Invasive Plant Information Note

What is it?

Himalayan balsam (*Impatiens glandulifera*) is an invasive annual plant species which is native to the foothills of the Pakistani and Indian Himalayas. It was first introduced to Europe in the mid-1800s as an ornamental garden plant. Since then, it has escaped into the wild and is now present in most parts of Ireland. Himalayan balsam is particularly frequent in damp soil areas such as along the banks of watercourses and damp woodland. Please see link to its distribution across Ireland: http://maps.biodiversityireland.ie/#/Home.

Fig. 1: Himalayan balsam © CABI

Fig. 2: Invading pasture land © CABI

Why should we be worried about it?

Himalayan balsam grows rapidly and spreads quickly. From seed it can grow up to 2.5 metres high in a single season. It absorbs fertiliser and water intended for crops. Himalayan balsam seeds germinate from March and develop rapidly over the growing season into dense upright stands. These stands smother native plants and prevent them from establishing (See Fig. 2). The combination of its high rate of reproduction and large size facilitates rapid colonisation. When the plant dies back in autumn it can leave the ground bare and vulnerable to erosion. Himalayan balsam can increase costs on farms due to loss of land and habitat, riverbank erosion, increased flood risk and loss of amenity.

Fig. 3: Explosive seed dispersal

(www.fineartamerica.com)

Fig. 4: Himalayan balsam flower

(www.paulrobson.co.uk)

How do we recognise Himalayan balsam?

The seedlings of Himalayan balsam begin to emerge as early as March. The stems are pinkish-red, brittle and hollow with side branches originating from joints in the stem (See Fig. 5). Its stems are translucent and succulent. The leaves of the Himalayan balsam are dark green, lance-shaped and have sharply serrated edges. Leaves are 5-18cm long and range in width from 3-7cm (See Fig. 6). Himalayan balsam flowers can vary between white, pink and purple, with colouration differing among individuals within the same habitat. Each flower has 5 petals and is said to look like an English policeman's helmet (See Fig. 1 & Fig. 4). The fruit capsules are green and contain many spherical seeds (which may be green or brown), eventually becoming black when they are mature. Flowering commences by June and extends into October. Over the winter, the mature Himalayan balsam plants rot and decay.

Fig. 5: Himalayan balsam stem
(www.gobotany.newenglandwild.org)

Fig. 6: Himalayan balsam foliage
(www.bcinvasives.ca)

Fig. 7: Shallow root system
(www.shim.bc.ca)

How does Himalayan balsam spread?

Himalayan balsam produces up to 2,500 seeds per plant. **These seeds are released explosively from capsules when disturbed (See Fig. 3).** The seeds can be propelled up to 7 metres from the mother plant. The seeds can remain viable for up to 18 months and are readily dispersed by wind or in water.

How to manage Himalayan balsam

Complete eradication of Himalayan balsam from a site may take a number of years. Non-chemical, chemical or a combination of both can be employed to remove the species. Grazing is an effective non-chemical control for Himalayan balsam. Grazing and trampling by livestock can be introduced from early May when plants are tender and sweet. Hand-pulling alone can also be employed if grazing is not an option. Himalayan balsam has a shallow root system so is easy to uproot (See Fig. 7). Care should be taken to remove the whole plant. This form of control should ideally happen in June, when the plants have grown to a good height, but have not yet flowered. Hand pulling may require a follow-up in August due to new seeds sprouting. Vegetative material can be disposed of by composting unless seeds are present, in which case the material should be disposed of by 'deep burial.'

For Further Information please visit:

- Invasive Species Ireland http://invasivespeciesireland.com/
- European Commission http://ec.europa.eu/environment/nature/invasivealien/index_en.htm