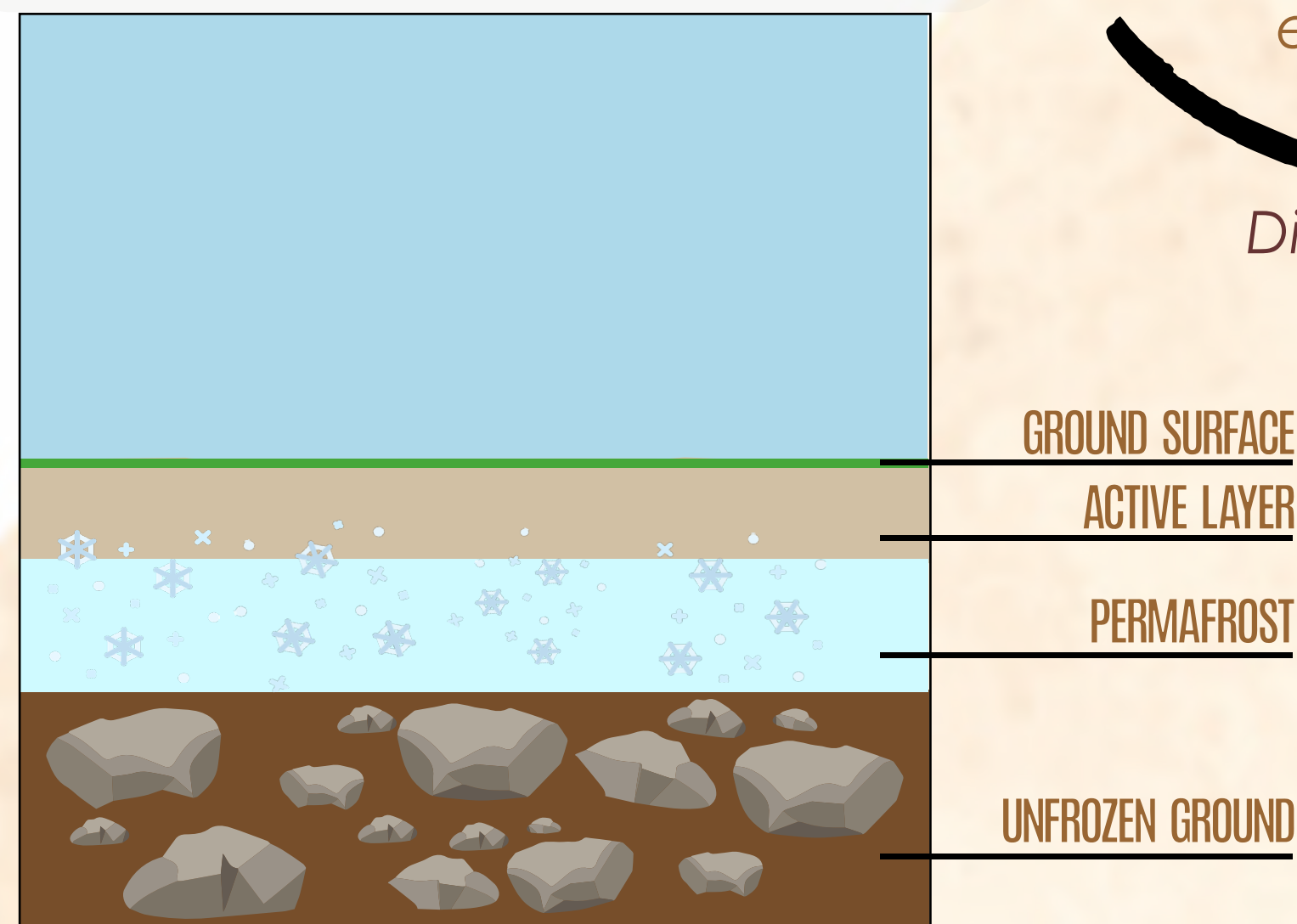


DE-EXTINCTION OF THE WOOLLY MAMMOTH TO COMBAT ARCTIC PERMAFROST DEGRADATION

WHAT IS PERMAFROST?

- Ground that remains below 0°C for at least two consecutive years
- May comprise of bedrock, sediment, soils, or organic materials and may or may not contain ground ice



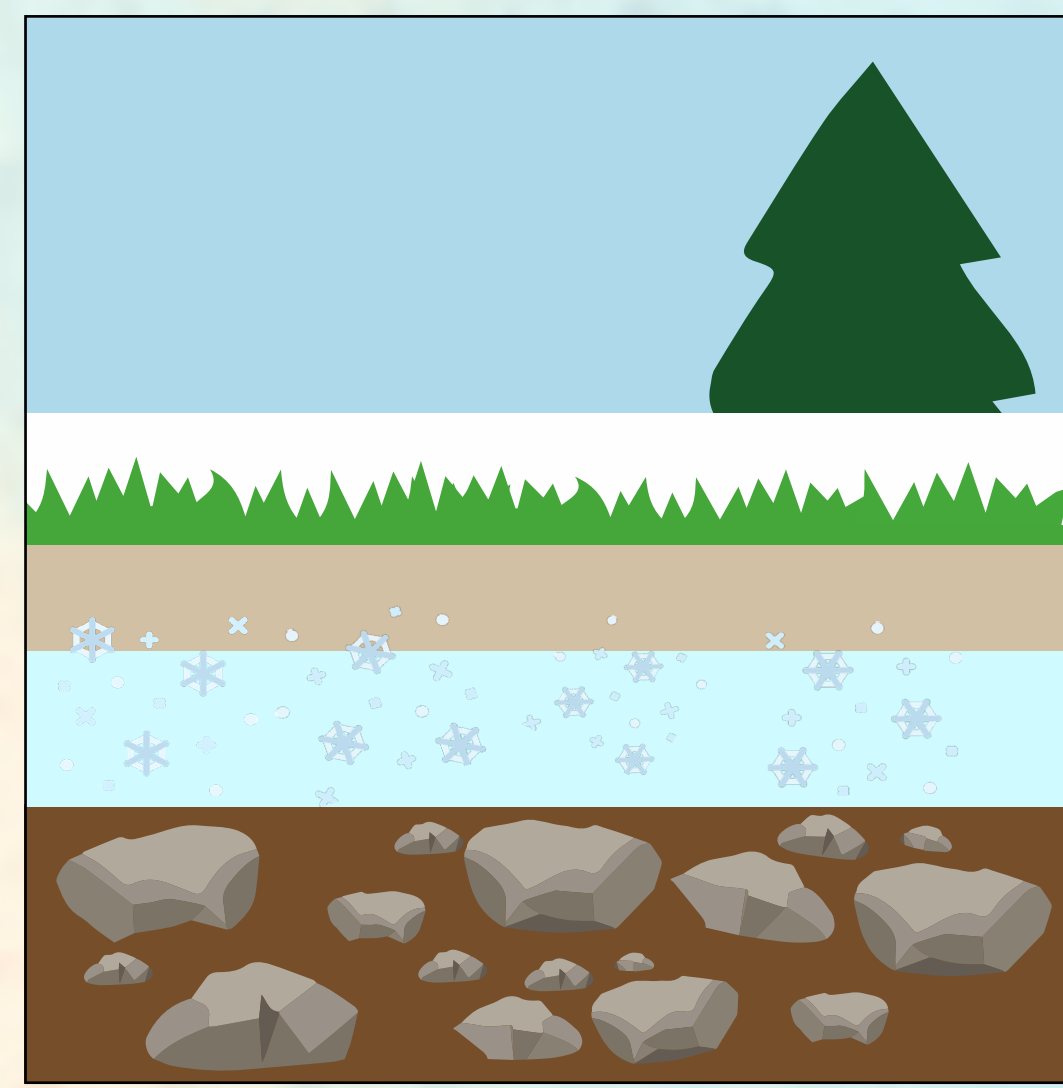
Slow thawing rate

Understanding permafrost dynamics is essential for mitigating climate change and fragile arctic and subarctic environments

Distribution and productivity

VEGETATION

Increases in vegetation cover and height generally mitigate permafrost thaw in summer, but increases annual soil temperatures through snow-related winter soil warming effects¹



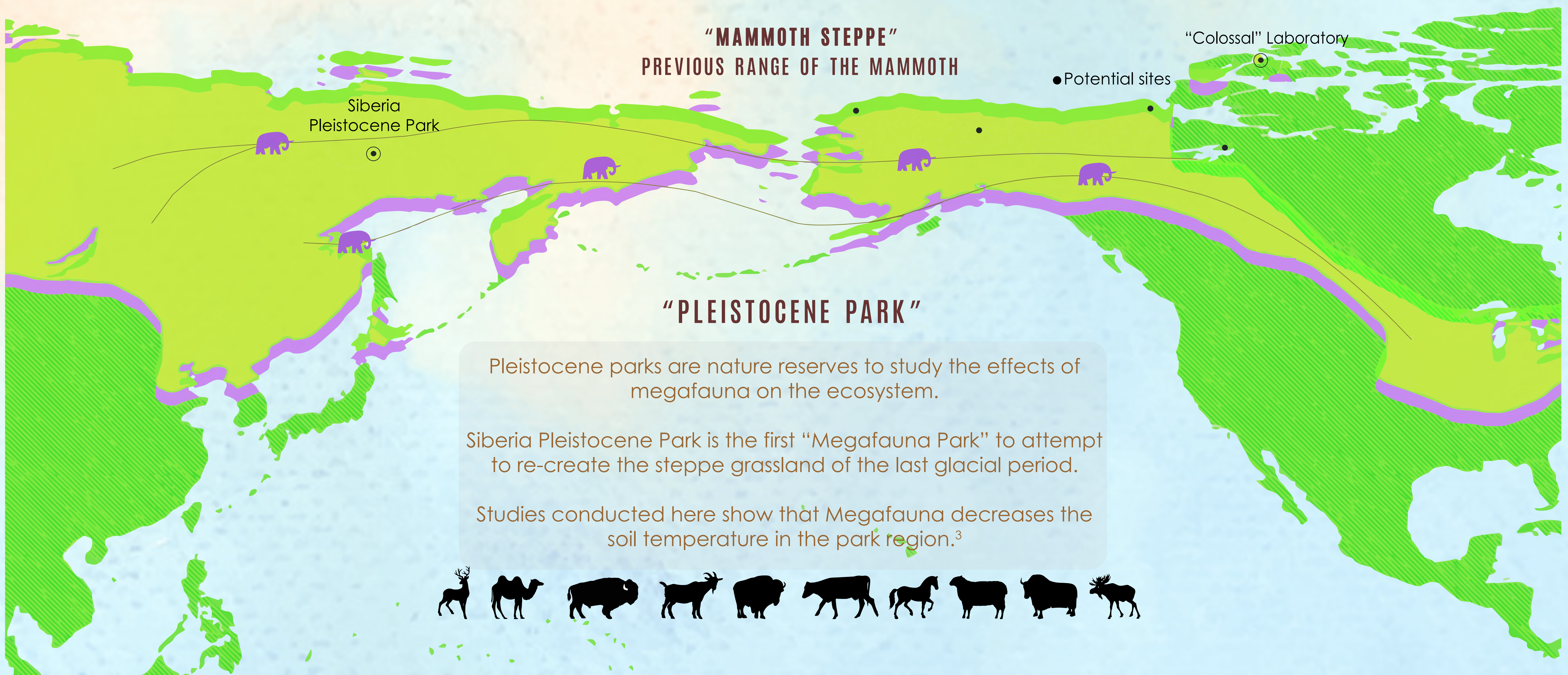
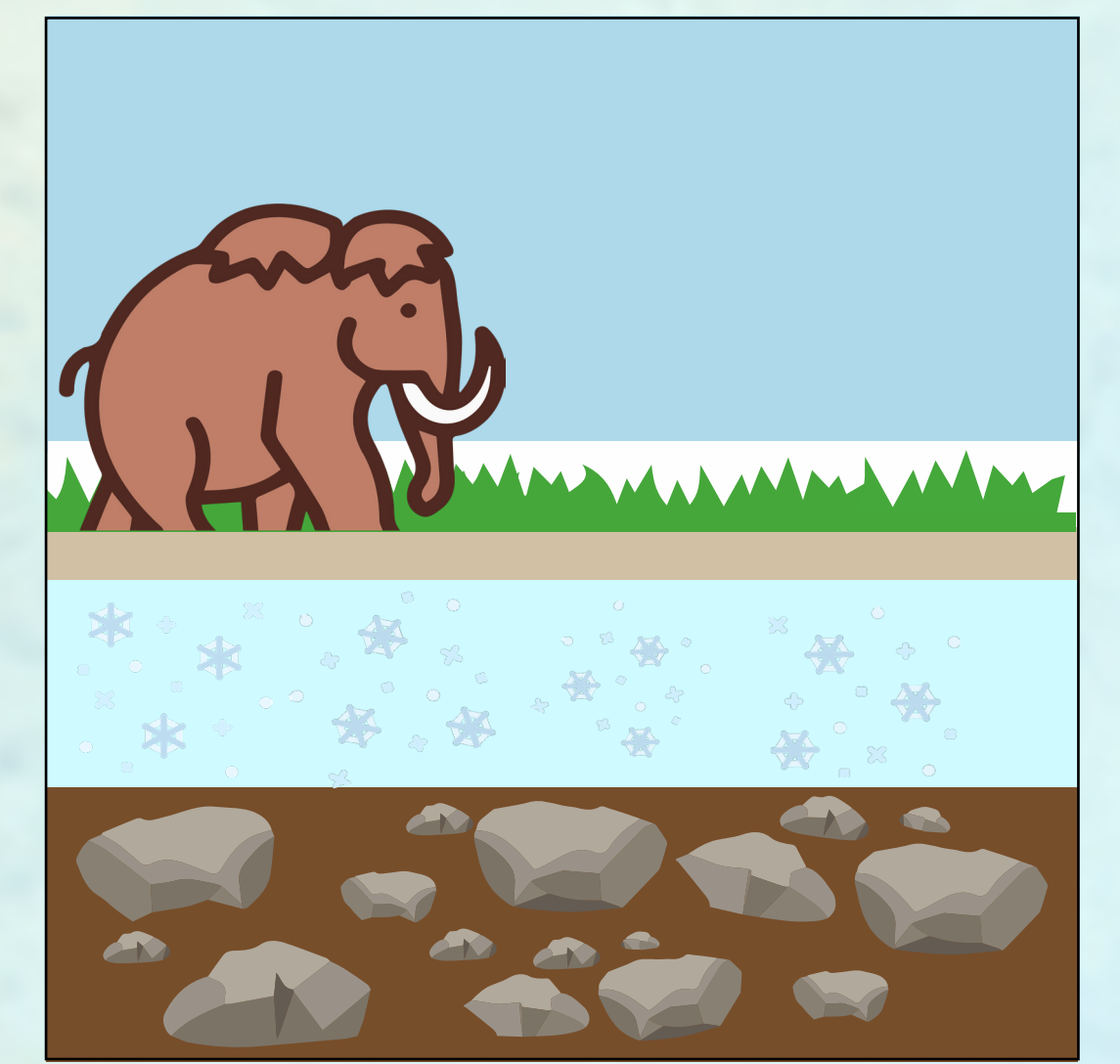
Trampling and grazing

Herbivorous megafauna increases productivity of the ecosystem, by recycling nutrients from the vegetation, to allow grasslands to appear²

Food sources

MEGAFAUNA

- Refers to large or giant animal species, characterized by their substantial size and weight
- Played a significant ecological role in their respective habitats



INTRODUCTION OF THE WOOLLY MAMMOTH TO PLEISTOCENE PARK

The company named "Colossal" aims to re-introduce mammoths to selected sites in Alaska.

Impact is expected to be similar to that of the modern elephant who accounted for more than 80% of woody plant loss in studies.⁴

Selected re-introduction areas range from 5.000 km² to 20.000 km², and store up to 2 Gt of Carbon in permafrost.

FROM "MEGAFAUNA PARK" TO "MAMMOTH STEPPE"

The "Mammoth Steppe" covered a range of approximately 5-10 Million km² storing up to 185 Gt of Carbon.⁵

A release of that Carbon into the atmosphere would cause an increase 421 to 508 ppm of CO₂.

Maintaining this area manually would require large amount of resources and leaving this area up to nature is likely the better option.



I AM A LARGE COLD RESISTANT HERBIVORE

"I DON'T KNOW IF BRINGING THE MAMMOTH BACK IS THE RIGHT APPROACH BUT AT THE MOMENT WE LACK A DECENT SOLUTION FOR KEEPING THE GIANT ARCTIC CARBON DEPOSITS IN THE GROUND"
- PAUL MANN, 2018

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