



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 ecological 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:

Carbeen Open Forest community in the Darling Riverine Plains and Brigalow Belt South Bioregions (as described in the final determination of the Scientific Committee to list the ecological community)

The final determination, set out in Annexure "B" to this Notice, to insert this ecological community in Part 3 of Schedule 1 has been made because 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.

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 8thday of October 1999.

Dr Chris Dickman

Chairperson
Scientific Committee

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Annexure “A”

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

Carbeen Open Forest community in the Darling Riverine Plains and Brigalow Belt South Bioregions (as described in the final determination of the Scientific Committee to list the ecological community)

Annexure “B”

Final Determination of the Scientific Committee to list the Carbeen Open Forest community in the Darling Riverine Plains and Brigalow Belt South Bioregions as an endangered ecological community.

Annexure “B”

NSW SCIENTIFIC COMMITTEE

Final Determination

The Scientific Committee, established by the Threatened Species Conservation Act, has made a Final Determination to list the Carbeen Open Forest Community in the Darling Riverine Plains and Brigalow Belt South Bioregions as an Endangered Ecological Community on Part 3 of Schedule 1 of the Act. Listing of Endangered Ecological Communities is provided for by Part 2 of the Act.

The Scientific Committee has found that:

1. Carbeen Open Forest is the name given to the plant community that is characterised by the following assemblage of species:

<i>Abutilon oxycarpum</i>	<i>Acacia excelsa</i>
<i>Acacia salicina</i>	<i>Alectryon oleifolius</i>
<i>Allocasuarina luehmannii</i>	<i>Alstonia constricta</i>
<i>Aristida calycina</i>	<i>Atalaya hemiglaucha</i>
<i>Austrostipa scabra ssp scabra</i>	<i>Callitris glauophylla</i>
<i>Capparis mitchellii</i>	<i>Casuarina cristata</i>
<i>Chloris truncata</i>	<i>Corymbia dolichocarpa</i>
<i>Corymbia tessellaris</i>	<i>Crinum flaccidum</i>
<i>Cymbidium canaliculatum</i>	<i>Einadia nutans</i>
<i>Eremophila mitchellii</i>	<i>Eucalyptus camaldulensis</i>
<i>Eucalyptus populnea</i>	<i>Geijera parviflora</i>
<i>Panicum decompositum</i>	<i>Petalostigma pubescens</i>
<i>Rhagodia spinescens</i>	<i>Sclerolaena birchii</i>

2. The total species list of the community is larger than that given above, with many species present only in one or two sites or in very small quantity. In any particular site not all of the assemblage listed 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

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balance between species will change over the fire cycle, and may also change in response to changes in fire frequency.

3. Carbeen Open Forest occurs on siliceous sands, earthy sands and clayey sands and is a distinctive plant community on the riverine plains of the Meehi, Gwydir, MacIntyre and Barwon Rivers and has been recorded from the Local Government Areas of Moree Plains and Walgett.
4. The structure of the community was originally open-forest but may now exist as woodland or as remnant trees.
5. Characteristic tree species are *Corymbia tessellaris* and *Callitris glaucophylla*, associated trees include *Corymbia dolichocarpa*, *Eucalyptus populnea*, *Eucalyptus camaldulensis*, *Casuarina cristata* and *Allocasuarina leuhmannii*.
6. The community is restricted in the landscape by edaphic factors. Adjacent communities—either other woodland communities or grasslands on heavy clay soils are distinct. *Corymbia tessellaris* (carbeen) and *Callitris glaucophylla* (white cypress pine) are restricted to well drained sandy soils.
7. Carbeen Open Forest has been cleared for grazing and cropping, and is further threatened by clearing for agriculture, grazing, fire management practises, and land-forming for irrigated crops. Remaining stands of this community are typically fragmented and often isolated. Remnants are also threatened by weed invasion especially by *Cenchrus* species, *Opuntia aurantiaca*, *Opuntia stricta*, and *Lycium ferrocissimum*.
8. Less than 500 ha of the Carbeen Open Forest Community is found within Boomi, Boomi West and Boronga Nature Reserves.
9. In view of the small size of existing remnants, the threat of further clearing and other known threats (listed in 7), the Scientific Committee is of the opinion that the Carbeen Open Forest in the Darling Riverine Plains and Brigalow Belt South Bioregions 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.

Dr Chris Dickman
Chairperson
Scientific Committee

BY AUTHORITY