary, IV administration ideal, but administer IM if IV not possible. Inter-rectal 20 mg.

Consider diazepam @ 5mg for bears less than 250lbs-10 mg for bears greater than 250 lbs for animals that:

- Has received supplemental doses of Ketamine to maintain anesthesia.
- Has been reversed on an Alpha 2 agonist (Xylazine/Medetomidine) in

combination with Ketamine that have been reversed before ½ hour post initial dosing.

- Is exhibiting a rough/rigid recovery.

**Dexamethasone** for shock 2.5 mg/lb IV for soft tissue injury, trauma or swelling 0.5 mg/lb IV or IM

**Methyl Prednisalone-Solumedrol** for shock, internal trauma or spinal cord injury 30 mg/kg (15mg/lb) IV.

\*Do Not Use in Suspected Pregnant Females unless Animal is in Imminent Life Threatening Condition.

## **Other Anesthetic/Sedative/Analgesic compounds**

### **Ace Promazine**

Consider as a sedative during transport @ below dosing ranges.

As supplemental anesthetic 0.02 mg/lb SQ or IM

For Horses: Sedation 0.03 mg/lb 30 mg/1000 ml IV

In combination with Xylazine 150 mg. Butorphanol 15 mg

Ace Promazine 15 mg/1000 lb horse for minor surgical procedures with local anesthetic, see below

Warning! Ace promazine lowers the seizure threshold. Avoid use in Ketamine and Tiletamine anesthetized animals.

### **Butorphanol**

As a supplemental anesthetic in Carnivores or for post anesthetic

analgesia. For Transported Animals Only 0.045 mg/lb IV

For Horses: in combination with Xylazine 150 mg, Butorphanol 15 mg and Ace Promazine 15 mg for minor surgical procedures.

### **Lidocaine HCL- as local anesthetic**

Inject subcutaneously and intramuscularly around wounds or lacerations for local anesthetic to assist in wound cleaning or closure. Do not exceed 50 ml /animal.

### **Antibiotics**

Consider penicillin for all darted animal at below doses. Strongly recommended for culvert trapped animals.

For use in extensive injury or current infected wound.

Long acting Procaine Penicillin G/Benzathine Penicillin G: combination

Dose at 10,000 IU/lb of Benzathine

No more than 5 ml/injection site IM

Note refrigeration requirements for this drug

**OR:**

Long acting Oxytetracycline (200 mg/ml)

10 mg/lb IM

Avoid in young growing animals

No more than 5 ml/injection site

### **Buethanasia- Euthanasia solution for humane Euthanasia 1 ml/10lb IV**

I HAVE REVIEWED THE ATTACHED PROTOCOL AND IT MEETS OR EXCEEDS THE STANDARDS OF CARE FOR VETERINARY FIELD CAPTURE IMMOBILIZATION AND ANESTHESIA.

**DR. JOHN B. MURNANE**

MONTANA LICENSE # 1573

DEA #BM4447531

## 2) IGBST Immobilization Protocol for Grizzly Bears.

**Positioning**-sternal recumbency & head down if possible; if lateral recumbent: switch every 20-min. Do not roll animal completely over.

### Establish Baselines:

**Temperature** - want 98-102 °F

**Pulse** - want strong & consistent, not thready & weak

**Heart Rate** - try left side of sternal animal @ 4-5th rib; want 50-120/min

**Respiration** - want 12-20/min; listen to airway from front to back, listen for collapsed lung

**Capillary Refill** - test gums, lips, eyelid-want  $\leq 2$  sec refill

**Endo-tracheal tube**-lube the tube with KY jelly, measure to shoulder or a shorter distance, pull tongue forward and open mouth wide open, see the opening to the airway, insert, inflate, tie off, use jaw spreader, don't use if aspiration has already occurred. Tubes that are too deep may occlude a brachial tube. Listen for free passage of air.

### Physical Exam:

**Eyes** - test level of sedation-pupil dilation; test blood pressure & shock-want pink underside of eyelid; look for injuries; debris; test for dehydration-pinch, apply ophthalmic ointment

**Nose** - check airway, look for blood, injuries, gross trauma

**Mouth** - test blood perfusion by capillary refill; test level of sedation-jaw rigidity; test hydration-moisture levels in mouth; test airway-look for obstructions or vomit, look for injuries, blood, throat cancer; look for jaw-dislocation & examine symphysis; look for new or old tooth fractures

**Ears** - test levels of sedation-movement; look for wounds (flush or stitch); look for infections-redness (give antibiotics); look for gross trauma and parasites

**Lymph nodes** - look for swelling (indicates infections)

**Palpation of Body, Joints, Limbs, Feet** - feel for crepitation, fractures, swelling, new or old wounds; disarticulations, fractures, bruises, distentions)

### Processing:

**Sex**

**Age** - note tooth color and wear, pull upper or lower PM1

**Collar** - remove magnet, record frequency, check with receiver, size collar around the zygomatic arch

**Blood extraction** - use cephalic or femoral vein

**Hair samples** - clip long hair for isotope, pull hair with roots for genetics

**Ear tags** - shave, punch, install, and record tag no.

**Weight** - electronic scale

**Bio Impedance** - needed, barrier needed if ground is wet

**Measurements** - include chest and neck circumference, total contour length, head length and width, and pads

**Reproductive status** - examine vulva of females, record nipple length, diameter, and color, lactating

### **Reminder:**

**Steroids may be abortifactive** for gravid females; be willing to live by the consequences. Use only in life threatening circumstances for pregnant females.



## Emergencies

Problem Condition	Indications	Treatment
Respiratory distress	Breaths none-infrequent or rapid-shallow; Cyanosis; > 2 sec. cap. refill	Position; Clear airway; O <sub>2</sub> insufflation; Cease anesthetics; Give antagonist if appropriate; Check pulse; begin artificial resuscitation-5-8 puffs/min
Bradycardia	Slow (< 60 beats/min) heart rate	Give atropine; <b>no epinephrine</b>
Cardiac arrest	Pulse weak-absent; > 2 sec. cap. refill; Cyanosis; Apnea; Dilated pupils; Cold skin	Give antagonist if appropriate; Cease anesthetics; Give Atropine; Secure airway with endo-tracheal tube. Give alternating chest/abdominal compressions at 1/1 sec. intervals for 15 sec. and interrupt with puffs at 15 sec. intervals; continue for 2 minutes, then check heart rate and respiration; if unsuccessful, give epinephrine. If unsuccessful, continue CPR; continue cycle, giving atropine next alternate with epinephrine between CPR sessions and C-R checks.
Low temperature	Temp. < 98 °F; Shivering; Cold extremities; > 2 sec. cap. refill; O <sub>2</sub> sat. < 90%; Decreased heart rate	Anticipate; Warm packs; Insulate; Dry fur; Antag. drugs
High temperature	> 103 °F; Warm extremities; Temp. > 103 °F; Breaths rapid-shallow; Panting; O <sub>2</sub> sat. < 90%	Anticipate; Shade, Axial ice or alcohol; Cease anesthetics; Ant. Drugs; Cold water immersion
Shock	Weak, thready pulse; Poor capillary refill; Pale mucous Membranes	Cease anesthetics; ant. drugs; give steroid Solumedrol (compatible with Atropine and Epinephrine)
Vomiting/Aspiration	Gurgling sounds; Choking or gasping; Cyanosis	Clear airway; Begin artificial Respiration; Ant. drugs; Give Oxytetracycline
Seizures/Convulsions	Tightening or spasms of muscles; Rigid limbs; Gaping mouth	O <sub>2</sub> insufflation; Give valium (slowly & repeat as needed); Give antagonists; Monitor temperature
Old Skin/Muscle Injuries	Detect visually or by palpation	Flush with Nolvasan, Remove debris; Cut necrotic tissue away; Spray with nitrofurizone; Leave open; <b>no alcohol or peroxide</b>
New Skin/Muscle/Bone Injuries	Detect visually or by palpation	Clamp open vessels; Shave hair; Remove debris; Flush with Novasan, Cut necrotic tissue away; Stitch; Spray topically with Nitrofurizone; Give Soludelta for major wounds; Give Dual-Cillan for skin wounds and Oxytetracycline for airway wounds
New wounds with swelling and trauma	Detect visually or by palpation	Give Dexamethasone
New Neural Injuries (e.g., spine, head)	Detect visually or by palpation	Give Solumedrol
Swollen Lymph Nodes	Detect by palpation	Check eyes, ears, nose, and mouth for source of chronic infection; Give LA penicillin or LA tetra as appropriate for the type of wound
Dehydration	Eyelid slow to respond to pinch	Give lactated ringers or multisol
Excess Salivation	Detect visually	Give Atropine

## REFERENCES

- Arnemo et. al. AAZV proceedings Sept 2001 Orlando, FL (2001)
- Cattet et. al. Ursus14 (1) 88-93 (2003)
- Reynolds et. al. J. Wildl. Manage. 53(4) 976-978 (1989)

Krieger and Arnemo, Handbook of Wildlife Immobilization. (2002)

References (cont)

Plumb Veterinary Manual (2003)

Colorado State University Veterinary Teaching Hospital Formulary. Fort Collins, CO. (1995)

Animal Medical Center Formulary. New York, NY. (1995)

Merck Veterinary Manual, Rahway, NJ (2003)



## WYOMING GAME AND FISH DEPARTMENT

**Chapter 33 Permit**

For Scientific Research, Educational/Display, or Special Purposes

ID: 439 Chuck Schwartz  
PO Box 172780  
Bozeman, MT 59717-2780

COMPANY: Interagency Grizzly Bear Study Team

ISSUED: 1 28 2010

Others Authorized by This Permit:

Mark Haroldson  
Chad Dickinson  
Craig Whitman  
Seth Thompson  
Joshua Brown  
Garrett Rasmussen

SPECIES	NUMBER	REGION	EXPIRES
Bear, Grizzly ( <i>Ursus arctos</i> )		Statewide	12/31/2010

**PURPOSE:** To conduct capture operations in order to monitor grizzly bear population, survival, and occupancy in the greater Yellowstone ecosystem for grizzly bear recovery efforts. All trapping efforts must be coordinated with Dave Moody {(307) 332-7723 Ext. 240}. All trap sites shall occur on public lands and will be signed to alert the public if they inadvertently approach a baited trap site. Baiting and trapping of grizzly bear may be done via culvert trap and Aldrich leg-hold snares. Once captured, bears may be tagged, collared and immediately released. Permittee will be allowed to use road killed big game animals as bait. Prior to the collection of any road killed wildlife, the permittee or subpermittees shall coordinate the pick-up and placement of wildlife, with the District Game Warden in whose district the baiting will occur. **ELECTRONIC REPORTING OF CAPTURE DATA WILL BE REQUIRED**, to include a minimum of species, sex, age, and capture location in UTM coordinates. The annual report shall be completed on a department provided template and submitted to the Permitting Officer in Casper no later than January 31, 2011.

Unless otherwise indicated above, this permit does not include those species of wildlife defined as protected by W.S. 23-1-101 or those species of wildlife listed as threatened or endangered by federal regulation.

Permittee(s) must carry a copy of this permit when conducting the above-mentioned activities and agree to the inspection of all collections, gear and materials by any authorized enforcement personnel of the Wyoming Game and Fish Department or US Fish and Wildlife Service.

The permittee will furnish a written report to the Wyoming Game and Fish Department of activities and collections made under this permit (refer to Chapter 33 regulation, section 5(g)). In those cases where more than one name occurs on the permit, the first name listed is responsible for submitting the report.

Scott Talbott  
Assistant Chief, Wildlife Division



United States Department of the Interior  
FISH AND WILDLIFE SERVICE



**GRIZZLY BEAR RECOVERY COORDINATOR  
UNIVERSITY OF MONTANA  
UNIVERSITY HALL, ROOM 309  
MISSOULA, MT 59812  
PHONE (406) 243-4903, FAX (406) 329-3212**

March 30, 2010

Memorandum

To: Leader, Interagency Grizzly Bear Study Team, USGS, Bozeman, Montana  
From: Christopher Servheen, Grizzly Bear Recovery Coordinator, USFWS  
Subject: Subpermit for handling research grizzly bears

This subpermit authorizes you to take grizzly bears under certain conditions as described in Section (i) C and D of the grizzly bear 4(d) rule, 50 CFR 17.40(b) as long as activities are in conformance with the criteria listed therein. This authority is valid through December 31, 2010 subject to annual renewal. Under the authority granted in this subpermit, you may take grizzly bears for nuisance bear removal or management, or for other scientific or research purposes under the following conditions:

1. Capture using bear traps or snares, ear tag, radio collar, mark, take tissue, hair, blood, and tooth samples, and release grizzly bears (*Ursus arctos horribilis*) in Yellowstone and Grand Teton National Parks, the John D. Rockefeller, Jr. Memorial Parkway, and in Montana, Wyoming, and Idaho. Samples may be sent to facilities identified by the Fish and Wildlife Service.
2. Free dart and immobilize grizzly bears for the purpose of translocating or marking the animal.
  - (a) Only those personnel and their assistants who are trained and/or experienced in immobilizing, marking, and handling bears will be authorized to participate in these activities.
  - (b) Assist in the occasional transport of nuisance grizzly bears to zoos throughout the United States and Canada.

3. Manage bears to limit conflicts with people to enhance the survival of grizzly bears.
  - (a) Live-trap and transport nuisance bears to relocation sites or euthanize only when authorized by the Grizzly Bear Recovery Coordinator, University Hall, Room 309, University of Montana, Missoula, Montana 59812, telephone (406) 243-4903, **cell phone (406) 240-6506** (the best way to make contact after hours or on weekends or evenings). Euthanasia will only be done when authorized by the Recovery Coordinator. The disposal of any euthanized bears will be coordinated with the Recovery Coordinator.
  - (b) Preemptively move bears that are in an area where they may come into conflict with human activities. Bears may be moved only when authorized by the Recovery Coordinator (see contact information above).
  - (c) Harm and harass grizzly bears while conducting aversive conditioning activities with rubber bullets, specially trained dogs, noise, and sprays.
  - (d) All activities conducted under this subpermit must be done in compliance with the terms and conditions of the subpermit and with the Interagency Grizzly Bear Guidelines.
4. The only persons to be in the vicinity of your activities are those authorized personnel needed to accomplish the work being conducted. Every possible precaution shall be taken to avoid confrontations between bears and the public, including but not limited to closure or signing of the study sites. Study sites, including capture locations, are not to be disclosed to the public to ensure human safety and to prevent dangers to bears.

Coverage under this subpermit is provisional under the following restrictions:

1. You will obtain, have in your possession, and conduct your activities in compliance with all appropriate Federal and State required permits and licenses for take of listed species. This authorization does not grant the right of trespass. Such permission must be obtained from private landowners or the land management agency.
2. All grizzly bear activities will be coordinated with the Grizzly Bear Recovery Coordinator (see contact information above). You are to inform the Recovery Coordinator of all grizzly bear activities conducted under this subpermit.
3. Any threatened or endangered species that is accidentally killed while conducting activities under this authorization must be reported within 24 hours to **both** the Senior Resident Agent for Law Enforcement, 100 East B Street, Casper, Wyoming 82602, telephone (307) 261-6365, fax (307) 261-6366, and to the Recovery Coordinator (see contact information above). Species and/or the parts of species that are taken remain the property of the Fish and Wildlife Service. If the disposal of

species is not identified in the above conditions, contact the Recovery Coordinator for the final determination on disposition of any threatened or endangered species taken during authorized activities.

4. If you wish to continue work with grizzly bears, your request for annual renewal should be received by the Recovery Coordinator (see contact information above) on or before December 15, 2010. Otherwise, this subpermit becomes invalid on that date. You are not authorized to conduct any activities that may result in take of grizzly bears other than those identified above. The conditions that must be followed for take of grizzly bears under this authorization may be modified as deemed necessary by the Recovery Coordinator.
5. A report of all your activities relating to take of grizzly bears conducted under the authority of this memo must be submitted to the Recovery Coordinator (see contact information above) by December 31 of each year. Your reports should include complete accounts of those activities conducted under this authorization. A renewal of this authorization may not be provided if all reports have not been received.
6. This subpermit must be in your possession, or in the possession of designated members of your staff, while conducting all authorized activities.

If you have any questions about this authorization or need additional information, please contact the Recovery Coordinator (see contact information above).

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7. Any IGBC agency may terminate participation in this Plan upon 120 days written notice to each of the other agencies.
8. The attached Plan provides operational guidelines for determining grizzly bear nuisance status and for controlling nuisance grizzly bears in the conterminous United States. Handling and control of nuisance grizzly bears will be governed by the grizzly bear special rule (50 CFR 17.40) and per discussions and/or resulting agreements between IGBC member agencies and APHIS (Animal and Plant Health Inspection Service) animal damage control.
9. The "Guidelines and a "Plan" have been submitted to the Fish and Wildlife Service as a formal aggregate consultation since the projects, activities, and programs are logically grouped, their effects should be similar and such an aggregate consultation should greatly economize consultation activities related to and required for grizzly management.

The purpose of this document is to:

1. Document management direction agreed upon by participating agencies with respect to determination of grizzly bear nuisance status, and the capture, translocation, release and/or disposal of nuisance grizzly bears.
2. Guide managers in making rapid, effective, and responsible decisions and initiating action regarding grizzly bear control actions.

## II. Guidelines for Determining Grizzly Bear Nuisance Status

These guidelines apply to the Management Situation Areas defined in Interagency Grizzly Bear Guidelines. In Management Situations Areas 1 and 2, grizzlies must be determined to be a nuisance by specific criteria before they can be controlled. In Situation Areas 3 and 5, any grizzly involved in a grizzly-human conflict situation is considered a nuisance and will be controlled. Control must be compatible with Grizzly Bear Recovery Plan objectives for limiting man-caused grizzly mortality and with Federal and State laws and regulations.

A grizzly bear may be determined to be a nuisance if any or all of the following conditions apply:

- Condition A. The bear causes significant depredation to lawfully present livestock or uses unnatural food materials (human and livestock foods, garbage, home gardens, livestock carrion, and game meat in possession of man) which have been reasonably secured from the bear resulting in conditioning of the bear or significant loss of property.
- Condition B. The bear has displayed aggressive (not defensive) behavior toward humans which constitutes a demonstrable immediate or potential threat to human safety and/or a minor human injury resulted from a human/bear encounter.

Condition C. The bear has had an encounter with people resulting in a substantial human injury or loss of human life.

The following are considerations in determining grizzly nuisance status under Condition A:

Unnatural foods were reasonably secure from grizzlies. Reasonably secure means all steps were taken to comply with guideline objectives (a) Maintain and Improve Habitat and (b) Minimize Grizzly-Human Conflict Potential. The following are examples of reasonably secure conditions:

- (1) sight and/or smell of edibles and/or garbage was not dominant (i.e., food was canned or in other sealed containers) and edibles and/or garbage was made unavailable (hung out of reach or secured in a solid-sided-bear-proof structure). Livestock use did not occur in habitat components critically important to grizzlies in time or space;
- (2) livestock and wildlife carcasses were removed, destroyed or treated so that the material would not reasonably be expected to attract grizzlies.
- (3) game meat was stored at least 100 yards from any sleeping area;
- (4) no baits were placed for purposes of sport hunting black bears, nor did any artificial feeding of bears occur.

The following are considerations in determining grizzly nuisance status under Condition B:

The bear has displayed aggression toward man. Sound evidence must be available to establish that the bear acted aggressively without provocation (not defensively), and that such behavior constituted a threat to human safety and/or a minor human injury occurred as a result of a nondefensive grizzly attack.

The following are considerations in determining grizzly nuisance status under Condition C:

An encounter with people which resulted in a serious human injury or loss of human life. A bear that is involved in an accidental encounter with people, defense of young, or in a provoked attack (the bear acted defensively not aggressively) which results in a minor human injury should not be considered a nuisance under this condition.

If information is insufficient to clearly establish the above requisites under Conditions A, B, and C, then the involved bear(s) probably should not be determined a nuisance under that condition. The criteria in Table 1 should be used to guide control actions.

## Preventive Action

Certain specific grizzlies have known behavioral patterns, which, when combined with location, time and other factors, indicate that an incident is highly probable. In such situations, direct preventive action designed to safely remove the bear(s) from the situation (prior to an occurrence which would result in nuisance status and possible loss of the bear(s) to the ecosystem) can be implemented regardless of the Management Situation involved. Human activities must be in compliance with applicable guidelines to minimize potential for grizzly-human conflicts for that Management Situation. Control actions should be designed to capture and remove the specific target bear(s).

In other situations, a bear may move into a visitor use or residential area without causing an incident, but there is indication that due to its persistent use of the area, it may become overly-familiar with humans and may become habituated. The animal may be relocated if a suitable release site (free of circumstances similar to the capture site) is available. This is an action to prevent a possible incident or habituation of the bear. It does not count as an offense when determining the disposition of the bear (using Table 1), should the bear be recaptured in a future control action.

### III. Grizzly Bear Control Action

1. If a grizzly bear is not determined to be a nuisance after consideration of criteria in Section II, no control action will be initiated.
2. Capture of nuisance grizzly bears outside National Parks is the primary responsibility of the State Fish and Game Agency in conjunction with the U.S. Fish and Wildlife Service. The National Park Service is responsible for bear capture within National Parks. Figure 1 is a schematic diagram showing the sequence of notification and the decision process which will be used in all grizzly control actions. Data forms for recording information about the captured bear(s) and the control action are provided in the Appendix. Nuisance bear forms should be completed by the on-site official and forwarded to the Grizzly Bear Recovery Coordinator for subsequent distribution.
3. Nuisance grizzlies that are sick or injured beyond a point where natural recovery is likely will be removed from the population. Other nuisance grizzlies will be controlled according to the guidelines in Table 1.
4. After a bear has been captured during a control action, the decision on where to relocate the bear or whether to kill it must be made within 24 hours of its capture. The relocation must be made as expeditiously as possible after the disposition of the bear is determined. Bears will not be held in a snare but will be immobilized, marked, and placed in an appropriate holding facility (can be a culvert trap).

With due consideration of mortality risk associated with immobilization, grizzly bears released should be marked with numbered ear tags, lip tattoo, and functioning radio transmitters. Monitoring will be a cooperative effort between State and Federal agencies. On-site release may be

accomplished if the bear taken is: (a) determined not to be a nuisance bear or; (b) on a first offense when the bear cannot be relocated because of terrain, weather, or inaccessibility to a relocation site. Females with cubs, where relocation is identified in the above table, will be released on-site if relocation is not feasible for previously stated reasons or if the cubs cannot also be caught and relocated with the female. An on-site release will not be conducted in developed areas. On-site releases will be accomplished after approval of the land management agency if the release is monitored in such a way to determine its success or failure with respect to bear survival and conflict resolution.

5. If a bear is to be killed, the action will be completed only by authorized State or Federal or Tribal employees. A grizzly bear mortality report form should be completed and the carcass forwarded to the Montana Department of Fish, Wildlife and Parks lab in Bozeman, Montana, for examination and subsequent disposition.
6. The initiating agency may "take back" a relocated bear, according to case-by-case agreements.
7. The State Fish and Game Regional Office will be the principal coordination point for all control actions, unless specified otherwise in the initial discussions on a particular incident.

The public and news media are extremely interested in all operations involving grizzly bears. To insure that they receive the proper information, it is critical that information be shared between all involved agencies in an accurate and timely manner. Planned news releases will be the responsibility of the State Fish and Game agency in close consultation with the administering land management agency (or Tribe) and the Grizzly Bear Recovery Coordinator.

Table 1. GUIDELINES FOR GRIZZLY BEAR CONTROL ACTION  
(See Footnotes)

TYPE OF GRIZZLY	NO OFFENSE OFFENSE	TYPE OF PROBLEM					
		CONDITION A			CONDITION B		CONDITION C
		1st	2nd	3rd	1st	2nd	1st
<u>Females</u>							
Orphaned Cub	*** RLS/REL *						
Cub		REL	REL	REM **	REL	REM	REM
Yearling		REL	REL	REM	REL	REM	REM
Subadult		REL	REL	REM	REL	REM	REM
Prime Adult							
with Young		REL	REL	REM	REL	REM	REM
				(Adult)		(Adult)	(Adult)
Old Adult ***		REL	REM	--	REM	--	REM
Old Adult							
with Young		REL	REL	REM	REL	REM	REM
				(Adult)		(Adult)	(Adult)
<u>Males</u>							
Orphaned Cub	*** RLS/REL *						
Cub		REL	REL	REM	REL	REM	REM
Yearling		REL	REM	--	REM	--	REM
Subadult		REL	REM	--	REM	--	REM
Prime Adult		REL	REM	--	REM	--	REM
Old Adult		REM		--	REM	--	REM

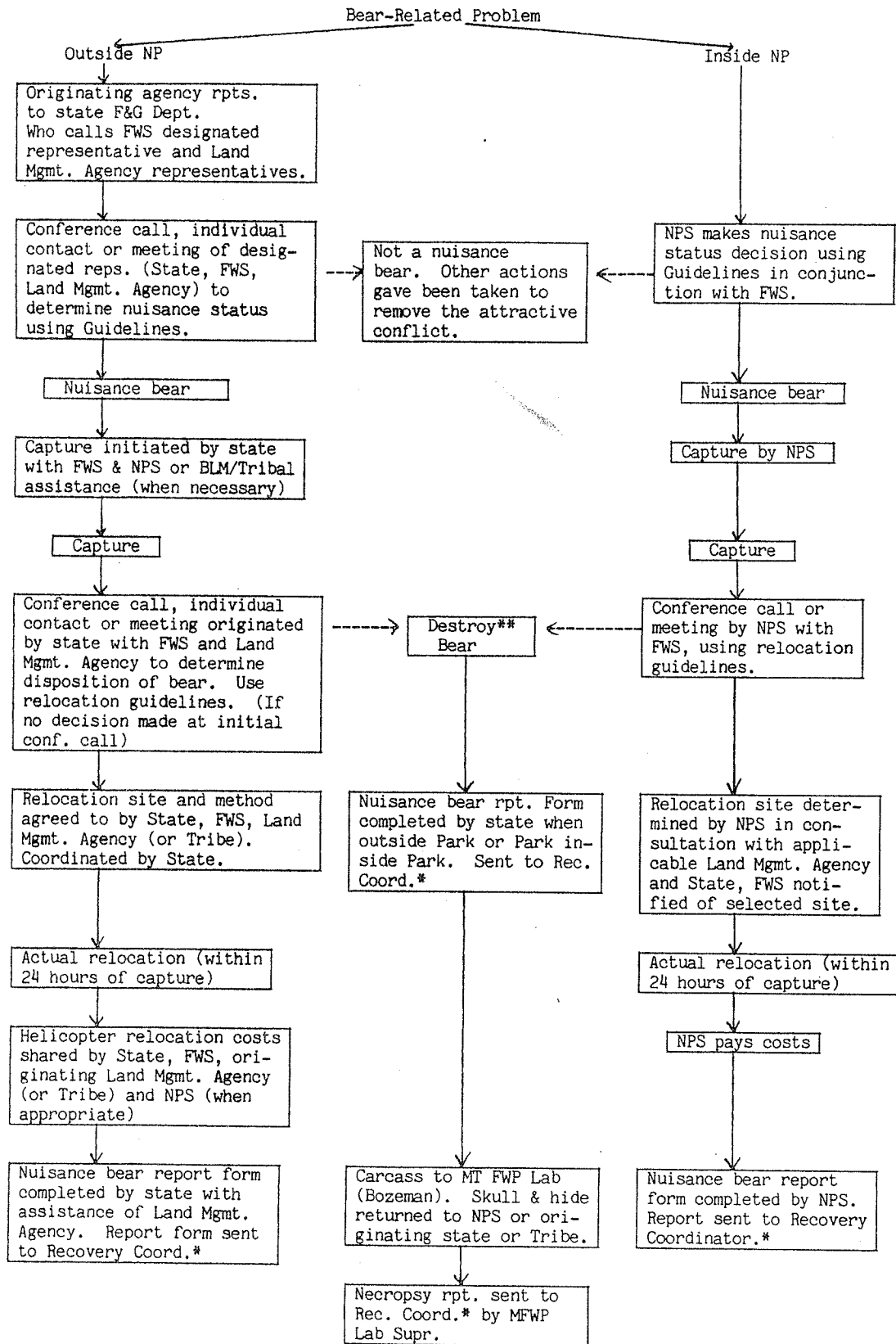
\* REL - RELOCATE      \*\* REM - REMOVE FROM POPULATION      \*\*\* RLS - RELEASE ON SITE  
(Nuisance grizzlies that are sick or injured beyond a point where natural recovery is likely will be removed.)

Cub                    - Young of the Year  
Yearling           - 12 to 24 months old  
Subadult           - 24 to 48 months old  
Young               - Cub, yearling, or subadult accompanying mother  
Old                  - Indicates advanced age and deteriorated physical state, indicators are tooth wear and physical appearance

\* Grizzly Bear Recovery Coordinator, USFWS, HS 105D, University of Montana, Missoula, MT 59812

FIGURE 1

ACTION PROCEDURES FOR DETERMINING BEAR NUISANCE  
STATUS AND MANAGEMENT ACTION



\*Recovery Coordinator distributes report to agency representatives in Ecosystem.

\*\*Alternative may include transport to a zoo or research. Decision made at second phone call.

\*Grizzly Bear Recovery Coordinator, USFWS, US 105D, University of MT, Missoula, MT 59812



FIGURE 2

ACTION PROCEDURES IN CASES OF GRIZZLY-HUMAN CONFLICT

All grizzly bear habitat

1. All incidents of grizzly-human conflict will be investigated immediately and a factual and detailed report (answering who, what, when, why, where and how) submitted to the line officer. In case of human death, notify the County Sheriff and County Coroner. In case of grizzly death, notify the U.S. Fish and Wildlife Service and the appropriate State wildlife management agency.
2. State wildlife management agencies and/or the U.S. Fish and Wildlife Service, National Park Service, Tribe will handle nuisance grizzlies.
3. County sheriffs will have primary responsibility for backcountry rescue outside National Parks and Indian Reservations.
4. The site of an incident will be closed immediately to human use until the investigation is complete and the problem solved or corrected. This closure is the responsibility of the managing agency.
5. All incidents resulting in serious human injury or death will be investigated by an interagency team with members from the county law enforcement agency, State wildlife management agency, land management agency, U.S. Fish and Wildlife Service, NPS and appropriate outside experts as necessary.
6. News releases involving grizzly-human conflict incidents will be coordinated through all concerned agencies.

Further, in National Parks,

7. All grizzly-human conflicts will be investigated and a factual and detailed bear incident report submitted to the Superintendent's Office. In incidents where injury and/or property damage have occurred, the investigating officer's report will be supplemented when possible by the statements of witnesses to the incident. All incidents of grizzly inflicted human death will be investigated by an interagency investigation team (as in No. 5).
8. All management actions involving bears will be reported by telephone to the Bear Management Office/Resource Management Office.
9. All grizzly bear sightings will be recorded in the station log and telephoned daily to the Bear Management Office/Resource Management Specialist. Information shall include observer, data, location, time, number, activity, and if possible, sex, age class, and individual description.



# **A MANUAL FOR HANDLING BEARS FOR MANAGERS AND RESEARCHERS**



BY

**JAMES J. JONKEL**

(Edited by Timothy J. Thier)

Produced in Cooperation with the Office  
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This Publication was written by James J. Jonkel (Interagency Grizzly Bear Study) and reviewed and edited by Tim Thier (U.S. Fish and Wildlife Service). Several words of caution for this publication are appropriate. This manual was primarily written as a reference for game wardens, park rangers, biologists, and others who find themselves in the position of capturing and handling bears. The techniques, methods, and drugs discussed within will undoubtedly advance and change over time. When specific problems arise, advice beyond the manual is recommended. Because of the unique nature of each capture and handling situation, the author and agencies involved in the printing of this manual refuse to assume any legal responsibilities that may result from the capturing and handling of bears by others.

## INTRODUCTION

### Why the Manual was Written

The step-by-step procedures, precautions, and techniques in this manual are assembled from both the positive experiences and mistakes of wildlife researchers, managers, and veterinarians who have dealt extensively with bears. The main goal of this manual is to assist and educate future bear handlers and to help reduce the number of bear and human injuries and deaths. This manual is not designed to replace hands-on experience. **The only way to learn how to capture and handle bears properly is through an apprenticeship with experienced professionals!**

Every year bears are captured, drugged, handled, and relocated by park rangers, game wardens, federal trappers, and biologists. Some of these people do not have the confidence or expertise to do their job with minimal risk to the animal or crew. Human error has been a factor in bear mortalities and injuries. Since 1959, for example, 42 grizzly bear deaths in the Yellowstone Ecosystem have been documented as trapping and drugging-related casualties (Craighead et al. 1988). Some errors are repeated almost annually. This manual was written to provide individuals in bear management or research with a clear and concise field reference that has an emphasis on proper techniques.

Hard and fast rules are impossible, and every person will do things differently. The techniques discussed in this manual are offered only as a reference and an aid to understanding the problems and dangers involved in bear research and management. There are other trapping and handling methods and procedures used by bear handlers that are safe and reliable. If you find a safer, more efficient technique, by all means use it.

The safety measures emphasized in this manual are primarily directed towards individuals handling grizzly bears. Although safety should never be taken casually, black bears generally pose less of a risk to the handlers or public. As a result, some of the safety measures recommended in this manual can be relaxed somewhat when dealing with black bears. The actual handling techniques for both black bears and grizzlies, however, are very similar.

### Safety Precautions

There are three primary rules to follow when working with bears, especially grizzly bears:

- 1) **Never make yourself or anyone else available to a bear.** The bear should always be securely captured or drugged before you approach. If there is absolutely no way to physically restrain a bear before drugging, you should be in a vehicle or safe location with a planned escape route.

- 2) **Approach every trapping, drugging, and handling situation as if you will not have the protection of a firearm.** Too many bear

handlers depend on firearms to get them out of trouble.

3) **Before making any decisions or setting any trap, look at all the possible outcomes.** Is there an opportunity for something to go wrong? Can you see from a safe distance whether or not the site has been disturbed? Could a citizen stumble onto the trap site when a cub is captured? Could the bear, when recovering from the drug, stumble downhill and fall over a cliff? Could an elk or moose get captured in this snare? Is there any possibility that this female bear being relocated has more than one cub? Could this bear being released from a culvert trap attack me? Ask yourself these kinds of questions, and do some preventive planning.

### Ethics and Professionalism

The Kuuvangmiit Indians of coastal Alaska believe that humility is the key to peaceful encounters with bears. Elders instruct hunters not to brag about how many bears they have killed, not to behave arrogantly, and not to talk about bears in a threatening manner. Some of the natives disapprove of biological research requiring the handling of bears. For example, some Inupiaq hunters worry about the safety of "... biologists engaging in such research, fearing that bad things may happen to them for being - in the villagers' view - disrespectful to bears" (Georgette 1989).

Albert Schweitzer's book "Reverence For Life" states that scientists "... must ask themselves whether there is a real necessity for imposing such a sacrifice upon a living creature." The intent of most bear research today is to improve population numbers and to reduce conflicts with people. In order to better understand and study bears, usually radio telemetry is required. This relies on the ability to capture and handle bears with a minimum of trauma. Each researcher must weigh the final outcome and potential benefits of his or her study and determine if capturing and handling is really necessary.

Ideally, bear managers must first know when not to trap and handle, when and how to trap and handle, and finally when to stop trapping and handling. Many managers and private citizens believe bears avoid areas inhabited by humans, and that certain "bad bears" move into the area to cause trouble. Bears do not usually leave when people appear. They either stay and learn to live with people or they get killed. During exceptionally bad food years bears may become more visible and are more easily lured into conflicts with humans, requiring some type of management action.

Often in management situations where grizzly bears are involved, the bear "problem" is grossly exaggerated. For example, in 1986 on Montana's Gallatin National Forest, it was rumored that an enraged, wounded grizzly bear with cubs was lurking on the fringes of a hunting camp. A member of the Interagency Grizzly Bear Study Team (IGBST) was sent in by helicopter to check out the situation, only to discover that "no, a bear wasn't in camp, but one did walk by camp about a week ago." In another situation on Montana's Flathead National Forest in the spring of 1989, a local

radio station reported that a grizzly bear had just killed and partially eaten a mushroom picker. Approximately 60 men with rifles swarmed to the area. The report turned out to be totally false, and information on who first reported the incident was vague.

Before heading out into the field, gather information to determine if a trapping or management effort is really necessary. The first and most important thing to accomplish before setting out is to touch base with the landowners and local state and federal officials. Interview the local game warden, Forest Service district ranger, biologist, and any other pertinent people involved and find out what the situation is. Every effort should be made to create a smooth working relationship and to coordinate activities.

In situations involving management, trapping actions will depend on the situation and the location. Once you have gathered your necessary equipment, go to the site and attempt to solve the situation by removing, or making unavailable, whatever attracted the bear to the site in the first place. Only as a last resort should the bear or bears be trapped, handled and relocated. There are a number of good reasons why bears shouldn't be captured and moved. First, you endanger the life of the bear and people by making contact. Second, by capturing and marking a bear because of a possible bear/human conflict, you are in essence giving the bear a "criminal" record. Often bears are trapped and relocated repeatedly until the decision is made to destroy them. Many times bears are categorized as "problems" instead of the source that was luring them into the vicinity in the first place. Finally, when you trap a bear and relocate it to another region, you not only avoid the real problem, you also decrease the bear's chances of survival.

Occasionally, the only option available is to move the bear to an area uninhabited by people, which in the lower 48 states is increasingly difficult to find. Older bears, no matter how far they are moved, often work their way back. Younger bears are more likely to establish new home ranges. Generally, grizzly bears should be moved at least 70 miles and black bears 40 miles from where they were captured (Thier pers. comm.).

Some bears that have been poorly managed will continue to cause problems and will have to be destroyed. The decision to kill a bear should be a last resort. Habituated behavior in bears is usually an indication of poor people management; "problem bears aren't born, they're made". Preventative planning is the key to managing bears.

Human safety should always come first, but bear handlers always have the obligation to minimize pain and suffering to the animal. Researchers and managers working on bears, especially with Threatened grizzly populations, must do everything possible to avoid all unnecessary deaths and injuries. Because of the national attention focused on the grizzly, an accidental bear or human death or injury during a trapping operation could have drastic repercussions.

The legalities encompassing bear research and management are vague. Government and state employees have the obligation to protect people. The majority of the public assumes that they will

7  
signs

be warned if dangerous animals are in the area, and that efforts will be made to capture and move or dispose of any animals posing a threat.

It is difficult to define the mandatory duty of a bear researcher or manager. Whenever in doubt, the agency's attorney should be consulted. It all comes down to an issue of "adequate warning." When a researcher or manager can prevent an injury by informing the public, they have the duty to do so. If a collared bear is moving through a campground, for example, the public should be informed of the danger.

Future court suits involving bears, the public, bear managers, and researchers are inevitable. Therefore, it is important to document every aspect of every management situation and trapping episode. Bear researchers and managers must make careful decisions and always warn the public when a trap has been placed in the vicinity or when there is a potential for a confrontation. Education and communication are the best tools when working with the media and the public.

signs

1



## Appendix 4 – Information about the Interagency Grizzly Bear Study Team

### Interagency Grizzly Bear Study Team – Information Sheet 2010

#### **Background:**

The Interagency Grizzly Bear Study Team (IGBST) is an interdisciplinary group of scientists and biologists responsible for long-term monitoring and research efforts on grizzly bears in the Greater Yellowstone Ecosystem (GYE). The team is composed of representatives from the U.S. Geological Survey, National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, Montana State University, and the States of Idaho, Montana, and Wyoming. This interagency approach ensures consistency in data collection and allows for combining limited resources to address information needs throughout the GYE.

#### **History:**

The IGBST was formed by the Department of the Interior in 1973 as a direct result of controversy surrounding the closure of open pit garbage dumps within Yellowstone National Park during 1968-72. For decades, large numbers of grizzly bears fed at these dumps. The rate of grizzly bear deaths that followed dump closure and concerns for the population's future led to grizzlies being listed as threatened under the Endangered Species Act in 1975. Early research by the team indicated that following listing the population continued to decline into the 1980s. This information helped support the formation of the Interagency Grizzly Bear Committee (IGBC) in 1983. The IGBC, represented by administrators from federal and state agencies, implemented several regulations on federal lands designed to reduce human-caused grizzly bear deaths. These actions, along with favorable environmental conditions, halted the grizzly bear population's decline. Grizzly bear distribution has expanded since the mid-1980s and today bears again occupy their historical range well beyond Yellowstone National Park.

#### **Research and Monitoring:**

IGBST annually monitors the grizzly bear population and habitat in the GYE. Examples include:

- Distinguishing unique females with cubs of the year.
- Radio-collaring bears to estimate reproduction, survival, movements, habitat use, and denning.
- Documenting distribution of females with young throughout the ecosystem.
- Documenting numbers and causes of bear deaths, known as mortalities.
- Monitoring annual trends in key foods including winter-killed bison and elk, spawning cutthroat trout, whitebark pine cone production, and bear use of cutworm moth aggregation sites.

#### **Population Studies:**

Adult females are considered the most important segment of the grizzly population and consequently are a major focus of IGBST's monitoring efforts. The efforts to document the distribution and abundance of females with cubs within the GYE began in 1973. During the past 10 years (2000-2009) IGBST has counted an average of 43 unique females with cubs of the year in the GYE. When summed over 3 consecutive years (the average reproductive interval for adult females) these counts provide a minimum estimate of adult females in the population. These counts and the population estimates derived from them are also used to establish annual quotas for bear mortalities which are the number of grizzly deaths that can occur and still sustain a healthy population.

IGBST began radio-marking bears in 1975. Since then we have monitored over 600 individuals for varying periods. The trapping and monitoring program monitors a minimum of 25 adult females annually. Data collected from these marked bears provide the information necessary for tracking key population parameters. By observing collared individuals, IGBST documents age of the female's first pregnancy, average litter size, how often females produce litters, and causes of death. These data also allow the study team to estimate survival rates. This information is used in conjunction with other estimates to assess population trend and help focus management activities toward issues that impact bears.

Identifying the locations and causes of grizzly bear mortality is another key component in understanding the dynamics of this population. Over 80% of all documented bear mortality is human-caused. Tracking human-caused bear deaths helps define patterns and trends that can direct management programs to protect grizzly bears.

### **Food Monitoring:**

IGBST monitors annual trends in several important grizzly bear foods including winter-killed ungulates such as deer and elk, spawning cutthroat trout, army cutworm moths, and whitebark pine cones. The seeds of whitebark pine are arguably the most important fattening food available to grizzly bears during late summer and fall. IGBST annually monitor cone production throughout the GYE. Cone production is highly variable from year to year and the team's studies have demonstrated a relationship between cone counts and bear mortality. In years of poor cone production, bear conflicts and deaths increase, particularly on the outer edges of the ecosystem where human development has had a more profound impact on the landscape. Understanding such relationships is useful in predicting and preventing future problems between grizzly bears and humans.

**Additional IGBST Research:**

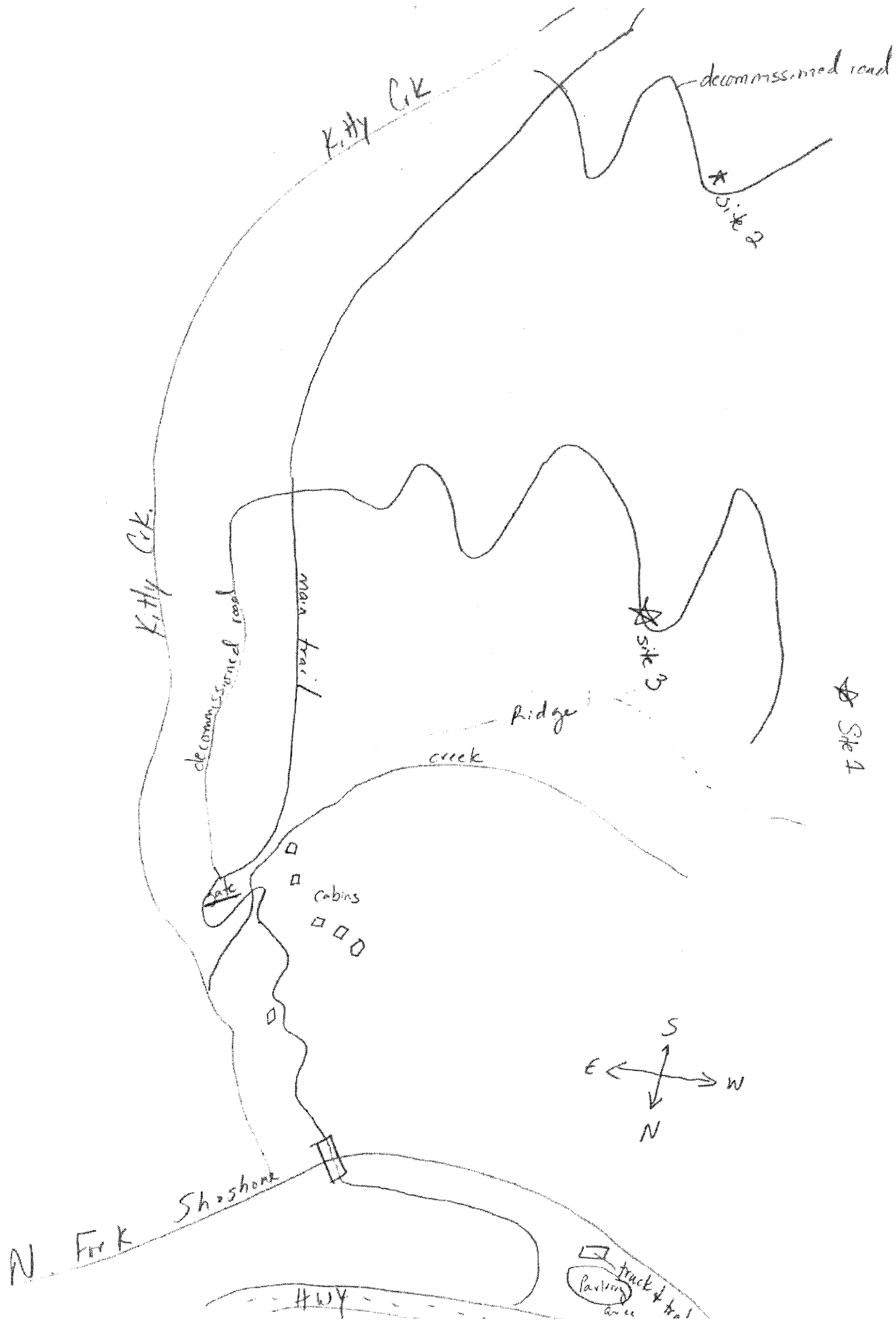
- Use of Global Positioning System technology to identify grizzly bear movements and habitat use.
- Application of DNA technology to determine the number of bears feeding on cutthroat trout.
- Identification and mapping of grizzly bear denning habitat.
- Influence of climate change on denning chronology of grizzly bears in the GYE.
- Mapping current distribution of grizzly bears in the GYE.
- Incorporation of uncertainty into population estimates and sustainable human-caused mortality.
- Use of stable isotopes obtained from grizzly hair to estimate percent diet items.
- Interactions of large carnivores (bears, wolves, and lions) in the GYE.
- Habitat use and overlap between black and grizzly bears in Yellowstone and Grand Teton National Parks.
- Ecology and genetics of the army cutworm moth.

Ensuring the survival of the grizzly bear in the face of natural and human induced landscape change impacts requires current information upon which to base management decisions. The research and monitoring efforts of the IGBST provides the critical information necessary to formulate informed decisions and guide management that will ensure long-term conservation of grizzly bears in the GYE.

**For more information contact:**

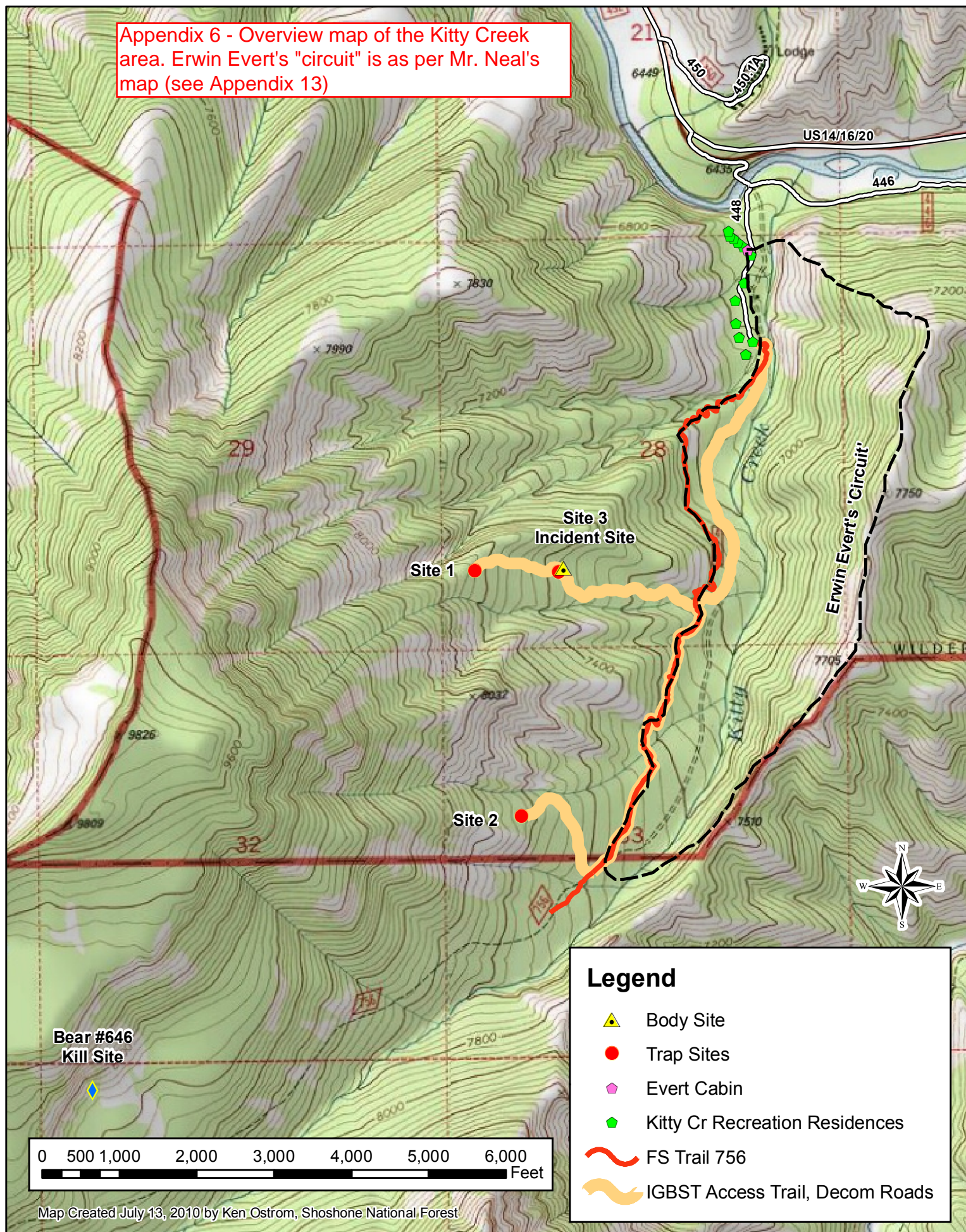
Chuck Schwartz, Team Leader  
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Appendix 5 – Map of Kitty Creek area showing all trap sites





Appendix 6 - Overview map of the Kitty Creek area. Erwin Evert's "circuit" is as per Mr. Neal's map (see Appendix 13)



## Appendix 7 – Statement of Chad Dickinson

### Account of IGBST Trapping Effort in Kitty Creek, SNF – Prepared by Chad Dickinson, 6-20-2010

IGBST members Chad Dickinson and Seth Thompson began research trapping efforts on May 27 2010 in the Kitty Creek drainage of the Shoshone National Forest. The trap sites were approved by both the Shoshone National Forest (SNF) and Wyoming Game and Fish Department personnel.

The IGBST ran one trap site up Kitty Creek from May 27-June 3 2010. UTM 589588 x 4921808 NAD83. This particular trap site did not result in a capture of a grizzly bear during that time period.

This trap site was closed for days off on June 3<sup>rd</sup>. Snares were sprung and the bait and trap site closure signs were left at the site.

Bear activity was noted at this site on June 1 & 2 snares were sprung by a grizzly bear resulting in no capture.

Access to the Kitty Creek drainage was done by horseback. Our IGBST truck and trailer was parked next to the Hwy and we proceeded to ride up a gravel road that also accessed approx. 9 private cabins that were visible from the road. Seth and myself talked with one cabin owner on May 31 regarding our trapping efforts. This gentleman lives in the cabin that is near the trail and is the most southern cabin in that particular drainage.

This gentleman was very nice and expressed interest in what we were doing and said that he hoped that we would be successful in capturing a grizzly bear. (This was not Mr. Evert. He lived in a lower cabin.)

IGBST members Chad Dickinson and Seth Thompson began trapping efforts on June 9 in the Kitty Creek drainage. We reset snares at the site despite having no bear activity at the site while on days off. Our bait was still present from June 3. After resetting we proceeded to ride up the drainage approx. another mile and set one cubby snare. UTM 589772 x 4920839 NAD83.

For clarity we called this site Upper Kitty Creek.

On June 10 while riding back down the old Forest Service road that had been rehabed we spoke with a "dude" ride from the Cross Sabres Ranch that is located just across the highway from Kitty Creek. A gentleman named Ray asked if we had any luck, so he already knew that we were trying to capture bears.

This particular ranch was making small 1-2 hr rides on the old road & were never near our trap sites.

Beginning on June 12 we had grizzly activity at our original Kitty Creek snare site. Both snares were sprung by what looked like a smaller grizzly track. We reset then rode out to the Wapiti FS station and caught up with WGFD personnel Dan Bjornlie, Sam Lockwood and Justin Ciapp. We asked them to ride back in and help set 2 pail snare sets. This particular set they have more experience with setting. Plus we thought this set would not be familiar with the bears we were trying to catch. I decided to have WGFD set the pail sets lower on the ridge from our original site for a "newer" look maybe to the bear. This site was called Middle Kitty Creek, UTM 589925 x 4921827 NAD83. After setting the Middle Creek site closure signs were posted below the site on the old spur road and to the north and south of the spur road.



On June 13 our "new" Middle Kitty Creek site was untouched despite following grizzly tracks from the main road all the way. Our original site was sprung. I decided not to reset the the original site and let the pail snares on the middle site try and work.

On June 14 our pail sets were sprung at the middle site and we decided to pull our original site and concentrate on our middle site now. So basically from June 14-17 we ran the Middle & Upper Kitty Creek sites. The Middle Creek site received bear activity (by sprung snares) from June 14-June 17.

Our IGBST work schedule was going to end on June 17<sup>th</sup> so after that date we planned to be done in the Kitty Creek drainage.

On June 17 we proceeded to check our snares about 1 hour earlier due to the long day ahead plus the weather was cold and windy and the chance for snow was predicted.

We (Seth and myself) started riding from the truck and trailer about 7:30 am. We then checked our Middle Kitty Crk site first and had captured a large male grizzly bear in the pail set. Our other 2 snares were sprung. The darting and handling were uneventful, however 2 hard doses were given to the length of time for tooth pulling and some recovery signs that were earlier than expected. (See capture form for more precise times).

It was decided by myself (Chad Dickinson) that after handling this particular male grizzly bear that the site would be pulled and shut down. This meant all snares pulled and trapping closures signs would be removed. Due to the total lack of human activity in our area I thought this would be a safe thing to do. Seth and myself both commented that due to the weather conditions (spitting snow and cold) that we would think people would not not be out hiking around.

At 12:30 pm I decided that we needed to leave the male grizzly (646) since we had another snare still that needed checked. At this point 646 had his head up and was swaying side to side but would respond to stimulus such as clapping or yelling.

On our ride down to connect to the main trail to our upper site we encountered no human activity.

We arrived at our Upper Kitty Crk site at approx. 1315 hrs and it was concluded that we had another grizzly bear snared.

This looked to be a young grizzly bear.

We did observe large grizzly bear tracks on the trail to the site as well as around the catch circle of the snared small grizzly.

This particular bear turned out to be a 4 yr old female grizzly #628. Had to dart the bear twice due failure of injection of the first dart. Other than that the handling was uneventful.

At 1710 hrs we left GB628 standing and we proceeded down the trail and back to the truck. Upon leaving this upper site we pulled the closure signs and shut that site down.

At approx. 1815 hrs while riding past the lower cabins (closer to the NF River & Hwy) we were contacted by an elderly woman (Mrs. Evert). She asked if we had seen anyone hiking while we were riding. We

said no that we had not. Mrs. Evert said that her husband had gone hiking and was gone longer than expected. Mrs. Evert then asked what we were doing and I responded grizzly bear research and that we were conducting capture efforts in Kitty Creek. After telling this to Mrs. Evert she mentioned that her husband (Mr. Erwin Evert) had told her that he had seen our trapping closure signs before. Upon hearing this from Mrs. Evert I thought it would be prudent to ride back up the trail to our Middle Creek site to see if I could see any sign of Mr. Evert. Mrs. Evert told me his name was Erwin.

Mrs. Evert said her husband had been gone since about 1300 hrs. He had told her he would gone for only an hour or two.

I switched horses with Seth and got on Lemon & then proceeded on a trot to our Middle Kitty Crk site. I told Seth before I left that if was not back by dark to find Dan Bjornlie and his crew and come looking for me.

I rode Lemon up the horse trail that is west of the old Forest Service road trying to cut a track of Mr. Evert. (We had rode down the old FS road and had not seen any human foot traffic on the way down). I did not see any human tracks on the horse trail then I connected to the spur road that we had set our site at. Approx. halfway up the spur road I observed a boot track heading to our site.

I entered our site (yelling considerably) and found Mr. Evert laying next to a tree. I yelled his name "Erwin" a great deal and observed no response. I then trotted Lemon around the site to make sure a bear was not in the immediate area. Upon doing this I rode within a few feet of Mr. Evert and could see that he was face down and the back of his head had considerable trauma. I could also see that most of his back was exposed and his pants were pulled down to expose approx. half of his buttocks. I could not see any breathing and one leg looked to be damaged as well. I did not dismount off of Lemon to check Mr. Evert for vital signs. I was concerned for my own safety and was very convinced that Mr. Evert was indeed dead. I then trotted Lemon back to the first cabin and asked the man there to call 911 & tell them there had been a bear mauling & someone was dead & to call Mark Bruscino as well. I then rode down to Mrs. Evert's cabin and she came out and asked if I had found her husband and I said yes and then she asked if he was alright and I said no that a bear had killed her husband. She broke down crying at this point. (Meanwhile Mark Bruscino was driving back from Jackson Hole & saw Seth near the Hwy & had talked to him, Mark then drove up to Mrs. Evert's cabin, Mark Bruscino was there when I told Mrs. Evert about her husband.) Mark asked me if he was dead and I said yes. Mark B began calling Sheriffs and WGFD personnel. Mark told me to take his truck down to tell Seth and to keep some horses saddled.

I drove down and told Seth and Dan B., Sam L., and Dan T. from WGFD were there as well, they were concerned why we had been gone so long. I asked Dan B. to call Mark Haroldson & tell him the situation. I then left Seth to saddle ATM & drove back up to Mrs. Evert's cabin. She asked me to come in and I broke down crying and gave me a hug. Meanwhile Mrs. Evert's daughter called back to the cabin and asked to speak to me. I spoke with her a few minutes & she said that (her name was Mara) she had spoken with her father (Mr. Evert) that morning and that he had told her that he had interest in what we (the IGBST) were doing up the drainage. She (Mara) did not think he would go up there. She told me that that if she thought he would have done that she would have told him not to. Mara also told me that her father was very "bullheaded" and usually did what he wanted to.



I then had to talk with a Deputy Sheriff and give my contact information. After doing this I was asked by M. Bruscino if I could saddle a third horse so he and the Sheriff could ride up to the site. Mark Bruscino, myself, and a Sheriff's Deputy rode back to the site and found Mr. Evert untouched as before.

Mark Bruscino got off first and found no pulse on Mr. Evert. The Deputy took several photos of the body.

Mark B. and the deputy turned Mr. Evert over and found extensive facial injuries.

I stayed upon my horse Colonel and provided a watchful eye for bears while Mark & the Sheriff conducting the investigation. After the Sheriff was done we rode back down while Search and Rescue was organized.

Once Search and Rescue was briefed Mark B & I thought we could take ATV's into the site to retrieve the body. It was decided by Mark B. & myself that we ride on the ATV's w/ Search & Rescue. Terry Root, District Ranger for the Shoshone National Forest in Cody WY also went in to retrieve the body.

The terrain was deemed to rocky & rough to safely carry passengers on ATVs so myself, Mark B and Terry Root proceeded on foot into the site in front of the ATV's. Mr. Evert's body was once again found intact and Search and Rescue loaded the body into a litter while Mark B & myself provide firearm security. Mr. Evert's body was brought to the trailhead/cabin area at approx. 12:30 am. on June 18.

At no point during the IGBST trapping effort was Mr. Evert observed hiking in the vicinity of our trap sites or on the FS roads or trails. In fact no one was observed hiking in the Kitty Creek drainage during our effort.

*This was an accurate transcription  
of my hand written report*

*Chad Dickinson*  
Chad Dickinson 7-8-10

## Appendix 8 – Statement of Seth Thompson

**Statement in regards to the human fatality that occurred Thursday, June 17<sup>th</sup>. Seth D. Thompson, IGBST contract employee through UM**

### Trapping Operations

On Wednesday, May 26<sup>th</sup>, Chad Dickinson and myself began work in the Kitty Creek drainage on the Shoshone National Forest. Prior permission and approval from the U.S. Forest Service to conduct live capture of grizzly bears for research purposes was obtained. Wyoming Game and Fish personnel, including bear management employees, were also notified that IGBST was conducting research live capture operations in the Kitty Creek drainage. We used horses to access our trapsites and used Aldrich cable foot snares for trap methods in Kitty Creek. An additional trap site using culvert traps was used at the 5 Mile/50 mile carcass dump on U.S. Forest Service land between Mormon Creek and Grinnell Creek. Prior permission was granted for the use of this site and Wyoming Game and Fish personnel were notified. We caught no bears at this 5 Mile culvert trap site between May 26<sup>th</sup> and Thursday June 3<sup>rd</sup>.

In Kitty Creek, we set up one site (Site #1 on accompanying map) consisting of two snare sets. Following normal procedures, we posted numerous signs on the perimeter of the trap Site #1 ranging in distance from the trap site of roughly 50 yds to 100 yards. The paper signs were taped on trees along game trails and former skidder tracks or two tracks. The signs read "Danger" and something to the effect of "bear traps in the area," and "the area behind this sign is closed pursuant to Special Order 97-008 with the Shoshone National Forest. This area closure is effective during the following dates". Chad and I dated the signs accordingly to our trapping plans. Also at the Site #1, we hung extra bait consisting of roadkilled deer or elk quarters. A bottle of liquid scent lure made from fermented cattle blood was also hung at the site. We had bear activity at the site at least two nights during this trapping hitch (May 26<sup>th</sup> through June 3). Both snare sets were sprung but did not capture the bear(s) on both trap nights. Please refer to our trap log as to the dates.

Chad and I went home on days off until Tuesday June 8<sup>th</sup>. We left the Site #1 baited, with traps sprung on days off. Signs remained posted, and the area closed, with effective dates. On our return to Site #1 on Wednesday, June 9<sup>th</sup>, it appeared that there had been no bear activity at the Site #1 on days off. We reset the snares which were sprung a few days later, with no bear(s) being caught at Site #1. Having thus far been unsuccessful at capturing a bear at Site #1, Chad and I opted to set up a second trap site (Site #2 on accompanying map) to increase our odds and trap opportunity.

Site #2 consisted of one snare set, a few additional pieces of bait hung in trees, and numerous signs posted on the perimeter of the trap site. This site, and all three sites in this report, were located well away from the main trail. Signs were posted opportunistically in a visible manner around all trap sites. We had no activity at Site #2 until Tuesday, June 15<sup>th</sup>, when the snare was sprung with no bear captured. We moved the snare set to a different tree on June 16<sup>th</sup>.

With our unsuccessful attempts to capture a bear at Site #1, we chose to set up a new trap site (Site #3 on accompanying map). We had seen a bear in the vicinity of Site #3 one day on our ride out of Site #1. Site #1 was cleaned up by pulling our snare sets, removing all bait and lure, and removing our closure signs.

For Site #3, we asked Wyoming Game and Fish research trappers Dan Bjornlie, Justin Clapp, and Sam Lockwood to assist and accompany us. They helped us build some snare sets at Site #3. These sets were subsequently sprung. Chad and I added 2 more additional sets at Site #3 in an effort to capture the

bear(s). So, there were upwards of four snares set at Site #3. At Site #3, signs were posted opportunistically in a visible manner on the perimeter of the trap site.

#### Personal Contacts/Human Activity up Kitty Creek

Throughout our working period in Kitty Creek (roughly May 26<sup>th</sup> through June 17<sup>th</sup>) we encountered no hikers. We also saw no evidence of human foot traffic along trails or at our trap sites. We did encounter two horse parties during the first work session. A man from the second horse party identified himself as "Ray" and worked out of the Crossed Sabres Guest Ranch/Lodge. Chad and I did not introduce ourselves, but Ray knew what we were doing. These two horse parties were the only human activities we witnessed up Kitty Creek.

We did interact with some local cabin owners. The owners of the cabin furthest up the drainage spoke to us regularly. They often stopped us as we passed their cabin to ask if we were successful. We informed them of what we were doing and they expressed their support for what we were doing and why. I seem to recall their names as Ron or Roger and Mary Anne Dahlquist. They knew we were live capturing grizzly bears. Our interactions with them were always pleasant. We often waved at numerous other cabin owners who were on their porches, in their yards, or otherwise near the cabins, or in their vehicles on the Kitty Crk. Road between the cabins and the main N. Fork Highway.

#### Thursday, June 17<sup>th</sup>

On the night of the 16<sup>th</sup>, Chad and I had 1 snare set at Site #2, and 3 at Site #3. Due to our lack of success thus far, we were not optimistic about capturing a bear that day at either trap site. The weather was miserable, cold, and windy with intermittent snow showers of varying intensity. We saw no sign of human activity during our approach of Site #3, the first site we visited that day.

Upon our arrival to Site #3, we saw we had captured what appeared to be an adult male grizzly bear. The two other snares were sprung. Chad and I prepared our capture gear and equipment from a safe distance but with the bear in view. Chad drew up 5 cc's of Telazol and injected it into the dart. We approached the bear with Chad on the dart pistol and myself on a 12 GA shotgun for personal defense. Chad darted the bear who went into anesthesia within the normal induction time for Telazol. The handling and anesthetic event were both unremarkable. We followed IGBST handling protocol, monitoring the bear's vitals throughout anesthesia as we collected samples and took measurements. The bear was collared with a VHF collar. The bear received two additional injections of Telazol by hand totaling 2.2 cc's. This was done to maximize the bear's time under anesthesia, allowing Chad and I ample time to complete the handling and still load our gear and manage horses safely. The bear was not wearing a collar when captured and was otherwise unmarked indicating to us that the bear had no known capture history or known conflicts with humans. We aged the bear at about 10 years old. He weighed approximately 430 lbs. The bear received 12 cc's of Tetradur antibiotics by hand injection. After we completed the handling event, we began packing our gear, while watching the bear recover.

As the bear recovered from the anesthesia, we made noise to stimulate the bear. This helped Chad and I assess the bear's waning level of anesthesia. I continued to pack up gear in preparation to load the horses and leave the site. Chad went around and pulled the signs from the site. Prior to and during this time Chad and I both worked to remove snare sets and clean up any bait or scent lure from the site. This was the final day of this trapping session and we knew we would not be returning for another trapping stint in the Kitty Creek drainage. We also felt that since we had seen no hikers in the drainage

since we began our operations on May 26<sup>th</sup> and only two horse parties who stayed on the main trail that we were justified in our actions. We also felt that the unfavorable weather conditions would curtail human activity that day.

We loaded the horses and mounted and continued to watch the bear and stimulate it with noise. The bear was swaying its head laterally and tongue lolling typical of a bear recovering from Telazol. After awhile, we approached the bear from the relative safety of horseback. The bear could focus on us with its head up and it was beginning push up on its front legs. We were satisfied with the bear's recovery process and it was prudent for us to leave the site before the bear was fully ambulatory. We left the bear and trap Site #3 at about 12:30 p.m.

We arrived at Site #2, where we had captured a 4 yo female. She was a recapture and was bear #628. Her capture and handling event were likewise unremarkable. We had less sampling and procedure for a recaptured/known bear. We replaced her VHF collar with a new one. Younger bears typically metabolize Telazol faster than adults, so she began to recover quickly. We began to load our gear, again stimulating the bear to assess level of recovery. We again mounted our horses after having cleaned up the site, removing signs, snares, and all bait and lure. Bear #628 began to become ambulatory around 5:00 p.m. and we left the site.

At around 6:00 p.m. we arrived at the cabins and started down the road towards our truck and trailer. A lady approached us from one of the cabins and motioned for us to approach. She asked if we had seen a hiker, her husband. We had not, nor had we seen any sign of him. She explained that he hikes regularly but always returns when he said he would but was long overdue. She said he left at around 1:00 p.m. that afternoon and usually goes up this ridge. (She motioned towards the ridge that leads into our trap site). She also asked what we were doing and we told her. She mentioned her husband had seen our "dangerous bear" signs and was curious about what it was for. Chad told me to ride on to the truck with the two pack horses. He told me to call or get help if he did not return by dark. Chad and I swapped horses as my horse was more reliable away from other horses. Chad said he would ride first to Site #3. I went on to the trailer and unloaded and unsaddled the horses, when Wyoming Game and Fish Bear Manager Mark Bruscino pulled up. I explained to him the situation and he drove over to the cabins to walk in on foot. He must have met Chad at the cabin and Chad drove Mark's truck back to the trailer to inform me that he had found the missing man at Site #3 face down, mauled, and roughly 20 yards from where the bear was left. I resaddled one of the horses and took it to the cabin where the second saddled horse was. The Sheriff was called and Search and Rescue was notified and en route. As I road up to the cabin, the lady emerged from the cabin and thanked me and Chad for our help and response. I asked her, "Ma'am, are you ok?". She said "I'll be OK, and here come my friends." The Sheriff had arrived and along with Mark Bruscino were preparing to mount the two horses I had. Chad was at the trailer saddling a third horse and bringing up the fourth. The three of them were going to ride into the Site #3, to assess the victim, watch for the bear, and take photos of the scene. I remained behind to manage the fourth horse and help direct Search & Rescue personnel to the site as they arrived.

I did not converse with the lady again. The friends she referred to were, among two women, a man I later found out whose name was Chuck Neal. Mr. Neal approached me shortly after his arrival. He mentioned that the victim had called him to say he'd seen our closure/danger signs and was curious what was going on. Mr. Neal asked me if we were hair-snaring for DNA analysis. I told him no, that we were live capturing bears for research. That was the end of my conversations with anyone other than Wyoming Game and Fish or U.S. Forest Service personnel about the incident that day. I either managed the remaining horse or sat in a WY Game and Fish vehicle until the rescue party had recovered the body

and Chad arrived with the horses. I helped Chad manage the horses and get them back to the trailer, then we went back to Wapiti Ranger Station, where we had been staying for the duration of our trapping operations on the Shoshone National Forest.

Respectfully submitted,

Seth Thompson, 6-19-2010

*This is an accurate transcription of  
my hand-written report -*

*Seth Thompson*

*7-8-2010*

## **Investigation Report Grizzly Bear Caused Death of Erwin Frank Evert**

Prepared by:  
Mark Bruscino  
Bear Management Program Supervisor  
Wyoming Game and Fish Department  
2820 State Highway 120  
Cody, WY 82414  
[mark.bruscino@wgf.state.wy.us](mailto:mark.bruscino@wgf.state.wy.us)  
307-899-8157

9 July 2010

*This report details only the involvement, actions, and observations made by the Wyoming Game and Fish Department (Mark Bruscino and the personnel working under his direction) into the investigation of the death of Erwin F. Evert and the removal of grizzly bear 646. This is not a comprehensive report of the investigation of the incident that resulted in Mr. Evert's death.*

On June 17, 2010 at about 1815 hours, I stopped to talk to U.S. Geological Survey, Interagency Grizzly Bear Study Team (IGBST) employee Seth Thompson while he was parked at the junction of U.S. Highway 14-16-20 and the Kitty Creek Road. This location is approximately 9 miles east of the East Gate to Yellowstone National Park on the Shoshone National Forest. Thompson advised they captured one adult male grizzly bear (#646) and one adult female grizzly bear (#628) earlier that day and radio collared them for monitoring purposes. I asked him where Chad Dickinson (IGBST employee) was and he advised a woman staying at a cabin on Kitty Creek had reported her husband overdue from a hike. According to Thompson, Dickinson had gone looking for him on horseback. I told Thompson that I would go to the cabin site to see if I could be of assistance.

At about 1830 hours, I met Yolanda Evert who was standing east of her cabin. She explained that her husband was overdue from a hike. Mrs. Evert said he had left early in the afternoon and he usually returned in a few hours and she felt something may have happened to him. She said Dickinson had gone up the trail looking for him. Yolanda Evert said Erwin Evert knew the area well, as they have owned the cabin there since 1970, and had hiked there many times. She stated that Erwin Evert knew the IGBST was working up Kitty Creek trapping bears and he had gone to see what they were doing. Yolanda Evert and I went into her cabin at 23 Kitty Creek Road and at about 1845 hours, I called the Park County Sheriff's Office (PCSO) to notify them that Erwin Evert was overdue. While I was relaying the information to the dispatcher, the dispatcher advised they had just received a phone call from a person staying at the last cabin on Kitty Creek advising a man had been killed by a bear in the Kitty Creek drainage.

At about 1850 hrs, Dickinson rode up to the cabin and advised he found Evert, he was dead, and he had been killed by a bear. I contacted PCSO to advise them I was with the person who found Evert and they advised Deputy Mike Pennell was responding to our location. Dickinson stated that Evert's body was near the trap site where they had captured and released an adult male grizzly bear earlier in the day. Yolanda Evert stated several times that her husband, Erwin Evert, knew that bears were being trapped up the drainage and he wanted to check out what they



(Dickinson and Thompson) where doing. She also asked several times, “Why did he have to go up there?” I contacted Wyoming Game and Fish Department (WGFD) Regional Supervisor Gary Brown and advised him of the incident. I contacted WGFD Bear Management Program employee Luke Ellsbury and advised him to come to our location in case we needed help. I asked Yolanda Evert if she had friends in town that she could call to come to the cabin and be with her. She called Chuck Neal from Cody and he arrived at the cabin at about 2000 hrs.

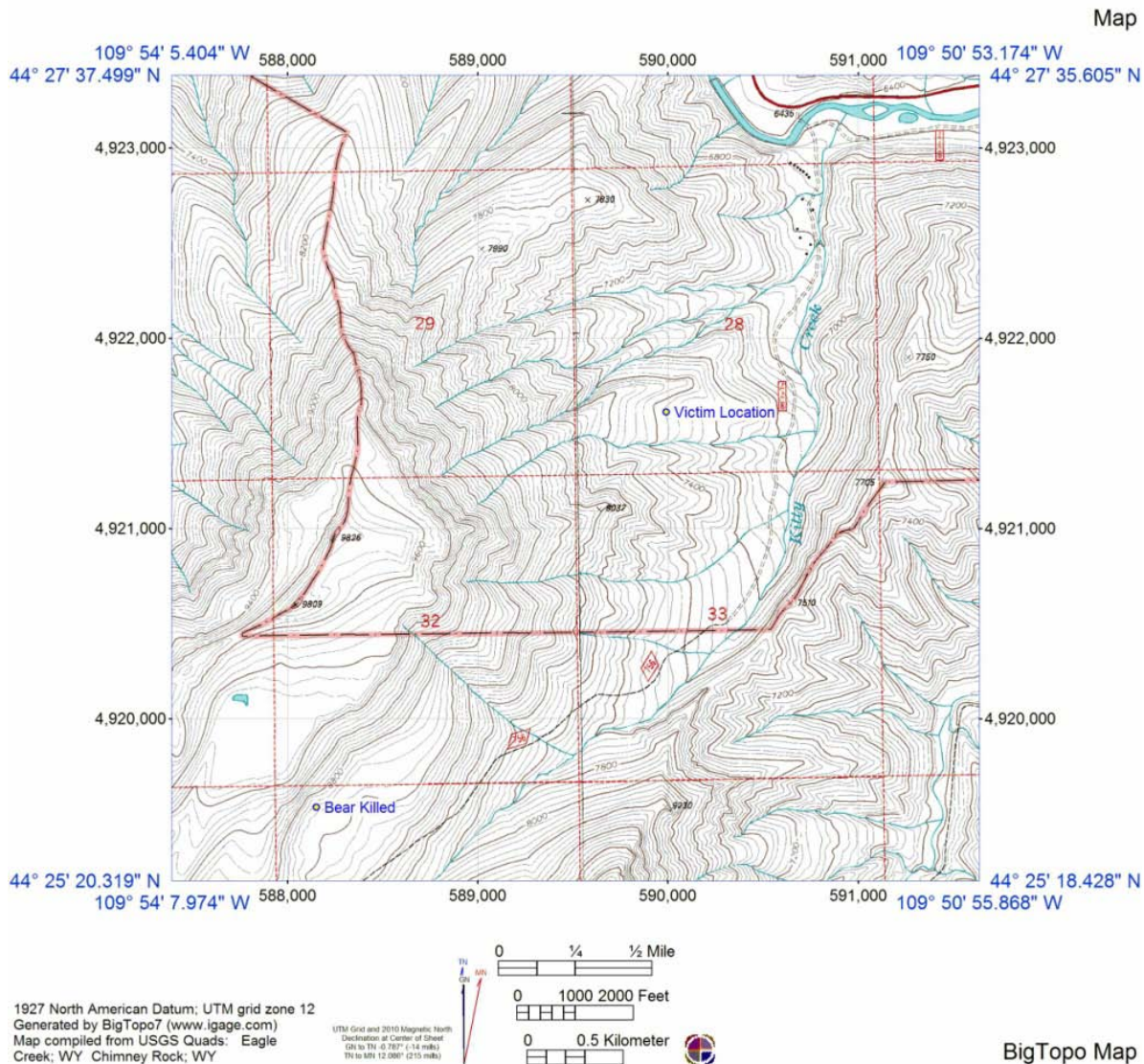


Figure 1. Map of the attack location, cabin sites, and the location where bear 646 was killed.

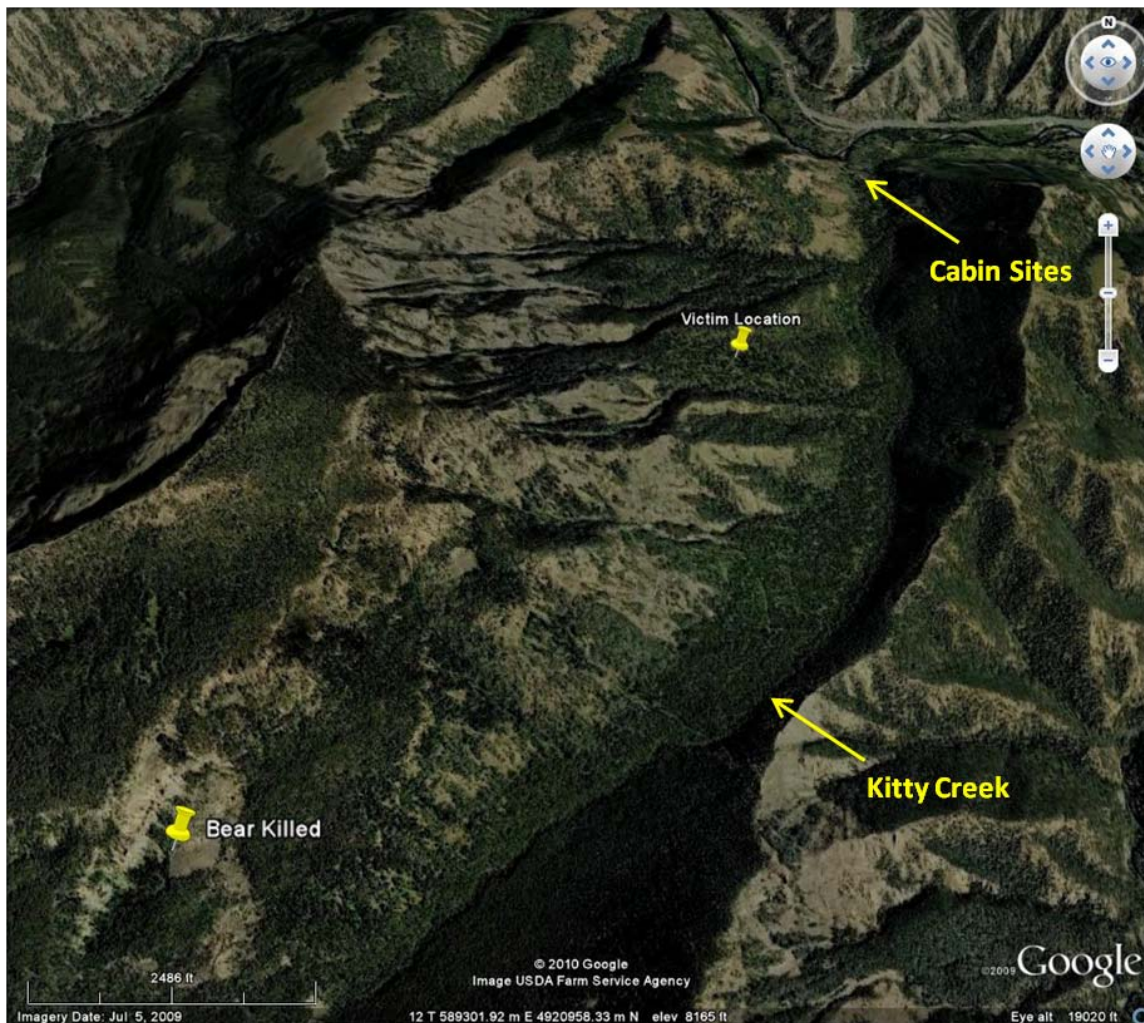


Figure 2. Aerial photo of the attack location, cabin sites, and the location where bear 646 was killed.

At about 1930 hrs, Deputy Pennell arrived at the Evert's cabin and recorded preliminary information from Dickinson, Yolanda Evert, and I. We decided to ride horseback to the location of the victim before it got dark to confirm Evert was deceased and so Pennell could begin his investigation. At about 2030 hrs, Dickinson, Pennell, and I arrived at the scene (589934 E 4921822 N Z 12 N METERS NAD83) and confirmed that Evert was dead (Fig. 1 and 2). Evert was positioned face down and had multiple wounds to his body consistent with a bear attack. Deputy Pennell took several photos of Evert in the position we found him, then I turned Mr. Evert over at the request of Pennell and he took several more photos. Deputy Pennell made field notes of his observations while Dickinson and I watched for bear activity. Dickinson pointed out the snare tree where they had captured bear 646 earlier in the day. The tree was about 21 yards south of Evert's body. We left Evert's body at the location and rode back to the cabin area.

That evening, WGFD employee Gary Brown discussed the incident with the Evert family friend Chuck Neal. Brown's discussion with Neal is documented in Attachment 1.



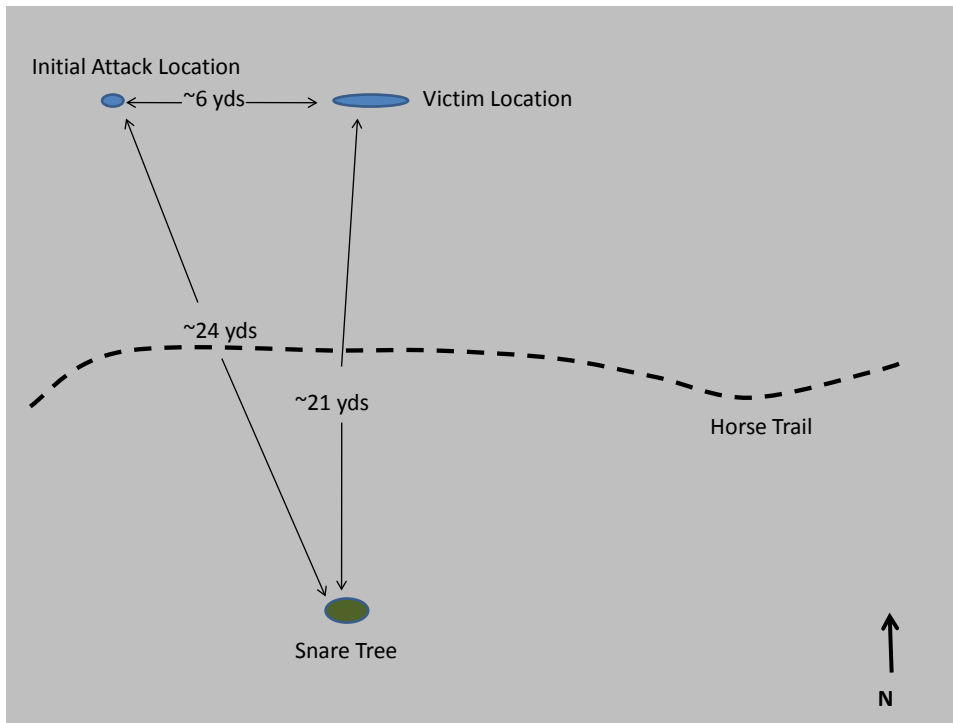


Figure 3. Schematic diagram of the incident site.

After dark, Dickinson, U.S. Forest Service (USFS) employee Terry Root, and I accompanied Park County Search and Rescue team members back to the scene to recover Evert's body. Evert was in the same position as when we had left him before dark. It did not appear that any animals had disturbed his body. Search and Rescue personnel removed Mr. Evert's body and I collected Mr. Evert's blue knit hat before leaving the scene. The hat was about 4 yards west of his body. The body was recovered to the cabin area at about 0020 hrs on 6/18/10. Blood and tooth samples from bear 646 were obtained from Dickinson and Thompson before we left the area.

At about 0600 hrs on 6/18/10, I contacted Dee Dee Hawk, Wyoming Game and Fish Department Forensic Lab Supervisor, to advise her we would be getting samples to her later in the day and to discuss with her procedures for collecting samples from the victim. I requested that the lab try to make a genetic comparison of bear hair we anticipated collecting from the victim with blood samples collected from bear 646 by Dickinson and Thompson.

At about 0800 hrs on 6/18/10, WGFD employees Chris Queen and Brian Nesvik examined Evert's body at the office of Tim Powers, Park County Coroner, and collected numerous bear hairs from the victim and his clothing. In addition, they collected several saliva swabs from wounds on the body for DNA comparison to blood samples obtained from bear 646 by IGBST personnel. During a gross scale examination of the body, Queen and Nesvik observed numerous puncture wounds, lacerations, and bruises to Evert's body. They collected Evert's clothing for forensic purposes. The samples of blood, clothing, and hair were transported to the WGFD's Forensic Lab in Laramie, arriving at the lab at about 1900 hrs.

At about 1200 hrs on 6/18/10 Tim Eicher, acting USFWS Resident Agent In Charge for Wyoming and Montana, Trampas Barhaug, USFS Law Enforcement Officer, Luke Ellsbury

(WGFD) and I returned to the attack site to further investigate the incident. The location was about 0.42 miles west of the Forest Service Kitty Creek Trail in an area that had been logged many years ago. What appeared to be the initial attack site, consisting of blood and matted grass, was about 6 yards west of where the victim was found dead. This location was about 24 yards north of the snare tree. There was a slight blood trail from this location to about 2 yards to the east, where a pair of broken prescription eyeglasses were located and near the location where I recovered the hat the previous night. The blood trail continued east for 1 additional yard (equidistant from the initial attack site and the victim's location) where a hair comb was located. The location where we found the victim the night before was 3 more yards to the east. The blood trail had tufts of human hair scattered along it in several locations beginning near the initial attack site (Figure 4). The location of the victim was about 21 yards north of the snare tree and almost directly under a tree that the IGBST personnel had previously hung a call bait (Figure 5). We recovered glasses and a comb. At about 1300 hrs, we were able to locate grizzly bear 646 about ½ mile east of the incident site on the east side of Kitty Creek. We left the area at that time and returned to Cody.



Figure 4. Attack site with location of the victim and his possessions.



Figure 5. Photo of the snare tree location taken from where the victim was initially found.

I contacted Chris Servheen, USFWS Grizzly Bear Recovery Coordinator, and we decided to remove bear 646 if given the opportunity. I contacted USDA-Wildlife Services (WS) and asked them to be available with their aircraft in the morning to assist with the removal of bear 646 if we determined it was appropriate. On the evening of 6/18/10, Luke Ellsbury and I set one box trap at the end of the Kitty Creek Road about ½ mile north of 646's location. We made a scent drag with a dead deer from near 646's location to the trap site. We encountered a small, unmarked grizzly bear while we were making the scent drag. This bear was not suspected as being involved in the Evert fatality.

At approximately 2000 hours on 6/18/10, Brian DeBolt and Zach Turnbull, Bear Management Officers for the WGFD, along with Luke Ellsbury set one more box trap near the location of the trap set by Ellsbury and Bruscino earlier that evening.

On the morning of 6/19/10, we checked both traps on the Kitty Creek Road but did not have a bear captured. The radio collar signal from bear 646 was weaker and appeared to be further up the Kitty Creek drainage. I requested WS remove the bear with the aid of their helicopter. At about 0715 hrs, they shot and killed grizzly bear 646 about 1.7 miles southwest (588092 E 4919745 N Z 12 N METERS NAD83) of the attack site. WGFD employees Brian DeBolt and Luke Ellsbury were flown to the site and recovered the head, paws, stomach contents, and the radio collar from the bear. The remainder of the carcass was left in the field.

At about 1400 hrs, Dee Dee Hawk (WGFD) telephoned me and advised that the DNA extracted from the blood samples taken from bear 646 matched the DNA obtained from the bear hair taken from Evert's body, linking bear 646 to Evert's death (Attachment 2).

*The production of this narrative concludes the WGFD's involvement in the field investigation of the grizzly bear caused death of Erwin F. Evert. This document will be updated if additional information becomes available.*

## **Attachment 1**

### **Report from WGFD Employee Gary Brown**

Approximately 18:45 on 6/17/2010, officer Brown received a call from Mark Bruscino that a grizzly bear had attacked and killed a subject in Kitty Creek earlier in the day. Mark asked that I come to the scene and assist. When I arrived at the scene Bruscino, Chad, and a Park County Sheriff's Deputy Pennell were headed into the scene. I stayed near the victim's cabin until search and rescues arrived.

Shortly after I arrived, Chuck Neal came to the cabin. He said he was a family friend and had been called by the family. He then went into the cabin. He came out a short time later and we spoke. Neal said that Everett had been in Bozeman earlier in the day, came back to the cabin about noon. He saw the bear team going up and followed at about 15:00 hours. He was only going to be gone for a couple of hours. When he didn't return, Mrs. Everett stopped the bear team coming out and asked if they had seen him. They hadn't and Chad returned to look for him. Neal said that Ervin had called Neal about a week previous and said he had seen signs warning of a dangerous bear and wondered what that was all about. Neal told him that they were probably trapping bears in the area and that he should stay out of the area. He didn't understand why he would go into the area, when the wind was blowing so hard. Neal said, like me, Everett never carried spray or a firearm with him. He was not very experienced around bears.

After search and rescue arrived I moved up to the trailhead and waited until Bruscino returned. After he returned, a recovery effort was launched. Once the body was recovered, I left the scene.

**Attachment 2**  
**Laboratory report of the DNA analysis of samples taken  
from bear 646 and bear hair from Erwin Evert's body.**



**WYOMING GAME AND FISH DEPARTMENT**

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**LABORATORY EXAMINATION REPORT**

LAB NO.  
10-27-W-CAF

DATE:  
June 28, 2010

**SUBMITTER:** Mark Bruscano  
Trophy Game Biologist/Warden

**EXAMINERS:** Kim Frazier  
Tasha Bauman

**AGENCY:**  
Wyoming Game & Fish Dept.  
2820 State Hwy 120  
Cody, WY 82414

**TECHNICAL REVIEW:** Dee Dee Hawk  
**CASE NO.:** N/A  
**PURPOSE:** Microsatellite matching of  
the submitted items.

**EVIDENCE RECEIVED:**

Kim Frazier, Forensic Specialist, received numerous swabs, clothing items and hair samples from Scott Becker, WGFD, on June 18, 2010. The following items were tested:

- Item #1: "Blood & hair from male Grizzly Bear-Kitty Creek-collected by IGBST on 6/17/10"
- Item #2: "Blood & hair from female Grizzly Bear #628-Kitty Creek-collected by IGBST on 6/17/10"
- Item #3: "Bear hair samples recovered from Erwin Everett"
- Item #4: "Bear hair samples recovered from Erwin Everett"
- Item #5: "Bear hair samples collected from sweater off of Erwin Everett"
- Item #6: "Swab of bite wound from body of Erwin Everett- right thigh"
- Item #7: "Swab of bite wound from body of Erwin Everett- right arm"

**EXAMINATIONS CONDUCTED:**

Extracted DNA was used in the polymerase chain reaction (PCR) for microsatellite matching of the submitted items.

**RESULTS AND CONCLUSIONS:**

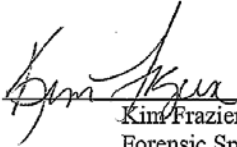
- 1) Items #1 and #3-5 resulted in identical genotypes (genotype A); this is consistent with the items originating from the same male grizzly bear.
- 2) Item #2 resulted in genotype B and originated from a female grizzly bear.
- 3) Items #6 and 7 were non-reactive.

10-27-W-CAF  
June 28, 2010  
Page 2 of 2

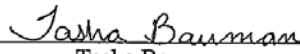
**DISPOSITION OF SAMPLES:**

Items are retained in the custody of the examiners.

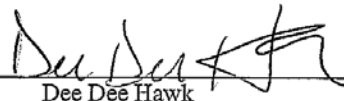
**SEROLOGY AND DNA EXAMINER:**

  
\_\_\_\_\_  
Kim Frazier  
Forensic Specialist

**SEROLOGY AND DNA EXAMINER:**

  
\_\_\_\_\_  
Tasha Bauman  
Forensic Analyst

**TECHNICAL REVIEW:**

  
\_\_\_\_\_  
Dee Dee Hawk  
Laboratory Director

cc. G. Amrine  
S. Talbott  
B. DeBolt  
file





## PARK COUNTY SHERIFF'S OFFICE

## CAD INCIDENT REPORT

100617172

Page 1

6/28/2010

Location 23 FOREST SERVICE RD 448				Cross Streets NORTHFORK HWY		City CODY											
Incident Type BODYFOUN - BODY FOUND				Call Taker PARISI, PATTY		Dispatcher PARISI, PATTY											
Date 6/17/2010	Priority 1	Primary Unit 1112	Beat S1	Fire Zone	Area 4	Map 52108	Source 9-1-1 CALL										
Caller Name LONNIE GAMBRIEL				Caller Address 115 Lane 16, Cody			Caller Phone [REDACTED]										
Dispositions See Case				Weapon		Alm Level	Case Number 10-791										
Vehicles				Associated Incidents 100617174													
Incident Times		Special Circumstances															
Received 18:42:59		On Shoshone Forest															
Created 18:48:20																	
Dispatched 18:49:49																	
En Route 18:49:49																	
On Scene 19:28:08																	
Closed 00:46:47																	
Rcvd-Closed 6:03:48																	
Unit Times		Officer		Dispatched		Enroute		On Scene		Clear		Disp-On Scene		On Scene-Clear		Disp-Clear	
1112		Pennell, Mike		18:49:49		18:49:49		19:28:08		19:02:51		N/A		N/A		13:02	
1112		Pennell, Mike		19:04:59		19:04:59		19:28:08		00:46:47		23:09		5:18:39		5:41:48	
1125		Coroner		22:13:02		22:13:02		00:18:14		00:46:41		2:05:12		28:27		2:33:39	

## Incident Comments

Rp. calling from #49 Kitty Creek Rd - phone # 587-0205 is informed by someone on horseback that someone has been killed by a bear in the Kitty Creek drainage approx 2 miles up the Kitty Creek Trail. \*\*\*\* PHONE # FOR CABIN #23 is 587-5031 \*\*\* GF61 is present at cabin

TIME	EVENT
18:48:20	Incident initiated at 49 Forest Service Rd 448, Cody
18:49:49	1112 ENRT. 49 Forest Service Rd 448, Cody
18:50:34	1112 has been called out from off-duty status
18:58:13	Mark Bruscino, G & F, called minutes earlier to report that a Erwin
18:58:13	Evert, 70 yo male who is a part time resident at cabin #23 on Kitty
18:58:13	Creek Rd, was overdue from his hike. Everts wife said he left around
18:58:13	1245 hours
19:00:00	1101, 1102, 1106 all advised of the situation
19:02:51	1112 CLR. Freed
19:02:51	1112 Incident returned to pending status
19:04:59	1112 ENRT. 49 Forest Service Rd 448, Cody
19:05:34	1101, 1102 notified
19:05:48	1112 EVERT, ERVIN F (02/13/1940) added to incident
19:05:55	1112 EVERT, YOLANDA (03/02/1938) added to incident
19:09:23	Duplicated incident as incident 100617174
19:10:57	1142- Mark Bruscino, GF61, stated that horseback rider who found body is
19:10:57	Chad Dickenson from USGS, and was about 2 miles up the Kitty Creek
19:10:57	trail and is fairly sure that the body is that of the overdue hiker
19:10:57	based upon description obtained from the wife and that the injuries were
19:10:57	extensive
19:11:13	*
19:11:13	Per 1112 SAR paged and 1125 notified
19:11:13	*
19:13:45	Location changed from 49 Forest Service Rd 448, Cody
19:13:45	to 23 Forest Service Rd 448, Cody

JULY 8TH  
MEETING @ 8:00  
BIG HORN BANK

TIME	EVENT
19:15:26	1112 BRUSCINO, MARK THOMAS (01/27/1959) 100680362/WY added to incident
19:17:57	1101 contact Ranger Terry Root and was given permission to cut chain and
19:17:57	enter Rd
19:22:44	*
19:22:44	1101 advised 1112 that he spoke with the USFS supervisor and they have
19:22:44	permission to use whatever motor vehicles they need to get access as
19:22:44	well as cut any locks that may be barring access.
19:22:44	*
19:22:44	1112 advised to have SAR to bring a large pair of bolt-cutters
19:22:44	*
19:28:08	1112 ARRIV.
19:32:27	*
19:32:27	1112 advised 300 to stage at the last gate up Kitty Creek, may not be
19:32:27	able to drive to the location. 1112 is going in with G & F on
19:32:27	horseback.
19:32:27	*
19:35:29	1112 DICKENSON, CHAD added to incident
19:38:03	1112 Case number PCSO 10-791 assigned to 100617172
19:43:51	*
19:43:51	1112 advising 300 that the USFS has said there will be no driving to the
19:43:51	location due to the rough terrain
19:43:51	*
19:43:51	1112 requesting portable lights
19:43:51	*
20:02:34	Mart is responding up there handling operations: Kitty Creek
20:02:34	Operations. Cell px of 272-0306. The team is getting ready to respond
20:02:34	from the hall shortly.
20:02:34	*
20:26:15	300 advised Kitty Creek Operations that the team has deployed with full
20:26:15	equipment, 8 people.
20:26:15	*
21:22:06	1112 is now with Kitty Creek Ops. They are going back to get 1112's
21:22:06	vehicle and the team will probably be there by then. 1112 has
21:22:06	transferred Incident Command to Kitty Creek Ops; he will now be IC and
21:22:06	Ops.
21:22:06	*
21:23:13	Team Alpha is arrival at staging.
21:23:13	*
21:46:45	1125 notified and will be responding
21:46:45	*
21:52:42	Teams are headed up trail, 4 SAR and 4 USFS personnel
21:52:48	*
22:13:02	1125 ENRT. 23 Forest Service Rd 448, Cody
22:13:26	1125 is approx 35-40 minutes out
23:33:03	*
23:33:03	Kitty Creek Ops advised team is on it's way back down ETA 45 minutes.
23:33:03	*
[ 6/18/2010 ]	
00:17:55	1112 Victim has been recovered, Coroner has custody of body.
00:17:55	1112 *
00:17:55	1112 *
00:18:05	1112 ARRIV. VICTIMS HOUSE W/ CORONER
00:18:14	1125 ARRIV. HAS CUSTODY OF THE BODY
00:46:30	1125 ARRIV. STILL ON SCENE W/ FAMILY
00:46:41	1125 CLR. Freed
00:46:47	1112 CLR.
00:46:48	1112 Closed - Disposition SC



TIME	EVENT
01:39:31	*
01:39:31	HS1 ADVISES THE TRAILHEAD UP TO THE SCENE IS CLOSED PER GAME AND FISH
01:39:31	THEY (GAME AND FISH) WILL BE SEARCHING FOR THE SUSPECT BEAR IN THE A.M.
01:39:31	*
01:40:11	1125- BACK IN TOWN
01:40:11	*
01:45:03	1112 Requested the following notation be added:
01:45:03	DICTATED TO BFLOREZ FROM M.PENELL VIA PX-
01:45:03	"TIM POWER CONCURED WITH DEPUTY PENNEL THAT THE WOUNDS TO THE HEAD, WERE
01:45:03	FATAL WOUNDS."
01:45:03	*

## Appendix 11 – Park County Sherriff's Office Incident Report

## PARK COUNTY SHERIFF'S OFFICE



1402 RIVER VIEW DR CODY, WY 82414 307-527-8700

Page 1

## INCIDENT REPORT

10-791

Offenses BODYFOUN		Description BODY FOUND		Fel/Misd	Date Occurred 6/17/2010	Time Occurred 1245 - 1815	Date Printed 6/28/2010
					Date Reported 6/17/2010	Time Reported 1848	Time Printed 14:19:48
					Related Cases		Incident # 100617172
Location Kitty Creek, 23 Forest Service Rd 448, Cody, WY 82414				Beat S1	Area 4	Disposition Information Only	
Dispo Date 6/18/2010							
Location Type Other	Location of Entry	Method of Entry	Point of Entry	Alarm System	Means of Attack (Robbery)		
Victim Name Evert, Erwin Frank				Means of Attack (Assaults)			
Residence Address 1476 Tyrell, Park Ridge, IL 60068				Residence Phone [REDACTED]	DOB [REDACTED]	Age 70	Sex M
Business Name and Address				Business Phone 307-	Height 5'11"	Wt 160	Race W
Assistance Rendered/Victim Disposition Taken To Coroner				Transporting Agency Tim Power			
Description of Injuries Fatal				Other Information Killed in Bear Attack			
Reporting Party Bruscino, Mark Thomas							
Residence Address 1043 Lane 11, Powell, WY 82435				Residence Phone 754-5081	DOB [REDACTED]	Age 51	Sex M
Business Name and Address Wyoming Game & Fish, 2820 WY Hwy 120, Cody, WY 82414				Business Phone 527-7125	Height 5'11"	Wt 190	Race W
Suspect Name				Action Taken	Charges		
Residence Address				Residence Phone	DOB	Age	Sex
Business Name and Address				Business Phone	Height	Wt	Race
Identifying Features				Arrest Number	Drivers License		
Status		Vehicle Make and Model		License/State	Vehicle Type		
No.	Status/Disposition	Property Description			Value	Val Recovered	Val Damaged
Solvability Factors Informant Information							
Prepared By 1112 - Pennell, Mike		Date 6/17/2010	Assisted By		Approved By 1106 - Patterson, Dave		Date 6/19/2010
Routed To		Date	Routed To		Date	Notes	

**PARK COUNTY SHERIFF'S OFFICE**

1402 RIVER VIEW DR CODY, WY 82414 307-527-8700

**INCIDENT REPORT**

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10-791

**Contacted**

Dickinson, Chad Aron

**Residence Address**

2327 University Way, #2, Bozeman, MT

**Residence Phone**

[REDACTED]

**DOB**

[REDACTED]

**Age**

[REDACTED]

**Sex**

M

**Race**

W

**Business Name and Address**

Us Geological Survey, 2327 University Way Suit 2, Bozeman, MT

**Business Phone**

[REDACTED]

**Height**

6'2"

**Wt**

185

**Hair**

BRO

**Eyes**

BRO

**Contacted**

Evert, Yolanda

**Residence Address**

23 Kitty Creek, Cody, WY 82414

**Residence Phone**

[REDACTED]

**DOB**

[REDACTED]

**Age**

[REDACTED]

**Sex**

F

**Race**

W

**Business Name and Address****Business Phone****Height****Wt****Hair**

GRY

**Eyes****Contacted**

Power, Timothy Lee

**Residence Address**

4112 Carter Mountain Dr. Cody, WY 82414

**Residence Phone**

[REDACTED]

**DOB**

[REDACTED]

**Age****Sex**

M

**Race**

W

**Business Name and Address**

Ballards Funeral Home, 636 19TH Street, Cody, WY 82414

**Business Phone**

[REDACTED]

**Height**

5'11"

**Wt**

180

**Hair**

GRY

**Eyes**

HAZ

**PARK COUNTY SHERIFF'S OFFICE**

1402 RIVER VIEW DR CODY, WY 82414 307-527-8700

**NARRATIVE**

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10-791

On Thursday, June 17, 2010, at approximately 1930 hours, I arrived at Kitty Creek Drainage, within the Shoshone National Forest, Forest Service Road 448, Cody, Wyoming. This response was in reference to a report of an overdue hiker, and also a deceased person, located in the wilderness area Southwest of Kitty Creek.

I observed that Kitty Creek, Forest Service Road 448 is located South off of Wyoming Highway 14-16-20 West, at mile post eight point five (8.5).

Upon arrival I responded to cabin number twenty three (23), and met with Yolanda Evert, who is the wife of the overdue hiker, Erwin Frank Evert. I also met with Chad Aron Dickinson, of the United States Geological Survey, Inter Agency Grizzly Bear Study Team. I conducted interviews with both subjects, and was able to gain the following reconstruction of events.

On Thursday, June 17, 2010, at approximately 0730 hours, Chad Aron Dickinson, and his team arrived at one of several Grizzly Bear snare capture sites that they are conducting within the Kitty Creek Drainage. Upon arrival, an adult male grizzly Bear was in fact snared at this site. The Bear was tranquilized, and medical tests were conducted, along with radio collaring of the bear. At approximately 1230 hours, the team had completed its work at the site, and left the area to check other snare sites. At this point the Bear was still at the site, coming out of the affects of being sedated. At approximately 1245 hours, Erwin Frank Evert informed his wife, Yolanda Evert, that he was going for his daily hike, and would return in three (3) hours. Erwin Frank Evert when hiking did not carry a firearm, Bear spray, or Bear bells. When Erwin Frank Evert became overdue from his hike, his wife Yolanda Evert started walking up Kitty Creek Road looking for her husband. At that point, approximately 1750 hours, she came into contact with Chad Aron Dickinson, and his team, who were exiting the back country. Upon explaining her situation, Chad Aron Dickinson rode directly to the site where his team had collared the male Grizzly Bear this morning. Chad Aron Dickinson explained that Erwin Frank Evert was aware of this location, and had shown great interest in prior contacts with his team, as to their activity in the area. Chad Aron Dickinson, upon arrival at the site, at approximately 1815 hours, did in fact find Erwin Frank Evert at the location, apparently deceased from a violent Bear attack. Chad Aron Dickinson did not dismount his horse, and immediately left the area for safety concerns.

At this point, Chad Aron Dickinson led me to the site location on horseback. I was also accompanied by Wyoming Game Warden Mark Bruscano, GF # 61. I arrived at the site location at approximately 2030 hours. I observed that the outside temperature was forty eight (48

Prepared By:

1112 PENNELL, MIKE

Date:

6/18/2010

Approved By:

1106 PATTERSON, DAVE

Date:

6/19/2010

**PARK COUNTY SHERIFF'S OFFICE**

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1402 RIVER VIEW DR CODY, WY 82414 307-527-8700

**NARRATIVE**

10-791

degrees. I observed the site location to be located Southwest of the South dead end of Kitty Creek Road at UTM coordinates 0590006 East, and 4921604 North. I observed that this location is four thousand (4000) feet due Southwest, in a direct line of travel from the South dead end of Kitty Creek Road. I observed that using the existing trails, the location is one point six three (1.63) miles Southwest of the South dead end of Kitty Creek Road. I was able to complete these observations with the aid of computers utilized by the Park County Sheriff's Search and Rescue Unit. A map of the area, to include the site location was completed by the members of the Park County Sheriff's Search and Rescue Unit, and has been attached to this RIMS report. I observed that this location is not marked in any way, as to warn hikers of the Bear activity occurring at this location.

Upon arrival at the site, I observed the victim, Erwin Frank Evert, to be lying face down. I dismounted from my horse and examined the victim. I observed that the victim was in fact deceased. Rigor mortis was present, and well defined within the body. I observed that the body was still warm to the touch; however no signs of lividity were present. I observed that the victim was clothed in black socks, tennis shoes, jeans, blue sweater, and a black jacket. I observed that the victim was not wearing any jewelry. A gold in color pocket watch was recovered from his front pants pocket, and returned to his wife by Tim Power. I observed that as a result of this Bear attack, the victim sustained deep puncture wounds covering his entire body, with the exception of his hands. I observed that the victim sustained several fatal puncture wounds to the upper left portion of his face in the area of the left eye, and upper left portion of the top of the victims head, within the hair line. I observed that this series of punctures completely fractured the skull, and penetrated into the brain. I observed that the puncture wounds within the area of the victims left eye had resulted in the separation, and loss of the left eye. I observed that the attack was limited to the direct area, and final point of rest of the victim. I observed that as a result of this attack, the Bear did not feed on the victim's body, and left the area upon killing the victim.

I photographed the incident scene, and have included the photographs into my RIMS report.

My investigation, and observations at the incident scene revealed that this incident was in fact a fatal attack of the victim, Erwin Frank Evert, by a Grizzly Bear.

Upon arrival back at Kitty Creek Road, I met with Martin Knapp, at which point the incident command was turned over to him, and a recovery mission was initiated. This mission was successful, and was accomplished without incident or injury to any member of the Park County

Prepared By:

1112 PENNELL, MIKE

Date:

6/18/2010

Approved By:

1106 PATTERSON, DAVE

Date:

6/19/2010



# PARK COUNTY SHERIFF'S OFFICE

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1462 RIVER VIEW DR CODY, WY 82414 307-527-8700

## NARRATIVE

10-791

Sheriff's Search and Rescue Unit.

Upon the removal of the Victim's body, Park County Coroner, Tim Power, who was now present at Kitty Creek, examined the body in my presences, and concurred with my initial findings of the head wounds being fatal in nature. Tim Power informed me that an autopsy would not be conducted in reference to this incident. At this point Tim Power took custody of the victim's body.

DNA samples of the attacking Bear were collected from the victim's body by Tim Power, and released into the custody of the Wyoming Game and Fish Agency.

I completed the Park County Sheriff's Death Investigation Worksheet, and have attached it to my RIMS report.

Cast Status: Closed. Death of the victim, as a result of a Grizzly Bear Attack.

Prepared By:

1112 PENNELL, MIKE

Date:

6/18/2010

Approved By:

1106 PATTERSON, DAVE

Date:

6/19/2010

Appendix 12 – Chronological events leading to the incident and notes from Mark Haroldson, Chuck Schwartz, and Jeff Kershner

Haroldson time line of events 17 June 2010.

- 1) 09:12 AM SPOT Check-in/OK message from Chad at first bear (#646),  
Chad's Spot  
Latitude:44.44354  
Longitude:-109.86963  
GPS location Date/Time:06/17/2010 09:12:23 MDT
- 2) 14:28 PM SPOT Check-in/OK message from Chad at second bear (#628),  
Chad's Spot  
Latitude:44.43533  
Longitude:-109.87165  
GPS location Date/Time:06/17/2010 14:28:09 MDT
- 3) Approximately 20:15 call from Dan Bjornlie (WYGF) who was at Kitty Crk trail head. Dan informed me that an incident had occurred associated with IGBST trapping effort. An individual had been injured or worse. Chad had found the individual near a trap site, and rode back out to get help. Mark Bruscino (WYGF) happened to stop by, he alerted the Sheriff's office and accompanied Chad back to the site.
- 4) Approximately 20:30 called Chuck Schwartz (USGS, IGBST Leader) at his residence and informed him of the situation as I new it.
- 5) Approximately 20:45 called Jeff Kershner (USGS, NOROCK Director) at his residence and informed him of the situation as I new it.
- 6) Approximately 21:15 called Kevin Frey (MTFWP, study team member) and informed him of the situation as I knew it.
- 7) Approximately 21:30 called Chad's wife Laura and informed her that there had been an incident possibly associated with our trapping effort involving an unknown individual and that Chad and Seth were safe and unharmed. I also told Laura that I would keep her informed.
- 8) Approximately 22:30 got a message on my cell phone from Dan Bjornlie (WYGF) who was at the Kitty Crk trailhead via satellite phone that confirmed a human fatality had occurred.
- 9) Approximately 22:45 called Jeff Kershner (USGS, NRMSC Director) informing him that a fatality had indeed occurred.
- 10) Approximately 23:00 called Chad's wife and informed her of the situation.

18 June 2010.

- 1) Approximately 02:15. Chad called and indicated they were out of the field, the victim had been recovered, and they were back at the cabin they had been stay in at the Wapiti Ranger Station. Chad indicated they would be traveling back to Bozeman in the morning. It was a bad connection and hard to hear so I told him to get some rest and we would talk in the morning.

- 2) Approximately 06:45 called Chris Servheen (USFWS Grizzly Recovery Coordinator) and informed him of the situation as I knew it.
- 3) Approximately 07:30. Met with Jeff and Chuck at the office. Called Mark Burscino for information as to the status on information. Learned the victim's name and distance body was found from the trap site.
- 4) Approximately 13:00 called Chris Servheen called wanting information regarding captured bears.
- 5) Approximately 13:05 called Chad asking for information regarding captured bears. Bear (#646) likely involved was a new, previously unmarked adult male. Chad also indicated their ETA in Bozeman would be about 14:30PM.
- 6) Approximately 13:10 called Chris back with information regarding bears.
- 7) Approximately 14:40. Met with Jeff, Chuck, Chad, and Seth at the office. Heard Chad's account of events for first time.

)  
)



Chuck Schwartz, time line of events.

17 June, 2010.

Around 8:30 PM Mark Haroldson called and informed me of the incident with IGBST trappers and Mr. Evert.

Shortly after I was informed, I phoned Jeff Kershner our Center Director and left a message on his home phone. I informed Jeff of the incident.

Jeff returned my call about 30 minutes later and I told him that an individual had walked into one of Chad's trap sites and was killed by a grizzly bear.

18 June

I arrived at the office at about 7:15 AM. I met with Mark Haroldson and Jeff Kershner at 7:30. We phoned Mark Bruscino, Wyoming Game and Fish. We were told the victim's name was Erwin Evert. Bruscino indicated Chad had found the body. Mrs. Evert told Chad her husband had not returned. He also indicated "her husband had told her he was going to see what those guys were up to". Bruscino indicated body was about 20 yards from trap site. The victim was badly mauled. Bruscino then indicated he was en route to the site and ended the conversation. Following the conversation with Bruscino, Jeff, Mark, and I discussed the need to provide human resources assistance to both Chad and Seth. Haroldson then called Chad to see when we might expect him and Seth to arrive in Bozeman. Mark left a message.

1:45 PM. I spoke with Acting Forest Supervisor Dave Piper. He wanted to know who would be the press contact in our office. I indicated Dave Ozman was in route to our office and he would let them know.

2:45 PM. Chad and Seth arrived and we discussed the incident with them. Chad indicated they went to the first site and had a male bear captured. They processed this individual and left the area around 12:30 to go to the next site. They cleared the area and removed the signs on their way out. At site 2 they had captured a female bear. They processed her, cleared this area, and removed signs on their way out. They left that site around 5:30 PM. They arrived at the trailhead around 6:00 PM. Chad indicated that when he first spoke with Mrs. Evert at the trailhead she told him that Mr. Evert had not returned and she was worried. He told her he would go look for him. At some point (I don't recall the sequence) Chad also said that Mrs. Evert told him her husband had seen their signs and had gone up to the area to see what they were doing. Chad was unsure just what time Mrs. Evert indicated Mr. Evert had left. He said she indicated 1:00 or 3:00 but he was not sure. Chad and Seth then drew us a map of the layout and explained the trail system, where the trap sites were located, and where the signs had been placed. Seth indicated that during the entire time they were in this area (2 hitches of 10 days each plus 4 days between hitches) that they had not seen any human tracks and had never seen hikers. He

also indicated it was a miserable day with strong wind, cold temperatures, and spitting snow.

After finding Mr. Evert's body and telling Mrs. Evert of the mauling, Chad indicated he had a phone conversation with Mr. Evert's daughter. He indicated she said she had spoken with her father earlier in the day and that he had expressed interest in what they were doing. She also indicate that if she had know that they were trapping she would have told her father not to go up there, but that he was rather independent (may not be exactly the words Chad used) and probably would have gone anyhow. We finished by emphasizing to both Chad and Seth that there were resources available to both of them (professional de briefer) and they should seriously consider this help. We told them they should go on days off and then we would put them on Administrative Leave pending the completion of an investigation. We also ask each of them to independently write up their memory of the events starting with when they began the trapping operation. We ask them to complete this as soon as possible so they could recall every detail.

## Notes from Conversation with Chad and Seth

I asked Chad and Seth to give me as much detail as they remembered about the incident from the day before.


They arrived at the first of two trap sites during the morning of the 17<sup>th</sup> and found a bear in the trap. The trap site is up an old trail well away from the main trail up Kitty Creek in a side drainage. They processed the bear in the normal fashion and were packed up and ready to leave once the bear showed signs of recovery. The trap site was off an old road that had been decommissioned by the FS and up the drainage approximately 2 miles from the summer home sites. The trappers had made a horse trail into and out of the site during the time there and the trail was muddy due to rain, snow and inclement weather during that day and the previous days. For safety reasons they left the bear at approximately 1230 once the bear showed head swaying and attempts to get up on front legs. They traveled back down the trail to meet the main trail up to the next trap site. They removed the signs on their way out to the second site. They did not see anyone on the trail on the way out to the second trap. Chad and Seth drew a map on the board of the relative locations of the road, traps and trail.

The trappers arrived at the second site mid afternoon and found another bear that had been previously captured and processed this bear in the normal manner, replacing the old collar with a new one. They followed the same steps as before and started back to the trailhead late afternoon, arriving at the road approximately 6pm. They encountered Yolanda Everts at the trailhead and she was distraught and inquired whether they had seen a hiker, indicating that her husband had gone hiking somewhere between 1-3pm in the area and was overdue back home. She indicated that he knew there was trapping in the area and that her husband had seen signs and was curious what was going on. Chad traded horses with Seth and cut a track back up the drainage looking for signs of the hiker. He said he had trouble picking up any sign and picked up a foot trail close to the trap site on the trappers trail and followed it back to the site where he found the victim approximately 20 yards from the capture area.

We asked Chad and Seth whether they'd seen any signs of anyone in the area prior to the incident and both indicated that in the previous 19 days they hadn't seen anyone except a horse packer on the main trail. They had talked to the summer homeowner who owned the cabin closest to the trailhead on other occasions about the trapping.

When Chad got back to the trailhead he informed Ms. Everts that her husband was dead. Sometime later Chad spoke with the daughter by phone and she indicated that the deceased had spoken with her that morning and she indicated that her father knew there was trapping in the area.

We had contacted our employee assistance program and had counseling available for both trappers in case they wanted to take advantage of that resource.



Jeff Kershner  
Center Director

## INTERVIEW

SUBJECT: Charles R. "Chuck" NEAL

DATE: July 9<sup>th</sup>, 2010

On July 9<sup>th</sup>, 2010 at approximately 10:30 am, Special Agent Tim Eicher interviewed Chuck NEAL at his home (1526 Alger, Cody, WY). NEAL provided the following information.

NEAL is a retired ecologist and has lived in Cody for over 25 years. He is 76 years young and married to Kate/Katie NEAL. NEAL worked as a professional ecologist, with many years of experience in the field around the west. NEAL's last position was with the Bureau of Land Management in Cody. For the past several years, NEAL has studied the ecology of the grizzly bear in the Greater Yellowstone Ecosystem, which resulted in his writing a book, *Grizzlies in the Mist*, which was published in 2003. In addition, NEAL has been conducting one guided trip a year in grizzly county up the Northfork west of Cody for the Wyoming Wilderness Association of Sheridan, WY. There are approximately a dozen people on these trips. Also, NEAL has recently been doing work studying the recovery of riparian areas since the re-introduction of the wolf.

NEAL has had many close encounters with grizzly bears over the years. These include bluff charges, charges that stopped right in your face and charges where the bears ran past within arm's length. NEAL described that when he encounters a bear, he talks to the bear calmly and quietly. NEAL does not carry bear spray or a gun. NEAL stated that the most important part of dealing with bear encounters is to use your brain. NEAL stated that too many people who carry spray, put their brains in the can. However, NEAL does recommend that people who do not have his level of experience should carry bear spray and should carry it readily available (not in their backpack).

NEAL and Erwin EVERT met each other approximately 20 years ago in a chance counter on the Northfork. NEAL was a wildlife ecologist and EVERT was a botanist and they shared common interests. This casual meeting turned into professional respect - then to personal friendship - then to a family friendship (their wives and daughters also became friends). NEAL also stated that Erwin and his wife Yolanda have owned the cabin at Kitty Creek for 40 years and had been married 46 years.

NEAL described EVERT has a phenomenal field man and with his combination of botanical expertise and agility he had no equal. He was a superb physical specimen that could walk miles and miles, climb elevations and could hike a 20 year old into the ground. EVERT many times would take the harder route on a hike as he enjoyed the workout and heavy breathing. NEAL stated that EVERT was not timid, was a self-assured man and that he did not routinely weigh risks. NEAL speculated that this trait could have been a disability on his last day and might have cost him his life. NEAL stated that he and EVERT were together one time when they had a close

bear encounter. NEAL talked to the bear and the bear left. EVERT knew what to do and stood quietly by his side during the encounter.

NEAL stated that EVERT did not carry bear spray or a gun, but doubted that either would have done him any good on the day that he was killed. NEAL stated, I think he walked into a recovering bear, a disoriented bear and that the bear lashed out and attacked defensively. From what NEAL knew of the site of the attack, NEAL stated that EVERT would have been walking across wind into the site. NEAL stated that it seems we have a perfect storm gathering, with a bear on drugs and EVERT arriving at the wrong time, but that it is all speculation as only one person knows what happened and that's Erv. NEAL stated that he had seen Erv's body and that the bite to his head appeared to be the killing bite.

NEAL stated that on June 9<sup>th</sup>, 2010, EVERT telephoned him and told him that he had seen a sign that said "**Dangerous Bear**" on a hike up Kitty Creek. EVERT joked, that don't mean have a dangerous bear tied to a tree. EVERT also stated that he had seen 3 men ride by his cabin on previous days headed up Kitty Creek. EVERT stated that one of them had an "NPS" logo on a saddle bag. EVERT was wondering what the National Park Service would be doing on the National Forest. NEAL told EVERT that the previous Interagency Grizzly Bear Study Team (IGBST) leader was Dick Knight, who had been associated with the Park Service and that might explain the logo and that the individuals were probably members of the IGBST. EVERT asked NEAL what do you think is going on. NEAL told EVERT, I can guess that they are doing one of two things; they either have a hair snare trap site or have a live capture trap site. NEAL stated that both involve smelly bait and that you don't want to be anywhere near there. EVERT replied, I understand. During this conversation, NEAL's impression is that EVERT spoke as if it was a singular thing, not multiple sites and there was no indication from the conversation that EVERT had gone beyond that sign. NEAL thought that the day EVERT called him would have been shortly after he saw the sign. Also, there was nothing from their conversation to indicate to NEAL where up Kitty Creek EVERT saw the sign.

During that same telephone conversation, EVERT stated that he was going to Bozeman the coming week to distribute some of his books. After EVERT returned from the trip, NEAL and EVERT were going to make plans to conduct a field trip to the Sunlight Basin. They were planning a trip for the Windy Mountain area above Swamp Lake. EVERT wanted to look at another location from a previous trip to document plant species and NEAL would be looking at bear habitat.

Sometime the evening of June 16<sup>th</sup>, Yolanda telephoned and talked to NEAL's wife Katie and advised that she and Erwin were back and planned on meeting them in town (Cody) on the 18<sup>th</sup>, so Erwin and Chuck could make plans for their Sunlight trip.

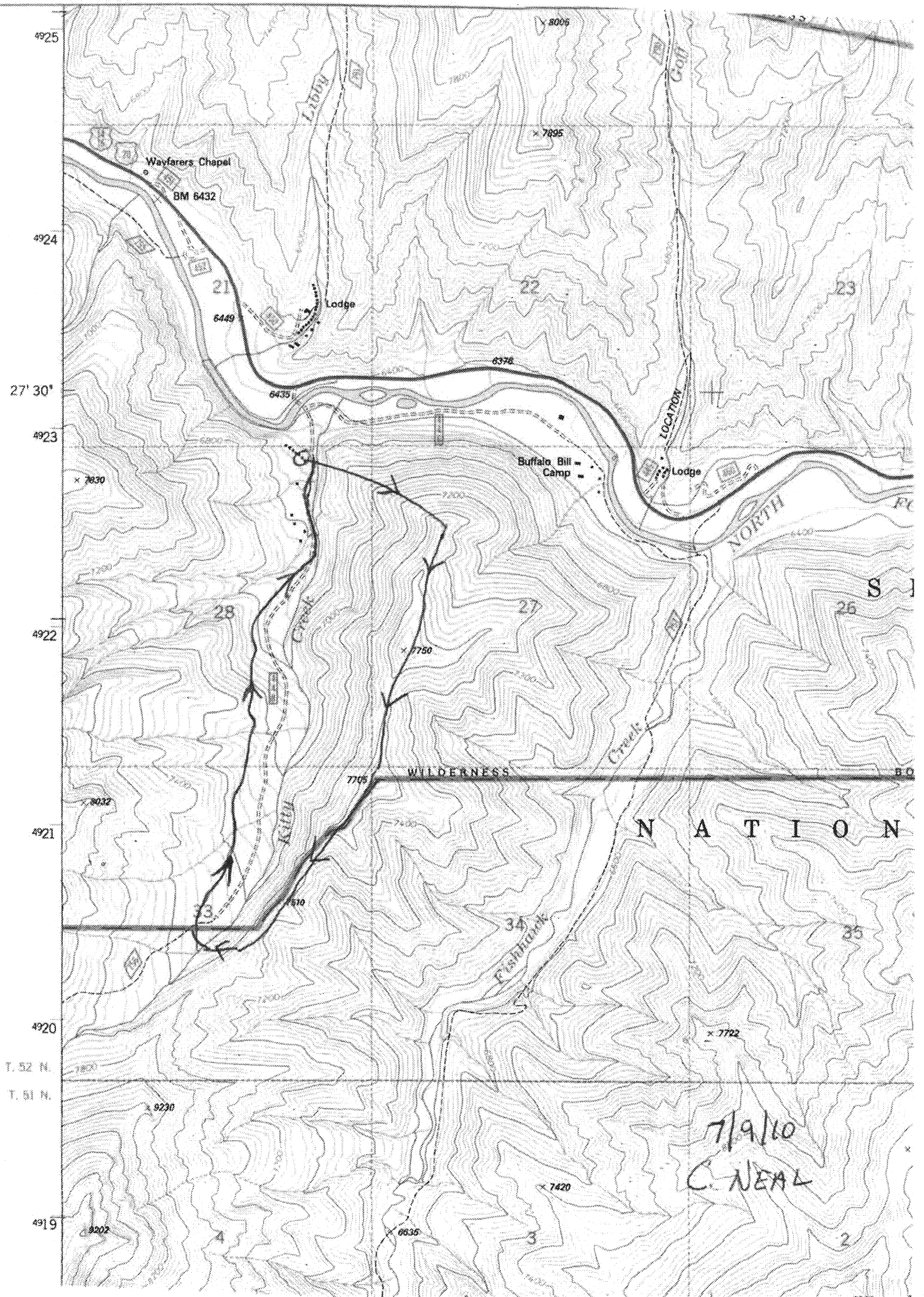
Based on conversations that Chuck and Katie NEAL had with Yolanda and Mara (daughter), the following is NEAL's understanding of events on June 17<sup>th</sup>. Sometime that morning Mara and Erwin had a telephone conversation. Erwin was happy, people were recognizing his book and

that Erwin was planning on taking his usual hike up Kitty Creek. Erwin left about 1 pm, wrapped up in warm clothes due to the cold and wind and told Yolanda that he would be back about 4 pm.

NEAL stated that he had taken the hike with EVERT before and that it took a couple hours. NEAL described the circuit/route as follows: leave the EVERT cabin at Kitty Creek and go east across Kitty Creek and climb up the mountain to the top of the ridge, then head south along the top of the ridge paralleling Kitty Creek towards the base of Howell Mountain. As they hiked along the ridge there was a natural spot in a saddle to drop off to the west back down into Kitty Creek. NEAL described that the location they dropped off into Kitty Creek has a good patch/stand of Highbush Huckleberry (*Vaccinium memvranaceum*). After hitting the bottom, EVERT would hike down the Forest Service trail, not on the old road bed. NEAL stated that hiking this circuit in a clockwise direction was EVERT's normal pattern as he enjoyed the long steep climb and heavy breathing this route provided. Sometimes EVERT would go the other direction (counter clockwise) and hike up Kitty Creek. SA Eicher provided a USGS map of the area and NEAL drew the circuit on the map.

NEAL had heard that Yolanda and Mara had been told by someone from the Ballard Funeral Home that the time of death from the coroner was estimated to be 1400 hours or 2 pm. Based on that information NEAL hypothesized that EVERT would have started the hike up Kitty Creek itself, rather than his normal clockwise route, east to the top of the ridge and then south along the ridge; given a starting time of 1 pm.







Statement of Terry Root, District Ranger, Shoshone National Forest

**Discussion with Chuck Neal on June 17, 2010**

8:17pm – I reached kitty creek via GOV and parked near the entrance to the Evert cabin. I met with Chuck and Lona Quillen briefly and they stated that a Wyoming Game and Fish employee, deputy sheriff and Chad Dickinson (IGBST) were headed up to the site on horseback. I was approached by Chuck Neal who shook my hand in greeting. I asked him why he was there and he said that Yolanda (Evert's wife) had asked him and his wife to come up there to be with her as they were close friends with the Everts. I asked him if he knew what had happened and he told me that Erwin had walked to the trapping site and been killed by a bear. He stated that he had spoken to him less than a week ago and Evert had asked him about a "dangerous bear" sign. He said that Evert joked about having a grizzly tied to a tree. Chuck told him they were probably trapping and to stay away from the area. However, Chuck said that Evert had decided to go investigate the issue and had even told his daughter (via telephone – she lives in Louisiana) that he was going up that day to check it out. Chuck said that Evert seemed to be obsessed with finding out what the signing was all about.

**Discussion with Chuck Neal on June 18, 2010**

On this same day, Scott B. came to my office to discuss the incident. Scott told me that the USGS crew had already left that morning (which I had been informed about earlier) but that he had interviewed them earlier at the Park entrance. We also decided to give Chuck Neal a call (I had his telephone number). Chuck discussed the event with us on the phone. Scott took notes of the conversation. The gist of the conversation was that Evert knew about the trapping, had been warned, but chose to ignore the warnings (as per Chuck). Chuck also told us that Yolanda was currently at his house and that the daughter would be flying in that evening.

**Discussions with Yolanda Evert (wife) and Mara Dominique (daughter) on June 21, 2010.**

They expressed their frustration with the media and with Chuck Neal who had indicated that Erwin knowingly entered the area of the trap and that he was negligent in doing so. They insisted that while he had seen the signs several days ago, he had left the house to see if he could "catch up with the guys" (Chad and Seth) to "find out what was going on". Mara confirmed this by stating that she had a nearly hour long conversation with her Dad that morning and he had told her he had hoped to be able to talk with the guys (meaning Chad and Seth) to find out what was going on. Yolanda stated that they had seen the two guys go by the cabin (on the road) riding horses several mornings, early in the day, leading two pack animals. Sometimes they would see them come back after a short while and sometimes they wouldn't.

She said that they had seen them go up that morning and Erwin was anxious to talk with them to see what they were up to. They said he had a natural curiosity which was part of his personality as a scientist.

They also explained to me that the area of the trap was near a path that the family and he referred to as the "circuit". They explained that he liked to walk the circuit about three times a week and that the circuit included an area from the cabin up the kitty creek trail for a ways, then "bushwacking" up the hill to the saddle on the west, then along the rim to the north and down again to the cabin – walking the circuit in one direction or another. They stated that he had left the cabin that day at approximately 12:45pm to walk the circuit and that he stated he would be back no later than 4:30pm. They said they didn't know which direction (on the circuit) that he had taken that day. Yolanda stated that she and Erwin had been up to Bozeman selling some of his new botany manuals and they had recently returned from there with Erwin feeling excited and happy about selling some of the manuals as he had bore the complete cost of publishing the manual and was hoping to recoup some of his investment.

**DANGER!**  
**BEAR TRAP IN THE**  
**AREA**

**THE AREA BEHIND THIS SIGN IS**  
**TEMPORARILY CLOSED. THE**  
**CLOSURE IS EFFECTIVE FROM**  
**\_\_\_\_\_ TO \_\_\_\_\_.**

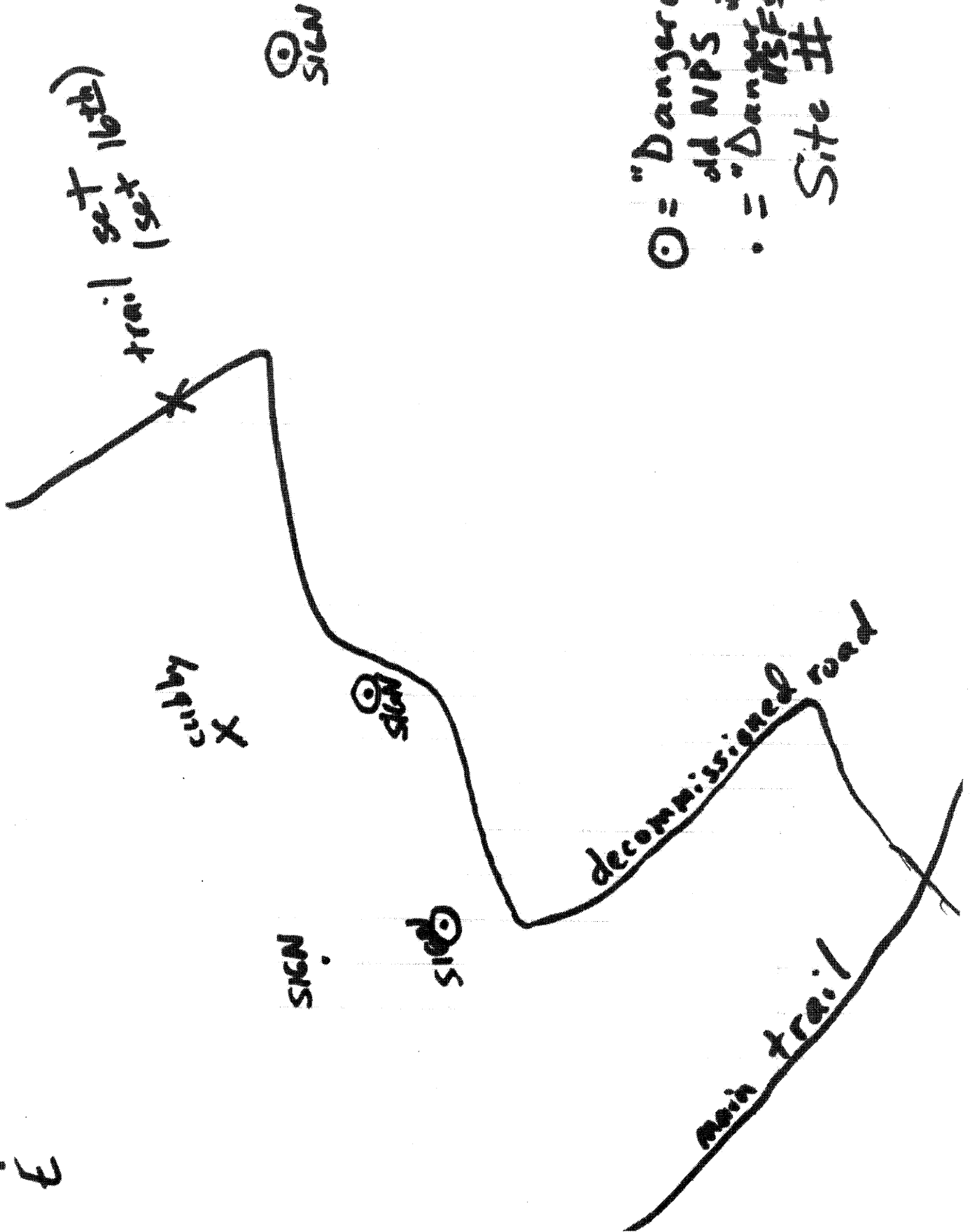
SPECIAL ORDER 97-008  
SHOSHONE NATIONAL FOREST

**CLOSED**

**AREA BEHIND THIS SIGN IS  
CLOSED TO HUMAN TRAVEL  
DANGEROUS BEAR**

Department of Interior  
National Park Service

N  
+  
S  
E  
W



○ = "Dangerous Bear"  
○ = "NPS sign"  
○ = "Dangerous Bear"  
Site #2

Timeline for IGBST Trapping Effort at Kitty Creek , SNF on June 9, 2010

7:30\* am Checked Five Mile trap site with WGFD personnel.

8:15 am Arrived back at Wapiti RS and gathered horses.

9:00 am Left Wapiti RS and drove to Kitty Creek trailer parking area near Hwy.

10:00 am Left trailer at Kitty Creek and rode past cabins to Site # 1 via old main decommissioned road then up decommissioned spur road to trap site.

11:00 am Arrived at Site # 1. Reset cubby and trail set.

12:30 pm Left Site # 1 and rode back down old decommissioned spur road to main trail and rode up main trail to Site # 2. We did not ride directly to Site # 2 due to the fact we looking for a new trap site

2:00 pm Arrived at Site # 2 via old decommissioned spur road off of main trail. Set one cubby set and hung one gut, placed signs \*\* and dragged.

4:00 pm Left Site # 2 via old decommissioned spur road, then down to main trail, then connected with old main decommissioned road, then down past cabins to truck and trailer.

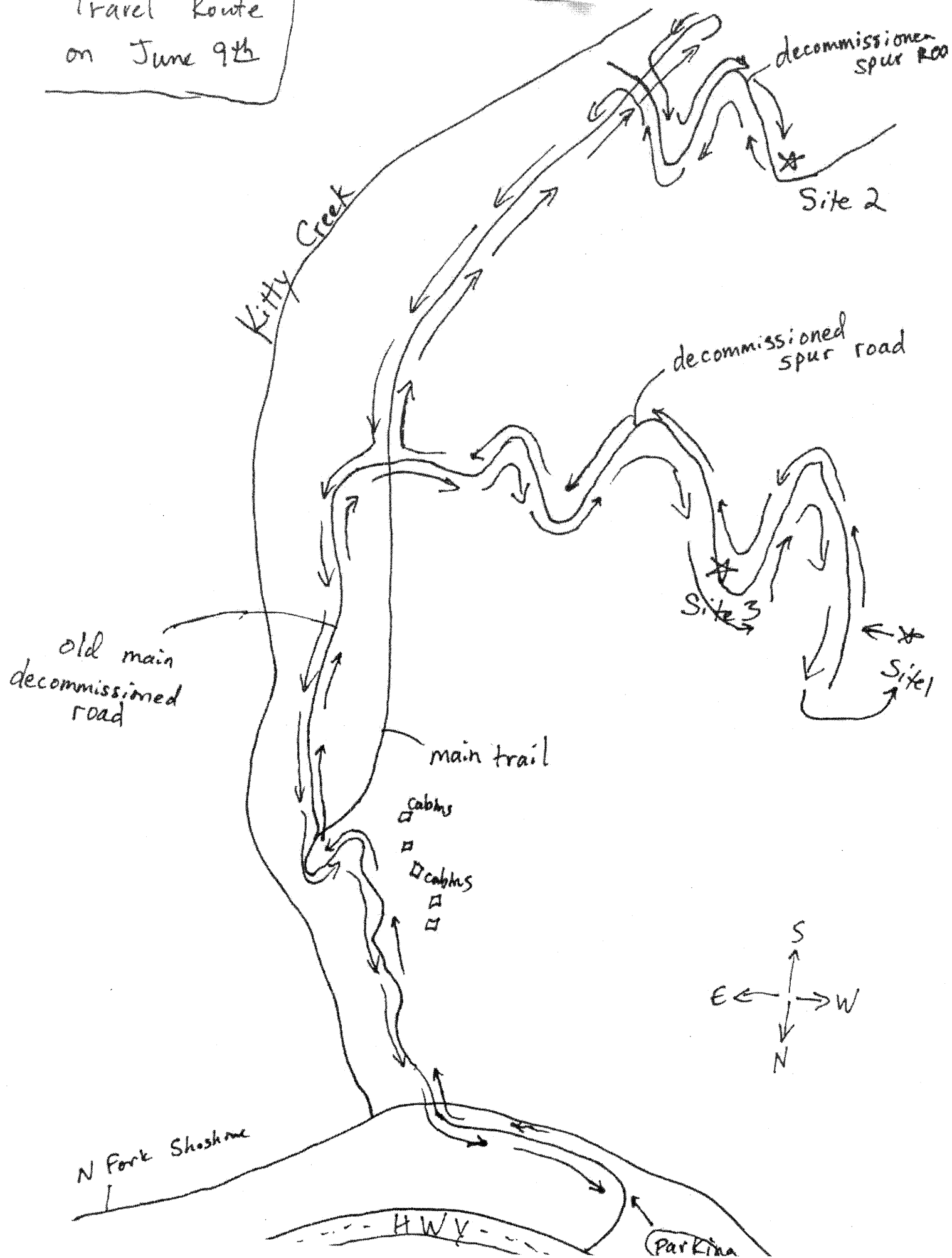
5:30 pm Arrived back at truck and trailer parked near Hwy.

6:00 pm Left Kitty Creek area.

\* All times are approximate. We did not pay a particular amount of attention to the time that day.

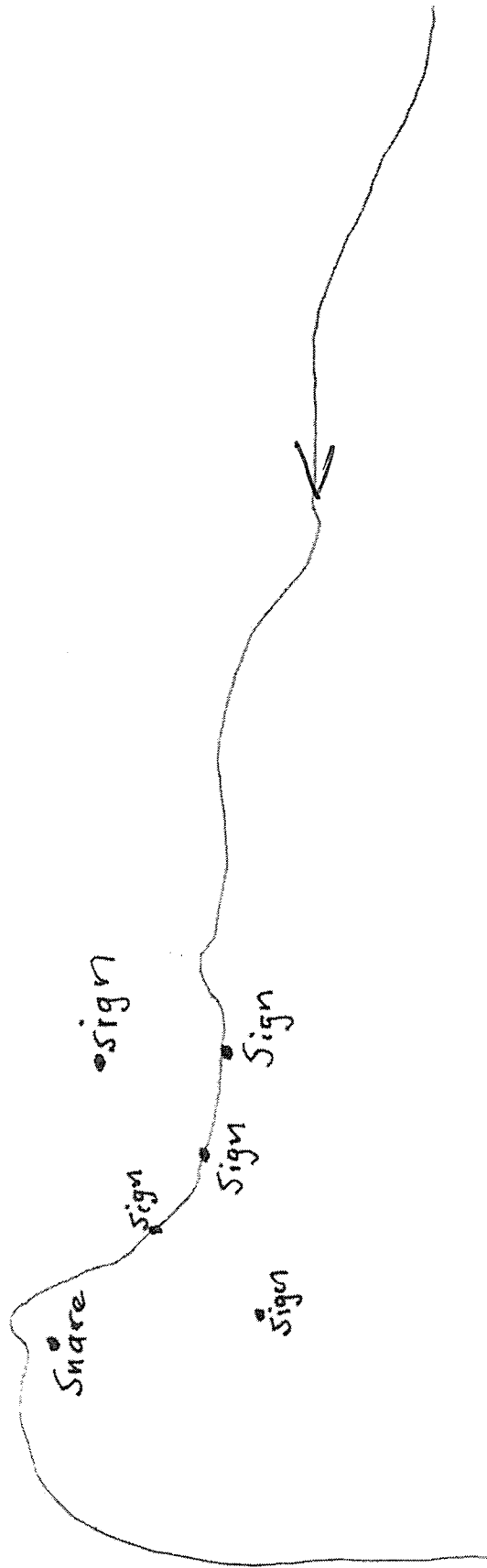
\*\* “Dangerous Bear” signs were only placed at site # 2. This was because we could only find that particular type of sign in our saddle bags on that day. At least 3 of the dangerous bear signs were placed on June 9<sup>th</sup>. The official forest closure signs were placed at Site # 2 on June 10. The forest closure signs were placed on all 4 trees.

Travel Route  
on June 9<sup>th</sup>



Appendix 20 - Map of Site #3 warning signs and snare tree location

N ↑



100 meters

Kitty Creek Trap site  
UTM 589925 x 4921827

Map Drawn by Chad Dickinson  
6-9-2010  
*Chad Dickinson*



**Appendix 21 - Capture form for grizzly bear #646**  
**IGBST BEAR TAGGING FORM**

21

Res. or Mgmt? Research		Date: 6/17/2010		Bait: Deer lung		Bear No. 646	
Method trapped: Pail Set Snare		Location: Kitt Creek, Middle site, SNF		UTM: 589925 x 4921827		Datum: NAD 83	
Trappers: Dickinson/Thompson				Agency: IGBST			
Immobilization Procedures:		strength of drugs used (mg/ml): 285		dosage (mg/lb): 5.4		Total mg delivered: 2280	
Time	Drug	Dosage (ml)	Injection Site/Route	Method/Whom	Reactions		
906	Telazol	5.0	Left shoulder	CO2 pistol, CD	Flinch		
913					Layed down		
915	Telazol	1.0	Right shoulder	Hand, CD	Down		
954	Telazol	1.2	Right shoulder	Hand, CD	Head twitch		
1004	Tetradure	12.0	6ml, each hind qtr.	Hand, CD			
1048					Licking, blinking		
Time bear immobile:	915	Time recovery started:	1048	Time recovery complete:	1230 bear holding head up, swaying We left the site.		

Body Measurements (in cm)							
A. Total Length	N/A						
A-1. Contour Length	181						
B. Girth	122						
C. Height	N/A						
D. Neck Circ.	90	Drug Lot #:	Vial ID	mg used	mg discarded	Final Airway Check: yes	
E. Head Length	38	11973	2009-061	570	0	Second eye lube: yes	
F. Head Width	21.5	11973	2009-062	570	0	Baseline exam:	
		11973	2009-063	570	0		
		11973	2009-069	570	0		
Pad Measurements (in mm)		Samples:	Est. Wt: 400	Scale: 425	Sex: Male	Age: est 8-10	E yes Asc. No
G 160 K 150	Tooth	Yes	Old Markers Present: None				E yes Plp yes
H 80 L 180	Blood	Yes	Tattoo: 942 both upper lips Pit: 46287E574F, right tricep				N yes Ln no
I 130 M 225	Hair	Yes	Ear Tags Right	942	Color:		Myes P no
J 180 N 240	Tissue	Yes	Ear Tags Left	942	Color:		Mm yes Eurog yes.

Time	Respiration	Temperature	Bioimpedance	Pulse Ox w/out O2 Administration			Pulse Ox with O2 Administration		
926	12	100.9	Res: 55	Time	Pulse	%Sat./ Site	Time	Pulse	%Sat./ Site
937	20	101.5	Reac: 8						
956	16	101.8	%Fat: 3.3						
1040	24	101.8	Fat Index (1-5): 3						

Reproductive Status: Baculum intact both testes present

Nipple Diameter and Length: Front: (L. X W. ) Median: (L. X W. ) Rear: (L. X W. )

Radio type:	Collar freq: <del>XXXXXX</del>	Trans. # 597976A	Color: Black/ white	Attached with:
VHF	Ear tag freq:	BPM: 60/35, 5 hr delay	GPS antennae position:	One cotton spacer, 2 holes punched

Body Description and condition: Color blond tips on back, blonde girth band, dark legs. Teeth- upper and lower right canines intact. Upper left canine broken & rounded (old). Bottom left canine broken & rounded, old chip hanging by gum, removed. Incisors flattened across, upper show heavier wear. Molars have moderate flattening.

Large open wound behind left shoulder, 3"x 2" at widest. Numerous scars and fight wounds on head and neck. Both old and new. Treated w/ furacin

Remarks: Right front foot capure, some swelling

Resistance seemed low as well as percent body fat, Bear was not thin or skinny.

Transport Release Site: UTMN \_\_\_\_\_ UTME \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ CAD 3/2008