

**Advice from the Threatened Species Scientific Committee (the Committee)  
on the list of Threatened Species under the  
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)**

**1. Reason for Conservation Assessment by the Committee**

This advice follows assessment of new information on:

***Hicksbeachia pinnatifolia* (monkey nut)**

**2. Summary of Species Details**

<b>Taxonomy</b>	<i>Hicksbeachia pinnatifolia</i> (CHAH, 2009).
<b>State Listing Status</b>	Listed as vulnerable under the NSW <i>Threatened Species Conservation Act 1995</i> .  Listed as vulnerable under the Queensland <i>Nature Conservation (Wildlife) Regulation 2006</i> .
<b>Description</b>	This species is a small tree growing to 12 m high. The leaves are up to 100 cm long, comprised of 7-32 leaflets (or lobes) 14-40 cm long and 2.5-7 cm wide. The maroon flowers grow in clusters on a central stem 14-50 cm long. The red fleshy fruits are to 3-5 cm long (Theis, 1976; Weston, 1995).
<b>Distribution</b>	This species is found in isolated coastal areas of north-east New South Wales from the Nambucca Valley north to the Queensland-New South Wales border (NSW DECC, 2005).
<b>Relevant Biology/Ecology</b>	The species occurs in rainforest on basalt-derived soils. It regenerates prolifically by suckering from the base after disturbance (Weston 1995a).
<b>Threats</b>	
<i>Known</i>	Clearing of rainforest habitat was a past threat to this species.  Current threats include clearing of habitat to urban development, the spread of introduced plants throughout the species habitat, particularly Lantana ( <i>Lantana camara</i> var. <i>camara</i> ). Other introduced plants include, <i>Ageratum houstonianum</i> (Blue Billygoat Weed), <i>Cinnamomum camphora</i> (Camphor Laurel) also recorded at some sites (Barry and Thomas 1994). These introduced plants threaten the species either by direct competition or increasing fuel loads with a subsequent change in the fire frequency (W.J.F. McDonald 2001, pers. comm.).
<i>Potential</i>	Potential threats include, clearing of rainforest habitat for development or agriculture, invasion of habitat by introduced weeds (particularly Lantana and exotic vines), altered fire and collection of seed for horticulture (NSW DECC, 2005).

**3. Public Consultation**

Notice of the proposed amendment was made available for public comment for 30 business days. Any comments received that are relevant to the survival of the species have been considered by the Committee.

#### 4. How judged by the Committee in relation to the EPBC Act criteria and Regulations

**Criterion 1:** It has undergone, is suspected to have undergone or is likely to undergo in the immediate future a very severe, severe or substantial reduction in numbers

**Not eligible**

Criterion element	Evidence
Reduction in numbers	Insufficient data – Though several threats to this species have been identified, there are insufficient data to determine whether their impact on populations is substantial. Floyd (1989) records that it was originally a common tree in the ‘big scrub’ of the Richmond River.

**Criterion 2:** Its geographic distribution is precarious for the survival of the species **and** is very restricted, restricted or limited

**Not eligible**

Criterion element	Evidence
Geographic distribution AND  Geographic distribution precarious	Insufficient data – Species is found in isolated coastal areas of north-east New South Wales from the Nambucca Valley north to the Queensland-New South Wales border (NSW DECC, 2005).  Insufficient data – In NSW, species has been recorded in Dorrigo National Park, Never Never State Forest and Whian Whian State Forest. Forty per cent of known records in northern NSW are along roadsides, with approximately 30 per cent on private land and 30 per cent within the protected area estate. However, actual figures are likely to be much higher for private lands and the protected area estate, as current records are skewed towards easily accessible roadsides (DECC, unpubl.).

**Criterion 3:** The estimated total number of mature individuals is very low, low or limited; **and either**

(a) evidence suggests that the number will continue to decline at a very high, high or substantial rate; **or**

(b) the number is likely to continue to decline **and** its geographic distribution is precarious for its survival

**Not eligible**

Criterion element	Evidence
Total no. of mature individuals AND  Continued rate of decline	Insufficient data – No information is available with respect to population size or abundance in Queensland. As in NSW, the population is likely to be substantially larger than current records suggest (DECC, unpubl.).  Insufficient data – The distribution of the Red Boppel Nut does not appear to have decreased in south east Queensland although habitat loss and fragmentation are likely to have resulted in local

	<p>population reductions. The species is locally noticeable in northern NSW, particularly on the rhyolitic soils in and around Nightcap National Park, Goonengerry and Wilson's Creek, and on the metasediments around Main Arm, Inner Pocket, Billinudgel and the Burringbar Range. It is found in the Dorrroughby Creek area, occurring at the falls on Dorrroughby Creek, along local roads, and on the edge of Hogan's Scrub (which has recently been incorporated into the protected area estate) (J. Sinclair pers. comm in DECC, unpubl.).</p>
<b>OR</b>	
<p>Total no. of mature individuals AND Continued decline likely AND Geographic distribution precarious</p>	<p>Insufficient data – Most database records of the Red Boppel Nut are of locations only and do not include abundance information or size-class distributions. Accordingly, it is difficult to estimate population sizes. The species is locally noticeable in northern NSW. No information is available with respect to population size or abundance in Queensland. As in NSW, the population is likely to be substantially larger than current records suggest (DECC, unpubl.).</p> <p>No data</p> <p>Insufficient data – In NSW, species has been recorded in Dorrigo National Park, Never Never State Forest and Whian Whian State Forest. Forty per cent of known records in northern NSW are along roadsides, with approximately 30 per cent on private land and 30 per cent within the protected area estate. However, actual figures are likely to be much higher for private lands and the protected area estate, as current records are skewed towards easily accessible roadsides (DECC, unpubl.).</p>

**Criterion 4:** The estimated total number of mature individuals is extremely low, very low or low  
**Not eligible**

Criterion element	Evidence
Total no. of mature individuals	<p>Insufficient data – Most database records of the Red Boppel Nut are of locations only and do not include abundance information or size-class distributions. Accordingly, it is difficult to estimate population sizes. The species is locally noticeable in northern NSW. No information is available with respect to population size or abundance in Queensland. As in NSW, the population is likely to be substantially larger than current records suggest (DECC, unpubl.).</p>

**Criterion 5:** Probability of extinction in the wild that is at least

- (a) 50% in the immediate future; or
- (b) 20% in the near future; or
- (c) 10% in the medium-term future

**Not eligible**

Criterion element	Evidence
Probability of extinction in the wild	No data

## 5. Recommendations

Although there are insufficient data to assess the species against the criteria, the Committee recommends a precautionary approach be applied and hence that **no amendment** be made to the list referred to in section 178 of the EPBC Act and that *Hicksbeachia pinnatifolia* remains eligible for inclusion in the **vulnerable** category of the list by judgement likely to meet Criterion 2.

Threatened Species Scientific Committee

3 December 2009

## 6. References cited in the advice

Barry SJ and Thomas GT (1994). Threatened Vascular Rainforest Plants of South-east Queensland: A Conservation Review. Queensland Department of Environment and Heritage.

Council of Heads of Australian Herbaria (CHAH) (2009). Australian Plant Census.

Available on the Internet at:

<http://www.anbg.gov.au/cgi-bin/apclist>

Department of Environment, Climate Change and Water (DECC) (unpubl.) Draft recovery plan for *Hicksbeachia pinnatifolia* Red Boppel Nut. DECCW, Sydney. The information is based largely on a report written for DECCW in October 2006.

Floyd AG (1989). Rainforest trees of Mainland South-eastern Australia. Inkata Press. Melbourne

McDonald WJF (2001). Personal communication, Queensland Herbarium, Queensland Government, Environmental Protection Authority.

NSW Department of Environment and Climate Change (NSW DECC) (2005). Red Boppel Nut – profile. Viewed 11 August 2009.

Available on the Internet at:

<http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/profile.aspx?id=10405>

Stanley TD and Ross EM (1986). Flora of south-eastern Queensland. Volume Two. Department of Primary Industries. Brisbane, Queensland.

Theis N (1976). *Hicksbeachia*, a neglected native Australian nut. West Australian Nutgrowing Society Yearbook 2: 46-52.

Weston PH (1995). '*Hicksbeachia*', In: Orchard, AE & McCarthy, P (Eds.), *Flora of Australia*, vol. 16, CSIRO, Melbourne.