What are invasive non-native species

Non-native species (sometimes referred to as alien or exotic species) are those that occur outside their natural range due to direct or indirect introduction by humans.

Why are they a problem?

The vast majority of garden plants are non-native, but very few of these plants are a problem in the wider environment. Some, however, have proved highly invasive, colonizing a habitat often to the detriment of native species and habitats. Once established they are very difficult and costly to eradicate or control. Currently legal options to prevent the spread of invasive species are ineffective.

What are we doing in Highland?

In summer 2008 the Highland Invasive Species Forum was formed, made up of interested organisations and individuals. They agreed to produce a list of the main invasive species in Highland, prioritise those requiring the most urgent action and to come up with projects to deliver this action. In spring 2009 the list was completed and projects proposed. The work in Highland ties in closely with the Invasive Non-Native Species Framework Strategy for Great Britain, launched in summer 2008.

How you can help

- Refrain from planting species that may escape from the garden and become a problem in the wild, and be vigilant with garden waste.
- Refer to Plantlife's informative leaflet 'Pond Alert' for guidance on what plants to use or not to use in garden ponds. Download from www.plantlife.org.uk
- Report records of invasive species to the Highland Biological Recording Group www.hbrg.org.uk. This may help in identifying a small problem before it becomes a major one.
- If you know of invasive species occurring in your area consider organising or joining a local community group to tackle invasive species in your locality.
- More information is available on Invasive Species at the Highland Biodiversity web portal: http://www.highlandbiodiversity.com/htm/invasive-species/invasive-species.php

This is one in a series of four leaflets produced by the Highland Invasive Species Forum. The others are Rhododendron, Japanese Knotweed, and Mink.

For further information contact:
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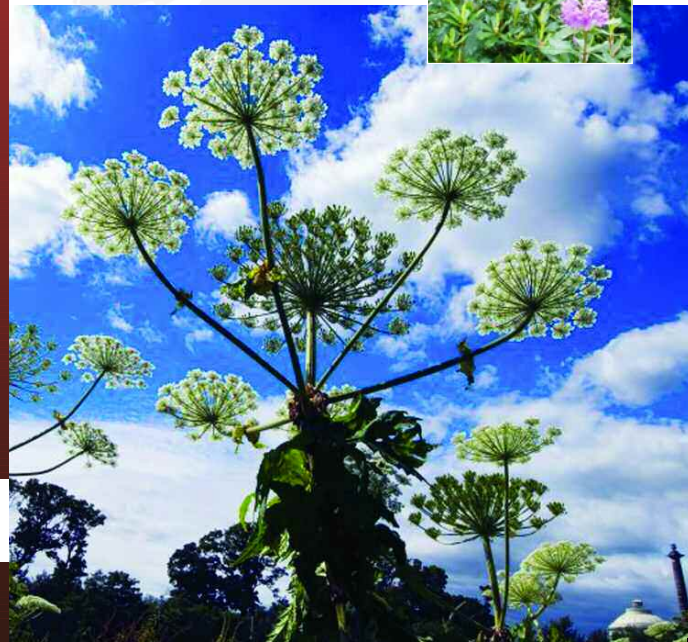
Large print version available

This project is one of 24 being undertaken in Highland with assistance from the Highland Biodiversity Partnership. It is supported by the National Lottery through the Heritage Lottery Fund, and receives match funding from Highland Council, Scottish Natural Heritage, Highlands & Islands Enterprise and RSPB Scotland.

Mink photo supplied by Laurie Campbell

INVASIVE
NON-NATIVE
SPECIES

Invasive non-native species
IN THE HIGHLANDS



Invasive species in the Highlands

The Highland Invasive Species Forum has prioritized 5 species for action: American mink, *Rhododendron ponticum*, and Japanese knotweed, giant hogweed and Himalayan balsam. These species are the most widespread, are increasing in area and have the greatest impact on native habitats and species. Leaflets with more detailed information on American mink, Japanese knotweed and *Rhododendron ponticum* have been produced in conjunction with this one.

In addition to these widespread species, there are species such as salmonberry and montbrecia which are a major problem but on a smaller geographical scale, but have the potential to become more widespread. Some species may not have arrived in the Highlands yet but have the potential to be a problem in the future for example the harlequin ladybird.

Invasive species control work is already being carried out in some cases such as the SNH Hebridean Mink Project and also the Water Vole Project (involving coordinated mink control) in the Cairngorms National Park. Less coordinated has been the Rhododendron control work that has been taking place for many years.

The Top Five

American mink

This member of the weasel family is smaller than an otter and bigger than a stoat. Often it is black with a white chest marking. It spends much of its time in the water and preys on birds and small mammals. It is a major predator of water voles, the UK's most rapidly declining mammal. All the mink in this country originally came from fur farms. Trapping and killing is the most effective control measure.

Rhododendron ponticum

This evergreen shrub was introduced in Victorian times to many Highland estate gardens. It thrives on the acidic soils and wet climate and has spread widely covering huge areas of woodland and open hill; it does especially well as nothing eats it. Its poisonous leaves break down slowly forming a thick layer of mulch and this combined with its dense branches shade out all the native ground plants. Coordinated and systematic clearance using various methods is the best control measure.

Japanese knotweed

This plant is one of many species found in Japan, it arrived in the 1800's in the port of Swansea. It is now found all over the UK but is scarce in Sutherland and Caithness. It does not set seed but it is spread by people moving soil around containing some of its roots. A new plant can spring from a piece of root the size of a thumbnail. This plant is most commonly found in urban areas and along road verges, these areas are where the soil has been disturbed and moved about the most. Repeated spraying with herbicide is the best control method.

Giant hogweed

This "monster" plant can grow up to 12 feet (4 meters) high. Over twice the size of the native hogweed. It grows mainly along river banks and likes disturbed ground to colonise. This plant is another Victorian introduction. It can produce 40,000 seeds a year that can lie dormant for 5 years. Although not a big problem here yet, in Morayshire and Central Scotland huge forests of this plant can be found along rivers and burns shading out the native vegetation and leading to bank erosion. The sap of this species causes skin burns when it is exposed to sunlight, so look at but don't touch this one. Repeated and coordinated spraying with herbicide is the best control method.

Himalayan balsam

Of all the top 5 this is the only one where a simple control measure works very effectively. Pulling this plant up by the roots controls it very effectively. After a few years of systematic pulling it can be eradicated from a catchment; as has been done in the River Conon catchment. This river bank plant is an annual, with explosive seed pods that shoot the seeds a few metres from the plant onto the ground or into a river. This means it can spread rapidly. Again it shades out native ground plants.