

June 2007 Barren-ground Caribou Calving Ground Survey-
Tuktoyaktuk Peninsula, Cape Bathurst, and Bluenose-West Herds

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A fixed-wing survey was conducted over the calving area of the Bluenose-West, Cape-Bathurst Caribou Herds and Tuktoyaktuk Peninsula. The purpose of this survey was to find the where caribou were calving this year. Surveys were flown over the range of the Bluenose-East, Bathurst and other caribou herds at the same time by different field crews.

The survey was flown with a Cessna 206, 120 meters above ground at a speed of 160 kilometers per hour. A 400 meter strip on each side of the plane was used as the transect. Observers marked the 400-meter distance on their windows and identified each observation as “in transect” or “off transect”. “On transect” observations were used for the analysis. Transects were 5 kilometers apart, and on the outer edges of the Tuktoyaktuk Peninsula and Bluenose-West areas distance between transects was increased to 10 kilometers. Each caribou observation was identified by a GPS waypoint and the observer identified the caribou as cows, calves, bulls, yearlings or unknown.

For the Cape Bathurst and Bluenose-West portion of the survey Jonah Nakimayak was an observer and during the Tuktoyaktuk Peninsula portion of the Robin Felix was an observer. Richard Popko (Wildlife Technician, ENR, Sahtu Region) was the second observer and Tracy Davison (Regional Biologist, ENR, Inuvik Region) recorded for the duration of the survey.

A flight was done on June 13th to determine if it was peak calving (50% of cows had calves at heel). It was close to peak calving so the survey was started on the Bluenose-West range. However, the weather turned bad east of Paulatuk and the survey start was switched to the Cape Bathurst range. The Cape Bathurst range was flown on June 14th and 15th. Bad weather delayed the survey on the Bluenose-West range, and it was flown on June 17th, 21st, and 22nd. On June 25th the Tuktoyaktuk Peninsula was flown. Figure 1 shows the flight lines for all surveys. A total of 57.6 hrs was flown for this survey with 16.7hrs on Bluenose-West, 10.5hrs on Cape Bathurst, 5.7hrs on Tuktoyaktuk Peninsula. The remaining time was spent determining peak calving, fairing, and because flight plans had to be changed due to weather.

The number of cows observed per square kilometer on the Tuktoyaktuk Peninsula and Cape Bathurst range is shown in figure 2. Figure 3 shows the number of calves observed per square kilometer on the Tuktoyaktuk Peninsula and Cape Bathurst areas. Figure 4 shows the number of cow and figure 5 shows the number of calves observed per square kilometer on the Bluenose-West range.

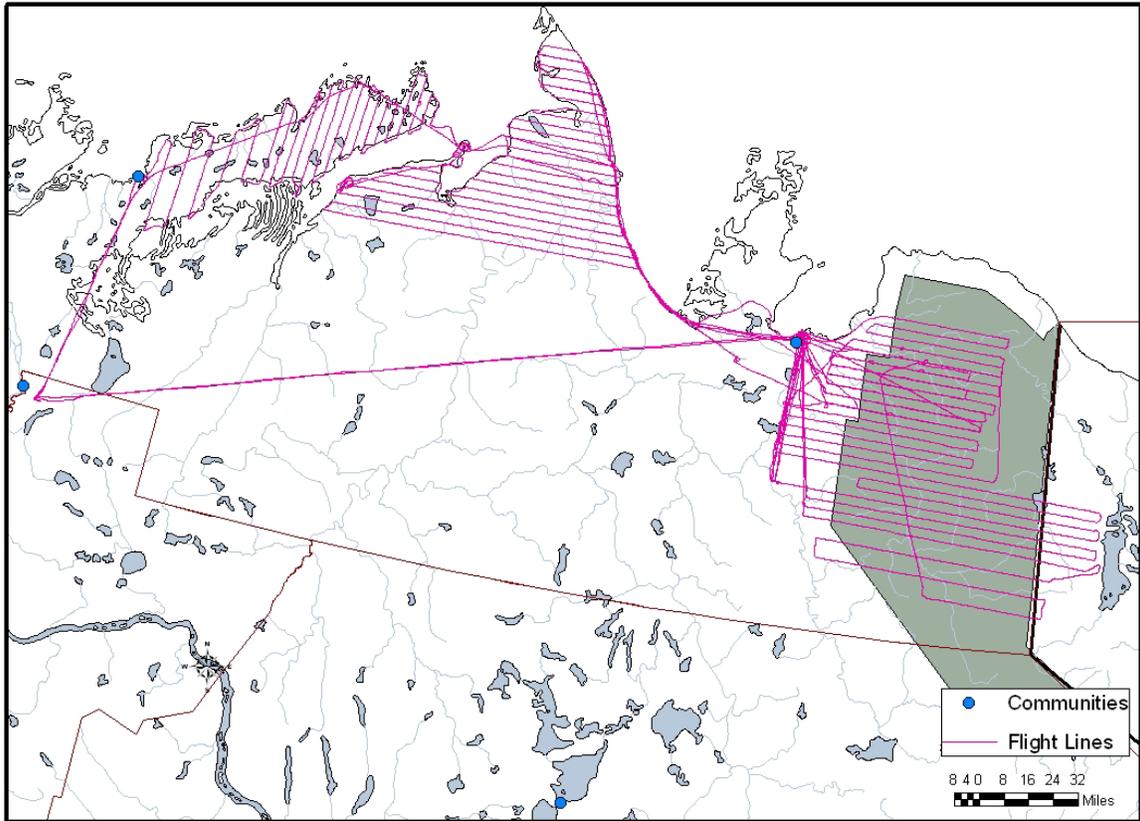


Figure 1: All flight lines from fixed wing flights during June.

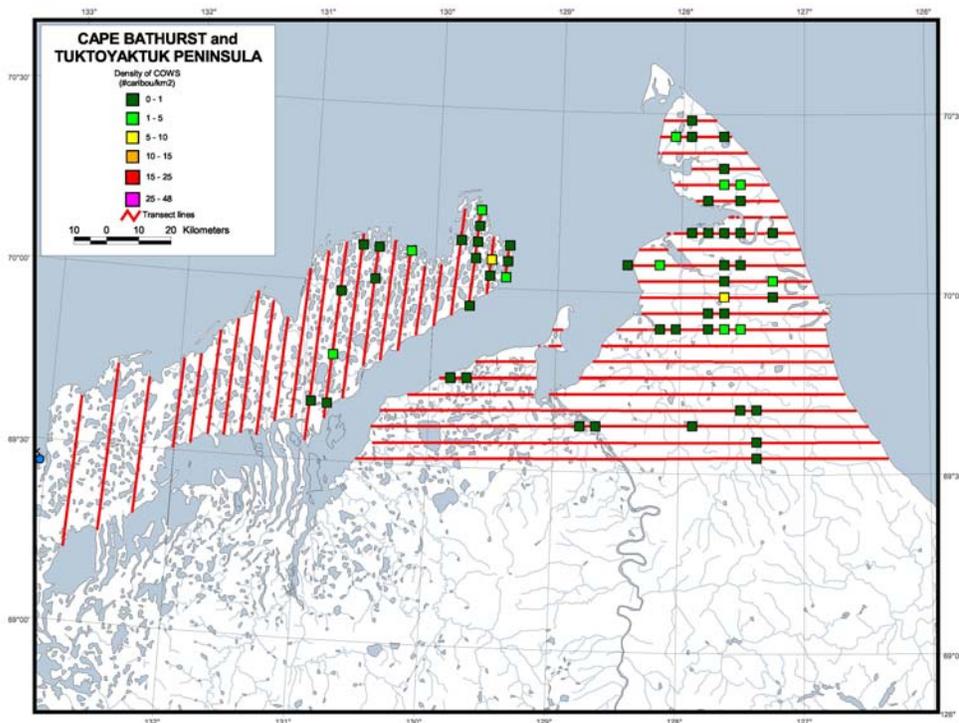


Figure 2: Density of Cows observed on the Cape Bathurst and Tuktoyaktuk Peninsula areas.

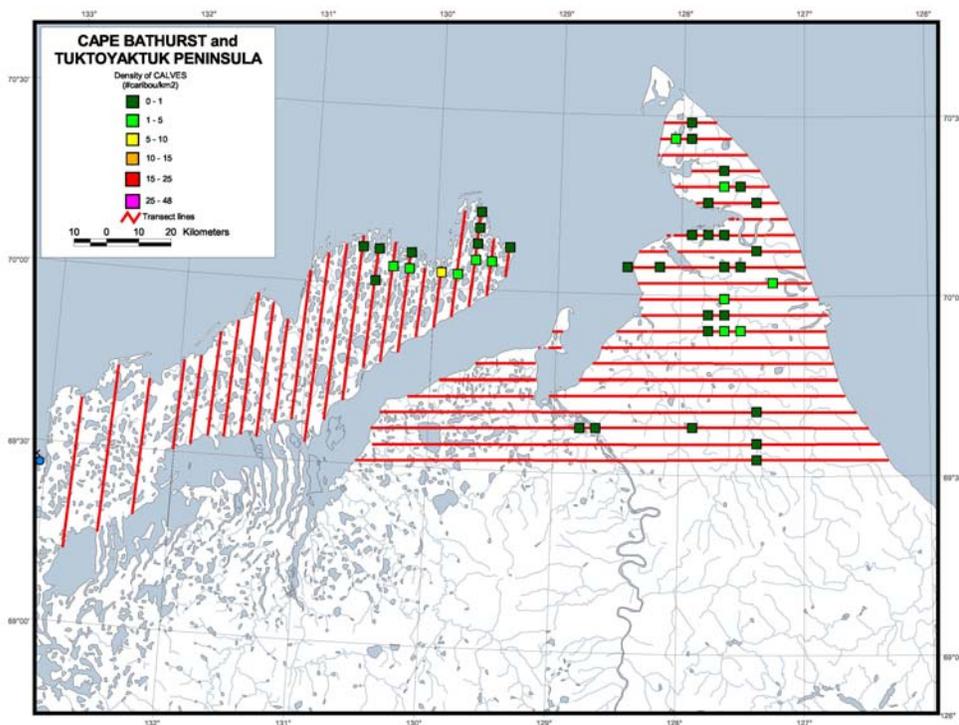


Figure 3: Density of Calves observed on the Cape Bathurst and Tuktoyaktuk Peninsula areas.

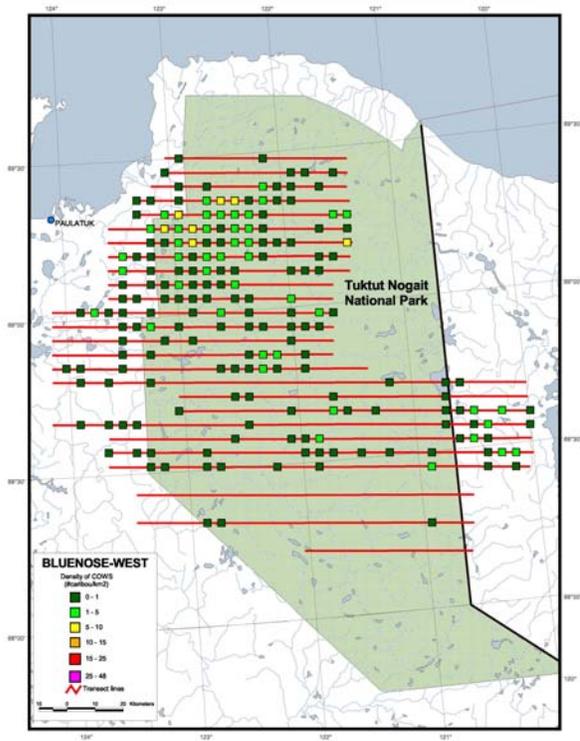


Figure 4: Density of Cows observed on the Bluenose West area.

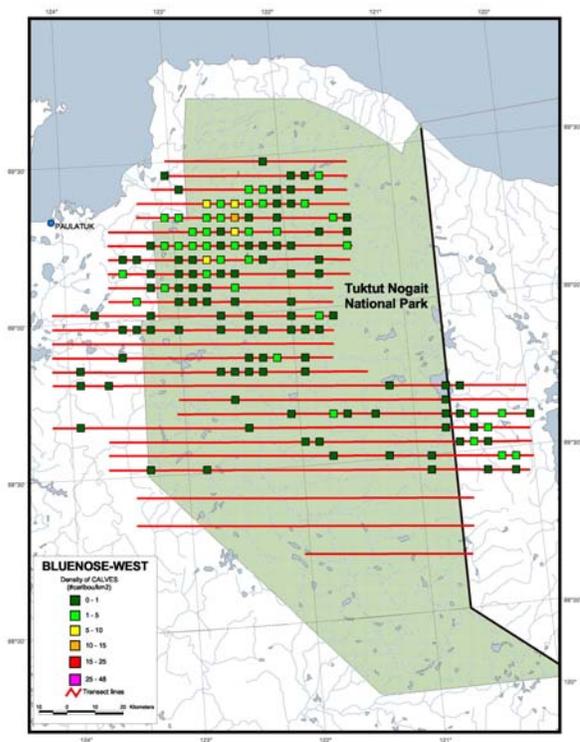


Figure 5: Density of Calves observed on the Bluenose West area

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