



The Canadian Coalition for Invasive Plant Regulation

Presents

Invasive Plant Regulations - Overview and Recommendations

Cathy Kavassalis
Lynne Patenaude
Oct. 25, 2023

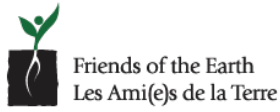


Tree of Heaven (*Ailanthus altissima*)
Credit Luis Fernández García CC BY-SA 2.1



CCIPR – Canadian Coalition for Invasive Plant Regulation

- Grass roots organization
- Initiated by Master Gardeners of Ontario
- Called upon by public to reduce the sales and spread of invasive plants available through the nursery and pet/aquarium trades



Thank you to
our Partners
&
Supporters



Mission & Objectives

To protect our economy, environment and public health from invasive plant species, we must:

- **Improve policies and legislation.**
- **Create a national invasive plant database.**
- **Require all new imports undergo risk assessments.**
- **Ban the sale and movement of high-risk invasive plant species.**
- **Require point-of-sale labelling.**
- **Provide continued and stable funding for public education.**
- **Incentivize adoption of a voluntary code of conduct**

A white 3D-rendered figure stands on a green background, holding a red flag with the words 'High Risk' written on it. The figure is also holding a large yellow flower with red veins in its center. To the right of the figure is a book cover for 'A Guide for Southern Ontario: Beautiful Non-Invasive Plants for your Garden' by CIPR. The book cover features a photo of a garden path and the CIPR logo.

A Guide for Southern Ontario

 **row me instead**

Beautiful Non-Invasive Plants for your Garden

Spring 2016 - 2nd Edition

Invasive Species

Canada has deemed this plant is an **Invasive Species – Harmful to the Environment**
Alternatives include: ...

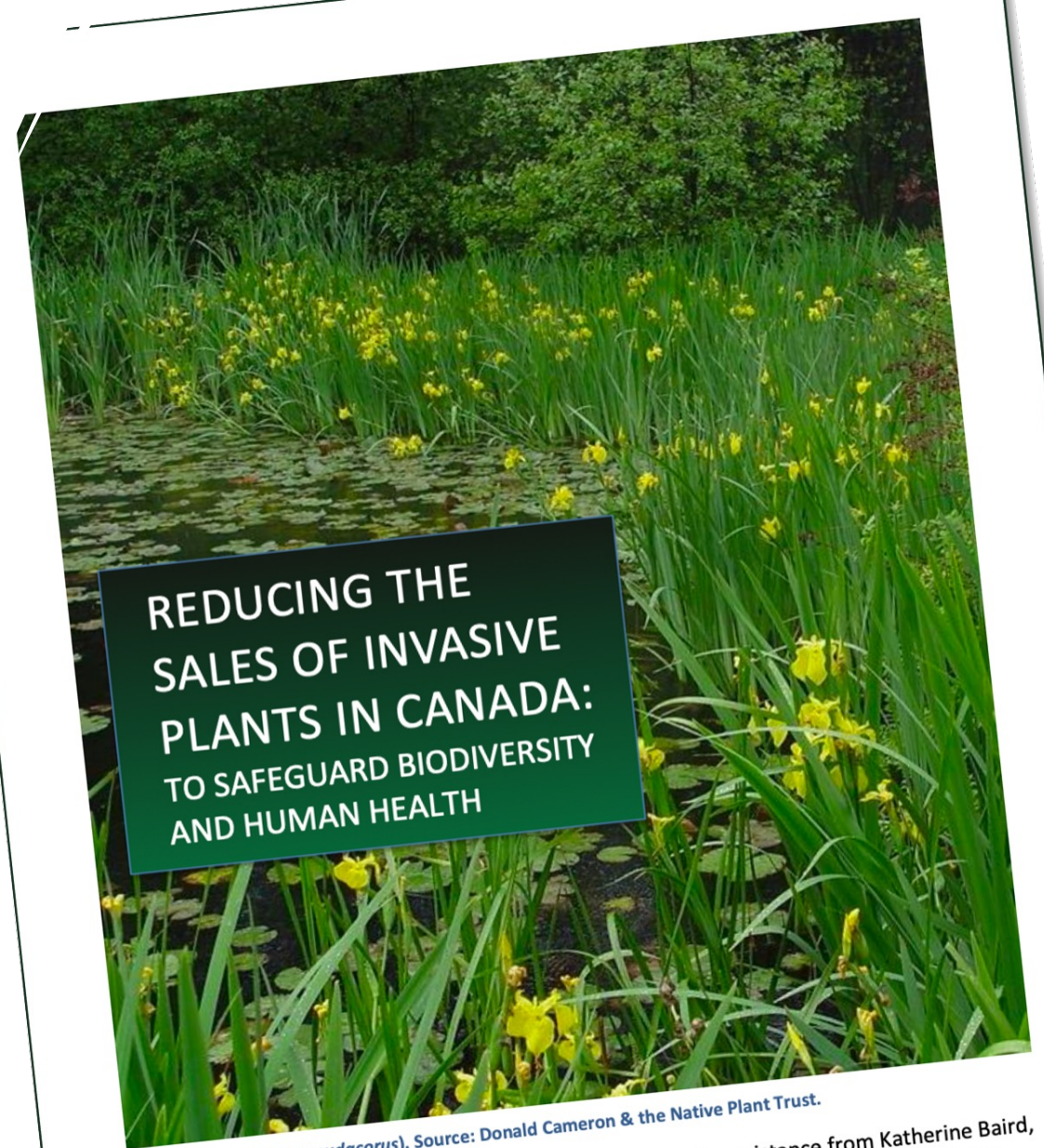
To help prevent the spread of this regulated plant into natural areas:

- Do not place this plant near wild or natural areas
- When possible, deadhead or remove seed debris
- Dispose of plant or plant debris responsibly
- Do not share seeds, seedlings or cuttings with others gardeners

Urgent action is needed

Key learnings

- The **ornamental plant trade is the largest pathway** for the introduction of invasive plants
- As more invasive plants are sold and spread, damages and costs grow
- Canada, the provinces, and territories do not have the policies, legislative tools, or resource capacity to address the problem
- Invasive plants pose a growing threat to our life support systems from food security to biodiversity to public health



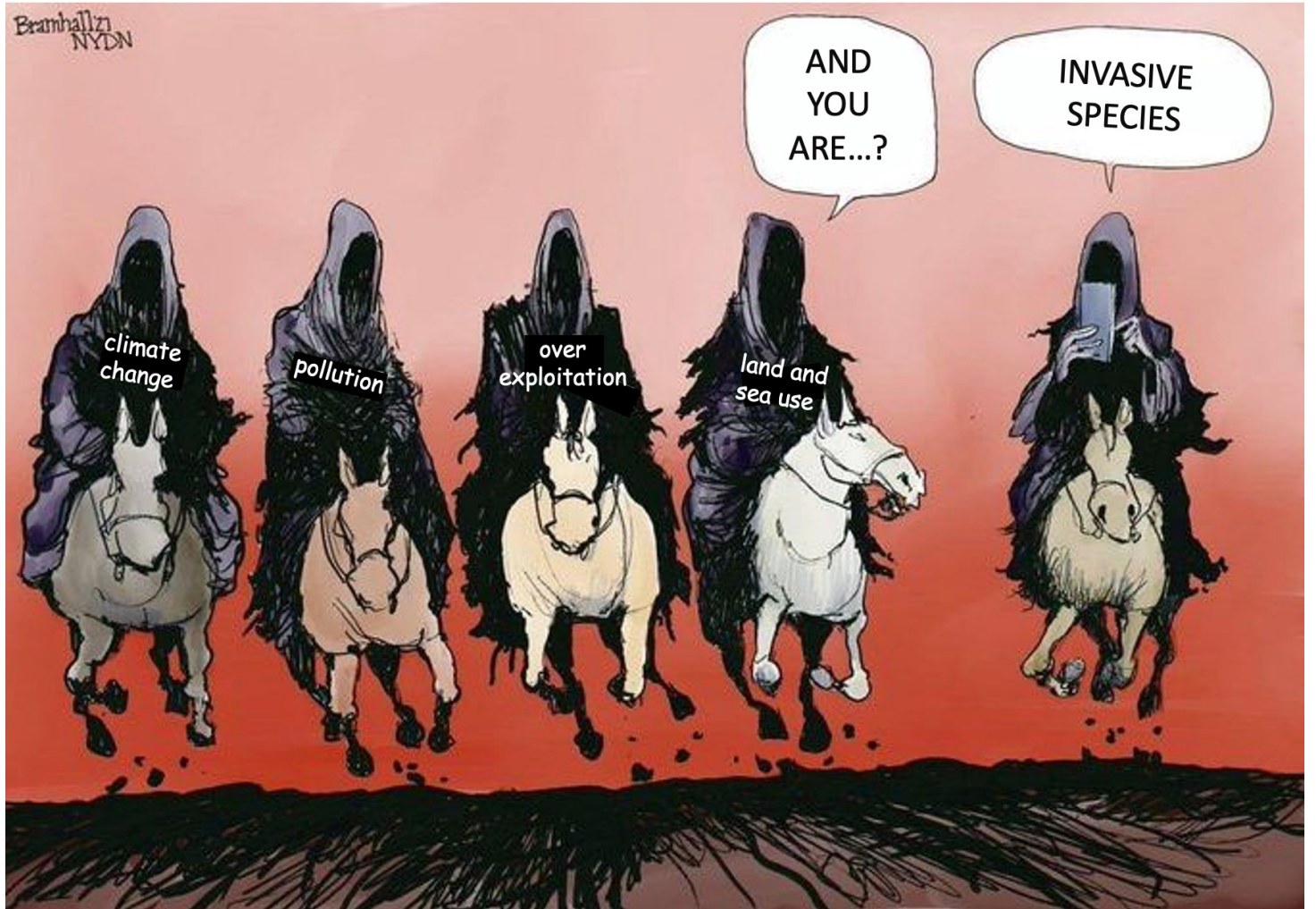
**REDUCING THE
SALES OF INVASIVE
PLANTS IN CANADA:
TO SAFEGUARD BIODIVERSITY
AND HUMAN HEALTH**

Yellow flag iris (*Iris pseudacorus*). Source: Donald Cameron & the Native Plant Trust.

Prepared by Cathy Kavassalis and Claudette Sims with editorial assistance from Katherine Baird, Candi Jeronimo, Lynne Patenaude, Renee Sandelowsky, and Freyja Whitten - May 10, 2023.
On behalf of the Canadian Coalition for Invasive Plant Regulation - [CCIIPR.ca](https://www.ccipr.ca)



Drivers of the biodiversity apocalypse



The five horseman. Adapted from Bill Bramhall/NYDN

Invasive Alien Species
Pose Major Global
Threats to Nature,
Economies, Food
Security and Human
Health (IPBES, 2023)

“Invasive species have become one of the five horsemen of the biodiversity apocalypse that is riding down harder and faster upon the world”
(Inger Andersen, UNEP)

Secretariat for the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), “Invasive Alien Species Assessment,” 04-09-23.

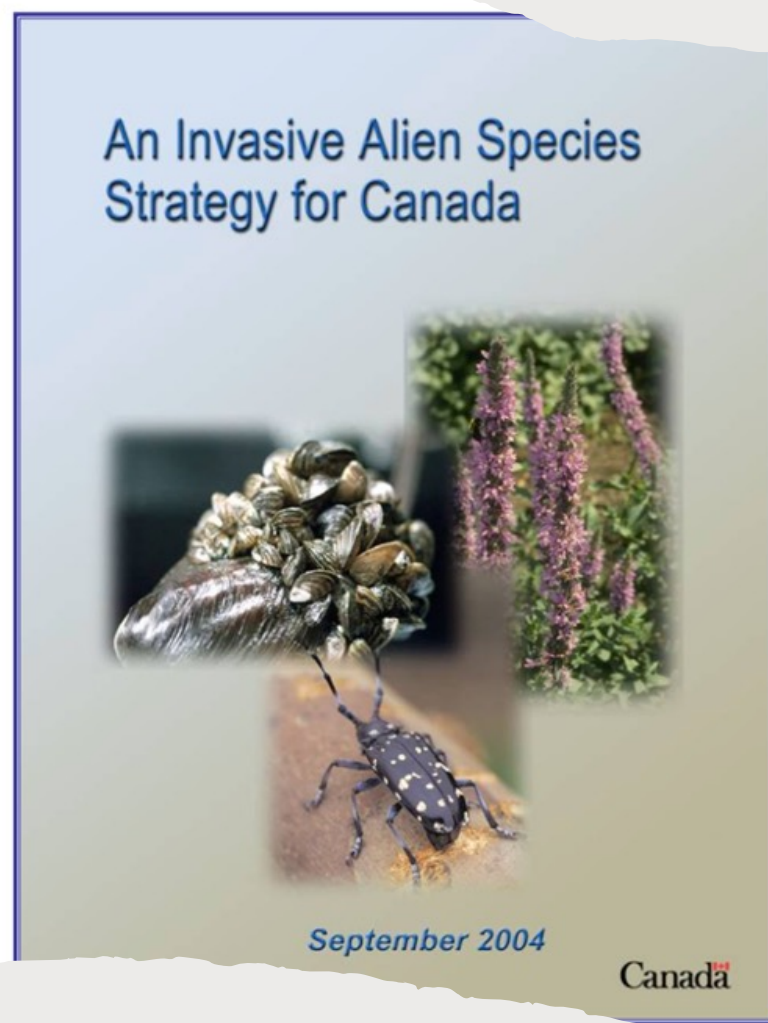
Kumming-
Montreal Global
Biodiversity
Framework (2022)



To protect
biodiversity,
we must

Reduce the rates of
introduction and
establishment of non-native
invasive species by at least 50
percent, by 2030.

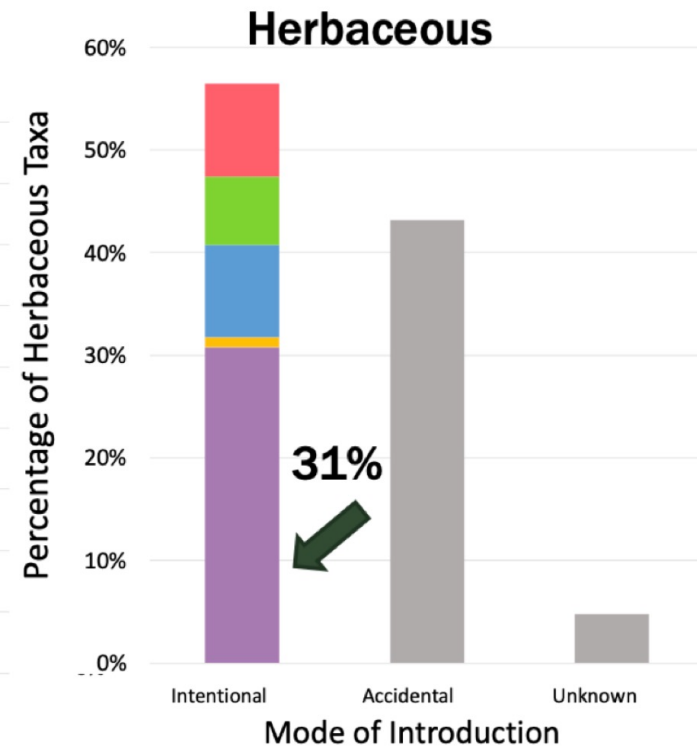
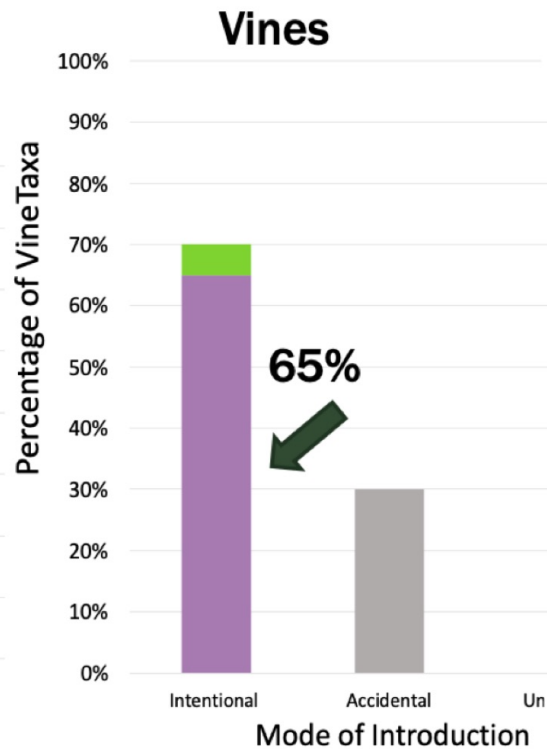
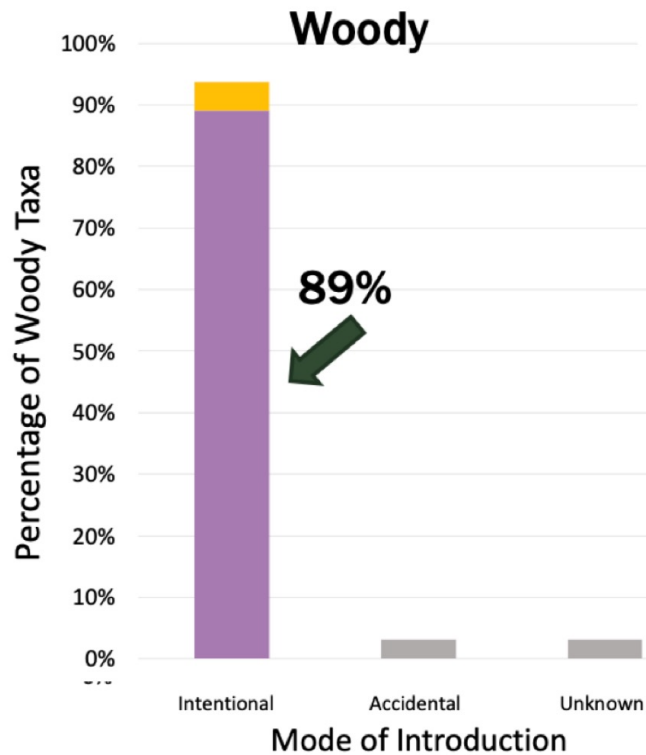
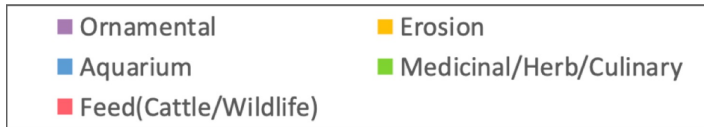
How are we going to
achieve this goal?



Canada's strategy to protect biodiversity from invasive species

Identify Pathways and Close Them

The ornamental trade is the largest source of invasive plants worldwide*

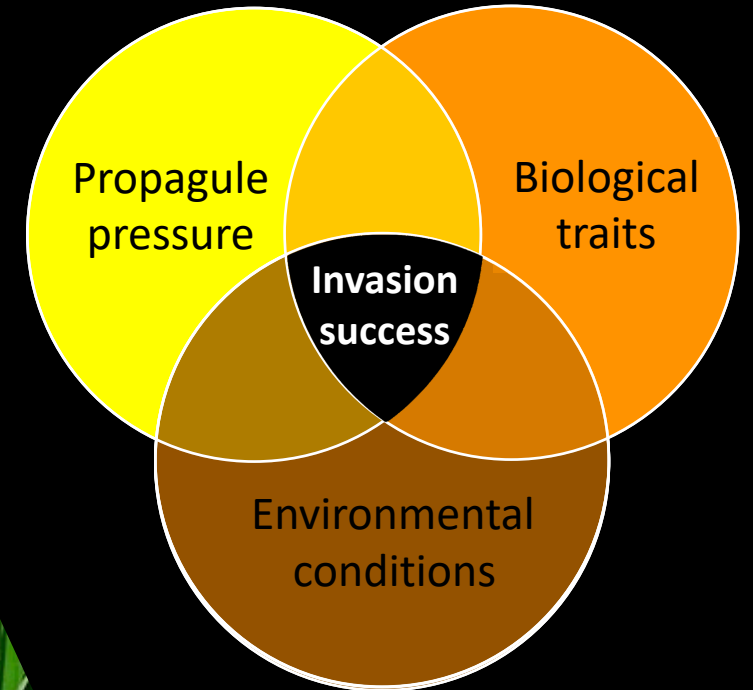


Origin of Invasive Plants in Midwestern North America – Credit: Culley, T., et al. 2021.

*Reichard and White 2001; Dehnen-Schmutz et al. 2007; Hulme et al. 2018; van Kleunen et al. 2018

It is a numbers game - plant introductions increase invasion success

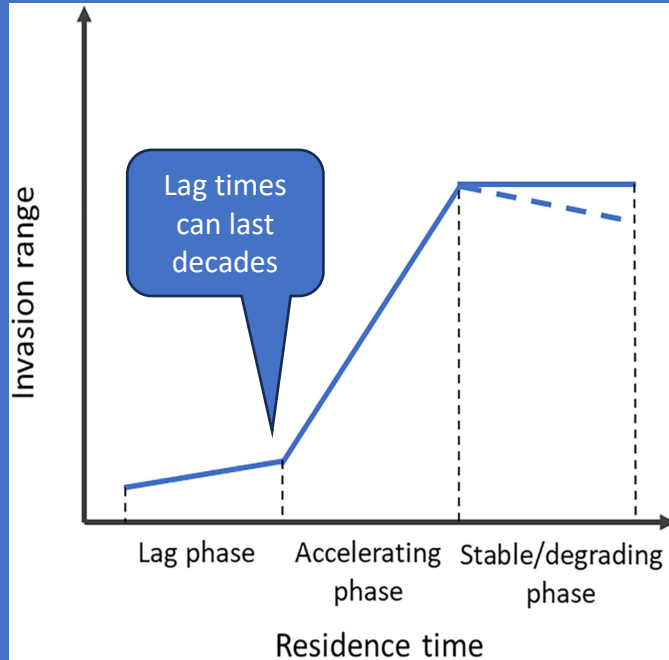
Each time a vendor
sells an invasive plant,
chances for invasion success
increases.
(Propagule Pressure)



How propagule pressure, biotic characteristics and abiotic conditions interact to drive invasion success

adapted from: Catford, J. A. , Jansson, R. , & Nilsson, C. (2009). Reducing redundancy in invasion ecology by integrating hypotheses into a single theoretical framework. *Diversity and Distributions*, 15, 22–40.

“We should control the population sizes of these species before they reach a tipping point” (Ming Ni, 2022)



Ni, Ming. (2022). Herbarium records reveal multiple phases in the relationship between minimum residence time and invasion ranges of alien plant species. *Plants, People, Planet*.

Classical Invasion Curve

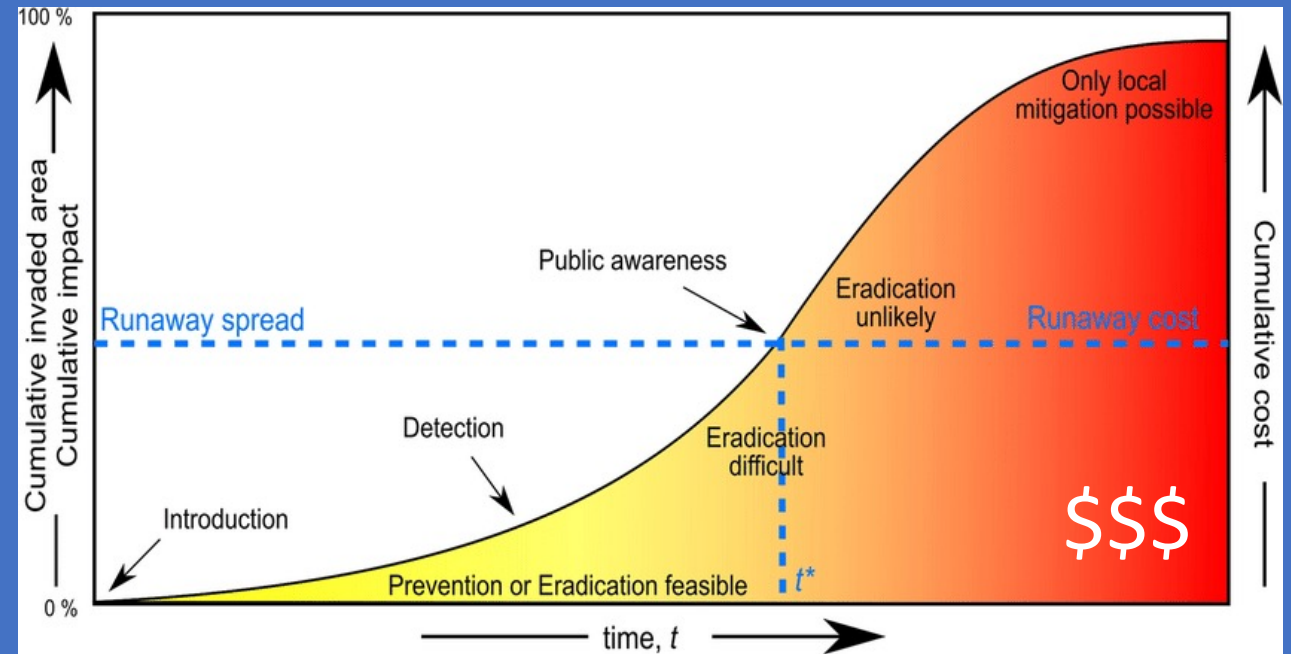


Figure adapted from *Invasive Plants and Animals Policy Framework*, Victorian Government (2010) in Ahmed, et al. (2022). *Managing biological invasions: the cost of inaction*. *Biological Invasions*. 24.



Costs to Agriculture

2.2\$ billion annually

Reducing the impact on agriculture has been the focus of federal regulatory action

(CFIA, 2008)



Costs are *Massive and Under-reported* (Haubrock, 2022)

Under-reported costs include loss of biodiversity

Loss of biodiversity



Species
At Risk

Red
Mulberry



Acadian
flycatcher



Slender
bush clover



Spoon
leaved
moss

Legal jurisdiction for regulating
invasive plants is unclear

Primary federal players:

ECCC

- Biodiversity mandate
- Manages– *Species at Risk*
- Manages *CEPA* – assesses risks to biodiversity
- Regulates harmful organisms, but not invasive plants

DFO

- *Aquatic Invasive Species Regulations* does not regulate invasive aquatic plants at present

CFIA

- Regulates invasive plants that impact plant health, but does not have a clear mandate to protect biodiversity, waterways or human health under the *Plant Protection Act* (PPA) or the *Seeds Act*

Invasive ornamental plants flow through the legislative gaps

- The CFIA categorizes very few ornamental IAPs as 'pests'
- DFO is unclear if it is responsible for regulating aquatic invasive freshwater plants (Auditor General 2019)
- ECCC hasn't considered regulating invasive plants under CEPA



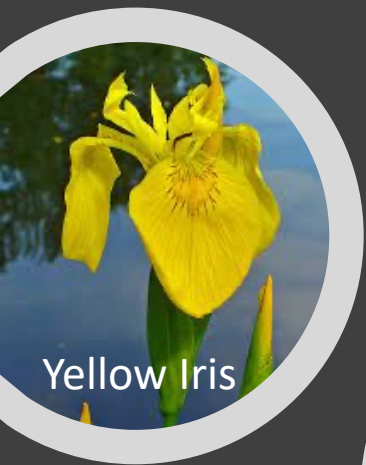
Floating heart



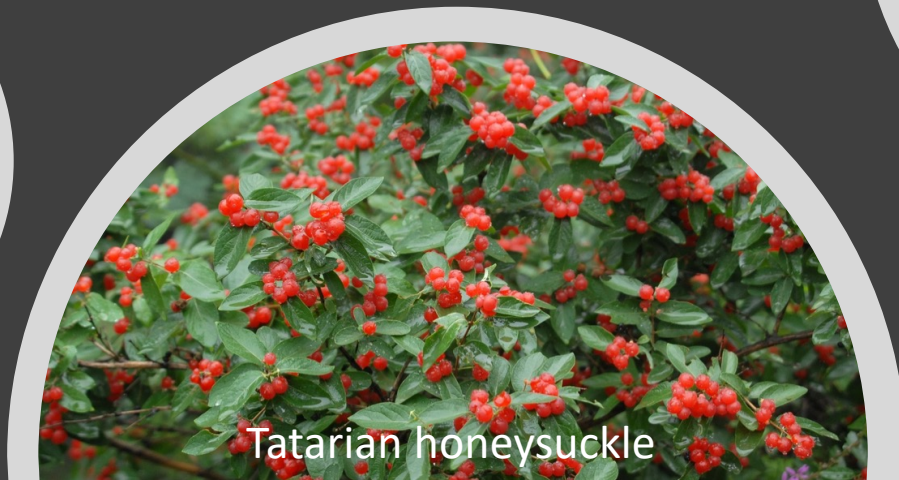
Multiflora rose



Parrot's feather



Yellow Iris



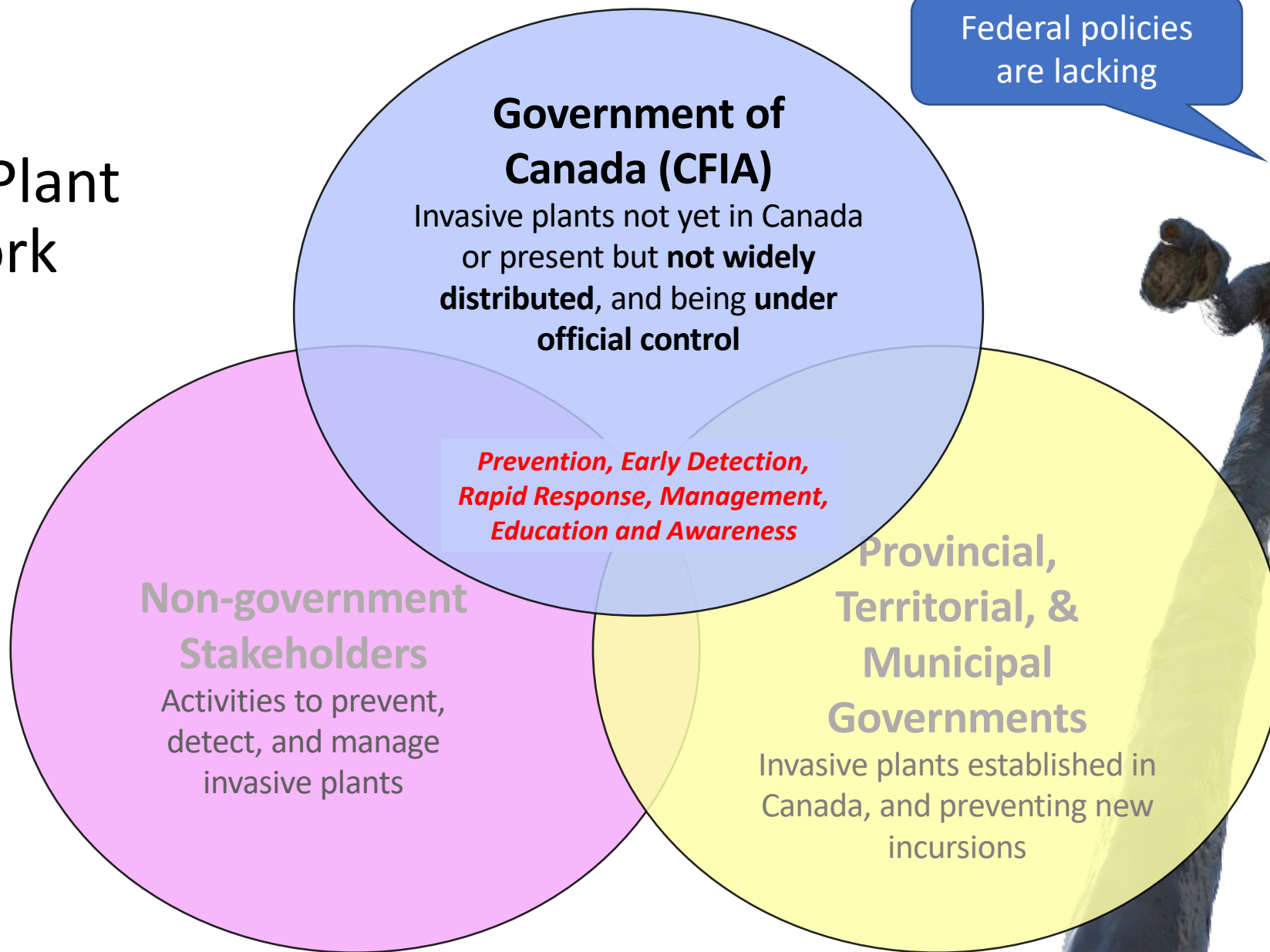
Tatarian honeysuckle



15
Tree of heaven

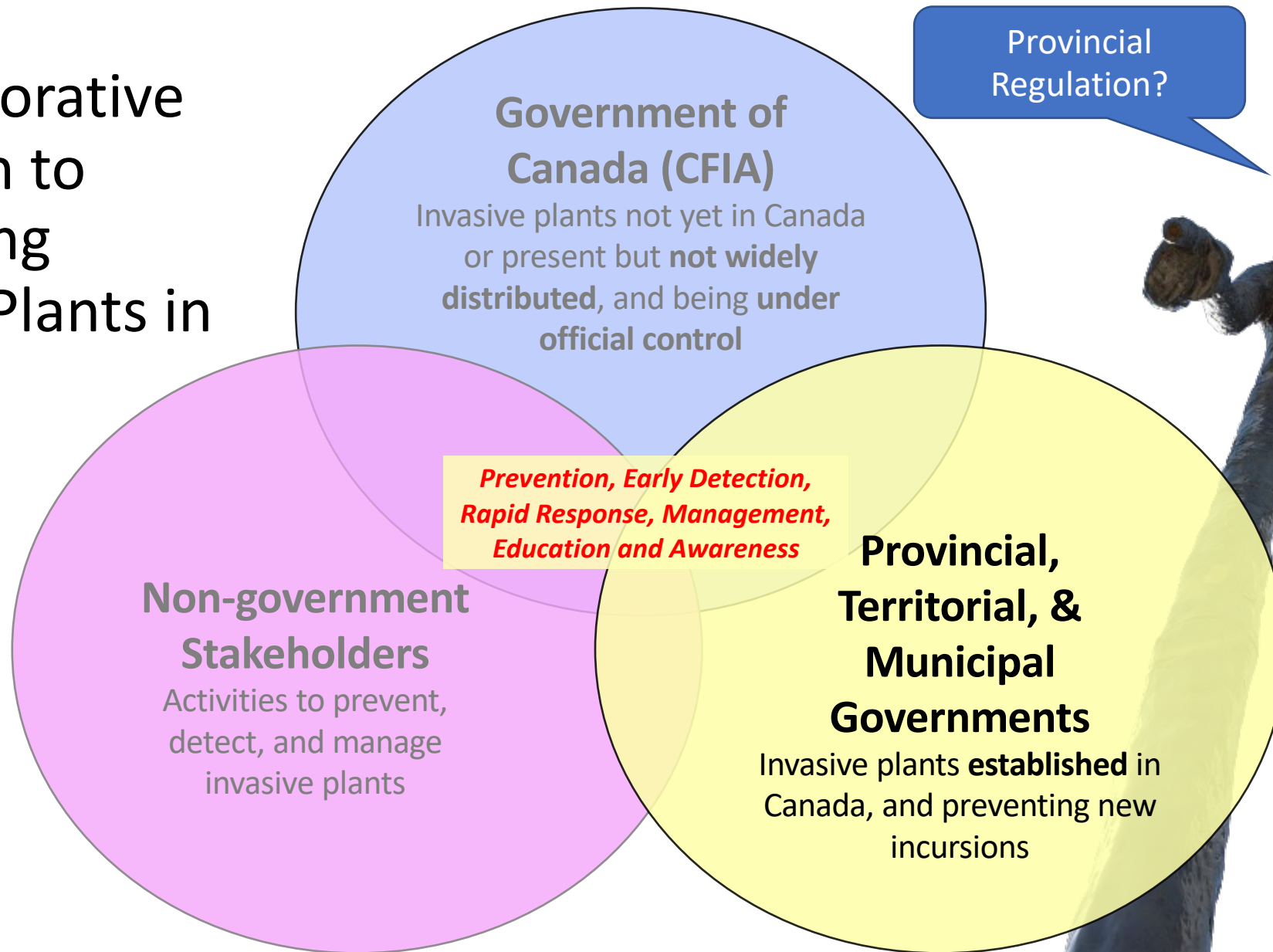
Canadian Invasive Plant Framework

developed by CFIA in 2011



Source: CFIA. 2011.
Canadian Invasive Plant Framework A Collaborative Approach to Addressing Invasive Plants in Canada

“A Collaborative Approach to Addressing Invasive Plants in Canada”



Source: CFIA. 2011.
Canadian Invasive Plant Framework A Collaborative Approach to Addressing Invasive Plants in Canada



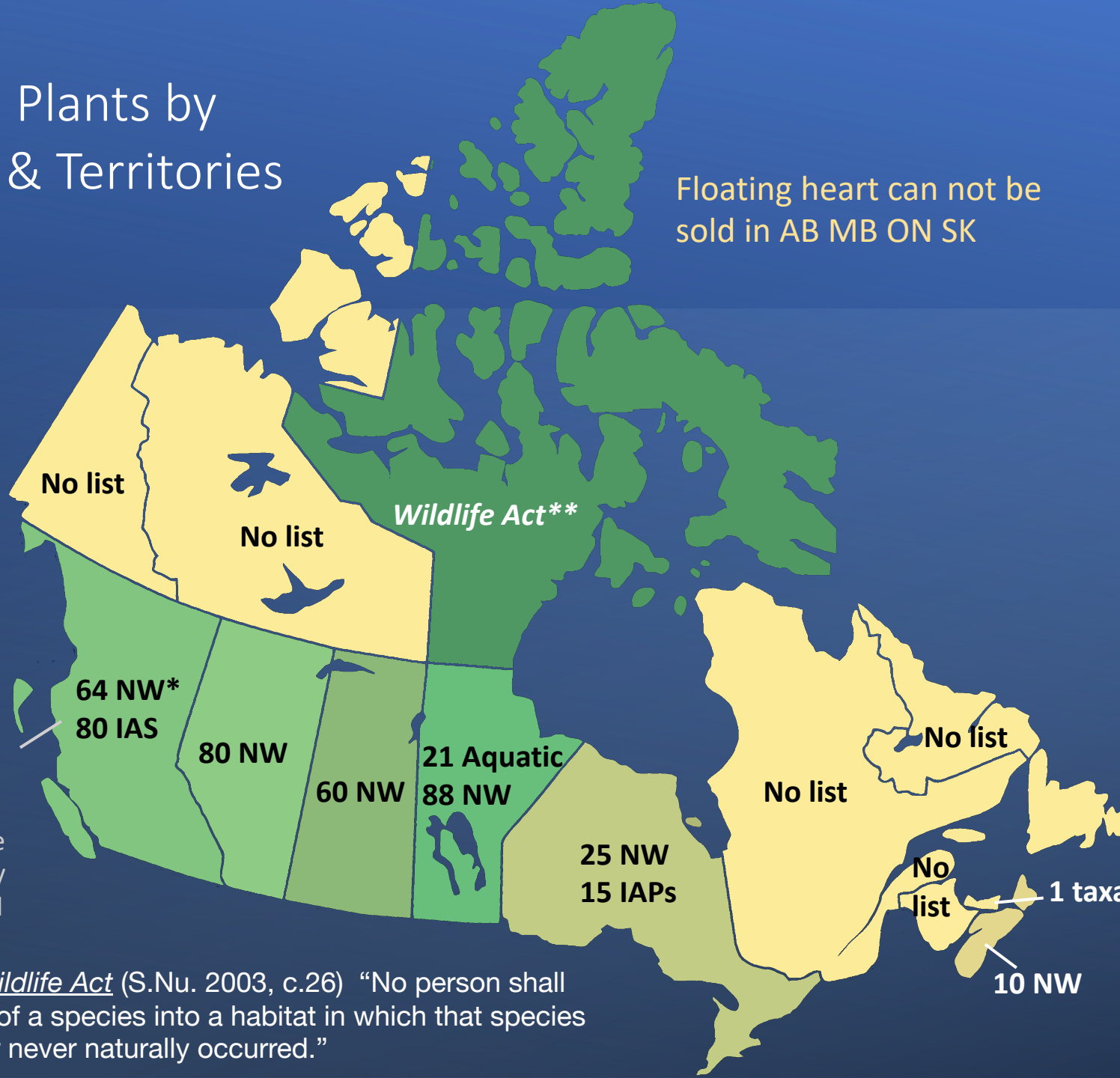
Floating heart
Nymphoides peltata
was assessed by CFIA
and not regulated

- “The overall risk associated with yellow floating heart is calculated to be “HIGH”, . . . it is recommended that the importation and sale of yellow floating heart in Canada be prohibited.” (CFIA, 2008). **Sales were not prohibited.**
- DFO assessed it as HIGH risk of becoming a MAJOR INVADER in Canada (Gantz et al, 2014).
- Under the *AIS Regulation* it is prohibited for any person to introduce a non-indigenous aquatic species into a particular region or body of water frequented by fish. **This does not prohibit sales.**

Image: Yellow floating heart, an invasive plant, is posing a problem at Little Albro Lake in Dartmouth, N.S. (Anjuli Patil/CBC)

Regulated Plants by Provinces & Territories

Floating heart can not be sold in AB MB ON SK



5 have no lists

6 Noxious Weeds Acts

- native/non-native

1 Aquatic Species Act

2 IAS legislation

PE with 1 taxa

NU *Wildlife Act*

*several plants on both lists and some regionally regulated

Problems: lack of knowledge and information, uncertainty about distribution and impacts, lack of clear legal jurisdiction, lack of resources.

** Nunavut, *The Wildlife Act* (S.Nu. 2003, c.26) "No person shall release a member of a species into a habitat in which that species does not belong or never naturally occurred."

Nova Scotia *Agricultural Weed Control Act*

Common name	Scientific name	Area
Velvetleaf	<i>Abutilon theophrasti</i>	
Wild parsley; wild chervil	<i>Anthriscus sylvestris</i>	Ornamental 'Ravens wing'
Common milkweed	<i>Asclepias syriaca</i>	Native
Field bindweed	<i>Convolvulus arvensis</i>	
Yellow nutsedge	<i>Cyperus esculentus</i>	
Thorn-apples; angel's trumpet	<i>Datura</i> spp.	Ornamental species
Leafy spurge	<i>Euphorbia esula</i>	
Tansy ragwort	<i>Jacobaea vulgaris</i>	
White campion	<i>Silene latifolia</i>	
Marsh woundwort	<i>Stachys palustris</i>	Ornamental water gardens



NS *Weed Control Act* addresses threats to agriculture not biodiversity or health

An inspector can order the removal of listed weeds if they are likely to spread to cultivated or pastureland

B.C Regulations

Weed Control Act WEED CONTROL REGULATION B.C. Reg. 66/85

Protects agricultural crops and livestock from noxious weeds

- 38 Provincial Weeds
- 27 Regional Weeds

SPHERES OF CONCURRENT JURISDICTION — ENVIRONMENT AND WILDLIFE REGULATION B.C. Reg. 144/2004

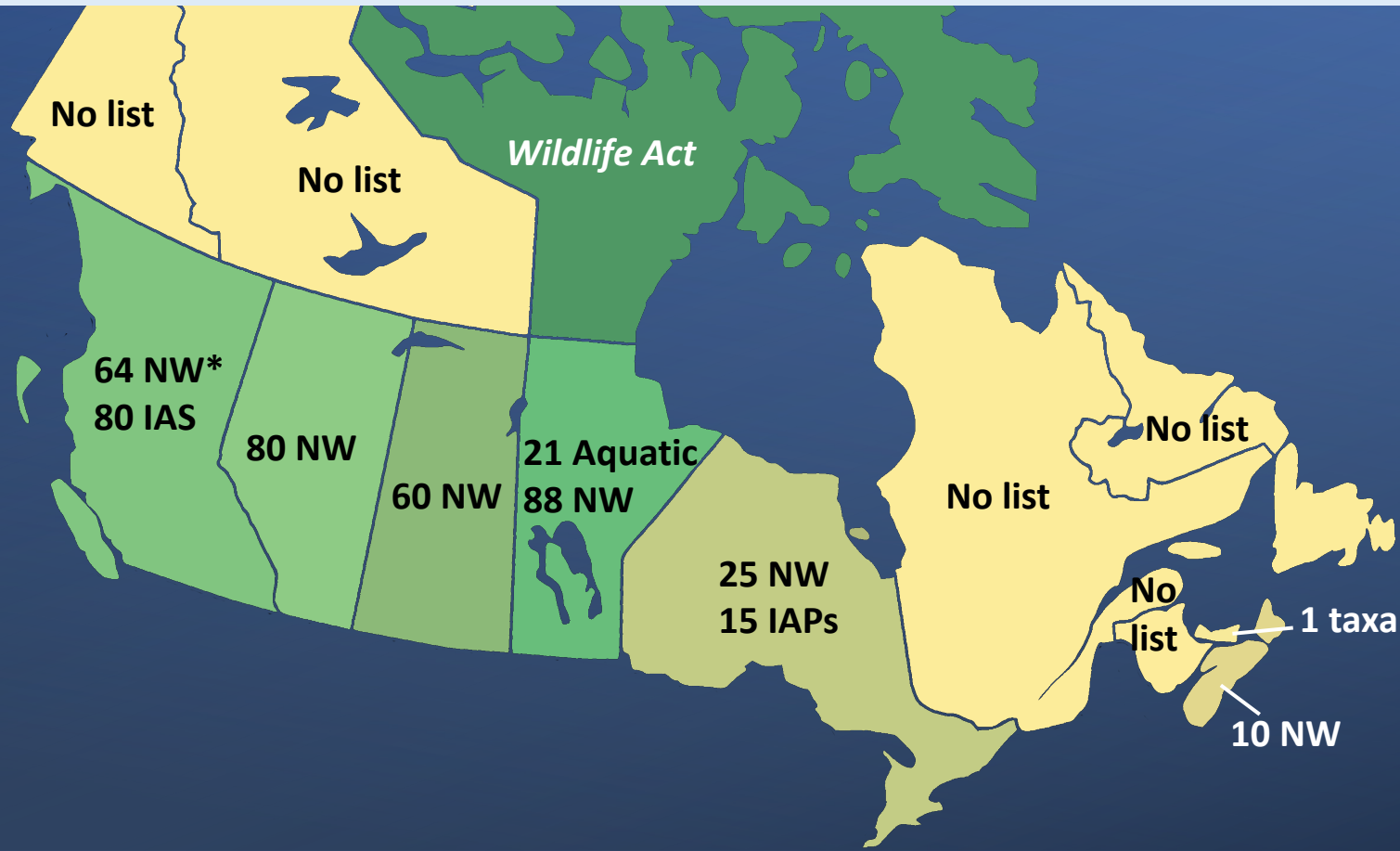
Identifies IAS that may be regulated by municipalities

- IAS listed in the Schedule include ***Plants, Terrestrial Vascular Plants, Fresh Water/Riparian Vascular Plant***

It is unclear how plants are distinct from vascular plants or why only common names are listed in parts of the Schedule— e.g., Baby's breath

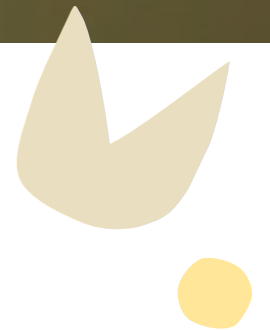
Invasive plants don't respect borders.

Federal leadership is required for the public good, clarity, fairness and equity.





21st century Invasive plant legislation
is needed to address the biodiversity crisis

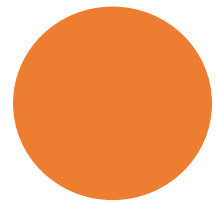


Around the globe, legislation has been developed to reduce the sales of invasive ornamental plants

Maine targets the horticultural industry and prohibits the sale of 63 terrestrial invasive plants and 11 aquatic plants

Invasive Aquatic Plants listed by Maine law as imminent threats to Maine waters – 5 are *HERE!*

Brazilian elodea	Eurasian water-milfoil
Fanwort	Variable water-milfoil
Hydrilla	Water chestnut
European frogbit	Yellow floating heart
European naiad	Curly leaf pondweed
Parrot feather	

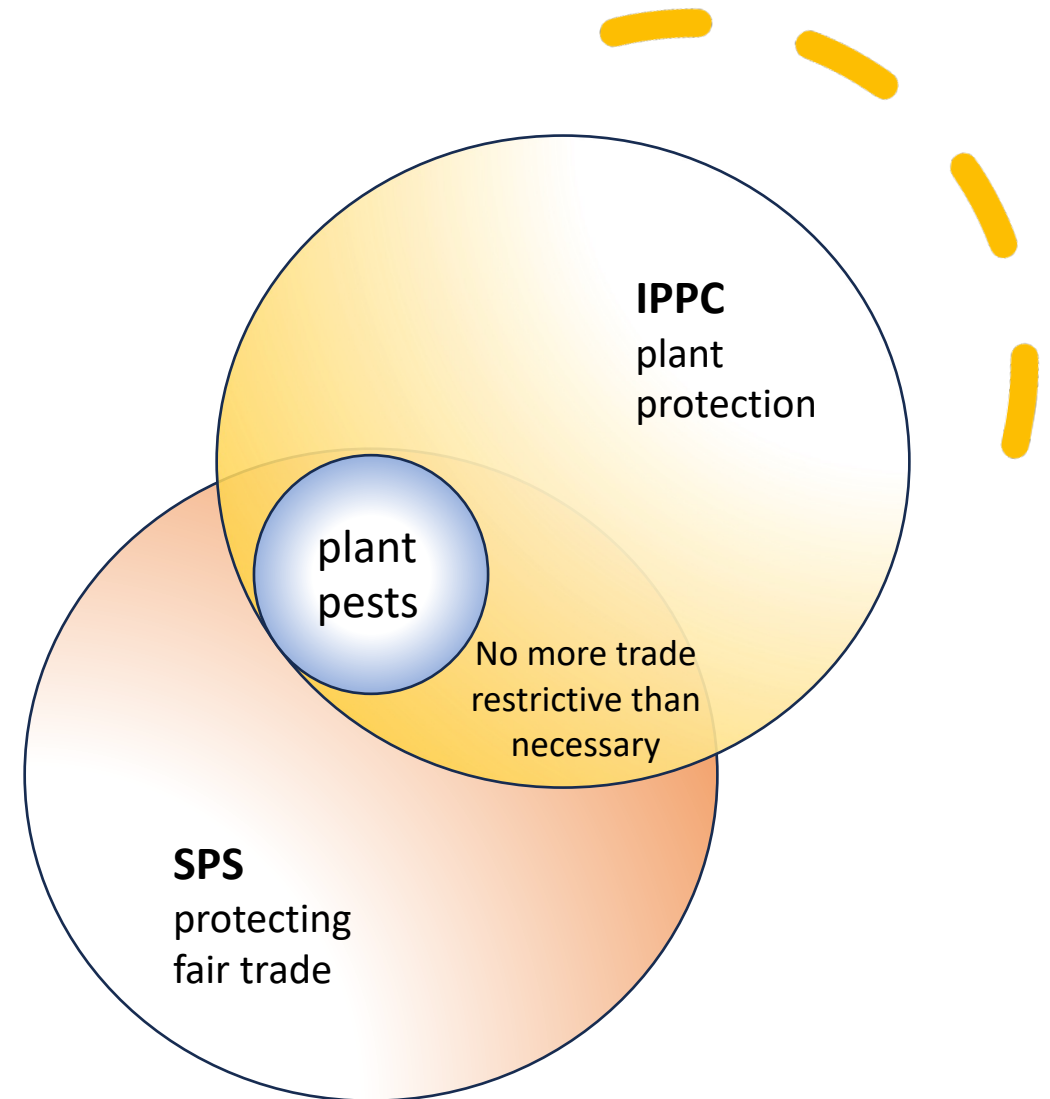


Invasive Terrestrial Plants Prohibited from Sale in Maine

- Garlic Mustard (*Alliaria petiolata*)
- Amur Maple (*Acer ginnala*)
- Bishop's Weed (*Aegopodium podagraria*)
- Porcelain Berry (*Ampelopsis glandulosa*)
- Japanese Barberry (*Berberis thunbergii*)
- Asiatic Bittersweet (*Celastrus orbiculatus*)
- Tree of Heaven (*Ailanthus altissima*)
- False Indigo Bush (*Amorpha fruticosa*)
- Chinese Bindiweed (*Fallopia badschuanica*)
- Autumn Olive (*Elaeagnus umbellata*)
- Winged Euonymus (*Euonymus alatus*)
- Common Mugwort (*Artemisia vulgaris*)
- Common Barberry (*Berberis vulgaris*)
- Japanese Stilt Grass (*Microstegium vimineum*)
- Glossy Buckthorn (*Fraxinus alnus*)
- Cypress Spurge (*Euphorbia cyparissias*)
- Common Privet (*Ligustrum vulgare*)
- Pawlownia (*Paulownia tomentosa*)

CANADA PROTECTS TRADE OF INVASIVE ORNAMENTAL PLANTS

Canada is failing to meet its obligations under *Convention on Biological Diversity* (CBD)



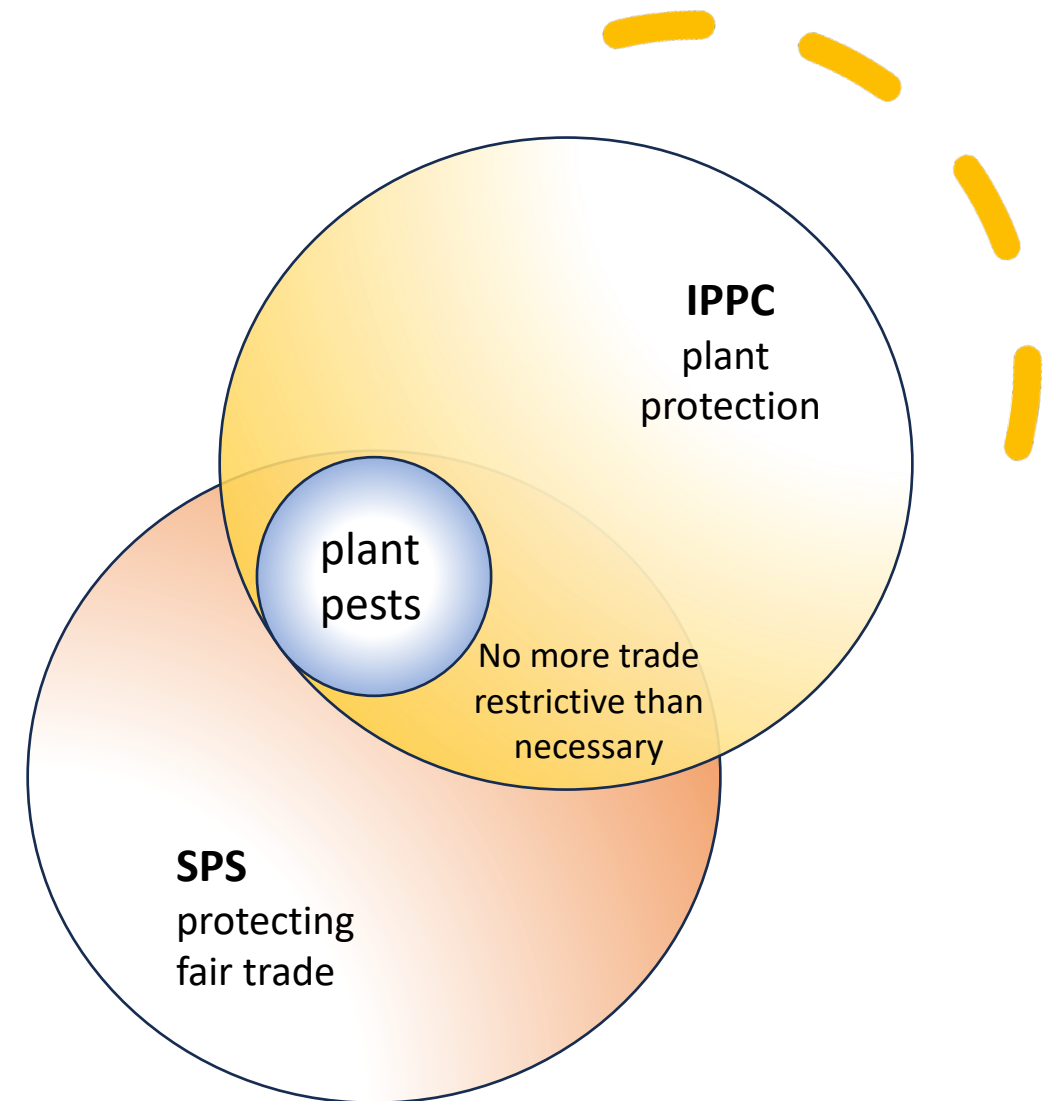
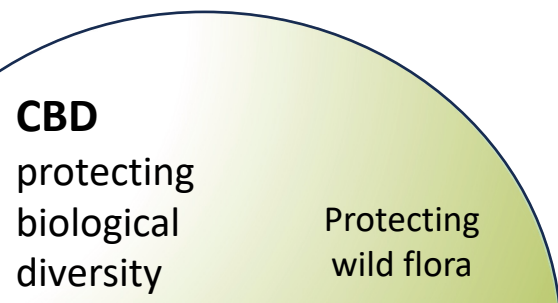
CBD
protecting
biological
diversity

Overlapping mandates of the IPPC, WTO-SPS, CBD and Cartagena Protocol (CP) (source: Breithaupt & Nowell, 2006: slide 11) Adapted from Smith, Richard & Gudbjorg, Inga & Aradottir, Alastair & Taylor, Christopher & Lyal, Chris. (2008). Invasive Species Management – What Taxonomic Support Is Needed.

TO MEET INTERNATIONAL OBLIGATIONS UNDER CBD

Canada must

- Align the IPPC, SPS with the CBD
- The IPPC and Standards and Trade Development Facility called upon signatories to the IPPC and SPS to modernize their policies and legislation to address invasive alien species (2013)
 - Assess **environmental concerns in economic terms** (new ISPM guidelines)
 - Properly interpret the term “**widespread**”
 - Draft legislation to explicitly **protect biodiversity, waterways, and public health**



Overlapping mandates of the IPPC, WTO-SPS, CBD and Cartagena Protocol (CP) (source: Breithaupt & Nowell, 2006: slide 11) Adapted from Smith, Richard & Gudbjorg, Inga & Aradottir, Alastair & Taylor, Christopher & Lyal, Chris. (2008). Invasive Species Management – What Taxonomic Support Is Needed.

Models for change:

- Recognize nature has value and **embed nature valuation** into decision-making (IPBES)
- Enhance or draft new **biosecurity** laws and policies
 - The *Plant Protection Act* could be revised to more explicitly **protect the biodiversity and health**
 - The *Canadian Environmental Protection Act* could be expanded to include invasive plants as toxic substances
 - DFO could include aquatic plants on the federally prohibited Invasive Aquatic Species list
 - Canada should create an *Invasive Alien Species Regulation* as the EU has done
 - Canada should utilize features of the *Biosecurity Acts* developed in Australia or New Zealand

STDF (Standards and Trade Development Facility). (2013) International Trade and Invasive Alien Species. World Trade Organization. FAO, OIE, WHO, WTO, World Bank Group.
IPPC. 2005. Report of the Seventh meeting of the Interim Commission on Phytosanitary Measures. FAO.
Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. (IPBES) (2022. "Values Assessment - Decisions Based on Narrow Set of Market Values of Nature Underpin the Global Biodiversity Crisis"



EU Regulation on Invasive Alien Species

1143/2014

- To prevent, minimize and mitigate the adverse impacts posed by invasive species on native biodiversity and ecosystem services
- To limit social and economic damage
- **IAS of Union Concern can not be sold, transported, grown, or cultivated . . .**

Regulation applies to:

All invasive alien species (IAS)*

- Introduced outside natural range
- Live specimens that may reproduce
- Adversely impact biodiversity and related ecosystem services

Listing criteria:

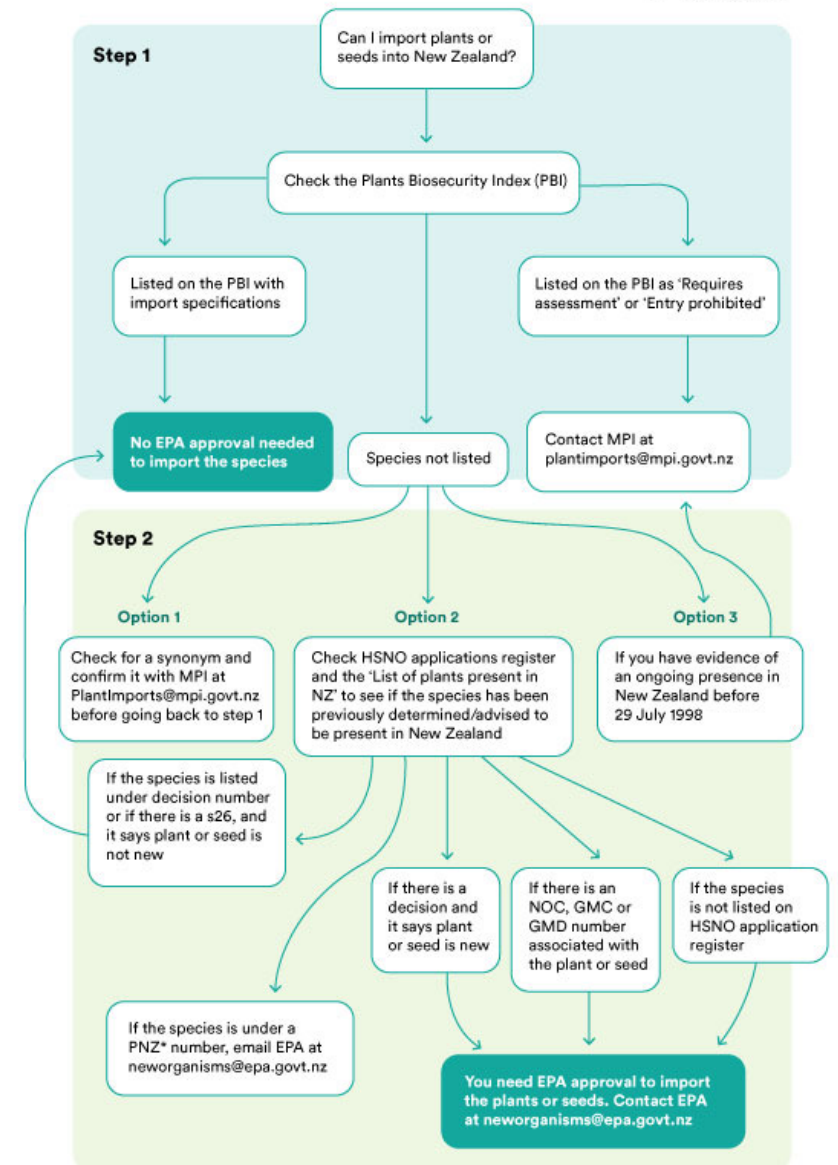
- Alien to the Union (exc. outer regions)
- Capable of establishing & spreading in >2 Member States or 1 marine region
- Adverse impacts to biodiversity & ecosystem services
- Risk Assessment shows concerted action at Union level required
- Inclusion on the *Union List* will effectively prevent, minimise or mitigate impacts

List of IAS of Union concern

All new nursery introductions should require risk assessment

- A database of approved plant species.
- Cost recovery fee for risk assessments of new organisms.
- All new plants:
 - must not establish a self-sustaining population (taking into account ease of eradication).
 - must not displace or reduce a valued species.
 - must not cause deterioration of natural habitats.
 - must not be a disease-causing or be a vector for human, plant or animal disease.
 - must not have any adverse effects on human health and safety or the environment.

New Zealand's *Biosecurity Act*



APP = application
NOC = New organism containment
GMC = Genetic Modification Containment
GMO = Genetic Modification Development

Present in New Zealand advice does not constitute a statutory determination and you are still entitled to pursue a formal determination by the EPA if you wish

Risk Assessments

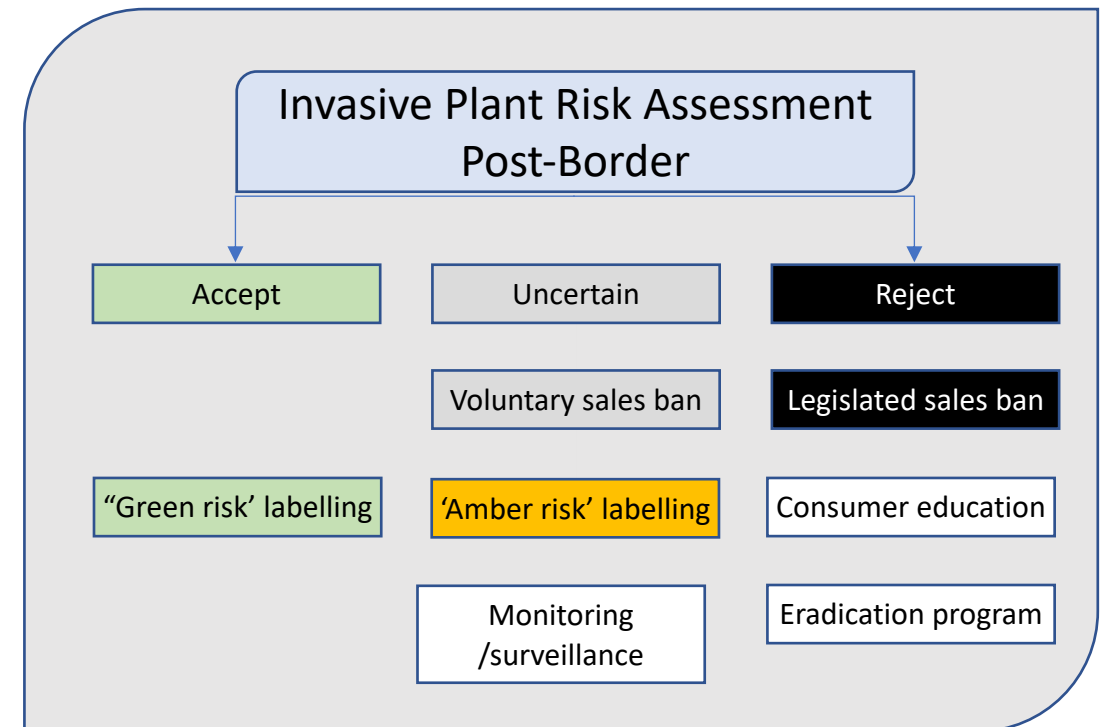
Pre-Border

- All new plant species **should be assessed before import approval**

Post-Border

- Stop the sale of high-risk plants
- **Label plants with uncertain risk**

Integrating IAS policies across ornamental hort. supply-chains

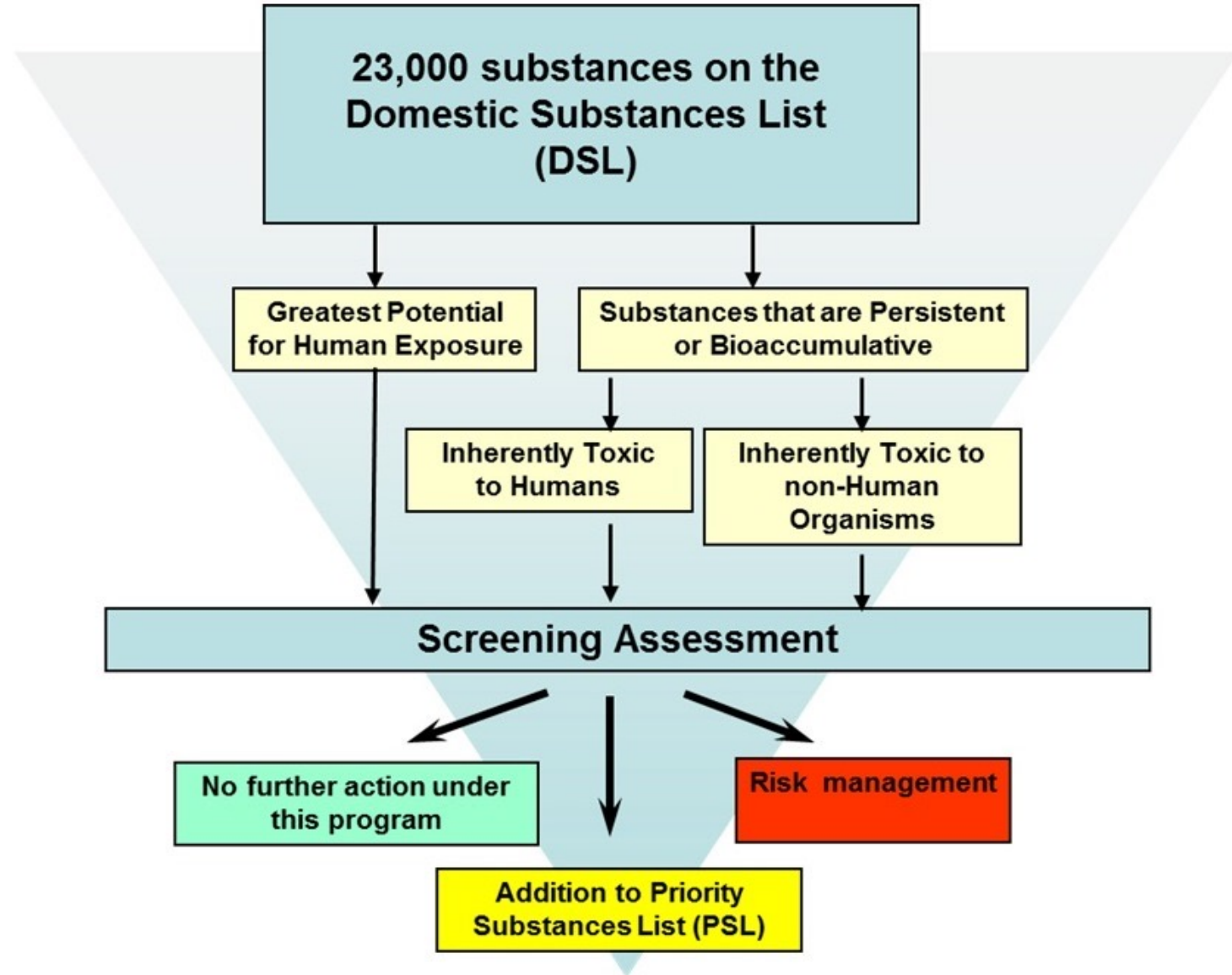


Adapted from Hulme et al (2017). Bio-Protection Research Centre, New Zealand

*From a list of high-priority potential sleeper species in the northeastern U.S from Regional Invasive Species & Climate Change (RISCC) (O'Uhuru, 2022).

ECDC model for prioritization & assessment

- All new substances not on the Existing Substances List are evaluated
- 23,000 existing substances required assessment under the *Canadian Environmental Protection Act (CEPA)*
- By 2006, 4,363 priorities identified
- All risk assessment and management information is available in a database



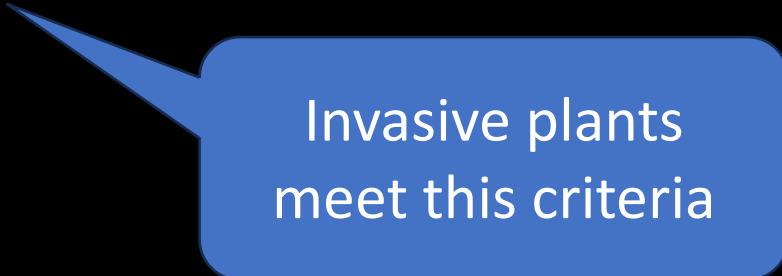


Should invasive plants be regulated under CEPA?



Toxic substances

- (a)** have or may have an immediate or long-term harmful effect on the environment or its biological diversity;
- (b)** constitute or may constitute a danger to the environment on which life depends; or
- (c)** constitute or may constitute a danger in Canada to human life or health.



Invasive plants
meet this criteria

1379 is a small number
compared to 23 000!

- There are 5 324 known species of vascular plants in Canada
- 1379 are non-native*
- These should be evaluated
- A database created – transparent and accessible



*Canadian Endangered Species Conservation Council. 2022. *Wild Species 2020: The General Status of Species in Canada*.

A National IAS Database is essential

- taxonomic information
- the history and ecology of invasion (e.g., pathways for introduction, distribution)
- the biological characteristics
- potential Impacts
 - an assessment of impacts to the market economy
 - an assessment of biodiversity impacts at the ecosystem, species, and genetic level
 - an assessment of public health and socio-cultural impacts
 - consideration of impacts to keystone species and endangered species or habitats,
- the potential effects of future climate scenarios on distribution and impacts
- management options

Risk-assessments underpin decision-making by land managers, policy makers, industry leaders, and consumers



CFIA lists *Weed Risk Documents*, but assessments (WRAs) must be requested

- The CFIA Risk Assessment Process is not transparent or easily accessible
- Purple loosestrife (*Lythrum salicaria*) is not listed?
- 433 WRA documents listed
 - 20% assessed
 - 6% have RMDs
 - 29 regulated taxa (70% agricultural) – no aquatic plants (Database accessed 10-16-23)

List of available weed risk analysis documents prepared by CFIA

Filter items Showing 1 to 25 of 433 entries | Show entries

Species ↑↓	Categorization ↑↓	Weed Risk Assessment ↑↓	Risk Management Document ↑↓	Present in Canada ↑↓	Plant Hardiness ↑↓	Impact Potential (most representative) ↑↓	Regulated (Plant Protection Act) ↑↓
<i>Abies homolepis</i>	Yes	No	No	Only in cultivation	6	Not assessed	No
<i>Abies sibirica</i>	Yes	No	No	Only in cultivation	1	Not assessed	No
<i>Acanthospermum australe</i>	Yes	No			8	Anthropogenic	No
<i>Achillea santolina</i>	Yes					Not assessed	No
<i>Achyranthes aspera</i>	Yes	No			7	Environmental	No
<i>Achyranthes japonica</i>	Yes	Yes	No	Yes	5	Environmental	No
<i>Acroceras zizanioides</i>	Yes	No	No	No	10	Environmental	No

What makes the list? It is not clear.

Impact potential: 41% agricultural / 35% environmental/ 1.3% aquatic / 1% anthropogenic / 22% not assessed

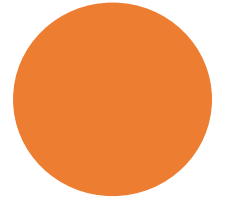
How do we begin to prioritize plants to be assessed?

- Potential high-risk plants identified by authorities (CFIA, DFO, plant councils . . .)
- Plants regulated by U.S. Border states

27 plants assessed by CFIA are regulated by border states – **Are these plants falling through gaps in Canadian policy and legislation?**



Japanese angelica tree
(*Aralia elata*)
regulated in ME NY PA

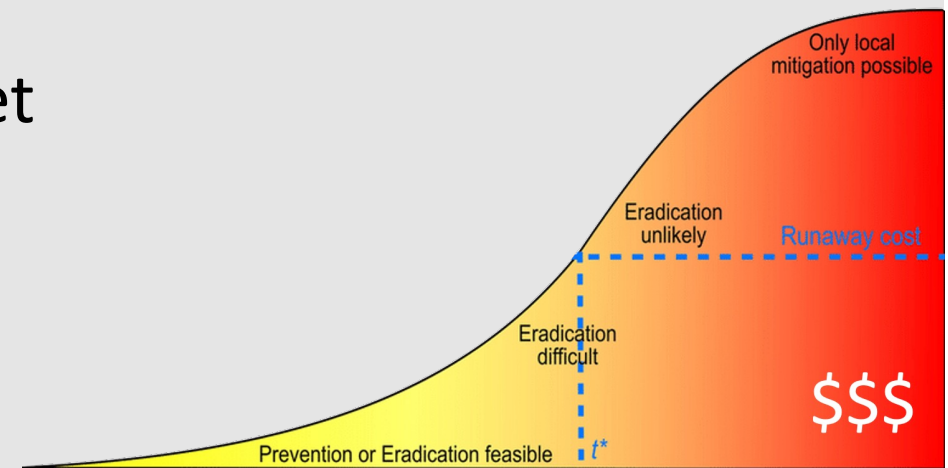


Amur cork tree
(*Phellodendron amurense*)
regulated in ME MN NY WI

49 Ornamental plants were Identified as invasive in CFIA's 2008 *Invasive Alien Plants of Canada* report

- Amur maple
- Flowering rush
- Sweet Autumn clematis
- Burning bush
- Baby's breath
- Common privet
- . . .

sales continue
spread accelerates
costs rise



A few examples of high-risk ornamental species that should be nationally regulated

Common name	<i>Scientific name</i>	Province or territory	Regulated in U.S. border states (bs) plus others	CFIA WRA	# bs
Tree of heaven	<i>Ailanthus altissima</i>	AB	ME MN NH OH PA VT WA WI	Pending	8
Japanese Barberry	<i>Berberis thunbergii</i>	CAN*	ME MN NH NY PA VT WI	Pending?	7
Yellow flag iris	<i>Iris pseudacorus</i>	AB BC MB NU SK	ID ME MN MT NH NY OH VT WA WI plus CT, IL, IN, MA, MD, OR	No	10
Amur honeysuckle	<i>Lonicera maackii</i>		ME MN NH NY OH PA VT WI	No	8
Parrot's feather	<i>Myriophyllum aquaticum</i>	MB ON NU	ID ME MI MN MT ND NH OH PA VT WA WI plus AL, CA counties, CO, CT, IL, IN, MA, NE, OR, PR	No	12
Yellow floating heart	<i>Nymphoides peltata</i>	AB MB ON NU SK	ID ME MI NH NY OH PA VT WA WI plus CT, FL, IL, IN, LA, MA, NC, NE, OR	Yes - no fed action	10

*Canada prohibits Japanese barberries that are host to black stem rust. 11 resistant cultivars are sold.

**Play
Clean
Go**



Education and voluntary action can help . . .

The gardening public, industry, land managers, and policy makers want and need authoritative lists

NATIONAL VOLUNTARY CODE OF CONDUCT FOR THE ORNAMENTAL HORTICULTURE INDUSTRY

For Landscape Architects, Landscape Contractors, Growers, Plant Breeders, Retailers, Suppliers, and Specifiers



grow me instead

NEW BRUNSWICK & NOVA SCOTIA EDITION

Use native plants to create a vibrant garden, support biodiversity, and prevent the spread of invasive species.

Developed in partnership by the National Horticulture Invasive Plant Working Group



CCIPR recently contacted a nursery . . .

“we are in compliance with all policies regarding invasive species. At present, floating heart and frogbit are not prohibited, so

we do sell these plants to our customers”!

Common name	Scientific name	Zone	AqWRA score	Risk under thresholds	History
Floating heart	<i>Nymphoides peltata</i>	2	74	High/High	Major invader
European Frog-bit	<i>Hydrocharis morsus-ranae</i>	4	62	High/High	Major invader

Regulatory action is essential

Four provinces regulate floating heart (AB, MB, ON, SK); only two regulate frog-bit (MB, ON)

Yellow floating heart
Credit: Greg Bales

8 servings per container
Serving size 2/3 cup (55g)

Amount per serving
Calories **230**

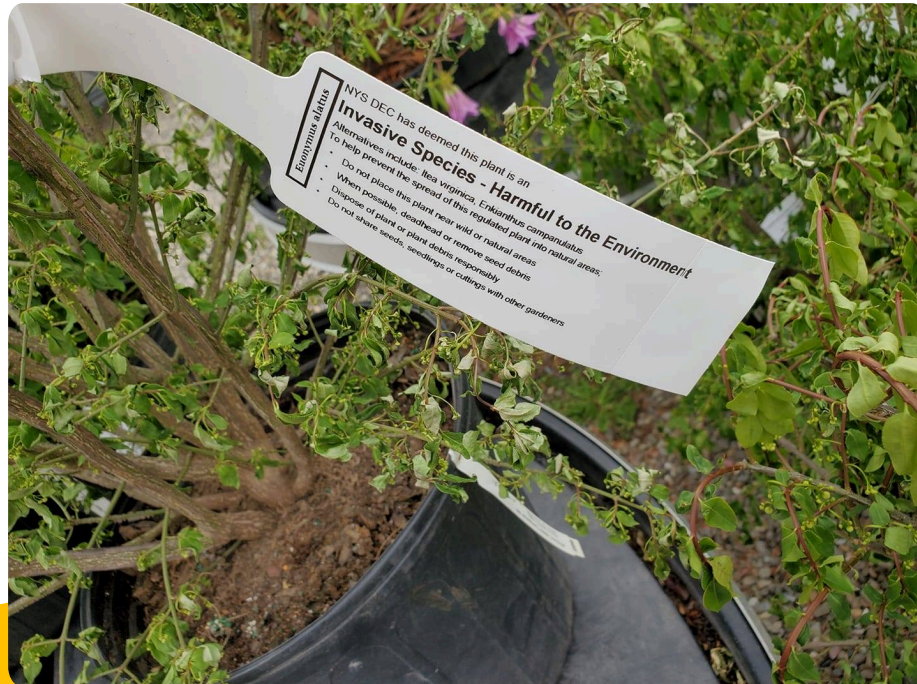
	% Daily Value*
Total Fat 8g	10%
Saturated Fat 1g	5%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 160g	7%
Total Carbohydrate 37g	13%
Dietary Fiber 4g	14%
Total Sugars 12g	
Includes 10g Added Sugars	20%
Protein 3g	
Vitamin D 2mcg	10%
260mg	20%



Point of sale labelling

- Plants are products
- Consumers have a **RIGHT TO KNOW** plants can cause harm
- Labels should inform how to prevent that harm

Point of sale labelling



For plants like burning bush, New York requires plant tags to state:

Harmful to the Environment

Recommend alternative species

Consider Virginia sweetspire

Planting cautions

**Do not place this plant near natural areas;
Deadhead; Do not share**

BURNING BUSH, WINGED EUONYMUS, WINGED SPINDLE TREE
EUONYMUS ALATUS

Recommendations to Improve
INVASIVE ALIEN SPECIES
Prevention and Management in Canada

Prepared by the Federal-Provincial-Territorial Invasive Alien Species Task Force
Approved by the Conservation, Wildlife and Biodiversity Steering Group on January 5th, 2017
For consideration by the Federal, Provincial and Territorial Conservation, Wildlife and Biodiversity Ministers



Priority Actions

- National IAS Database
- Improved legislation
- National coordination

FPT-IAS Taskforce, 2017

European water chestnut (*Trapa natans*) being removed from the Ottawa River
CFIA lifted a ban on the import and sales of water-chestnut in 2001 as it didn't meet their definition of pest.

The solutions

To protect our economy, environment and public health from invasive plant species, we must:

- **Improve policies and legislation.**
- Create a **national invasive plant database.**
- Require all new imports undergo risk assessments.
- **Ban the sale** and movement of **high-risk** invasive plant species.
- **Require labelling.**
- Provide continued and stable funding for **public education.**

A white 3D-rendered figure stands on a green background, holding a red flag with the words 'High Risk' written on it. The figure is also holding a large yellow flower with dark red veins in its center. The figure's other hand is raised in a gesture of warning or alarm.The cover of a book titled 'A Guide for Southern Ontario: Beautiful Non-Invasive Plants for your Garden'. The cover features a photograph of a garden path leading to a house. The CIPR logo and the text 'row me instead' are visible on the cover. The book is identified as the 'Spring 2016 - 2nd Edition'.

Invasive Species

Canada has deemed this plant is an **Invasive Species – Harmful to the Environment**
Alternatives include: ...
To help prevent the spread of this regulated plant into natural areas:

- Do not place this plant near wild or natural areas
- When possible, deadhead or remove seed debris
- Dispose of plant or plant debris responsibly
- Do not share seeds, seedlings or cuttings with others gardeners

Please implement our call for national action

- Rather than spending countless dollars MOPPING UP THE MESS
- **TURN OFF THE FAUCET**
- Close the primary pathway for invasive plants via the horticultural and pet/aquarium trades



Preventing aquatic invasive species. [DFO](https://www.heartstrong.com/1-37-turn-off-faucet-not-mop-floor/)