

A statement for the purposes of approved conservation advice
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

Approved Conservation Advice for
***Hibbertia* sp. Bankstown (R.T.Miller & C.P.Gibson s.n. 18/10/06) (a shrub)**

This Conservation Advice has been developed based on the best available information at the time this conservation advice was approved.

Following taxonomic revision, the name of this species has changed and is listed under the EPBC Act as at 25 September 2013 as:

Hibbertia puberula* subsp. *glabrescens

Description

Hibbertia sp. Bankstown (R.T.Miller & C.P.Gibson s.n. 18/10/06) is also known as *Hibbertia* sp. nov. (Bankstown Airport) and by its manuscript name *Hibbertia glabrescens* ms. It is a prostrate shrub in the Dilleniaceae family. It has a few to numerous spreading, glabrous, wiry branches which are up to 40 cm in length. Its leaves are oblong-lanceolate to almost linear, 3 to 6 mm long by 0.8 – 1.4 mm wide. The flowers are yellow with notched petals.

Conservation Status

This species is eligible for listing as **critically endangered** because it has extremely low numbers of mature individuals and because its geographic distribution is very restricted and precarious for its survival (see Threats, below).

Distribution and Habitat

Hibbertia sp. Bankstown (R.T.Miller & C.P.Gibson s.n. 18/10/06) is known from one population of less than 50 mature individuals (October 2006) in Area 5, Bankstown Airport, NSW. This population is found in highly modified Georges River Tertiary Alluvium Floodplain Communities which, due to vegetation clearance and modification are currently maintained as grasslands. The NSW National Parks and Wildlife Service have completed broadscale mapping of the area where this population is found and mapped the area as modified Sydney Coastal Riverflat Forest – Alluvial Woodland. It occurs on Sandy Tertiary Alluvium with a high silt content. This species occurs within the Sydney Metro Natural Resource Management Region.

Threats

The main identified threats to *Hibbertia* sp. Bankstown (R.T.Miller & C.P.Gibson s.n. 18/10/06) are from potential developments and significant habitat changes in Area 5 of Bankstown Airport, as well as weed invasion.

Stochastic events, such as disease or extreme weather may also threaten this species, as this population represents the only known extant population of this species.

Given the population's proximity to residential development there will be ongoing pressure to utilise the area of the airport where this population is found.

Research Priorities

Research priorities that would inform future regional and local priority actions include:

- Design and implement a monitoring program or, if appropriate, support and enhance existing programs.

- More precisely assess population size, distribution, the effect of the current mowing/ slashing regime on the species, ecological requirements and the relative impacts of threatening processes.
- Undertake survey work in suitable habitat and potential habitat to locate any additional populations.
- Undertake seed germination or vegetative propagation trials to determine the requirements for successful establishment.

Existing Plans/Management Prescriptions that are Relevant to the Species

- Bankstown Airport Environmental Strategy 2005

Priority Actions

The following actions can be done to stop the decline or support the recovery of *Hibbertia* sp. Bankstown (R.T.Miller & C.P.Gibson s.n. 18/10/06).

Habitat Loss, Disturbance and Modification

- Monitor known populations to identify key threats or the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.
- Control and manage access on Bankstown Airport land.
- Undertake regular survey work to monitor the population at Bankstown Airport.
- Undertake survey work in potential habitat to locate any additional populations.
- Minimise adverse impacts from land management activities at Bankstown Airport.
- Ensure chemicals or other mechanisms used to eradicate weeds do not have a significant adverse impact on *Hibbertia* sp. Bankstown (R.T.Miller & C.P.Gibson s.n. 18/10/06).
- Ensure road development and maintenance activities (or other infrastructure or development activities as appropriate) in the area where *Hibbertia* sp. Bankstown (R.T.Miller & C.P.Gibson s.n. 18/10/06) occurs do not adversely impact on this population.

Invasive Weeds

- Develop and implement a management plan for the control of weeds on Bankstown Airport lands such as African Love Grass *Eragrostis curvula* and Kikuyu Grass *Pennisetum clandestinum*.
- Identify and remove weeds in the local area, which could become a threat to *Hibbertia* sp. Bankstown (R.T.Miller & C.P.Gibson s.n. 18/10/06), using appropriate methods.
- Manage the site to prevent introduction of additional invasive weeds, which could become a threat to *Hibbertia* sp. Bankstown (R.T.Miller & C.P.Gibson s.n. 18/10/06), using appropriate methods.

Conservation Information

- Raise awareness of *Hibbertia* sp. Bankstown (R.T.Miller & C.P.Gibson s.n. 18/10/06) within the local community. Consider the need for fact sheets/information brochures/ field days in conjunction with known industry or community interest groups.
- An awareness strategy could include the following interest groups: Bankstown Airport Limited; Department of Infrastructure, Transport, Regional Development and Local Government; Department of Environment and Climate Change (NSW); Bankstown Bushland Society; and local residents.

Establishing Additional Populations

- Undertake appropriate seed collection and storage.
- Undertake seed germination and/or vegetative propagation trials to determine the requirements for successful establishment.
- Investigate options for establishing additional populations.

- Implement appropriate translocation protocols if establishing additional populations is considered necessary and feasible.

This list does not necessarily encompass all actions that may be of benefit to *Hibbertia* sp. Bankstown (R.T.Miller & C.P.Gibson s.n. 18/10/06), but highlights those that are considered to be of highest priority at the time of preparing the conservation advice.

Information Sources:

Bankstown Airport Limited (2005). Bankstown Airport - Airport Environment Strategy.
Bankstown Airport Limited, North Sydney.