

## Group dynamics of the Porcupine Caribou Herd during insect season

W.A. Nixon & D.E. Russell

Canadian Wildlife Service, 202 - 204 Range Road, Whitehorse, Yukon, Canada Y1A 3V1

*Abstract:* In early summer, caribou (*Rangifer tarandus granti*) form large dense groups in response to insect harassment. In early July 1984 and 1985 the maximum group size was 30 000 for the Porcupine Caribou Herd. Later in July, when insect activity subsided, maximum group size was less than 10 000. This behavior, as well as overt annoyance responses may reduce the contact between individual caribou and parasitic or blood sucking dipterans such as bot flies (*Oestridae: Cephenomyia trompe*), warble flies (*Oestridae: Hypoderma tarandi*) and mosquitoes (*Culicidae*). Based on the frequency of annoyance responses elicited by caribou, the windward side or the center of the group was more advantageous to caribou in terms of insect avoidance. This concurs with the findings from Helle & Aspi's experiment with animal traps to determine if herd formation reduced insect harassment among reindeer.

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