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:

Sydney Turpentine-Ironbark Forest (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 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 2nd day of October 1998

Dr Chris Dickman

Chairperson
Scientific Committee

Published in Gazette No 148 of 16 October 1998, page 8231 

## Annexure "A"

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

Sydney Turpentine-Ironbark Forest (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 Sydney Turpentine-Ironbark Forest as an endangered ecological community.

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## NSW SCIENTIFIC COMMITTEE

### Final Determination

The Scientific Committee, established by the Threatened Species Conservation Act, has made a Final Determination to list the Sydney Turpentine-lronbark Forest as an ENDANGERED ECOLOGICAL COMMUNITY on Part 3 of Schedule 1 of the Act. The listing of endangered ecological communities is provided for by Part 2 of the Act.

The Scientific Committee has found that:

1. The Sydney Turpentine-lronbark Forest (STIF) is the name given to the plant community that is characterised by the following assemblage of species:

| | | |
|---|---|---|
| *Acacia decurrens* | | |
| *Acaciafalcata* | *Acacia implexa* | *Acacia longifolia* |
| *Acacia myrtifolia* | *Acacia parramattensis* | *Allocasuarina torulosa* |
| *Angophora costata* | *Angophora floribunda* | *Aristida vagans* |
| *Billardiera scandens* | *Breynia oblongifolia* | *Bursaria spinosa* |
| *Centella asiatica* | *Cheilanthes sieberi* | *Clematis aristata* |
| *Clematis glycinoides* | *Clerodendrum tomentosum* | *Commelina cyantea* |
| *Corymbia gummifera* | *Daviesia ulicifolia* | *Dianella caerulea* |

| | | |
|---|---|---|
| *Dichelachne rara* | *Dichondra repens* | *Dodonaea triquetra* |
| *Echinopogon caespitosus* | *Elaeocarpus reticulatus* | *Entolasia marginata* |
| *Entolasia stricta* | *Eucalyptus acmenoides* | *Eucalyptus globoidea* |
| *Eucalyptus paniculata* | *Eucalyptus resinifera* | *Exocarpos cupressiformis* |
| *Glycine clandestina* | *Goodenea hederacea* | *Goodenia heterophylla* |
| *Hardenbergia violacea* | *lmperata cylindrica* | *indigofera australis* |
| *Kennedia rubicunda* | *Kunzea ambigua* | *lepidosperma laterale* |
| *Leucopogon juniperinus* | *Lomandra longifolia* | *Melaleuca decora* |
| *Microlaena stipoides* | *Notelaea longifolia* | *Oplismenus aemulus* |
| *Oxalis exilis* | *Ozothamnus diosmifolius* | *Pandorea pandorana* |
| *Panicum simile* | *Pittosporum revoultum* | *Pittosporum undulatum* |
| *Poa affinis* | *Polyscias sambucifolius* | *Pomax umbellata* |
| *Poranthera microphylla* | *Pratia purpurascens* | *Pseuderanthemum variabile* |
| *Rapanea variabilis* | *Rubus parvifolius* | *Smilax glyciphylla* |
| *Stipa pubescens* | *Syncarpia glomulifera* | *Themeda australis* |
| *Tylopora barbata* | *Veronica plebeia* | *Zieria smithii* |

2. The total species list of the community is considerably larger than that given in 1 (above), with many species present in only one or two sites or in very small quantity. In any particular site not all of the assemblage listed in 1 may be present. At any one time, seeds of some species may only be present in the soil seed bank with no above-ground individuals present. The species composition of the site will be influenced by the size of the site and by its recent disturbance history. The number of species and the aboveground composition of species will change with time since fire, and may also change in response to changes in fire frequency.
3. The structure of the community was originally forest. but may now exist as woodland or as remnant trees.
4. Characteristic tree species in the STIF are *Syzcarpia glomulifera, Eucalyptus globoidea, Eucalyptus resinifera. Eucalyptus paniculata, Angophora costata and Angophora floribunda.*
5. Species composition varies between sites depending on geographical location and local conditions (e.g. topography, rainfall, exposure).

6. STIF occurs within the local government areas Ashfield, Auburn, Canterbury, Concord, Drummoyne, Leichhardt, Marrickville, Bankstown, Ryde, Hunters Hill, Baulkham Mills, Ku-ring-gai, Hornsby? Parramatta, Bankstown, Rockdale, Kogarah, Hurstville, Sutherland. The area is within the County of Cumberland and entirely within the Sydney Basin Bioregion.

7. In many of these LGAs particularly in the inner western suburbs, only remnant trees may remain. These may have particular ecological and genetic significance and may be important sources of propagation material for use in rehabilitation projects.

8. STIF typically occurs on areas with clay soils derived from Wianamatta Shale, or shale layers within Hawkesbury Sandstone.

9. Occurrences of STIF may occur on plateaus and hillsides and on the margins of shale cappings over sandstone.

10. STIF is referred to in Benson & Howell 1990 and in UBBS (1997). It includes vegetation described as map unit 9o of Benson (1992) and Benson & Howell (1994).

11. STIF provides habitat for a number of plant species recognised as being of regional conservation significance in UBBS (1997). These include:

| | | |
|---|---|---|
| *Acacia stricta* | *Arthropodum milleflorum* | *Brachychiton populneus* |
| *Chloris truncata* | *Danthonia linkii* | *Danthonia racemosa* |
| *Daviesia genistifolia* | *Einadia nutans* | *Einadia polygonoides* |
| *Einadia trigonos* | *Elymus scaber* | *Glycine microphylla* |
| *Lasiopetalum parviflorum* | *Lepidosperma gunnii* | *Leucopogon juniperinus* |
| *Marsdenia viridiflora* | *Omalanthus stillingifolius* | *Opercularia hispida* |
| *Paspalidium criniforme* | *Platylobium formosum* | *Pomaderris lanigera* |
| *Senecio hispidulus* | *Sporobolus creber* | *Stipa rudis* subsp. *nervosa* |

12. STIF has an understorey that may be either grassy and herbaceous or of a shrubby nature. STIF can have a dense understorey in areas that have not been burnt for an extended period of time.

13. Adjacent communities on sandstone soils are generally part of the Sydney Sandstone Complex (see Benson & Howell 1990).

14. It is estimated that only 0.5% of the original area of STIF exists in the form of a number of remnants.

15. Only small areas of STIF are presently included in conservation reserves.

16. Large areas of STIF have been cleared for agriculture and urban development. Remnants are small and scattered. Identified threats include: clearing, physical damage from recreational activities, rubbish dumping, grazing, mowing, weed invasion.

17. In view of the small size of existing remnants, the threat of further clearing and other known threats, the Scientific Committee is of the opinion that Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion is likely to become extinct in nature unless the circumstances and factors threatening its survival or evolutionary development cease to operate and that listing as an endangered community is warranted.

Dr Chris Dickman

Chairperson
Scientific Committee

References

UBBS (1997) Urban Bushland Biodiversity Survey (NSW National Park and Wildlife Service: Hurstville).

Benson, D. & Howell. J. (1990) Taken for granted: the bushland of Sydney and its suburbs. (Kangaroo Press: Kenthurst).

Benson, D. (1992) The natural vegetation of the Penrith 1:100000 map sheet. *Cunninghamia* 2(4):541–596.

Benson, D. & Howell, J. (1994) The natural vegetation of the Sydney 1:100000 map sheet. *Cunninghamia* 3(4):677–722.