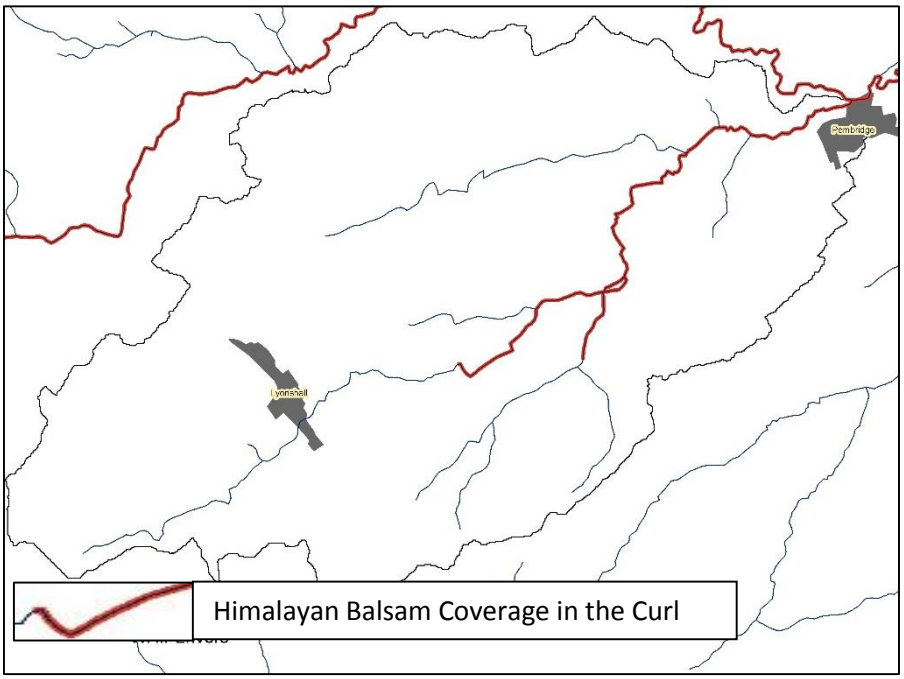
The Wye & Usk Foundation
ACTION FOR FISHERIES
www.wyeuskfoundation.org Reg Charity No. 1080319

Himalayan Balsam in the Curl Brook

During the 2015 and 2016 electrofishing surveys it was noticed that along the banks of the brook were numerous stands of Himalayan Balsam. Below is a map showing the known extent of this invasive weed in the Curl Brook Catchment.



How it spreads

Each plant can produce up to 800 seeds. These are dispersed widely as the ripe seedpods shoot their seeds up to 7m (22ft) away.

Although it is currently believed that the seeds are not viable for more than 2-3 years, they are in fact very resilient to all types of conditions and therefore without committed and continuous control, the seed bank is extremely persistent.

It grows rapidly, spreads easily, out-competes other vegetation and readily colonises new areas. Eradication must therefore start at the top of its catchment so that new seeds are not washed down stream on to cleared areas.

Why is it a Problem?

Himalayan Balsam is extremely competitive and is already the dominant vegetation in much of the Wye catchment. It outcompetes native flora due to aggressive growth rates then when it dies back during the winter it leaves stream and river banks bare. This decreases bank stability as they do not have root structures binding the soil and makes it much more susceptible to erosion.

Himalayan Balsam

and its impact on UK invertebrates

Cost of control **£300m**

Pods explode seeds up to **7m**

Seeds per plant **800**

FOLIAR INVERTEBRATES

ALL invertebrate feeding groups negatively affected

75% Spider species

64% Beetle species

58% True bug species

GROUND DWELLING INVERTEBRATES

Detritivores

Herbivores

Predators

BELOW GROUND INVERTEBRATES

Detritivores
largely unaffected.
In the summer months
numbers significantly increase.

Himalayan balsam is one of the UK's most widespread invasive weed species, colonising river banks, waste land, damp woodlands, roadways and railways. Research by CABI scientists has shown local invertebrate biodiversity is negatively affected by the presence of Himalayan balsam.

They found that native plant community structure was different in the presence of Himalayan balsam, and coincided with significantly lower abundance of above-ground invertebrate detritivores, herbivores, and predators. Overall below-ground invertebrate groups were not affected, although detritivore abundance fluctuated significantly, with peaks during summer months.

The community shifts resulting from the presence of Himalayan balsam can potentially lead to fragmented, destabilised ecosystems, have serious consequences for ecosystem processes and functioning, and complicate habitat restoration unless remedial actions are implemented.

www.himalayanbalsam.cabi.org

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.

www.cabi.org

KNOWLEDGE FOR LIFE

Control Methods of Himalayan Balsam

The Wye & Usk Foundation intend to co-ordinate a catchment wide eradication programme to get of Himalayan Balsalm.

The plants will initially be sprayed in April to address the most vigorous growth.

This should then be followed up by cutting or pulling plants in June/July. If cutting plants it must be ensured that it is cut below the lowest node otherwise it flowers again. The plants can be left to breakdown on the banks.

It is also worth following this up in early September - there's always one or two plants that survive or recover.

Following cutting, native plants recolonise unsprayed areas much more quickly.

The majority of next year's infestation comes from the seed of plants growing in the immediate vicinity.

To find out more visit: https://himalayanbalsam.cabi.org/current-control-methods/