RHODODENDRON



Rhododendron ponticum

Invasive Plant Information Note

What is it?

Rhododendron (*Rhododendron ponticum*) is a large perennial evergreen, acid loving shrub which is native to the Iberian Peninsula and Asia. It was introduced to Ireland during the 18th Century as an ornamental garden plant because of its attractive flowers. There are over 900 species of Rhododendron, but only *Rhododendron ponticum* is invasive in Ireland. Since its introduction, Rhododendron has escaped into the wild and is particularly invasive in the west, north-west and south-west of the country. Rhododendron thrives on acidic soil in areas with mild, moist climatic conditions. It can colonise a range of habitats including agricultural land, grasslands, woodland, urban areas, roadsides and wastelands (See Fig. 2). Please see link to its distribution across Ireland: http://maps.biodiversityireland.ie/#/Home.



Fig. 1: Rhododendron (www.arthurleej.com)



Fig. 2: Rhododendron infestation (www.nigelborrington.com)

Why should we be worried about it?

Rhododendron is an aggressive coloniser which is both environmentally and ecologically damaging to infected sites. Once established, it forms dense, long-lived thickets which smother the ground flora and suppress the regeneration of native trees and shrubs (See Fig. 4). Its dense thickets can reach several metres in height (See Fig. 1). Well established thickets eventually form a toxic layer of leaf litter which produces a dark sterile environment and supports little wildlife. The foliage of Rhododendron is unpalatable to grazing animals. Dense tangles of Rhododendron stems can block pathways, smother watercourses and encroach on roadways, resulting in an impingement of sightlines. In some cases, infestations have been so expensive to control that land has been abandoned.



Fig. 3: Rhododendron capsules (www.nonnativespecies.org)



Fig. 4: Rhododendron infestation in woodland habitat (www.zoonar.de)

How do we recognise Rhododendron?

It forms a compact shrub in open areas, whereas in the shade it adopts a larger lateral spread. The leaves of Rhododendron are waxy and oval-shaped (See Fig. 5). The upper side is dark green in colour while the lower side is paler and hairless. Leaves are 10-20cm long and range in width from 2-6cm. The leaf stem can be 1-3cm long. Rhododendron does not usually produce flowers until it is 10-12 years old. Flowering then occurs from May to July. Flowers can vary in colour from lilac pink to various light and dark shades of purple; spotted with brown and orange (See Fig 6). The flowers are bell-shaped and are held in large clusters. The fruit is a woody capsule containing several seeds that can persist on the plant for up to 3 years (See Fig. 3).



Fig. 5: Waxy Rhododendron leaves (www.aphotoflora.com)



Fig. 6: Rhododendron flower head (www.nonnativespecies.org)



Fig. 7: Tiny Rhododendron seeds (www.burncoose.co.uk)

How does Rhododendron spread?

It can reproduce by both sexual (seed) and asexual (vegetative) means. Each flower head can produce between 3,000 and 7,000 seeds (See Fig. 7). This means that a single Rhododendron bush can produce over 1 million seeds per annum. Rhododendron seeds are amongst the smallest and lightest of any plant species and are designed primarily for dispersal by wind. Rhododendron seeds can be dispersed up to 100 metres by wind. Rhododendron is also capable of reproducing by vegetative means, both by suckering from roots and by layering wherever branches touch the ground. In Ireland, colonisation takes place mainly through seed dispersal.

How to manage Rhododendron

Rhododendron is an invasive species which may take several years to eradicate from a site. Non-chemical treatment, chemical treatment or a combination of both can be employed to control an infestation. Younger plants in newly-established infected sites can be readily hand-pulled. Mature plants can be mechanically uprooted as the root system of Rhododendron is generally located in the top 45cm of the soil. Please note that Rhododendron re-grows vigorously when cut. Seeds are tiny and may be spread unintentionally on shoes, clothes and machinery. Please note that regular and systematic follow-up is required to deal with re-growth and seedling germination, irrespective of the control method employed. In order for eradication projects to be successful, tackle oldest bushes first to prevent the dispersal of seeds.

For Further Information on Invasive Alien Species please visit:

- Invasive Species Ireland http://invasivespeciesireland.com/
- European Commission http://ec.europa.eu/environment/nature/invasivealien/index en.htm