Vegetation change viewed from pollen analysis around Haven Lake in Adak Island, Central Aleutians, Alaska

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To determine vegetation change in Adak Island (central Aleutians), we collected peaty sediments (ADK13083002 Core) from Haven Lake in the island. We confirmed six apparent tephra layers (Black, 1976), 40 Years (0.4 cal kBP), YBO (3.6 cal kBP), Sandwich (4.7 cal kBP), Intermediate (7.2 cal kBP) and Main (9.5 cal kBP) and Upper and Lower Gritty (ca. 10 kBP). Four major pollen assemblage zones (HL-1 to -4 in descending order) are recognized in the cored sediments. The HL-1 pollen zone is dominated by Ranunclaceae and *Empetrum*. The HL-2 pollen zone is dominated by Poaseae, Ranunclaceae, and *Empetrum*. The HL-3 pollen zone is dominated by Poaseae and *Empetrum*. The HL-4 pollen zone is dominated by Poaseae, Cyperaceae, *Empetrum* and Lycopodiaceae. The charcoal chips increased above Intermediate Tephra. It's contemplated that the Aleut people arrived at Adak Island and started settling down from *ca*. 9.5 cal kBP.

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