

**THE NATURAL ENVIRONMENT OF  
THE VICTORIA REGION  
SUPPORTS CONSIDERATION FOR  
UNITED NATIONS BIOSPHERE  
RESERVE STATUS**



# *THE NATURAL ENVIRONMENT OF THE VICTORIA REGION SUPPORTS CONSIDERATION FOR UNITED NATIONS BIOSPHERE RESERVE STATUS*

## **SITUATION BRIEF # 45**

**Contributor: J. Sirois**

Greater Victoria is a special place. Its natural beauty and environment are among the best in urban Canada. A great window on the Salish Sea, it is a superb “naturehood” of coastal forests, waters, intricate shorelines, hills and islands. Year after year, the Victoria Foundation identifies the natural environment as the region’s best asset in its Vital Signs Report. This region has the ingredients to become an urban U.N. Biosphere Reserve.

Much of the region’s appeal has to do with its temperate climate, among the mildest in Canada (daily annual mean temperature: 10 C, compared to 1 C in Canada). Victoria has an estimated Climate Severity Index of 13, compared to 51 in Winnipeg and 99 in Isachsen, an abandoned High-Arctic weather station. The historic Gonzales Observatory has an astounding, “uncanadian” record of 609 days without frost.

Victoria’s location in the Olympic Rain Shadow translates into frequent “blue holes in the clouds” (well known to aviators), “endless summer sunshine” and surprisingly dry, overall conditions (~600 mm of annual precipitation in Oak Bay) for coastal British Columbia. Brittle Prickly-pear Cactus grows on local islands and headlands.



Its location near the southern tip of Vancouver Island is enviable with its valuable coastal and marine habitats, including vast beds of clams and eelgrass, and kelp forests. Important corridors for migratory birds, sea mammals and fishes travelling north, south, east and west occur at this strategic location.

This vibrant nature translates into scores of popular parks and important conservation areas. The region has municipal, regional, provincial parks and one national park (Gulf Island National Park Reserve). Victoria's Beacon Hill Park is possibly Canada's oldest park; it was established in 1859 by the British Colonial government. The District of Saanich alone has 170 municipal parks.

Moreover, Greater Victoria has three federal, historic Migratory Bird Sanctuaries, one of which, Victoria Harbour Migratory Bird Sanctuary (est. 1923) occupies 30 km of Victoria's marine front yard. There are IBA sites (Important Bird and Biodiversity Areas) like Sidney Channel and the Chain Islets, and precious, provincial Ecological Reserves like the Trial Islands (outstanding collection of rare plants) and Race Rocks (outstanding marine life).



Marbled Murrelet, a threatened species in Canada that is fairly common in our coastal waters.

Nature, biodiversity and species at-risk are noteworthy here. Rare plants, birds and whales are big stories. A brief, eclectic list must include Killer Whale and Humpback Whale, Steller Sea Lion and Northern Elephant Seal, Marbled Murrelet, Rhinoceros Auklet, Brant, Bufflehead, Heermann's Gull, Pacific Great Blue Heron and Western Purple Martin, Coho Salmon, Pacific Herring and Pacific Sandlance, Olympia Oyster, Northern Abalone and Giant Pacific Octopus, Victoria's Owl-clover, Golden Paintbrush and Macoun's Meadowfoam. Terrestrial predators like Cougar, Black Bear and Grey Wolf are among our neighbours. Garry Oak and Common Camas are our iconic tree and flower.

The recovery and return of some species (e.g. Humpback Whale, Bald Eagle, Western Purple Martin, Western Grebe, Pacific Harbour Seal) in recent decades are inspiring. The recovery of others (e.g. Pacific Herring, Coho Salmon, Cutthroat Trout) will take time and effort. Other challenges include abundant, invasive, urban Canada Geese and Black-tailed Deer which degrade our regional ecology, and securing remnants of our very diminished coastal forest of Douglas-fir, Arbutus and Garry Oak.



“Brant”, J. F. Lansdowne, 1976, in *Birds of the West Coast*, Volume One.

Among the best signs of renewal is a long list of cleanups, remediation and restoration projects in recent decades, big and small, everywhere. The return of relatively clean waters and shorelines in the Gorge Waterway is a clear symbol of urban renewal. Folks began to swim again in the “Gorge” two decades ago and Swimfest is an annual event.

The massive cleanup of Rock Bay’s toxic soils and sediments in Victoria Upper Harbour, once the site of an historic power plant, is another symbol of renewal. After decades of controversy, a regional Wastewater Treatment Plant was built in Victoria Outer Harbour; it became operational in January 2021. It was possibly the most expensive (~\$780M) infrastructure project in the region’s history. Raw sewage is no longer flushed in the cold, fast-moving, marine waters of the Juan de Fuca Strait.

The particular attention paid to what’s left (~5%) of our iconic Garry Oak woodlands, meadows and associated ecosystems is particularly interesting. These include cultural landscapes used by First Nations for millennia where

trees and shrubs were burnt to promote the growth of edible root crops such as Common Camas and Bracken Fern and to create openings for hunting ungulates like Black-tailed Deer and Roosevelt Elk.



Trial Islands restoration team. These islands have been under restoration for two decades. They support one of the best collections of rare plants in Canada.

These ecosystems, where burning is now difficult or impossible, are varied and include, for example, Deep Soil, Wet or Average Moisture Garry Oak Communities, Shallow Soil Garry Oak Communities, Maritime Meadows, Coastal Bluffs, seasonally wet Vernal Pools and Vernal Seeps. Oak Bay's Uplands Park/ Cattle Point and the Trial Islands feature these rare ecosystems and the efforts to save them well. Groups like GOERT (Garry Oak Ecosystem Recovery Team), GUMPS (Garry Oak Meadow Preservation Society) and FOUP (Friends of Uplands Park) have been caring for these heritage landscapes for decades.

Special places often attract special people. Scores of competent biologists, ecologists, naturalists, botanists, birdwatchers and whale watchers are active in Greater Victoria. So are groups like the Victoria Natural History Society, Rocky Point Bird Observatory, Swan Lake & Christmas Hill Nature Sanctuary and

the Greater Victoria Naturehood. This region was home to renowned bird artist and author J. Fenwick Lansdowne (1937-2008). In 2021, a Tribute to Lansdowne was installed in Queen's Park, Oak Bay.

This ecosystem has been home to several First Nations for millennia. Victoria Harbour, the Gorge Waterway, the Chatham and Discovery islands are still in Lekwungen traditional territory: "the place to smoke herring".



## Observations

- Recent attempts to secure U. N. Biosphere designation failed. A demanding and complicated conversation among several important, indispensable parties (e.g. First Nations, universities, the Capital Regional District, various municipalities) never materialized. A determined champion never emerged.
- The establishment of the Gulf Islands National Park Reserve in 2004, protecting the ecosystems of 16 islands, 30 islets, reefs and surrounding waters, in the Salish Sea adjacent to Saanich Peninsula, provides a modern-day

context for the national significance of Greater Victoria's coastal conservation programmes.

- The sheer volume and intensity of volunteer efforts contributed annually to habitat restoration activities such as day-lighting creeks, invasive species removal and water-way cleanup is prodigious. It warrants on-going support and publicity.
- New high-quality signage, supporting recent on-site interpretive programs by the four core municipalities, Victoria, Oak Bay, Saanich and Esquimalt has invigorated education in public ecological literacy. Along with similar work by the Capital Regional District
- The dissolution of the Capital Provincial Commission in 2014 was a great blow to Greater Victoria. We no longer have a regional organization with a cohesive, socio-cultural "vision" of what our heritage is and what should be celebrated and highlighted. We need a PCC. Many of our great, special stories usually unknown and untold at this point need public "skylighting".

## Resources

- Acker, M. 2012. *Gardens Aflame. Garry Oak Meadows of BC's South Coast.* Transmontanus - North Star Books. Vancouver.
- Beamish, R. & McFarlane, G., Eds. 2014. *The Sea Among Us - The Amazing Strait of Georgia.* Harbour Pub. Co. Ltd. Madeira Park, B.C.
- Ford, J. K.B. 2014. *Marine Mammals of British Columbia.* Royal BC Museum. Victoria.
- Garry Oak Ecosystems Recovery Team. 2009. *The Garry Oak Gardeners's Handbook. Nurturing Native Plant Habitat in Garry Oak Communities.* Victoria.
- Lansdowne, T., Ed. 2014. J. Fenwick Lansdowne. *Pomegranate.* Portland, Oregon.
- Lansdowne, J.F., 1976, *Birds of the West Coast Volume One*, M.F. Feheley Publishers, Toronto.
- Lansdowne, J.F., 1980, *Birds of the West Coast Volume Two*, M.F. Feheley Publishers, Toronto.
- Lee, R. J. 2003. *Victoria's Weather and Climate.* Victoria.
- Macdonald Stewart, H. 2017. *Views of the Salish Sea.* Harbour Pub. Co. Ltd. Madeira Park, B.C.
- Nightingale, A. & Copley, C. Eds. 2012. *Nature Guide to the Victoria Region.* Royal



BC Museum Pub. with Victoria Natural History Society. Victoria.  
Polar, J. & Mackinnon, A. Eds. 2014. *Plants of Coastal British Columbia*. Lone Pine  
Pub., Partners Pub. & B.C. Ministry of Forests.  
Songhees Nation. 2013. *Songhees. To Work with Good Mind - Good Feelings*.  
Victoria.  
Victoria Foundation. 2021. *Victoria's Vital Signs. Greater Victoria's 2021 Annual  
Check-up*. Victoria.  
Victoria Natural History Society 2017. *Checklist of Birds, Victoria and  
Southeastern Vancouver Island*.