



## A guide to invasive weed and management

### Himalayan Balsam (*Impatiens glandulifera*)



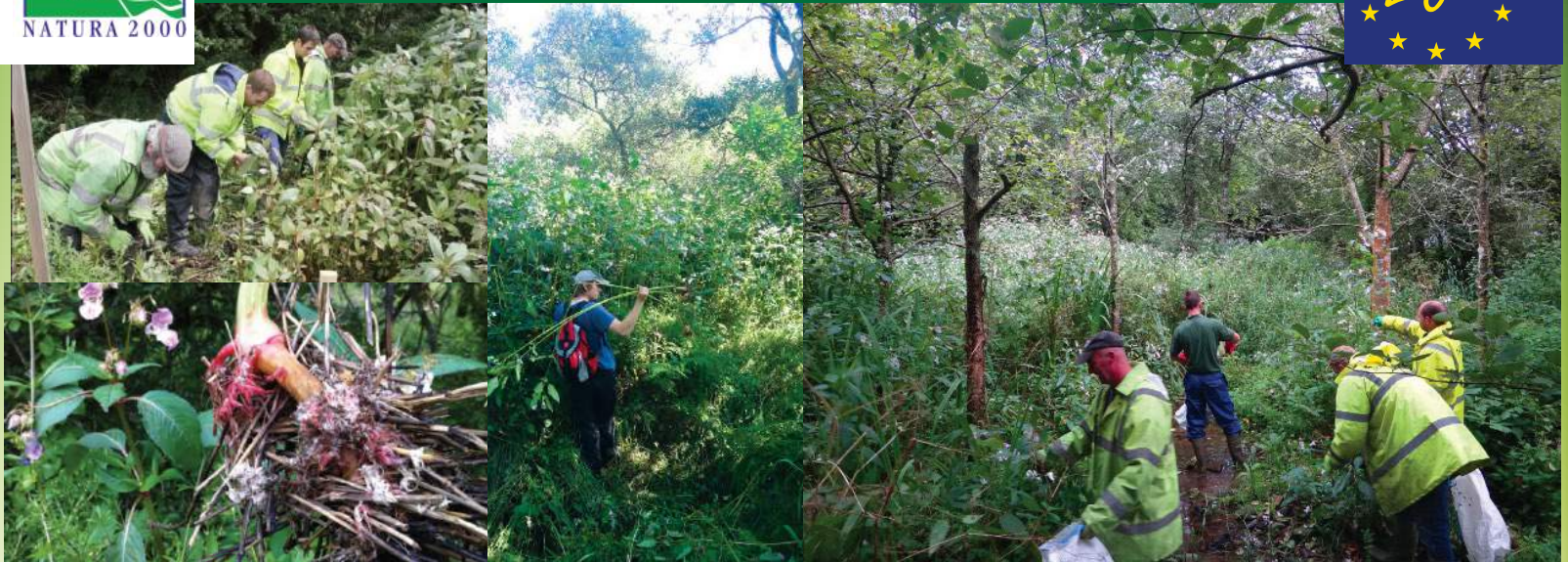
**H**imalayan balsam is an attractive, non-native and invasive plant species. Since it was introduced, it has spread to many parts of Ireland. The species is particularly frequent along the banks of watercourses, where it often forms continuous stands. This tall, fast-growing, invader grows in dense stands that prevent shorter native plants from getting enough light to grow underneath it. As a result Himalayan balsam can take over large areas. Each plant produces about 2,500 seeds which fall to the ground, and with several parent plants close together, seeds can occur at a density of between 5000-6000 seeds per square metre. The seeds float, making watercourses a prime route for dispersal of the species. Seeds can also begin to germinate in water on their way to new sites.

As well as causing problems for native species, Himalayan balsam also increases the risk of riverbanks washing away because it stops the more long-lived plants such as grasses, which bind the soil with their roots, from growing.



Himalayan balsam is one of the highest risk non-native invasive species in Ireland. This is largely due to its impact on native waterside vegetation within designated sites. Since the species is rapidly expanding its range, a major concern is Himalayan balsam will dominate waterside vegetation and damp ground at the expense of native species across Ireland.





**T**he IRD Duhallow EU LIFE Project has advocated a non-chemical method for controlling this highly invasive plant. By simply pulling by hand, the Himalayan Balsam can be removed from the ground with relative ease. This is due to a relatively shallow-rooting system.

Management of Himalayan Balsam requires a systematic approach. Care must be given to ensure every plant is attended to. For this reason, repeat visits are needed. Growth rates can vary depending on shading; smaller plants may go unnoticed on the first occasion.

In dry conditions, or in areas of dry ground, plants that have been pulled can be left to desiccate and rot. However if conditions are wet and humid; greater care is required as the newly removed plant can continue growing from nodes along the long stalk. For this reason the plant needs to be broken up with the root removed. Care must also be given if the plant is in flower. Seed pods form from the flower heads. These spring-loaded pods can expel seeds up to 7m away. By carefully placing a small plastic bag over the flower before removing it the risk of re-seeding the area is greatly reduced. The bags must then be disposed of carefully to ensure there is no re-infestation.



To study the re-colonisation of native vegetation after the removal of the non-native plant, quadrats were randomly placed along the Allow River. Every Himalayan Balsam plant in each quadrat was measured and counted. Return visits then monitored the rate of recovery of native plants such as nettles, grass and buttercups and whether or not re-infestation occurred.

## Other invasives of note along waterways



### Japanese Knotweed

Japanese Knotweed can colonise new areas rapidly and outcompetes native plant species. It can damage infrastructure as it can grow through tarmac and concrete. It acts as a barrier in wildlife migration corridors.



### Giant Hogweed

Giant Hogweed is potentially harmful to humans as the sap can cause third degree burns. Giant Hogweed out-competes native flora and as it dies back in the winter, river banks are often left open to erosion.