

February 4, 2005

Martin Haefele, Environmental Assessment Officer
Mackenzie Valley Environmental Impact Review Board
5102-50th Avenue, P.O. Box 938
Yellowknife, NT X1A 2N7

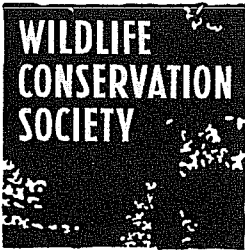
Dear Mr. Haefele:

For the past three years, I have been conducting field surveys of grizzly bears in and adjacent to Nahanni National Park Reserve in collaboration with Parks Canada and the Deh Cho First Nation. I understand that Canadian Zinc Corporation has applied for a permit to re-open the Prairie Creek mine and to construct an all-season road from the Liard Highway to the mine site. On October 16, 2003, I sent a letter to the Mackenzie Valley Land and Water Board to transmit our findings on the occurrence of grizzly bears in the Prairie Creek area. The purpose of this letter is to update you on the most recent findings of this continuing study. I have provided details on methodology and analysis in the accompanying Addendum to this letter. Here, I will cover the primary findings and concerns.

Survey Results

During a single 20-day survey session in 2003, 10 different grizzly bears -- 6 males and 4 females -- visited 10 of the 16 stations across a 1000-km² grid around Prairie Creek (Fig. 1). The average number of grizzly bears per station was 1.19 (\pm 0.26 SE). Most of the grizzly visits were higher up in the mountains whereas most of the black bear visits occurred along the South Nahanni River. In 2004, we collected grizzly bear hair from 2 natural rub trees along Prairie Creek about 3 km and 11 km upstream of the mine site. In 2003, male grizzly bear #33 was detected at stations 7 and 8 in the Prairie Creek grid within 10 km of the mine site (Fig. 2). Interestingly, in 2004, this same grizzly bear was detected at another grid station some 65 km distant at the south end of the Tlogotsho Plateau near the Yukon border (Meilleur Tlogotsho grid in Fig. 1). It is highly likely that this grizzly traveled through Nahanni National Park Reserve in route between these sites.

The Prairie Creek area ranks moderately high in grizzly bear occurrence compared to other areas in the Greater Nahanni Ecosystem. The Prairie Creek grid tied for 2nd highest in the average number of grizzly bears per station (1.19 ± 0.26 SE) and 3rd highest in the minimum number of grizzlies detected (10).



We have developed a provisional model and map of grizzly bear distribution and relative abundance across the Greater Nahanni Ecosystem following a peer-reviewed modeling approach. This preliminary model also indicates that much of the Prairie Creek area, particularly the valleys and mountains above the mine site, ranks moderately high in the likelihood of grizzly bear occurrence. Ground reconnaissance in 2004 revealed that sweet-vetch (*Hedysarum* spp.), a common plant food for grizzly bears in the Mackenzie Mountains, occurs consistently along the edges of the floodplain.

Conservation Concerns

The mine site, airstrip, and winter access road are located near the center of the Prairie Creek survey grid. Four grizzly bears (2M:2F) visited 5 sites within 10 km of the mine; all 10 sites visited by grizzlies lay within 20 km of the mine. A total of 6 different grizzly bears (4M:2F) visited the 3 sites that occurred along the section of the access road within the grid.

If additional mining activity is proposed in the Prairie Creek area, the notable concentration of grizzly bear activity documented herein warrants a detailed environmental assessment. Improved and/or unregulated road access would be an issue of special concern.

Sincerely,

A handwritten signature in black ink that reads "John L. Weaver". The signature is written in a cursive, flowing style.

John L. Weaver, Ph.D.

Wildlife Conservation Society