



CLAM GARDEN RESTORATION IN THE SOUTHERN GULF ISLANDS

Listening by the sea, Looking to the future

The southern Gulf Islands are renowned for their ecological diversity, home to a wide variety of species and habitats, from Garry Oak ecosystems to the southern resident killer whales and glass sponge reefs. And this rich ecological diversity has supported different cultures for millennia. First Nations people have occupied the area since time immemorial, and their rich culture and way of life continues to be tied to the land and waters of the region. However, historical patterns of industrial resource use and recent waves of settlement in these coastal regions have had a significant impact on local ecosystems; the neighbouring sea has been used as a source of food and income, as well as repository for waste and runoff. Intertidal ecosystems – the link between marine and terrestrial landscape – acutely represent this impact, with shellfish populations existing in a depressed state, many of which can no longer be eaten for fear of pollution.

Furthermore, the loss of habitats and species, in combination with a variety of socio-political factors, has prevented First Nations people from interacting with their surrounding environments in traditional ways. For many First Nations people, these

traditional practices define who they are, and their loss represents a loss of not only income and food security, but also culture. Consequently, many of the cultural landscapes which have been built up and carefully managed for thousands of years now exist in a depressed state.

Understanding how Coastal First Nations people managed the ecological landscapes in the southern Gulf Islands, blending both ecology and culture to essentially create *eco-cultural* landscapes, is critical for organizations such as Parks Canada, an agency committed to maintaining and restoring the region’s ecological and cultural integrity. Clam gardens are one such example of this unique relationship, and their revitalization in the region’s current ecosystem has the potential to improve both the health of contemporary shellfish populations as well as local cultural landscapes. These traditional resource management features, newly discovered by western scientists but well known to Northwest Coast First Nations, are hand constructed rock walls and associated tidal sand flats built to ensure on-going productive harvests of bivalves. (next page)

Listening By the Sea Clam Garden Restoration Project



Partners:

This project is not possible without the support of many people and organizations. A wide variety of partners have contributed support to the overall clam garden restoration project, including:

- Parks Canada – Action on the Ground Funding
- Royal Roads University
- National Science and Engineering Research Council (NSERC) – Promo Science Grant
- Simon Fraser University – Community Engagement Initiative
- Northwest Indian College
- The Clam Garden Network



Clam gardens are also visible remnants of a web of social connections and negotiations and embody intergenerational teachings about ecological knowledge and systems of land tenure. Several hundred clam gardens have now been noted along the coast from Alaska to Washington. Despite this, and the undeniable importance of these features to Coast Salish people, none are active today.

Parks Canada recently received funding to the Gulf Islands National Park Reserve (GINPR) to restore two clam gardens in the southern Gulf Islands. The goal of the project is to:

- Use traditional and scientific knowledge to restore a clam garden eco-cultural landscape
- Work with Coastal First Nations to improve the state of the intertidal ecosystem
- Provide recommendations regarding clam gardens and related techniques as tools for restoring intertidal ecosystems
- Reconnect First Nations to the land
- Act as an example of integrated, future resource management possibilities.

Specifically, the project will restore two clam gardens in the southern Gulf Islands, manage those sites just as they would have been

managed by First Nations people historically, and then monitor local bivalve and fish populations to understand the impact of clam gardens on the intertidal ecosystem.

The project is founded on previous work, projects, and discussions undertaken with local Nations. All aspects of the project – from its design through to its restoration, management, monitoring, and analysis – will be completed in concert with local communities. Input is being sought from local Nations through meetings with band staff, committees, working groups, and community meetings. The project is intended to reflect the ideas and interests of local people.

Parks Canada is looking to hire a local First Nations person to assist with the project, and will be developing opportunities to involve Elders and youth, and other community members in various aspects of the project.

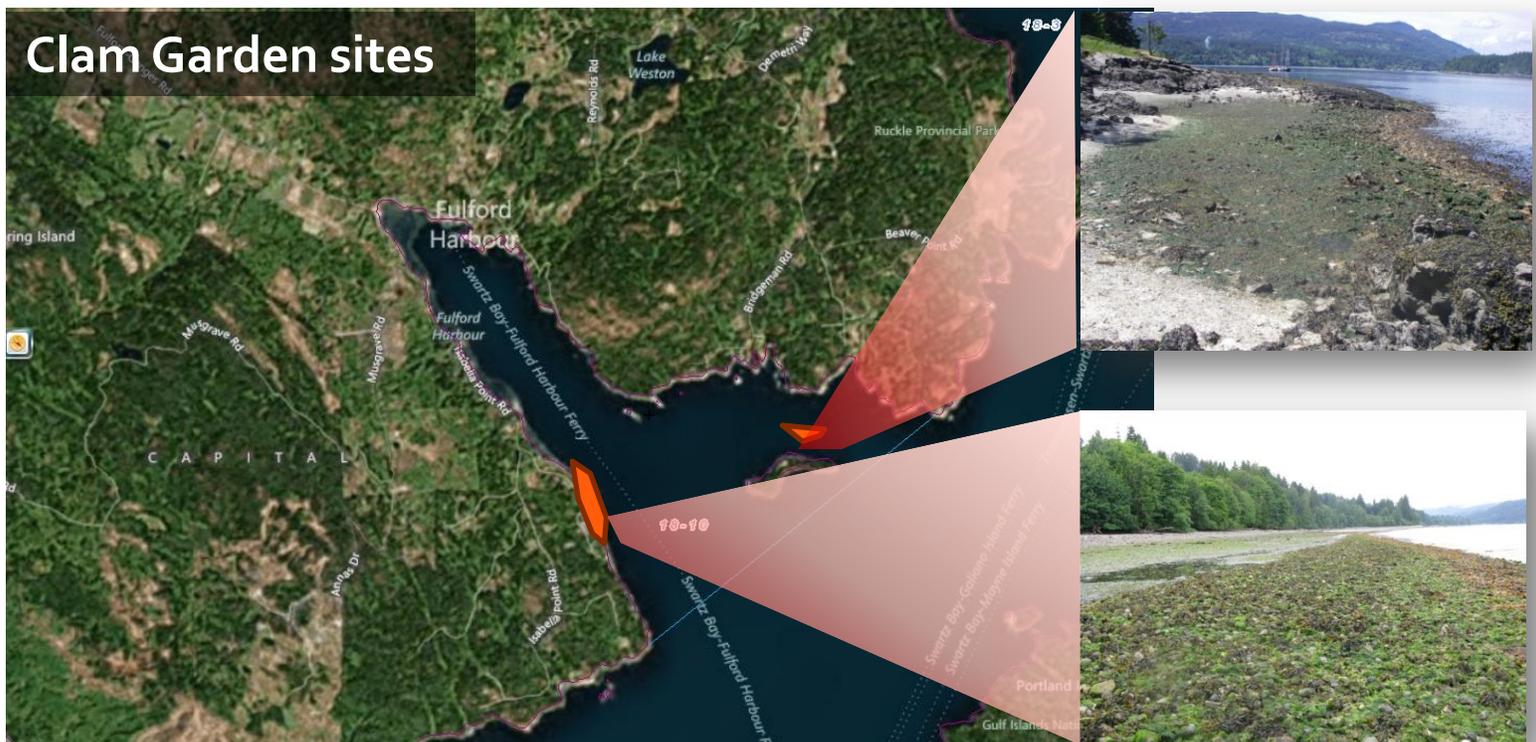
The clam garden is made up of a rock wall at the low tide line with a cleared beach behind it



Activities will include clam garden restoration, harvesting and managing, and monitoring trips. Furthermore, other opportunities that are of interest to the community will also be pursued.

This project will be an opportunity for Coastal First Nations and Parks Canada to learn about these eco-cultural landscapes together, and learn how they can be restored and re-imagined for today's culture and ecology. Many other partners are involved, including Royal Roads University, Simon Fraser University, and the University of Victoria. Together, we can listen to what history, culture, and the environment is telling us, with the hope of looking to the future to revitalize the cultural and ecological landscapes of the southern Gulf Islands.

Clam Garden sites



Listening By the Sea

Clam Garden
Restoration
Project

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