

# MEMORANDUM

## State of Alaska

TO:  James W. Brooks  
 Loren W. Croxton  
 Robert A. Rausch  
 Don H. Strode

DATE : May 14, 1964

FROM: Albert W. Erickson  
Game Biologist

SUBJECT: Report on black bear attacks

Enclosed with this letter is a paper prepared by Rausch and myself concerning the black bear attacks which occurred in interior Alaska. Mr. Strandberg has kindly reviewed the report and has no objection to its being published.

We should appreciate your comments on it before we submit it for publication.

AWE:ja  
encl

## BLACK BEAR ATTACKS ON MAN<sup>1</sup>

By Albert W. Erickson<sup>2</sup> and Robert A Rausch<sup>2</sup>

Abstract: During July and August 1963, bears attacked five persons near Fairbanks, Alaska, killing one and maiming three persons. The attacks are described and related to earlier accounts of unprovoked assaults by black bears on man. All bears implicated in the attacks were large healthy-appearing males.

Although no explanation for the attacks was found, food availability, rabies and population stress were discounted as logical causes.

While there are numerous accounts of skirmishes between man and bears, the present authors are aware of only three apparently valid records of unprovoked attacks in the wilds by black bears (Ursus americanus Pallas). Whitlock (1950) relates the tragic death of a three-year-old child seized from the porch of a back-

1 A contribution of Federal Aid in Wildlife Restoration Project W-6-R-6, Alaska Wildlife Investigations, Game Division, Alaska Department of Fish and Game.

2 Alaska Department of Fish and Game, Anchorage and Fairbanks, respectively.

woods cabin in northern Michigan, and Norris-Elye (1951) recounts a similar instance where a seven-year-old child was seized from her bedroom in Winnipeg, Canada. Both victims were extensively molested. No details concerning the bear were available in the latter account, but in the former the bear was described as very thin, its weight was about 125 pounds and its stomach was essentially empty except for human flesh. Autopsy and microscopic examinations of the brain and spinal cord revealed no clues for its abnormal behavior.

Seton (1935) relates a third instance where a black bear swam a river in Alberta, Canada and attacked three men, killing one of them. Despite attempts by the other two men to beat it off with a canthook and later to fire at it with a revolver, the bear escaped dragging its victim. Apparently this victim was also eaten.

In view of the rarity of unprovoked attacks of black bears on humans, it appears warranted to record our findings relative to a series of black bear incidents which occurred in interior Alaska during July and August, 1963. This appears the more appropriate since considerable publicity has attended the incidents, not the least being a report of two of them in the Congressional Record (Bartlett, 1963).

The incidents included three serious maimings, one attack without serious consequences, and another probable and fatal attack. Numerous minor conflicts were reported also, but the significance of these is difficult to weigh since such occurrences are common-

place almost everywhere the black bear is found in association with man, and the attention focused on bears this year doubtless stimulated reports.

#### Descriptions of the Attacks

Summarized below are descriptions of these incidents as obtained by personal interviews of the living victims, and as reported by Mr. Harold Strandberg and the state officials investigating the death of the probable attack victim.

Attack on Mr. Don Hymes. The assault on Mr. Hymes occurred at approximately 3:00 a.m., 21 July 1963 near Fox, Alaska while Hymes slept without shelter in a sleeping bag. He was bitten on the upper arm and on the forehead. Following the attack, the bear moved off about 20 yards as several unidentified road crewman approached. Apparently they had just chased the bear from their work camp nearby. The bear was shot and found to be a large healthy-appearing male.

Attack on Mr. C. Wayne Major. Mr. Major was attacked at approximately 4:00 a.m., 4 August 1963 while he and two companions slept under an open tarpaulin along the Tolovana River near Minto Village, Alaska. Entering the improvised tent, the bear inflicted a five-inch gash across the top of Major's head and a two-inch

gash on the left side of the neck. It is uncertain whether the wounds were inflicted with the teeth or claws. At Major's cry the bear backed away but returned and began pulling at his sleeping bag. The bear was shot by one of Major's companions and proved to be a large male in good physical condition.

Attack on Mr. George P. Roberts. The assault on Mr. Roberts occurred about 7:00 a.m., 18 August 1963 along the Tatlanika River between Grubstake and Rex, Alaska. Roberts was awakened by a bear ripping its way into a tent occupied by him and three companions. The bear caught Roberts as he attempted to flee from the tent, after which he wrestled with it briefly until it was shot by a Mr. Bob Bundtzen. Roberts was badly bitten under the left arm and on the left side as well as on the left hip and right arm. This bear, as the two previously mentioned, was also a large male in good flesh.

Attack on Mr. Larry Bidlake. Mr. Bidlake, a U.S. Fish and Wildlife Service employee, was attacked about mid-day 19 August 1963 as he drifted down a small stream just north of Fort Yukon, Alaska. When Bidlake first observed the bear, it was drinking from the stream. However, upon seeing Bidlake, the bear crossed to the opposite side of the river and ran after him along the bank. Bidlake attempted to paddle away, but the bear jumped into the

water and swam after him. He was able to outdistance the bear briefly, but soon his way was blocked by a log jam whereupon he fled ashore and sought refuge in a small tree. The bear attempted to climb the tree also, but Bidlake managed to ward off the bear by kicking it in the nose. In attempting to climb higher, however, he lost his grip and slipped to the ground about six feet from the animal. Instead of attacking, the bear gave him only a side-wise glance. Bidlake then removed his pack and moving deliberately so as not to incite the animal tossed it about eight feet to the bear's side.

The bear carried the pack about 50 feet away, ate Bidlake's lunch, rested a brief spell and again sought Bidlake, who had meantime taken refuge in another tree. During the next hour the bear made three additional attempts to reach Bidlake. Between attacks it further ravaged Bidlake's pack and fed on berries. The decking of the canoe was torn up also. At this point the bear became more aggressive in its attempts to reach Bidlake-- growling and biting at limbs in its apparent frustration. At one point, a minor wound was inflicted to Bidlake's foot. The bear was successfully distracted from time to time by tossing down cigarettes, paper, dried apples and articles of apparel until a co-worker (John Trent) came by, whereupon the bear fled. Approximately an hour later another companion (Jay Eisenhart) passed the area; and

although the bear was still there, it made no attempt to harass him.

Bidlake described the bear as good-sized and healthy appearing.

Incident with Mr. Fred Woldstad. A further incident not considered an attack but exemplary of the unusual boldness of a black bear was experienced by Mr. Woldstad, a Protection Officer with the Alaska Department of Fish and Game. The incident occurred at Othik Lake about 85 miles southeast of Fort Yukon, Alaska. In this instance, Woldstad was working around a newly-erected tent camp when a small black bear approached. It fled suddenly, however, upon the approach of a still larger bear. The latter bear, seemingly undisturbed by Woldstad's presence, proceeded to investigate objects about the camp, and it was only by vigorous attacks upon the animal with sticks and stones that Woldstad was able to get it to leave reluctantly. At one point, a tug-of-war ensued between Woldstad and the bear which attempted to drag off a rubber wet suit.

Woldstad described this bear as a large animal, which appeared in good physical condition, and which, beyond its unusual boldness, did not appear abnormal in any manner.

Mr. J.W. Strandberg's Death. The factors bearing on Mr. Strandberg's death are uncertain since there were no witnesses to the tragedy.

The following account was prepared from testimony presented by Mr. Harold Standberg, brother of the deceased and first witness to the tragedy, and Mr. Fred Woldstad, Protection Officer, Alaska Department of Fish and Game, who, together with State Police Trooper Thomas Sweeney, investigated the incident.

On Sunday, 18 August 1963, Mr. Harold Strandberg discovered the body of his brother at their mining claim at Tofty Camp near Manley Springs, Alaska. The body was lying beside a pickup truck approximately 20 feet from the cook shed. Although the body had been slightly molested, Mr. Strandberg did not realize at first that his brother had been the victim of a bear attack. Rather, he suspected that he had injured himself on one of the pieces of machinery used in the mining operation. This suspicion was not confirmed and closer examination of the body revealed that the back of the skull had been fractured and the right arm extensively lacerated. Profuse hemorrhage from the wounds was evident and the right shirt sleeve of the deceased was badly torn. Mr. H. Strandberg did not disturb the body except to cover it with a blanket and sleeping bag after which he sought help.

Slightly over an hour later, Mr. H. Strandberg returned from a nearby camp with Messrs. Kosloski and Luke. Upon their arrival at Tofty Camp, a large male black bear was found further molesting the body and was shot.

Due to a heavy rainfall occurring after the death of Mr. J.W.



Strandberg, few clues helpful in determining what may have transpired were revealed. Blood was found on the left front wheel, tire and door of the vehicle. Blood was also found on the underside of the fender and running board. There was also a large pool of blood in a slight depression beneath the vehicle. This suggests that considerable hemorrhage had occurred although spreading of the blood by rain may have exaggerated this condition.

When attacked Mr. J. W. Strandberg was not wearing his jacket, and a fresh pot of coffee was on the stove in the cook shed. From this, it was the opinion of Mr. H. Strandberg and the State investigating officers that the deceased had been attacked as he stepped around the corner of the cook shed, presumably headed toward the latrine located to the rear. The attack was judged to come from the deceased's right, thus the extensive lacerations of that arm. It was further surmised that the deceased had then attempted to reach his truck approximately 20 feet away. Evidence of blood beneath the vehicle's fender and running board indicated that Mr. Strandberg may have attempted to seek refuge there.

The scant evidence at hand does not permit an absolute statement that Mr. Strandberg was the victim of a bear, particularly a black bear. Circumstantial evidence does, however, suggest this. Nevertheless, the possibility that Mr. Strandberg may have died of

natural causes should be considered. However, Mr. Harold Strandberg stated that his brother (age 51 years) had no record of heart disease or other known-serious but abeyant malady; also the nature of his wounds, with the evidence of profuse hemorrhage, were such as to have been unlikely inflicted upon a dead body.

On the other hand, to assume that the killer-bear was the bear found molesting the deceased's body appears less warranted. Another large bear was seen by Mr. Woldstad feeding on the carcass of the slain bear the following day (19 August) and two other black bears and a grizzly bear had been killed at Tefty Camp short periods before Mr. Strandberg's death. This suggests an abundance of bears in the vicinity. An additional point is unusual. During extensive studies of black bears, it has been the senior author's observation (Erickson, 1957) that the black bear usually drags or carries fresh animal remains to cover before consuming them. This was also the case in the references cited earlier. The grizzly bear appears less inclined to do this, but on the other hand is frequently, if not usually, protective of such a prize and both species commonly bury the remains of fresh carcasses. Both characteristics were violated in this instance.

#### Discussion

While a scarcity of berries as food for bears was popularly accepted as explanation for these attacks, logic and cursory

evidence does not support this contention. Certainly, over the almost continent-wide distribution of the black bear, marked food scarcities have frequently occurred in the past. Yet, discounting situations where close associations of bears and man are encouraged, as in some parks and at so-called bear pits (garbage dumps), there is no evidence that a series of attacks such as occurred in interior Alaska has ever before occurred in the wilds. Furthermore, the attacks took place at a time of year when foods are in near-maximum abundance.

Unfortunately, very little is known of the food habits of the black bear in interior Alaska, and there are no precise data available for comparing berry abundances between years or areas. However, Dr. Arvo Kalliao, horticulturist, Extension Service, University of Alaska, has during recent years made general observations of the distribution and abundance of berries along the road systems of interior Alaska. He reported (personal communication) that blueberries (Vaccinum uliginosum) were generally in low abundance during 1963, though not exceptionally so, and that there were, in fact, local areas of high abundance. Furthermore, Dr. Kalliao found cranberries (Vaccinum vitis-idaea) to be very abundant. An abundance of blueberries existed also at the site of the attack on Bidlake.

The fact that the attacks did not materialize in the spring or later in the fall when foods, even grass, the usual food staple, were certainly less abundant than at the time of the attacks is further argument that they were not related to the availability of food. It is significant also that all of the bears described in the aforementioned incidents were described as thrifty and healthy-appearing animals.

Rabies may also be largely discounted as a cause for the attacks. The brains of ten black bears, including the bear attacking Mr. Roberts and one molesting Mr. Strandberg's body were found negative for rabies virus by the fluorescent antibody test and by inoculation of white mice. Except for the two mentioned, the bears were taken by Fairbanks hunters. The tests were conducted at the viro-pathology unit, Communicable Disease Center, U.S. Public Health Service, Atlanta. Furthermore, none of the attack-animals exhibited symptoms suggestive of rabies, nor were there other reports of bears suggestive of behaving as if afflicted with rabies. It is significant, too, that none of the three seriously bitten victims contracted the disease. However, this would not rule out the possibility that the animals were rabid since transmissibility of the disease is comparatively poor. In cases of humans bitten by proven rabid dogs, only an estimated 5 to 15% of victims untreated with anti-rabies vaccine contract the disease (Rhodes and van Roozen, 1953).

The fact that rabies apparently has been reported only once from a bear (Schoening, 1956) is also indicative that bears are infrequently infected with the disease; as is the fact that Dr. R.L. Rausch (personal communication) has been unsuccessful in attempts to infect captive black bears artificially with rabies.

In one test, a black bear, together with six dogs, two raccoons (Procyon lotor), and three ermine (Mustela erminea), was inoculated with rabies virus that had been isolated from an experimentally infected red fox (Vulpes vulpes). Only the bear, one raccoon, and one dog survived. The bear, and the raccoon that died, had received ten times the amount of virus received by the other animals (5000 and 500 LD<sub>50</sub>, respectively). In a second test, involving a black bear, six arctic foxes (Alapex lagopus) and three dogs, the bear and some of the other animals survived, but again the bear had received a larger amount of virus (1000 and 100 LD<sub>50</sub>, respectively). The brain of the latter bear was found to be negative for rabies virus when the animal was sacrificed after six months. All animals were inoculated in the muscles of the neck. This is an indication that the black bear is quite resistant to rabies infection.

A further possible cause for the attacks may have been stress associated with a high population of bears, as has been observed for cyclic rodent populations (Chitty, 1960; Chitty and Phipps,

1960). Again, however, this does not seem a plausible explanation, even assuming a high bear population, since populations elsewhere must certainly have attained periodic density-highs and yet no attacks or even noticeable intra-specific strife has ever been reported. Then, too, why were the attacks so limited in time? A further perplexing point is the obvious lack of total aggression in several of the attacks. Why, for example, was Bidlake not attacked when he slipped from the tree?

Doubtless, innumerable suppositions might be advanced as explanation for the attacks. In a word, however, it appears clear that no simple explanation is likely to elucidate this unusual series of attacks and the obviously involved behavior of Ursus americanus.

### References Cited

- Bartlett, E. L. 1963. Congressional Record, pp. A5441-A5442.  
U.S. Govt., August 26.
- Chitty, D. 1960. Population processes in the vole and their  
relevance to the general theory. Can. J. Zool., 38:99-113.
- Chitty, D. and E. Phipps. 1960. The effect of fleas on spleen  
size in voles. Journ. Phys., 151: 27-28.
- Erickson, A.W. 1957. Techniques for live-trapping and handling  
black bears. Trans. N.A. Wildl. Conf., 22: 520-543.
- Norris-Elye, L.T.S. 1951. The black bear as a predator of Man.  
J. Mamm., 32: 222-223.
- Rhodes, A.J. and C.E. van Roozen. 1953. Textbook of virology.  
Baltimore: Williams and Wilkins Co. 561 pp.
- Seton, E.T. 1935. Lives of Game Animals. Vol. II. Literary  
Guild of America, N.Y., N.Y.
- Schoening, H.W. 1956. Rabies. In Yearbook of Agriculture.  
U.S. Gov. Printing Office. pp. 195-202.
- Whitlock, S.C. 1950. The black bear as a predator of Man.  
J. Wildl. Mgt., 31: 135-138.

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