

Ironstone petrophile

E n d a n g e r e d F l o r a o f W e s t e r n A u s t r a l i a

If you think you've seen this plant, please call the Busselton District office of the Department of Conservation and Land Management on (08) 9752 1677.

Ironstone petrophile, also known as *Petrophile latericola* ms, is an upright, single-stemmed, open shrub, from 0.4 m to 1.5 m high and about 0.4 m wide, with few branches. The hard, linear leaves are 15 to 50 mm long, circular in cross-section, end in a rigid, sharp point, and are held erect and close to the stem. The species has small, rounded inflorescences at the ends of the branchlets, with numerous overlapping brown bracts at their base. The flowers are bright yellow, hairy, about 20 mm long, and are produced from October to November.

A single plant of ironstone petrophile was discovered by botanist Greg Keighery in 1991 on a rail reserve during a floristic survey of the southern Swan Coastal Plain. Soon after this during the same survey, a further population was located in nearby State Forest. The Department of Conservation and Land Management's (the Department's) staff have since located additional plants in remnant vegetation that adjoins the rail reserve population.

The species-rich plant community in which ironstone petrophile occurs, is a winter-wet area of shrubland over shallow red clay over ironstone. The plant community that occurs on these ironstone soils is highly restricted in distribution and was ranked as a Critically Endangered Ecological Community in 1995. There are also six additional Declared Rare Flora (DRF), three of which are ranked Critically Endangered, that occur on the ironstone soils in the vicinity of ironstone petrophile.

In 1992 the rail reserve populations were burnt and it was not until 1997 that some plants were relocated in the area by Department staff. A hot fire also burnt through part of another population in 1992 and resulted in the death of some mature individuals. Some regeneration has since occurred.

Dieback disease caused by the plant pathogen *Phytophthora cinnamomi* is a serious threat to ironstone petrophile. The species is suspected to be susceptible to the disease which is known to occur immediately uphill of, and adjacent to ironstone



The golden hairy flowers of ironstone petrophile. Photo – Andrew Brown

petrophile. Staff from the Department are spraying the site with phosphite to control the disease and prevent it from destroying the populations of ironstone petrophile.

Ironstone petrophile was ranked as Critically Endangered in 1997 and the Department, through the direction of the South West Region Threatened Flora and Communities Recovery Team, has been addressing the most threatening factors affecting its survival in the wild (see overleaf).

Ironstone petrophile is currently known from a single viable population totalling of around 200 plants. We are eager to hear of any other populations.

If unable to contact the District office on the above number please contact the Department's Wildlife Branch on (08) 9334 0422.

Recovery of a Species



The Department is committed to ensuring that Critically Endangered taxa do not become extinct in the wild. This is done through the preparation of a Recovery Plan or Interim Recovery Plan (IRP), which outlines the recovery actions that are required to urgently address those threatening processes most affecting the ongoing survival of threatened taxa in the wild and begin the recovery process.

IRPs are prepared by the Department and implemented by Regional or District Recovery Teams consisting of representatives from the Department, Botanic Gardens and Parks Authority, community groups, private landowners, local shires and various government organisations.

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Recovery actions that are being implemented are:

Protection from current threats: these include control of introduced weeds; the development of a fire protection and response plan to protect the species from inappropriate fire regimes; the maintenance of dieback hygiene; treating the habitat with phosphite to control dieback; and regular monitoring of the health of the populations.

Protection from future threats: these include the collection and storage of seed; the maintenance of live plants away from the wild (ie. in botanic gardens); conducting further surveys; rehabilitation of habitat; researching the biology and ecology of ironstone petrophile; enhancing plant numbers by direct propagation and translocation techniques; and ensuring that relevant authorities, land owners and Departmental personnel are aware of its presence and the need to protect it, and that all are familiar with the threatening processes identified in the Interim Recovery Plan.

IRPs will be deemed a success if the number of individuals within the population and/or the number of populations have increased.

This poster is sponsored by the Endangered Species Program of the Natural Heritage Trust.



Flowering shrub of ironstone petrophile. Photo – Leonie Monks



Bright golden flowers of ironstone petrophile appear from October to November. Photo – Leonie Monks

