

River Ribble Invasive Species Project - 23rd February 2015

By Tony Moverley

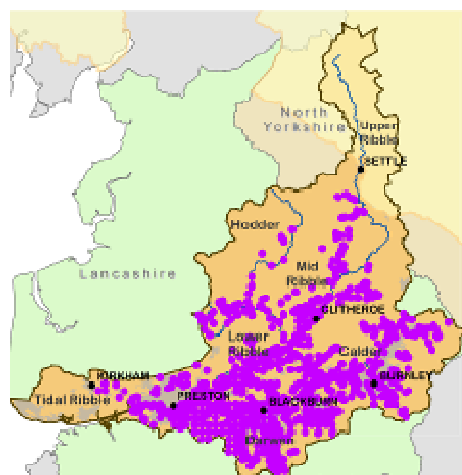
After an introduction on the general nature of invasive non-native species (INNS), Adam Walmsley, Project Officer for the Ribble Rivers Trust, made us all sit up when he told us that INNS are thought to be the second largest threat to global biodiversity after habitat loss, ranking ahead of even climate change.

The majority of the subsequent talk focused on the control of three priority non-native invasive plant species within the Ribble catchment:

1) Himalayan Balsam – propagates by seed. Hand pulling, knapsack spraying, strimming and hand cutting are the main methods of control. It quickly swamps an area with luxuriant cover in summer, leaving erosion-prone bare ground in the winter. Their nectar-rich flowers may be responsible for attracting insects at the expense of the pollination of native wildflowers. A new natural treatment – a rust fungus, has been discovered and after an eight year research programme, a series of controlled releases of the rust fungus was made last year as part of field trials to control the weed. Looking to the future, it is hoped that this treatment could eradicate one of England's most invasive plants. In the Upper Ribble, Himalayan Balsam inhabits just two tributaries: Wigglesworth Beck and Rathmell Beck (the latter is the upper limit of balsam in the catchment).

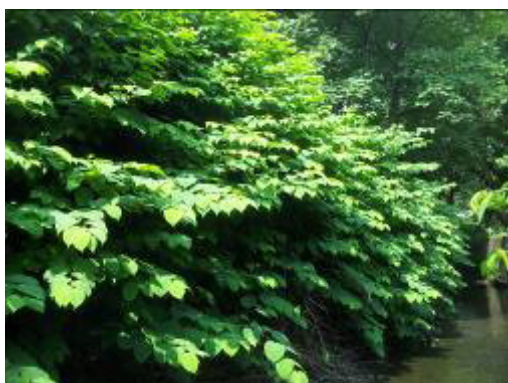


Left: Himalayan Balsam in full Flower
Photo Adam Walmsley



Right: Himalayan Balsam distribution in Ribble catchment
Source: Ribble Rivers Trust

2) Japanese Knotweed – propagates by the spread of tiny root/rhizome fragments. It is controlled by a glyphosate-based herbicide applied with either a knapsack sprayer or by root injection. The latter method is very effective but still requires subsequent spraying once the plants weaken; it takes several years of continuous treatment for eradication. Sites often need clearing of dead stems using brushcutters and machetes in order to allow access for spraying in the following season. It grows in dense stands excluding other vegetation and promotes erosion on riverbanks. The root system can cause major damage to man made structures (walls, houses etc.).



Above: Japanese Knotweed Photo Adam Walmsley
Right: Japanese Knotweed distribution in Ribble catchment
Source: Ribble Rivers Trust



Recently, CABI, the team responsible for research into the natural rust fungus treatment for Himalayan Balsam, have announced significant progress in the development of an insect (a jumping plant lice or psyllid, *Aphalara itadori*) treatment which appears to reduce the growth capacity of Japanese Knotweed.

3) Giant Hogweed – propagates by seed. It is controlled either chemically or by cutting (to ground level in April/May followed by flower and seed head removal in June/July). The toxins in the sap induce photosensitive blistering upon contact with skin and make this species a threat to public health. It also exhibits similar environmental impacts as the other two species. Giant Hogweed distribution is confined to areas south of Clitheroe.



Left: Giant Hogweed in full flower
Photo: Adam Walmsley



Right: Giant Hogweed distribution in Ribble catchment
Source: Ribble Rivers Trust

Adam then went on to explain about the very damaging impact that Signal Crayfish are having on our native White-clawed Crayfish. Although eradication of this North American species from still water bodies is possible using pyrethroid pesticides (a specialist and very expensive task), there is currently no satisfactory method of eradication from a watercourse. Electric treatment of Signal Crayfish has been trialled in the Ribble but even the use of extreme currents could only achieve a mortality rate of 95%, significantly below the rate needed for eradication.

It was encouraging to see how the Upper Ribble (i.e. the catchment north of Settle) remains almost totally free of INNS and that the control work being conducted on lower areas of the catchment is defending this higher area well.

Adam concluded with some important advice on the need for all visitors to the countryside to practise good biosecurity which helps prevent the introduction of new invasive species to a catchment and reduces their spread within the catchment. He finished with encouragement for us all to remember the mantra 'Check, Clean, Dry'.



Further information:

Submit INNS sightings in the Ribble catchment (supports Yorkshire area as well):

<http://www.lancashireinvasives.org/>

GB based government strategy for INNS - <http://www.nonnativespecies.org/>

The Ribble Rivers Trust - <http://www.ribbontrust.org.uk/>