

MELIADINE TERRESTRIAL BASELINE SYNTHESIS REPORT - DRAFT

Table 5-4: Timing of Loon and Swan Nest Surveys, 1998 to 2000, 2009

Year	Survey Type	Mine Area	Control Area
1998 (aerial and ground)	Occupancy	18, 20 to 23 June	-
	Productivity	18 July	-
1999 (aerial and ground)	Occupancy	12 to 13 June	12 to13 June
	Productivity	25 July	25 July
2000 (aerial and ground)	Occupancy	11 to 15 July	11 to15 July
	Productivity	12 to 17 August	12 to17 August
2009 (aerial only)	Occupancy	16 June	-
	Productivity	31 July	31 July

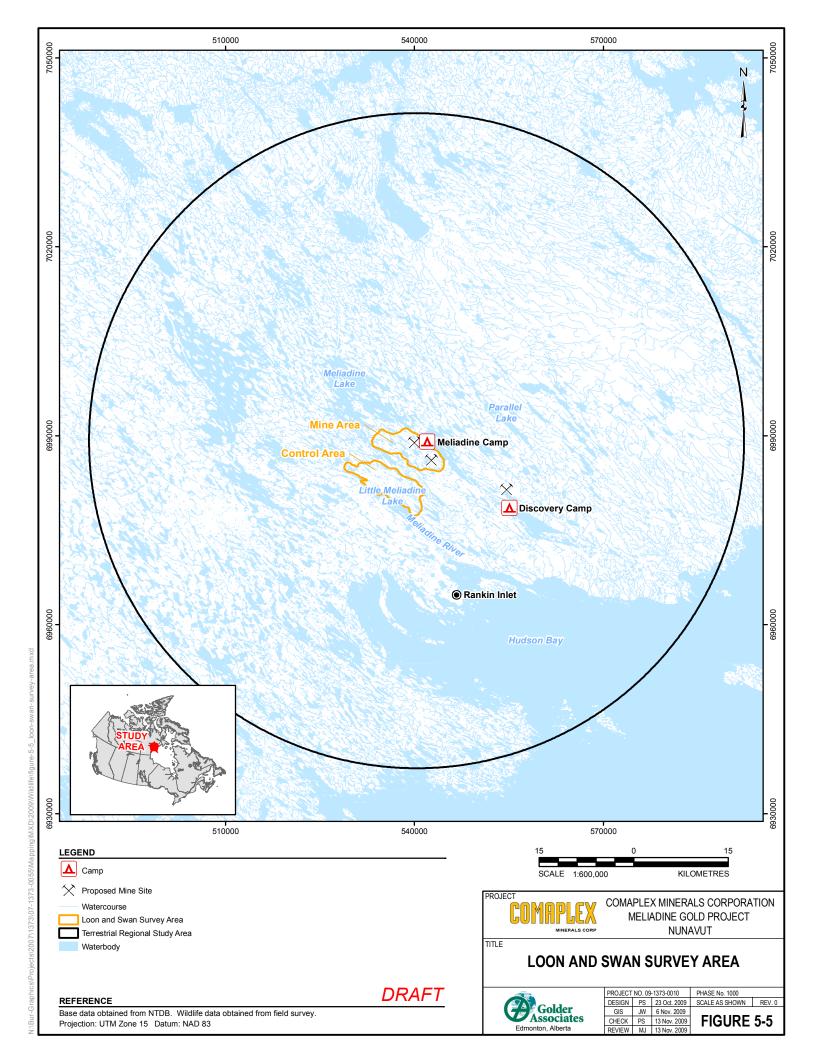
Note: - =surveys not conducted

5.1.8 Incidental Wildlife Observations

The objective of incidental observations was to document important additional information on wildlife occurrence within the Project area. Incidental wildlife observations were recorded during all visits to the Project area. During all aerial and ground surveys, observations of non-target species were recorded including GPS coordinates, number of individuals, and group composition, if applicable.

Between 1998 and 2000, WMC environmental staff and Project staff completed a wildlife sightings log, which provided additional incidental wildlife data. A sightings log was also used in 2008 and 2009, but with little to no participation. Instead, personal communications with Project staff about wildlife observations were recorded and compiled by Golder personnel.







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5.2 Barren-ground Caribou

Baseline survey data documenting the distribution of barren-ground caribou during the early winter, spring migration and calving, and post-calving through fall migration and rut periods suggest that the study area lies within the seasonal range of the Qamanirjuaq (Kaminuriak) barren-ground caribou herd (Jalkotzy 1999, 2000a, 2000b, Golder 2008). The year-round range of this herd occupies an area from northern Manitoba and Saskatchewan in the south to south-western Nunavut and south-eastern Northwest Territories in the north (BQCMB 1999, Figure 5-6). Barren-ground caribou are migratory, and movements and range use varies annually (Wakelyn 1999). The annual distribution and life history of this population has been previously documented (Banfield 1954; Kelsall 1968; Thomas 1969; Parker 1972; Heard 1983). A portion of the Qaminrjuaq herd may pass through the Project area very quickly in summer but may linger in some years from later October through March (Hubert and Associates 2007).

Migration from the southern winter range to the calving grounds occurs mid-March to late May (BQCMB 1999). The traditional calving grounds of the Qamanirjuaq herd are located west of the Project study area, and south of Baker Lake (BQCMB 2008; Figure 5-6). Specific calving areas can vary from year to year. However, the traditional calving grounds have historically remained in the same general location (BQCMB 2008; Figure 5-6). After calving in early June, barren-ground caribou form larger groups and by mid-July, aggregations of many thousands may move over the tundra landscape en masse. The herds occupy the calving ground and post-calving areas until the end of July when a rapid summer migration to the treeline occurs. In some years, a migration north back towards the calving grounds can take place in August in response to flies. The timing of the fall migration south of the treeline occurs from October to December (BQCMB 2008).

Over 5 years of monitoring, 195 groups of barren-ground caribou were observed during 16 aerial surveys, comprising a total of 10 254 individual animals (Appendix B1; Table 5-5 and Table 5-6; Figures 5-7, 5-8, and 5-9). Mean group size (\pm standard error) was 53 \pm 15 individuals for all periods and all years combined. Mean group size was higher during the post-calving through fall migration and rut period, and the largest groups were observed during this period (Table 5-6). In some cases, in excess of 2000 individual caribou were observed during the post-calving through fall migration and rut period of 2008 (Figure 5-8).



