



New South Wales

THREATENED SPECIES CONSERVATION ACT 1995 No 101

Notice of Final Determination and Amendment of Schedule 1 to Act

The Scientific Committee established under the *Threatened Species Conservation Act 1995* has, in pursuance of Division 3 of Part 2 of that Act, made a final determination to insert the following community in Part 3 of Schedule 1 to that Act (Endangered ecological communities) and, accordingly, that Schedule is amended as set out in Annexure "A" to this Notice:

Part 3 Endangered ecological communities

Low woodland with heathland on indurated sand at Norah Head (as described in the final determination of the Scientific Committee to list the ecological community)

The final determination to insert this community in Schedule 1 has been made because the Scientific Committee is of the opinion that this community is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival or evolutionary development cease to operate.

Copies of the final determination may be inspected at:

The Information Centre (Level 1)
National Parks & Wildlife Service
43 Bridge Street
HURSTVILLE NSW 2220

and at all District Offices of the National Parks and Wildlife Service during business hours

Signed at Sydney this 9th day of July 1998.

Associate Professor Paul Adam

Deputy Chairperson
Scientific Committee

Annexure "A"

Schedule 1 to the *Threatened Species Conservation Act 1995* is amended by inserting in Part 3 in alphabetical order the matter:

Low woodland with heathland on indurated sand at Norah Head (as described in the final determination of the Scientific Committee to list the ecological community)

**NSW SCIENTIFIC COMMITTEE
Final Determination**

The Scientific Committee, established by the Threatened Species Conservation Act has made a Final Determination to list the Low woodland with heathland on indurated sand at Norah Head as an ENDANGERED ECOLOGICAL COMMUNITY under Schedule 1, Part 3 of the Act. Listing of Endangered Ecological Communities is provided for by Division 2 of Part 2 of the Act.

The Ecological Community which is the subject of the proposal is:

1. That described as Low woodland with heathland on indurated (hardsetting) sand at Norah Head (Community Qhd7 of Payne 1997).
2. It has the structural form predominantly of a very open cover of trees up to three metres high with a mid-dense cover of shrubs, graminoids and grasses up to one metre high (Payne 1997).
3. The characteristic assemblage of vascular plant species in the community is:

<i>Acacia longifolia</i>	<i>Acacia suaveolens</i>	<i>Allocasuarina distyla</i>
<i>Anisopogon avenaceus</i>	<i>Banksia oblongifolia</i>	<i>Bossiaea ensata</i>
<i>Callistemon citrinus</i>	<i>Corymbia gummifera</i>	<i>Dillwynia sp.</i>
<i>Epacris microphylla</i>	<i>Eucalyptus camfieldii</i>	<i>Gonocarpus teucrioides</i>
<i>Grevillea sericea</i>	<i>Haemodorum sp.</i>	<i>Hakea dactyloides</i>
<i>Hakea teretifolia</i>	<i>Isachne globosa</i>	<i>Isopogon anemonifolius</i>
<i>Kunzea capitata</i>	<i>Lambertia formosa</i>	<i>Leptocarpus tenax</i>
<i>Lepyrodia sp.</i>	<i>Melaleuca quinquenervia</i>	<i>Melaleuca sieberi</i>
<i>Melaleuca thymifolia</i>	<i>Mirbelia rubifolia</i>	<i>Persoonia levis</i>
<i>Pimelea linifolia</i>	<i>Ptilothrix deusta</i>	<i>Pultenaea sp.</i>
<i>Stylium sp.</i>	<i>Themeda australis</i>	<i>Xanthorrhoea fulva</i>

4. The total species list of the community is considerably larger than that given in 3 (above), with some species present only in one or two sites or in very small quantity. Not all of the assemblage listed in 3 may be present at any one time (at least above ground), seeds of more species may be present in the soil seed bank. The species composition of a site will be influenced by the size of the site and by its recent disturbance history. For a number of years after a major disturbance, dominance by a few species may occur, with gradual restoration of a more complex composition and vegetation structure over time. The balance between species will change over the fire cycle, and may also change in response to changes in fire frequency.
5. The community occurs on indurated (hardsetting) sand with a range of local variation in drainage conditions.
6. The community has been reported from areas in the Local Government Area of Wyong, principally east of Wilfred Barrett Drive near Norah Head.
7. The Scientific Committee noted that general information on the Low woodland with heathland community is contained in the draft *Vegetation survey for Wamberal Lagoon Nature Reserve, Wyrrabalong National Park and Mummorah State Recreation Area, April, 1997*, prepared for the National Parks and Wildlife Service by Robert Payne. The Scientific Committee has found that:
 8. The Community, as defined by the proposal, satisfies the definition of an ecological community under the Act; i.e., an assemblage of species occupying a particular area.
 9. The community on indurated (hardsetting) sand is found nowhere else in the area, other sites having been destroyed by urban expansion, and is probably the only site left of this nature in the Sydney Basin Bioregion, according to Payne (1997).
 10. Threats to the survival of the community include clearing and fragmentation for urban, recreational and industrial development, invasion by exotic species and illegal dumping.
 11. None of this community is represented in any national park or nature reserve. In view of the threats to the integrity of the community, the Scientific Committee is of the opinion that the Low woodland with heathland on indurated sand is likely to become extinct in nature in New South Wales unless the factors threatening its survival cease to operate.

12. In view of 9, 10 and 11, the Scientific Committee is of the opinion that the community is likely to become extinct in nature in New South Wales unless the circumstances and factors threatening its survival cease to operate.

References:

Payne, R. (1997) *Vegetation survey for Wamberal Lagoon Nature Reserve, Wyrrabalong National Park and Munmorah State Recreation Area*. Draft report prepared for the NSW National Parks and Wildlife Service.

Associate Professor Paul Adam
Deputy Chairperson
Scientific Committee