Department of Sustainability and Environment

Action Statement

Flora and Fauna Guarantee Act 1988 No. 217

Genoa River Correa

Correa lawrenciana var. *genoensis*

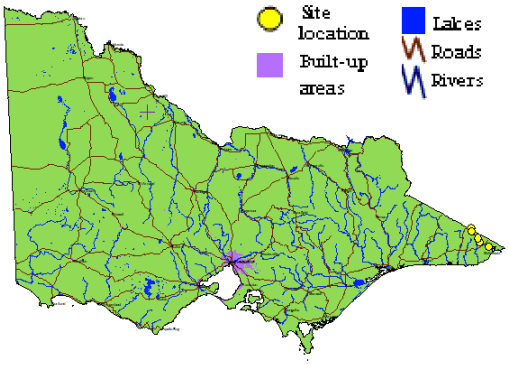
This Action Statement is based on a draft Recovery Plan prepared for this species by DSE under contract to the Australian Government Department of the Environment, Water, Heritage and the Arts.

Description

Genoa River Correa (*Correa lawrenciana* var. *genoensis*) is an erect to spreading shrub which grows to 2 m in height (Walsh & Entwisle 1999). It has ovate leaves to 7 x 4 cm. The upper leaf surface is dark green, glossy and hairless; the lower surface is pale grey-green and densely covered with stellate hairs (Walsh & Entwisle 1999). The leaf margins are smooth. The flowers tend to be solitary, are drooping, yellow-green and tubular, with four curved, triangular lobes at the end of tube. They are hairy outside, and grow to 25 mm long (Walsh & Entwisle 1999; DNRE 2001). The calyx is hemispherical, more or less hairless, up to 5 mm long, and has four conspicuous teeth. The stamens protrude from the flower. Flowering largely occurs in spring (Walsh & Entwisle 1999).

Genoa River Correa differs from the type variety in its prominently gland-dotted calyx with long acuminate lobes (Wilson 1961). The key to Mountain Correa (*Correa lawrenciana*) varieties in Walsh & Entwisle (1999) further distinguishes the Genoa Correa (*C. lawrenciana* var. *genoensis*) as having a green and glabrescent calyx.

Genoa River Correa
(Photo:DSE/McCann)



Distribution in Victoria
(Flora Information System DSE 2007)

Distribution

Genoa River Correa is restricted to a few very small populations in far-east Victoria fringing the Genoa River, and one population in south-eastern New South Wales, fringing Redstone Creek. Its altitudinal range is approximately 60–380 m above sea level.

Abundance

There are five populations in Victoria, which are estimated to contain between eight and one hundred individuals in total. Population sizes are

difficult to estimate for some populations due to steep, rocky terrain in remote areas (D. Cameron pers. comm.). The previous abundance and extent of range of Genoa River Correa is unknown. Clearing of suitable habitat of fertile alluvial flats in the Genoa area for agriculture and stock grazing is likely to have destroyed many individuals. A 1996 record from Mallacoota Lake (MEL herbarium record) has not been relocated despite targeted searches. It is possible that the plant is now extinct at this site.

Important populations

Important populations necessary to the long term survival and recovery of Genoa River Correa occur in the following locations:

Land tenure/reservation	*Population location and size*
National Parks	Coopracambra National Park:
	Site 1. Ivor Track, Genoa River (unknown population size)
	Site 2. Site known from a single plant (N. Walsh pers. obs; 2000)
Other (managed by Parks Victoria)	Genoa River, Wangarabelle (seven plants)
	Lower Genoa River (unknown population size)

Habitat

Victorian populations occur in riparian forest or riparian scrub, tending to ecotonal vegetation between forest, or Burgan (*Kunzea ericoides*) scrub, and treeless riparian scrub. Associated species may include White Sallow-wattle (*Acacia floribunda*), Black Wattle (*A. mearnsii*), Sticky Hop Bush (*Dodonaea viscosa*), Slender Tea-tree (*Leptospermum brevipes*), Spiny-headed Mat-rush (*Lomandra longifolia*), Hazel Pomaderris (*Pomaderris aspera*), Kanooka (*Tristaniopsis laurina*) and/or Slender Westringia (*Westringia eremicola*).

Life history and ecology

There have been no specific ecological studies of Genoa River Correa. It is likely that birds or bees pollinate the tubular flowers of this taxon, as was observed for Tasmanian Mountain Correa (*C. lawrenciana*) by Hingston & McQuillan (2000).

Conservation status

National conservation status

Genoa River Correa is listed as endangered under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999.*

Victorian conservation status

Genoa River Correa is listed as threatened under the Victorian *Flora and Fauna Guarantee Act 1988.*

It is considered endangered in Victoria according to DSE's *Advisory List of Rare or Threatened Plants in Victoria – 2005* (DSE 2005).

Potentially threatening processes

Weed invasion

Most populations are relatively weed free. At least one population, however, is threatened by Blackberries (*Rubus fruticosus* spp. agg.). Blackberry is a Weed of National Significance.

Reservation status

Two of the five known populations are not formally reserved for conservation purposes.

Inappropriate biomass reduction / fire regimes

Multiple fires in quick succession are likely to destroy individuals

Flooding

This species occurs in the riparian zone; severe flooding or modification to hydrological processes may damage plants.

Previous management action

- Surveys have been undertaken at known sites to record numbers and distribution.
- Plants have been established at the Rainforest Centre in Orbost.
- Weed control has been undertaken.

Long term objective

To ensure that the Genoa River Correa can survive, flourish and retain its potential for evolutionary development in the wild.

Specific objectives, actions and targets

The intended management actions listed below are further elaborated in DSE's Actions for Biodiversity Conservation (ABC) system. Detailed information about the actions and locations, including priorities, is held in this system and will be provided annually to land managers and other authorities.

Objective I To increase knowledge of biology, ecology and management requirements

Action	*Targets*	*Responsible*
1. Clarify/review taxonomy. Clarify taxonomy to enable an accurate conservation status assessment.	▪ Determination and updating of conservation status for inclusion on state and national threatened species lists.	Royal Botanic Gardens
2. Acquire baseline population data by conducting detailed field and desk top surveys including identification of the area and extent of the population; estimates of the number, size and structure of the population; and inference or estimation of population change.	▪ Updated records on all state databases (Flora Information System, VrotPop and Herbarium). ▪ Target populations accurately mapped.	DSE
3. Assess habitat characteristics and/or condition. Accurately survey known habitat, and collect and analyse floristic and environmental information relevant to community ecology and condition.	▪ Ecological requirements identified for the completion of essential life history stages, recruitment and dispersal. ▪ Core habitat mapped.	DSE
4. Conduct survey to locate suitable habitat. Identify and survey potential / historical habitat, using ecological and bioclimatic information that may indicate habitat preference.	▪ Predictive model for potential habitat developed and tested.	DSE
5. Identify disturbance regimes to maintain habitat or promote regeneration and recruitment.	▪ Determine disturbance regimes that maintain habitat for Genoa River Correa. ▪ Ecological burning plan established for all known populations.	DSE
6. Undertake research to identify key biological functions. Evaluate current reproductive/regenerative status, seed bank status and longevity, fecundity and recruitment levels. Determine seed germination requirements by conducting laboratory and field trials aimed to identify key stimuli.	▪ Seed bank/regenerative potential quantified for target populations ▪ Stimuli for recruitment/regeneration identified. ▪ Management strategies identified to maintain, enhance or restore regenerative processes fundamental to reproduction and survival.	DSE
7. Analyse population trends. Measure population trends and responses against recovery actions by collecting demographic information including recruitment and mortality, timing of life history stages and morphological data. Collate, analyse and report on census data and compare with management histories.	▪ Techniques for monitoring developed and implemented. ▪ Census data for target populations. ▪ Population growth rates determined. ▪ Population Viability Analysis completed for targeted populations.	DSE

Objective II **To secure populations or habitat from potentially incompatible land use or catastrophic loss.**

Action	*Targets*	*Responsible*
8. Establish Management Areas or Special Protection Zones. Negotiate formal conservation measures (e.g. Special Protection Zones) at Genoa River (Wangarabelle) and Lower Genoa River sites.	▪ Sites protected by zoning.	DSE
9. Erect/maintain signs to restrict or discourage access.Control accidental destruction by installing appropriate signage.	▪ Signage installed at sites likely to be subject to disturbance through road- or track-works (e.g. Lower Genoa River and Ivor Creek sites). Signage is not recommended for remote sites (e.g. Coopracamba National Park).	DSE, Parks Victoria
10. Establish cultivated plants *ex situ* to safeguard from the unforeseen destruction of the wild population.	▪ Development of effective propagation and cultivation techniques. ▪ At least 30 mature plants in cultivation.	Royal Botanic Gardens
11. Liaise with private landholders. Ensure that information and advice about the recovery of Genoa River Correa has been provided to private land managers and landholders.	▪ All relevant private land managers are aware of the species and its management needs.	DSE
12. Liaise with government agencies. Ensure that information and advice about the recovery of Genoa River Correa has been provided to public land managers, local government authorities and Catchment Management Authorities.	▪ All relevant authorities and public land managers are aware of the species and its management needs.	DSE

Objective III **To improve the condition of habitat**

Action	*Targets*	*Responsible*
13. Manage environmental weeds. Control threats from pest plants using careful application of herbicide or hand removal of weeds.	▪ Measurable seedling recruitment/vegetative regeneration at all known sites. ▪ A measurable reduction in plant mortality at all known sites.	DSE, Parks Victoria

Objective IV To increase the number of populations or individuals

Action	*Targets*	*Responsible*
14. Store reproductive material. Establish a seed bank.	▪ Long-term storage facility identified. ▪ Seed from target populations in storage.	DSE, Royal Botanic Gardens
15. Determine seed viability.	▪ Seed viability determined.	Royal Botanic Gardens
16. Identify potential sites for reintroduction / translocation. Select and evaluate suitable translocation sites that are ecologically and biologically suitable, have secure land tenure and are managed appropriately	▪ Criteria for site suitability identified and site selected. ▪ Translocation plan prepared.	DSE
17. Establish and maintain a reintroduced / translocated population. Prepare site(s) to achieve maximum survival of translocated plants and implement translocation plan. Maintain and monitor translocated plants	▪ Development of successful translocation techniques. ▪ At least 30% survival of translocated plants.	DSE, Royal Botanic Gardens

Objective V To increase community awareness and support

Action	*Targets*	*Responsible*
18. Involve community groups and volunteers in recovery activities.	▪ Opportunities for involvement identified, promoted and supported.	DSE

References

DNRE (2001) *DNRE Flora Information System 2001*, Department of Natural Resources and Environment.

DSE (2005) *Advisory List of Rare or Threatened Plants in Victoria – 2005*. Department of Sustainability and Environment, East Melbourne, Victoria.

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Wilson, P.G. (1961) A taxonomic revision of the genus *Correa* (Rutaceae), *Transactions of the Royal Society of South Australia*, **85**: 21-53.

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