U.S. DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

Yellowstone National Park

BOARD OF INQUIRY INTO THE DEATH OF:
Brigitta Fredenhagen

Date of Death: July 30, 1984

Date of Report: September 4, 1984
Board of Inquiry
Death of Brigitta Fredenhagen
July 30, 1984

A Board of Inquiry convened at 9:17 a.m. on Thursday, August 23, 1984, in the Superintendent's Conference Room at Mammoth Hot Springs, Yellowstone National Park. The purpose of convening the Board was to review the incident resulting in the death of Brigitta Fredenhagen in the White Lake area of the park July 30, 1984.

Members of the Board were: Robert Barbee, Superintendent, Yellowstone National Park (Chairperson); John Chapman, National Park Service, Chief, Protection and Visitor Use Management, Rocky Mountain Regional Office; Chris Servheen, U.S. Fish & Wildlife Service, Grizzly Bear Recovery Coordinator; Steve Mealey, U.S. Forest Service, Forest Supervisor, Shoshone National Forest; and John Varley, Research Administrator, Yellowstone National Park.

Witnesses consisted of the following:
Mark Marschall - Park Ranger (Lake District) - Took the report of the missing person, and initiated search operation actions the first night. Searched the next day. One of those who found the body.

Tim Blank - Lake District Ranger - Incident Commander. Flew in on the first flight. Searched the area. One of those who found the body.

Dave Spirtes - Park Ranger (Lake District) - Operations Chief and primary investigator.

Jerry Mernin - Snake River District Ranger - Assisted the first day on search and on investigation. Logistical Advisor.

Mary Meagher - Research Biologist - On site as biologist. Coordinated lab analysis.

Gary Youngblood - Park Ranger (Canyon) - Issued the backcountry permit.

Kerry Gunther - Biological Technician at Pelican Cone - Assisted in identification of individual bears during investigation.

Brigitta Claudia Fredenhagen, born on August 26, 1959, and who resided at Spalenvorstadt 35, 405 Basel, Switzerland entered Yellowstone with Andreas Fredenhagen and Jonko Fredenhagen (brother and sister-in-law) through the South Entrance where they received a park map and safety brochure. They camped at Grant Village on July 28. On July 29 they camped at Norris and went to the Canyon Ranger Station and obtained a backcountry permit for Brigitta to hike from the Pelican trailhead on the 30th, camp at site 5B1 and exit at the Wapiti trailhead on the 31st. Her brother and sister-in-law
would not camp with her in the backcountry since they did not have backpacking gear with them. At Canyon Brigitta received a copy of the backcountry booklet, "Beyond Road's End", and a pamphlet entitled "Grizzly, Grizzly, Grizzly, Grizzly". Verbal warnings were also given by Ranger Youngblood. She had previously purchased Mark Marshall's "Yellowstone Trails" and a park trails topographic map. Andreas said that Brigitta was concerned about the animals and had read the brochure and books.

On the morning of the 30th, they drove to Pelican trailhead and Brigitta signed the trail register at 1100 hours. On the registration board were posted the standard "Danger" bear warning sign, the "Attention Backcountry Users" sign and a "Warning - Grizzly Frequenting Area Traversed by this Trail, Be Alert" sign. There was also "Beyond Road's End", "Grizzly, Grizzly, Grizzly, Grizzly", and "Bear" handouts in the register box. Andreas and Junko hiked with Brigitta for the first 5-1/2 miles which is past the Astringent Creek bridge. They stated that they changed their plans and that Brigitta would hike out the same way and meet them at the Pelican Trailhead on the 31st at 1530 hours rather than hike out to Canyon. They left Brigitta and hiked back out to the trailhead while she continued north. Andreas and Junko camped again at Norris and on the 31st were at the trailhead at 1530 hours waiting for her. When she did not show up by 1730 hours they went to the Fishing Bridge Visitor Center and reported her missing.

On August 1, Ranger Marschall started on horseback at 0730 hours and went up the Astringent Creek trail. Bill Berg and Collette Daigle-Berg went up upper Pelican, and Nelson Scott, a volunteer, hiked between the two trails. At 1124 Park Ranger Marschall discovered Brigitta's campsite at 5W1 rather than the permitted 5B1. Seeing evidence of a possible bear incident he requested assistance. An investigative team was flown to the site.

Site 5W1 is located in mixed, open lodgepole with spruce understory, forest to the north of a substantial meadow, east of south arm of White Lake, on the Astringent Creek Trail. There was a lack of bear signs or digging in the adjacent meadow; elk thistle, ant hills, ripe strawberries, and pocket gopher sites appeared totally undisturbed. The tidiness of the incident scene seemed almost uncanny. Everything inside the tent was neatly laid out with the rip by the entrance flap being the only indication that something was wrong. The sleeping bag was laid out flat as one might leave it laid out in the sun to dry. The food cache which had been eaten was not spread out, but in 2-1/2 by 4 foot cluster.

The tent which was facing the west had a lateral rip on the side of the rainfly and a single 27 inch rip on the right side of the entrance flap that penetrated the tent. Everything inside the tent was neatly arranged. There was a foam pad in the center of the tent with a flashlight on the right side, turned off, and a small tape player, turned off with the batteries run down, on the left. Her rucksack was toward the rear of the tent; the only food item in the tent was a 2/3 of a 100 gram chocolate bar wrapped up inside the pack. The clothing that she had been wearing that day (blue jeans with mud
on the legs, flannel shirt, bra, camisol, underpants, and a handkerchief) was neatly folded and inside a plastic bag on the left side of the foam pad. The only other odorous items that could be detected in the tent were a small container of lip sunblock, a container of 30 "Micoren" pills, and a butane cigarette lighter. The presence of bear bells in the tent, possession of warning pamphlets including "Beyond Road's End", "Grizzly, Grizzly, Grizzly, Grizzly", "Enjoy Them at a Distance", "Danger", and "Yellowstone Trails", a backcountry permit with bears written on it, the manner in which she suspended her food 12 feet up from between two trees as illustrated on page 9 of "Yellowstone Trails", and her having signed in at the trail register where "Attention Yellowstone Backcountry Users", "Danger; Grizzly and Black Bears", "Warning Grizzly Frequenting Area" (orange) were posted, demonstrate a knowledge of, and concern for precautions in bear country. Laying outside, 6 feet away from the tent was her zipped up and velcroed sleeping bag; it was laid out straight as one might place it in the sun to dry. There was a puncture in the left section of the bag that would have been where the victim's neck was; midline, 18 inches down from the top was a tear, possibly made by a claw. It appears that Fredenhagen had laid down to sleep for the night. There was no sign of a struggle or even the slight disorder usually associated with one's movement during sleep. It appears that Fredenhagen was laying with her head near the tent flap, perhaps diagonally with her feet to the east to avoid a slight downhill slope. It appears that a bear ripped the tent and pulled her out either by the left side of her neck or by the top of the skull. Six feet outside she either slid out of or was pulled from the sleeping bag.

From there, a barely discernible drag trail that went to the west of the fire ring crossed the trail, and went uphill toward the wood in a northeasterly direction was followed. Roughly halfway between the fire ring and final resting place of the body, a bloody sweater with numerous rips and tears was left behind. Thirty feet from where the body was found was a discolored cotton pullover shirt. The body was lying approximately 250 feet from the tent. The body was partially consumed. Cause of death as determined by autopsy was hemorrhage and shock resulting from multiple lacerations resulting from bear attack.

Based on all available information, the Board found that Brigitta Fredenhagen died as a result of hemorrhage and shock due to multiple wounds inflicted by a single subadult (2-3 years of age) grizzly bear.

Ms. Fredenhagen had apparently received and followed all safety recommendations.

The Board recommended that the Interagency Grizzly Bear Committee (IGBC), a group of six agency leaders that direct grizzly bear policy in the Northern Rockies, direct the Yellowstone Grizzly Bear Management subcommittee to review and refine the current backcountry regulations or standards within the park and surrounding national forests. As a result of the findings of this Board of Inquiry, there is need to specifically examine and refine, if
necessary, the following areas: 1) better ways to store foods in grizzly
country; 2) the proximity of camping sites to trails; 3) proximity of food
storage and cooking to sleeping areas; 4) proximity of camping sites to
preferred bear habitat; 5) the recommended camping group size in the back-
country; and 6) public awareness of risks when camping in grizzly country.

The Board noted the importance of public involvement in any proposed change
in policy that may be recommended by the Subcommittee. The Board will
recommend to the IGBC and its various committees to undertake the
Environmental Assessment that would include the items that we have listed.
This should be taken to the public sometime before the next visitor season.

The Board adjourned at 12:30 p.m.
BOARD OF REVIEW
August 23, 1984


Board:

Robert Barbee, Superintendent, Yellowstone National Park (Chairperson)
John Chapman, Chief, Protection and Visitor Use Management, RMRO
Chris Servheen, U.S. Fish & Wildlife Service, Grizzly Bear Recovery Coordinator
Steve Moaley, U.S. Forest Service, Forest Supervisor, Shoshone N.F.
John Varley, Research Administrator, Yellowstone National Park

Witnesses:

Mark Marschall
Tim Blank
Dave Spirites
Jerry Mernin
Mary Meagher
Gary Youngblood
Kerry Gunther