The Quintette caribou herd lives primarily in the mountains near Tumbler Ridge, B.C. This herd belongs to a population which is currently listed as Threatened in Canada, although a recent analysis by the Committee on the Status of Endangered Wildlife in Canada recommended that the status be listed as Endangered. The herd is also part of the Peace Northern Caribou Planning (PNCP) area. The PNCP calls for protection of 90% of high-elevation winter range, and appropriate management of low-elevation winter ranges to allow recovery of these caribou herds.

The Quintette caribou population has experienced significant declines in recent years and currently numbers about 98-113 caribou. The herd contains two primary wintering groups, one in the Mt. Spieker area, and the other in the Quintette Mountain area. Until recently, caribou in both groups primarily wintered in high-elevation habitats including alpine, subalpine and subalpine parkland. Over 95% of winter locations occurred in those high-elevation habitats. In 2010, however, the TREND coal mine expanded from Roman Mountain to high-elevation caribou habitat on Quintette Mountain. The presence of that industrial activity on Quintette Mountain corresponded to a major shift in caribou winter habitat use in that area. In recent winters, most of the Quintette Mountain caribou have used low-elevation winter habitat to the east of Quintette Mountain. Since 2011, over half of the winter telemetry locations for these caribou have been in low-elevation forested habitat. Consequently, the protection of high-elevation habitat provided by the PNCP is no longer adequate to protect the winter range being used by these caribou.

As part of the PNCP, high-elevation core winter range has been delineated for the Quintette caribou herd. Also, low-elevation core winter range has been delineated for the Narraway (Bearhole/Redwillow subgroup) caribou that winter in boreal forests further to the east. The displaced Quintette caribou have been using the area between these two areas. Most of that low-elevation habitat had not been delineated, however, because use of that area is a recent phenomenon. This report outlines the areas of low-elevation habitat that are now being used by the displaced Quintette caribou so that those areas can be properly managed to protect the caribou.

Radio-telemetry data were plotted to identify the low-elevation areas being used by the caribou in winter. Within that area, we applied a habitat model that identifies winter habitat selection by caribou for low-elevation winter range (Williamson-Ehler 2012). We mapped areas that contained high and moderate selection by caribou during winter. We then delineated the outer perimeter of these areas to enclose a polygon that contained areas most likely to be selected by caribou, and areas that were also intensively used by caribou. Small areas that were less likely to be selected by caribou were also included in order to delineate one large contiguous polygon. Total area of this polygon is 9,255 hectares, of which 6,791 hectares consists of moderate and high selection by caribou.
Reference:
Figure 1. Low-elevation winter habitat for the Quintette caribou herd.
Figure 2. Low-elevation winter habitat and caribou winter locations for the Quintette caribou herd.