Berberis buxifolia 简体中文 正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Plantae	Magnoliophyta	Magnoliopsida	Ranunculales	Berberidaceae

Common name

Synonym

Similar species

Summary

Berberis buxifolia, commonly known as calafate, and Darwin's barberry (Berberis darwinii) are among the top twelve invasive alien plants on the Falkland Islands, categorised as a result of an assessment on the potential of non-native flora to cause land management problems and economic impact. Additionally they both achieved high scores of above 16 in a risk assessment that categorised non-native flora as potentially invasive plants because they out-compete local flora species and reduce agricultural productivity.

view this species on IUCN Red List

Species Description

Berberis buxifolia grows to a height of 1 - 1.5 m and has many arching branches which are covered in many tripartite spines. It flowers in summer, bearing many small yellow flowers, which are hermaphroditic, making it self-fertile; it is pollinated by insects. It has edible blue-black berries which are harvested for jams or eaten fresh; in some parts of South America it is commercially grown for this purpose (Belton, 2008).

Uses

Berberis buxifolia is often used as an ornamental species. It is also grown for its potential medical uses, as a garden plant or bonsai, whilst its wood is also used to make a red dye (Belton, 2008).

Management Info
Preventative measures: *Berberis buxifolia* was listed among the top twelve invasive alien plants on the Falkland Islands, categorised as a result of an assessment on the potential of non-native flora to cause land management problems and economic impact. Additionally it achieved a top score of 19 in a risk assessment that categorised non-native flora that scored above 15 as potentially invasive plants because they out-compete local flora species and reduce agricultural productivity. (Whitehead (2008) in Otley *et al*, 2008).
Chemical/Physical/Mechanical: The main technique used in the control of *B. buxifolia* on the Falkland Islands is a \"Cut and paste treatment\" (Belton, 2008), which includes the cutting of all stems as close to the ground as possible, and the application of a herbicide called \"Vigilant\" which is applied as a paste (Belton, 2008). Foliar spraying of a herbicide is another technique which should be successful. It has not been tested on *B. buxifolia* itself, however it has been proven as an effective technique on other *Berberis* sp. Manual and mechanical removal are also an option, however broken roots often re-sprout, so these methods are not recommended.
Integrated management: There are several management options that have been suggested for the control of *B. buxifolia* (Belton, 2008) on the Falkland Islands. \"Do nothing\", has been suggested (Belton, 2008) as the species currently affects very few landowners, and thus causes very little perceived annoyance. This option will also contribute very little impact economically in the short term, however it will also allow the problem to increase, and is thus not a long term solution. \"Containment\" has also been suggested (Belton, 2008). The costs associated with this method are probably very low, however due to the dispersal method of the species, bird dispersal, it will also be very hard and is thus, considered not appropriate. \"Site-led management\" has been suggested (Belton, 2008). This would involve the identification of *B. buxifolia* sites and the prioritization of their treatment. Those sites deemed high priority and those where very little resources are required would be treated first, with others treated when resources and funds are available. This method seems appropriate as it would treat large sites, hopefully reducing their potency, as well as stopping sites of little establishment from becoming more infested. \"Eradication\" is the last method proposed (Belton, 2008). This would be the largest type of operation to be undertaken, however as *B. buxifolia* is considered to be in a lag phase in only some areas, this type of treatment may only be effective in these areas, not in other areas where growth has become exponential. This method is not deemed appropriate. The responsibility of control is also an issue raised by Belton (2008). Affected and concerned landowners, a lead government agency, and a charitable trust have all been suggested as possible figureheads to take responsibility of *B. buxifolia* control. Only the establishment of a charitable trust is considered as an option in Belton's (2008) report. Various steps have been suggested as a sort of plan for the management scheme. 2008 was to include the mapping and abundance of *B. buxifolia*, the establishment of a Trust of the Falklands and the initiation of control measures on the smallest infected areas. 2009 was to include the acquisition of funding for necessary resources, although the continuation of actual control measures is not mentioned. 2010 is to include further funding acquisition, review of control techniques to establish a best practice.
Cultural: Community support and education on the effects of *B. buxifolia* has been identified as very important within the control programme on the Falkland Islands (Belton, 2008).

Pathway
Berberis buxifolia is a popular ornamental species on the Falkland Island's and can be spread via domestic planting (USDA, ARS, 2010)

Principal source:

Compiler: Interim compiled by IUCN SSC Invasive Species Specialist Group (ISSG) with support from the EU-funded South Atlantic Invasive Species project, coordinated by the Royal Society for the Protection of Birds (RSPB)
Updates with support from the Overseas Territories Environmental Programme (OTEP) project XOT603, a joint project with the Cayman Islands Government - Department of Environment

Review:

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ALIEN RANGE

[1] FALKLAND ISLANDS (MALVINAS)
[1] SWEDEN
[1] IRELAND
[1] UNITED KINGDOM

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12 references found for **Berberis buxifolia**

Managment information

IUCN/SSC Invasive Species Specialist Group (ISSG)., 2010. A Compilation of Information Sources for Conservation Managers.
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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