

Working together to tackle invasive non-native species (INNS) of plants in Greater Manchester

What are invasive non-native species (INNS)?

Many non-native species are harmless, causing no disruption to the environment and native wildlife in their new locations, and are often welcome in our gardens. But occasionally, a species will establish and thrive in a way which can cause those disruptions, harm our economy, and even impact on our health and way of life.

The scale of the problem in Greater Manchester

- In the summer of 2022, as part of the Natural Course project, Greater Manchester Combined Authority (GMCA) commissioned a survey of INNS plants along the River Irwell Catchment, which was complemented by volunteer surveyors, and followed it up with a commissioned survey of the River Tame catchment in the summer of 2023.
- The survey results mostly featured two very widely distributed and problematic plants: Japanese Knotweed and Giant Hogweed. Alongside both plants causing significant ecological damage, Japanese Knotweed is estimated to cost the UK economy £246.5m each year while Giant Hogweed costs £1.4m and is a significant health risk causing chemical burns on skin.
- Extrapolating the survey results from the Tame and the Irwell, we estimate that over 149 km of riverbank in Greater Manchester contains Japanese Knotweed, and over 55 km contains Giant Hogweed.
- Meanwhile, Himalayan Balsam was found on all the rivers and was too widespread to be feasibly mapped. There is no reported economic cost, but it is known to damage the environment, for example by outcompeting native plants and causing erosion of riverbanks.
- Both sets of results have been shared with the respective catchment partnerships and other stakeholders to inform future INNS control strategy.

Map of Invasive Non-native **Species along Greater Manchester Rivers**

Greater Manchester = black OS Open River = blue Irwell Catchment = orange Tame Catchment = purple Japanese Knotweed = red Giant Hogweed = green

Table of results from Invasive non-native plant surveys of Tame and Irwell Catchments 2022-23

Irwell + Tame catchment surveys (569 km of river surveyed)	No. of stands	Total line length (km)	Total Area Coverage (m2)	Percentage of riverbank
Japanese Knotweed	2643	124.516	389608	11
Giant Hogweed	723	45.682	136054	4





Giant Hogweed



Japanese Knotweed



Himalayan Balsam

Control case study: River Croal

• In 2022, the Bradshaw Brook Flying Fishing Club (BBFFC) received single year funding from the Angling Trust to commence a volunteer eradication project of Japanese Knotweed from Bradshaw Brook in Bolton. It takes several years of treatment to kill Japanese Knotweed, so the club put out an appeal for funding for 2023 via the Bolton Forum for Greenspace.

Seeing the opportunity to remove a serious infestation from an entire watercourse, GMCA provided Natural Course project funding to continue and increase the extent of the BBFFC INNS control project to the entire Bradshaw Brook catchment downstream of Jumbles Dam.

Some of the infested land is within a Sites of Biological Importance, so they are liaising with an ecologist from GMEU to avoid damaging important habitat.

Bolton Council were also contacted to see if they had plans to control the INNS at this location, and for permission to do so.

> Japanese Knotweed on **Bradshaw Brook before** treatment Oct 2022

Japanese Knotweed on Bradshaw Brook the summer after treatment June 2023







- BBFFC were also funded to commence removal of Himalayan Balsam. In some cases, electric strimmers were the most effective method, and again GMEU were involved to discover the best treatment methods.
- Meanwhile, Natural Course funding enabled Groundwork to organise balsam bashes with the volunteer community of Bolton. They worked along Bradshaw Brook in close co-ordination BBFFC.
- It was discovered that there was a significant Himalayan Balsam seed source on United Utilities land around Jumbles Dam, where United Utilities agreed to carry out ongoing control work to assist the eradication effort.

What's next?

- Review.

INNS Mapper

- manage this problem.

How can you get involved?

Find your nearest Catchment Partnership to learn more and see how you can help in your local area – scan the QR code or visit http://bit.ly/44S0Jrt.



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• Local authorities, catchment partnerships, and other stake holders will use our findings to help steer future INNS control efforts on local and strategic scales. • Key to this is INNS being included within Greater Manchester's Local Nature Recovery Strategy, which clearly sets out our vision and priorities for nature's recovery and the practical actions needed to restore declining species and habitats. • These surveys have created a baseline for future monitoring of these problem plants, for instance the maps are going to feature in the Greater Manchester State of Nature

• The surveys have highlighted the gap that existed in our knowledge about where INNS are within Greater Manchester, and how eager people are to help record and

• To further close that INNS knowledge gap, and to help keep our knowledge up-to-date, we are currently evaluating INNS Mapper, which is a free to use app and website, created by a consortium of national and regional

organisations. It enables members of the public, volunteers, and employees to record the presence of 62 types of INNS, ranging from Giant Hogweed, to Mink, and even Killer Shrimp. Records are verified using the app, and It can also be used to map management activity.

• The data is uploaded to the NBN Atlas, where it is published on the internet and is available for download. From here organisations such as Catchment Partnerships and Local Environmental Record centres can access the data to assist with strategic decision making and planning advice.

Upper Mersey



INNS Mapper app home screen



Map of River Catchment Partnerships in **Greater Manchester** (red outline)