



Fostering Conservation and Restoration of Priority Habitat on Salt Spring Island

Salt Spring Island Conservancy

\$ 83,197 Grant

SCIENCE

- Completed Species at Risk surveys on target properties.
- Wildlife cameras installed to assess beaver numbers and presence on the Blackburn Lake Nature Reserve site.

COMMUNICATION & EDUCATION

- Maintained contact with landowners and provided updated map of Species at Risk on lands found during surveys.
- Riparian Restoration Workshop
- 20 university students and 20 volunteers participated in seed collection, weeding and watering of wetland restoration sites and mapping at Blackburn Lake Nature Reserve.
- An educational video highlighting SSIC's restoration projects, including drone footage.

WETLAND RESTORATION

- Monitored wetlands that were created in 2013, which were noted as having re-vegetated fairly well but with low diversity.
- Maintain Native plant nursery
- Planning, wetland design, water level monitoring and site visits completed for the construction of 3 new wetlands.
- Invasive species removed around wetland construction sites.

HABITAT RETENTION

- Landowner registered conservation covenant on a 5 acre portion of their property, encompassing marine shoreline and upland mixed forest habitat.
- 3 new stewardship agreements signed protecting 80 acres of upland mixed forest habitat.



Native sedge seedlings at nursery. Photo credit L. Matthias



Establishing **Cover Crops for Waterfowl** on the Lower Fraser

Delta Farmland and Wildlife Trust

\$ 30,000 Grant

The Winter Cover Crop Stewardship Program establishes cost-share agreements with farmers in order to establish vegetative cover on fields before winter. Farmers engaged in this Stewardship Program plant cereal grasses, mixtures of legumes, or annual forage grasses as cover crops, which in turn provides feeding habitat for herbivorous waterfowl and shorebirds. Cover Crops mainly benefit herbivorous waterfowl, providing them with a protein-rich food source during staging and wintering periods. Cover crops also provide benefits to farmers, including luring waterfowl away from economically important hay and pasture crops, thereby mitigating overgrazing, which can impact the viability of local farms.

UPLAND RESTORATION

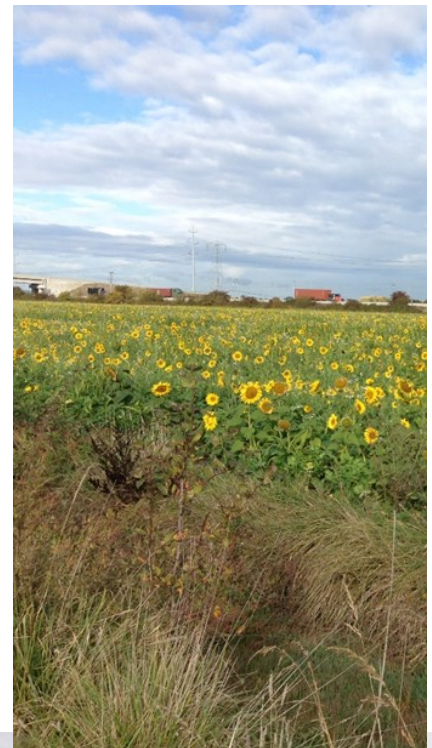
- 3,475 acres of cover crops (cereals, grasses and legumes), executed by lower Fraser River delta farmers
- Worked with farmers to establish 921 acres of novel cover crops (including clover, forage radish, and other legume mixtures).
- GPS verification of acreages reported in Stewardship Agreements, and monitoring for compliance

COMMUNICATION & EDUCATION

- Presentations and field visits to raise awareness about the project and the role of agricultural stewardship in enhancing waterfowl habitat.



Sandhill Cranes foraging in a winter cover cropped field in Delta (Nov. 2016)



Novel crop cover mix (Oct. 2016)





Habitat Stewardship and Enhancement in the Okanagan and Similkameen Valleys

Okanagan Similkameen Stewardship Society
\$ 20,000 Grant

HABITAT RETENTION

- 6 new wetland management/stewardship agreements signed with landowners; 153 landowners have been identified and engaged in the project.

WETLAND RESTORATION

- 2200 trees/plants were planted.
- Invasive plant management was completed at 14 wetlands including 12 privately owned wetlands and 2 public spaces.

CONSERVATION PLANNING

- Foster strategic partnerships with all levels of government, user groups, stakeholder groups.

COMMUNICATION & EDUCATION

- Over 400 volunteers including local residents, youth and children have been involved in wetland enhancement projects.
- Community stewardship (i.e.. Workshops, guest speakers, local events) in 15 communities.
- 2 newsletters were delivered to over 500 local stewards; 4 new stewards received signage for their project/land.





Chilcotin Marsh Enhancement – Phase 2

The Nature Trust of British Columbia

\$ 22,000 Grant

Chilcotin Marsh is a renowned waterfowl staging area. A water control project implemented by DUC in 1992 has greatly increased the capacity of the marsh for waterfowl. In conjunction with the nearby Chilcotin Lake conservation area, the conservation complex hosts 5,000 to 6,000 ducks and hundreds of Canada Geese during the fall migration.

Over time perimeter fencing, designed to exclude livestock from Chilcotin Marsh, has deteriorated to the point where it was now ineffective. As a result, livestock, including cattle and horses from neighbouring ranches, were having a negative effect on wetland integrity and capacity to support waterfowl and other wildlife. The replacement fencing allows for the restoration and enhancement of wetland and upland features, benefiting waterfowl, wildlife, and people.

WETLAND RESTORATION

- Installation of 4.8 km of fencing, protecting 2,449 acres of wetland and associated upland habitat.

COMMUNICATION & EDUCATION

- Project information was provided to 3 neighbouring landowners/stakeholders.





Assessing **Yellow Flag Iris Control** and Native Species Restoration to Improve Wildlife Habitat within Riparian Ecosystems

Agrowest Consulting

\$ 26,330 Grant

SCIENCE

- Benthic barriers were installed at 3 locations within 3 sites (Cheam Wetlands, Dutch Lake, and Little White Lake); the total treated area is approximately 2,000 m².
- Elementary school and university students participated in the project, learning about and installing benthic barriers and transplanting native species.
- Cheam Wetlands and Little White Lake received transplanting with native species in October 2016 (vs. natural regeneration, i.e., untreated).
- Statistical programs were used to analyze data, and results uploaded to EcoCat and submitted to Aquatic Ecology for publication.

COMMUNICATION & EDUCATION

- A short manual for the restoration of yellow flag iris treated areas was produced.
- Peer reviewed paper accepted for publication
- Presented at regional meetings and field events.



Volunteer University of the Fraser Valley (Ecology Students) installing benthic matting at Cheam Wetlands





Columbia Wetlands Waterbird Survey

Wildsight Golden

\$ 16,150 Grant

COMMUNICATION AND EDUCATION

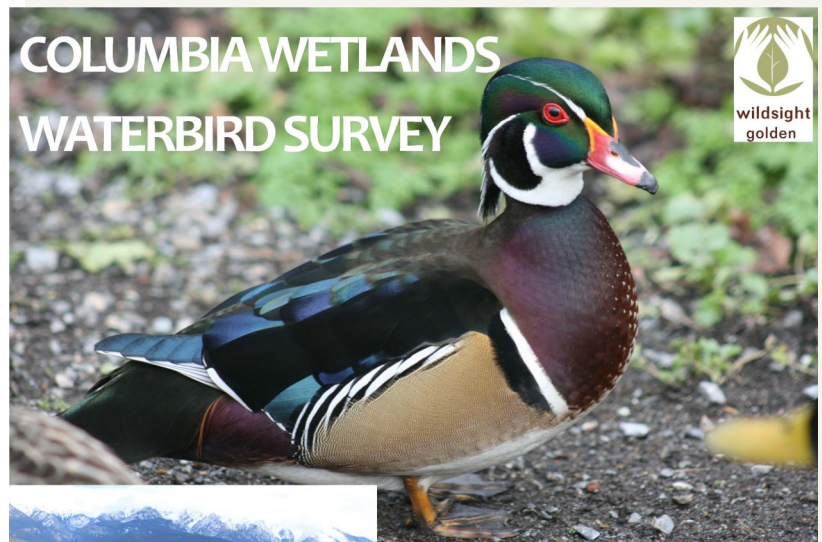
- 500 brochures were printed and distributed, describing the goals and objectives of the Columbia Wetlands Waterbird Survey, summary data from 2015, bird species at risk, and the value of the Columbia Wetlands.
- 13 presentations were completed to promote the CWWS and maintain a sufficient volunteer base. Two articles appeared in local newspapers and 10 school-aged field trips were conducted.
- 4 training modules & 2 field trip training sessions for volunteers organized. CWWS bird field guides, spotting scopes/tripods & resources provided.

SCIENCE

- 76 volunteers were coordinated to conduct 3 surveys during the spring migration at 86 survey sites: 25,800 birds and 111 bird species were recorded.
- 85 volunteers have been coordinated to conduct 3 surveys during the fall migration at 95 survey sites.
- An aerial swan survey was conducted, with 756 swans counted.
- Survey data was entered into eBird database.
- Pilot project for a Marsh Bird survey was completed.

CONSERVATION PLANNING

- Work to establish a CWWS Steering Committee with relevant agencies (DUC, CWS, BSC, CIJV MFLNRO) for effective collaborations and communications.
- Initiated a new program The CW Marsh Bird Monitoring Program (for breeding birds) with the help of partner organizations



Do you love wildlife & the Columbia Wetlands? If so, you may be interested in participating in a coordinated bird count! Data you collect will contribute to developing bird conservation initiatives in the Columbia Wetlands.

THE COLUMBIA WETLANDS WATERBIRD SURVEY IS FOR YOU!

Fall survey dates are Thurs Sept 29th, Wed Oct 5th & Sat Oct 15th (10am-1pm).
Training sessions are in Golden - Sept 21st & Invermere - Sept 22nd (5-7pm).

Project funders:





Wetland Habitat Conservation, Restoration and Enhancement in Coastal BC

Sunshine Coast Wildlife Project

\$ 59,000 Grant

HABITAT RETENTION

- 107 stewardship agreements were signed with landowners, protecting 63.2 acres of wetland habitat and 59.2 acres of upland habitat.

WETLAND RESTORATION

- 5 acres of wetland habitat were created in the Clowhom watershed.
- 10 wetland sites were improved by mitigating human disturbance, removing 400 m² of invasive weeds, and planting 2,000 native plants.

SCIENCE

- 20 wetlands have been surveyed to identify high priority sites for conservation (10 priority sites were identified).
- 20 sites were surveyed for waterfowl and other wildlife.

UPLAND RESTORATION

- 50 nest boxes built & installed
- 200 Stewardship guides encouraging best management practices have been distributed to 50 landowners to date.

COMMUNICATION & EDUCATION

- Support for wetland and waterfowl conservation is being built through presentations, workshops, children's programs, etc.



Excavating new wetland ponds in Clowhom watershed.





Wetland on Wheels 2016-2017: Strengthening local and provincial capacity to conserve wetlands

British Columbia Wildlife Federation

\$ 50,000 Grant

COMMUNICATION & EDUCATION

- 10 workshops were delivered (Wetlandkeepers Workshops, Restoration Planning and Map Our Marshes)
- Outreach programming delivered to approximately 500 students through the Squamish River and Estuary Program.

SCIENCE

- An inventory of 12 plots at 6 wetland complexes were mapped, piloting a draft BC Wetlands Plot form and developing recommendations for management and conservation.
- A Mapping and Assessment workshop was delivered in Castlegar, BC .

WETLAND RESTORATION

- 415 trees and shrubs were planted, completing a 6.1 acre wetland complex in Meadow Creek, BC.
- Initial construction started to create a wetland at Dewdney Elementary School to provide outdoor education opportunities; 170 native plants were planted, with more planting anticipated in Fall 2016.
- Initial restoration of a wetland at Silverdale Wetlands (Mission, BC) was completed with 800 native plants planted.



Squamish Map our Marshes workshop. Participants analyze a soil sample (Oct 2016).