Approved conservation advice
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

Approved Conservation Advice for *Eucalyptus caleyi* subsp. *ovendenii* (Ovenden's Ironbark)

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

Description

Eucalyptus caleyi subsp. *ovendenii*, Family Myrtaceae, also known as Ovenden's Ironbark, is a tree growing to 25 m with rough and deeply corrugated bark, persistent throughout the trunks and branches (Hill & Johnson, 1991; DECC NSW, 2005a). Fruit are often larger than those of *E. caleyi* subsp. *caleyi*, and are distinctly square in section and prominently ribbed, while in *E. caleyi* subsp. *caleyi* they are barrel-shaped and not ribbed (Brooker & Kleinig, 2006).

Conservation Status

Ovenden's Ironbark is listed as **vulnerable**. This species is eligible for listing as vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) as, prior to the commencement of the EPBC Act, it was listed as vulnerable under Schedule 1 of the *Endangered Species Protection Act 1992* (Cwlth). The subspecies is also listed as vulnerable under the *Threatened Species Conservation Act 1995* (NSW).

Distribution and Habitat

Ovenden's Ironbark is known only from a limited area west of Guyra to west of Tenterfield, NSW. Localities include 'Moorabinda' station and Torrington State Conservation Area (DECC NSW, 2005a). It overlaps with part of the range of *E. caleyi* subsp. *caleyi*, but occupies the crests of broad high ridges (Hill & Johnson, 1991). Preferred altitudes are 610–820 m, on granitic substrates (DECC NSW, 2005a). *Eucalyptus caleyi* subsp. *caleyi* occurs on lower slopes in the same general area, and intergradation occurs in intervening habitats (Hill & Johnson, 1991). Ovenden's Ironbark is restricted to NSW, while *E. caleyi* subsp. *caleyi* also occurs in Queensland (Jessup, 2002; Brooker & Kleinig, 2004). Ovenden's Ironbark occurs within the Border Rivers–Gwydir (NSW) Natural Resource Management Region.

Ovenden's Ironbark grows on shallow soils in dry, open grassy woodlands (Hill & Johnson, 1991). Associated species include Yellow Box (*E. melliodora*), Tumbledown Red Gum (*E. dealbata*), White Box (*E. albens*), Silver-leaved Ironbark (*E. melanophloia*), and Wilga (*Geijera parviflora*) (DECC NSW, 2005a).

Ovenden's Ironbark can be locally abundant, in some cases dominating its grassy woodland habitat. Juveniles were present in about half the sampled sites within Torrington State Conservation Area, indicating good recruitment (Hunter et al., 1998; DECC NSW, 2005a).

The distribution of this species overlaps with the "White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland" EPBC Act-listed threatened ecological community.

Threats

The main identified threats to Ovenden's Ironbark include invasion of habitat by introduced grasses such as Coolatai Grass (*Hyparrhenia hirta*) which can prevent seedling establishment, clearing and fragmentation of grassy woodland habitat for agriculture, and grazing pressure (DECC NSW, 2005a). Coolatai Grass (*Hyparrhenia hirta*) dominates large areas of pasture,

roadsides, travelling stock routes and areas of remnant vegetation in the North Western Slopes (NSW Scientific Committee, 2003).

The main potential threats to Ovenden's Ironbark include frequent fire which may reduce populations and kill young regenerating trees (DECC NSW, 2005a).

Research Priorities

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

- Design and implement a monitoring program.
- More precisely assess population size, distribution, 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 and/or vegetative propagation trials to determine the requirements for successful establishment.
- Research the ecological fire requirements of this species (DECC NSW, 2005b).

Regional Priority Actions

The following regional priority recovery and threat abatement actions can be done to support the recovery of Ovenden's Ironbark.

Habitat Loss, Disturbance and Modification

- Monitor known populations to identify key threats.
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.
- Identify populations of high conservation priority.
- Minimise adverse impacts from land use at known sites.
- Protect known populations and areas of potential habitat from clearing fragmentation or disturbance (DECC NSW, 2005a).
- Investigate formal conservation arrangements such as the use of covenants, conservation agreements or inclusion in reserve tenure.

Invasive Weeds

- Implement the management plan for the control of Coolatai Grass in the local region (NSW Department of Agriculture, 2002).
- Identify and remove weeds in the local area, such as Coolatai Grass, which could become a threat to Ovenden's Ironbark, using appropriate methods.
- Manage sites to prevent introduction of invasive weeds, which could become a threat to Ovenden's Ironbark, using appropriate methods.
- Ensure chemicals or other mechanisms used to eradicate weeds do not have a significant adverse impact on Ovenden's Ironbark.

Fire

- Develop and implement a suitable fire management strategy for Ovenden's Ironbark.
- Provide maps of known occurrences to local and state Rural Fire Services and seek inclusion of mitigative measures in bush fire risk management plans, risk register and/or operation maps.

Trampling, Browsing or Grazing

- Manage known sites on private property to ensure appropriate cattle or sheep grazing regimes are conducted to allow regeneration from seedlings.
- Prevent grazing pressure at known sites on leased crown land through exclusion fencing or other barriers.

Conservation Information

- Raise awareness of Ovenden's Ironbark within the local community.

Enable Recovery of Additional Sites and/or Populations

- Expand and reconnect isolated remnants of habitat (DECC NSW, 2005a).
- Undertake appropriate seed collection and storage.
- Investigate options for linking, enhancing or establishing additional populations
- Implement national translocation protocols (Vallee et al., 2004) if establishing additional populations is considered necessary and feasible.

This list does not necessarily encompass all actions that may be of benefit to Ovenden's Ironbark, but highlights those that are considered to be of highest priority at the time of preparing the conservation advice.

Existing Plans/Management Prescriptions that are Relevant to the Species

- Torrington State Conservation Area Plan of Management (NSW NPWS, 2003), and
- Management for Coolatai Grass on the North West Slopes of NSW (NSW Department of Agriculture, 2002).

These prescriptions were current at the time of publishing; please refer to the relevant agency's website for any updated versions.

Information Sources:

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