

WINTER RANGE FIDELITY IN WESTERN ARCTIC HERD CARIBOU AS DETERMINED BY
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We used radiotelemetry to measure winter range fidelity among caribou of the Western Arctic Herd (WAH) in northwestern Alaska. From 1978 through 1984 we obtained 2-7 successive winter range locations for each of 51 instrumented caribou. Overall, we obtained 190 individual winter range locations or 139 consecutive pairs. Each location was assigned to one of 4 major ranges occupied by caribou in each of the 7 winters. Perfect fidelity to a winter range occurred in only 2 cases for which at least 5 records were obtained, in 2 cases for which 4 records were obtained, and in 2 cases for which 3 records were obtained. All other animals switched winter ranges at least once even though none of these ranges was abandoned by the herd. One animal for which 6 records were obtained never occupied the same range during 2 consecutive winters. The same was true of 1 animal for which 5 records were obtained and 3 animals for which 4 records were obtained. Overall, individual caribou switched winter ranges on 79 of 139 possible occasions (57%). Observed return rates did not differ significantly from rates expected on the basis of chance alone. We also conclude that the tendency for individual caribou to frequently switch winter ranges cannot be explained by major changes in herd distribution.

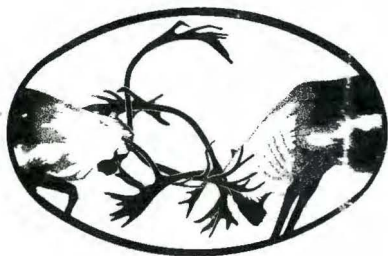
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