BARNET FEDERATION OF ALLOTMENT AND HORTICULTURAL SOCIETIES Andrew Brown 30 June 2011

JAPANESE KNOTWEED AND HIMALAYAN BALSAM

Controlling these Invasive Plants at Gordon Road Allotments - A Case Study

Gordon Road Allotments in Finchley, London N3, is a statutory site owned by the London Borough of Barnet and leased to the Finchley Horticultural Society which lets the sixty plots and manages the site. One side of the site (c200m) is bounded by the Dollis Brook beyond which is public open space. There is a fence along this boundary a few metres from the Brook.

In January 2011 we discovered a small stand (c100 stems) of Japanese Knotweed on the Gordon Road allotment site between the fence and the Dollis Brook. This had gone unnoticed because it was on the other side of the fence and could not be seen from the allotment side. Knotweed is a seriously invasive species which excludes other vegetation and is difficult to eradicate.

Whilst treating the Knotweed, we noticed a different plant growing amongst its stems. This was Himalayan Balsam, another invasive pest. The two plants are ostensibly similar, with fleshy stems re-growing each year to around 2m. But the leaves are different and Balsam has pretty pink flowers in June. The two plants have different habits, spread by different mechanisms, and require different treatment.

JAPANESE KNOTWEED

Knotweed spreads vegetatively through developing its root system which can go down several metres. It can regrow from the tiniest fragment so safe disposal of cut stems is important. It prefers full sunlight but can live in shade. It had probably arrived at our site by fragments floating down the Dollis Brook which has areas of infestation.

For small stands the recommended control method is to cut the stems below the bottom node in September (when fully grown but before die back starts), use a screwdriver down the hollow stem to penetrate any membranes, and inject a small amount of concentrated glyphosate (Roundup), the treatment to be repeated until complete eradication is achieved. Glyphosate is the only weed killer approved for use near water courses.

We carried out this treatment in March and in June and intend to do so again in September. We expect to need to re-treat next year when we intend to do it only in September. This year's triple treatment is likely to produce results sooner but has the disadvantage that some smaller stems have not developed the central hollow core necessary for injecting the weed killer. These plants we sprayed with glyphosate.

It was obvious in June that the March treatment had been effective but there was some re-growth and the edges of the stand had spread significantly. We dried the cut stems and then put them in a green waste wheelie bin for high temperature (sterilising) composting by the waste authority. They should not be retained on site because of the danger of regrowth, and drying and burning is the only other convenient way to deal with the cut material.

The particular formulation of glyphosate which is made for this purpose is Roundup Tree Stump & Root Killer 250ml which is diluted 1:5 and 10ml applied into each stem using the supplied dispenser. At the time of writing Monsanto (the manufacturer) are partnered with Amazon which is presently selling it for £9.30 with free delivery. One pack will do our three treatments this year.

HIMALAYAN BALSAM

Balsam can spread vegetatively but its principle method of propagation is explosive seed pods which scatter the fine seed over many metres. It prefers wet ground and spreads along water courses. It probably arrived on our site from the well established stand on the opposite bank which is part of the public open space. For small stands the recommended treatment is to cut the stems in late June before the seed pods form, or better still to pull the plant up by its shallow roots. This is easy to do and prevents speedy re-growth with the potential for a late flowering. As the seeds are viable for only 1-3 years then annual pulling should soon eradicate the infestation.

In late June, we pulled up all the plants on our land and the whole of the Balsam stand on the public open space. The plants on our land we disposed of in a green waste wheelie bin and those on the public open space we simply stacked to rot. There is little danger of them re-rooting and spreading as Knotweed would.

We will also walk along the section of the Brook bounding the allotments this June to check for Balsam plants and to pull any present. At the same time we will look out for any more Knotweed which will be treated in September. We have resolved that this will be an annual task each year.

FURTHER INFORMATION

Environment Agency advice

http://publications.environment-agency.gov.uk/PDF/GEHO0410BSBR-E-E.pdf

DEFRA advice from the Non Native Species Secretariat https://secure.fera.defra.gov.uk/nonnativespecies/home/index.cfm

Knotweed

Roundup Tree Stump & Root Killer

http://www.roundup-garden.com/which_roundup_product/tree_stump__root_killer.aspx

Monsanto's advice

http://www.monsanto-

 $\underline{ag.co.uk/content.output/170/170/Roundup/Difficult\%20Weeds/Japanese\%20Knotweed.mspx}$

Royal Horticultural Society advice

http://apps.rhs.org.uk/advicesearch/profile.aspx?PID=218

The National Trust experience in Cornwall

http://www.conservationevidence.com/Attachments/PDF12.pdf

Balsam

Royal Horticultural Society advice

http://apps.rhs.org.uk/advicesearch/profile.aspx?pid=480