1845 Cowichan Bay Road, Cowichan Bay, BC

www.cowichanestuary.ca admin@cowichanestuary.ca

Annual Report 2017 - 2018



Introduction

The Cowichan Estuary Nature Centre in Hecate Park in Cowichan Bay, BC is an interpretive centre overlooking the Cowichan Estuary, a 400 hectare estuarine ecosystem in the unceded territory of the Quw'utsun people. The estuary provides vital habitat for resident and migratory birds, Pacific salmon, shellfish and a diversity of intertidal life. The Centre offers interactive educational opportunities for children and people of all ages to learn about the estuary, its marine and bird life, its natural and cultural history, and the Cowichan & Koksilah watersheds of which it is a part. Our indoor classroom has both freshwater and inter-tidal aquariums and a touch tank. We have microscopes, a wildlife viewing telescope, interactive displays and maps. Outdoors visitors can climb the wildlife viewing platform and explore the estuary's increasing biological diversity on our interpretive trails. The estuary was degraded over a number of decades. We offer volunteers and school groups opportunities to engage in hands-on restoration projects. Awareness-raising, conservation, restoration, and environmental monitoring are all critical to the estuary's ongoing recovery. We are making a difference.

The Cowichan Estuary Nature Centre Year - April 1, 2017 to March 31, 2018

The Centre is an inviting open space with a wildlife mural, three-dimensional eelgrass meadow and a number of interactive exhibits. The fresh water aquarium is home to Coho salmon fry and our salt water aquarium and touch tank have lots of Shiner Perch and many colorful and camouflaged intertidal creatures.







Our "Cowichan and Koksilah Watersheds" exhibit, created in partnership with the Royal BC Museum (RBCM), focuses on the water cycle, an interactive story of the salmon cycle, climate impacts in our watersheds, and how everything in a watershed is connected.





The second phase of the watersheds exhibit, an eight-by five, three-dimensional map of the lower Cowichan and Koksilah Watersheds with animated and beautifully illustrated stories of the watersheds' history, biodiversity, challenges and restoration projected on its surface, will be ready for installation by the summer of 2018. Co-created with RBCM, this project has also been supported by the Pacific Salmon Foundation, TD Friends of the Environment, Telus, the Cowichan Watershed Board, the Cowichan Valley Naturalists, the Cowichan Valley Regional District and many local business and private donors.

The Centre also has a video station with a series of videos of local First Nations' elders, biologists, conservationists and historians talking about the historical, cultural and biological importance of the estuary. Our 3D wall model of our watersheds is also a favorite stop for visitors.

Visitors

Since opening on April 21, 2012 we have had over 23,000 visitors. This year we welcomed 4,152 visitors, including a good mix of local residents and travelers from all over the world. New exhibits and displays, as well as new visiting intertidal creatures in the touch tank, bring many visitors back for repeat visits to learn more about this special ecosystem. We are open to the public Thursday through Sunday afternoons, plus holiday Mondays, and are busy with school programs and workshops throughout the week.

Education Programming

We have developed hands-on conservation and science-oriented school programming for different grades and ages, linked and kept up-to-date with the Province's prescribed learning outcomes for each grade. We have also partnered with the Cowichan Watershed Board to deliver a Cowichan Watershed program for elementary school groups. This year we had 1,319 students participate in the Centre's school program offerings.







Our school programs are a popular educational resource for both public schools within School District 79 and local private schools. We also provide programing for S.E.A. Programs, a residential ocean learning program for students from Calgary. This year we delivered 43 programs with participants ranging from pre-schoolers to young adults.

We also host Professional Development Days for teachers to assist them in integrating river, ocean and estuary-related knowledge into their classrooms.

Kerrie Talbot, a dedicated volunteer and retired children's librarian, has been hosting regular story-time sessions for pre-school age children and parents since 2012. This year in February she once again teamed up with her library colleague Judy Baxter to offer another popular Mother Goose pre-school program.



Summer Science Camps

In 2017 we held five week-long full-day summer science camps for school-aged children 5 to 7 and 8 to 11 years-old. Campers participate in beach seines, mud digs, bird surveys, expeditions through the estuary, and explorations aided by microscope and telescope, learning about the diversity of intertidal life up close and creating nature-related arts and crafts.





We also offer an annual Youth Leadership Training. Here above we have an enthusiastic group of campers expressing our gratitude to Peninsula Co-op for their support of our programming. Keeping camps accessible is important.

Community Education and Events

The Nature Centre regularly hosts and participates in community events that increase access to environmental education and raise awareness about sensitive ecosystems. On May 13th, Migratory Bird Day, Eric Marshall gave talk about birds in the estuary and Gail Mitchell and Dorothy Marshall had scopes and binoculars ready on the viewing tower for visitors to get a first-hand look.

On May 27th we once again were part of hosting International Low Tide Day with a beach seine, the annual Low Tide critter count, music and food at Kil-pah-las beach in Cowichan Bay.





Eric and our marine educator Madeline Southern also hosted a hands-on marine biology station on July 1st at Canada Day celebrations in Maple Bay.

Throughout the year we also offered a number of presentations and film showings. On October 12th, as a part of the Somenos Marsh Society's month-long Wild Wings Festival, we showed the film "The Messenger", about the plight of song birds world-wide, what they have to teach us, and what we can do. In September, in the lead-up to World Rivers Day, we showed local film-maker Harold Joe's "Wisdom of the River" and were pleased to have Harold join us for a post-film Q&A. We also had a Nature Centre table at the September 30th BC Rivers Day all-day event on the banks of the Cowichan River co-hosted by Cowichan Tribes and the Cowichan Stewardship Roundtable.

Citizen Science

The 400 hectare Cowichan Estuary, with its marshes, mudflats and tidal rivers, is a designated Important Bird Area (IBA) that provides habitat for up to 230 resident and migratory bird species.

The Nature Centre partners with Bird Studies Canada to complete monthly bird surveys identifying and counting water and shore birds found along a designated stretch of shoreline in Cowichan Bay. Volunteers, who go out monthly in all weather, also identify, count, and report any dead birds found on the beach. This citizen-based science initiative has been ongoing at the Centre since 2013. Bird survey dates are on the Nature Centre website. No experience is required to participate.







We also continue to keep a close eye on the Pacific Great Blue Herons, the fannini subspecies, nesting in the ravine near the Centre. Found only on the Pacific Coast between Prince William Sound in Alaska and Puget Sound in Washington State, they are listed as a species of concern under Canada's Species at Risk Act (SARA). The Cowichan Bay colony remains one of the largest on Vancouver Island, usually with upwards of 90 nests, and is regularly monitored by a Species at Risk Biologist for BC's Ministry of Forests, Lands and Natural Resource Operations with the support of local volunteers.

The Climate Change Connection

Climate change is affecting ecosystems around the world. Yet climate impacts often require specific place-based solutions. We were pleased to receive Eco-Action funding from the federal Ministry of Environment and Climate Change this year to carry out workshops and restoration projects between September 2017 and June 2018 on local climate change adaptation.

In October and November, with the help of Feel-Good-Friday volunteers, a collaborative staff volunteer day with CVRD, and students from Brentwood College and the Lands Program, we

restored wetlands and riparian areas to prevent flooding and provide shade for salmon, and continued the ongoing Green Shores restoration of the beach at Hecate Park, removing invasive blackberries and planting native species to stabilize banks and increase climate resilience in the face of increasing storm surges and higher King Tides in the estuary.





On December 2nd we filled the Nature Centre with a keen group of learners, including local shoreline property-owners, to hear plant ecologist and restoration biologist David Polster talk about "Sea Level Rise and the Shoreline". He showed lots of great slides demonstrating how to use biological approaches to building resilient shorelines in response to climate change. This was followed by a trip to the shore the next morning for a hands-on look at some challenges and solutions. Thanks also to CVRD Environmental Planner Kate Miller for starting us off with an overview of current and expected climate impacts in the Cowichan Valley.

January 18th, in collaboration with Transition Cowichan, we showed the moving and artfully-rendered film "The Wisdom to Survive" on the climate crisis, including its causes, effects and how we can move through our grief at the losses toward climate justice and hope. The film shares the perspectives of Indigenous leaders, people from poor and vulnerable nations, scientists, scholars, religious leaders, activists, farmers, and poets, and led us into an engaging post-film discussion. On February 10th and 11th, again in collaboration with Transition Cowichan, we hosted a two-day retreat based on eco-philosopher Joanna Macy's "Work that Reconnects" at Providence Farm. Facilitators Jackie Larkin and Maggie Ziegler supported 21 participants in exploring ideas and activities to reconnect us to ourselves, our human community and the natural world, and renew our courage and resilience in the face the challenges of climate change.



Volunteering & Staffing



Our volunteers and our regular donors are the real backbone and key to the success of the Estuary Nature Centre, allowing us to keep our doors open to visitors and offer accessible educational programing. When you stop in to visit, it is a volunteer who is there to answer

your questions. Our school programs also rely heavily on volunteer support. We're eager to include more interested community members on our volunteer team and offer regular orientations for new volunteers, as well as updates to support our seasoned volunteers, whose contributions are so essential to our work.

September 18th we welcomed Haley Guest as our new Nature Centre Coordinator and Eco-Action Project Coordinator. Haley has also been working with Madeleine Southern, our Marine Educator, in leading programming and updating curricula. In January 2018 she began hosting monthly volunteer "learning circles" where volunteers share their knowledge and learn from each other. In partnership with Canada Summer Jobs, we were once again lucky to have a great team of summer students in Miranda, Emerald and Avery, who provided leadership in our summer science camps.



December 8th we held a Volunteer Appreciation evening with refreshments, music and fun for all ages. We had the pleasure of recognizing Gail and Steve Mitchell as our "Volunteers of the Year", pictured above. Thank-you Gail and Steve for your generous contributions to the Nature Centre's work! And on the afternoon of December 28th we had a good crowd out to watch our "bring-your-own-popcorn" showing of the family-friendly nature film, "Christmas in Yellowstone".

Our History - The 2011 -2012 Journey to Create the Nature Centre

The Cowichan Estuary Nature Centre was conceived in February 2011 by a small group of local Cowichan Bay residents, including parents, educators, naturalists, fishermen and business people, who saw the Estuary as both a natural treasure and also an ecosystem at risk from development and industrial activities.



Working under the Cowichan Land Trust, a non-profit society and registered charity that holds conservation covenants, we received development funding from the West Coast Community Adjustment Program (WestCCAP), Island Coastal Economic Trust (ICET), and raised money through local fundraising events and partnerships with the Cowichan Valley

Regional District, Cowichan Tribes, the Cowichan Valley Naturalists and the Rotary Club of Duncan.

The development project included a 1,000 square foot nature classroom, our first Green Shores restoration of eroded shoreline at the west end of Hecate Park, outdoor interpretive signage and maps that show the diversity of life in the estuary's rich intertidal zone. A path through the park along the waterfront leads to the wildlife viewing platform with views looking up the Koksilah and Cowichan Rivers to the west, north toward Mt. Tzouhalem and east toward Salt Spring Island and the Salish Sea.





The Centre's indoor classroom, built on the eastern edge of Hecate Park has large windows overlooking the estuary, its changing tides and eelgrass meadows. It is just a short walk to the foreshore. The Centre officially opened April 21, 2012 with music, First Nations dancers and a crowd of about 250 people.





Since the Centre opened its doors the surrounding greenspace has been expanded to include the Cowichan Bay Marine Gateway to the west, including a nature-scape play area, picnic shelter, public kayak launch and parking area.

We look forward to many more years of offering visitors, school groups, youth and families opportunities to learn about the Cowichan Estuary and the Cowichan and Koksilah Watersheds through our hands-on approach to environmental education, balancing science and stewardship, to inspire those who come our way to care for and protect the environment.

Your Donations Make All the Difference

We encourage those who value nature and nature education to support the Centre by becoming members: \$20-for an individual membership, \$35-family membership, or \$100 or

more for supporting members. Consider making a monthly gift to the Centre. Charitable receipts are issued for all memberships and donations. Donations can be made through <u>Canada Helps</u> – make sure the drop-down menu says "Cowichan Estuary Nature Cente".

Gift Shop

We have a small gift shop that helps support the Centre's operations, primarily from selling t-shirts, water bottles, field guides, books, small and large animal puppets, colouring books and cards. We also have some beautiful pieces of local art for sale. We accept cash, cheques and now have INTERAC for debit for purchases.









Financial Report

As a small centre we are careful with our finances. We are committed to offering accessible educational programs that are affordable within the budgets of families and the public school system, and to having admission to the centre accessible to all visitors, regardless of income. We suggest an admission donation of \$5 or purchase of a membership. Each donation really makes a difference. Our doors are open and we don't turn visitors away.

In our first six years (2012-18) the Nature Centre has been successful in obtaining grants to develop engaging educational programs and exhibits. While operational funding is harder to find, since our inception ongoing operations (programming and overhead) have generally broken even financially, but only through extremely frugal management – something we don't believe is sustainable over the long term.

The \$17,600 operating surplus shown on the financial statements at the end of this report is, unfortunately, temporary and reflects the fact that our Eco-Action Climate Change Adaption Project continues through the first quarter of the coming fiscal year when we are excited to be partnering with SeaChange on a local eelgrass restoration project. This will bring us back to a break-even position without an operating surplus.

In order to be economically healthy, the Nature Centre needs to raise an additional \$30,000 in operational funds annually to continue to do citizen-science, restoration projects and offer high quality education in our school and summer camp programs – activities that provide essential support for the protection and restoration of the biological diversity of our estuary.

We continue to explore new opportunities to make the centre a sustainable and self-supporting place of learning for the long-term. Plans for the coming year include developing a database and communications strategy to better track our progress and engage with our supporters and the wider community.

And of course, fundraising remains important. On June 10th this year we were delighted to have the support of Cari Burdett, her Lila Community Choir and the Coastline Fiddlers, along with special guests Genevieve Charbonneau, Ivonne Hernandez, Paul Ruszel, King Tide, Corbin Keep and Tania Gillespie, offering "Sing for Cedar and Salmon", a benefit concert for the Nature Centre that raised \$1,500 for our educational programming.





We had our fall Beer & Burger fundraiser on November 5th at the Cowichan Bay Pub and a fun Spring Beer and Burger on February 25th, with added time for story-telling "for the love of nature", in addition to the usual great live music from Paul Ruszel and Friends, plus our silent auction. Each of these events raised about \$2,500. They continue to be a success because of ongoing local support, including the generous donations of silent auction items by local local businesses and individuals. Expanding our annual donor program, and especially our base of monthly donors, is another priority for the coming year.

The generosity of our supporters and donors makes a huge difference to what we can do.

Thank you so much for your support!

Cowichan Estuary Nature Centre Financial Report April 2017 to March 2018

				Interpretive		
STATEMENT OF OPERATIONS	TOTAL	0	B	Display	C1	Eco-
STATEMENT OF OPERATIONS	TOTAL	Operations	Programs	Development	Store	Action
INCOME						
Donations, Fundraising, Dues	29,052	17,693	-	10,300	-	1,059
Nature Centre Grants	84,808	10,500	20,026	(6,050)	-	60,332
Nature Centre Activities	22,993	700	16,694	-	2,599	3,000
Total Income	136,852	28,893	36,719	4,250	2,599	64,391
EXPENSES						
Project & Program Costs	27,103	1,627	2,549	4,250	2,030	16,647
Personnel Costs	74,363	10,796	19,759	-	-	43,807
Facility Costs	11,029	9,127	51	-	-	1,851
Administration & Other	4,365	2,279	-	-	-	2,086
Total Operating Expenses	116,860	23,829	22,359	4,250	2,030	64,391
Net Operating Income	19,993	5,064	14,360	-	569	-
Capital Asset Activity	(16,477)	(7,952)	-	(8,525)	-	-
Net Income	3,516	(2,888)	14,360	(8,525)	569	-

OPERATING SURPLUS (DEFICIT)

Beginning operating surplus (deficit) (2,435)

Net operating income (loss) for the year

Ending operating surplus (deficit) * 17,557

^{*}see notes on page 10