

Woolly Mammoth



Peak Population Size: Hundreds of Thousands

Habitat Needs/Preferences: Dry, cold grasslands, low-growing vegetation, limited deep snow, open spaces for herding.

Role in the Food Web: Mammoths were herbivores that shaped nutrient cycles and vegetation. They were also a vital food source for apex predators due to their large quantities of rich meat. Younger, older, or sick mammoths were also easy targets for predators looking for nutrients.

Ecosystem Service: Trampling snow, aggressively grazing, uprooting trees.

Fun Fact: Like the rings of a tree, mammoth tusks have rings that can be used to determine a mammoth's age.

Steppe Bison

Peak Population Size: Unknown, but estimated to have peaked 37, 000 years ago

Habitat Needs/Preferences: Extensive grasslands, tundra-like biomes, mixed diet of grasses, sedges, forbs, mosaic woodlands for temperature regulation.

Role in the Food Web: Mixed eater that mainly ate grass, but sometimes shrubs depending on seasonal availability. By converting vegetation into digestible biomass, bison were foundational to predators such as scimitar cats and wolves. Their dung was also extremely nutrient-dense, acting as fertilizer for plant growth.

Ecosystem Service: Grazing prevented woody encroachment, nutrient cycling through dung, soil disturbance.

Fun Fact: In 1984, a steppe bison was found that was so well-preserved that scientists ate a piece of it.



Caribou



Peak Population Size: Between 700,000 and 1,000,000 in western Canada

Habitat Needs/Preferences: Require old-growth coniferous forests and peatlands. They use forests to forage for tree and ground lichens, find refuge from large predators, and to host calving grounds.

Role in the Food Web: Caribou convert low-energy tundra and taiga vegetation into high-quality protein, directly supporting predators and circulating nutrients.

Ecosystem Service: Dispersed seeds, cycled nutrients, acted as living barometers for old-growth forests, supporting biodiversity and regulating climate.

Fun Fact: Dating back roughly 1.6 million years, the world's oldest caribou fossil was found in Yukon's own Fort Selkirk



Wolves

Peak Population Size: Across all of North America, population estimates peak at 67,000 to 74,000.

Habitat Needs/Preferences: Wolves require large prey, access to fresh water, secluded sites for dens, and minimal human disturbance.

Role in the Food Web: Wolves are apex predators at the top of the natural food web. With no natural predators, wolves play a huge part of controlling large herbivore populations and behaviours.

Ecosystem Service: Wolves regulate prey populations, manage mesopredators, and shape natural landscapes, also indirectly boosting carbon storage and stabilizing waterways.

Fun Fact: Rather than long, deep sleeps, wolves take power naps every few hours, allowing them to be active during both the day and night.

Scimitar Cats

Peak Population Size: Unknown but low compared to other big cats.



Habitat Needs/Preferences: Required vast, open environments such as grasslands, needing wide spaces to hunt down large herbivores.

Role in the Food Web: Scimitar cats were apex predators that regulated mega-herbivore populations, selectively targeting easy targets such as young mammoths and mastodons. They also were known to hunt bison and horses.

Ecosystem Service: Regulated herbivore populations, had numerous trophic cascade effects, and left behind food that could be used for scavengers.

Fun Fact: The fangs of a scimitar cat acted like steak knives for slicing through the hides of their prey.