

Abstracts

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Movements and Behavior of Caribou Potentially Affected by
the Trans-Alaska Pipeline

The Central Arctic caribou herd, estimated at 5,000 head, ranges on the arctic slope between the Brooks Range Divide and the Beaufort Sea in the vicinity of the Sagavanirktok River. Seasonal range is roughly bisected by the trans-Alaska pipeline corridor. Calving occurs primarily on the coastal plain and annual movements are distinct from those of the Porcupine and Western Arctic herds to the east and west, respectively. Summer occupancy is centered in coastal habitats with fall and spring movements to and from the arctic coast occurring along a northwest-southeast axis. The majority of the herd winters in the lower foothills of the Brooks Range, although variable numbers may remain near the arctic coast. Factors which may be related to seasonal movements are discussed, including distribution of preferred forage species, plant phenology, snow conditions, insect harassment, predator avoidance, and intrinsic drives related to parturition and rut. Data on interactions of caribou with the haul road and sections of elevated pipe are limited but several patterns of behavior are beginning to emerge. The majority of successful crossings involve bulls and occur more frequently during periods of high insect density. Selection of higher pipe elevations has been exhibited by several groups of crossing caribou; however, a few demonstrated no height preference and crossings beneath pipe as low as one meter above the ground have been observed.

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