

Join the movement...lead it in Canada...stop the spread of invasive plants!

Evergreen, the Invasive Plant Council of BC, Greater Vancouver Invasive Plant Council, BC Landscape and Nursery Association, and local municipalities are tackling invasive plants. Activities include public education, new landscape standards, pilot projects for plant control.

Nurseries and garden centres can lead the charge in the private sector by voluntarily adopting practices that prevent further invasive plant introductions. Similar efforts are being made in the United States. Drafted codes of conduct for slowing the spread of invasive plants have been produced by the American Nursery and Landscape Association, American Society of Landscape Architects, the Garden Club of America, and others.

Evergreen offers workshops and presentations to nurseries and retail garden centers in the Lower Mainland on invasive species – what they are, how to deal with them and market alternatives. Contact 604-689-0766 for more information or to book a session.

This initiative is supported by



“At its core, this is a simple matter of nursery integrity. Our ethical responsibility is to act with care when we import plants from other states and countries, and we must be judicious about what we choose to offer. We’re the plant professionals. Retail customers look to individuals in our industry for professional advice. We must help educate them to make responsible purchase decisions.”

— Mark Krautmann, Oregon nurseryman

Sources for the information in this brochure include

- Invasive Plant Council of BC www.invasiveplantcouncilbc.ca
- Framework for Invasive Plant management in GVRD Parks 2006 by Nick Page
- City of Coquitlam, Invasive Plant and Habitat Restoration Strategy, 2005
- City of Burnaby, Council Report to the Environment Committee, June 2006, Still Creek Watershed Invasive Species Management
- District of Saanich, 2005, Noxious Weeds Bylaw, 2000, No. 8080 [with amendment]
- International Union for the Conservation of Nature (IUCN) 2001
- World Conservation Union (WCU) www.app.iucn.org/info_and_news/press/alien2001.html
- Biotic invasions: Causes, epidemiology, global consequences and control. Issues in Ecology No. 5, Ecological Society of America, 2000. Mack, R.N. et al
- Impact: toward a framework for understanding the ecological effects of invaders in Ecological Invasions I: 3-19, 1999, Parker, I.M et al

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INVASIVE SPECIES: Stop the Spread



EVERGREEN
Imagine your city with nature

The introduction and spread of Invasive Alien Species is affecting Canada’s environment, economy, and society, including human health. The current threats posed by existing and potential invasive alien species are significant and are growing at an alarming rate.

Introduction to An Invasive Alien Species Strategy for Canada, Sept. 2004

Invasive plants are rapidly changing parks and natural areas in the Lower Mainland. Nurseries, retail garden outlets and residential gardens are the important sources of these problem plants. Many invasive species sold as ornamentals to gardeners and landscape professionals end up escaping into less managed areas.

Invasive plants are non-native species that out-compete native plants and often dominate in natural areas. They include plants such as English ivy, Yellow lamium, English holly, and Cherry laurel and spread by nursery stock, soil movement and garden waste dump sites. Many parks and natural areas adjacent to residential neighbourhoods have invasive plants in such abundance that native plant diversity has been reduced, wildlife habitat affected, and ecosystem dynamics altered. Strong science supports the fact that invasive species have become a threat to global biodiversity (IUCN 2001) and are now one of the ‘big five’ environmental issues for the public (Didam et al. 2005).

“Invasive plants are a shared problem and we need to share in the solution.”

With a problem of this scale growing quickly, it will take a coordinated effort to respond effectively. Nurseries and growers, along with gardeners, municipal land managers and community groups, need to play significant and strategic roles in battling the spread of invasive plants. While management of invasive plants in public landscapes is one part of the solution, the most cost effective and efficient response is prevention.

Nurseries and garden centers can play a key role by educating consumers, and providing and promoting alternatives.

Looks can be deceiving. Invasive plants can be both beautiful and destructive. Many safer alternatives also have great aesthetic appeal!

Species of concern in the Lower Mainland

In the past year, a number of local governments, including the City of Coquitlam, the City of Burnaby and the Greater Vancouver Regional District, inventoried natural areas within their city boundaries and listed the following plants as species of concern

- Scotch broom *Cytisus scoparius*
- English ivy *Hedera helix*
- Yellow flag *Iris pseudacorus*
- Periwinkle *Vinca minor*
- Goutweed *Aegopodium podgraria*
- Butterfly bush *Buddlei davidii*
- Lamium *Lamiastrum galeobdolon*
- Cherry laurel *Prunus laurocerasus*
- English holly *Ilex aquifolium*
- Spurge laurel *Daphne laureola*.

“Educating consumers and offering market alternatives are key prevention strategies.”

Invasive Plant Definition

An invasive plant is any alien plant species that has the potential to pose undesirable or detrimental impacts on humans, animals or ecosystems. Invasive plants have the capacity to establish quickly and easily on new sites, and have widespread negative economic, social and environmental impacts. *The Invasive Plant Council of BC*

The following are typical characteristics of invasive plant species

- spread rapidly and are highly competitive
- form monocultures that monopolize resources and prevent the growth or smother out native plants
- reduce nesting and foraging opportunities for animals
- are sometimes harmful to humans (e.g. Giant Hogweed sap makes skin sensitive to the sun. When exposed to sunlight, skin can blister and scars can last up to six years)
- can be significant contributors to stream erosion (e.g. Policeman’s Helmet dies back each year and leaves exposed soil on stream banks) or slope slippage (e.g. English Ivy’s shallow root system prevents the percolation of water and instead encourages slope loading that can result in slippage).

Ecological and Economic Impacts

Once established, removing invasive species is resource intensive. This is partly due to their reproductive/survival strategies. Many invasive species produce millions of seeds each year through each plant. These seeds can lie dormant in the soil as part of a seed bank for decades. Additional strategies used by invasive species to achieve high survival rates include

- releasing toxins that negatively impact native species
- growing quickly to shade out native species
- mass reproduction through vegetation fragments
- carrying genetic effects (e.g. hybridization)
- reducing the abundance and diversity of native plants
- altering ecosystem processes (e.g. reducing nutrient availability; altering succession; increasing terrestrialization through increased sedimentation).

“When you explain how harmful English ivy is to native plants, and how it can choke out other ornamental plants in the garden, it becomes easy to sell alternatives.”

*Kris Van de Vyvere
Manager, Garden Works,
North Vancouver*



*Ivy and clematis in North Vancouver’s urban forest.
Photographer Evergreen*



*Buddlei davidii has become prolific in West Vancouver.
Photographer Alex Boston*



*Yellow flag iris has become a problem in wetland areas.
Photographer Ernie Sellentin*

As invasive species contribute to the homogenization of biologically unique habitats and reduce habitat values for other plants and animals in urban areas, they negatively affect local and regional park values. Land managers are responding to the need for control and containment through ongoing and long term management.

While numbers are still coming in for current control costs in BC, the economic losses associated with invasive species in the US are about \$5 billion per year for non-crop sectors (including golf courses, turf production and growth of ornamentals); highway and utility right-of-ways; and industrial, aquatic, forestry and other sites (Westbrooks 1998, in City of Burnaby, Council Report, Still Creek Invasive Species Management, 2006).

“Proactive prevention is far less costly, and can help prevent additional or new invasive plants from entering local landscapes.”

What can nurseries and garden centres do?

Plant availability combined with poor gardening and waste removal practices by residential gardeners contribute significantly to the invasive plant problem. Limiting invasive plant stock and providing plant species that provide similar benefits without the negative ecological and economic impacts is an important first step. So too is customer education – people need to know that there are better alternatives.

Nurseries and garden centres have a great deal of face-to-face time with plant buyers – from gardeners to landscape architects. Suppliers can use this time to recommend the purchase of alternatives to invasive plants. Nurseries and garden centres can play a strategic role by

- working with stakeholders to identify existing and new invasive plant species
- growing, purchasing and promoting market alternatives to invasive plants
- labeling current invasive plant stock
- educating customers.

It also means they should recommend the following practices to consumers

- composting or proper disposal of garden waste (instead of dumping)
- removing invasive plants growing in yards
- using native plants
- reducing soil movement, as this disturbs and transports seed banks
- sharing invasive plant information with neighbors, other gardeners and land use professionals.

“Members of the landscape and nursery trades are encouraged to play a leadership role in the industry by setting an example for others and by taking advantage of this emerging priority for plant buyers and land managers.”