



Some basic facts about
caribou
Rangifer tarandus

Dr. Elie Gurarie
State University of New York
College of Environmental Science and Forestry



State University of New York College of
Environmental Science and Forestry

Caribou
are Arctic generalist
herbivores



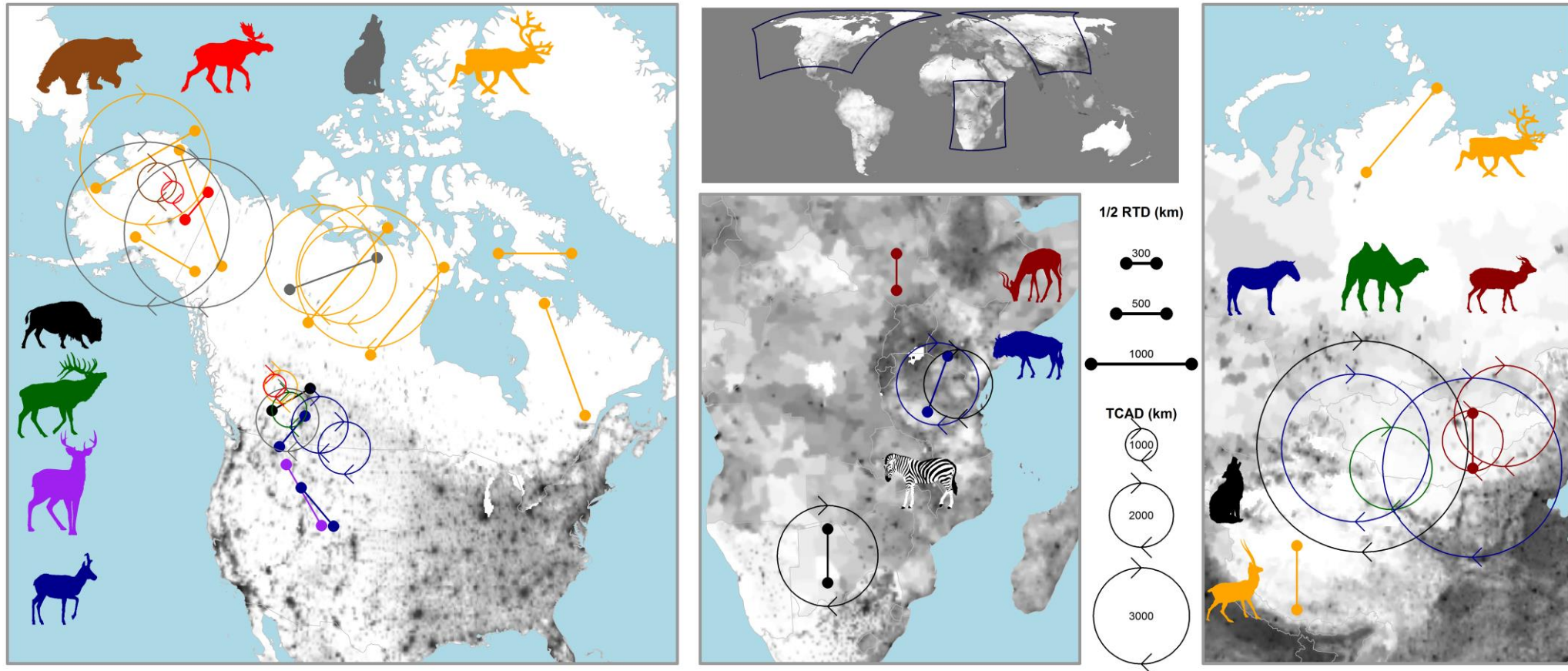
Caribou are extremely abundant



and extremely well-adapted to Arctic conditions

Caribou travel enormous distances

> 4000 km / year



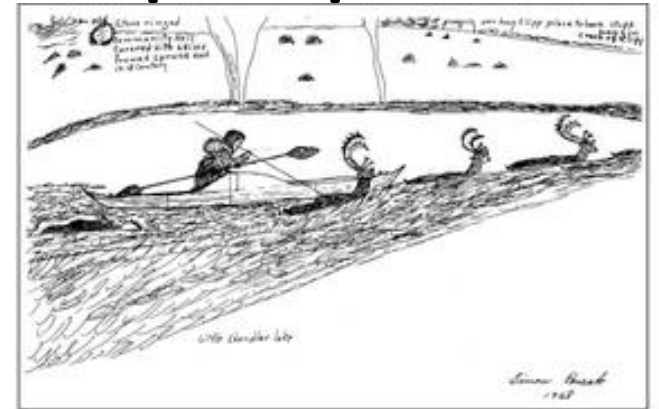
Caribou are extremely important to people



Helge Ingstad

“Caribou meat is our meat since I was born. I was raised with it. The skin was my clothes. The meat was my diet and the broth was my drink... Without caribou meat, what would I eat...?”

Rachel Riley, Nunamiut Elder

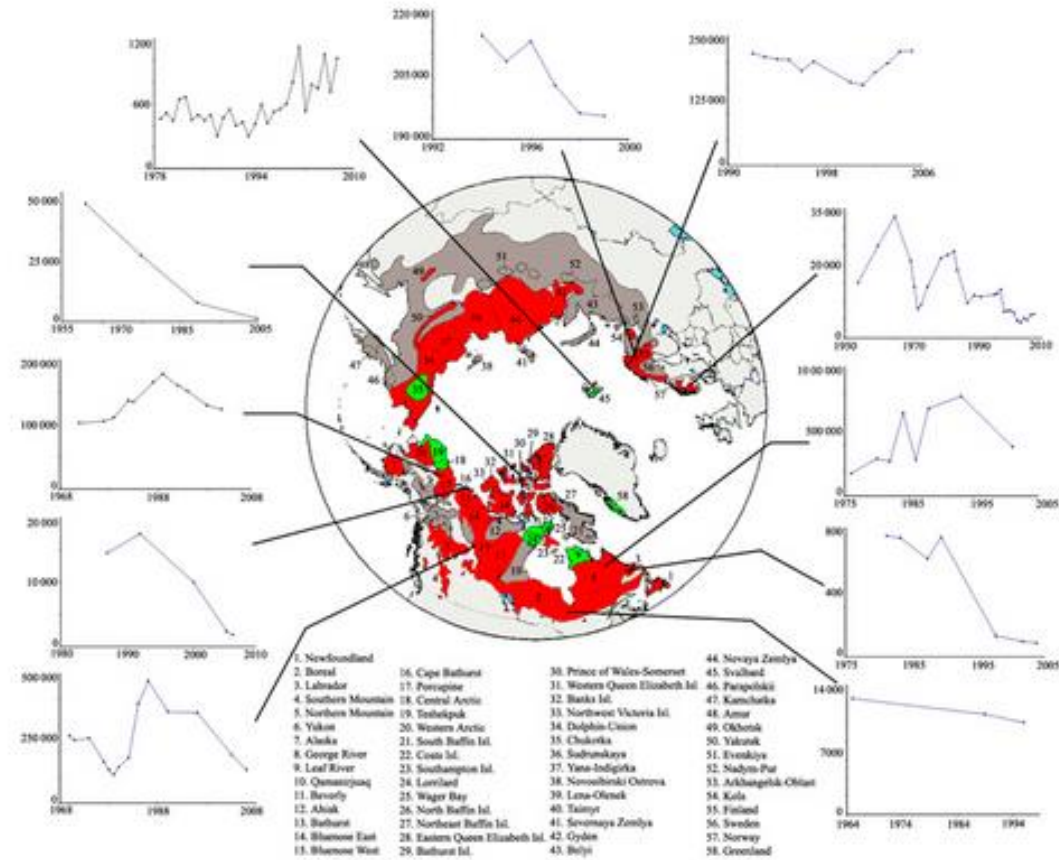


Simon Paneak

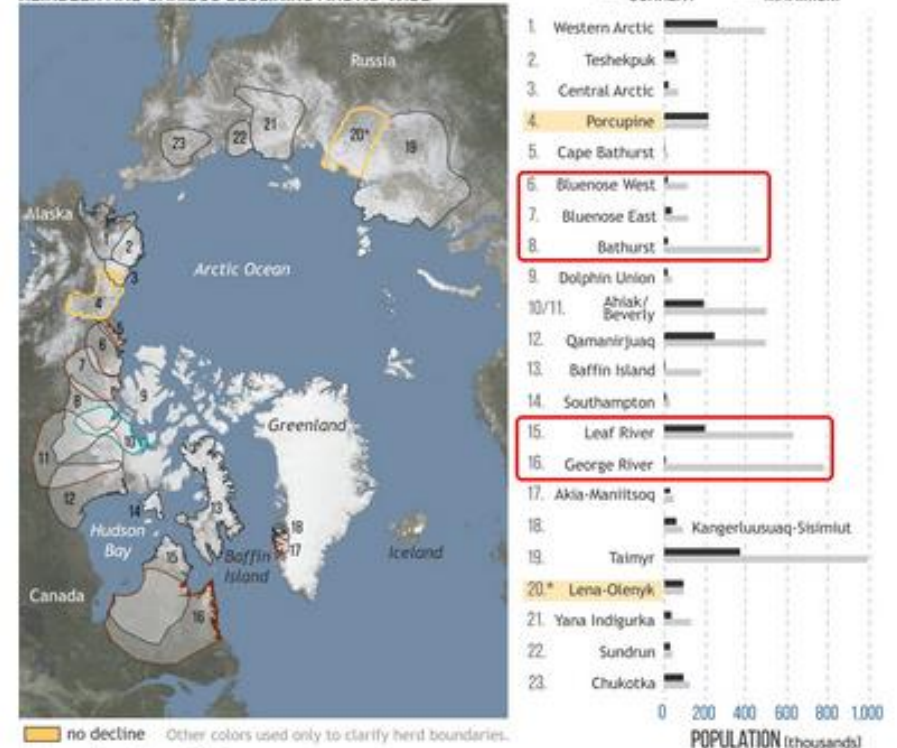


Peter Mather

Caribou populations are (mainly) falling



REINDEER AND CARIBOU DECLINING ARCTIC-WIDE



*Not confirmed since 2009.

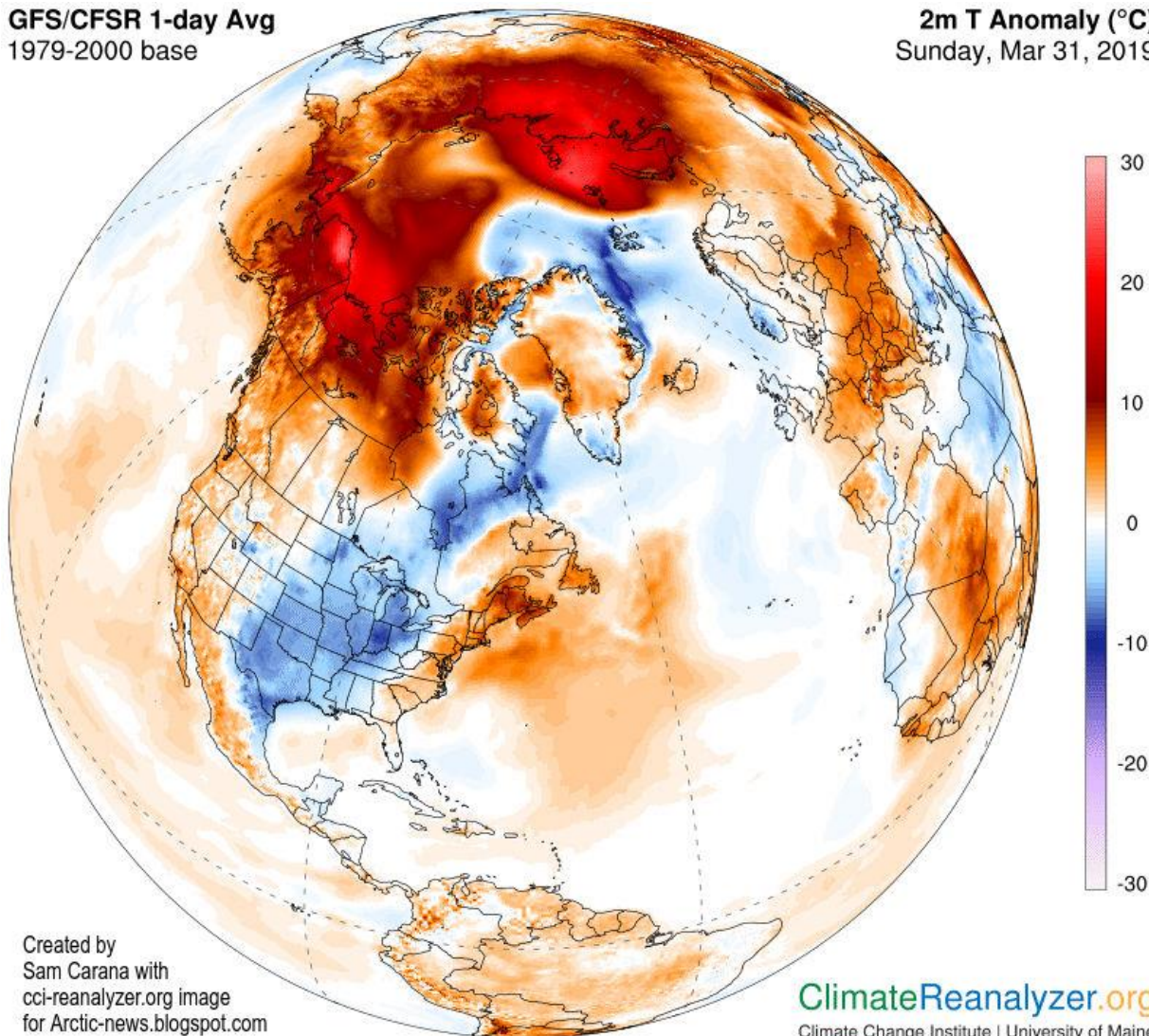
NOAA Climate.gov, adapted from 2018 Arctic Report Card

... and no one knows why

The Arctic is warming faster than any other place on Earth

GFS/CFSR 1-day Avg
1979-2000 base

2m T Anomaly (°C)
Sunday, Mar 31, 2019



World
+ 0.8 °C

Northern Hemisphere
+ 1.4 °C

Arctic
+ 7.5 °C

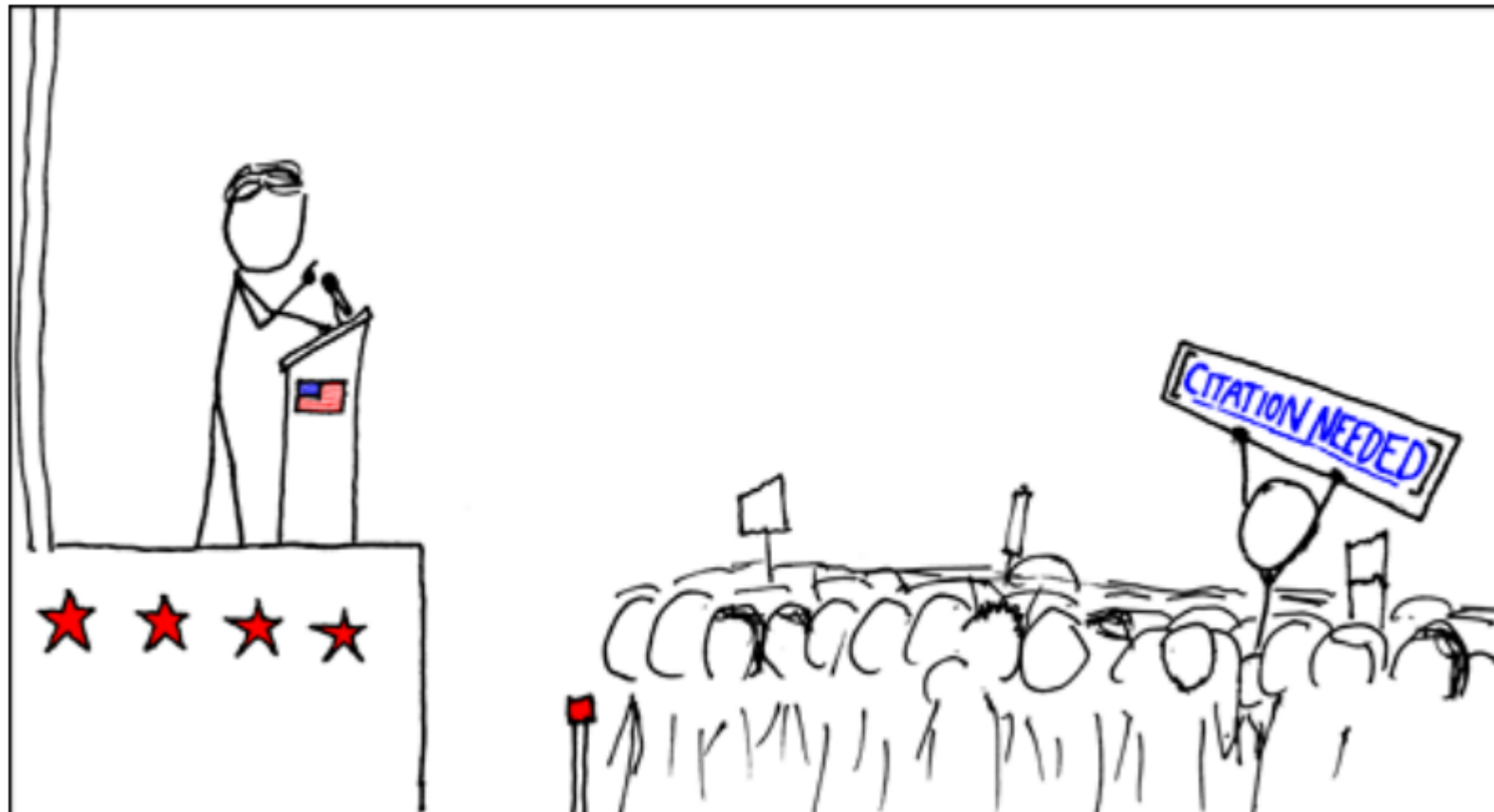
Tropics
+ 0.6 °C

Southern Hemisphere
+ 0.1 °C

Antarctic
- 2.3 °C

But how do we know *any* of these facts!?

For research/reporting/science to be credible *almost everything* that is not original work needs to be **cited**...



Example:

ECOSPHERE
AN ESA OPEN ACCESS JOURNAL

Article | [Open Access](#) |  

Tactical departures and strategic arrivals: Divergent effects of climate and weather on caribou spring migrations

Eliezer Gurarie , Mark Hebblewhite, Kyle Joly, Alicia P. Kelly, Jan Adamczewski, Sarah C. Davidson, Tracy Davison, Anne Gunn, Michael J. Sutor, William F. Fagan, Natalie Boelman

First published: 12 December 2019 | <https://doi.org/10.1002/ecs2.2971> | Citations: 39

Corresponding Editor: Debra P. C. Peters.

One intro sentence:

The centrality of caribou to high latitude ecosystems is reflected in their high circumpolar abundance, their strong impacts on tundra vegetation, their importance as prey species for predators and scavengers, and their importance to the subsistence and culture of human groups throughout the Arctic.



Example:

ECOSPHERE
AN ESA OPEN ACCESS JOURNAL

Article | [Open Access](#) |  

Tactical departures and strategic arrivals: Divergent effects of climate and weather on caribou spring migrations

Eliezer Gurarie , Mark Hebblewhite, Kyle Joly, Alicia P. Kelly, Jan Adamczewski, Sarah C. Davidson, Tracy Davison, Anne Gunn, Michael J. Sutor, William F. Fagan, Natalie Boelman

First published: 12 December 2019 | <https://doi.org/10.1002/ecs2.2971> | Citations: 39

Corresponding Editor: Debra P. C. Peters.



One intro sentence:

The centrality of caribou to high latitude ecosystems is reflected in their high circumpolar abundance, their strong impacts on tundra vegetation (Väisänen et al. [2014](#), Rickbeil et al. [2015](#), Bichet et al. [2016](#), Bråthen et al. [2017](#), Schmitz et al. [2018](#)), their importance as prey species for predators and scavengers (Reynolds et al. [1987](#), Bergerud [1996](#), Young and McCabe [1997](#), Legagneux et al. [2014](#)), and their importance to the subsistence and culture of human groups throughout the Arctic (Burch [1972](#), Wolfe and Walker [1987](#), Hummel and Ray [2008](#)).

12 references!