

FULL ACCOUNT FOR: Rhododendron ponticum

#### Rhododendron ponticum

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Ericales	Ericaceae
Common name	rhododendron (English), Pontian rhododendron (English), common rhododendron (English)			
Synonym	Rhododendron speciosum , (Willd.) Sweet. Rhododendron lancifolium , Moench			
Similar species				
Summary	<i>Rhododendron ponticum</i> often simply called rhododendron, is an evergreen shrub that has been widely cultivated as an attractive ornamental species. In ideal conditions <i>R. ponticum</i> can form dense stands which can inhibit the regeneration of native species and alter plant and animal communities. Control of <i>R. ponticum</i> is best achieved using a combination of physical and chemical methods, however this is usually an expensive and labour intensive process due to the high numbers of wind dispersed seed produced and the ability to resprout vigorously from its stumps and roots.			
CEP CEST	view this species on IUCN Red List			

## **Habitat Description**

*Rhododendron ponticum* is tolerant to a wide range of temperatures and to shade, but is intolerant to drought; it grows best in uniformly damp climates (Hulme, 2006; Maguire *et al.*, 2008). *R. ponticum* is capable of thriving on peaty, sandy or acidic soils (Maguire *et al.*, 2008) and while seedling recruitment is inhibited in areas where there is an existing continuous ground cover by native species, *R. ponticum* is able to establish readily in disturbed areas where a gap is present (Hulme, 2006). Distribution modelling has shown that fallen logs or tree stumps with light moss levels also provide establishment opportunities for *R. ponticum* in areas of existing ground cover (Stephenson *et al.*, 2006).



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### **Management Info**

<u>Preventative measures</u>: Preventing the establishment of *Rhododendron ponticum* should vary according to the major colonising strategy in the area and may include eradication of seed sources, minimising soil disturbance, reducing moss formation, relaxing fire exclusion policies and preserving plant cover (Esen *et al.*, 2006a); or the regulation and planning of forest activities to reduce disturbance levels (Colak, 1997; in Esen *et al.*, 2006a). <u>Prioritisation</u>: Prioritisation of control sites is important for the long term control of *R. ponticum* with different best practice guides recommending he prioritisation of different infestation types based on the age and condition of the infestation and nearby seed sources (Barron, undated; Edwards, 2006).

<u>Physical control</u>: Physical control can include the hand pulling of seedlings and smaller plants, which may involve the use of handtools (Edwards, 2006). Above ground material can also be removed with handtools or chainsaws with cut material either removed, chipped or burnt to enable necessary follow up work to continue (Barron, undated; Edwards, 2006; Maguire *et al.*, 2008). Heavy machinery can also be used to removed material, and while faster, it requires road access, is expensive and may cause damage to the soil and environment (Walter, 2005; Esen *et al.*, 2006a; Maguire *et al.*, 2008). Follow up treatments are always required for the stumps of *R. ponticum* as resprouting will occur otherwise (Edwards, 2006). In terms of physical control, this can be achieved by digging out the stumps either by hand or with heavy machinery and can be a very labour intensive process (Barron, undated; Maguire *et al.*, 2008).

<u>Chemical control</u>: Stumps of *R. ponticum* are more commonly treated with herbicides with a number of different applications including painting or spraying freshly cut stumps and stem injection techniques; foliar application through spraying or weed wiping is also possible and are preferred in some situations (Walter, 2005; Edwards, 2006; Maguire *et al.*, 2008). There are a number of different herbicides used at different rates which may be used successfully, their use and the application method utilised depending on a number of factors (Edwards, 2006)

<u>Biological control</u>: The indigenous wood-rotting fungus *Chondrostereum purpureum* has been recognised as a potential bioherbicide option in the UK, allowing for the controlled distribution of a biological control agent without the risk of harming other cultivated, ornamental and non-invasive *Rhododendron* species (Green, 2003). Please follow this link for details on the management and control of *Rhododendron ponticum*.

## Pathway

*Rhododendron ponticum* has been widely distributed in the British Isles as an ornamental plant (Dehnen-Schmutz, *et al.*, 2004). *Rhododendron ponticum* was used as a rootstock species for less hardy *Rhododendron* species and cultivars (Edwards, 2006).*Rhododendron ponticum* was historically planted as game cover in woodland habitats as a suitable habitat for pheasants (Dehnen-Schmutz, *et al.*, 2004).

## **Principal source:**

**Compiler:** IUCN SSC Invasive Species Specialist Group (ISSG) with support from the Overseas Territories Environmental Programme (OTEP) project XOT603, a joint project with the Cayman Islands Government -Department of Environment

#### **Review:**

Pubblication date: 2010-06-08

## ALIEN RANGE

[1] AUSTRIA[1] FRANCE[1] ISLE OF MAN[1] NEW ZEALAND

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**Summary:** This compilation of information sources can be sorted on keywords for example: Baits & Lures, Non Target Species, Eradication, Monitoring, Risk Assessment, Weeds, Herbicides etc. This compilation is at present in Excel format, this will be web-enabled as a searchable database shortly. This version of the database has been developed by the IUCN SSC ISSG as part of an Overseas Territories Environmental Programme funded project XOT603 in partnership with the Cayman Islands Government - Department of Environment. The compilation is a work under progress, the ISSG will manage, maintain and enhance the database with current and newly published information, reports, journal articles etc.

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