

NOVEMBER 8-9



2023

NATIONAL HORTICULTURE
AND INVASIVE SPECIES
CONFERENCE

PATHWAYS

to Change

HORTICULTURE
& INVASIVE SPECIES
NATIONAL CONFERENCE

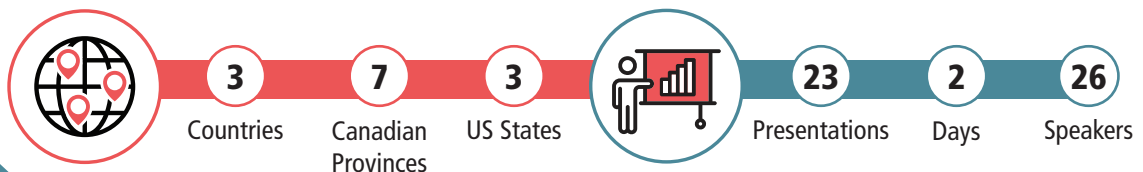
CONFERENCE SUMMARY

The Canadian Council on Invasive Species (CCIS) in partnership with the Ontario Invasive Plant Council (OIPC), hosted the National Horticulture and Invasive Species Conference on November 8 to 9, 2023. The virtual conference brought together diverse participants, including industry professionals, environmental organizations, Indigenous communities, and government leaders to explore the issue of invasive species within the horticulture sector—spanning ornamental plants and food crops.

Presenters shared critical insights and strategies to support coordinated efforts at national and regional levels to over 150 participants from across Canada, the United States and United Kingdom.

Attendees and presenters were engaged in discussions and identified solutions to address and mitigate the impacts of invasive species in the horticulture industry, with the aim of safeguarding Canada's biodiversity and communities. The following sections provide an overview of event outcomes, highlights, feedback, and identified next steps to address the issue.

Conference Snapshot



“ The conference had presenters from academia to public gardens, native species plant and seed suppliers. Hence the knowledge share was quite diverse and in-depth at the same time.

“ Great to see more work in the ornamental/invasive species being done after the quiet times of Covid.

“ I learned much at the conference... 5-star event.

Attendees were asked to describe this event in one word. The words most frequently used were:

informative, connecting, educational, inspiring, challenging, and interesting.

DAY 1 HIGHLIGHTS

Speaker Affiliations

Queen's University, Belfast • Princeton University • University of Vermont • The Morton Arboretum
Canadian Food Inspection Agency • Pest Management Regulatory Agency • Invasive Species
Council BC • Beyond Attitude Consulting • Site Specific Inc • Kayanase Greenhouse •
Meewasin Valley Authority

Keynote Address



Dr. Ross Cuthbert (Institute for Global Food Security and School of Biological Sciences, Queen's University Belfast) illustrated the global impact of invasive species with a keynote presentation on the advances of economic cost assessments of invasions.

"The costs [of invasion] are high and rising, exceeding £1 trillion in recent decades to activity sectors such as agriculture, from pathways such as horticulture."

Concurrent presentations shared information on the impacts of several invasive species threatening the horticulture industry from spotted lanternfly to oak wilt to jumping worm, among others.

"Canada's wine and grape industry add 11.5 billion annually to the economy... 96% of Canadian fruit farms are located in areas of risk to [spotted lanternfly] invasion." – **Diana Mooij**, Senior Program Specialist, Invasive Alien Species and Domestic Plant Health Programs, Canadian Food Inspection Agency.

"Oaks infected by oak wilt will die in 6-8 weeks after infection." – **Julie Stachecki**, ISA Certified Arborist, Founder and Principal of Site Specific Inc.

"Lack of proper communication between stakeholders has led to the widespread distribution of Jumping worms." – **Josef Gorres**, Professor of Ecological Soil Management, Department of Plant and Soil Science, University of Vermont.

"Boxwood is a top 5 nursery crop for sale in Canada.... box tree moth invasion can lead to extreme defoliation and eventual mortality [of boxwood] if left unmanaged." – **Holly Armstrong**, Acting Policy and Program Leader, Horticulture Section, Canadian Food Inspection Agency.



Dr. Evelyn Beaury (Department of Ecology and Evolution, Princeton University) shared insights on the spread and introduction of invasive plants to North America through the horticulture industry.

"Eighty-three percent of invasive plants that were introduced through horticulture are still commercially available. [Under climate change] 97% of invasive plants will have suitable habitat for invasion in new areas."



Kristina Pauk (Program Specialist, Invasive Alien Species and Domestic Programs Section, Canadian Food Inspection Agency) provided an overview of the National Invasive Plants Program led by the Canadian Food Inspection Agency.

"In all cases [of invasive plant regulation] partnerships are critical to success... Everyone has a role to play in preventing the introduction and spread of invasive plants."

DAY 2 HIGHLIGHTS

Speaker Affiliations

Canadian Committee for International • Union for Conservation of Nature • Naa'Waya'Sum Coastal Indigenous Gardens • Canadian Nursery Landscape Association • Landscape Ontario Horticultural Trades Association • WWF-Canada • Loblaw Companies Ltd. • Canadian Food Inspection Agency • Canadian Plant Health Council • Kwantlen Polytechnic University • Plant Health Australia • Gooseberry Gardens

Keynote Address



Eli Enns (Founder of the Naa'Waya'Sum Coastal Indigenous Gardens, President, and CEO, IISAAK OLAM. Foundation, President, and Chair, Canadian Committee for International Union for Conservation of Nature) opened day two of the conference by sharing insights on a balanced approach to climate change adaptation. Eli drew on examples from Indigenous Protected and Conserved Areas to share approaches to responding to invasive species.

"The Convention on Biological Diversity's Global Biodiversity Framework is causing government to realize they cannot meet targets without Indigenous communities and organizations as the original stewards of the land."



World Wildlife Fund (WWF)-Canada and Loblaw Companies Limited presented on the progress and learnings from their partnership to bring native plant species to Loblaw garden centres.

"Together, [Loblaws and WWF-Canada] have set in motion a major shift in the native plant supply chain, selling nearly 145,000 native plants in select Loblaw garden centres in southern and eastern Ontario and southern Quebec over the past four years." – Gabriella Carrier, Sustainability and Social Impact Manager, Loblaw Companies Limited



Sarah Corcoran (CEO, Plant Health Australia) shared insights from Australia's collaborative work to protect biodiversity.

"At Plant Health Australia, we believe a strong and resilient plant biosecurity system is built on connected strategies and partnerships, effective and efficient response and recovery and leveraged data and technology for improved decision-making and rapid response to biosecurity threats."

What More Needs to Be Done:

Dr. Kathy Dunster, Department of Sustainable Agriculture and School of Horticulture, Kwantlen Polytechnic University, shared current efforts and gaps related to invasive species education and training in the horticulture industry. *"There is plenty of training and awareness-raising available across Canada at the regional level...The challenge is... how we can reach those connected to the horticultural sector that are not affiliated with [Canadian Nursery Landscape Association/ Canadian Society of Landscape Architects /Canadian Council on Invasive Species]? This vast country will require many cross-sectoral partnerships and collaborations within ecoregions."*

Audiences learned about invasive species awareness from the perspective of garden retailers. **Jennifer Hoglin**, Gooseberry Gardens, shared experiences of interacting with the public on the topic of invasive plants at the retailer level. *"Education is desperately needed for retailer owners, buyers, and staff on invasive species. Not only so that they can identify when/if invasive stock comes in, but also so that they can assist the public with identifying these species when they occur in their yards and public spaces."*

CONFERENCE OUTCOMES

At the end of the conference, an interactive session engaged participants to brainstorm next steps and solutions to prevent the spread of invasive species through horticulture pathways. Outcomes from the interactive session are summarized below.

What More Is Needed: Retailer and Public Interface



Challenges Identified

Lack of Knowledge Among Garden Centre Staff:

- a. Public-facing staff often lack awareness about invasive species.
- b. Limited understanding of what plants are prohibited or invasive.

Public Misconceptions:

- a. Many customers are unaware of which species are invasive.
- b. Customers often request invasive species like baby's breath, creeping bellflower, and Himalayan balsam, due to sentimental attachment.

Gardening Practices:

- a. Gardeners may unknowingly trade invasive species.
- b. People see invasive species in parks and assume they are native, then seek them out at garden centres.



What's Needed

Education and Awareness:

- a. Provide clear, accessible lists of invasive species, including both Latin/scientific and common names, and indicate whether they are classified as noxious.
- b. Share information on invasive species alternatives tailored to specific growing zones and plant characteristics.

Outreach Focus:

- a. Prioritize getting information to individuals "on the ground" who interact directly with plants (e.g., gardeners, garden centre staff).
- b. Leverage tools like EDDMapS for experts and informed users to report and track invasive species.

Staff Training:

- a. Equip garden centre staff with training on identifying invasive species, understanding their impact, and offering suitable alternatives.
- b. Ensure items are well-labeled with clear warnings about invasive species.

Support and Resources:

- a. Provide funding and support to implement training programs.
- b. Ensure both management and staff have the tools they need to effectively combat the spread of invasive species.

Engaging the Public:

- a. Distribute simple, easy-to-read resources like the Grow Me Instead (GMI) guide to inform the general public.
- b. Position garden centres as hubs for public education, offering accurate information to those driving demand.

CONFERENCE OUTCOMES

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What More Is Needed:

Training in the Industry



Challenges Identified

Outdated Training

Approaches:

- Current training programs are often reactive rather than proactive.
- There is insufficient focus on identifying and managing new invasive species in emerging areas of Canada.

Inadequate Resources:

- Municipal and federal invasive species lists are outdated and incomplete, limiting the ability to address new threats effectively.

Lack of Integration:

- Efforts to address invasive species are often siloed within organizations (e.g., municipalities) and across government levels and groups, resulting in fragmented responses.



What's Needed

Proactive Training Programs:

- Develop and implement updated training to equip industry professionals with the skills to identify and manage invasive species before they spread.
- Focus on new and emerging threats in different regions of Canada, tailored to specific sectors (e.g., municipalities, utilities, landscaping).

Comprehensive Species Information:

- Ensure invasive species lists and related resources from municipalities and federal agencies are regularly updated and inclusive of all known threats.
- Connect programs like Plant Wise to broader pest management efforts to create unified strategies.

Collaboration Across Sectors:

- Foster better communication and integration within organizations (e.g., between municipal departments) and across different levels of government.
- Recognize the intersectionality of invasive species management by encouraging cross-sector collaboration to address shared challenges.

By focusing on education, staff training, and public engagement, garden retailers can play a pivotal role in reducing the spread of invasive species and promoting sustainable gardening practices.

"It is imperative to inform and collaborate across disciplines/sectors/departments."

"Spreading the word, one person at a time, is just as important as speaking to groups; every little bit helps."

"Increased collaboration amongst involved groups/organizations/people and increased education."

"Further educating clients and public and developing invasive species disposal plan for client properties."

"Education is the key to raise awareness."

BRAINSTORM SESSION



Audience members worked in groups and shared several priority actions to be taken across sectors to tackle this issue, here are a few:

“Identify and address barriers to taking action; increase coordination.”

“CCIS and other NGOs have an opportunity to be advocates for policy and legislative change in a way that cannot always come from within government/ the civil service.”

“Provide free booklets and packages to garden groups, master gardeners, and retail.”

“Public education and staff training within the industry is constantly ongoing. We need legislation to enforce banning on sales of invasive species. it’s so hard to enforce on private lands when the harmful plants present are available.”

“To help educate the public, create websites with good photos.”



Attendees also shared ideas on the Canadian Council on Invasive Species’ role and actions that can be taken (e.g. through the PlantWise program) to mitigate the issue.

“Support programs that distribute native plant seeds that are regionally relevant.”

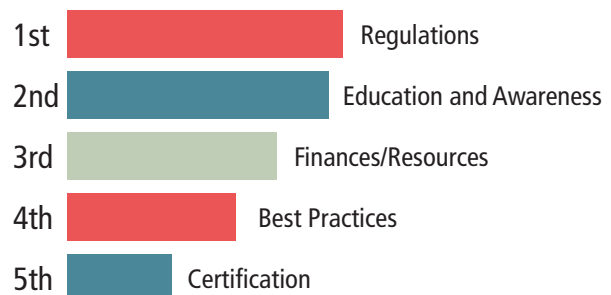
“Educate the educators! Especially those who teach kids’ gardening.”

“Help get resources to keep PlantWise updated yearly and scientifically supported.”

“Education: what are invasive plants and how to identify them.”

“Native plantings vs invasives. More Grow Me Instead programs.”

Attendees ranked the following approaches and tools as most important to addressing the issue of invasive species in horticulture.



THANK YOU TO OUR MANY SUPPORTERS!

Several industry experts were engaged in the planning and facilitation of the National Horticulture and Invasive Species Conference, including:

Jamie Aalbers, Canadian Nursery Landscape Association

Anne Kadwell, Canadian Nursery Landscape Association

Kathy Dunster, Canadian Society of Landscape Architects / Department of Sustainable Agriculture and School of Horticulture, Kwantlen Polytechnic University

David Milne, Quercus Gardens, Landscape Ontario Horticultural Trades Association

Courtney McCann, Landscape Ontario Horticultural Trades Association

Andrea Eastham, Plant Science Consultant, retired Research Agrologist, Industrial Forestry Service Ltd. and Program Manager, Northwest Invasive Plant Council

Rebecca Lee, (formerly) Fruit and Vegetable Growers of Canada



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