



A Cultural Context for Preserving Hawaii's Diverse Ecological Landscape



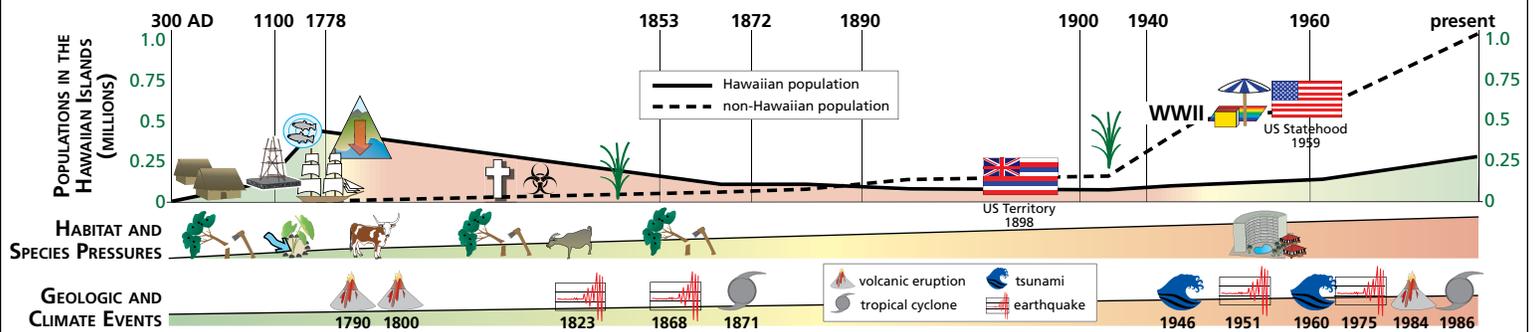
The west coast of the island of Hawai'i contains four national parks with a wealth of cultural resources in diverse ecological landscapes. Since the Hawaiian islands first rose from the ocean, these natural habitats have been changed by lava flows, earthquakes, and tsunamis. Since Polynesians arrived, there has been a close link between the ecological landscape and human inhabitants. From the late 1700s, western influences changed traditional Hawaiian life to ranching and plantation agriculture. Today, threats from rapid development and invasive species provide a challenge to the unique cultural and natural features of these Hawaiian national parks.



Changes to Cultural Resources



Between first Polynesian settlement in ~300 AD and the arrival of Europeans in 1778, the Hawaiian population had grown to between 200,000 and 1,000,000 people. The traditional system of taboos and resource use, *kapu*, ended in 1819 due to western influences and brought many new diseases, reducing the native population to <25,000 over the next century. Traditional land divisions, *ahupua'a*, were replaced with extensive cattle ranching and sugar cane agriculture. Due to the declining local population, workers were brought from Asia and Portugal.



Changes to Natural Resources



With *ahupua'a* in place, fishponds and irrigated crops were integrated with the natural ecology. In the mid-1800s, however, the increasing number of cattle and goats required shrubs and trees be cut in favor of grasslands. The rise in tourism since the 1950s has increased the pace and scale of development.



The National Parks of West Hawai'i Island: agents of change

The national parks of west Hawai'i share several primary stressors on their natural ecosystems. The common stressors shown here are from both human and natural sources, as well as local and global agents of change. These stressors affect many ecosystems, and can represent potential threats to human health or safety.

Common Stressors

- invasive plants and animals
- development, traffic, and groundwater withdrawal
- natural and man-made fires
- visitor recreation impact
- volcanic eruptions, cyclones, and tsunamis
- rising sea temperatures and sea level rise



1. Ala Kahakai National Historic Trail
2. Kaloko-Honokohau National Historical Park
3. Pu'ukohola Heiau National Historic Site
4. Pu'uhonua o Hōnaunau National Historical Park