# THE **HEAT** IS **ON**

Species feeling the effects of climate change



## **Caribou** Rangifer tarandus

#### **ABOUT THIS SPECIES**

Caribou are the nomads of the Arctic, tracing migration routes across hundreds or thousands of miles in search of lichens, moss, shrubs and grass to eat. As the northernmost-ranging member of the deer family, caribou have a number of adaptations for tundra life, including a thick coat of two layers of fur; large, broad hooves that provide traction and aid in cratering (digging) through snow to reach food; and a muzzle specialized to help warm the air before it reaches their lungs. In Canada and Alaska, caribou amass in huge herds in spring and fall to migrate south to wintering areas and north to summer feeding grounds. Mating occurs during the autumn merger, and calving during the spring. Calves can walk within an hour of birth and run within a day.

#### **DESCRIPTION OF IMPACT**

The Arctic is warming faster than any other part of the world, affecting caribou in all seasons. Warmer autumn and winter temperatures are leading to more freezing rain events that cover the ground with a thick, icy crust that requires the animals to use considerably more effort to break through to reach food. The "green-up" of the most nutritious plants is also occurring earlier in spring, and in some places the migrating herds arriving to give birth and raise their calves are missing the best growth. And in summer, warmer temperatures are increasing the survival rates of biting flies and mosquitoes to the point that the scourge of biting insects is enough to interfere with feeding. The combined effects have been disastrous: **caribou have experienced a nearly 60 percent decline worldwide over the past three decades**. Alaska's Western Arctic Herd declined 30 percent from 2003 to 2011. Nine of the 11 major Canadian herds have also declined precipitously, down 50 to 90 percent since the early 1990s.

### References

Associated Press. 2009. Mighty caribou herds dwindle, warming blamed. October 4. <u>http://www.nbcnews.com/id/33164564/ns/us\_news-environment/t/mighty-caribou-herds-dwindle-warming-blamed/#.VHSXtdKjMyp</u>

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Russell, D.E. and A. Gunn. 2013. Migratory Tundra Rangifer. <u>http://www.arctic.noaa.gov/report13/</u> <u>caribou\_reindeer.html</u>

For more information on other wildlife affected by climate change, visit our website at **www.defenders.org/climatechange** 

#### **Region:** Arctic

#### Area affected: Alaska and Canada

#### **Climatic change:**

Warming temperatures, precipitation changes

#### Impact:

Altered food availability, insect harassment



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