

#### INVASIVE ALIEN SPECIES OF PEI:

### Himalayan Balsam Impatiens glandulifera



## What are invasive species?

Invasive species (IS) are species that are introduced to an area outside of their native range and have the ability to outcompete native species. IS can be introduced intentionally or unintentionally.

## Why are invasive species a problem?

Once they establish, invasive plants can reproduce quickly because they have no natural predators or pathogens to keep them in check, and they often become the dominant species in an ecosystem. This can have devastating effects on the environment. IS can displace native plants by monopolizing space, light, water and other resources needed for growth. They can completely alter native plant communities drastically lower biodiversity. IS can also adversely affect the economy and human health, and interfere with recreational activities.

#### **HISTORY**

Himalayan balsam originally came from the Western Himalayas. It was introduced to Canada in the early 1900s as an ornamental garden flower. It is now considered a pest in many countries throughout the world. In Prince Edward Island it can be seen along several trails and roads.

#### **IDENTIFICATION**

Himalayan balsam is fairly easy to identify, especially if it is in flower. Here are some distinguishing features you can look for:

- Grows to be 2m tall
- Red bamboo-like stem
- Distinct flower with sac structure
- Flowers are deep pink to white
- Flowers bloom from June October
- Seed pods are teardrop-shaped and the slightest pressure will cause them to explode and release seeds
- Leaves are long, slender, sharply-toothed and arranged oppositely
- Forms large, dense stands

#### **CONCERN**

Himalayan balsam exhibits a high reproductive rate through prolific seed production (up to 2500 seeds per plant). The plant's seed pods explode when disturbed, shooting seeds out to a distance of up to seven metres from the plant. An alternative common name is touch-me-not, indicating the plant's sensitivity to touch and explosive seed dispersal. The typical habitat for this plant is nearby water, allowing its seeds to spread quickly and over great distances. Seeds can germinate underwater. Himalayan balsam germinates earlier than many native plants and forms dense patches, preventing native plants from establishing. In addition, it has a weak root system. The combination of weak roots and outcompeting native ground cover means that when the plant becomes established in riparian zones it can increase erosion. The flowers produce floral nectar that attracts bees, competing with native plants for these pollinators. Himalayan balsam can secrete allelopathic chemicals, which inhibit the growth of other plants in a local area.

#### **HABITAT**

Himalayan balsam inhabits urban areas, disturbed areas, gardens, riparian areas, and freshwater wetlands. It grows best in full sun but tolerates some shade.











#### How can you help?

Here are a few things you can do to help stop the introduction and spread of invasive species:

- Learn more about invasive species in PEI, including how to identify species of concern
- Choose native species whenever possible
- Carefully inspect and clean clothing, gear, animals, and vehicles before visiting a new natural area
- Never dump garden or pond waste in a natural area.
- Report your IS sightings to the PEIISC.

#### **How to report:**

Record any invasive species sightings at:

https://www.eddmaps.org/ report/

OR

https://www.inaturalist.org/ OR contact

peiinvasives@gmail.com



This project was undertaken with the financial support of: Ce projet a été réalisé avec l'appui financier de:

# ISLAND NATURE TRUST Environment Environnement Canada Canada

#### CONTROL

Since this species often occurs along watercourses, it is recommended that all control efforts first be focused on upstream populations, to avoid downstream spread. Ensure that you also consider the local ecosystem and what other organisms or ecological processes may be affected by management. Timing is crucial for the management of Himalayan balsam. Manage the plants in the spring and early summer, before seed set. Seeds begin to appear in August. If management is attempted after seed set, you run the risk of dispersing seed during management, which is the plant's primary method of reproduction. The best method for removal of Himalayan balsam is pulling since the roots are weak and the plants can be easily removed. If pulling must occur after the plants have gone to seed, carefully remove seed pods before plants are pulled. Do this by gently cutting the stem below the seed pods, and immediately place the stem and seed pods into a garbage bag. Alternatively, place a bag over the entire plant and cinch it shut near the plant's base, ensuring that all seed pods are contained in the bag. Pull the plant up. This will keep all seeds within the bag and prevent dispersal. Pulling must be repeated for several years because seeds in the ground remain viable for multiple years. For expanded control information, see our management fact sheet.

#### **DISPOSAL**

Place invasive plants in a clear plastic bag and secure. Write plant name (or "invasive plant") on the bag. Place in waste cart (you can also have up to 2 excess bags beside your cart) OR bring them to any Waste Watch Drop-Off Center and pay applicable waste disposal fee. Businesses and residents disposing of loads greater than what would fit in a half-ton truck require a permit from the Department of Environment Energy, and Climate Action Special Waste Disposal Permit | Government of Prince Edward Island. After receiving the permit, businesses and residents will be directed to an appropriate final disposal facility. Please note that only loads for which permits have been issued will be accepted at these facilities. Please check the IWMC sorting guide www.iwmc.pe.ca/sort (type Invasive Species in the search window) to ensure these instructions are up to date.

#### GARDEN ALTERNATIVES

**Fern-leaf bleeding heart,** *Dicentra 'King of Hearts'*, is not native to PEI. However, it is commonly grown in Island gardens and sold at local greenhouses. It closely resembles Himalayan balsam with its delicate pink flowers. It has beautiful, fern-like, foliage that forms a robust clump, but will not take over your garden like Himalayan balsam.





**Spotted Joe-Pye weed,** *Eupatorium maculatum*, is native to PEI. It can reach similar heights as Himalayan balsam. They also share a number of similar features, including similar shaped and arranged leaves, a reddish stem, pink flowers, and similar habitat.

**Indian tobacco**, *Lobelia inflata*, is native to PEI. It ranges in height from 15-100cm. The stems are covered in tiny hairs and the leaves are long with toothed edges. It produces violet flowers, with a faint patch of yellow on the inside, that bloom from midsummer to fall. Indian tobacco has been used by herbalists to treat asthma.



**Photos provided by and copyright belongs to:** Beth Hoar of Green Thumb Photography, Julie-Lynn Zahavich, Beatriz Moisset, Marc Ryckaert, Scott Zona, H. Zell