
This book contains the most complete collection of caribou photographs ever published, and they are, without doubt, the most beautiful caribou photographs ever published. The photographs illustrate a text that is well written but at other times is somewhat overwritten. Calef skillfully tells a fictional narrative of the life of caribou throughout the year and interweaves this with a series of more sober, factual accounts. The technique is extremely effective in conjuring up visions and, for me, memories — of crouching in the snow and counting caribou while trying to keep the binoculars from freezing in the -40° C air, of watching long lines of caribou stream toward a tundra esker heading into the northern sun, of watching a newborn fawn struggle to its feet with its rubbery legs wide-braced, of the clacking, rattling roar of the hooves of one-quarter of all the caribou in Canada streaming around me under a forest of palm trees.

But he fails to emphasize that the examples he gives are but minor cavils. There are a few trivial errors in this part of the book: at one place the text describes the Bathurst region while the accompanying photographs are clearly of eastern Alaska or western Yukon Territory; there is a statement that wolves kill many wild reindeer calves in Scandinavia when there are neither many wild reindeer nor wolves there; the author repeats the old wheeze about the edges of caribou hooves in winter providing "excellent traction on slippery ice." These are but minor cavils.

After such an entertaining story for about 150 pages, the book falls all to pieces. At this point Calef embarks on a crusade to save the caribou, and, in doing so, ignores most of the past 30 years of caribou research. Basically his thesis is that wolves and native hunting have done in the caribou and in order to stem the decline we must eliminate natural and human predation. Shades of Jack Miner! Why do we always blame them and never us?

In order to develop his thesis Calef selects conclusions from the research literature that agree with his ideas but does not mention conflicting views. For example, he points out that caribou can, indeed, thrive on grasses and sedges. But he fails to emphasize that the examples he gives are from tiny, isolated areas on the fringe of caribou distribution, areas that have mild, maritime climates and that have nothing in common with the vast reaches of the taiga wintering ranges on the continent. He repeats the astonishing statement that forest fires help maintain lichen crops. Again, this idea originated in the context of the windy, wet, maritime vegetation of Newfoundland where fire can indeed be used to break the forest canopy and increase lichen productivity. It has no relationship at all to the lichen ranges in the dry, continental taiga.

Calef seems to be a member of that group of southern foresters that claims "Fire is good for the forest." He says fires have not increased in frequency in recent years and that they would have to increase to five or ten times their present frequency before they would begin to affect caribou food supply. Anyone who revisits old, familiar regions of the north will be dead wrong. As Calef himself describes (but apparently does not really appreciate), caribou, by their own actions, disturb the snow cover and cause it to melt. This nullifies the entire reason for the program except that it provides the excuse for more control.

Calef ignores the classic study by Parker (Canadian Wildlife Service Occasional Paper No. 10, 1971) which showed that the type of program advocated by Calef did not increase caribou numbers when it was tried in the late '50s. Calef brings in comparative data on muskox survival but nowhere mentions the mass of data from the Isle Royale moose-wolf studies. In fact, the Isle Royale results are just the opposite of what Calef supposes will happen.

Not only is there a biased selection from the scientific literature but there is an inordinate reliance on ideas and data in unpublished theses and government agency or consulting company in-house reports (the "grey literature") that have never undergone scrutiny and criticism by the scientific community. In fact, of Calef's citations after 1954 (the date of Barfield's classic study, the beginning of modern caribou biology) 27% are from unpublished sources not in the open scientific literature.

The last part of the book shows numerous other errors and inconsistencies. For example, on p. 152 Calef says that caribou are the only deer that have evolved to live in the Arctic. Quite true, but this book is solely about those caribou that spend over half their lives in the taiga, not the Arctic. On p. 152 he says that caribou become more active as temperatures fall but on p. 155 he says that their basal metabolic rate drops by more than 25% from November on. On p. 158 he says that lichens "... grow widely on the poor soils of the boreal forest and tundra ..." implying that lichens receive nutrients from the soil, but, of course, they do not.

The author clearly loves caribou, passionately and devotedly. I fear that his devotion to caribou has fogged his scientific objectivity and has prevented him from bringing all his faculties to bear on the problem. He has forgotten that "Those who ignore history are forced to repeat it."

Calef does have good advice regarding protection of fawning grounds, use of vehicles, interference with migration routes, overhunting, etc. He admits that if the lichens were killed by sulfur dioxide and the taiga cut for lumber and fence posts then the caribou would disappear, but for some reason he cannot see that fire kills lichens, too, and fire destroys taiga as surely as cutting for fence posts does.

The book is beautifully bound and produced. Probably because of its appearance it has received a number of uncritical, effusive and laudatory reviews. Such general acceptance by an unsophisticated public means the book probably has already set back rational caribou management by many years.

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This unpretentious book by three outstanding Soviet scholars presents us with an important addition to our store of data on prehistoric cultures.