# HORTICULTURE AND INVASIVE SPECIES CONFERENCE AGENDA

(As of November 7, 2023)

Virtual Event Date: November 8-9, 2023, Times are displayed in Eastern Standard Time

# DAY ONE – November 8, 2023

10:30 am Networking and Sign-in

11:00 am Welcome Address

11:10 am Indigenous Welcome

Mary Lou and Dan Smoke

# **SETTING THE STAGE**

11:30 am Keynote Address

**Advances in Economic Cost Assessments of Biological Invasions** 

Dr. Ross Cuthbert, Institute for Global Food Security and School of Biological Sciences, Queen's University Belfast

12:15 pm BREAK

## **EMERGING ISSUES**

## 12:25 pm

**Objective**: Hear from experts in the field from Canada and abroad on emerging issues in horticulture, including emerging pathways of spread.

12:30 pm Preventing the spread of invasive plants through horticulture

Dr. Evelyn Beaury, Department of Ecology and Evolution, Princeton University

12:50 pm A Missing Link in Plant Invasions: North American Public Gardens are Redefining our View of Invasive

**Plants** 

Kurt Dreisilker, Head of Natural Resources and Collections Horticulture, The Morton Arboretum

1:10 pm Q and A

## 1:25 pm NETWORKING BREAK

### **REGULATORY TOOLS IN THE TOOLBOX**

## 1:50 pm

**Objective**: Learn what tools exist in Canada to stop the spread of invasive species coming through the horticulture pathway, what tools exist to support the industry on this issue, and what tools are still needed.

## 1:55 pm The Canadian Food Inspection Agency's Weed Risk Assessment Process

Alexandre Blain, Plant Health Risk Assessor, Plant Health Risk Assessment Unit, Canadian Food Inspection Agency

## 2:15 pm The Canadian Food Inspection Agency's National Invasive Plants Program

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Kristina Pauk, Program Specialist, Invasive Alien Species and Domestic Programs Section, Canadian Food Inspection Agency

2:35 pm Registration Process in Health Canada's Pest Management Regulatory Agency

Scott Couture, Senior Evaluation Officer, Herbicides, Pest Management Regulatory Agency

2:55 pm Q and A

3:05 pm BREAK

# **ALL HANDS ON DECK: COLLABORATIVE INITIATIVES**

# 3:15 pm

*Objective*: Participate in concurrent presentations on invasive species updates and horticulture initiatives.

Session 2:
3:20
Spotted Lanternfly – CFIA prevention and response
Diana Mooij, Senior Program Specialist, Invasive Alien
Species and Domestic Plant Health Programs, Canadian
Food Inspection Agency
3:40
Oak Wilt – Awareness and Collaboration – Keys to
Containment
Julie Stachecki, ISA Certified Arborist, Founder and
Principal of Site Specific Inc
4:00
Invasive Jumping Worms – Implications for the Green
Industry and Policy
Josef Gorres, Professor of Ecological Soil Management,
Department of Plant and Soil Science, University of
Vermont
4:20
Box tree moth and strawberry blossom weevil –
preventing spread while facilitating trade of host plants
Holly Armstrong, Acting Policy and Program Leader,
Horticulture Section, Canadian Food Inspection Agency

4:40 pm Q and A

4:50 pm WRAP-UP AND ADJOURN

<sup>\*</sup> Times are displayed in Eastern Standard Time

# DAY TWO - November 9, 2023

10:30 am Networking and Sign-In

11:00 am Welcome Address

11:10 am Keynote Address

Indigenous Protected and Conserved Areas for a More Effective Response to Invasive Species, and a Balanced Approach to Climate Change Adaptation

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

12:15 pm BREAK

# WHAT IS WORKING IN CANADA AND ABROAD

# 12:25 pm

**Objective**: Hear from leaders in the industry across Canada and beyond on what is working to stop the spread of invasive species in the horticulture industry in this concurrent session.

Session 1	Session 2
12:30	12:30
Clean Plants Certification – Tackling the Business	A nursery sector-led monitoring program for invasive
Challenges Posed to Nurseries by Invasive Pests and	species in Ontario
Diseases	Dr. Jeanine West, Grower Technical Analyst, Landscape
Jamie Aalbers, Growers Sector Specialist, Canadian	Ontario Horticultural Trades Association
Nursery Landscape Association	
12:50	12:50
Market Transformation: Changing the landscape, one	Promoting biosecurity resources and initiatives in
native plant at a time	greenhouses and beyond in Canada
Jarmilla Bečka Lee, Specialist, Community Action,	Jaimie Schnell, Plant Health Strategy Section, Canadian
Restoration & Regeneration, WWF-Canada	Food Inspection Agency and Secretariat, Canadian Plant
Gabriella Carrier, Sustainability and Social Impact	Health Council
Manager, Loblaw Companies Limited	
1:10	1:10
Training for Industry and Within Industry	Partnerships – the key to biosecurity
Dr. Kathy Dunster, Department of Sustainable Agriculture	Sarah Corcoran, CEO, Plant Health Australia
and School of Horticulture, Kwantlen Polytechnic	
University	

1:30 pm Q and A

1:40 pm BREAK

# WHAT MORE IS NEEDED

# 1:55 pm

<sup>\*</sup> Times are displayed in Eastern Standard Time

**Objective**: Hear from experts on what gaps still exist in addressing this issue, within Industry, government, and education.

1:55 pm Further Training and Education in the Horticulture Industry

Dr. Kathy Dunster, Department of Sustainable Agriculture + School of Horticulture, Kwantlen Polytechnic

University

2:15 pm Perspectives from Garden Retailers: Interactions with the Public Regarding Invasive Plant Species

Jennifer Hoglin, Gooseberry Gardens

2:35 pm Q and A

# NEXT STEPS, WHAT DOES SUCCESS LOOK LIKE, CALLS TO ACTION

2:45 pm Breakout Rooms

Attendees will have the opportunity to discuss key topics and provide feedback to help build solutions to challenges related to invasive species and horticulture.

3:25 pm Summary and Adjourn

3:30 pm Networking

4:00 pm SYSTEM CLOSES

Speaker biographies and abstracts follow.

<sup>\*</sup> Times are displayed in Eastern Standard Time

# SPEAKER BIOGRAPHIES AND ABSTRACTS Day 1 (November 8<sup>th</sup>)

# **SETTING THE STAGE**



**Dr. Ross Cuthbert**Lecturer in the Institute for Global Food Security and School of Biological Sciences, Queen's University Belfast

# **Advances in Economic Cost Assessments of Biological Invasions**

Globalisation of trade and transport networks have made the world more interconnected than ever before. Despite huge environmental impacts — including extinction — management actions and awareness levels towards biological invasions remain low on policy agendas. Placing a monetary value on this global change is a salient metric to communicate effectively with decision makers and citizens. I will provide an overview of a recent international, interdisciplinary collaboration with over 100 natural and social scientists to quantify the economic impacts of biological invasions globally. We have developed a new database and statistical analysis tools to synthesise the economic costs of biological invasions for the first time — InvaCost. These costs are high and rising, exceeding £1 trillion in recent decades to activity sectors such as agriculture, from pathways such as horticulture. The vast majority of costs have been from damages or losses to resources, whereas management and especially proactive investments are lacking. I will unravel cost distributions across geographic, taxonomic, environmental, sectoral and temporal contexts, and present broader societal impact and communication efforts.

## Bio

Ross Cuthbert is a biologist at Queen's University Belfast. His research focuses on measuring the impacts of global changes on ecosystems, economies and health, with the aim of informing management strategies. Ross mostly works on biological invasions and disease vectors. He is currently a Leverhulme Early Career Fellow and Proleptic Lecturer, with his present Fellowship focusing on the socio-economic and ecological impacts of biological invasions — species introduced by humans outside of their natural range. Ross is also an Honorary Research Associate at the South African Institute for Aquatic Biodiversity and a Member of the Young Academy of Ireland. Previously, he held a Humboldt Postdoctoral Fellowship at GEOMAR Helmholtz Centre for Ocean Research Kiel. His research has been recognized by disciplinary and transdisciplinary awards, including the 2022 Francesca Gherardi Memorial Prize for his work in invasion science.

## Web

https://pure.qub.ac.uk/en/persons/ross-cuthbert-2 https://twitter.com/ross\_cuthbert

# **EMERGING ISSUES**

<sup>\*</sup> Times are displayed in Eastern Standard Time



**Dr. Evelyn Beaury**Postdoctoral Research Associate, Department of Ecology and Evolution, Princeton University

# Preventing the spread of invasive plants through horticulture

The spread of invasive species is an ongoing threat to biodiversity and natural resources conservation, and many invasive species are on the move to new locations with climate change. Horticultural trade is one of the primary vectors that could unwittingly facilitate this movement. In this talk, I will discuss recent research identifying which invasive species could move quickly through trade and how nursery sales of invasive species relate to invasion risk under both current and future climate regimes. Using the northeastern United States as a case study, I will also discuss what interventions are needed to reduce the spread of invasive species, and how encouraging native plants in horticulture is an ecological win-win by reducing invasion risk and facilitating the persistence of native biodiversity.

## Bio

Dr. Evelyn Beaury received her PhD from the University of Massachusetts Amherst where she studied the spatial ecology and biogeography of plant invasions in the context of climate change. This work included research and outreach on the management and policy of invasive plants, working with stakeholders to proactively prevent invasive plant introductions. Evelyn is now a postdoctoral research associate at Princeton University, where she has broadened her research to think spatially about how we can increase carbon storage via changes in land use and land management.

Social media: Twitter is @evecologist and website: https://ebeaury.wixsite.com/evelynbeaury



**Kurt Dreisilker**Morton Arboretum

A Missing Link in Plant Invasions: North American Public Gardens are Redefining our View of Invasive Plants
Botanic gardens and arboreta in North America are harnessing their botanical and horticultural expertise to document
plant taxa that are escaping from cultivation on their properties. This is accomplished by collecting, synthesizing, and
sharing data about the extent that taxa spread from their original sites of cultivation into adjacent areas of their

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property. However, these data are much more impactful if collected, structured, and shared using a common methodology. To this end, the Public Gardens as Sentinels against Invasive Plants (PGSIP) working group has developed standardized guidelines to help gardens organize and share their data from their collections to characterize these situations when they occur. PGSIP also developed a database for gardens to upload their data and access information about plants spreading from cultivation at other gardens. By collecting and sharing data from gardens across North America, PGSIP aims to provide a clear picture about plants escaping cultivation and potentially becoming problematic before large-scale invasions occur and before commercial adoption of these taxa. This presentation will explore the idea of how PGSIP can help prevent plant species from becoming invasive and help the horticulture industry succeed.

#### Authors

<u>Kurt Dreisilker</u><sup>1</sup>, Theresa Culley<sup>2</sup>, Michelle Beloskur<sup>3</sup>, Brittany Shultz<sup>4</sup>, Nadia Cavallin<sup>5</sup>, Hans Landel<sup>6</sup>, Kayri Havens<sup>7</sup> **Affiliations** 

<sup>1</sup>The Morton Arboretum, Lisle, USA

<sup>2</sup>University of Cincinnati, Cincinnati, USA

<sup>3</sup>Midwest Invasive Plant Network, Lisle, USA

<sup>4</sup>Missouri Botanical Garden, St. Louis, USA

<sup>5</sup>Royal Botanical Gardens, Burlington, Canada

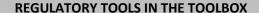
<sup>6</sup>Lady Bird Johnson Wildflower Center, Austin, USA

<sup>7</sup>Chicago Botanic Garden, Chicago, USA

#### Bio:

Kurt Dreisilker is the Head of Natural Resources and Collections Horticulture at The Morton Arboretum near Chicago, Illinois, United States, where he plans and implements ecological restoration and horticultural maintenance programs. Kurt's work within a public garden has provided him with a unique perspective on plant invasions since plants from around the world are utilized in many capacities throughout Arboretum programs. He is Treasurer for Midwest Invasive Plant Network. Kurt has a B.S. in plant biology and a M.S. in Natural Resources and Environmental Sciences from University of Illinois at Urbana-Champaign.

Link to PGSIP: <a href="http://pgsip.mortonarb.org/Bol/pgsip">http://pgsip.mortonarb.org/Bol/pgsip</a>





**Alexandre Blain** 

Plant Health Risk Assessor - Botany, Plant Health Risk Assessment Unit, Canadian Food Inspection Agency

# The Canadian Food Inspection Agency's Weed Risk Assessment Process

This presentation will cover the Canadian Food Inspection Agency's (CFIA) Weed Risk Analysis process and provide international context on Pest Risk Analysis. An example of the different formats of plant health risk assessments CFIA has adopted will be given. The outcome of recent Weed Risk Assessments performed on horticultural species will also be shared during this talk.

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#### Bio:

Alexandre Blain joined the Canadian Food Inspection Agency (CFIA) in 2009 as a botanist at the Ottawa Plant Laboratory. He has identified and catalogued more than 7500 specimens of plants collected by inspectors and himself throughout Canada and the world. He also helped establish CFIA's herbarium collection. From 2018 to 2020 he worked as a horticulture program specialist where he managed the risks associated with horticultural commodities. Since 2020 he is working as a botanist in CFIA's Plant Health Risk Assessment unit. His main task is to evaluate and predict the distribution of plant species which could potentially pose harm to Canada's environment and economy.



**Kristina Pauk** 

Program Specialist, Invasive Alien Species and Domestic Programs Section, Canadian Food Inspection Agency

# The Canadian Food Inspection Agency's National Invasive Plants Program

The Canadian Food Inspection Agency (CFIA) recognizes the risks associated with invasive plants to the Canadian environment and economy. Invasive species are a shared responsibility. Active involvement of all levels of government, non-government organizations and stakeholders in Canada is essential to reduce the risk of introduction and spread of invasive plants via these various pathways. This presentation will provide an overview of the CFIA's Invasive Plants Program; its history, risk analysis process and ongoing enhancements, emphasizing the importance of partnerships in the success of this program. It will focus on examples in the horticultural pathway, as well as examples of domestic eradication measures.

#### Bio:

After earning her B.Sc. in Environmental Biology at the University of Waterloo, Kristina joined the Canadian Food Inspection Agency (CFIA) in 2009. She is a specialist in the Invasive Alien Species and Domestic Plant Health Programs Section at the CFIA in Ottawa. Kristina leads the Invasive Plants Program, which focuses largely on preventing the introduction and spread of invasive plants in Canada.

Website: www.inspection.gc.ca

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Scott Couture
Senior evaluation officer in Herbicides with the PMRA

## Registration Process in Health Canada's Pest Management Regulatory Agency

A high level summary of the registration process will be provided for Health Canada's PMRA specifically with regards to registrations relative to invasive species.

#### Bio:

I graduated from McGill University with a MSc in agronomy in 1999, worked at McGill University as a research assistant, Washington State University in the stripe rust research program as a research technician, and at the PMRA since 2003 as a scientific evaluator in herbicides specifically efficacy and crop tolerance.

## **ALL HANDS ON DECK: COLLABORATIVE INITIATIVES**



**Gabby Nichols**Project Coordinator, Canadian Council on Invasive Species

#### Bio:

Gabby's work as CCIS' Project Coordinator involves building partnerships and working collaboratively with organizations across Canada to develop messaging and resources to support the implementation of six national behaviour change campaigns. Gabby joined the CCIS in the spring of 2020, bringing her experience of invasive species education and management from her previous roles within provincial government, municipal government, and non-profit sectors. Gabby holds a Masters of Environment and Sustainability from the University of Western Ontario, and a Bachelor's of Bio-Resource Management from the University of Guelph.

Website: <a href="https://canadainvasives.ca/">https://canadainvasives.ca/</a>

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**Gail Wallin**Executive Director, Invasive Species Council of British Columbia

## Bio:

Gail has been involved with the Invasive Species Council of BC (ISCBC) since its inception in 2004. Today, the ISCBC is the largest invasive species organization in Canada. For more than 25 years, Gail has been managing complex natural resource projects within BC and across the country. She is a professional facilitator and has worked for decades with the agriculture sector and First Nations on land use and joint government planning processes. With a Bachelor (History/Biology), Professional Educators Certificate, and Multi-Party Mediation, Gail has built strong partnerships to design and deliver practical and successful programs for on-the-ground results. Gail is also Chair of the Canadian Council on Invasive Species. Gail is grateful to live and work in William's Lake BC, on the ancestral lands of the Secwepemc Nation.

Website: Invasive Species Council of British Columbia (bcinvasives.ca)

# Plant Wise Program & Recognized Retailer Program

Most exotic plants in Canada were intentionally introduced for their attractiveness as garden plants. Unfortunately, some of these far-away species end up becoming invasive in their new home and can escape gardens, impacting our native ecosystems, way of life, and economy.

Plant Wise is a take action program that supports the (ornamental) horticulture industry's transition to become invasive-free. This program further helps gardeners and industry understand which plants are invasive and harmful to our communities and to make 'Plant Wise' choices through 'Grow Me Instead' and other educational tools. Recently the Invasive Species Council of BC (ISCBC) has worked with a National Advisory Group to guide the revamp of the Plant Wise recognized retailer program to support garden retailers to educate their customers on responsible gardening practices and choices. In this presentation, the Canadian Council on Invasive Species and ISCBC will share the history, recent learnings, current status of the Plant Wise program in Canada, and efforts being made to expand the Plant Wise and Recognized Retailer Program across Canada

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**Ken Donnelly**President, Beyond Attitude Consulting

# Invasive Plants Attitudes, Awareness and Actions: What gardeners have told us

Surveys of gardeners have provided us with insight into their attitudes towards invasive species, awareness of such things as risks, and the actions that they take. They have also told us about their outdoor recreation habits, who they trust as messengers, and where they source plants for their gardens. Insights from this research help inform effective outreach programs that enlist gardeners to take action to prevent invasive species' introduction and spread.

## Bio:

Ken Donnelly is the President of Beyond Attitude Consulting, a Canadian-owned firm with clients across Canada and around the world. Ken works with government and non-governmental organizations to foster positive individual behaviours, primarily in the areas of environment, health, transportation, and occupational health and safety. For 30 years, Ken has been combining research and behavioural psychology to develop effective Behaviour Change programs. In addition, for the past 23 years, he has trained people in Behaviour Change principles across Canada, the UK, the USA and the Caribbean. Ken also publishes a free weekly electronic newsletter on Behaviour Change, with subscribers worldwide. It can be subscribed to at the website: <a href="https://www.beyondattitude.com">www.beyondattitude.com</a>.

Website: www.beyondattitude.com



**Dan Werner**Operations Manager, Kayanase Greenhouse

<sup>\*</sup> Times are displayed in Eastern Standard Time

## **Successes and Challenges Facing Native Plant Suppliers**

The demand for native seed and plants continues to increase. Factors such as urban development, agricultural expansion, habitat loss, invasive species, and climate change are driving the need for high quality, locally adapted native seed and plants to support the ever-increasing number and scale of ecological restoration projects across Canada and North America. As this demand grows, native plant nurseries and seed producers are challenged with increasing their production capacity to keep up. However, within this transition lies opportunities, not only for the nurseries and seed producers, but for society as a whole with hopes of meeting the need to grow healthy landscapes, reverse the trend of biodiversity loss, and increase climate resilience. This presentation will introduce some of the challenges, opportunities, and successes facing native plant suppliers.

#### Bio:

Dan is an ecologist who takes pride in the valuable work done by the Kayanase team, supporting biodiversity through ecological restoration and native plant and seed production. Throughout his life he has been fascinated by the natural world, spending countless hours exploring wild places and learning about all forms of wild life. After obtaining his bachelor's degree in Biology from Wilfrid Laurier University he gained valuable experience in biological field assessments, taking particular interest in plants and ecology. Now with over 10 years of professional experience in ecology and ecological restoration Dan provides his valuable expertise as Operations Manager for Kayanase. Dan continues to increase his involvement in the community, sharing his passion for of the environment through many of Kayanase's outreach programs and events. Dan enjoys spending time with his wife and two daughters, hiking, birding, gardening and exploring!

# **Company Contact Information**

993 Brant County Hwy 54
Ohsweken, ON
NOA 1M0
519-770-0013
519-751-0568
sales@kayanase.ca
restoration@kayanase.ca
www.kayanase.ca



Renny Grilz
Resource Management Officer at Meewasin Valley Authority Saskatoon, SK

## Regionality of Invasive and Native Plants – A Prairie Perspective

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The Prairies present an unique blend of arid to semi-arid prairie grasslands landscapes interspersed with wooded riparian areas and newly forested urban areas. Many of the invasive species on the prairies are agronomic-related species but new species from the horticulture industry are invading our natural spaces plus forest-related invasives are impacting our urban forests. Many Prairie invasive species practitioners watch nearby jurisdictions in Canada and the US on what maybe impending invasive species maybe moving into the region. This presentation will discuss some of the newly emerging invasives into the Prairies and the early detection initiatives underway.

#### Bio:

Renny is a Professional Agrologist and is the Resource Management Officer for Meewasin Valley Authority in Saskatoon, SK. Renny's 25+ year career in conservation has spanned the three Prairie Provinces working for several agencies including Ducks Unlimited Canada and Nature Conservation of Canada. Renny focuses on numerous programs including targeted grazing, prescribed fire, ecological restoration, native seed industry, invasive species programs, and public outreach. Renny is also a co-owner of the family business Blazing Star Wildflower Seed Company. In 2023, Renny received the Distinguished Agrologist award from the Saskatchewan Institute of Agrologists and was awarded the Prairie Conservation Award by his peers. In his spare time, Renny also serves as the weed inspector for three local rural municipalities, near where he lives.

#### **Social Media:**

Meewasin – Facebook: @meewasin; Instagram: @meewasinvalley

Personal – Facebook: @renny.grilz; Intagram: @renny\_grilz

## Diana Mooij

Senior Program Specialist, Invasive Alien Species and Domestic Plant Health Programs, Canadian Food Inspection Agency

## Spotted Lanternfly – CFIA prevention and response

Spotted lanternfly was first reported in the United States in 2014 and has since spread to many Eastern US States. This is a pest that feeds on many economically and environmentally important hosts with the largest impacts being observed on grapes. With recent detections in Buffalo, NY and Michigan, spotted lanternfly is on Canada's doorstep. The CFIA has been working collaboratively with partners and stakeholders to raise awareness about this pest and the importance of reporting while also preparing to respond once SLF is detected in Canada.

### Bio:

Diana is a Senior Program Specialist in the Invasive Alien Species and Domestic Plant Health Programs section at the Canadian Food Inspection Agency. Since joining the CFIA she has been involved with the development and implementation of the invasive alien species program and the invasive plant program. In 2012 she became the national lead for the flighted spongy moth vessel certification program and is now also the national technical lead for the spotted lanternfly program.

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Julie Stachecki
ISA Certified Arborist MI-0650A
\*Michigan State University
Bachelor of Science: Horticulture

Bachelor of Science: Park & Recreation Resources

Master of Science: Crop & Soil Science, Entomology & Turfgrass Management emphases

## Oak Wilt - Awareness and Collaboration - Keys to Containment

Michigan is battling Oak wilt - a natural resource crisis. As a lethal disease of red oaks, awareness and collaboration are key to minimizing the diseases' spread and impact across landscapes of all scales. Hear basic oak wilt biology, how it spreads and the various actions Michigan is taking to educate, increase dialogue and collaborations, and contain oak wilt's impact in the State.

#### Bio:

Julie Stachecki is principal of Site Specific, Inc. a company providing arboriculture, horticulture & turfgrass consulting. She's an ISA Certified Arborist, Tree Risk Assessment Qualified, MI Oak Wilt Qualified specialist, serves on the MI Oak Wilt Coalition, and is a Past President of ISA Michigan. Prior to establishing Site Specific, Julie worked several years for her alma mater \*Michigan State University in capacities including: the Pesticide Education program, as an Extension educator, and in Department of Horticulture as a faculty member teaching & managing the Landscape & Nursery Certificate Program. Julie gives back by volunteering for ISA Michigan, ReLeaf Michigan, and cycling in "Tour des Trees" the primary fundraising event for tree research & education.



**Josef Gorres** 

Professor of Ecological Soil Management, Department of Plant and Soil Science, University of Vermont

Invasive Jumping Worms - Implications for the Green Industry and Policy

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Jumping worms are annual, invasive earthworms from Northeastern Asia. They have recently been reported from Canada. Their main impact is on forest ecology, in particular the biodiversity of the understory and long term on the sustainability of sugarbush. They are mainly distributed through horticultural products. In the northeastern USA the invasion is most pronounced in gardens and nurseries. The problem has long been ignored by the green industry and regulators. Early action is needed to slow the invasion, but denial of the problem makes it difficult to engage green industry stakeholders. Currently there are no nationally certified vermicides in the US even though there are some biopesticides and organic pesticides that do work. Engaging with regulators is essential to prevent further spread.

#### Bio:

Dr. Gorres is a Professor of Ecological Soil Management at the University of Vermont. He was trained as physicist but is now working in soil ecology. His projects range from soil erosion to restoration of riparian forests. He has been studying the invasion of jumping worms in the northeastern USA for the past 15 years. He is currently on sabbatical at Saint Mary's University in Halifax, Nova Scotia.



**Holly Armstrong**Acting Policy and Program Leader, Horticulture Section, Canadian Food Inspection Agency

## Box tree moth and strawberry blossom weevil - preventing spread while facilitating trade of host plants

Box tree moth and strawberry blossom weevil are two pests that have been detected for the first time in in North America in recent years and may move domestically and in trade in the plants for planting pathway. Box tree moth is an invasive pest, native to Asia, that was confirmed in Toronto in 2018 following a community science report, marking the first report in North America. This pest can move long distances with movement of boxwood nursery stock and short distances by natural dispersal. Boxwood is a top 5 nursery product for sales with an estimated annual value of \$40 million. Canadian producers have been seeking to regain US market access since 2021. Strawberry blossom weevil is a small beetle originating in Europe. It was first confirmed in North America in Abbotsford, British Columbia in 2019. It is a pest of strawberry, rose, raspberry and blackberry. Producers of these plants must establish and maintain Pest Free Places of Production (PFPP) or Pest Free Production Sites (PFPS) in accordance with International Standard for Phytosanitary Measure (ISPM) 10 in order to export to the United States. Preventing spread of these pests while facilitating trade of host plants requires collaborative effort.

#### Bio:

Holly started with the CFIA as a Plant Health Inspector on Vancouver Island in 2005 and later moved into an Inspection Advisor role. After 15 years in Operations, she moved into a national position with Policy and Programs Branch of the Plant Health and Biosecurity Directorate, reporting remotely, where she works as a Horticulture Program Specialist. Holly's role as a Program Specialist focuses on regulatory control of plant pests in the horticulture pathway and oversight of systems-based plant programs for export of plants for planting to the United States.

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# SPEAKER BIOGRAPHIES AND ABSTRACTS Day 2 (November 9<sup>th</sup>)

# **KEYNOTE ADDRESS**



Eli Enns

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

Indigenous Protected and Conserved Areas for a More Effective Response to Invasive Species, and a Balanced Approach to Climate Change Adaptation

#### Bio:

Eli Enns is an internationally recognized expert in Indigenous-led conservation. From Tla-o-qui-aht Nation on his father's side, and of Dutch Mennonite heritage on his mother's side, Eli promotes holistic solutions for community and ecosystem health and well-being. With a background in political science, Eli is a 'Nation-builder' with values and approaches rooted in Indigenous economic theory and practice.

In 2017, a decade after co-founding the Ha-uukmin Tribal Park in his own territory, Eli co-chaired the Indigenous Circle of Experts (ICE) for the Pathway to Canada Target 1, which culminated with the groundbreaking 2018 report, We Rise Together: Achieving Pathway to Canada Target 1 through the creation of Indigenous Protected and Conserved Areas (IPCAs) in the spirit and practice of reconciliation. IPCAs are now a central component of Canada's conservation efforts. Eli supports Indigenous Nations across Canada to advance their conservation efforts via his roles with the IISAAK OLAM Foundation and the Conservation through Reconciliation Partnership.

Nuu-chah-nulth values and concepts that guide Eli's life and work:

- hishuk-nish-tsa-wahk "Everything is one and everything is interconnected."
- iisaak "To observe, appreciate, and act accordingly."

Website: https://iisaakolam.ca/

## WHAT IS WORKING IN CANADA AND ABROAD



**Jamie Aalbers** 

<sup>\*</sup> Times are displayed in Eastern Standard Time

Growers Sector Specialist, Canadian Nursery Landscape Association

#### Bio:

Jamie Aalbers is the Growers Sector Specialist for the Canadian Nursery Landscape Association, responsible for managing a wide array of national grower issues which include plant health and trade, research and new plant development. Jamie graduated from the University of Guelph with a B.Sc. (Agr) in Horticultural Science and Business. He has been involved in the ornamental sector since then in a variety of roles ranging from growing and breeding to horticultural association work and consulting.



Jarmila Bečka Lee Specialist, Community Action, Restoration & Regeneration, WWF-Canada

### Bio:

As part of WWF-Canada's Community Action team, Jarmila develops and manages programs that engage Canadians in hands-on conservation action, especially in urban areas. During her 26 years at WWF-Canada, Jarmila has been involved in a variety of conservation initiatives including advising Loblaw on its 100% sustainable seafood commitment, managing WWF's species at risk work as well as the long-running Endangered Species Recovery Fund, and as part of the Marine, International, and Wildlife Toxicology programs. Jarmila holds an Hon. Bachelor of Science, Environment and Biology, from the University of Toronto.

Website: <a href="https://regrow.wwf.ca/">https://regrow.wwf.ca/</a>



**Gabriella Carrier**Sustainability and Social Impact Manager, Loblaw Companies Limited

# Bio:

Gabriella is the Sustainability and Social Impact Manager at Loblaw Companies Limited, where she is dedicated to driving progress on the company's commitments to Fighting Climate Change and Advancing Social Equity from an enterprise

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level. With a background in sustainable food systems, Gabriella is passionate about supporting stakeholders from farm to fork in engaging in more sustainable production and consumption practices.

Website: https://www.loblaw.ca/en/responsibility/

# Market Transformation: Changing the landscape, one native plant at a time

In 2020, Loblaw Companies Limited, in partnership with WWF-Canada, became the first major retailer to sell Ontario native plants grown from source-identified and ethically collected seeds. The program expanded to Quebec in 2021. Together, we 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. This program enables anyone living in these areas to build healthier habitats that help migratory and local wildlife thrive. In this presentation, we will discuss the successes and challenges of this initiative and how it supports both Loblaw's and WWF-Canada's sustainability and conservation goals.



Dr. Kathy Dunster

MBCSLA, FCSLA

Urban Ecosystems Program

Department of Sustainable Agriculture + School of Horticulture
Kwantlen Polytechnic University | Richmond, BC

# **Training for Industry and Within Industry**

This first presentation looks at who is the horticulture industry, who uses the horticulture industry, what are the challenges to the industry, what sort of invasive species training is currently available, and what sort of training is critically needed as we continue to move towards a 1.5° C global climate warming in which many plant species are on the move northwards on this continent from the USA and Mexico. There is plenty of training and awareness-raising available across Canada at the regional level, and in the larger metropolitan regions. The challenge is to get the message out to the millions of people connected to plants and the horticulture industry. More problematic is how we can reach those connected to the horticultural sector that are not affiliated with CNLA/CSLA/CCIS. This vast country will require many cross-sectoral partnerships and collaborations within ecoregions.

#### Bio:

Dr. Kathy Dunster is a faculty member is the Department of Sustainable Agriculture and the School of Horticulture at Kwantlen Polytechnic University. Her PhD is in Biogeography and Plant Ecology from the University of Toronto, and she is a registered member of the BC Society of Landscape Architects and a Fellow of the Canadian Society of Landscape Architects. Her current research interests are the integration of food, health, and ecosystem well-being in urban environments and the everyday landscape including: good stewardship practices, grassroots social landscape design, living roof designs for all; local food justice and equity; urban food forests; learning landscapes; bioregional ethnobotany; community mapping and green mapping; and growing local fibre for natural fabrics in a circular economy being impacted by climate change.

<sup>\*</sup> Times are displayed in Eastern Standard Time



Jeanine West
Grower Technical Analyst, Landscape Ontario Horticultural Trades Association

# A nursery sector-led monitoring program for invasive species in Ontario

For years, Landscape Ontario and the Ontario Ministry of Agriculture, Food, and Rural Affairs (OMAFRA) have partnered to organize a scouting program for nursery producers in the major nursery production areas of Ontario. In 2023, with Ontario facing numerous serious invasive species threats (spotted lanternfly, hemlock woolly adelgid, oak wilt and others), there was a need to adjust the program to incorporate the surveillance of the surrounding landscapes of nurseries and to share that information on a regional scale. Funding from the Invasive Species Action Fund supported the additional scouting for these pests. This talk will summarize the industry-lead scouting program, challenges, successes, and results from 2023 scouting such as the deployment of spotted lanternfly traps, communicating optimal management windows to the green industry for box tree moth, the discovery of elm zigzag sawfly in the GTA and more.

#### Bio:

Dr. Jeanine West is a private consultant working closely with the ornamental horticulture sector. After completing a doctorate in plant pathology and physiology at the University of Waterloo, Canada, she gained practical experience in container and field nursery production as a manager. Jeanine's primary research focuses on finding sustainable management solutions for environmental concerns. In her current role as Grower Technical Analyst with Landscape Ontario, Jeanine collaborates with the Canadian Nursery & Landscape Association and the Canadian Food Inspection Agency to support growers in managing invasive pests. Dr. West also works with Flowers Canada Growers to help GCP facilities mitigate the risk of invasive pests at their facilities. Jeanine was involved in developing assurance system pest modules for various invasive pests, including Box Tree Moth and Strawberry Blossom Weevil.

Website: https://landscapeontario.com



Jaimie Schnell
Senior Advisor, Plant Health Strategy Section, Canadian Food Inspection Agency and Secretariat, Canadian Plant Health
Council

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# Promoting biosecurity resources and initiatives in greenhouses and beyond in Canada

Biosecurity is the collection of management practices implemented in greenhouses and other places of production to minimize or control the introduction, spread and release of plant pests and diseases. Since the inception of the Canadian Plant Health Council in 2018, biosecurity has been recognized and identified as an important priority area. As such the council operates a Biosecurity Working Group to explore ways that plant health partners can collaboratively promote the importance and encourage adoption of biosecurity measures across the supply chain. The Working Group has assessed the current status of biosecurity implementation in Canada, and is working on several initiatives to address identified barriers and gaps to support the greenhouse and other sectors in the implementation of robust biosecurity measures.

#### Bio:

Jaimie Schnell joined the Canadian Food Inspection Agency in 2009 as a risk assessor with the Plant and Biotechnology Risk Assessment Unit. Since 2015, she has worked with various teams to develop partnership approaches in plant health, including several years spent facilitating the development of the Plant and Animal Health Strategy, and more recently, contributing to its implementation, by supporting the work of the Canadian Plant Health Council.



Sarah Corcoran CEO, Plant Health Australia

## Partnerships - the key to biosecurity

For 23 years, PHA has been the trusted co-ordinator of the plant biosecurity system. In this role, we bring expertise, knowledge and stakeholders together to generate solutions that improve biosecurity outcomes and ensure the system is future-orientated and solutions-focused.

At PHA, 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. Our three strategic priorities clearly outline the focus areas needed to ensure a strong, smart and sustainable plant biosecurity system.

Partnerships are a cornerstone of PHA and we recognise the value of collaboration between our members, the supply chain and the science and technology community and we actively seek to develop traditional and non-traditional cohesive networks to drive transformation, improve outcomes and support the system.

But what do we mean when we say 'partnerships'? And what is the key to successful partnerships? Sarah will showcase how PHA reduces and manages biosecurity risk through a shared approach with the Australian Government, state and territory governments and plant industry.

### Bio:

Recognized in the league of great scientists, Sarah boasts multiple awards for her contribution to biosecurity and Australia's plant health status. From a young age, Sarah had a strong fascination for natural science. Her career has taken her far and wide, connecting with like-minded people making a difference. Her work to keep ahead of emerging risks, spans three Australian states and territories. Today, Sarah is still firm in her belief that plant health is the backbone of our existence. As CEO of Plant Health Australia - the trusted coordinator in Australia's biosecurity system and recognized internationally as a leader in plant health and biosecurity, she brings together expertise, knowledge and

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stakeholders to generate solutions that improve biosecurity outcomes to ensure the system is future-orientated and solutions-focused.

https://www.linkedin.com/in/sarah-corcoran-4291b039/

Website: https://www.planthealthaustralia.com.au/

Facebook: <a href="https://www.facebook.com/planthealthaustralia">https://www.facebook.com/planthealthaustralia</a> Instagram: <a href="https://www.instagram.com/planthealthaust/">https://www.instagram.com/planthealthaust/</a>

LinkedIn: <a href="https://www.linkedin.com/company/plant-health-aus/">https://www.linkedin.com/company/plant-health-aus/</a>

X: <a href="https://twitter.com/planthealthaust">https://twitter.com/planthealthaust</a>

## WHAT MORE IS NEEDED



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MBCSLA, FCSLA

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## Further Training and Education in the Horticulture Industry

Do we need further training + education in the horticulture industry? This second presentation follows from the first by asking some questions and using a case story to emphasize the need for further training and education, particularly in geographical areas of Canada that are gateways to the pathways for invasive plants and their pests. Do we have enough training already? How far is our reach? Who are we missing? Why do we need to connect more closely and collaborate more broadly? How can we reach out, communicate the stories, and educate Canadians about the existential threats presented by invasive species? We can't do this work alone and we need broad partnerships to achieve our goals.

#### Bio:

Dr. Kathy Dunster is a faculty member is the Department of Sustainable Agriculture and the School of Horticulture at Kwantlen Polytechnic University. Her PhD is in Biogeography and Plant Ecology from the University of Toronto, and she is a registered member of the BC Society of Landscape Architects and a Fellow of the Canadian Society of Landscape Architects. Her current research interests are the integration of food, health, and ecosystem well-being in urban environments and the everyday landscape including: good stewardship practices, grassroots social landscape design, living roof designs for all; local food justice and equity; urban food forests; learning landscapes; bioregional ethnobotany; community mapping and green mapping; and growing local fibre for natural fabrics in a circular economy being impacted by climate change.

## Further Training + Education in the Horticulture Industry

Dr. Kathy Dunster MBCSLA, FCSLA Urban Ecosystems Program Department of Sustainable Agriculture + School of Horticulture Kwantlen Polytechnic University | Richmond, BC

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Jennifer Hoglin Gooseberry Gardens

# Perspectives from Garden Retailers: Interactions with the Public Regarding Invasive Plant Species

Garden retailers are the horticultural industry's link to the public. Yet the staff at these businesses are often completely lacking in knowledge of invasive species. While live plant material from outside of the country is regulated by CFIA, seeds rarely are. Additionally, plant material that is shipped from other provinces has no regulatory government check at all. That means it is left to staff at garden centers to be able to identify if any of their seed or plant stock is considered invasive in their province. This is further complicated by the fact that a plant may not be invasive within the province where the stock is purchased, but may be very invasive in the province into which that stock is shipped to sell to the public. 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. When customers ask specifically for species that have recently been listed as prohibited noxious or noxious, an educated staff can assist the public on the reasons why and provide them with some good plant alternatives.

# Bio:

Jennifer Hoglin was originally trained as an environmental biologist and architectural technologist, but soon realized her real passion was gardening. So, she added a Master Gardener certification and permaculture design certificate to her education. She has been gardening in the Calgary area for over 20 years and working in the retail garden industry in Southern Alberta for 12 of those years. Currently, she is the owner of Gooseberry Gardens, a gardening website, blog, and landscape design company. In her spare time, she teaches for the Calgary Horticultural Society, including their Master Gardener Program.

<sup>\*</sup> Times are displayed in Eastern Standard Time