

Lake Todatonten Pingos RNA South Todatonten Summit RNA

Todatonten Pingo System

The pingos found in these two adjacent Research Natural Areas (RNAs) are located on the north-facing slope of watershed divide between the Upper Melozitna River and tributaries of the Koyukuk River.

Pingos are mounds of soil-covered ice. Uniquely arctic and subarctic, pingos form under certain circumstances when ground ice accumulates as temperatures fall during the winter. They are best understood as an unstable and short-lived (in geologic terms) cycle or process of development and collapse.

A. Lake Todatonten Pingos RNA

Size: 658 acres

Elevation: 590–1,300 feet

Area Description

The Lake Todatonten Pingos RNA includes two pingos approximately 1.5 miles south of Lake Todatonten.

In 1983 the longer of these pingos was 263 feet long (N-S), 180 feet wide (E-W), and 43 feet tall. It was marked at its base by concentric depression accentuated by lichens.

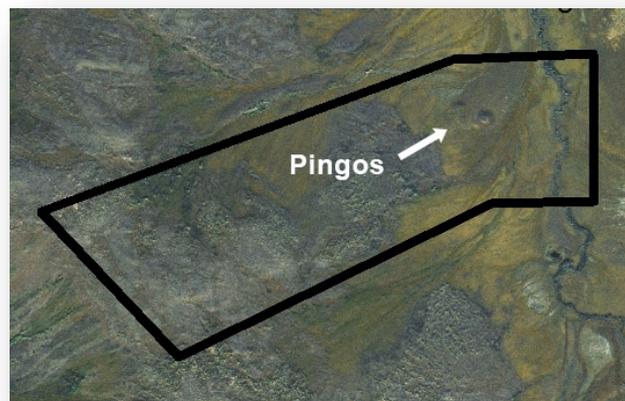
The second pingo had an ice depth of 4.8 feet, a steep slope made up of gravel and sand, and an irregularly collapsing summit with a half-cratered rim.

Features of Significant Research Value (Animal, Plant and Geologic)

Geologic: A representation of a well developed, mature pingo and a cratered, collapsing pingo

Additional Features

Large, old growth white spruce are found in the RNA.



B. South Todatonten Summit RNA

Size: 655 acres

Elevation: 780–1,360 feet

Area Description

The South Todatonten Summit RNA includes the main cratered pingo, a small buffer, and the watershed and hydrological recharge area on the northwest-facing slope above the pingo.

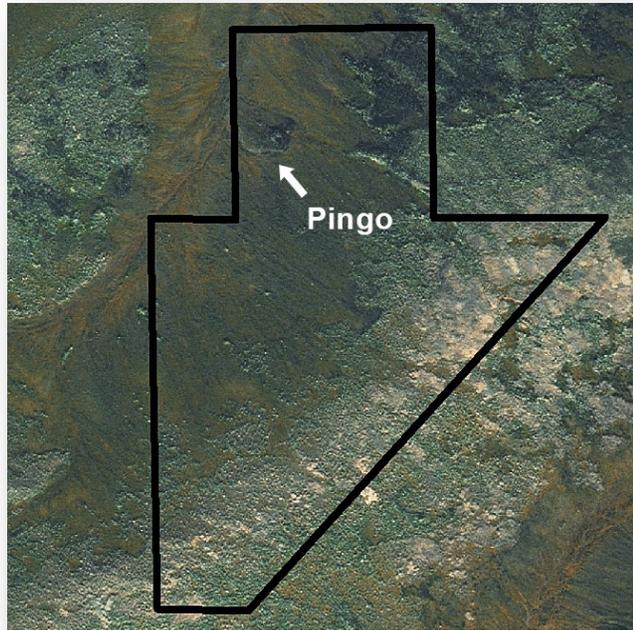
Features of Significant Research Value (Animal, Plant and Geologic)

Geologic: Open system, cratered pingo.

Additional Features

The RNA includes a crater lake and algae species. Large, old growth white spruce grow on the pingo.

Source: Glenn P. Juday, 1983, Proposed Todatonten Pingos Natural Research Areas: Lake Todatonten Pingos and South Todatonten Summit. Report prepared for the Bureau of Land Management in Alaska.



Central Yukon RMP - Research Natural Areas

