ALBERNI-CLAYOQUOT REGIONAL DISTRICT

2024 – 2027 Strategic Plan

Agricultural Development Committee
Tuesday, August 20, 2024
Via Zoom
9:30 am

Regular Agenda

Watch the meeting live at: https://www.acrd.bc.ca/events/20-8-2024/

Register to participate via Zoom Webinar at:
https://acrd-bc-ca.zoom.us/webinar/register/WN_Y4gr3lz0QDaqx9DNL4NXvA#/registration

PAGE #

1. CALL TO ORDER

Recognition of Territories.

Notice to attendees and delegates that this meeting is being recorded and livestreamed to YouTube on the Regional District Website.

Introductions - Committee Members and Staff present via Zoom.

2. APPROVAL OF AGENDA
(motion to approve, including late items requires 2/3 majority vote)

3. DECLARATIONS
(conflict of interest)

4. MINUTES

a. **Agricultural Development Committee Meeting held June 18, 2024** **4-10**

THAT the minutes of the Agricultural Development Committee meeting held on June 18, 2024 be adopted.

5. PETITIONS, DELEGATIONS & PRESENTATIONS (10-minute maximum)

a. **Iona Smith, Project Manager, Upland Agricultural Consulting introducing the Food Security Emergency Planning and Agricultural Water Plan projects.**

6. CORRESPONDENCE FOR INFORMATION

a. **BC GOVERNMENT NEWS** **11-13**
Automation, Robotics Help Farmers Strengthen Food Security

b. **INVASIVE SPECIES COUNCIL OF BC** **14-45**
Invasive Species Strategy for British Columbia 2024-2028

c. **AGRISERVICE BC** **46-70**
Islands Edition – Regional Newsletter – August 2024

d. **TOFINO COMMUNITY FOOD INITIATIVE** **71-77**
Impact Report 2023

e. **CARIBOO CARBON SOLUTIONS** **78-79**
Vancouver Island Private Land Restoration

THAT the Agricultural Development Committee receive items a-e for information.

7. REPORTS

a. Alberni-Clayoquot Regional District – A. Needham
- Fall Fair Agriculture Table Volunteering
  - Thursday, September 5th 5pm – 10pm
  - Friday, September 6th 3pm – 10pm
  - Saturday, September 7th 11am – 10pm
  - Sunday, September 8th 11am – 3pm

b. City of Port Alberni – P. Deakin
c. School District # 70 – H. Zanette
d. Island Health – K. Ruel
e. Ministry of Agriculture & Food – T. O'Dell
f. Alberni Farmers' Institute – L. Aylard
g. Alberni District Fall Fair – A. Siddall
h. Alberni Valley Food Security Society – A. Lewis
i. Eat West Coast – E. Goldt
j. Nuu-chah-nulth Tribal Council – J. Cody
k. Spirit Square Farmers Market – C. Boudreau
l. Port Alberni Port Authority, Dock + Food Processing Hub – C. Addy
m. 4-H – P. Radcliffe
n. Marine Stakeholders
o. Primary Agricultural Producers

THAT the Agricultural Development Committee accept these reports a-o for information.

8. LATE BUSINESS

9. QUESTION PERIOD

Questions/Comments from the public:

- **Participating in the Zoom meeting**
- **Emailed to the ACRD at responses@acrd.bc.ca**

10. ADJOURN

Next Meeting: **Tuesday, September 17, 2024 at 9:30 am via Zoom**

Alberni-Clayoquot Regional District

MINUTES OF THE AGRICULTURAL DEVELOPMENT COMMITTEE MEETING HELD ON TUESDAY, JUNE 18, 2024, 9:30 AM

Via Zoom

MEMBERS PRESENT:
Heather Shobe, Chairperson, Eden Tree Farm
Ann Siddall, Alberni District Fall Fair Association
Fred Boyko, Director, Electoral Area "B" (Beaufort)
Helen Zanette, SD70 Trustee
Anna Lewis, Alberni Valley Food Security Society
Lisa Aylard, Alberni Farmers' Institute, Stonehaven Farm
Patty Radcliffe, 4H

REGRETS:
Tanya Shannon, Shannon Farms
Pat Deakin, City of Port Alberni
Kaley Ruel, Island Health
Cecilia Addy, Port Alberni Port Authority
Jen Cody, Nuu-chah-nulth Tribal Council
Thom O'Dell, Ministry of Agriculture & Food
Erika Goldt, Coastal Food Roundtable, Eat West Coast
Bob Collins, Arrowvale Farm
Victoria Lake, Effingham Oyster
Alex Taylor, Shelter Farm
Claire Boudreau, Spirit Square Farmers Market

STAFF PRESENT:
Amy Needham, Sustainability Planner
Kristin Kerr-Donohue, Administrative Assistant

The meeting can be viewed on the Alberni-Clayoquot Regional District website at:
https://www.acrd.bc.ca/events/18-6-2024/

1. CALL TO ORDER

The Chairperson called the meeting to order at 9:34 am.

The Chairperson recognized this meeting is being held throughout the Nuu-chah-nulth territories.

The Chairperson reported this meeting is being recorded and livestreamed to YouTube on the Regional District website.

Introductions - Committee Members and Staff via Zoom.

2. APPROVAL OF AGENDA

MOVED: A. Lewis
SECONDED: H. Zanette

THAT the agenda be approved with the addition of item 7(a) request to send condolences from the Agricultural Development Committee to Bill Thomson on the recent loss of his wife, Dezi Thomson.

CARRIED

3. DECLARATIONS

4. MINUTES

a. Agricultural Development Committee Minutes – May 14, 2024

MOVED: A. Siddall
SECONDED: H. Zanette

THAT the minutes of the Agricultural Development Committee meeting held on May 14, 2024 be adopted.

CARRIED

5. CORRESPONDENCE

a. AGRISERVICE BC
June 2024 Bulletin

b. LOWER MAINLAND LOCAL GOVERNMENT ASSOCIATION
2024 Resolutions Disposition, Pitt Meadows proposed tax changes on pages:
R46-Unfarmed Land Tax
R47-School Tax Exemption
R54-Minimum Income Requirements for Farm Classification

Committee discussion on the Pitt Meadows proposed tax change resolutions, how the farm-tax breakdown works, what qualifies on Agricultural Land Reserve (ALR) land as farm-use, and the idea of having separated ALR Zones to be able to have separate policies based on the needs of the individual zones.

The committee does not support the resolutions as they are currently written and put forward a motion based on the following reasons:

- Unfarmed Land Tax and the removal of the School Tax Exemption would force property owners to farm all their ALR land. In the Alberni Valley this would require forested land to be logged to create arable land, having negative environmental and public impacts.

- Increase to the Minimum Income Requirements for Farm Classification on properties between two and ten acres would have a significant negative impact in a sector where the farming income is already at a narrow margin and fewer people are farming each year.
- Tax increases/changes aimed at Lower Mainland ALR property speculation issues should not negatively affect the rest of the producers on ALR lands in BC. Blanket restrictions and taxes on farmland will not encourage people to farm, it will make economically viable farming even harder to attain.

P. Radcliffe joined the meeting at 9:45 am.

MOVED: L. Aylard
SECONDED: F. Boyko

THAT the Agricultural Development Committee recommend that the ACRD Board of Directors not support the resolutions, R46-Unfarmed Land Tax, R47-School Tax Exemption, and R54-Minimum Income Requirements for Farm Classification, proposed by Pitt Meadows, at the 2024 Union of BC Municipalities Convention.

CARRIED

MOVED: A. Lewis
SECONDED: H. Zanette

THAT the Agricultural Development Committee receive items a-b for information.

CARRIED

6. REPORTS

a. Alberni-Clayoquot Regional District – A. Needham

- Greenhouse Grower Course – Amy met with North Island College (NIC) to discuss a fall grant application and course intake. NIC is responsible for developing the curriculum and confirming the teacher. Amy will be assisting with making the connections for where the program could be held. Also discussing options with NIC for evening/weekend course offerings open to the public, and an Indigenous-focused course.
- The Request for Proposal for the Food Security Emergency Planning Project was awarded to Upland Agricultural Consulting. They have extensive background in agricultural and livestock emergency planning and have both an agricultural emergency expert on their team, as well as accessing local knowledge through Anna Lewis. The ACRD is planning to meet with them to launch the project soon and will be in touch with committees and agricultural groups as the schedule unfolds to begin engagement. Amy is planning to engage in person with the agricultural committees if possible. This will not be tied to any committee meetings; Amy will reach out individually to set up engagement. Amy recognized

that summer is an especially busy time for producers and that engagement might be better scheduled for the Fall or later.

- Amy has applied for the additional 25% of the Agricultural Water Infrastructure funding through the Watershed Security Fund. Should be informed by September 2024 if the application was approved. If not, then the stacking grant money will come from the Local Government Climate Action Program funds, which are distributed to local governments to help fund climate mitigation and adaptation projects such as this one.
- The Request for Proposals for the Agricultural Water Infrastructure project is out and closes on July 5, 2024.
- There will be an opportunity for discussion on the zoning bylaw agricultural resolution from the last ADC meeting at the June 19 Electoral Area Directors meeting.
- There was a request from the ADC last meeting to contact the BC Centre for Agritech Innovation to ask if they could attend the Fall Fair. Amy met with them on May 31 and has a follow-up meeting booked on June 26 with their team plus the City of Port Alberni and North Island College to discuss options for engagement. If they end up being unavailable for the Fall Fair there may be the option to invite them as a delegation to a future ADC meeting to showcase their projects and initiatives.
  Comment from the Chair – there is one farmer in the valley who is very interested in developing Agritech to support harvesting on small blueberry farms, current technology is only available for large scale farms. Please share the information on this as it comes up.
- Previous discussion with the ADC has identified a desire for at least one in-person meeting per year. Committee members selected to have an in-person meeting in November instead.

b. ACRD System Change Project – H. Shobe

- Last meeting was held on June 12. View the Final Presentation here. Discussion focused on networks and the importance of being strategic when developing to reduce redundancy and competition for resources, supporting high-level tables where members have explicit permission to make decisions for those they represent which is important for policy making, and that networks have a very clear mandate and stick to it.
- There is a lot of excitement that the Ministry of Social Development and Poverty Reduction now has a mandate to support food security and will give the opportunity to engage more with producers and will potentially give producers more voice and avenues to get support for what they need.
- Support engagement with producers by having meetings on the farms as this is the best way to educate.
- Regarding Farmers' Institutes, aiming to develop leadership and organizational capacity from within the farming community is important

to support the organizations themselves instead of having others speak for them.

c. School District # 70 – H. Zanette

- Last Public SD70 Directors meeting before summer will be held June 25th at Wickaninnish School in Tofino
- Annual budget was passed at their last meeting.
- Staff Wellness Committee being set up, idea is to brand it and get staff engaged.
- New Board and Committee meeting schedule has been committed to for 2025
- Have adopted the Acceptable Use of Cell Phones, Smart Watches, and Electronic Device Use in Schools Policy, this is a Provincial requirement, the procedure will be posted on the SD70 website soon.
- Tree Protection Policy is being drafted.
- Kirsten Nesbitt is new Healthy Schools Manager.

Request from the Chairperson that we invite the SD70 Healthy Schools Manager to an ADC meeting. A. Needham is in contact with her through the Farm to School BC group and will invite her to an ADC meeting when she has settled into her new position.

d. Alberni Farmers' Institute – L. Aylard

- Participated in the Homestead Market held by Beaver Creek Community Club on June 15, was well attended and many tables from the Alberni Valley and surrounding areas.
- Represented the BC Cattlemen's Association at an event at Save-On-Foods supporting BC raised beef. Public engagement was great and had many interesting conversations regarding how and where to purchase meats directly from farmers.

e. Alberni District Fall Fair – A. Siddall

- Currently do not have a convener for Agriculture Education, so that job is falling on Ann's shoulders.
- Would be very interested to have the Agritech component at the Fall Fair, requested suggestions from the committee.

  Committee suggestions of potential tables for the Agriculture Building:
  - New Fiber Guild to participate in the Agriculture Building, could have the whole production from sheep to the multiple products that can come from fleece harvest.
  - Wayne Smith, from Vancouver Island Grain and Milling, with his table-top combine display.
  - Matilda Atleo's traditional foods display would also be an interesting add to the Ag Building.
  - Nitanis Desjarlais also has an interesting Indigenous Food Gathering presentation/display.
  - Farmers' Institute will discuss their involvement in the 2024 Fall Fair Agriculture Building at their next meeting.

f. Alberni Valley Food Security Society – A. Lewis

- Helped to get Haahuupayak School garden irrigation up and running.
- Helping Joanne get the Hupacasath garden set back up.

L. Aylard left the meeting at 10:46 am

- Summer student has been hired for 2024. Will be updating the Community Food Offering Guide. They will be starting inventory of the meat from the meat cutter's course to be able to distribute to the SD70 Backpack program.
- Final Grow Local Workshop will be on July 7th, focused on winter gardens.
- 2024 Grower's Guide is out, has been distributed, and is available digitally as well.
- Starting to think about Family Farm Day and if anyone in the committee has any ideas of new farms or urban sites that would be interested, please reach out to Anna directly. Potential to have one of the school gardens participate.

g. 4-H – P. Radcliffe

- Registration is now closed, kids are working hard on their projects now.
- Provided a petting farm last weekend for the Pediatric Stroke Association Fundraiser and Walk. Part of the 4-H program involves community service and giving back to the community.
- The Cloverbuds have gone out to the Cox Lake Blueberry Farm and learned from the beekeepers about the importance of pollination.

L. Aylard rejoined the meeting at 10:54 am

- 4-H Club will attend the Coombs Fair in August and the Fall Fair in September

h. Primary Agricultural Producers

- A. Needham for T. Shannon
  - Shannon Farm - the weather has cooperated this spring for a great silage harvest and grass growth for feed, much better than last year.
  - The Cabin - the Gather & Graze event is well underway with planning, Saturday, July 27 is sold out, and spots are filling up for Friday, July 26. Menu and poster available here. Contact Tanya at thecabin@shannonfarms.ca for more information.
- L. Aylard – Stonehaven Farm
  - Grass and silage harvest has been very productive this year, not able to do hay yet, but a lot being able to be put away for winter feed.
  - Support for local beef and lamb has been very good, selling out very quickly, with little to no advertising.

i. Directors Update - F. Boyko

- Advised the committee that a Log Train Trail meeting is being held on Tuesday June 18th at McLeans Mill.
    - Committee discussed that many agricultural producers have property that is adjacent to the trail and utilize the trail to access their water sources and neighbouring properties. Would appreciate better access point signage as are starting to have people parking on private property, potentially blocking equipment from being accessed. Signage regarding respectful use of the trail would also be appreciated, starting to see more garbage. Important that agricultural producers, especially those located on the trail, are included in these decisions.

MOVED: *A. Lewis*
SECONDED: *A. Siddall*

THAT the verbal reports a-i be received.

CARRIED

7. LATE BUSINESS

a. Request from Pat Deakin to consider sending condolences to Bill Thomson on the recent death of his wife.

MOVED: *L. Aylard*
SECONDED: *A. Siddall*

THAT the Agriculture Development Committee send their condolences, in the form of a gift and/or card, to Bill Thomson on the recent loss of his wife.

CARRIED

8. QUESTION PERIOD

Questions/Comments from the public. The Administrative Assistant advised there were no questions or comments respecting an agenda topic from public:

- Participating in the Zoom webinar
- Submissions received by email at responses@acrd.bc.ca.

9. ADJOURN

The meeting adjourned at 11:08 am.

Certified Correct:

_____ _____

Heather Shobe,
Chairperson

Kristin Kerr-Donohue,
Administrative Assistant

British Columbia News

Automation, robotics help farmers strengthen food security

https://news.gov.bc.ca/31061

B.C. farmers are accessing new technology through federal and provincial government funding to grow their businesses and increase production to help strengthen food security in the province.

“Our farmers work hard every day to grow top-quality products,” said Lawrence MacAulay, federal Minister of Agriculture and Agri-Food. “With investments through the B.C. On-Farm Technology Adoption Program, more of British Columbia’s farmers have been able to make improvements on their farms that will allow them to become more efficient and keep feeding their communities.”

The B.C. On-Farm Technology Adoption Program is helping farmers adopt new technology, such as automation, robotics and innovative growing, packing and storage solutions. These advances are increasing food production and helping combat labour challenges. The program is delivered by Innovate BC, a Crown agency of the Province.

“Integrating new agritech on farms means farmers can improve how they plant, grow, harvest, pack and store the food they produce, which allows them to grow their businesses and provide for the communities they live in,” said Pam Alexis, B.C.’s Minister of Agriculture and Food. “By helping farmers purchase and install equipment that boosts their efficiency and bottom line, we are strengthening food security and production in B.C.”

In the Fraser Valley, Van Eekelen Enterprises Ltd. bought a robotic weeder for its field vegetables. The “Robot One” is a machine learning platform that can be taught to differentiate between weeds and crops. The teaching is done by the operator’s input and the machine remembers these inputs. After identifying weeds, the machine can selectively kill the weeds with a variety of tools on the machine. This robotic weeder is helping the Van Eekelens improve profitability, while reducing labour costs and herbicide use.

“The program allowed us to purchase leading-edge technology that has the potential to vastly reduce our labour costs related to weeding,” said Marinus Van Eekelen, operations manager, Van Eekelen Enterprises Ltd. “By being early adopters of technology, we can continue to provide the high-quality produce to consumers in B.C. and elsewhere.”

Sandhar Farms in Kelowna bought a fruit-picking platform for its orchard. This technology, rarely seen in British Columbia's agricultural sector, is setting a new standard for efficiency and safety. By lifting workers to the height of the fruit, it eliminates the need for ladders, significantly enhancing safety and working conditions. Additionally, it reduces damage to the fruit as apples are placed gently in the bin. Beyond the harvest, it becomes an invaluable year-round asset.

Camirlaney Farms in Delta received funding to upgrade its potato storage with computer panels and digital sensors to control the storage temperature, which will decrease crop damage and loss from moisture and decay.

The B.C. On-Farm Technology Adoption Program is funded through the Sustainable Canadian Agricultural Partnership, a five-year, $3.5-billion investment by federal, provincial and territorial governments to strengthen the competitiveness, innovation and resilience of Canada’s agriculture, agrifood and agriculture-based products sector. This includes $1 billion in federal programs and activities, and a $2.5-billion commitment, which is cost-shared 60% federally and 40% provincially/territorially, for programs designed and delivered by provinces and territories.

territories.

Quotes:

Brenda Bailey, B.C.'s Minister of Jobs, Economic Development and Innovation –

"Developing a strong agritech industry is critical to building a sustainable, local food supply, as well as contributing to new jobs and economic growth for communities in B.C. The On-Farm Technology Adoption program is helping farmers add technology, like robotic weeders and robotic pickers, to their operations so farmers can continue to farm and provide good food and good jobs for people in B.C."

Peter Cowan, president and CEO, Innovate BC –

"We are proud to deliver the B.C. Technology Adoption Program on behalf of the Ministry of Agriculture and Food to support farmers in accessing new agritech to enhance their operations. Agriculture and other provincial industries continue to face a changing landscape with factors like rising costs and labour shortages. By reducing risk and creating new avenues to acquire innovative technologies, we can help B.C. businesses like farms be more efficient and remain competitive in response."

Davinder Sandhar, owner, Sandhar Farms –

"Our participation in the B.C. On-Farm Technology Adoption Program has been instrumental in propelling Sandhar Farms to leading the way into a new era of agricultural innovation. By embracing cutting-edge technologies through this program, such as the picking platform, we've experienced the profound benefits it brings, revolutionizing our operation. By enhancing efficiency and safety during use, the program has not only transformed our practices, but also positioned us for sustained success in British Columbia's agriculture sector."

Shelly Harris, manager, Camirlaney Farms –

"We really appreciate the support of the B.C. On-Farm Technology Adoption Program. We upgraded our potato storage with a new computer panel and sensors so we can control the environment in the storages remotely and more efficiently. This will maintain potato quality longer, which allows us to extend our season."

Quick Facts:

- The B.C. On-Farm Technology Adoption Program provides funding of as much as $150,000 for farmers to purchase technology to enhance profitability, productivity and efficiency.
- The first intake of the program funded 54 projects throughout the province to purchase and install equipment, such as a soil-moisture and leaf-wetness sensor in a vineyard, automated composter for field crops and an automated water pump for a berry farm.
- The next intake for the program will be this summer and will support farmers to purchase labour-saving technologies that target some of the most repetitive on-farm tasks.
- The governments of Canada and British Columbia fund other programs through the Sustainable Canadian Agricultural Partnership that include technology adoption on farms, such as traceability programs that support adoption of new traceability technologies and the Beneficial Management Practices Program, which supports adoption of technologies that reduce environmental impact.
- The B.C. On-Farm Technology Adoption Program is part of a suite of programs offered by Innovate BC through the Integrated Marketplace initiative, which was developed by the Province of British Columbia as part of the StrongerBC Economic Plan and supported by PacifiCan.

Learn More:

To see the full list of the B.C. On-Farm Technology Adoption Program funding recipients, visit:
https://news.gov.bc.ca/files/Backgrounder_BC_On-Farm_Tech_Adopt_Program.pdf
(https://news.gov.bc.ca/files/Backgrounder_BC_On-Farm_Tech_Adopt_Program.pdf)

B.C. On-Farm Technology Adoption Program:
https://www.innovatebc.ca/programs/bc-on-farm (https://www.innovatebc.ca/programs/bc-on-farm)

Sustainable Canadian Agriculture Partnership Program:
https://agriculture.canada.ca/en/department/initiatives/sustainable-canadian-agricultural-partnership
(https://agriculture.canada.ca/en/department/initiatives/sustainable-canadian-agricultural-partnership)

For more about Innovate BC: https://www.innovatebc.ca/ (https://www.innovatebc.ca/)

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Translations

- BCOnFarmTechnologyAdoptionProgram_French.pdf (https://govbcnews.azureedge.net/translations/releases/2024AF0020-000902/BCOnFarmTechnologyAdoptionProgram_French.pdf)
- BCOnFarmTechnologyAdoptionProgram_Punjabi.pdf (https://govbcnews.azureedge.net/translations/releases/2024AF0020-000902/BCOnFarmTechnologyAdoptionProgram_Punjabi.pdf)

Acknowledgment

The B.C. Public Service acknowledges the territories of First Nations around B.C. and is grateful to carry out our work on these lands. We acknowledge the rights, interests, priorities, and concerns of all Indigenous Peoples - First Nations, Métis, and Inuit - respecting and acknowledging their distinct cultures, histories, rights, laws, and governments.

Invasive Species Strategy for British Columbia

2024-2028

ACKNOWLEDGMENTS

The Invasive Species Strategy for British Columbia 2024–2028 is the fourth provincial strategy developed through a collaborative process led by the Invasive Species Council of BC (ISCBC). It incorporates input from a wide range of people, including those from all levels of governments, Indigenous organizations, businesses, community groups and people living across the province. Input was received through surveys, virtual and in-person workshops, online reviews, and special meetings with Indigenous Peoples.

The Invasive Species Strategy for BC was developed as a strategic framework for improved invasive species management in British Columbia and provides a foundation to guide our collective programs and efforts over the next five years.

The ISCBC appreciates all the technical and scientific advice provided during the development of this strategy from the following:

Clare Greenberg
Sea to Sky Invasive Species Council

Crystal Chadburn
Ministry of Forests, Province of B.C.

Daris Gillis
Peace River Regional District

Dr. David Ensing
Agriculture and Agri-Food Canada

Grahame Gielens
Ministry of Transportation and Infrastructure, Province of B.C.

Martina Beck
Ministry of Water, Land and Resource Stewardship, Province of B.C.

Mike Dedels
Grasslands Conservation Council of BC

Nicci Bergunder
sməq̓ʷaʔ θə sɬənɬenəy̓ - Blue Heron Women Consulting

Val Miller
Ministry of Forests, Province of B.C.

Gail Wallin and Dr. Nick Wong of the Invasive Species Council of BC led the Strategy development process, with staff support from Lara Phillips. Special thanks to Stephanie Woods, founder of Woods Environmental and Conservation Services, and Cailyn Glasser.

COVER: Eurasian watermilfoil, A. Fox, UGS; Cheatgrass and spotted knapweed, M. Blackmore; Feral pig; R. Brook; European rabbit, J. Bode; Spongy moth, USDA, Bugwood.org; Scotch broom, M. Syvenky; Parrrot's feather, R. Wersel, University of Mississippi

BACK COVER: Buse Lake Provincial Park, common tansy, Russian olive and tree of heaven, M. Blackmore; Yellow perch, M. Herborg; Giant hogweed, ISCMV; Orange hawkweed, M. Syvenky; European fire ant, R. Higgins

Table of Contents

Setting the Stage

Why You Should Care

Invasive species are a significant threat to lands, waters, biodiversity, and people worldwide. Global economic costs of invasive species have quadrupled every decade since 1970 and were estimated at $423 billion annually in 2019[1]. In British Columbia, invasive species are causing a multitude of harmful environmental, economic, cultural, and social impacts. Typically introduced by human activity, and often intentionally, invasive species can reproduce and spread rapidly, displace native species and disrupt the natural balance of ecosystems they invade. Often introduced without their natural predators to keep them in check, invasive species can alter habitats and outcompete native species for resources they depend on for moisture, food and/or shelter. For people in BC, invasive species threaten our food security, economic growth, cultural values, health and quality of life.

Japanese knotweed

D. Sigg

Goldfish at Pinecrest Lake

Sea to Sky Invasive Species Council

Increased trade and travel combined with changing climate and increased disturbances such as fires and floods, mean BC is at greater risk for new invasive species to establish and existing invasive species to spread. Whether it's forests, grasslands, urban green spaces, freshwater or marine environments — there are invasive species threatening habitats and communities throughout the province. From Scotch broom (*Cytisus scoparius*) to goldfish (*Carassius auratus*), knotweeds (*Reynoutria* spp. & *Persicaria wallichii*) to brown marmorated stink bugs (*Halyomorpha halys*) — invasive species will vary across BC, but the solutions are the same. Preventing the introduction is the first step, followed by active reporting and response to avoid establishment. For existing invasive species, containment is key to preventing further spread, as is consistent action to control and remove invasive species and restore the health and resilience of impacted ecosystems.

Each person has a role to play in preventing and reducing the negative impacts of invasive species. Whether you are a gardener, pet owner, developer, homeowner, or you just enjoy spending time in nature, we all need to work together to make a real difference in protecting BC from invasive species — at work, at play, and at home.

Vision: To protect BC's lands and waters from the harmful impacts of invasive species.

Dedicated efforts are needed to address the 2030 targets for the Kunming-Montreal Global Biodiversity Framework (2022), including Target 6 to

"Eliminate, minimize, reduce and or mitigate the impacts of invasive alien species on biodiversity and ecosystem services by identifying and managing pathways of the introduction of alien species, preventing the introduction and establishment of priority invasive alien species, reducing the rates of introduction and establishment of other known or potential invasive alien species by at least 50% by 2030, and eradicating or controlling invasive alien species, especially in priority sites, such as islands".[1]

Together we can create positive change by taking key actions to protect BC from invasive species. In doing so we can support sustainability in these areas:

- **Environmental** — restore ecosystem resilience and biodiversity, prevent and reverse habitat loss, reduce competition with, predation of, and disease vectors for native species
- **Cultural** — restore the historic and cultural significance of the landscape, reverse loss of culturally significant species for food, medicine, and spiritual purposes
- **Economic** — reduce losses and management costs for agriculture, forestry, fisheries, tourism, recreation, horticulture, infrastructure, real estate, and urban spaces
- **Social** — increase access to lands and waters for recreation and nature activities, and decrease negative impacts to human health, aesthetics, and communities

As invasive species 'do not respect boundaries', we must work together across jurisdictions to protect our ecosystems and communities from the impacts of invasive species. To achieve our collective vision, it is imperative to foster a culture of understanding and respect — for the land, for the water, for all living things including one another.

Why a Strategy?

The Invasive Species Strategy for British Columbia represents a collective vision for strengthening invasive species management and awareness in BC. The Strategy serves as an overarching, guiding document for governments, businesses, organizations and individuals to move forward together to protect our environment, economy, and social well-being from the widespread negative impacts of invasive species. This is the fourth provincial strategy. Each has been developed with broad and inclusive input, guided by a diverse advisory group. Just as with the first Strategy in 2004, the 2024-2028 Strategy identifies shared priorities and provides key goals confirmed through input from across British Columbia to guide our collective work over the next five years.

DEFINITION: Invasive species are plants, animals or microorganisms that are not native to the province or are outside of their natural distribution and negatively impact British Columbia's environment, people and/or economy.[2]

Helpful links at a glance:

- Invasive Species Strategy for BC 2004; 2012-2016; 2018-2022
- B.C. Inter-Ministry Invasive Species Working Group
- Invasive Species Council of BC
- Local Government and Regional Invasive Species Organizations in BC

"Ethical Space is formed when two societies with disparate worldviews are poised to engage each other."

- Dr. Willie Ermine, Sturgeon Lake First Nation

It is a space in which all knowledge systems (e.g., Indigenous, Western) are validated and respected (also called two-eyed seeing) and where it is possible to arrive at joint decisions arising out of mutually agreed protocols.[3]

Dungeness crab; Shawna Kiesman

Advancing Reconciliation

The lands and waters currently known as British Columbia are rich with cultural and biological diversity. The biodiversity that people take such pride in is integral to the practices of Indigenous Peoples and has been since time immemorial. Pre-contact, Indigenous Peoples managed the lands and waters within BC through systems of natural law, oral history, and deeply entrenched responsibilities, caring for their resources through reciprocal relationships. These relationships were disrupted by colonization, and consequently so was the health of the lands and waters they managed for millennia.

Invasive species have further altered ecosystems vital to Indigenous Peoples. By reducing the availability of native plants and animals, invasive species have led to the loss of cultural practices tied to the use of native species. For Indigenous Peoples to fully exercise their inherent rights, the impact of invasive species on the health and integrity of the ecosystems they steward must be reversed.

Indigenous partnership and leadership in environmental initiatives is recognized for advancing conservation efforts and sustaining biodiversity. The concept of reconciliation is fundamentally linked to healing the land. A deeper understanding of the connections with the land, and the relationship of Indigenous Peoples to the land, is necessary to achieve success in restoring natural functions, free of invasive species.

First Nations and Métis participants in the strategy development identified four key goals for invasive species management:

1. **Ensure Indigenous partnership and leadership** — Empower Indigenous Peoples to lead and engage in the process of healing the land. The relationship we have with each other is reflected in the relationship we have with the land.
2. **Respect and reflect Indigenous Knowledge** — Work directly with local knowledge keepers and communities. Solutions to invasive species issues require Indigenous Knowledge and Western knowledge to respectfully intersect. Reflecting the principles of Ethical Space throughout planning and coordination is critical.
3. **Expand knowledge sharing and research** — Strengthen education and awareness within and beyond Indigenous communities. Acquired over generations, Indigenous Knowledge deepens the shared understanding of the impacts and interactions of invasive species with ecosystems and helps guide management decisions.
4. **Support and increase capacity** — Expand management of invasive species through shared knowledge and resources to enhance stewardship.

> *"The land is us […] The land feeds you, but we feed the land as well […] we live on the land and we can impact the land, we can destroy the land, or we can love the land and it can love us back."*[4]
>
> - Jeannette Armstrong, PhD, Syilx Nation member from the Penticton Indian Band

British Columbia unanimously passed the *Declaration on the Rights of Indigenous Peoples Act* (DRIPA)[5] in November of 2019, followed by the release of the *Declaration on the Rights of Indigenous Peoples Act Action Plan 2022-2027* (DRIPA Action Plan)[6], outlining tangible actions and steps BC committed to as a path towards full implementation of the Act. The principles outlined in the DRIPA Action Plan have been woven into this Strategy to support commitment and action towards reconciliation.

Cheatgrass, M. Blackmore; Gustafsen Fire and Highway 8 photos, G. Gielens

Adapting to a Changing Climate

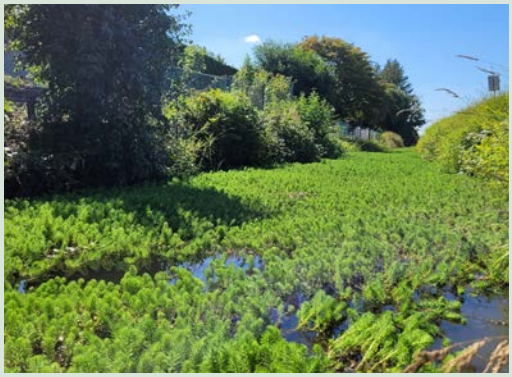
Climate fundamentally impacts ecosystem structure and dynamics, and across the province, our lands, waters, biodiversity, and communities now face ever-growing changes. Healthy and diverse ecosystems are more resilient to both changing climate and climatic events. Looking forward, stewardship of lands and waters must be carried out considering climate adaptation and nature-based solutions to ensure future ecosystem resilience, and incorporate effective management of invasive species.

Warming temperatures and changes in precipitation can threaten existing species, increase the risk of new invasive species establishments, and support the expansion of existing populations. Changing climate disrupts native species by compromising their competitive ability, creating favourable conditions for invasive species to establish, reproduce and spread. Still, the intersection between invasive species and climate is relatively understudied, and more extension and awareness of the linkages is needed. Prevention and management efforts must aim to protect and nurture resilient ecosystems to help buffer against the impacts of climate change.

Recently, BC has seen record-breaking temperatures with little precipitation, leading to drought and to a rise in destructive wildfires. Highly flammable invasive plants, such as cheatgrass (*Bromus tectorum*), form dense stands of dry material early in the year, increasing fuel load, and the risk and intensity of wildfires.[7] Highly flammable invasive plants, such as cheatgrass, can thrive in drought conditions. On the other hand, BC has also seen more frequent heavy rainfall events that are expected to continue, testing the capacity of storm sewers and resulting in local flooding, erosion, and bank destabilization.

In some areas, atmospheric river weather systems have caused severe flooding spanning multiple jurisdictions. Invasive species, such as knotweeds, can spread during floods and increase the impacts of these events by destabilizing riverbanks and increasing erosion. Response to climatic events must incorporate invasive species management into recovery efforts, as invasive species are often the first to colonize following large disturbances. Furthermore, the rapid movement of people and equipment during and after large disturbance events can create opportunities to transport and introduce invasive species to new areas. Pre- and post-disturbance management requires training, knowledge sharing, and extension of tools and information to all those involved, including members of affected and neighbouring communities.

It is also increasingly important to protect vulnerable at-risk habitats and species — which may be more susceptible to climate impacts — and proactively monitor these areas for invasive species rather than using a reactive approach. As prevention is the most cost-effective tool for invasive species management, taking measures to protect ecosystems from new introductions is key to minimizing climate impacts and ensuring resilient ecosystems for future generations.

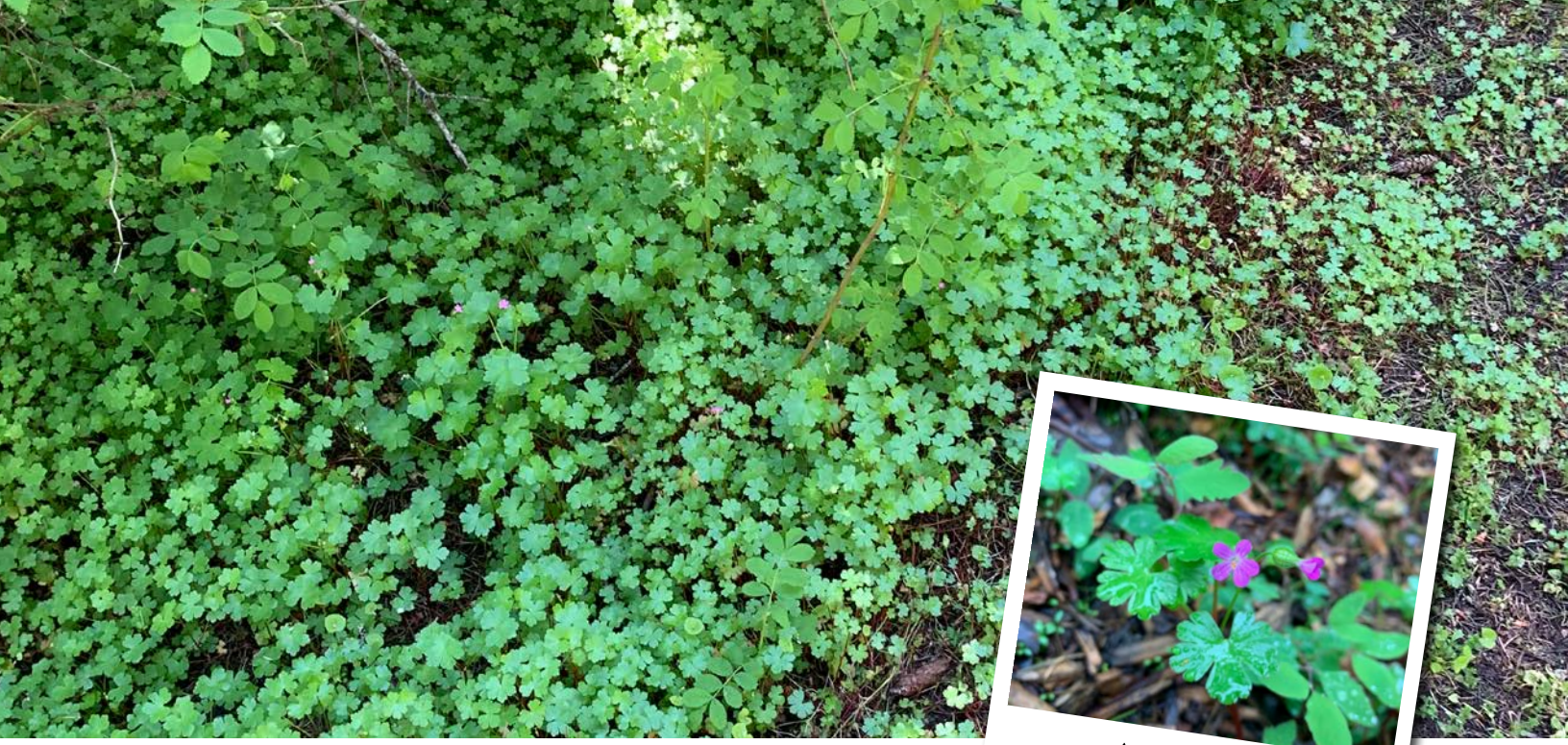


Parrot's feather; V. Marshall

Flood risk is increased by invasive species like knotweeds, that reduce riparian resiliency, destabilize streambanks and increase siltation that impacts aquatic life, or by invasive parrot's feather (*Myriophyllum aquaticum*), an aquatic plant that can reduce water flow by clogging drainage culverts and ditches. Flood events also create opportunities for invasive species movement.

Scotch broom; J. Leekie

Scotch broom plants contain flammable oils and form large infestations with many dry and dead branches. Their presence can greatly increase fuel loads and result in more intense wildfires.



Spread of shiny geranium along forest floor and close-up; B. Brown

Strategic Directions

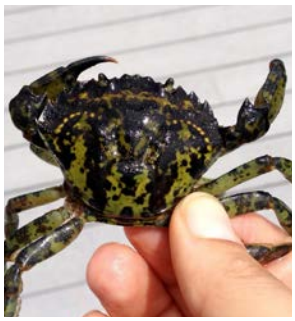
The Invasive Species Strategy for BC is based on a foundation of four key strategic directions, all equally important and interconnected. Each Direction includes an overview followed by key goals. Just as collective action is required, so is collective reporting. Targets and indicators (see the appendix) will be used to collectively measure progress and success toward the goals listed in this Strategy. Note that numbering of goals is not reflective of priority.

Enhance Stewardship of Lands and Waters

Bat caught in burdock; M. Anions

British Columbia is the most biodiverse province in Canada and is home to many rich and unique ecosystems, as well as many Species at Risk and culturally significant species. Invasive species are recognized as one of the five direct drivers of biodiversity loss, along with land-use change, pollution, climate change and natural resource use and exploitation.[8] Reducing invasive species impacts, protecting biodiversity and restoring ecosystem health and resilience are top priorities across BC. Protecting our natural and cultural diversity, and enjoyment of nature requires proactive stewardship of lands and waters. Stewardship includes prevention, control, and monitoring of invasive species, as well as restoration of degraded ecosystems and green spaces.

Invasive species directly impact native species and Species at Risk. Globally, invasive species have played a key role in 60% of plant and animal extinctions.[9] For example, the introduction of brown bullhead (*Ameiurus nebulosus*), an invasive fish species, to Hadley Lake, BC, in the 1990s led to the local extinction of the native fish: the stickleback species pair (*Gasterosteus aculeatus*). Stickleback species pairs are among the rarest and most threatened species in the world. Unlike many species that are rare in Canada but found elsewhere, the stickleback species pairs exist only in this corner of our province.[10] On the coast, salmon habitats are threatened by European green crab (*Carcinus maenas*), a voracious predator that out-competes native species and disrupts ecosystems by destroying critical eelgrass habitat.



European green crab; K. Bimrose, NOAA

In freshwater ecosystems, red-eared slider turtles (*Trachemys scripta elegans*) can out-compete native species for resources and spread diseases to native species, such as the regionally endangered Western painted turtle (*Chrysemys picta bellii*). On land, invasive plants such as knapweeds (*Centaurea* spp.) and sulphur cinquefoil (*Potentilla recta*) threaten sensitive grasslands by forming large monocultures that reduce native biodiversity, impact forage production and quality, and alter soil nutrient composition. Uninvaded grasslands are also impacted less by wildfires and droughts, making them incredibly resilient as 'carbon sinks', further emphasizing the need to protect them from degradation by invasive species. In forested areas, invasive forest insects like spongy moth (*Lymantria dispar dispar*) threaten healthy tree cover which is vital to cooling communities, providing

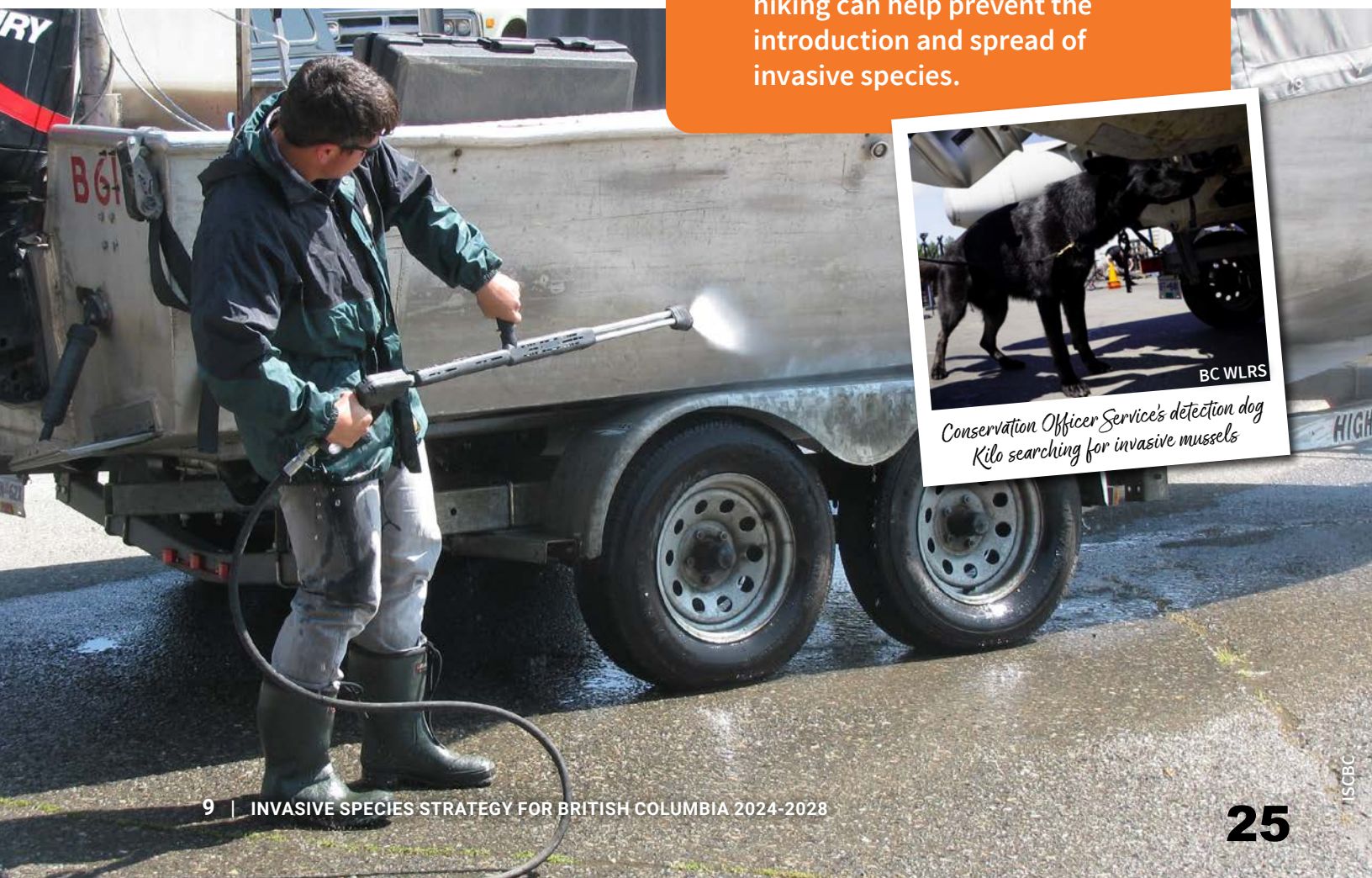
Female spongy moth; J. Ghent, Bugwood.org

shade for fish-bearing streams, and storing carbon. BC's range of terrestrial and aquatic ecosystems provide critical ecosystem services for local communities as well as regional and global processes. The benefits include water capture and filtration by watersheds, air pollution absorption by plants, and climate regulation resulting from carbon storage in trees, plants, and soils.[11] For BC's diverse wildlife, healthy habitats are crucial, as they provide food, water, shelter and the necessary conditions for reproduction, migration, and overall well-being.

Stewarding ecosystems to support resiliency against the impacts of invasive species requires detection, collaboration, increased resources and immediate action. Informed decision-making on invasive species management must encompass a hollistic approach, and incorporate appropriate integrated pest management techniques, including Indigenous and local knowledge, at both site-specific and landscape levels. Across all of BC, fostering stewardship efforts in Indigenous and local communities and among stewardship organizations and outdoor groups, will enhance detection and management efforts, and create a strong network of stewards working toward common goals.

ISCBC

KEY ACTION:
Close and restrict key pathways, vectors and transport of invasive species. For example, ensuring you clean, drain, and dry your watercraft before moving it to another waterbody, or brushing off your boots before and after hiking can help prevent the introduction and spread of invasive species.



BC WLRS

Conservation Officer Service's detection dog Kilo searching for invasive mussels

ISCBC

GOAL 1

Increase Investment in Prevention

Preventing the introduction of invasive species is a cornerstone of invasive species management and is the most cost-effective way to stop invasive species impacts. Identifying, closing and/or restricting the key pathways, vectors and mechanisms by which invasive species are introduced and/or transported is a top priority. Effective prevention requires a strategic approach that prioritizes invasive species based on risk to BC. Risk assessments for invasive species and pathways support this preventative approach and should continue to be a key priority. Investing in prevention will lessen ongoing costs for management and restoration, estimated in millions across BC, annually.

CLEAN DRAIN DRY

PLANT WISE

Play Clean Go

BUY LOCAL BURN LOCAL

DON'T LET IT LOOSE

Spotted lanternfly; L. Barringer, Bugwood.org

Preventing the introduction of species such as spotted lanternfly (*Lycorma delicatula*) is a priority for BC and Canada. Spotted lanternfly can feed on over 100 species of trees and plants, and is a serious threat to the tree fruit, wine grape, and ornamental tree industries.

Mussel monitoring; ISCBC

If zebra and quagga mussels (*Dreissena polymorpha* & *Dreissena rostriformis bugensis*) eventually occupy all water systems where they could physically survive and thrive in BC, damages to recreational boaters, water supplies, power generation infrastructure, tourism and property values are estimated to cost 2023 CAD $64–$129 million annually.[12]

Reporting invasive species can be done by anyone living in or visiting BC, and greatly helps the scientific and management community identify, study, and manage invasive species. Effective reports contain accurate location details and clear photographs of the species. Community science reports can be submitted via several methods:

- Report Invasives BC App (*report suspected invasive mussel detections to RAPP line*)
- iNaturalist App or web platform
- Online form submissions to ISCBC
- Contacting regional invasive species organizations or local governments

ISCBC

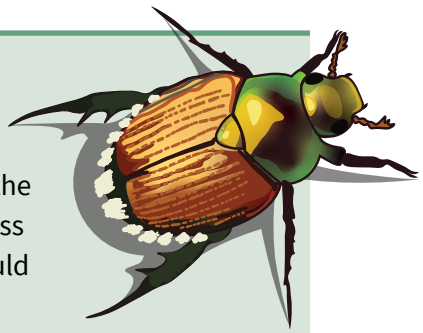
GOAL 2

Strengthen the 'Rapid' in Rapid Response

After prevention, Early Detection and Rapid Response (EDRR) is necessary to effectively respond to new invasive species introductions and prevent their establishment. Eradicating a species before it successfully reproduces and becomes firmly established requires early detection followed by rapid control actions. The Province of BC has an Invasive Species EDRR Plan that provides detailed direction on the decisions and actions required to address new incursions anywhere in BC.[13]

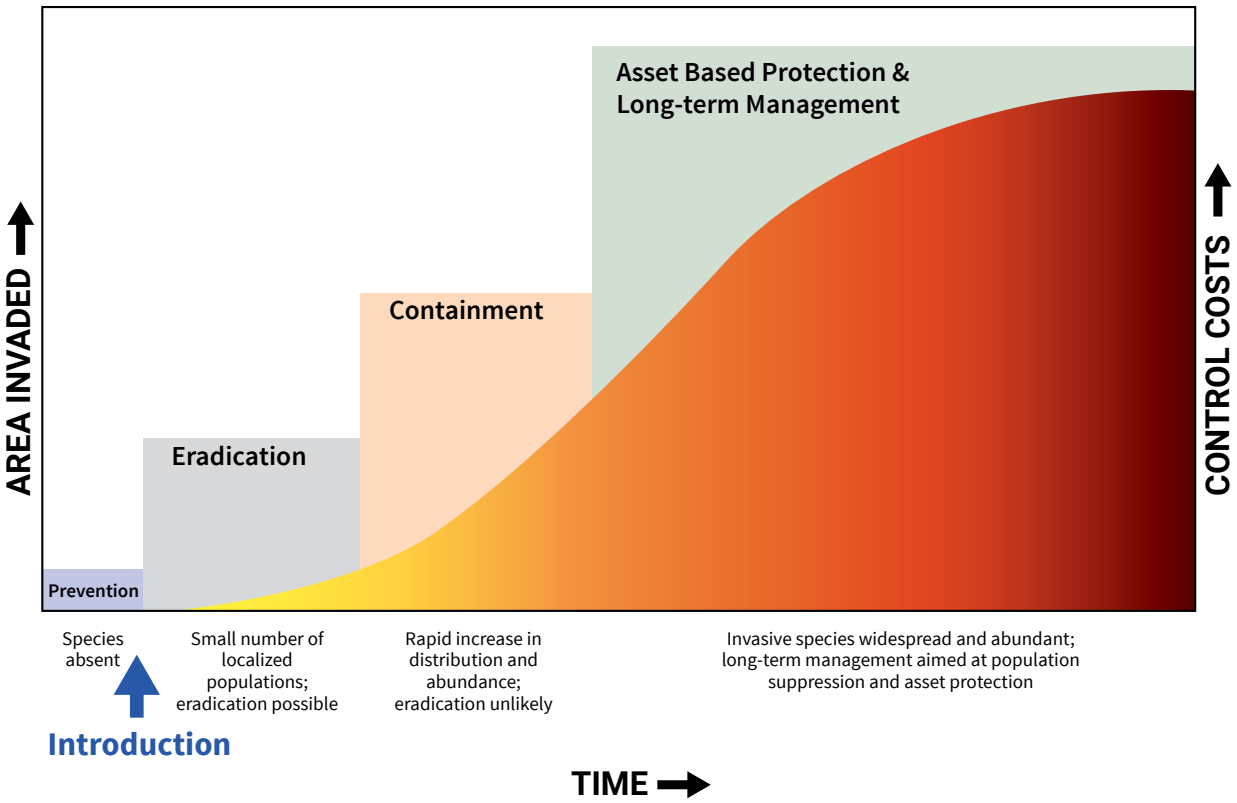
Preventing new invasive species from establishing and expanding in BC requires the right tools and joint decision-making response plans and approaches be in place before new incursions occur. Increased community science reports by individuals across the province are key to complementing formal monitoring programs. As with any emergency response situation, rapid response requires professionals, Indigenous and local communities, individuals and organizations to work together to detect, report and take action to ensure responses are effective. Ready-to-go response plans, collaborative teams, tools and resources must be in place to effectively respond to new incursions.

If Japanese beetle (*Popillia japonica*) were to establish, the cost to BC's turfgrass industry alone would be an estimated $73.85 million annually.[14]



Stop the Spread: The Invasion Curve[15]

Prevention is the most cost-effective tool! Adapted from USDA Forest Service 2005



GOAL 3

Improve Control, Monitoring, and Restoration

Reducing impacts from existing populations of invasive species is an urgent priority across BC requiring an integrated and collaborative approach. Increased consistency across jurisdictions (public and private) must be achieved and supported by more collaborative regional and local planning, increased capacity and funding, and adequate access to tools and resources. A holistic approach must combine scientific, Indigenous and local knowledge, effective treatment approaches, ecological restoration, long-term monitoring, and adaptive strategies. Lessons learned and successes in control need to be recognized, shared and leveraged. We must report on the progress of invasive species management leading to protected and restored natural diversity.

Maintaining a comprehensive database for tracking invasive species, with standardized protocols for surveying and monitoring, is a critical tool for maintaining accurate data. Up-to-date provincial and regional invasive species priorities and watchlists must be accessible and extended across agencies. Establishing regional priorities requires strong local involvement. Providing tailored, invasive species training opportunities for everyone will support improved prevention and management actions. Additionally, building Indigenous and local community capacity to aid with on-the-ground efforts both enhances ongoing work and supports long-term sustainability of healthy ecosystems.

Maintaining current provincial and regional lists of priority invasive species through collaboration is critical to determine priorities for control and monitoring across all parties.

BC Wildlife Park Seeding Event; ISCBC

Management should not end after the treatment or removal of invasive plants. A site-specific restoration plan, which might include promptly re-seeding or planting native species, combined with continued monitoring will increase the success of restoration and lead to improved ecosystem resilience.

The Province of B.C. launched InvasivesBC in 2023, replacing the previous Invasive Alien Plant Program (IAPP) application. InvasivesBC houses detailed invasive plant occurrence, treatment, and monitoring records and will soon be expanded to include invasive animal occurrences. InvasivesBC is available for use by land managers, contractors, government agencies and non-profit organizations completing surveys and/or management actions, and houses confirmed public reports submitted to the Province through the Report Invasives BC mobile application. A public facing map of invasive plant occurrences is available at InvasivesBC.gov.bc.ca

CFIA training for Japanese beetle traps; D. Watson

Setting live traps for northern giant hornet; K. Salp

Improve Regulations and Enforcement

Current regulations, whether established at the federal, Indigenous, provincial, or local government level, are not synchronized, enabling many invasive species to 'fall between the cracks'. As a result, many invasive species can be legally transported, traded, and sold. While many responsible businesses and individuals will implement best practices to avoid the introduction and spread of invasive species, additional rules and education of the issues are required for others. Enforcement of current regulations is haphazard or lacking. Work is needed to improve and provide consistent and clear regulatory tools, which include but are not limited to legislation, regulations, policy, bylaws, and standards of practice.

In British Columbia, authority over invasive species prevention and management involves four levels of government — federal, Indigenous, provincial and local. Current regulatory tools at the different levels are inconsistent, unclear or simply lacking. Invasive species priorities and watchlists, and requirements for management and monitoring need to be strengthened and supported. Across all three past invasive species strategies for BC, there has been an urgent and strong call for a single piece of over-arching provincial legislation on invasive species to ensure a current and consistent foundation to prevent their introduction and spread, and that need remains strong.

Beyond BC, strong leadership is needed from the federal government to prevent introduction of new invasive species by closing federally regulated entry pathways, such as through international trade and travel. Recent work on regulating ballast water, and responding to species like Japanese beetle and northern giant hornet (*Vespa mandarinia*), demonstrates the leadership needed to protect BC from new invasive species. Working closely with the Province of BC and Indigenous leaders, the federal government needs to pair regulations with increased monitoring and enforcement at key entry points. Preventing new introductions into BC and Canada is the first line of defense to avoid future environmental, economic, and cultural losses.

Across Indigenous Nations, while there is a growing concern about the impacts of invasive species on cultural activities and food security, there are inconsistent and few regulatory tools or programs. There are only a few Nations with Band Resolutions and programs, and those are generally limited to invasive plants. Moving forward, there is a need to unite Indigenous efforts to protect cultural medicines and food species like salmon, wild potatoes and berries from invasive species. Increasing capacity and leadership by Nations with policy and protocols, supported by resources, will help enable the implementation of local, culturally appropriate best practices.

Locally, there is great variation, with some local governments silent on invasive species and others focused on invasive plants. There is a growing awareness that local governments have major opportunities to reduce the spread of invasive species by regulating what can be sold (such as pets and plants) or used for landscaping, and how soil can be moved or disposed of. There are examples, such as the City of Richmond and District of Squamish, where bylaws were created and implemented to prohibit aspects of selling of pets and invasive plants or requiring landowners to take action against invasives species. Across the province, regional districts and municipalities often lack resources and capacity to enforce legal tools, creating significant barriers to process, and gaps in invasive species management. Furthermore, inconsistencies and variation across jurisdictions on bylaws and enforcement can lead to confusion for residents.

Regulatory tools at all levels require enforcement when needed. Education and awareness are critical first steps to encourage compliance. Both incentives and deterrents should be considered to recognize responsible actions while ensuring penalties for those who violate regulations.

Chinook salmon; Shawna Kiesman

GOAL 4

Develop Over-Arching Invasive Species Legislation

Strong effective legislative tools are needed to address invasive species, protect biodiversity and reduce economic losses. A single piece of provincial legislation, such as an Invasive Species Act, has been, and continues to be, a recommended priority call for action since 2012. It is critical that future legislation, whether stand-alone or integrated into existing legislation, addresses the movement, sale, gifting and trade of invasive species, and provides a comprehensive list of regulated species that can be easily updated and enforced. Recognizing legal pluralism, co-developed legislation must recognize best available evidence from diverse knowledge systems to provide the strong foundation needed to address invasive species in British Columbia.

GOAL 5

Enhance Resources

Investing in prevention and immediate response is vital to reduce the impacts of invasive species on BC's lands and waters. Investment must cross fiscal years and provide a multi-year approach especially when the goal is to eradicate an invasive species. Both the federal and provincial governments have key roles in ensuring sufficient funding to prevent and respond to new incursions. First Nations, local governments and private sectors also have a role in augmenting funds to help steward and restore ecosystems. Ensuring new additional funding is vital. Investing in an Invasive Species Trust Fund could support timely and rapid response and increased community engagement. Innovative funding mechanisms related to key pathways such as vehicle and recreational licensing, tire levies, or development fees that invest in preventing the introduction and spread of invasive species should be considered.

DEFINITION: Legal pluralism denotes a situation where two or more legal systems coexist in the same social field.[16]

Ontario's *Invasive Species Act* (2015)[17] — Amended in 2022, the *Invasive Species Act* provides a framework for identifying, classifying, and managing invasive species in Ontario. As of 2024, 28 species are now prohibited, meaning it is illegal to import, transport, possess, or release these species anywhere in Ontario. Additionally, there are 16 restricted species that are illegal to import or release.

KEY ACTIONS:

Co-develop effective legislation such as an Invasive Species Act to ensure a strong regulatory foundation for invasive species prevention and management.

Dedicate stable and sufficient resources from all parties to achieve the goals of this Strategy.

GOAL 6

Improve Capacity and Compliance

Improve enforcement capacity by broadening and clearly defining authority for and by provincial and Indigenous enforcement officers, local government officers, and land guardians. Consideration of incentive-based tools such as tax credits or lower fees for various initiatives, such as for restoring habitat or supporting wildlife corridors, would encourage compliance. Additionally, supporting a range of industries with tailored training programs and futher developing industry-specific standards will increase compliance.

GOAL 7

Strengthen Enforcement

Ensuring compliance with existing regulatory tools is critical to improving the prevention and management of invasive species. Enforcement must be equitable across all lands, requiring strong leadership and investment by the province, as public land accounts for over 94% of BC's land area. However, increasing enforcement under the current framework requires an increase in funding within each level of government to ensure leadership and enforcement of regulatory tools. Investing monetary penalties (i.e. fines) into preventing and responding to invasive species is one avenue to offset costs.

The District of Squamish[18] has enacted an Invasive Species Management Bylaw that prohibits the sale of invasive plants and animals. This bylaw provides authority to bylaw officers and requires landowners and occupiers to prevent growth and control the spread of invasive plant species on, to and from their land.

European rabbits in Richmond; J. Bode

Increase Responsible Action and Understanding

Invasive species can affect all of us, yet many do not realize or understand the impacts. Worldwide, they are costing billions annually and impacting our lands, waters, wildlife, and communities. A 2021 study estimated biological invasions have cost the North American economy at least CAD ~$1.70 trillion between 1960 and 2017.[19] Empowering people by increasing understanding of the small but hugely impactful actions they can each take to protect BC's rich biodiversity is imperative. Awareness, early reporting, and following simple best practices enable everyone across the province to help make a real difference for the places they know and love.

British Columbia is home to people from a wide range of backgrounds and cultures and is visited by millions of Canadian and international tourists every year. Diverse communication strategies are needed to successfully extend information to everyone living in and visiting the province. Moreover, the flow of communication must be reciprocal, and knowledge from all cultures must be heard and shared to strengthen education and awareness efforts by ensuring the information is both meaningful and applicable.

It is crucial to remember key invasive species messaging and information is easily lost when it does not speak to its audience. This has been a significant barrier for many people across BC, who have lacked translated resources, non-technical information, and relevant knowledge that can be applied to their interests, roles, and connections with the natural world. Further exacerbating this issue is a tendency to provide too much information,

PlantWise outreach at Union of BC Municipalities Convention; L. Barnett

that can quickly become overwhelming to its intended audience. Less is often more, and communication strategies would benefit from identifying and focusing on a small number of key, consistent messages.

Increasing public understanding of the negative impacts of invasive species and best practices is integral to the success of all invasive species management phases, particularly prevention. All government agencies, industries, and organizations should strive to ensure education and outreach is a key component of management objectives.

GOAL 8 Ensure Accessible Communication

Public-facing resources on invasive species must be easily accessible, consistent, and linked appropriately between sources. Sharing and adapting resources across the province will increase access to relevant information. It is crucial that messaging and resources be tailored for diverse ethnic and Indigenous communities and contain strong linkages to key pathways and regionally specific information such as priority invasive species lists, disposal methods and local regulations. Information should also be provided in various levels of detail, from plain, simple language, to more complex and nuanced where appropriate.

GOAL 9 Empower Youth

Targeting communication and education to younger audiences has a huge impact both immediately, and for the future of invasive species management. The lessons and values learned during childhood are often instilled throughout one's lifetime, and by teaching youth about invasive species and the importance of stewardship, they are empowered to act responsibly throughout their lifetime. Providing an inclusive, safe space with opportunities for youth to be involved in invasive species management is a top priority.

Play and Protect Mobile

Youth volunteer
McArthur Island weed pull

Youth volunteers
Microplastics survey at Jericho Beach

GOAL 10

Increase Community Science

Increasing community science results in more 'eyes on the ground' across the province to support early detection and awareness of invasive species. Engaging individuals in volunteer activities related to invasive species results in greater overall capacity, enhanced stewardship, and increased adoption of responsible practices. Ensuring community science opportunities are promoted and extended to everyone in BC should be a key focus, as well as supporting and recognizing community members that are already taking action.

KEY ACTION:
Engage and support people across BC in reporting and taking responsible actions.

Zebra mussel in moss ball; WA Dept of Fish & Wildlife

In 2022, a keen pet store employee observed and reported invasive mussels on marimo moss balls at a store in Seattle, WA. The report created an international response including the Province of BC, along with Fisheries and Oceans Canada, who identified and visited all pet stores in the supply chain that could have received zebra-mussel infested moss balls. Together, the aquarium and pet industry with the support of government agencies removed all of the potentially infested supply of marimo moss balls — all thanks to one informed and alert individual.

Northern giant hornet; PV Westenburg

Northern giant hornet (NGH) was first detected in BC in Nanaimo in August 2019. In addition to a multi-agency response by governments in BC and Washington, a collaborative approach with the public has enhanced monitoring efforts. Local beekeepers in NGH target areas have been voluntarily setting traps to monitor for NGH, while a campaign to the general public to monitor their hummingbird feeders, report and photograph suspected NGH has increased awareness and monitoring. Since 2021, no other specimens have been found in BC.

European green crab monitoring; F. McDonald

Strengthen Knowledge and Practices

Controlling and reducing the impact of invasive species on the lands and waters must embrace leading-edge knowledge and integrate diverse knowledge systems. Restoring impacted habitats to more resilient ecosystems requires streamlined approaches, new technology, knowledge transfer to on-the-ground managers and stewards, and monitoring results. Whether it is protecting fragile grasslands from knapweeds or precious freshwaters from invasive mussels or Eurasian watermilfoil (*Myriophyllum spicatum*), more tools, innovation and resources are needed now and into the future. Researchers, practitioners, Indigenous Knowledge keepers and others must come together to build shared solutions.

The collective understanding of invasive species in BC is limited by knowledge gaps that must be addressed to maintain healthy, resilient ecosystems. Identifying and prioritizing the necessary research must consider practical approaches to detecting, responding and reclaiming lands and waters from invasive species — all through the lens of climate adaptation. Increased research on priority species must be accompanied by extension to enable application in the 'field'. Access to current research and information must be readily available to land managers to utilize and support local management planning and activities. Furthermore, providing public access to information, such as risk assessments and prioritization models for species threatening BC, will improve transparency between government, non-government agencies, and all those concerned about and/or working with invasive species.

Based on clear shared research priorities, supported by increased resources and innovation, increased action will address critical knowledge gaps including impacts to BC's economy, green infrastructure, and cultural practices. It is important that new tools are developed before high-risk invasive species arrive, including both pre-determined coordinated response plans and registered and approved response tools. Working with

resource managers, knowledge-sharing and research is needed to provide practical tools to remove invasive species and restore ecosystem resilience.

Protection and revitalization of our lands, waters, and biodiversity hinges on the implementation of effective management strategies, legal tools, and inclusion of diverse knowledge systems.

GOAL 11 Increase Knowledge Transfer

Understanding the principles of diverse knowledge systems (Indigenous, Western, local) is vital for effective communication. Guided by the principles of Ethical Space, increasing opportunities to share, learn from, and document diverse knowledge and perspectives can support evolving management objectives. Knowledge transfer between diverse groups is essential at all levels, from local stewardship activities to management and policymaking.

GOAL 12 Improve Extension

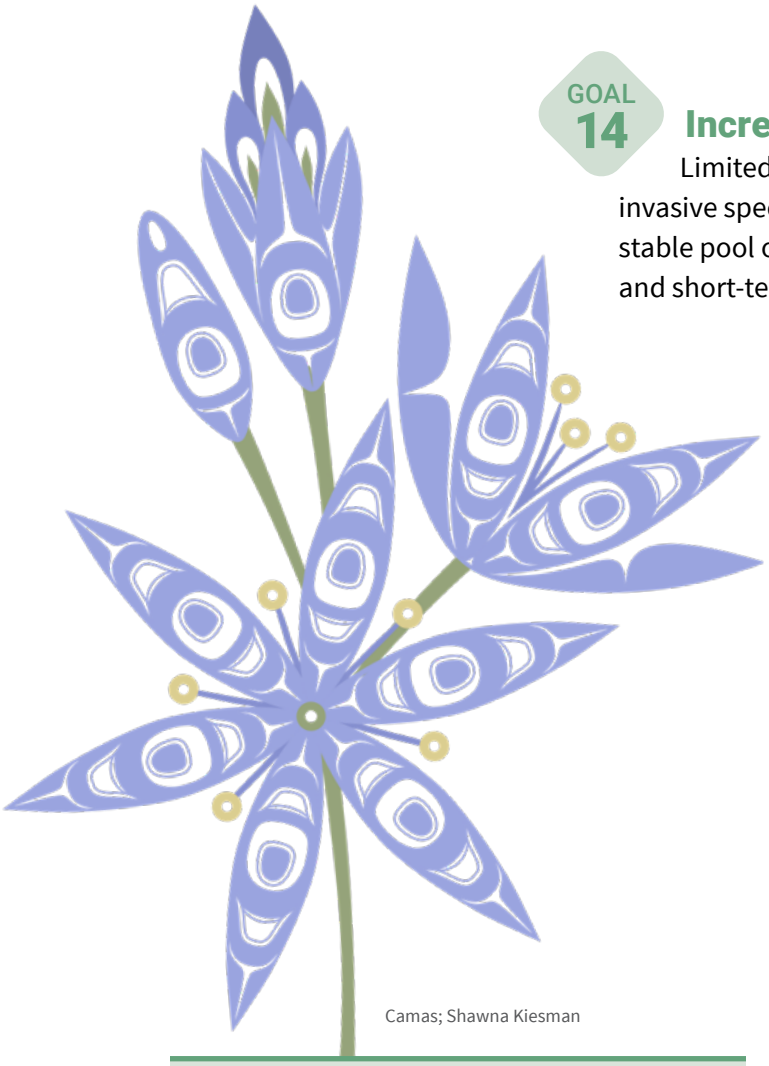
Increasing access to risk assessments, data, multi-level prioritization models, and knowledge is critical for stewards and resource managers to strategize management efforts to enhance protection of vulnerable species and habitats along with addressing economic, social, and cultural impacts. Diversifying tools and methods to extend resources (workshops, webinars, in-person training, and forums) will support knowledge transfer from researchers to non-technical audiences. Information without effective extension to relevant audiences creates significant barriers to applying leading-edge knowledge.

GOAL 13 Address Critical Knowledge Gaps

Developing and maintaining a current list of shared research needs and priorities across academia, governments, and resource managers can help ensure knowledge gaps are not hindering invasive species management efforts. Some examples of research needs include:

- Economic impacts of invasive species
- Linkage and impacts to culturally significant species
- Effective and innovative tools to control or eradicate invasive species
- Intersection of climate adaptation with invasive species management
- Impacts of invasive species to green infrastructure
- Impacts of invasive species on Species at Risk
- Psychology and sociology of shifting behaviours and attitudes toward invasive species
- Successes and lessons learned across BC

Forestry workshop; ISCBC



Camas; Shawna Kiesman

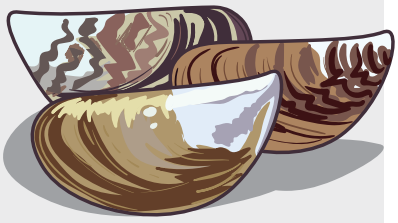
GOAL 14

Increase Research Investment

Limited funding has long been a major barrier to filling invasive species knowledge gaps in BC. Establishment of a stable pool of funding to support research needs, both long and short-term, is necessary going forward.

Indigenous Knowledge[20] reflects the unique cultures, languages, values, histories, governance and legal systems of Indigenous Peoples. It is place-based, cumulative and dynamic. Indigenous Knowledge systems involve living well with, and being in relationship with, the natural world. Indigenous Knowledge systems build upon the experiences of earlier generations, inform the practice of current generations, and evolve in the context of contemporary society.

Emerging technologies have the potential to enhance invasive species management. These may include aerial and land-based drones for monitoring and treating invasive species, and environmental DNA technologies which can detect even rare invaders through the DNA fragments they leave behind. Effective and perpetual invasive species management will rely on the continued research on, and application of, the latest and most efficient detection and management technologies.



KEY ACTION: Invest to increase knowledge and tools to improve and evolve invasive species management.

Clockwise from left: Management of garlic mustard in Kalamalka Lake Provincial Park; INVASIVES 2023 Forum; Partner field tour, Cranbrook

ISCBC

Next Steps

Protecting British Columbia from the escalating negative impacts of invasive species requires strengthening inclusive and collaborative approaches, supported by increased awareness, action and extension of resources. As emphasized throughout this Strategy and all previous invasive species strategies for BC, increased investment is mandatory to improve prevention, management, enforcement, and research. Furthermore, we must strive to ensure invasive species are included as key components of biodiversity and ecosystem health related initiatives in BC. As one of the five direct drivers of biodiversity loss, invasive species must be recognized as a priority now and in the future, with clear actions to address their existing and potential impacts. Integration of invasive species into ongoing and future initiatives will support the goals outlined in this Strategy, while helping to create a cohesive provincial vision for biodiversity and ecosystem health in BC.

By implementing this Strategy, we can advance our commitment and action toward important federal, provincial and local priorities. Taking necessary steps to support reconciliation will improve our relationships with each other and with the land and set a meaningful example for years to come. The strategic directions, goals, actions and success measures outlined in this Strategy will also set us on a forward path to protecting biodiversity across the province, while also supporting large scale global targets and increasing ecosystem resilience. By working together, acknowledging and reflecting diverse knowledge systems, we can prevent establishment of new invasive species and restore the health of ecosystems that have already been negatively impacted.

Key biodiversity and ecosystem health initiatives in British Columbia:

- BC Climate Preparedness and Adaption Strategy
- BC Watershed Security Strategy
- BC Coastal Marine Partnership
- BC Wild Salmon Strategy
- Together for Wildlife Strategy
- Biodiversity and Ecosystem Health Framework
- B.C. Inter-Ministry Invasive Species Working Group Strategic Plan
- Other initiatives and programs listed by the Province of B.C.

From conservation managers to ranchers — we all must be good stewards of the land to protect it for future generations.

Who Needs to be Involved?

Everyone. Tackling invasive species challenges must be done through strong collaboration across all levels of government (federal, Indigenous, provincial and local), non-governmental organizations, industry, communities, and all those who touch and care about our lands and waters. Increased collaboration and action across the natural resource sector can lead to major strides forward in invasive species prevention and management efforts. Heightened awareness and urgent action must also extend to everyone associated with invasive species pathways, such as travel, trade, and outdoor recreation. Substantial action is needed to help close these pathways.

Whether you are an avid gardener, boater, mountain biker, rancher, public land manager, or all of the above — there is an opportunity for each one of us to be a part of the solution. Everyone can play a role in protecting the lands and waters from new and existing invasive species. From being alert and reporting, or taking responsible action at work, home, and play — everyone can make a difference.

The time to act is now, to heal impacted ecosystems and communities, and protect our lands and waters for future generations.

Appendix

Measuring Success

For each of the following indicators, data will be collected and analysed from multiple sources, including the provincial and federal governments, and various surveys developed for all levels of government, Indigenous groups, organizations, businesses and all people living in British Columbia. Note that the numbering of goals listed in the left column relates to the numbering of goals thoughout the Strategy.

Goal	Target	Indicator
1	100% of key entry pathways have formal restrictions in place and are monitored	Percentage of key entry pathways that have formal restrictions in place that are monitored
2	No new high-risk invasive species become established in BC	Number of new high-risk invasive species that become established in BC
2	100% response rate to all reported provincial EDRR species identified by the provincial or federal government	Percentage of provincial EDRR species identified by the provincial or federal government that are responded to
3	All invasive species management programs or projects are monitored for effectiveness*	Percentage of invasive species management programs or projects that are monitored for effectiveness
3	Reduced extent of high priority invasive plants AND baseline of distribution in place for other non-plant invasive species (Species TBD)	Change in extent of high priority invasive plants AND baseline of distribution established for other non-plant invasive species (Species TBD)
3	Increasing number of organizations** conducting treatments against invasive plants*	Number of organizations conducting treatments against invasive species
3	100% of treated sites restored (refers to natural areas treated only)*	Percentage of treated sites restored (refers to natural area treatments only; not vector management, agricultural, human health treatments, etc.)
3	All organizations working on invasive species collaborate with neighbouring land managers and organizations*	Percentage of groups collaborating with neighbours (to include networking, alliances, collaboration, partnerships)
4	A single piece of co-developed invasive species legislation for British Columbia	A single piece of co-developed legislation for BC on invasive species is enacted

Goal	Target	Indicator
5,6,7	100% of regulating bodies that have the resources and tools necessary for adequate enforcement*	Percentage of regulating bodies that have the resources and tools necessary for adequate enforcement
8	Increasing number of unique annual visits to invasive species websites, followers on social media platforms, respondents to open consultations and attendants to invasive species conferences*	Number of unique annual visits to invasive species websites, number of followers on social media platforms, number of respondents to open consultations, and number of attendees to invasive species conferences
9,10	Increased awareness and responsible actions by people across BC to prevent the introduction and spread of invasive species*	Level of awareness and responsible actions to prevent the introduction and spread of invasive species
9,10	Increased number of volunteers engaged in reporting, removing and/or restoring from invasive species*	Number of volunteers engaged in invasive species activities, including reporting, removing and/or restoring
3,11	Increased collaboration with Indigenous governments on invasive species initiatives*	Number of local governments, regional invasive species organizations, and other non-governmental organizations working collaboratively with Indigenous governments on invasive species planning to implementation
12,13	Increased number of new publicly available research reports produced on invasive species in BC	Number of new publicly available research reports produced on invasive species in BC
6,14	Increased investment for invasive species prevention, management, enforcement, and research*	Investment over time for invasive species prevention, management, enforcement, and research

*Refers to data previously collected in the provincial survey. The provincial 'Monitoring for Success' survey is used to measure trends towards achieving the goals described in the Strategy.

**Organizations may include government and non-government agencies.

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ARTISTIC CONTRIBUTIONS BY

Shawna Kiesman, Northwest Coast Artist

Shawna Kiesman was born in Prince Rupert, BC and raised in Victoria, BC. Her mother is Tsimshian/Nisga'a and her father is Haida/German. Shawna graduated from Freda Diesing School of Northwest Coast Arts then continued on at Emily Carr University of Art + Design to gain her Bachelor of Fine Arts. Since graduating, Shawna has received a grant from First Peoples' Cultural Council and she was chosen to attend RBC Audain Museum Emerging Artist Program, Banff Centre for Arts and Creativity, and Bonnie McComb Kreye Studio residencies. Kiesman's work is included in the permanent collections of the Nisga'a museum, Wii Gyemsiga Siwilaawksat and Coast Mountain College. Her work has been featured in Creative Review and Canadian Architect magazines.

Orange hawkweed

Russian olive

Common tansy

European fire ant

Yellow perch

Tree of heaven

Giant hogweed

Invasive Species Council of BC

#72 – 7th Avenue South
Williams Lake, BC V2G 4N5
BCINVASIVES.CA
info@bcinvasives.ca
1-888-933-3722
Charitable Registration: 856131578RR0001

We invite you to consider joining our community of supporters or providing a charitable donation to help make invasive species education and stewardship programs, accessible across BC. Visit our website to learn more.

Islands Edition

Regional Newsletter - August 2024

FEATURE OF THE MONTH

Farmer to Farmer Forage Field Day

As part of the on-going effort to adapt to hotter and drier summers, the Ministry of Agriculture and Food partnered with Comox Valley Farmer's Institute to bring forage producers together to see and discuss warm season forages.

Over twenty people visited two sites to see alfalfa-orchard grass, pearl millet, hybrid sorghum-sudangrass and teff seedings. The alfalfa probably had the most interest with discussion focusing on fertility and weed management for successful

establishment. While the sorghum-sudangrass and millet had good establishment, teff was not as successful and may require more heat than our climate provided this year. The sorghum-sudangrass, millet and teff were planted as part of a Provincial trial of warm-season grasses through our regional extension program.

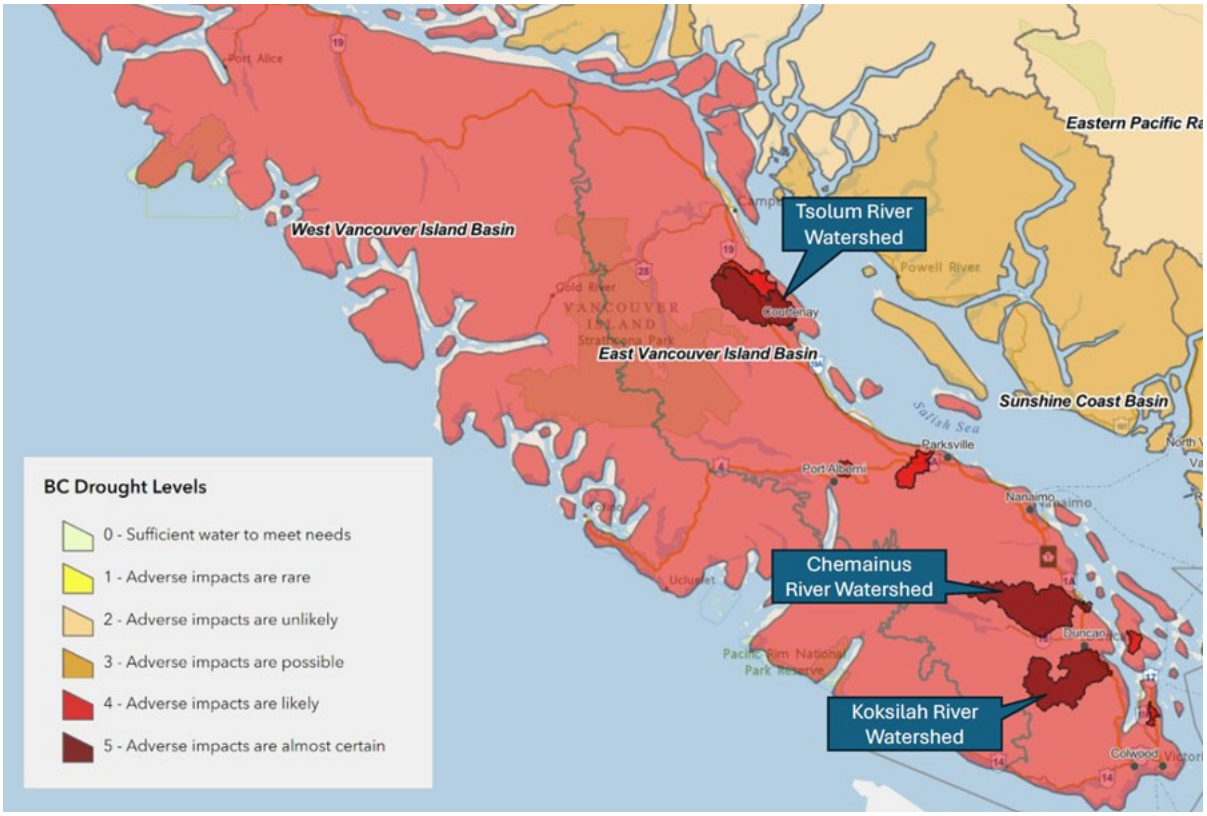
Please let us know if you have ideas for more projects and events like this.

Sorghum-sudangrass hybrid seeding in Comox Valley, about 45 days post-seeding.

Email Us

DROUGHT UPDATE

Drought levels in the Koksilah River, Tsolum River, and Chemainus River watersheds are now at drought **Level 5**, one level higher than the drought level of the major basin they sit within. “Watershed Watch” areas are priority watersheds identified as being at risk of severe low flows due to high water user demand, a history of low flows, and having significant ecological or fisheries value (see image below). Drought levels are updated every Thursday at 9 a.m. on the B.C. Drought Information Portal.



With the Koksilah and Tsolum watersheds now at drought **Level 5** and worsening water scarcity conditions, the Ministry of Water, Land, and Resource Stewardship (WLRS) is urging water users to maximize voluntary efforts to reduce water use. **If drought conditions do not improve and voluntary reduction measures are not enough to restore critical flows and protect fish populations in the Koksilah and Tsolum watersheds, WLRS will consider issuing Fish Population Protection Orders for some water users (likely large-volume agricultural irrigators and other industrial water users) to temporarily cease diversions in the coming weeks** (find out more about temporary protection orders here).

Through the Regional Extension Program and additional drought funding from the Province, here are some of the activities we're currently working on to support Islands & Sunshine Coast farms to adapt:

- 21 producers attended a field day on July 25th that showcased the success, or lack thereof, for a trials of switchgrass, a sorghum-sudangrass hybrid, pearl millet and teff in Courtenay. This is part of a Provincewide project researching warm season grasses for adaptation to our climate. The event also featured a visit to a nearby alfalfa field and was facilitated by the Comox Valley Farmers' Institute.
- We are partnering with local farmers and Kwantlen Polytechnic University to create demonstration sites and fact sheets about dry farming on the Islands.

- Upcoming events include water storage and irrigation demonstrations, extreme temperature adaptation, drought adapted grazing & forage production, and we're actively looking for host farms and more event ideas - contact us with ideas or to host.
- A virtual town hall meeting was held on July 25th in collaboration with the Ministry of Water, Land and Resource Stewardship. Any future events as well as articles can be found at 2024 Drought and water management workshops and engagement.

Digital Drought Resources:

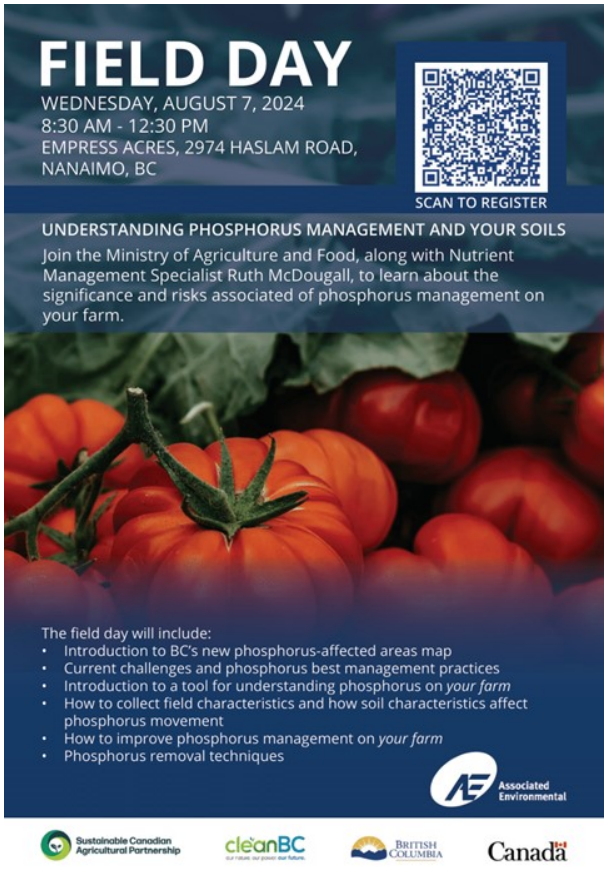
Drought levels are currently being monitored in all watersheds on Vancouver Island. Weather will dictate drought levels set by the province. For current drought information please check in on the BC Drought Information Portal (gov.bc.ca)

- Drought in Agriculture resources
- Calculate your evapotranspiration, growing degree days and more at Farmwest.com
- BC Agriculture Water Calculator

Current Drought Condition Reports:

- Drought Preparation and Response
- West Coast Low Streamflow Report
- West Coast Groundwater Level Conditions
- BC Drought Information Portal (gov.bc.ca)
- River Forecast Centre - Province of British Columbia (gov.bc.ca)
- British Columbia - Weather Conditions and Forecast by Locations - Environment Canada

EVENTS



UNDERSTANDING PHOSPHORUS MANAGEMENT AND YOUR SOILS
WEDNESDAY, AUGUST 7, 2024
8:30 AM - 12:30 PM
EMPRESS ACRES, 2974 HASLAM ROAD, NANAIMO, BC
**scan the attached QR code to register*

The field day will include:
• Introduction to BC's new phosphorus-affected areas map
• Current challenges and phosphorus best management practices
• Introduction to a tool for understanding phosphorus on your farm
• How to collect field characteristics and how soil characteristics affect phosphorus movement
• How to improve phosphorus management on your farm
• Phosphorus removal techniques

August 8 Farmer to Farmer Bees and Beef

Smith Lake Farm in Merville grows honeybees and steers. Join us to see how they are trying an innovative forage mix to feed both.

Hear results from a multi-year study on the diversity of bees present on Vancouver Island farms and learn how you can support a greater diversity of pollinators within your own farm!

More Information

North Saanich Flavour Trails Festival

Join us for the North Saanich Flavour Trails Festival on August 17th and 18th, 2024!

Saturday 17th August: Community Celebration

Kick off your weekend at the McTavish Academy for Arts, with our Flavour Trails Community Celebration. Start your morning with a delicious pancake breakfast. Then, join in the excitement with zucchini racing, experience the "Art of the Farm," witness farm demonstrations, groove to live music, and much more!

Saturday 17th & Sunday 18th August

Hop on the Flavour Trails and embark on a self-guided adventure... tour over 15 trail stops, including local farms, orchards, distilleries, and more! Enjoy special Flavour Trail offers, demonstrations, samples, and most importantly, connect with North Saanich's local food community!

Don't miss this opportunity to celebrate local agriculture, food, and community spirit at the North Saanich Flavour Trails Festival. Mark your calendars for a weekend filled with flavor, fun, and festivities! Learn more at www.flavourtrails.com.

You're invited to a Farm Tour and Potluck at The Plot Market Garden and City's Edge Farm in Victoria, B.C. If you're curious about what land matching and sharing is all about, want to learn what it's like to apprentice on a farm or host farm apprentices – or just want to check out what your local farmers are up to – join us for the event. Come out to connect with other farmers and food lovers, share a meal and learn about farm start-up!

Whether you are curious about land leasing, growing mixed crops, farm start-up, apprenticing on a farm, farm marketing or all of the many offerings from Young Agrarians, there will be something for everyone! We can't wait to see you there.

DATE: Saturday, August 24, 2024 • 3 pm-7 pm

LOCATION: lək̓ʷəŋən and W̱SÁNEĆ Territories.

The Plot Market Garden: 390 Brookleigh Rd, Victoria, BC V9E 2J2 (48°32'28.3"N 123°25'02.4"W) - Entrance on Oldfield Rd

City's Edge Farm: 6458 Central Saanich Rd, Victoria, BC V8Z 5T7

At both farm locations, on-site parking is limited, so registration for this event is essential to make sure we can accommodate all attendees!
Please follow parking directions upon arrival at both sites! Please do not bring pets to the event. Kids are welcome!

CARPOOL INFO: If you are looking for or can offer a ride to or from the event, you can coordinate carpools through the Facebook event. If you have space to ferry folks between The Plot and City's Edge, please make that known on the day of the event!

SCHEDULE (times are approximate):

- 3:00 – 3:45 Farm Tour at The Plot Market Garden
- 3:45 – 4:15 Drive from The Plot to City's Edge
- 4:15 – 5:00 Farm Tour at City's Edge
- 5:00 – 5:30 Intro Circle
- 5:30 – 7 Potluck Social

Full details and to register visit: https://www.eventbrite.ca/e/farm-tour-and-potluck-at-the-plot-market-garden-and-citys-edge-farm-tickets-936782209807

23rd Annual Vancouver Island Feast of Fields

Time: Sunday, August 25th from 1-4 pm
This year, we are very excited to host our Vancouver Island 23rd Annual Feast of Fields at Heritage Acres.

Feast of Fields is a three-hour wandering gourmet harvest festival that highlights the connections between farmers and chefs, field and table, and farm folks and city folks. With a wine glass and napkin in hand, you'll stroll across a field, traveling from tent to tent, listening to live music, and tasting gourmet creations from some of the Capital Region's top chefs, bakers, food artisans, vintners, brewers, distillers and other beverage producers.

For tickets and to register, visit Eventbrite
https://www.eventbrite.ca/e/23rd-annual-vancouver-island-feast-of-fields-tickets-942556039487

Register

South Island Farmers' Institute Innovation Series

The Innovation Series features and celebrates farm innovation on the South Island.

On September 8th, David Spencer from Applied Bio-Nomics is offering a tour of their lab in North Saanich.

On September 22nd, David Chambers welcomes SIFI Members to Madrona Farm for a tour and potluck.

If you're interested please contact info@sifarmersinstitute.ca for details, and visit https://sifarmersinstitute.ca/

Please reach out if there are innovative places you think the community would enjoy or if you would like to welcome Farmers to visit. If you're interested in joining the South Island Farmers Institute, sign up here: https://forms.gle/F2iuL1vrBenWGTvs6

These events are free, funded by the Knowledge and Technology Transfer Program. Funding for the Knowledge and Technology Transfer Program is provided by the governments of Canada and British Columbia, a federal-provincial-territorial initiative.

The Ewesful Farmer

"Making Good Decisions as a Sheep Producer"

BC Sheep Federation Annual Conference & AGM

October 5-6 2024

Matsqui Community Hall

33676 Saint Olaf Ave., Abbotsford, BC V4X 1T6

Key Note Speaker: Dr. Steve Mason, Ph. D

- A 100-year perspective on the BC sheep industry
- Feeding sheep to achieve their productive potential

Registration $160 Includes: BCSF annual 2024/25 Membership, 2 days of seminars, trade show and displays, silent auction, lunch each day, coffee breaks, dinner on Saturday.

Topics:

Lamb Nutrition	Pasture Walk Through
Ag Safe	Producer Panel
Fecal Testing	Wool Handling

To Register and more information:

www.bcsheepfed.com or
sheepproducers@gmail.com

Phone: 604-856-3365

Registration deadline: September 15, 2024

Funding for the Knowledge and Technology Transfer program is provided by the governments of Canada and British Columbia through the Sustainable Canadian Agricultural Partnership, a federal-provincial-territorial initiative.

More Information

Register

AgEx
AGRICULTURAL EXCELLENCE CONFERENCE

Together Towards Tomorrow

Don’t miss out on Early Bird Ticket sale!
Farm Management Canada’s Agricultural Excellence Conference
Date: November 19-21, 2024
Location: Abbotsford-Chilliwack

	Ticket Regular Price	Early Bird Price
General Admission	$650	$520
Farmer	$550	$440
Young Farmer*/ Student	$250	$200
One Day Student	$150	$120

Register **Conference Agenda**

New Research Briefs from BC Food Web!

- “Don’t forget sunscreen: Protecting tree fruits during extreme heat events”, summarizes research on foliar protectants in the Okanagan Valley. Read the full brief here: https://bcfoodweb.ca/briefs/dont-forget-sunscreen-protecting-tree-fruits-during-extreme-heat-events

BC FoodWeb

Peer-reviewed research

RESEARCH SUMMARY

Don't forget sunscreen: Protecting tree fruits during extreme heat events

Researchers: K. D. Hannam and J. L. MacDonald

Production Type
- Tree fruit

Practice Benefit(s)
- Increased resilience to extreme heat

Research Location
- Okanagan Valley, BC

KEY TAKEAWAYS

- **Intense and prolonged heat** can cause **widespread losses** in tree fruit crops, and is only going to become more pronounced with climate change.
- A **foliar protectant** is a product that is sprayed on leaves to protect crops from sun damage and heat stress. They are inexpensive and easily applied with existing farm machinery.
- We found that foliar protectants reduced the occurrence and severity of sunburn damage in apples, making them a promising tool for **climate resilience** in Canadian tree fruit. However, more research needs to be done to determine the best time, frequency, and concentration for application.

Figure 1. Apple tree. Photo by Jamil Rhajiak.

HOW CAN THIS RESEARCH BE USED?

- Foliar protectants can be used to **protect fruit quality** during extreme heat events.
- There are different types of foliar protectants on the market, including ones with a kaolin clay, calcium carbonate, or wax base. We tested a **calcium carbonate-based** spray in this study.

WHY WAS THIS RESEARCH DONE?

As part of developing a "climate resilience toolbox" for Canadian tree fruit, our research team tested the use of foliar protectants on apple trees. Extreme weather events, such as droughts, floods, heat waves, and cold snaps, are predicted to occur more frequently and become more extreme. For example, the unprecedented heat wave that hit North America in 2021 had major impacts on the BC tree fruit sector. Regardless of the crop grown, these events can cause significant losses in crop yield and quality.

Full Brief

"Reducing post-harvest irrigation in sweet cherry production", explores research on water use in 'Sweetheart' cherry orchards in the Okanagan Valley. Read the full brief

here: https://bcfoodweb.ca/briefs/reducing-post-harvest-irrigation-sweet-cherry-production

BC FoodWeb

Peer-reviewed research

RESEARCH SUMMARY

Reducing post-harvest irrigation in sweet cherry production

Researchers: E. Houghton, K. Bevandick, D. Neilsen, K. Hannam, and L. M. Nelson

Production Type
- Tree fruit

Practice Benefit(s)
- Reduced irrigation and water use

Research Location
- Okanagan Valley, BC

KEY TAKEAWAYS

- **Post-harvest watering** of 'Sweetheart' cherry trees was **reduced by 30% and 50%** with **no negative effects** on fruit quality and yield, timing of flower bud development, or flower bud cold hardiness over three years.

Key Terms:
- *Flower bud cold hardiness: the coldest temperature that a flower bud can withstand without being damaged.*

Figure 1. 'Sweetheart' cherries. Photo by Elizabeth Houghton.

HOW CAN THIS RESEARCH BE USED?

- 'Sweetheart' cherry growers can experiment with **reducing their post-harvest watering by 30-50%** (volumetrically), compared to their standard practices.
- Growers should continue to **monitor** the effects of water reductions on their crops, as results may be unique to each orchard.

WHY WAS THIS RESEARCH DONE?

Our objective was to investigate whether reducing post-harvest irrigation in 'Sweetheart' cherry orchards would negatively affect fruit quality, yield, the timing of flower bud development, or flower bud cold hardiness.

The Okanagan Valley is one of the main production areas for sweet cherry in Canada, alongside other high-value tree fruits and wine grapes. Irrigation strategies that improve water-use efficiency while safeguarding crop yield and quality need to be evaluated to improve agricultural climate resiliency in the face of increasingly likely water restrictions.

Full Brief

Optimizing Water and Nutrient Management in Potatoes

Optimizing Water and Nutrient Management in Potatoes

BC growers are wanting more data and tools to increase efficiencies in potato production. Irrigation and nutrient management are key components for success. Input costs are reported to be at an all-time high and, more frequently, weather patterns are forcing industry to make more precise and more timely management decisions during the production cycle.

The second year of a multi-year project is underway to continue work that supports growers in adopting new nutrient and soil monitoring practices, and that promotes adoption of best management practices. Led by BC Potato & Vegetable Growers Association, on-farm demonstration trials will be conducted to evaluate fertilizer and irrigation programs in Pemberton, Vancouver Island and the Lower Mainland. Irrigation trials will look at practices that improve water use efficiency and increase crop performance and the capacity to thrive under a changing climate. Fertilizer trials will focus on improving nutrient uptake while minimizing effects on the environment by looking at optimizing fertilizer rate, source, placement and timing.

In addition to various farmer-led on-farm demonstration fertilizer and irrigation trials, the BC Potato Variety Trial will continue to be used to further evaluate varietal response to fertility programs. This will be done through tissue testing, soil sampling and multi-depth monitoring of soil moisture through the growing season.

To learn more about an irrigation trial using a solid set system, soil moisture sensors and real-time tissue analysis using Picketa Systems, field days in Delta and Pemberton are scheduled for August and September. Please keep an eye out for dates, places and registration information - to be arriving in your inbox soon - from the organizers including BC Potato & Vegetable Growers Association, E.S. Cropconsult Ltd. and BC Ministry of Agriculture and Food.

The Optimizing Water and Nutrient Management in BC Potatoes project is led by the BC Potato & Vegetable Growers' Association and funded by the Governments of

Canada and British Columbia through the Sustainable Canadian Agricultural Partnership, a federal-provincial-territorial initiative.

EFP Advisor time for BMP Applications

EFP Advisors can allot up to 5 hours per BMP application to support making a BMP application. The 5 hours can be used for:

- Assisting you in identifying which BMPs would be most suitable for this operation,
- Supporting you in the steps to design and implement the BMP,
- Providing details of the EFP workbook numbers that align with the corresponding BMP for your application

PROVINCIAL UPDATES

BC Crop and Livestock Reporter Program

In July 2024 the B.C. Ministry of Agriculture and Food launched the AgriService BC Crop and Livestock Reporter Program based on the very successful crop reporting programs in Alberta and Saskatchewan. This program is for any agricultural producer or allied tradesperson who enjoys monitoring agricultural production conditions in their area and would like to be part of a network of people contributing timely, local agricultural intel to raise awareness of growing conditions throughout B.C. and support agricultural information sharing.

Each week from April to November, Reporters will spend about 5 minutes filling out an easy online survey that collects information on rainfall, topsoil moisture conditions, seeding progress, crop development, crop damage, harvest progress, livestock feed and water supplies, and pasture conditions. This information will be used in B.C. by producers, producer organizations, government, and others interested in keeping informed of current agricultural production findings in regions across B.C.

Please visit the program website here: https://www2.gov.bc.ca/gov/content/industry/agriservice-bc/crop-and-livestock-reporter-program for more information and to register as a Crop and Livestock Reporter.

Accommodation For Employees

The Ministry of Agriculture and Food would like to remind producers who have employees living on site, or are providing housing for employees off-site, that the accommodation must abide by the Industrial Camps Regulation. The B.C. Guidelines for Industrial Camps Regulation is a helpful resource that provides guidance, best practices, definitions, and interpretation of the Industrial Camps Regulation.

If you have any questions, please refer to the relevant Health Authority Contacts on the Government of British Columbia's Industrial Camp webpage

Business Risk Management Programs

B.C.'s agricultural producers face many business risks that are beyond their control (production losses, severe market volatility, extreme weather events or disasters); the Province's suite of agricultural insurance and income stability programs can help you manage those risks.

Production Insurance Application Deadlines for the 2025 Crop Year (https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/programs/agriculture-insurance-and-income-protection-programs/redirect-production-insurance):

• Berries, Grapes, Flower Bulbs and Strawberry Plants – **October 31, 2024**
• Tree Fruits and Forage – **November 30, 2024**

Learn More

What to Do with Excess Manure?

In certain regions of British Columbia, it may be more difficult to effectively manage surplus manure for a variety of reasons including, but not limited to: cost of land, transport costs to distant fields, and increasing quota to meet market demand.

The following factsheet provides guidance on dealing with surplus manure and covers a range of topics such as manure storage, nutrient management, and techniques for converting manure into valuable by-products.

Guidance

Pasture Walks and Field Scouting

Whether you have forage fields or pastures, it is important to get out and walk the land to evaluate what is happening throughout the growing season. A quick look at soil health and moisture, along with plant vigour and productivity can help you evaluate what is going on and make decisions on the next steps. This article provides information on pasture walks and field scouting, along with some guiding questions for forecasting and looking ahead.

This is the second article in the monthly Livestock Drought Management Article Series. All articles can be found here: Drought articles - Province of British Columbia (gov.bc.ca)

Heads Up! Knowledge and Technology Transfer Program opening soon!

The objective of the KTTP is to increase the competitiveness, resiliency, and innovation of the British Columbia (B.C.) agriculture and food sector through facilitated knowledge and technology transfer.

The cost-shared reimbursement program is intended to strategically support B.C.'s producers and processors to innovate and adapt to changing environmental, production, and market conditions through practical, applied knowledge and skill development to ensure behaviour change.

The next KTTP intake is expected to open later in 2024. Please check back for updates and announcements.

More Information

Farming Fundamentals at VIU

This fall and winter VIU will be offering three new micro-credentials with an agricultural focus. Please visit //viu.ca/agriculture or email pdtagriculture@viu.ca for more information and registration details.

Courses
Sustainable Soils Management
September – October 2024
Explore the science of soils. Develop an understanding of soil as a complex community of living beings. Learn about the physical, chemical, biological and social environments of soil.
Understand how communities of plants, animals and other biological beings in the soil can thrive or be regenerated with soil amendment practices.

Agro-ecological Systems Management
November – December 2024
Get an introduction to the art and the sciences that shape agro-ecological principles and practices. Explores ecological and farm biodiversity, climate-adaptation and ecosystem restoration strategies.
This course invites a holistic, Two-Eyed Seeing perspective on the ecological, social, and economic impacts and benefits of contemporary and traditional land management.

Organic Vegetable Seed Production

January-March 2025
Gain an understanding of the science of organic seed production for vegetables.
Explore the current regulatory and policy environments in Canada that impact seed saving and seed sovereignty.
This national initiative is a refresh of the Organic Vegetable Seed Production course developed with Canadian Organic Growers and SeedChange Canada.

More Information

Water Management Resources

Learn more about financial assistance for agricultural producers impacted by drought on the Ministry's **Drought in Agriculture** webpage. This page also contains key drought resources and information on livestock, crop, and irrigation management during drought. Links to information on flood forecasting, preparedness, and mitigation are found on our **Flooding webpage**.

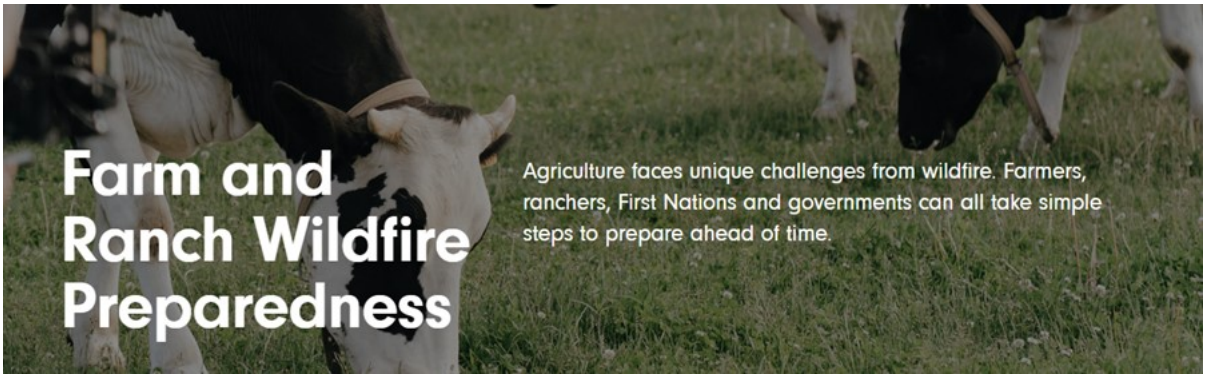
Please visit the Ministry's **Drought in agriculture web page** to access our library of water management resources for producers.

Access to Feed Program

Available to all livestock producers.
A program provided by the BC Cattlemen's Association was created to connect feed

suppliers to livestock producers that are in need of feed due to drought.
Submit applications if you have feed available for sale including: type of hay/ quality, bale type & size, equipment to unload, ability to handle a b-train or step-deck delivery, your contact info & location.

Contact **hay@cattlemen.bc.ca** or 250-306-6277



Spring is a great time to increase wildfire resiliency. Take action to reduce the impacts of wildfire on your agriculture business!

The updated Farm & Ranch FireSmart website includes:

- Farm & Ranch Wildfire Plan: Guide & Workbook
- Open Burning Practices for Farmers and Ranchers: Factsheet
- Farm & Ranch FireSmart Assessment: Information & Example Assessment

What's your Wildfire Plan? Check out the updated website and get prepared.

Learn More

BC Vegetable Marketing Commission

The BC Vegetable Marketing Commission oversees the regulation of vegetable production in British Columbia. Previously limited to southern regions, the Commission expanded its jurisdiction province-wide starting January 1, 2024. However, due to inquiries, they're deferring full implementation until January 1, 2026, to consult stakeholders and develop a plan. For more info, visit **www.bcveg.com** or contact the Commission's General Manager.

Contact BCVMC:

#207 - 15252 32nd Ave
Surrey BC
Canada, V3Z 0R7
Tel: (604) 542-9734
Toll Free in BC: 1-800-663-1461
E-mail: **info@bcveg.com**

Learn More

Agriculture Water Infrastructure Program

The Agriculture Water Infrastructure Program (AWP) aims to increase adoption of efficient irrigation infrastructure and improve agricultural water supply and management in British Columbia. Through this program, the Government of B.C. seeks to see improvements to stream flows, fish populations and an increased and more sustainable food production. The program goal is to help improve water security in agricultural areas and food security in B.C.

The AWP is delivered by the Investment Agriculture Foundation (IAF) of B.C. Please refer to the program website for details: **https://iafbc.ca/awp**.

Stream 1 Producer Projects
Stream 2 Community Projects
Stream 3 Assessments, Engineering Studies or Plans
Stream 4 Strategic Projects

Drafts for applications opened June 27, 2024, application submissions are open July 25, 2024, to August 8, 2024. This application is approved based on eligibility of projects submitted between the dates mentioned above.

SAVE THE DATE!

Application intake for the B.C. Agri-Business Planning Program will be opening SOON.

The B.C. Agri-Business Planning Program (ABPP) provides funding support for primary agricultural producers and agriculture, food and beverage processors to support informed decision making and ensure business development.

Funding is available under two streams:

1) Agri-business skills and leadership development

2) Business planning, preparedness, and disaster recovery

To find out more, please visit the Ministry's website https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/programs/agri-business-planning-program#Overview

Follow the link below, follow, like and share!

https://www.facebook.com/AgriService-BC-103287979487810

Visit AgriServiceBC Website

Vancouver Island Overview

Want to grow your farm or food business?

Contact your local Regional Agrologist

Thom O'Dell - North Island
Email: Thom.ODell@gov.bc.ca

Bejay Mills - Central Island
Email: Bejay.Mills@gov.bc.ca

Megan Halstead - South Island
Email: Megan.Halstead@gov.bc.ca

AgriService BC connects farmers, food processors and new entrants to agricultural services, programs and information that can help them succeed.

TOFINO COMMUNITY FOOD INITIATIVE

IMPACT REPORT

2023

Our mission is to develop and deliver programs that increase food growing and food security for people of Tofino and surrounding communities.

We share a vision of thriving and resilient coastal communities with access to an abundance of healthy local food and an awareness of what can be grown and harvested.

The Tofino Community Food Initiative conducts its programs on the ancestral, unceded territories of the Tla-o-qui-aht First Nations. We acknowledge that many of the practices we draw on and teach are not traditional to this place, yet Indigenous people have expertly altered the soils and forests to improve food growing capacity since time immemorial. With colonization, Indigenous people lost access to the land on which we live and work. The TCFI is committed to cultural inclusion and reconciliation, and to stewarding the land on which we are guests.

Activity Snapshot

12
Weekly School Programs

5
Community Events

3
Seasonal Workshops

1
Four-Day Learn-to-Garden Workshop

Photo: Peach tree on the Edible Garden Tour

A message from our board of directors

In 2023 we tried new things and were also confronted with new challenges. The spring started with excitement as we launched our Growing West Coast Gardeners Program to inspire and educate new gardeners. The program was conceived by Hélène Descoteaux, TCFI administrator, and Cindy Hutchison, past board member, as a project for the course, Thriving Non-profits. Cindy and current board members Dan and Leah created the curriculum and the support materials for the course, which we ran for 11 participants over four full days between April and October. Participants and instructors were enthusiastic about the success of the program, which we hope to continue to offer on a fee-for-service basis. Projects like this, in which we generate income from within the organization, will help us broaden our fundraising options beyond grants and donations to keep our non-profit thriving!

The school garden got off to a great start, with keen gardeners in the school classes, the after-school program, and the intergenerational program planting and tending gardens in the metal troughs, lower garden, food forest, and greenhouse. The dry spring meant a lot more watering for the students, but they were keen to play with water and enthusiastically used hoses and watering cans to keep their plant babies alive. Unfortunately, the drought continued over the summer and watering restrictions that prohibited even the watering of food made it very tough for our summer garden volunteers. The drought provided bittersweet teaching moments—heat-loving plants such as figs and grapes loved it, but many other plants suffered. Undeterred, the returning students in the fall made the best of what survived and planted anew, just as gardeners do! The board has been busy making plans for improved water catchment & storage - stay tuned!

TCFI is a small organization, but it's a tough and resilient one. I'd like to give a shout-out to our part-time staff who worked under some challenging conditions in 2023—Paula Robertson, the school garden coordinator; Beatriz Lema, program coordinator; and Hélène Descoteaux, TCFI administrator. The board, our volunteers, and west coast communities are so thankful for the work you do. In 2023 we also welcomed Katie Miles, a very talented gardener and advocate for food security, who is taking over as administrator as Hélène transitions to a career in Chinese medicine. Katie will also coordinate our workshops and events. A big welcome, as well, to Julia Burkart who joined the TCFI board.

This report highlights our 2023 programs and showcases the many ways community members can be involved in the work we do, from volunteering at garden work bees or events, to saving and sharing seeds, opening your gardens for others to learn, and making donations of all sizes. We're proud of what we were able to accomplish this year and look forward to another year of great community programs in 2024.

See you in the garden,

Adrienne Mason, TCFI Board Chair

School Garden Program + Intergenerational Garden Club


garden snacks

In 2023, Paula Robertson, our garden coordinator, worked closely with the school administration and educators to deliver a comprehensive program of in-class and in-garden activities for **10 classes.** As well, she offered **two after-school programs** and ran a successful intergenerational program, with seniors working alongside children in the classroom and garden. In the **Sowing Seeds Across Generations** program, student and senior pairs participated in gardening-themed activities, like calendula salve and bird feeders, followed by a nutritional snack, often from the school garden.

Throughout the year, students were hands-on learners in all aspects of planning, growing, and preparing food. This included learning about **winter sowing and lasagna gardening**, as well as how to seed, tend, weed, and fertilize with compost tea. Our young gardeners also learned how to properly harvest and clean the food they grew and spent some time in the kitchen learning how to prepare and preserve produce. This included making soup, veggies sandwiches, salads, and herbal teas, and also preparing jams, applesauce, and fruit leather. We were able to **contribute produce to school lunches** from time to time and the children were proud to see their berries and rhubarb used in desserts, and potatoes, garlic, onions, herbs, kale and other greens used in salads or soups. This year, we made sure that every student, and every teacher, sampled **strawberries, peas, kale, and herbs** fresh from the garden.

A "mushroom tower" was an exciting addition to the program in 2023. The expert, Colin Steven, introduced the inoculated logs and students were amazed to see the mushrooms flourish. A highlight in the food forest was a spiral "**jewel garden**" of edible flowers planted by students and elders. The spiral even managed to survive for most of the summer drought.


Little Green Thumbs

This highly successful program is administered and funded entirely by the TCFI and is supported through grants and **donations**. In 2023 TCFI raised $38,000 to make this rich, hands-on program happen. We are pleased to offer this program for the benefit of Tofino students and teachers, SD70, and the community, but we can't do it alone. If you can offer financial support to **help this program continue**, or are willing to volunteer your time and energy, please get in touch.

150+ Student, elder, and school staff participants

Growing West Coast Gardeners

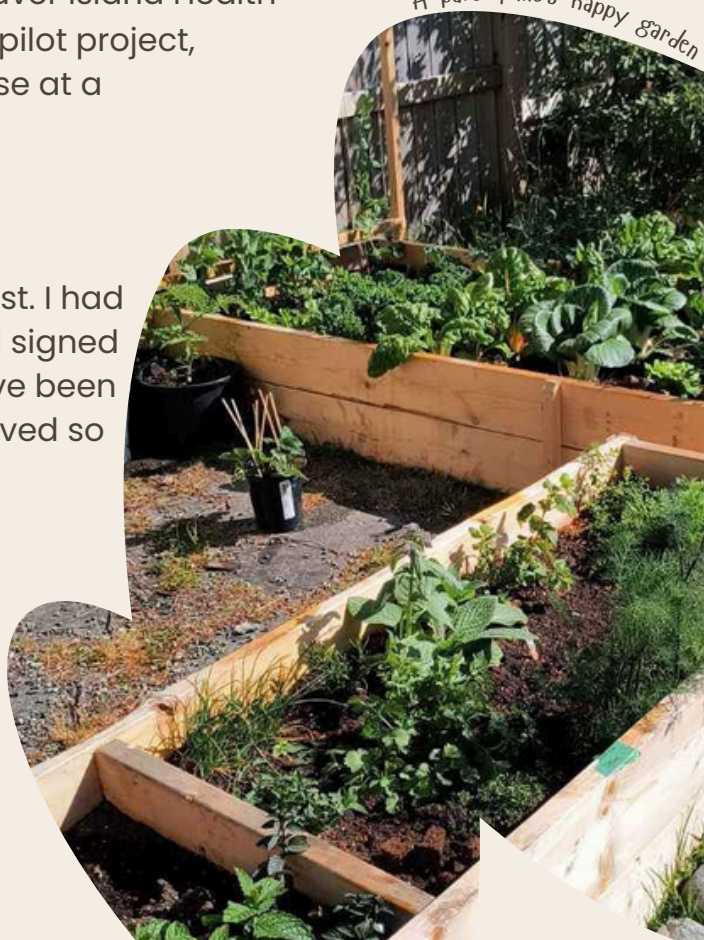
TCFI has done a lot - but we'd never done this before! In 2023 we launched a four-day (24 hours total) **learn-to-grow workshop**, called Growing West Coast Gardeners. The series was designed to support beginner gardeners in how to plan, start, and maintain a garden throughout the growing season. Students were introduced to the **"west coast trifecta"**—greens, peas, and garlic—among other crops.

Prepping beds

Our first year was very successful and filled up quickly with **11 participants** from throughout the region, from Ahousaht to Macoah. We were grateful to use the house at načiqs (Monks Point) and volunteers spent a few very wet afternoons digging out the old garden beds so that students could **rejuvenate and plant** them as part of the course.

Programming included **4 full-day** (2 days in spring, 1 in summer, 1 in early fall) in-person **learning modules**, a summer solstice gathering, a mid-season online Q&A, and an online discussion group to support gardeners throughout the growing season. Thank you to the District of Tofino and Vancouver Island Health Authority for supporting the pilot project, allowing us to offer the course at a highly subsidized fee.

A participant's happy garden



Feedback from participants:

"I never grew anything, it was never my interest. I had just got laid off from my long-time job when I signed up for this course and it was **life changing**. I've been so proud of my container garden and we saved so much money on food this summer!"
- Anonymous, age 43.

"[GWCG] far surpassed the amount of **knowledge** I thought I would gain. The teachers are incredible and have lots of experience, and I grew so much that I was able to sell produce to my neighbours."
-Emily, age 30

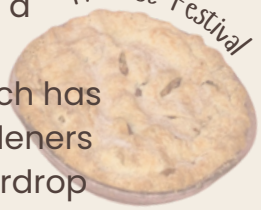
In the Community + Collaborations

Throughout the year we hosted 3 free workshops and 5 events. We launched the year with our ever-popular Seedy Saturday in March. Along with the seed swap, demos, and other activities, we shared a series of films with the support of West Coast N.E.S.T. Even with snow on the ground, the event drew over **120 people**. During the summer we held two **sold-out edible garden tours** (in Tofino and Ucluelet), and in fall, a **Harvest Celebration** with soup from **Chef Nick** made with **TUCG** squash, and an apple pie competition won by a young student! Huge thanks to **Daylight** for donating staff time to help us with set up and tear down!

Tattoo Flash

Workshops included container gardening, making cloches (at the beautiful Wya Community Garden) & hot water bath canning, which gave participants ideas on preserving food for winter. We ended the year with **Festive Food Forest Decorating,** the **Tofino Winter Market** and our friends at **Hotel Zed** hosting a pancakes with Santa fundraiser for TCFI. Throughout the year, we offered seasonal growing tips through social media & our monthly newsletter, which has almost 500 subscribers. We added a feature in which long-time local gardeners shared their gardens and growing tips. We also collaborated with Andi Wardrop in Ucluelet to create a **beautiful video** showcasing the Intergenerational Garden Club. Over **40 volunteers** came to our Work Bees in the school garden.

Harvest Festival



In summer we held a very fun garden flash tattoo pop-up at **Space Tattoos** in Ucluelet! Appointments were sold out within minutes of opening and happy participants came away with **fabulous tattoos of their favourite veggies**. We're grateful to long-time supporter **Gaia Grocery** who sponsored a seedling sale fundraiser and helped us raise $500 by offering our school garden produce to customers during summer at their lovely store full of tasty treats.

Festive Food Forest Decorating

Thanks to all **350+** participants in our work bees and events.

We're better together!

Edible Garden Tours

Edible Flowers

We Grow Together

Watch our new Intergenerational Garden Club video

Become our Partner

Cloche building workshop with Connie Kuramoto

Our Team

Board of Directors

Leah Austin
Julia Burkart
Adrienne Mason
Josie Osborne
Dan Price-Francis
Todd Evalina

Staff

Hélène Descoteaux, Administrator
Beatriz Lema, Program Coordinator
Katie Miles, Administrator/Program coordinator(incoming)
Paula Robertson, School Garden Coordinator

School garden goodies

Carrots that survived the summer drought

Thank you

for your contributions to our mission & the community's transformation.


Salmonberry

Community partnerships are not just valuable – they are vital. Thank you to all our donors, volunteers and partners!

Major Partners

Alberni-Clayoquot Regional District
All One Fund
Clayoquot Biosphere Trust / Eat West Coast
District of Tofino
Gaia Grocery
Government of Canada
Hotel Zed
Tofino Co-op
Tofino Saltwater Classic
Vancouver Island Health Authority
Wickaninnish Community School
Wickaninnish PAC
Tofino Brewing Company
OCN Garden Center

Community Partners

Blue Crush Concierge
Buckerfield's
FarmFolk CityFolk
Farm to School BC / PHABC
Rhino Coffee
Tofino-Ucluelet Culinary Guild
Tofino Time
Space Tattoos
Tuff City Radio
Common Loaf Bake Shop
Wolf in the Fog
West Coast Nest
Daylight
Chef Ron + Chef Nick
Tofino Garden Retreat
Wickaninnish Community School Society


A GWCG participant's fresh peas

Individual Donors

Alannah Radburn
Emelie Comtois
Emily Ballard
Heather Hendry
Jacqueline Fraser
Madelaine Clerk
Margaret Eady
Rebecca Hurwitz
Dan & Jenn Price-Francis
Sara Sloman
John Wynne
Heather McGregor
Kevin & Naomi Bruce
Ross Reid
Sam Anderson
Sarah Butterworth
Satsuko VanAntwerp
Steve Price-Francis
Tracy Rawa
Mackenzie Coombe
Todd Evalina
Adrienne Mason

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Vancouver Island

Private Land Restoration

July 25, 2024

Are you a landowner on Vancouver Island in need of reforestation on your private property? Cariboo Carbon Solutions is here to connect you with funding and provide expert forestry / tree-planting services tailored to your needs. Don't miss the opportunity to enhance your private property at no cost! Contact MacKendrick Hallworth today for a consultation: mackendrick@cariboocarbon.ca

Our team of experienced foresters specialize in silviculture and ecological restoration. We work closely with landowners to develop customized tree-planting plans that align with their goals. We can provide funding through non-governmental organizations for projects that meet specific requirements. We are committed to sustainable forestry practices and ensuring the long-term health of your forest by planting seedlings that are climatically suitable or adapted to your site.

The Vancouver Island Ecological Restoration Project is a comprehensive initiative that seeks to augment landscape biodiversity by promoting the re-establishment of native tree species, including fast-growing deciduous trees such as bigleaf maple. This project aims to create lasting positive impacts on Vancouver Island's natural heritage through reforestation in collaboration with private landowners, local governments and First Nation communities. Read more on our website: cariboocarbon.com

By MacKendrick Hallworth, FIT