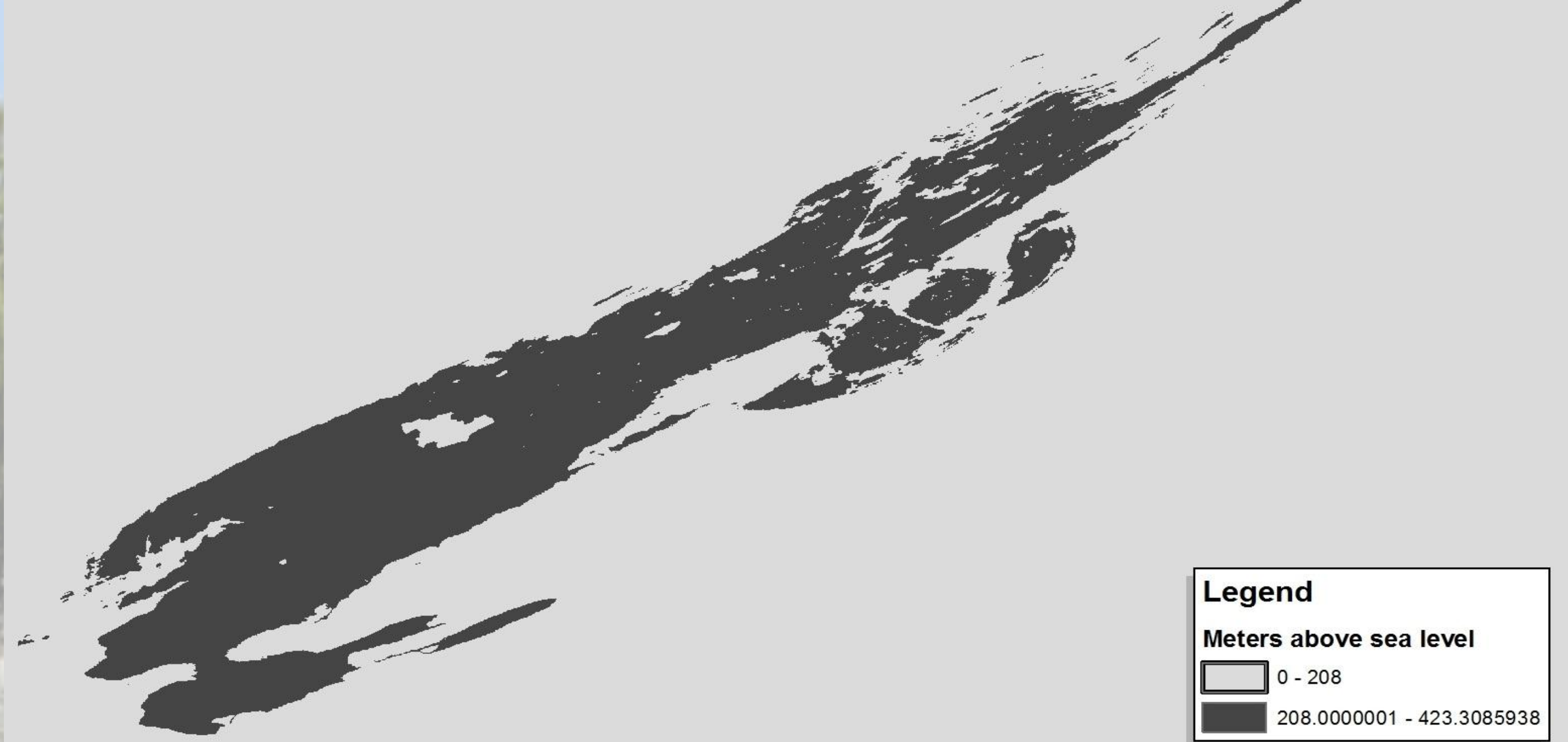


History of an Ancient and Remote Wilderness Archipelago: “a great island national park”

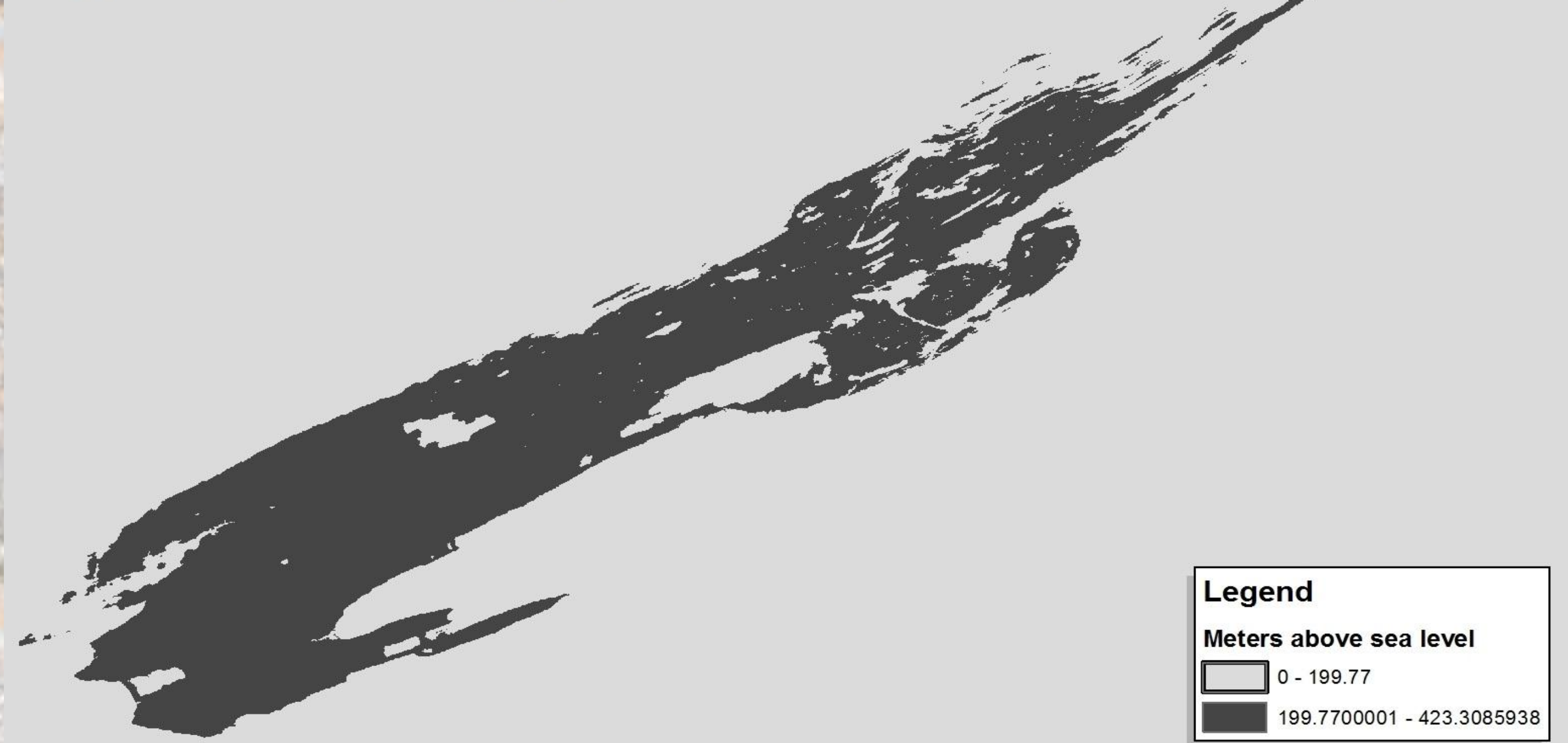
Minong Shoreline on Isle Royale

Approximate Date: 10,700 ybp (years before present)

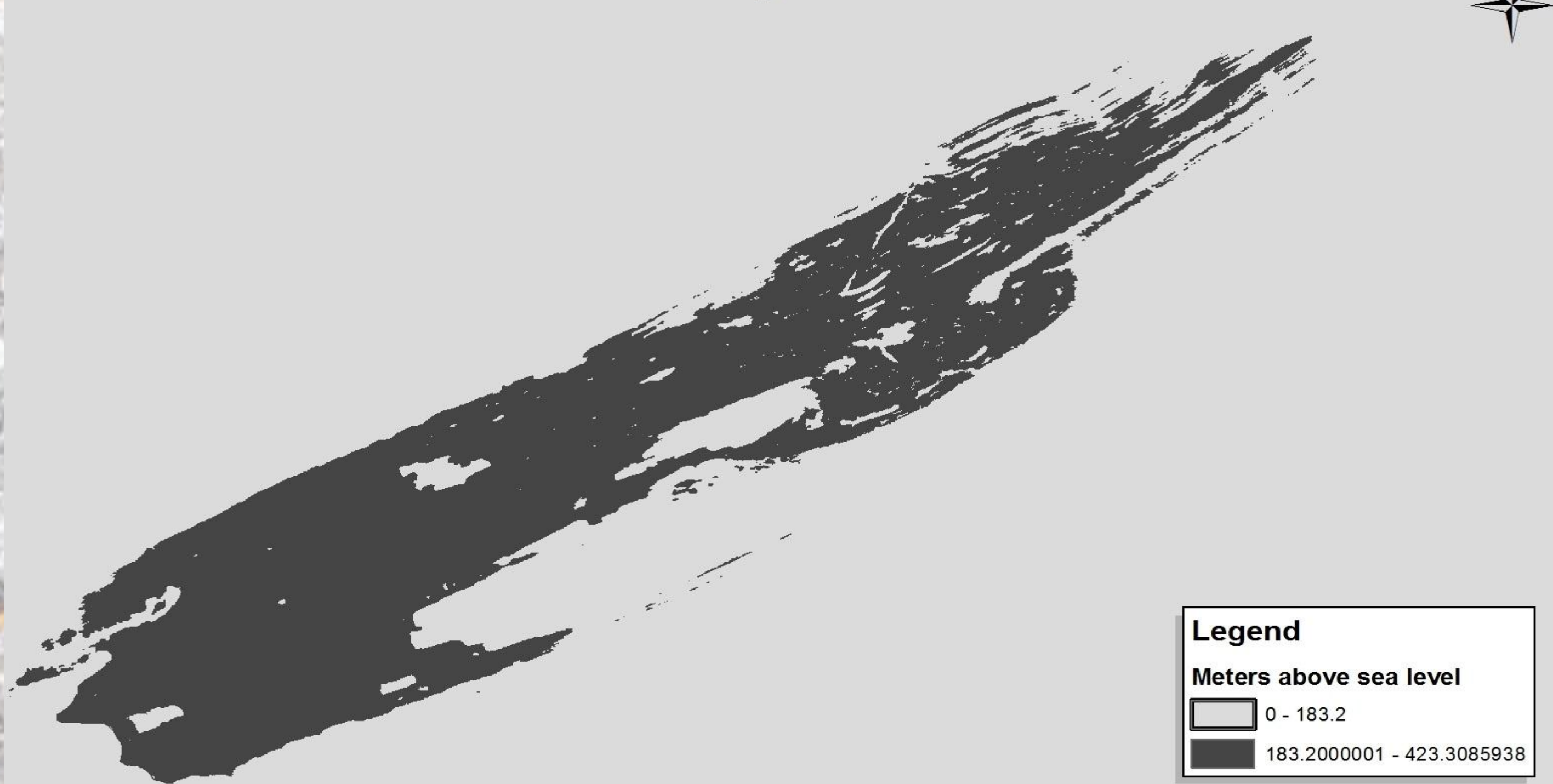


Nipissing Shoreline on Isle Royale

Approximate Date: 5,000 ybp



Present Shoreline on Isle Royale



Ancient and Still Emerging from Lake Superior:

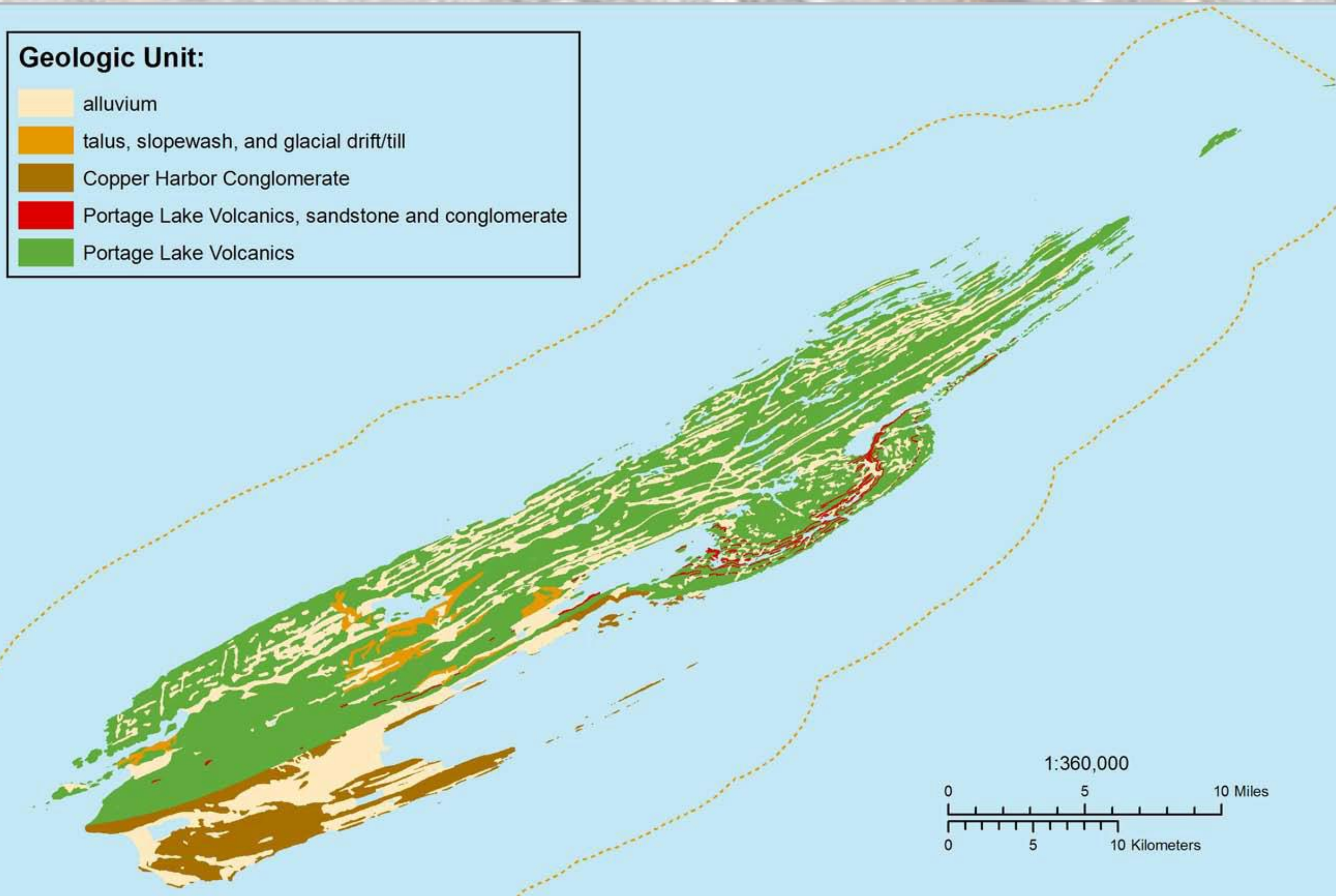
There are two major geologic events important to Isle Royale's billion year old geologic history preceding the islands emergence from Lake Superior:

1. The formation of the bedrock in the Precambrian (4.6 billion years ago to 541 million years ago).
2. The glacial activity in the Pleistocene epoch (2.6 million years ago to 12,000 years ago).

At a rate of about 1 inch per century, Isle Royale is rising from the waters of Lake Superior due to isostatic rebound, a process where land masses rise that were depressed by the huge weight of glacial ice sheets during a glaciated period.

Isle Royale ...

- is a 210 square mile island in western Lake Superior.
- is “Minong”, or the good place, the Ojibwe language place name for the island. Minong was an important provider of food and home place for the Grand Portage Band of Lake Superior Chippewa and their ancestors.
- was claimed by the French in 1671, became U.S. property in 1783 and in border dispute for the city of Toledo, Michigan relinquished to Ohio in exchange for the northwestern portion of the upper peninsula and Isle Royale.
- is about 15 mi. from Ontario, 22 mi. from Minnesota and 50 mi. from Michigan shorelines, respectively.
- was established as a “great island national park” in 1931.
- encompasses the surrounding waters out to 4.5 miles and all islands within the archipelago.
- has 99% of its landmass as federally designated Wilderness.
- has the longest average length of stay and more backcountry users per acre than any other unit in the National Park Service.
- is greatly influenced by the waters of Lake Superior creating cooler summers and warmer winters when compared to the mainland.



Forests Past and Present:

The early forests of Isle Royale, beginning roughly 10,000 years before present, were dominated by spruce, well adapted to the cooler climate of the early Holocene. As climate conditions became drier in the mid-Holocene, approximately 7000 to 5000 BP, pine asserted its dominance. Approximately 4000 BP when the dry period of the mid-Holocene waned, a typical boreal-mixed forest type established itself in the northeastern portion of the island; however, in the southwestern one-third of the island, where soils are deeper, a sugar maple/yellow birch complex became the dominant forest association.

From no less than 4500 years ago, humans have ventured to Isle Royale for varied reasons but it seems the most dramatic human influences to the island's forests have occurred in the past 150 years. Miners looking for copper veins and in need of local natural resources logged and burned. Logging companies built extensive road systems to support their operations and more recently, fires burned nearly 20% of the island's forest.

Untouched by man for over 75 years, total forest land has increased, with the northern hardwood forest type (sugar maple, yellow birch, northern red oak) increasing, while the boreal forest type (balsam fir, aspen, paper birch) is concurrently decreasing. Additionally, there has been a small shift in the lowland forest type from a black spruce-northern white cedar forest type to one mostly dominated by northern white cedar. Collectively, the forests on Isle Royale are dominated by mature, but not old growth, trees.

Beneath the forest canopy and along the rocky shorelines, the plant composition is quite diverse. There are roughly 60 state-listed endangered, threatened or species of concern. The greatest botanical value lies in the 21 disjunct alpine and arctic species and 12 species whose ranges are centered in the Western U.S., as well as, Isle Royale's only endemic species, the Isle Royale ragwort (*Packera insulae regalis*).

