

## ***Commitment 9 - Additional Boreal Caribou Maps and Narrative for Figures Provided in GNWT Response to ECCC IR#7***

**Parties:** ECCC and GNWT

**Reference:** Day 1 ([PR#158](#) p180-184) and Day 2 ([PR#159](#) p31-32)

**Commitment:** 9A) The GNWT commits to providing boreal caribou collar maps for the summer, breeding, fall and winter periods as the information becomes available, as stated in the GNWT's response to ECCC IR#7 ([PR#128](#)).

### **Response:**

GNWT is pleased to provide boreal caribou collar data maps for the Early-Mid Summer (7 June – 12 August) and Mid-Late Summer (13 August – 12 September) activity periods (Figure 9a-1, 9a-2), as outlined in the GNWT's response to ECCC IR#7 ([PR#128](#)). The collar data suggest that females moved shorter distances and used smaller areas during the Early-Mid Summer period than during the Calving period (30 April – June 06; Figure 5 in GNWT response to ECCC IR#7; [PR#128](#)). Three collared females undertook long linear movements from an area southwest of the TASR alignment, to areas east of the TASR alignment during the calving period, which may indicate pre-calving dispersal movements to locate suitable calving areas (Figure 5 in GNWT response to ECCC IR#7; [PR#128](#)). Following these longer linear movements, collared females remained within relatively confined areas during the Early-Mid Summer period (Figure 9a-1), which is more consistent with shorter daily movements reported by Nagy (2011) for the calving and post-calving periods. This might indicate that calving occurred later in 2017 than is typically observed. Movement rates appeared to increase again in the Mid-Late Summer period (Figure 9a-2). From March 14 to September 12 there were only four instances where collared caribou crossed the TASR alignment.

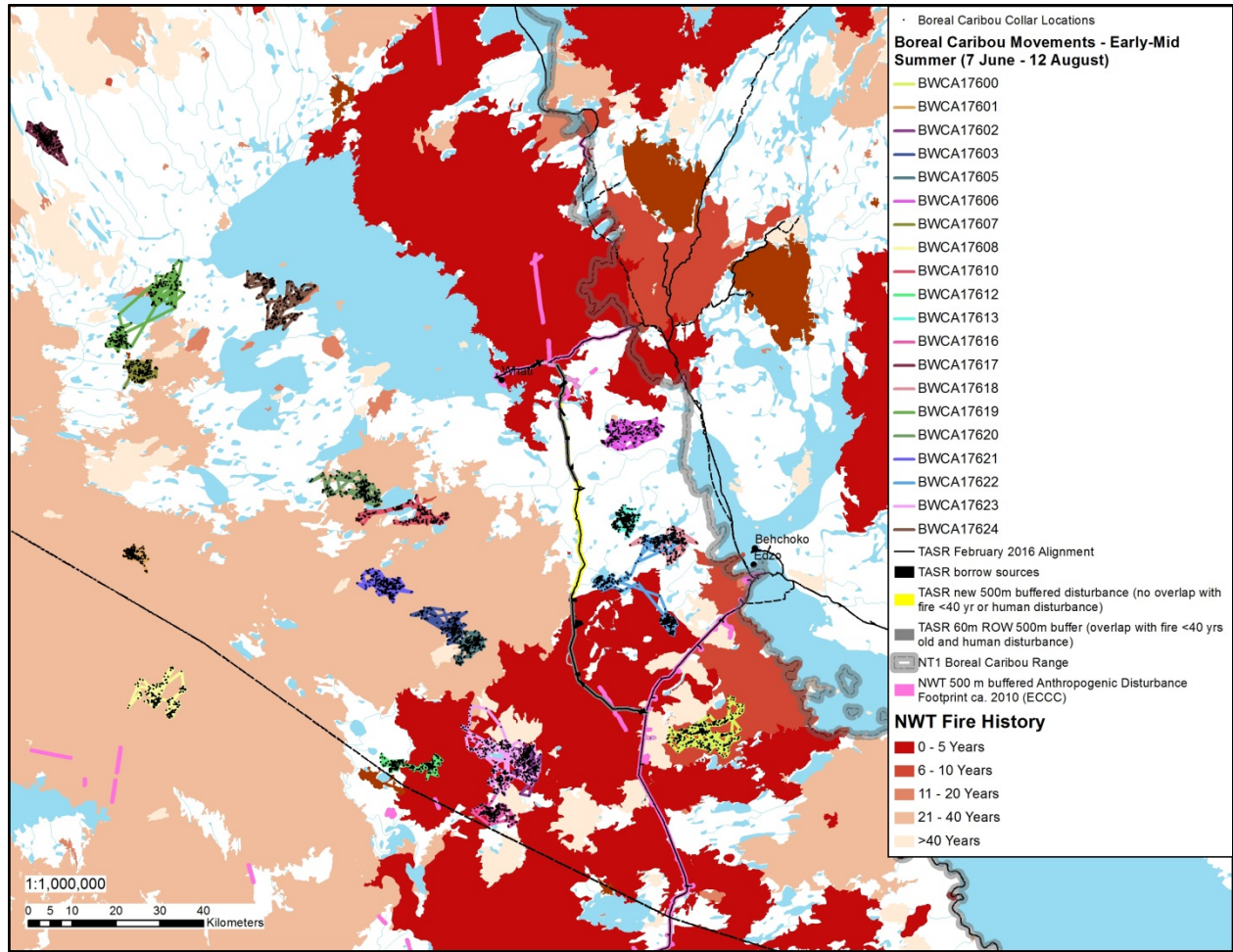


Figure 9a-1. Early-mid summer (7 June – 12 August) movements of 20 boreal woodland caribou fitted with GPS collars between March 14-22, 2017.

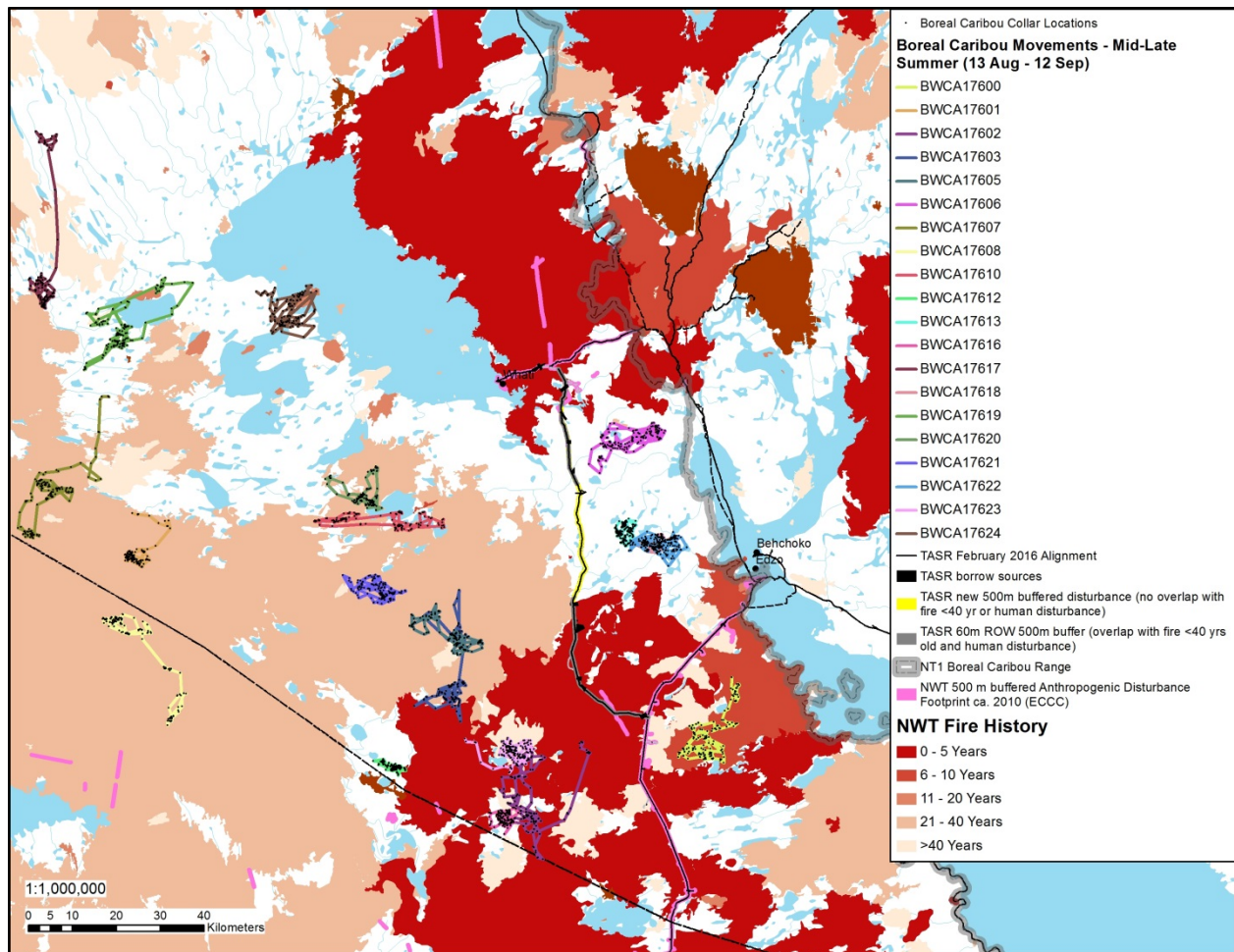


Figure 9a-2. Mid-late summer (13 August – 12 September) movements of 20 boreal woodland caribou fitted with GPS collars between March 14-22, 2017.

**Commitment:** 9B) The GNWT commits to providing a narrative to accompany the figures provided in the GNWT's response to ECCC IR#7 (PR#128). This narrative will include an explanation of boreal caribou movements around Highway 3 and will be provided prior to the final technical report submission date.

**Response:**

Figures 3, 4 and 5 provided in the GNWT's response to ECCC IR#7 (PR#128) show movements of collared female caribou during the late-winter, pre-calving and calving periods, and suggest that some collared females may have approached but not crossed HWY 3. Based on all the available collar data from March 15 to September 13 2017, there were three collared females that had movement paths that approached within less than 1 km of HWY 3 (Animal ID's BWCA17600, BWCA17606, BWCA17616) (Figure 9b-1). Figure 9b-2 provides a closer look at these movement paths. There was one movement segment from one individual (BWCA17616) that may have crossed HWY 3, however collar locations from this individual were recorded 8 hours apart, so it is

difficult to confirm whether that individual actually crossed the highway or just moved parallel to it during that time.

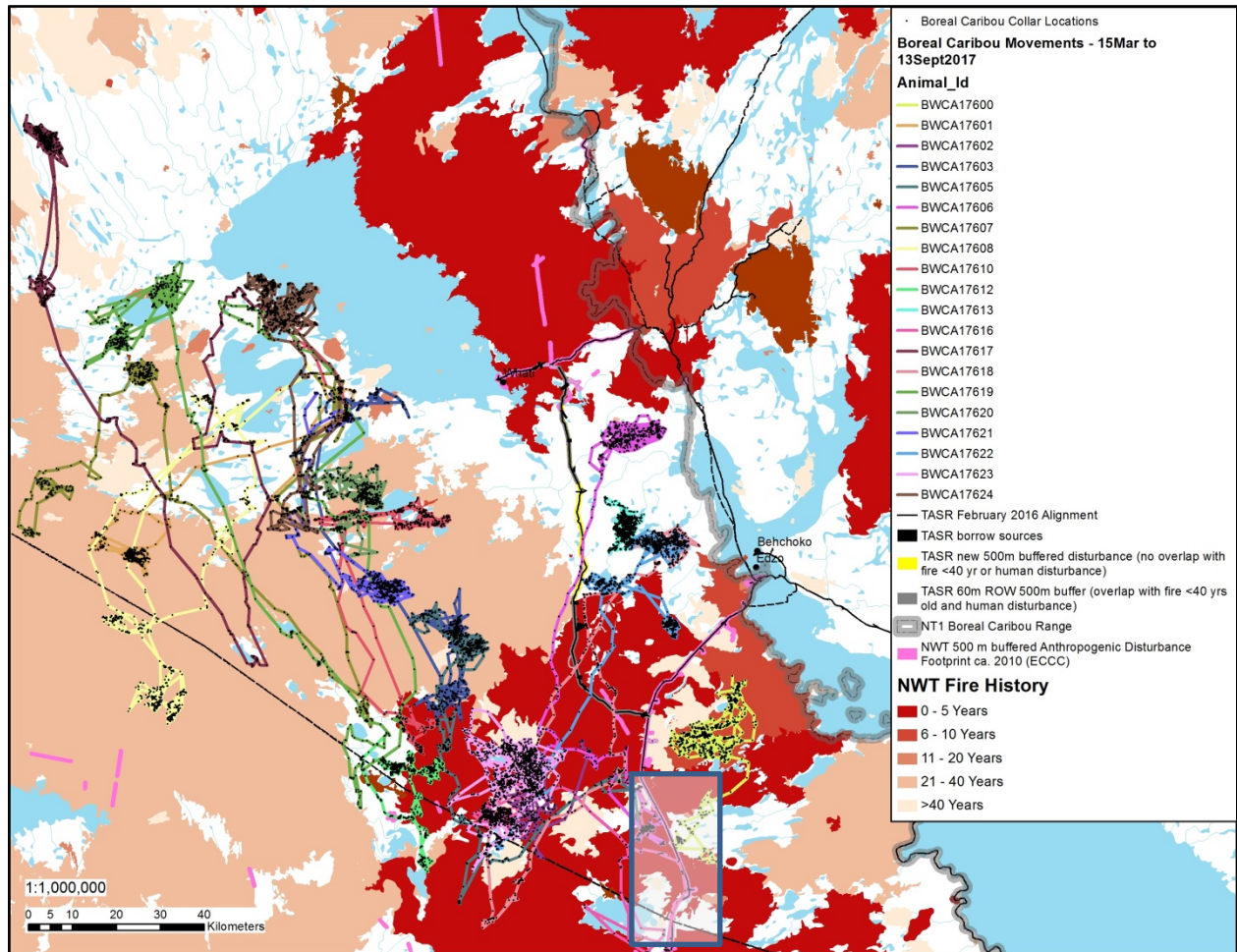


Figure 9b-1. Movement paths of collared female boreal caribou based on collar locations from 15 March to 13 September 2017. The rectangle at the bottom of the figure highlights movement paths that approached within less than 1 km of HWY 3, and are shown at a finer scale in Figure 9b-2.

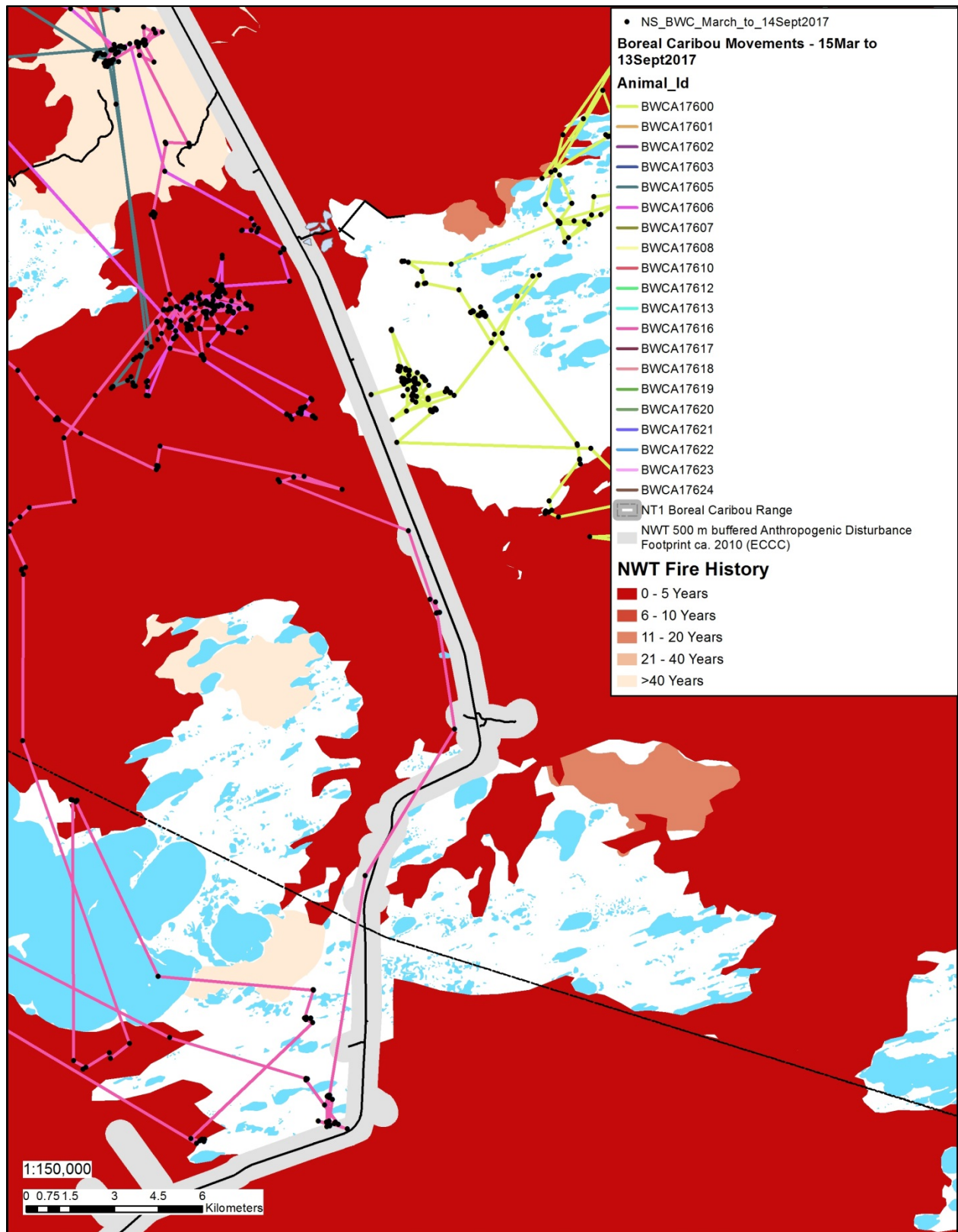


Figure 9b-2. Movement paths of three collared females that had movement paths that approached within less than 1 km of HWY 3 (Animal ID's BWCA17600, BWCA17606, BWCA17616).