



This fact sheet is developed with funding support from the Land Protection Fund.

Fact sheets are available from Department of Agriculture and Fisheries (DAF) service centres and our Customer Service Centre (telephone 13 25 23). Check our website at www.biosecurity.qld.gov.au to ensure you have the latest version of this fact sheet. The control methods referred to in this fact sheet should be used in accordance with the restrictions (federal and state legislation, and local government laws) directly or indirectly related to each control method. These restrictions may prevent the use of one or more of the methods referred to, depending on individual circumstances. While every care is taken to ensure the accuracy of this information, DAF does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.

Bitou bush

Chrysanthemoides monilifera sub-species *rotundata*



Bitou bush is an aggressive weed in coastal dune vegetation where it can outcompete, and in many cases totally eliminate, the native flora. The invasive success of bitou bush is due to its vigorous growth and prolific seed production.

Bitou bush grows faster than many native plants and is free of pests and diseases, giving it a competitive advantage over natives. It forms a dense green blanket that can prevent native tree seedlings from growing.

Such dense stands also destroy or drastically alter the habitat of many native birds and animals.

Bitou bush is out of control in New South Wales where it has already degraded over 60% of the coastline. Most of Queensland's coastline is free of bitou bush and we need to keep it that way. Queensland has 6100 km of scenic coastline with unique coastal flora, making the control of bitou bush highly important. Bitou bush has been recognised as a Weed of National Significance.



Legal requirements

Bitou bush (*Chrysanthemoides monilifera* ssp. *Rotundifolia*) is and its close relative Boneseed (*Chrysanthemoides monilifera* ssp. *Monilifera*) are restricted invasive plants under the *Biosecurity Act 2014*. The Act requires that all sightings of bitou bush or boneseed must be reported to Biosecurity Queensland within 24 hours of being found.

By law, everyone has a general biosecurity obligation (GBO) to take all reasonable and practical steps to minimise the risk of spread of bitou bush until they receive advice from an authorised officer. It must not be kept, moved, given away, sold, or released into the environment without a permit.

Description

Bitou bush invades and smothers native coastal dune vegetation and has the potential to destroy its value as wildlife habitat. Introduced from South Africa, it does not belong in our landscape.

Bitou bush is an attractive, bright-green perennial shrub clambering up to 5 m with yellow, chrysanthemum-like flowers. The stems have many woody branches and the upper stems are often purple. The leaves are smooth, alternate along the stems and are 3–7 cm long, oval to oblong in shape and tapering at the base. Some leaves have slightly toothed edges and have a short stalk. They are practically hairless except for a cottony down on young leaves.

The flowers are bright yellow on short stalks and clustered at the ends of the branches. They are up to 2–3 cm in diameter with 11–13 petals.

The fruit is egg shaped with a green fleshy skin that changes to brown and black on maturity. Each fruit has a single seed that is rough, hard and bone-like in colour and texture when ripe.

Boneseed is closely related to bitou bush. It is an erect shrub up to 3 m tall. Leaves are elongate with toothed margins, 3–9 cm long. Flowers are yellow with 4–8 petals. Fruit is round ripening from green to black. Seeds are smooth and bone coloured.

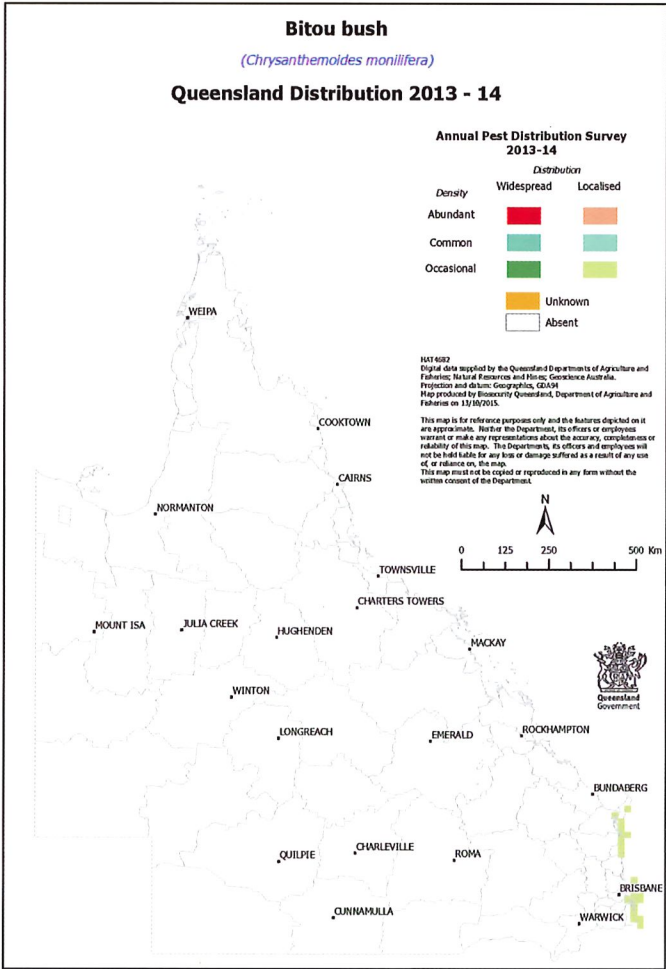
Life cycle

Seed production is prolific and up to 50 000 seeds per plant per year have been recorded. Seeds germinate at any time of the year, particularly after good rain. Flowering is intermittent year-round, but the main flowering time is between May and July. Most seeds remain viable for at least two years. Plants may flower within six months of germination and the fruit turns black when mature.

Methods of spread

Bitou bush is spread rapidly by birds eating the small black berries and passing the seed. Foxes have also been found to consume seeds with seedlings growing directly from fox scats.

Map 1. Distribution of bitou bush in Queensland



Habitat and distribution

A native of southern Africa, bitou bush is now naturalised in all states and territories of Australia except the Northern Territory. It occurs mainly in sandy, coastline areas (often where sand mining has occurred) but is capable of growing in other soils further inland. It is the dominant vegetation of 21% the New South Wales coastline and is present along 60% of the coast and 80% of the headlands.

In Queensland bitou bush is found in scattered locations in the South east from Fraser Island south to the border along the coast. Since 1981 the Queensland Government has carried out an active eradication control program in conjunction with the local governments, traditional owners and land owning state agencies.

Boneseed has not yet been found in Queensland.

Bitou bush was originally planted in New South Wales and parts of Queensland to ‘revegetate’ coastal dunes following sand mining. In Queensland it is restricted to two main areas.

In the Wide Bay area it is present at Inskip Point, Rainbow Beach and the southern tip of Fraser Island. Bitou bush poses a threat to the World Heritage values of the Great Sandy Region, including Fraser Island. Bitou bush is also present on North and South Stradbroke Islands and scattered along the Gold Coast beach strip.

Boneseed occurs in New South Wales, Victoria, Tasmania, South Australia and Western Australia.

Control

Managing bitou bush

All suspected sightings of bitou bush must be reported to Biosecurity Queensland, which will work with the relevant person to control the plant. Anyone finding suspected plants should immediately take steps to minimise the risk of bitou bush spreading.



Further information

Further information is available from your local government office, or by contacting Biosecurity Queensland on 13 25 23 or visit www.biosecurity.qld.gov.au.