

Invasive Species Ireland Project Horticulture Code of Practice

1. Background

Invasive non-native plant and animal species are the second greatest threat to biodiversity worldwide after habitat destruction. They can negatively impact on native species, transform habitats and threaten whole ecosystems causing serious problems to the environment and the economy.

The Invasive Species in Ireland project which began in May 2006 aims to reduce the impact and threats from invasive species on the island of Ireland and is a joint initiative between National Parks and Wildlife Services and the Environment and Heritage Service. Preventing the spread and new introductions of invasive species is an issue of shared responsibility and requires the involvement of all relevant government agencies, academia, private and voluntary sectors. Many non-native species do not become invasive but provide considerable benefits to society and industries such as horticulture, agriculture, forestry and aquaculture. Therefore, management of the problem requires engagement and consultation with commercial interests. The development of this code of practice is aimed at reducing the risk from, and impacts of, invasive species and protecting native biodiversity. It is not seeking to stop the use of non-native species or impede the development of the horticulture industry on the island of Ireland.

2. The need for a Code of Practice

The UK and Irish Governments are contracting parties to a number of international conventions and agreements which require them to take account of invasive introduced species. The Convention on Biological Diversity (CBD) aims to prevent introductions, control invasive species and develop legislation. Other legislative drivers are European (Birds Directive, Habitats Directive, Water Framework Directive and Plant Health Directive) and national (Wildlife (Amendment) Act 2000 and the Wildlife (Northern Ireland) Order 1995). Both countries are also committed to the EU target of halting the loss of biodiversity by 2010. Analysis of the pathways by which species are arriving in Ireland and spreading has identified key sectors whose activities can contribute to the spread of invasive species. These sectors are also part of the solution and the plant trade and the horticulture industry can play an important role in invasive species management. The risk assessment element of the Invasive Species in Ireland project identified a range of plants that are high risk invasive species in Ireland, in particular ornamental aquatic plants. While these plants have not been introduced into Ireland with the intention of causing harm to native wildlife and other interests, they have subsequently been demonstrated to do so. Many of these plants are currently on sale throughout Ireland although legislation banning their sale is likely to be forthcoming. The Invasive Species in Ireland project is aiming to reduce the threat from these species through different mechanisms including recommending legislative provisions, development of the Code of Practice for the horticulture sector and targeted education and awareness initiatives (see www.invasivespeciesireland.com for more details). Species of concern include the aquatic plants, water fern (*Azolla filiculoides*), curly leaved waterweed (*Lagarosiphon major*), parrots feather (*Myriophyllum aquaticum*), New Zealand pigmyweed (*Crassula helmsii*), Nuttall's waterweed (*Elodea nuttallii*), floating pennywort

(*Hydrocotyle ranunculoides*), least duckweed (*Lemna minuta*) and the fringed waterlily (*Nymphoides peltata*). There are also a range of terrestrial plants such as the giant rhubarb (*Gunnera tinctoria*), *Rhododendron ponticum*, cherry laurel (*Prunus laurocerasus*), Hottentot fig (*Carpobrotus edulis*) and Himalayan balsam (*Impatiens glandulifera*) which are causing negative impacts on biodiversity in Ireland. However the impacts do not just occur from invasive plants, but also species that are inadvertently introduced or spread with plants such as flatworms in growing media and fragments of *Crassula helmsii* on aquatic plants. Non-native flatworms prey on earthworms and so pose a risk to our native earthworm populations and this can impact on species dependent on earthworms and have a negative effect on soil structure. Therefore producers and traders of nursery stock need to be able to detect and thereby limit the spread of flatworms in particular the New Zealand flatworm

3. How can a Code of Practice reduce risk?

The use of non-native species in horticulture is widely recognised as an introductory pathway, and one where there is no blanket prohibition on introductions into the wild (as there is for animals, for example). Therefore the horticulture sector has a vital role to play in managing invasive species through safe disposal of plant species in its own working capacity as well as informing the public/end user. In many cases it is disposal of species near watercourses or important habitats which leads to them forming wild populations. These can impact on native species and in some cases negatively effect the conservation goals in designated areas and are costly to control. Good practice has the potential to deliver significant benefits in terms of preventing introduction and spread of non-native plants, where these are likely to cause problems. There has been increasing awareness of this issue in the horticultural sector and through the Invasive Species in Ireland project in co-operation Bord Bia, discussions were initiated with the horticulture industry and relevant interests with a view to developing a code of practice, aimed at encouraging best practice and avoiding unwanted introductions. The code of practice is a voluntary code promoting types of behaviour but compliance with the code of practice will prevent the spread of invasive species and ensure compliance with legislation. A positive outcome of the development of this code will be increased awareness of the potential impacts from invasive plants will hopefully lead to the horticulture industry voluntarily stopping the sale of some high impact species. Increased awareness will also contribute to surveillance for potential invaders and better information on the distribution of species already established in Ireland.

4. Scope of the Code of Practice

The code of practice applies to all plant producers, nurseries, wholesalers, garden centres and retailers of plants. It also is directed at those who are commissioning and recommending plants such as landscapers, landscape architects, local authorities and those with responsibilities for parks, properties and land. The code provides advice and guidance on the safe use, control and disposal of invasive non-native plants and flatworms.

5. The Horticulture Code of Practice

5.1. Promotion of native species and biodiversity

Ireland's biodiversity has been put under pressure in recent years due to threats such as increased construction and development, intensive farming,

inappropriate forest management and the introduction of non-native species. Promoting native species will contribute to the efforts to halt the loss of biodiversity by 2010. Further information on biodiversity in Ireland can be found on the Notice Nature (www.noticenature.ie) and the It's in our Nature websites (www.biodiversityni.com).

5.2. Know what you are growing

If you are unsure whether a plant has invasive qualities, it is good practice to take a precautionary approach and follow the guidance contained in this code. It is also worth giving careful consideration to a non-native plant's invasive qualities when you exchange plants with friends, or grow plants from imported seeds. This code does not deal with specific information on individual plants but information on specific plants and links to organisations websites which contain information on the biology and identification of plants can be found on the Invasive Species in Ireland website (www.invasivespeciesireland.com).

5.3. Know what you are selling and recommending

Invasive non-native plants are not good garden or ornamental pond plants. There are usually many alternative plants better suited to gardens or ponds. Avoid selling non-native plants that are known to be invasive, and are already posing a threat to native biodiversity. If you continue to sell invasive non-native plants then as a very minimum ensure they are clearly and correctly named, labelled and give an indication of growth rates. Labels on plants should identify the dangers to the wider environment if these plants were to escape from gardens or horticultural premises. Further information on plants which you are advised not to stock can be found on the Invasive Species in Ireland website and the websites of the following organisations:

PlantLife International

www.plantlife.org.uk/html/influencing_change/influencing_change_campaigns_alien.htm

The Ornamental and Aquatic Trade Organisation www.ornamentalfish.org

Royal Horticultural Society

www.rhs.org.uk/conservation/Conservation_and_environment_nonnative.asp

Gardening Which?

<http://www.which.net/gardeningwhich/campaigns/aiplants.html>

5.4. Know what you are specifying

Do not specify invasive non-native plants. Always use the correct Latin genus and species name in conjunction with the common name to avoid confusion. Be aware of the current lists of plants considered to be problematic or invasive and consider revising or withdrawing old publications encouraging the use of these plants.

5.5. Know what you are buying

Avoid using plants or seeds known to be invasive, consider alternatives and when using native plants, use those of local origin from certified sources where available. Check all plants supplied against specifications – it is important to ensure when buying plants that you get what you ask for.

5.6. Follow control advice.

Invasive plants can be difficult to control but timely action will reduce the scale of the task. Best practice management guidance for a range of species can be found on the Invasive Species in Ireland website along with links to other organisations which provide advice.

5.7. Watch out for hitchhikers on plants and soil

Plant health regulations relate to pathogens and pests and not to potentially invasive plants or seeds transported unintentionally. It is good practice to quarantine imported plant material by keeping it well away and isolated from locally produced plants and those growing in the wild. The following measures are recommended to reduce the risk of invasive flatworms being introduced into or spread from your premises:

- Inspect incoming consignments of plants - Inspect pots or trays carefully particularly if they come from an area where invasive flatworms have been reported.
- Maintain good hygiene - Always use fresh, sterile compost or other sterile growing medium when potting up plants, not material taken from places where flatworms might be hiding. For example, a container of compost or growing medium which has been opened and left lying on the ground may prove an attractive hiding place for flatworms. Clear up spilt compost or other growing medium, disposing of or thoroughly cleaning used pots and other containers.
- Inspect your site for flatworms - Check regularly under matting or pots standing directly on the ground for flatworms or their egg capsules. Flatworms are found on the soil surface; they will seek damp places, such as under loose turfs, plastic or other sheeting, rocks, flat stones, plant containers etc. for shelter during the day. Egg capsules can also be found in such areas. Where containers stand on black polythene or capillary matting, frequently check, where possible, the underside of the polythene or matting for flatworms. Whenever pots are standing directly on the ground, check whether flatworms have hidden under the pot and are either still on the ground surface or have adhered to the underside of the pot.
- Check your product for flatworms - Lift plants from their pots frequently to check for the presence of flatworms or their egg capsules. Flatworms and their egg capsules can also be found inside plant containers between the root ball and the edge of the container.
- Set traps - One of the locations where flatworms are most frequently found is in private gardens. Where nursery or other premises are adjacent to private gardens, set 'traps' close to the boundary, consisting of a weighted down sheet of black plastic or plank of wood. Check the underside of these traps frequently for the presence of flatworms or their egg capsules.
- Prevent spread - Inspect all outgoing consignments of plants carefully whether or not they are for export. Check planting material leaving the nursery or other premises carefully for the presence of flatworms whether or not it is for export. Defra
- Report sightings - If you suspect that you have found a flatworm or their egg capsule, please send details of your find to Dr Archie Murchie (archie.murchie@afbini.gov.uk) or report it via the Invasive

Species in Ireland website www.invasivespeciesireland.com/sighting
Further information can be found on the Invasive Species in Ireland website and in the Defra Code of Practice to Prevent the Spread of Non-indigenous Flatworms
(www.defra.gov.uk/plant/pestnote/flat.htm).

5.8. Safe disposal of plant material and growing media

Plant material should never be disposed of in the countryside or even over the garden fence. Much can be composted or taken to municipal recycling centres. Remember some weeds should not be composted for example, Japanese knotweed. Best practice management guidelines for Japanese knotweed are available from the Invasive Species in Ireland website. When selling plants, remind customers about the need to safely dispose of plant cuttings and material to reduce the risk of spread of invasive species.

6. What next?

6.1. Take Action

The success of this code will depend on the level of uptake by the horticulture industry and related sectors. There are specific actions which should be undertaken to reduce the risk from invasive species and raise awareness of the issue with the public/end user of the plants, these include:

- Auditing your stock to identify which high impact species you may be growing/selling/recommending and considering alternatives. • Labelling of high impact plants.
- Displaying information materials.
- Stocking leaflets on invasive species that can be given to customers.
- Sign up to the Invasive Species in Ireland network and keep up to date with developments.

6.2. Support for the Code of Practice

The implementation of the code will be supported by a range of measures which will be provided through the Invasive Species in Ireland project. These will include:

- Provision of education and awareness materials such as posters and leaflets.
- Provision of a dedicated page on the Invasive Species in Ireland website at www.invasivespeciesireland.com/getinvolved/horticulture
- A dedicated section on the website where information can be found on high risk invasive plants in Ireland.
- Provision of this information in hard copy upon request.
- Provision of training materials on invasive species and training can be provided upon request.
- A programme of stakeholder engagement to get uptake of the code by the sector and in local and central Government procurement.
- A publicity campaign to raise awareness of the code and its aims.
- Inclusion of the code in horticulture courses in Universities and other institutions.
- Inclusion of the code in Bord Bia quality manuals for hardy nursery stock, potted plants and bedding plants; landscape and garden contractors and garden centres.

The Invasive Species in Ireland Project is undertaken, in partnership, by Envirocentre and Quercus. and is Funded by the National Parks and Wildlife Service and the Environment and Heritage Service. For more information on the Invasive Species in Ireland Project please see the website at

www.invasivespeciesireland.comwww.envirocentre.co.uk

www.npws.iewww.ehsni.gov.ukwww.quercus.ac.uk