

Preventing the spread of telegraph weed in South East Queensland

Lyn Willsher¹, Paul Mason² and Barry Whyte³

¹Biosecurity Queensland, Department of Primary Industries and Fisheries, PO Box 4297, Robina Town Centre, Queensland 4230, Australia

²Gold Coast City Council, PO Box 5042, Gold Coast Mail Centre, 9729 Queensland, Australia

³Biosecurity Queensland, Department of Primary Industries and Fisheries, Level 7 Mineral House, 41 George Street, Brisbane, Queensland 4000, Australia
Email: lyn.willsher@dpi.qld.gov.au

Summary Telegraph weed (*Heterotheca grandiflora* Nutt.) is a member of the Asteraceae family native to California and north western Mexico. It is an annual to short-lived perennial that is well adapted to survival in sandy soils and has been recorded as naturalised in Hawaii and Japan (Csurhes 2004).

At present, telegraph weed is only recorded at two locations in Australia, an infestation in the Lower Hunter valley of New South Wales and on Queensland's Gold Coast. Telegraph weed has the potential to invade open sandy areas (Csurhes 2004) with Queensland's coastal dunes and sand island habitats under immediate threat.

It is believed that telegraph weed was accidentally introduced to the Southport Spit in the late 1980s via machinery and has since spread to adjoining areas due to seed being carried in the prevailing south easterly winds. The total area of infestation on the Gold Coast is estimated to be roughly 300 hectares.

A weed risk assessment was carried out in August 2004 by the Department of Natural Resources and Water (NRW) with telegraph weed being recommended for declaration. It was declared in December 2007 as a class 2 pest under the *Land Protection (Pest and Stock Route Management) Act 2002*.

The Gold Coast City Council has taken a proactive management approach and initiated an on-going telegraph weed containment program along the Southport Spit in September 2004. Control work on surrounding infestations began in late 2005 in a joint project between the Gold Coast City Council and various Queensland state agencies including Biosecurity Queensland Invasive Plants and Animals, Department of Primary Industries and Fisheries (formally NRW Land Protection), the State Land Asset Management

unit of NRW, Queensland Transport and Environmental Protection Agency.

All known areas of infestation are being treated with the herbicide 2,4-D amine on a regular basis to prevent further spread and reduce the size of core infestations. Follow up control work every four to six months is necessary to prevent newly established plants from flowering.

An example of the control programs success is Wavebreak Island, an area of approximately 37 ha. When control work started on the island in September 2005, 30 person days and 2.22 kg of 2,4-D a.i. were needed to complete spot spraying of telegraph weed throughout the island. There has been a steady decline in the amount of herbicide (96%) and labour (83%) required with the latest treatment on Wavebreak Island on 4th of March 2008 requiring only five person days and 0.08 litres of 2,4-D a.i. to spot spray plants over the same area.

Since the control program began there have been only two new minor infestations of telegraph weed found on the Gold Coast beaches that are targeted for eradication. The core infestation areas are declining in size and the northern spread of the weed has been halted resulting in the protection of coastal dunes and sand islands of high conservation and tourism value.

Keywords Telegraph weed, *Heterotheca grandiflora*.

REFERENCES

- Csurhes, S. (2004). *Heterotheca grandiflora* Nutt. telegraph weed. Weed risk assessment. Unpublished report to Queensland Department of Natural Resources and Mines, Brisbane.