GET TO KNOW YOUR BALSAM

- **IDENTIFICATION SHEET**

- **HIMALAYAN BALSAM LIFECYCLE**

- **BALSAM AND POLLINATORS LEAFLET**

NNSS
GB non-native species secretariat

Himalayan Balsam

For more information visit www.nonnativespecies.org
Produced by Olaf Booy, Max Wade and Vicky White of RPS

Species Description

Scientific name: *Impatiens glandulifera*
AKA: Policeman's Helmet, Indian Balsam, Jac y Neidiwr (Welsh)
Native to: West and central Himalayas
Habitat: Found mostly on river banks and in damp woodland, can grow in other damp habitat

A tall, attractive, annual herb with explosive seed heads. Although easy to identify as a mature plant with its pink-purple flowers, fleshy stem and characteristic leaves, the seedlings and last year's dead stems of this annual are more difficult to spot.

Introduced as a garden plant in the early 19th century and first recorded in the wild in 1855. Often favoured by the general public for its aesthetic appeal and is still deliberately planted on occasion. Now widespread in the UK, especially along urban rivers. Spreads solely by seeds, which are small and easily carried by wind or water.
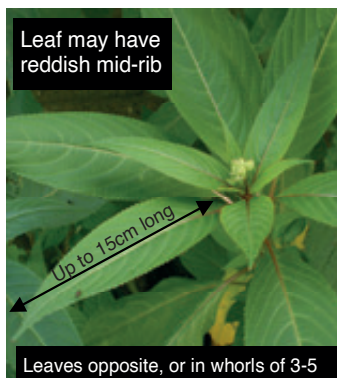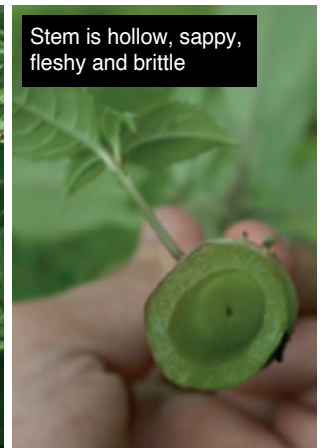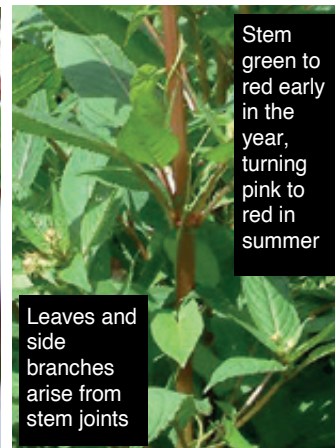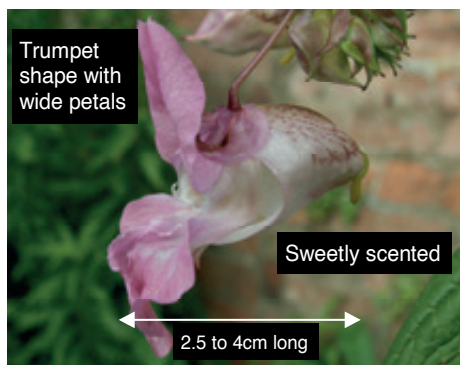
Out-competes native species in ecologically sensitive areas, particularly river banks. Where it grows in dense stands along river banks it can impede flow at times of high rainfall, increasing the likelihood of flooding. Die back of extensive stands over winter can leave river banks bare and exposed to erosion.

Himalayan balsam is listed under Schedule 9 to the Wildlife and Countryside Act 1981 with respect to England and Wales. As such, it is an offence to plant or otherwise allow this species to grow in the wild.

For details of legislation go to www.nonnativespecies.org/legislation.

Up to 2m tall

Key ID Features

Trumpet shape with wide petals

Sweetly scented

2.5 to 4cm long

Pink (rarely white) often with spots and markings inside

Stem green to red early in the year, turning pink to red in summer

Leaves and side branches arise from stem joints

Stem is hollow, sappy, fleshy and brittle

Seed capsule, approx 2.5cm long, hanging on red stalks. Explode on touch when ripe.

Approx 2.5 cm long

Seeds

Leaf may have reddish mid-rib

Up to 15cm long

Leaves opposite, or in whorls of 3-5

Leave have finely serrated edges

Slender to elliptical

Side shoots / roots form along the stem

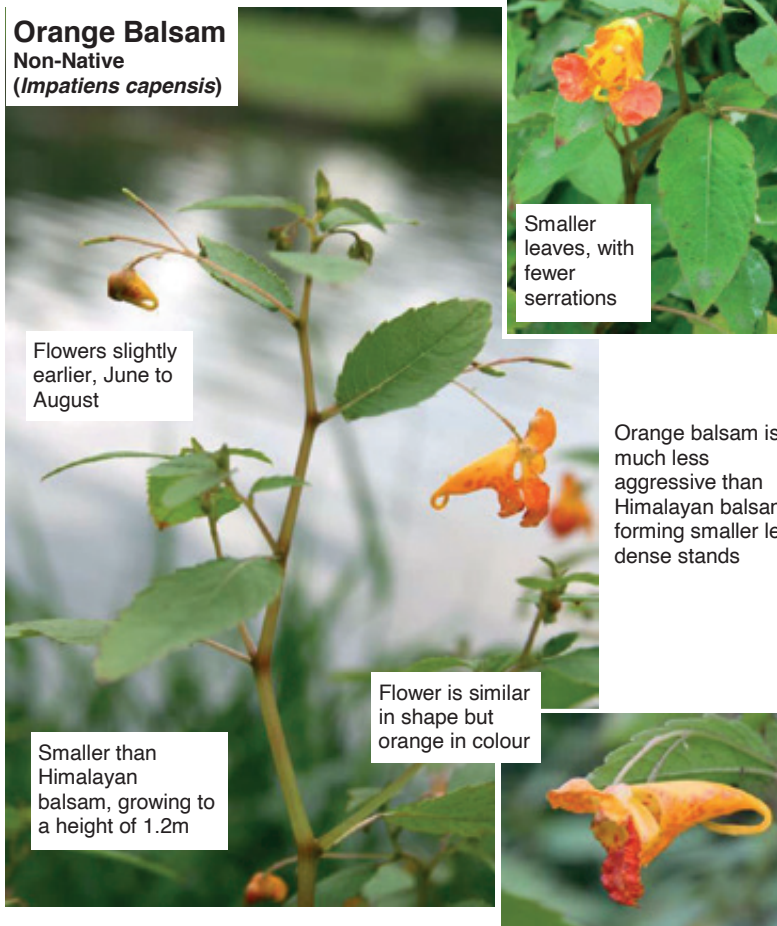Short roots with distinctive structure

Identification throughout the year

Can be identified at most times of the year: March-June by its seedlings, stem and leaf shape, from July to September by its stem, leaf shape and flowers. More difficult to identify over winter (October to February), look for hay like remains and distinctive root structure.

Hay like remains in winter

Root structure in winter

Similar Species

Orange Balsam
Non-Native
(*Impatiens capensis*)

Smaller leaves, with fewer serrations

Flowers slightly earlier, June to August

Orange balsam is much less aggressive than Himalayan balsam, forming smaller less dense stands

Flower is similar in shape but orange in colour

Smaller than Himalayan balsam, growing to a height of 1.2m

Distribution

Widespread and common across the whole of the UK. Primarily on riverbanks and in other damp areas.

Source: NBN Gateway. Check website for current distribution

References and further reading:

Blamey, M, Fitter, R and Fitter, A (2003) *"The Wild Flowers of Britain and Ireland. The Complete Guide to the British and Irish Flora"*. A & C Black

Preston, C D, Pearman, D A and Dines, T A (editors) (2002) *"New Atlas of the British and Irish Flora"*. Oxford University Press

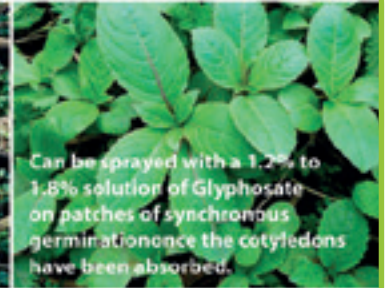Stace, C (1999) *"Field Flora of the British Isles"*. Cambridge University Press

Photos from: Olaf Booy, Mike Harris, Max Wade

Himalayan Balsam

Impatiens Glandulifera

Consider the life cycle for cost effective control

Germination and growth

Feb-Mar-Apr
Dormancy is broken after a chilling period over 45 days at 4 °C.

Seedling with cotyledons

Synchronous germination

Can be sprayed with a 1.2% to 1.8% solution of Glyphosate on patches of synchronous germination once the cotyledons have been absorbed.

Growth, pollination and fertilization

Best practice would be not to hand pull in late July once in fruit.

Strim below first node from early June onwards.

May-Jun-Jul
Hand pull early May - there after every 3 weeks on the same patch until early November due to delayed germination. Start on the highest patch upstream or on highest patch up slope.

Flowering, fruiting, ripening and seed set

Aug-Sep-Oct
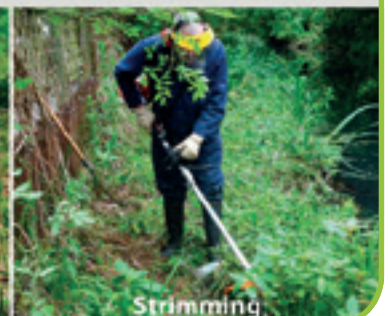Do not spray when in flower due to pollinators.

Do not hand pull once fruits have ripened.

An individual plant can produce 800 to 2500 seeds.

Dormant

Nov-Dec-Jan
Dormant seeds are normally viable for one year and at most two years.

Control methods

Folia application

Hand pulling

Strimming

Himalayan Balsam and Pollinators

From June through to October, the pretty flowers of Himalayan balsam provide a glut of nectar that honey bees and some bumblebees find irresistible. So it's understandable that some people question the desire to remove Himalayan balsam from our landscape and ask 'is it really that bad?'.

But, the stark fact remains, Himalayan balsam is an Invasive Non-Native Species and a transformer that is altering large areas of our lowland ecosystems at high cost to our economy and wildlife. Due to its highly invasive nature, leaving a little balsam for the bees is neither realistic nor practical. This is a plant on the march and only regular, active management stops it spreading out of control.

Although the flowers might appear popular with insects, due to its flower morphology, Himalayan balsam only supplies nectar to a select few species: larger bees with middle sized or long tongues such as Bombus, Apis and Vespa. The myriad of other pollinators, including butterflies, moths and beetles, are losing out and a UK study has shown that once balsam establishes in an area, the numbers of spider species declines by 75%, beetle species by 64% and true bug species by 58%[1].

The honey bee has existed in the UK for over 4,000 years, supported over that time by an abundance and diversity of native flowering plants. Sadly, this diversity of plant life is disappearing, in part due to the spread of Himalayan balsam and other invasive species. Replacing balsam with a range of native plants and trees will provide a diverse source of nectar and pollen throughout the seasons that not only support honey bees and bumblebees, but the many vital pollinating insects.

[1] Tanner R. et al (2013) PLoS ONE Impacts of an Invasive Non-Native Annual Weed, Impatiens glandulifera, on Above- and Below-ground Invertebrate Communities in the United Kingdom.

Here are some of the native flowering plants and trees that provide a diverse source of nectar and pollen through the seasons:
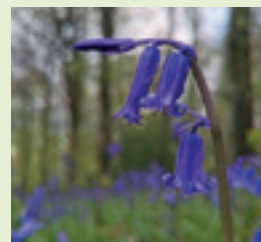

Apple blossom

Betony

Birds-foot-trefoil

Bluebell

Comfrey

Foxglove

Honeysuckle

Knapweed

Oxeye daisy

Purple loosestrife

Pussy willow
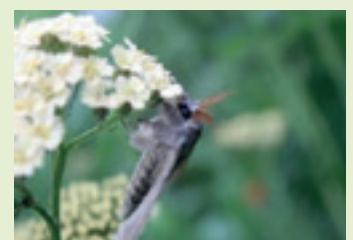

Ragged Robin

Red dead-nettle

Scabious

Stinking hellebore

White clover

Wood anemone

Yarrow

Photographs © Andy Karran, Ellie Baggett

www.wyevalleyaonb.org.uk

WISP
Wye Invasive Species Project
Project Rhywogaethau Goresgynnol Gwy

Wye Valley / Dyffryn Gwy
Area of Outstanding Natural Beauty
Ardal o Harddwch Naturiol Eithriadol

Himalayan balsam and foraging

Himalayan balsam is an edible plant and in its native Himalayan region, where the plant is not invasive, it is traditionally used in curries.

Thankfully, there's little appetite for exploring its culinary uses here in the UK where wild foraging for Himalayan balsam can constitute an offence. This invasive plant is classified as 'controlled waste' under the Environmental Protection Act 1990, which means any part of the plant and associated material e.g. soil, must not be removed from its site of origin other than to a controlled waste facility.

Himalayan balsam and gardening

Himalayan balsam is also listed under Schedule 9 of the Wildlife and Countryside Act 1981, which means 'it is an offence to plant or cause it to grow in the wild'.

Currently, the law does not require you to remove balsam from your garden but you can be held liable and face penalties if your balsam is allowed to jump your garden wall or flow downstream to colonise your neighbour's property. Considering the ease with which it can spread, the risk of harbouring this plant, even if you're 'doing it for the bees', is simply not worth it. Please be aware that sharing balsam plants and seeds with others is illegal.

The variety of flowering plants and trees in our gardens acts as both a magnet and a lifeline for many bees and insects. Indeed, some species of bumblebee are now more common in gardens than in the countryside! So, if you see Himalayan balsam in your garden, do try to control it promptly when the cost, to wildlife and your pocket, will be low. Ignore it and the costs will rocket.

Here are a few gardening tips to encourage pollinators to your garden…

- Join Plantlife's 'No Mow May' — let your lawn grass grow and be amazed at the number of flowers that appear and pollinators that visit them. www.plantlife.org.uk/uk/discover-wild-plants-nature/no-mow-may

- Let the dandelions flower — they are a superb source of early nectar and they flower for months….and they really are beautiful little plants.

- In the garden centre choose plants that have the pollinator-friendly labels.

- Avoid the double plant varieties as these don't produce nectar.

- Build a woodpile in a quiet corner with twigs and leaf mulch — these provide habitats for hibernating bees and other insects.

- Leave earth banks and old walls alone as they make great nesting habitats for bumblebees.

- Plant fruit trees like apple, crab apple and plum which flower in early spring

- Plant fruit bushes such as gooseberry, raspberries and blackcurrants which flower in late spring

- Plant herbs such as thyme, fennel, feverfew, borage and comfrey.

WiSP
Wye Invasive Species Project
Proiect Rhywogaethau Goresynnol Gwy

www.wyevalleyaonb.org.uk

Wye valley **dyffryn gwy**
Area of Outstanding   Ardal o Harddwch
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