

MARINE STEWARDSHIP HISTORICAL TIMELINE

1995 - 2020

WINTER 1994/1995

- **Oracle Ecology Project**; foreshore monitoring pilot with students from Oracle School; species identification and training in quadrat methodology
- **Ocean Oracle**; interpretative booklet on the Cortes Island foreshore researched, written & illustrated by Oracle School students

SUMMER 1995

- Ocean Oracle printed and mailed out to every household in Cortes community
- Feasibility study conducted, of the entire Cortes Island foreshore, for future foreshore monitoring using a quadrat methodology
- Initial proposal for establishment of a long-term environmental monitoring program called, **Cortes Island Foreshore Monitoring Program (CIFMP)**, submitted to Delores Broten/ Friends of Cortes Island (FOCI) Society

SUMMER 1996

- CIFMP launched; nine permanent transect lines surveyed in the Cortes Island foreshore to facilitate annual monitoring: Seaford, Mary Point, Whaletown, Gorge Harbour, Poison Cove, Carrington, Bullock Bluff, Von Donop & Boulder Point
- Training workshops for foreshore volunteers offered in species identification, foreshore ecology and quadrat methodology
- Baseline data collection at the 9 permanently established foreshore sites

SUMMER 1997

- Three additional permanent transect lines surveyed in the Cortes Island foreshore to provide comprehensive annual monitoring: Red Granite, Manson's Bay & Coulter Island
- Baseline data collection at the 3 newly established foreshore sites and the second year of data collection at the remaining 9 sites

SUMMER 1998

- **Marine Alphabet** written and **Marine Alphabet museum display** created for Cortes Island Museum & Archives Society (CIMAS), to celebrate Manson's Lagoon Provincial Marine Park, in the International Year of the Ocean, 1998
- Data collection at each of the 12 permanently established transect lines in the Cortes Island foreshore

SPRING 1999

- FOCI foreshore volunteers training trip to the Bamfield Marine Station (BMS); species identification and foreshore ecology

SUMMER 1999

- Data collection at each of the 12 permanently established transect lines in the Cortes Island foreshore

SPRING 2000

- **Great Blue Heron Watch**; nesting & foraging observations initiated for BC MOE
- FOCI foreshore volunteers return to BMS for additional training in species identification and foreshore ecology

SUMMER 2000

- The Marine Alphabet display returns after a 2 year installation at the BMS
- **3Reefs Project** launched under the **Sensitive Marine Habitat Mapping Program**; first season of field data collection
- Data collection at each of the 12 permanently established transect lines in the Cortes Island foreshore

SPRING 2001

- **Salish Sea Oystercatcher Watch** initiated in waters around Cortes Island; field signage installed at 4 sites: Plunger Pass Islet, Long Tom Islet, Cod Rocks, Powell Islet

SUMMER 2001

- 3Reefs mapping initiated on Marina Reef with support of Brad Mason/ Department of Fisheries & Oceans (DFO); mapping carried out with a Trimble Pathfinder GPS
- **Manson's Lagoon Sensitive Marine Habitat Mapping** undertaken by Cortes Island Environmental Youth Team (E-team) under supervision of Mary Clare Preston, Andy Ellingsen & SLM. Community Map created and gifted to the Cortes community
- Baseline **Occurrence Mapping of the native eelgrass, *Zostera marina***, completed over the entire Cortes Island nearshore
- Groundtruthing **Physical Shorezone Mapping** for Cortes Island, created by the provincial Land Use Coordination Office (LUCO); field team: Cortes Island Elementary Junior Secondary School's (CIEJSS) Career's Program students Evan Coty & Bowen McDonnell
- Data collection at each of the 12 permanently established transect lines in the Cortes Island foreshore

SPRING 2002

- FOCI partners up with the **Seagrass Conservation Working Group (SCWG)** to join the **BC Coastal Seagrass Stewardship Project**; network of 19 coastal BC communities
- Initiate conversations with Georgia Strait Alliance's (GSA) Kathy Booler and Bryan Nichols, to discuss standardized quadrat methodology for Salish Sea community foreshore monitoring

SUMMER 2002

- FOCI marine stewardship volunteers field trip to Botanical Beach, Port Renfrew
- Data collection at each of the 12 permanently established transect lines in the Cortes Island foreshore
- 3Reefs habitat monitoring conducted

WINTER 2002/2003

- **E is for Eelgrass: an ecological report**, researched, written and illustrated by CIEJSS students: Camille Jones, Anna Ochsenein & Michaela Davis, participating in a Global Community School Leadership Program

SUMMER 2003

- **Project Watershed Mapping Workshop** offered on Cortes Island with instructors Brad Mason/DFO and Joanne Ellefson/Project Watershed

- **Whaletown Bay eelgrass study site established**; baseline mapping carried out with a Trimble ProX GPS

- **E is for Eelgrass museum display** curated for CIMAS

- **Comox Strathcona Regional District (CSRD) digitizes FOCI eelgrass occurrence data** for incorporation into their data bank; a coup!

- 3Reefs mapping; initial GPS work undertaken on Sutil Point Reef

- Data collection at each of the 12 permanently established transect lines in the Cortes Island foreshore; sites upgraded with installation of permanent reference pins drilled into the foreshore, to increase accuracy & efficiency of annual relocation of transect lines

WINTER 2003/2004

- **Youth Working for Nature** mentorship:
Farlyn Campbell – **Creature Features**
Chako Stryck – **Dreaming of Eelgrass Meadows**
Tavish Campbell – Rockfish Conservation
Dominique Boudreau & Max Bullock – Marine Protected Area (MPA) research

SPRING 2004

- FOCI represented at BC Community Eelgrass Network's First Eelgrass Conference at Brandt Wildlife Festival in Parksville; E is for Eelgrass traveling display, on display

- Subtidal natural history observations from Whaletown Bay eelgrass study site, of note: first spawning record of Pacific wingfoot snail, *Gastropteron pacificum*

SUMMER 2004

- **Helicopter overflight of the 3Reefs**; video & still documentation

- 3Reefs mapping; initial GPS work undertaken on Hernando Reef

- Whaletown Bay eelgrass study site; first year of data collection following baseline

- **Coulter Bay & Windy Bay eelgrass study sites established**; intertidal baseline mapping and density count data collected

- Update occurrence mapping of native eelgrass, *Zostera marina*, over the entire Cortes Island nearshore

- **Eelgrass Ecology** public talk with Ramona deGraaf/ BMS and E is for Eelgrass traveling display, on display at CI Oyster Festival

- Eelgrass methodology training session on Quadra Island sponsored by Mitlenatch Field Naturalists; instruction SLM

- Data collection at each of the 12 permanently established transect lines in the Cortes Island foreshore

SUMMER 2005

- Data collection at each of the 12 permanently established transect lines in the Cortes Island foreshore
- 3Reefs habitat monitoring conducted

SPRING 2006

- FOCI represented at BC Community Network's Second Eelgrass Conference in Campbell River

SUMMER 2006

- **Adopt-A-Transect Project** launched; volunteers trained on site, in quadrat methodology and data collection; all 12 permanent transect lines re-established
- **Dear Sea Span...** local students take on Sea Span & Catalyst Paper over woodchip debris on Cortes beaches

SPRING 2007

- FOCI represented at the BC Community Eelgrass Network's Third Eelgrass Conference at the BMS
- FOCI represented at the BCSGA's **Aquatic Invasive Species Workshop** at Gorge Harbour

SUMMER 2007

- Coulter Bay & Windy Bay subtidal eelgrass beds delineated with snorkel and GPS
- Adopt-A-Transect volunteers carry out annual foreshore monitoring data collection
- 3Reefs habitat monitoring conducted

SUMMER 2008

- Adopt-A-Transect volunteers carry out annual foreshore monitoring data collection
- 3Reefs & eelgrass habitat monitoring conducted

SUMMER 2009

- **Forage Fish Monitoring Workshop** offered by Ramona deGraaf/ BMS
- **Foreshore Monitoring Data Entry** (1996-2008) carried out by Maria McKenty for FOCI; GSA developed data entry format into **Community Mapping Network** (CMN) www.shim.bc.ca
- Adopt-A-Transect volunteers carry out annual foreshore monitoring data collection
- 3Reefs & eelgrass habitat monitoring conducted

SUMMER 2010

- Adopt-A-Transect volunteers carry out annual foreshore monitoring data collection
- 3Reefs & eelgrass habitat monitoring conducted

SPRING 2011

- FOCI represented at SCWG symposium in Fulford Harbour on Saltspring Island

SUMMER 2011

- Second update of occurrence mapping of native eelgrass, *Zostera marina*, over the entire Cortes Island nearshore
- Annual monitoring of eelgrass habitat at Whaletown Bay & Coulter Bay study sites documents loss of *Zostera marina* in intertidal polygons
- **Dock Talk: All about Eelgrass**, at Whaletown government dock; divers underwater with underwater camera to live feed on the dock!
- Adopt-A-Transect volunteers carry out annual foreshore monitoring data collection
- 3Reefs habitat monitoring conducted

SUMMER 2012

- Adopt-A-Transect volunteers carry out annual foreshore monitoring data collection
- 3Reefs & eelgrass habitat monitoring conducted

SUMMER 2013

- Adopt-A-Transect volunteers carry out annual foreshore monitoring data collection
- 3Reefs & eelgrass habitat monitoring conducted

WINTER 2013/2014

- Subtidal Biodiversity Program pilot

SUMMER 2014

- SLM revisited all 12 permanently established transect lines with Adopt-A-Transect volunteers for on site training refresher; all permanent reference pins located intact at each of the 12 sites and data collection completed for all 12 sites
- 3Reefs habitat monitoring conducted

WINTER 2014/2015

- **3Reefs Atlas** researched & written, complete with 5' video produced from 2004 original helicopter video footage; **Youth Working for Nature**: Marino Perdisa on illustrations and Nick Wunsch on video production.
- All Foreshore Monitoring data binders reviewed and brought up to date in preparation for digital entry update: 2009-2014
- **Subtidal Biodiversity Program** launched; 12 subtidal sites established and surveyed by 2 professional divers for u/w habitat features & species diversity
- **MARINE PORTFOLIO** completed to celebrate 20 years of marine stewardship on Cortes Island; **Youth Working for Nature**: Jessie McGregor on marine program logos

SUMMER 2015

- Adopt-A-Transect volunteers carry out annual foreshore monitoring data collection

WINTER 2015/2016

- Subtidal Biodiversity Program; 12 dives completed by 2 professional divers

First Subtidal Biodiversity report submitted to FOCI, in confidence, to protect observed marine species at risk.

- **Subtidal Sunday** outreach program offered at the Discovery Passage Sea Life Society's Explorer Lab in Campbell River for Cortes community members

SUMMER 2016

- **Coastal Sand Ecosystem Restoration Project** initiated; consulting with Tamsin Baker/ SCCP and Erica McClaren/ BC Parks; first FOCI ... **Broom Bash** to remove the invasive Scotch broom from the CSE remnant in Manson's Landing Provincial Park

- Adopt-A-Transect volunteers carry out annual foreshore monitoring data collection

- **Tula Foundation, initiates Seagrass BC** program to network coastal BC communities around eelgrass stewardship; inaugural meeting Quadra Island with FOCI in attendance

- **Marine Outreach Summer Program: Gumbooting the Lagoon**
June 4, July 3 and August 1

WINTER 2016/2017

- Subtidal Biodiversity Program; **acquisition of a SEALIFE DC1400 entry level underwater camera** funded by the Campbell River Foundation; underwater photography begins in earnest; 12 dives completed by 2 professional divers

SUMMER 2017

- Adopt-A-Transect volunteers carry out annual foreshore monitoring data collection

- Marine Outreach Summer Program: Gumbooting the Lagoon
June 25, July 22 and August 20

- **Salish Sea Marine Survival Project**, multi-disciplinary provincial study, rekindles FOCI's conversation wrt long-term data storage for CIFMP; Brad Mason/ CMN & Isobel Pearsall/ Strait of Georgia Data Center join the conversation

- **BIOBASE pilot** on Whaletown Bay eelgrass research site; acoustic mapping technique facilitated by Cascadia Wilderness; **Youth Working for Nature**, Josh Fletcher contributes technical expertise towards the mapping output

WINTER 2017/2018

- Broom Bash Manson's Landing CSE

- Subtidal Biodiversity Program; 10 dives completed by 2 professional divers

SPRING 2018

- **CSE Community Outreach Report** written in partnership with BC Parks and presented at public meeting at Manson's Community Hall; BC Parks announce initiative to engage a hydrologist to study the erosional issues at Manson's Spit

- **Cortes Wild! launch on Earth Day**; FOCI is 1/5 members of the Cortes Wild! partnership whose mandate is to promote ECOLiteracy on Cortes Island working out of its new natural history center, Wild Cortes, located at the Linnaea Education Center

- Beach Cleanup!

SUMMER 2018

- Adopt-A-Transect volunteers carry out annual foreshore monitoring data collection
- Marine Outreach Summer Program: Gumbooting the Lagoon
June 17, July 14 and August 25
- Broom Bash Manson's Landing CSE

WINTER 2018/2019

- Subtidal Biodiversity Program; 10 dives completed by 2 professional divers

SPRING 2019

- **The Humpback Comeback** ; invited researcher, Jackie Hildering from MARS, speaks on the comeback of humpback whales in local waters
- **ECOLab launch on Earth Day**; Cortes Wild! expands its facility to include a working community lab equipped with 2 Wild stereoscopes; FOCI contributes 2 new marine displays celebrating humpback comeback & subtidal biodiversity

SUMMER 2019

- Adopt-A-Transect volunteers carry out annual foreshore monitoring data collection
- FOCI sponsored **Misty Isles 3 Reefs exploration** of Marina Reef
- **FOCI celebrates World Oceans Day** at Cortes Wild! open house
- Marine Outreach Summer Program: Gumbooting the Lagoon - July 3
- BC Parks install **CSE interpretive signage** at Manson's Landing government dock; annual Broom Bash Manson's Landing CSE

WINTER 2019/2020

- **Forage Fish Program initiated**; FOCI partners with Project Watershed Society in Courtenay and 4 volunteers attend **Forage Fish training workshop, Oct. 29**
- **Forage Fish sampling**: November 5, 14, 20, December 3, 7, 8 and January 21 followed by stereoscopic identification of PSL spawn at Cortes Wild! ECOLab Great excitement in the extended forage fish community as FOCI's Team Sweevy positively identifies Manson's Landing as an important spawning area for the Pacific sand lance, *Ammodytes hexapterus*.
- Subtidal Biodiversity Program; 4 dives completed by 2 professional divers

SUMMER 2020

- Foreshore Monitoring data collection is carried out at all 12 permanently established transect sites around Cortes Island; all site pins intact and recovered
- **Cortes Island Foreshore Monitoring data, 1996-2020, transferred to Isobel Pearsall, Manager of the Strait of Georgia Data Center**, for digitization and long-term data storage at UBC
- Low tide field data collection at eelgrass intertidal study sites and 3 Reefs
- **Subtidal Biodiversity reporting complete**; highlighting landscape components and biological communities at each of our 12 subtidal study sites
- **513 documented marine species on/around Cortes Island; inventory** contributed to BIOdiversity Cortes Project, operating in association with the IMERSS Biodiversity Informatics Working Group; cross-border Salish Sea

- **Coastal Sand Ecosystem Restoration Project Smelt Bay**; initiated on the ground by FOCI's Youth Working for Nature; restoration accompanied by interpretative signage

WINTER 2020/2021

- Forage fish sampling November 24 & 26, December 1-4, January 7

Team Sweezy again documents significant Pacific sand lance spawning at Manson's Landing and Smelt Bay