

COMMUNITIES FOR COMMUNITIES

Issue 14: May 2011

In this issue:

- From the Ecological Communities Section
- New nominations received in 2011
- Two new threatened ecological communities listed under the EPBC Act
- Monsoon vine thickets to undergo assessment for listing
- Technical workshop report on the Lowland Seasonal Wetlands of South-eastern Australia ecological community
- Consultation field trips for communities currently under assessment
 1. Giant Kelp Forests of the East and South coasts of Tasmania ecological community
 2. Arnhem Plateau Sandstone Sclerophyll Shrubland Complex ecological community
- New threatened species listings
- Conferences and events in 2011

From the Ecological Communities Section

The federal environment department's ecological communities team have been engaged in plenty of interesting work during the first half of the year. The first Threatened Species Scientific Committee (TSSC) meeting of 2011 took place in March and several new nominations were received for threatened species, ecological communities and key threatening processes. A new link explaining the assessment process and a list of all species and ecological communities currently under assessment has been added to the department's website at: <http://www.environment.gov.au/biodiversity/threatened/listing-assessments.html>.

The federal environment minister also announced the listing of two new ecological communities under Australia's national environment law*: The Coolibah – Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions and the New England Peppermint (*Eucalyptus nova-anglica*) Grassy Woodlands ecological communities.

In this issue you will find more information about these new ecological communities, updates on some of our current assessments and on recently listed or amended listings of threatened species.

* the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)



New nominations received in 2011

The annual call for nominations for threatened species, ecological communities and key threatening processes closed in March. For this round the federal environment minister did not set a conservation theme.

In combination with the five nominations eligible for reconsideration from the 2010 round, the five new ecological community nominations represent a diverse variety of Australian ecological communities. Eligible nominations will undergo a prioritisation process before the minister makes a final decision on which communities will be included on the 2011 Finalised Priority Assessment List (FPAL).

The 2011 FPAL will be published on the department's website by October at: <http://www.environment.gov.au/biodiversity/threatened/listing-assessments-fpal.html>

Two new threatened ecological communities listed under the EPBC Act

On 1 March 2011 two new ecological communities became protected under national environment law.

The Coolibah – Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions ecological community was listed as endangered.

The New England Peppermint (*Eucalyptus nova-anglica*) Grassy Woodlands ecological community was listed as critically endangered.

The Coolibah – Black Box Woodlands ecological community was once widespread on the inland floodplains of northern New South Wales and southern Queensland associated with the Darling River and the southern part of the Fitzroy River systems.

This eucalypt woodland is found on the grey, self-mulching clays of periodically waterlogged floodplains, swamp margins, ephemeral wetlands and stream levees. The main tree species of the community are coolibah and black box. A groundlayer of native grasses and shrubs are present, with taller shrubs sparse to absent.

The Coolibah – Black Box Woodlands face many threats including; clearing, changes to flooding regimes, inappropriate grazing techniques, weed invasion, and lack of recruitment of plant species. These threats have led to a 65 per cent reduction of the ecological community, along with fragmentation, degradation of remnants and lack of regeneration.

The association of this woodland community with floodplains indicates its particular importance for birds, especially as nesting sites for colonial breeding waterbirds that rely on occasional wetlands in addition to woodland habitats. The ecological community supports various declining woodland bird species, particularly in the eastern part of its range.



Coolibah - Black Box Woodlands (P. Komidar)

The New England Peppermint Grassy Woodlands ecological community is a temperate grassy eucalypt woodland, mainly occurring in the New England Tablelands, with a small amount extending over the border into Queensland.



The New England Peppermint Grassy Woodlands are generally found in valley flats and lower slopes that are subject to cold air drainage. It is found on both poorly drained fertile soils and on less fertile coarse sandy soils over granite. The main tree species is new england peppermint, occurring over a dense ground layer of native grasses and herbs. A shrub layer may also be present.

Since European settlement, New England Peppermint Grassy Woodlands have been cleared or degraded by pasture improvement and heavy grazing. These threats have led to a reduction of more than 80 per cent of the ecological community, along with fragmentation and degradation of remnants and lack of regeneration. Only 14 000 hectares of this critically endangered community remain.

Remnants of this temperate woodland are important habitat. With its combination of tree hollows and abundant seed bearing grasses and forbs, and flowering eucalypts that provide nectar and pollen, this community provides important habitat for birds. The eucalypts are also a seasonally important food source for flying foxes and tree-dwelling mammals. The community also makes an important contribution to farm productivity by providing ecosystem services, such as the pollination of crop and pasture plants by native insects, birds and gliders and insect pest control.

Listing under national environment law will help to ensure the long-term conservation of these threatened ecological communities and protect plants and animals dependent on them, some of which are also threatened.

For more information on these communities, such as listing and conservation advice and a farmer's factsheet go to <http://www.environment.gov.au/cgi-bin/sprat/public/publicshowcommunity.pl?id=66&status=Endangered> (Coolibah – Black

Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregion) and www.environment.gov.au/cgi-bin/sprat/public/publicshowcommunity.pl?id=83 (New England Peppermint (*Eucalyptus nova-anglica*) Grassy Woodlands).

Contact officers:

Mark Bourne, Mark.Bourne@environment.gov.au

Paul Barraclough, Paul.Barraclough@environment.gov.au



New England Peppermint (M.Bourne)

Monsoon vine thickets to undergo assessment for listing

In February the TSSC added an extra ecological community to the 2010 FPAL for assessment.

The Monsoon Vine Thickets on the Coastal Sand Dunes of the Dampier Peninsula ecological community occurs over about 2300 hectares of the Holocene sand dunes along the coastline within the Pindanland section of the Dampierland bioregion of Western Australia. It is largely a patchy, linear system that functions as a network ecosystem. Movement of fruit-eating birds, bats and mammals ensure enough species migration and gene flow to



maintain the plant and animal communities in their fragmented state.

The Monsoon Vine Thickets ecological community is believed to be subject to a high and increasing level of threat. It is listed as vulnerable by the Western Australian Government.

The 2010 assessment period began in October of that year, and will be completed by 30 September 2012.

Contact officer:

Anthony Hoffman, Anthony.Hoffman@environment.gov.au

Technical workshop report on the Lowland Seasonal Wetlands of South-eastern Australia ecological community

Technical workshops are an important step in the Australian Government's assessment of nominations to list nationally threatened ecological communities.

Workshops bring together key scientific experts and land managers to provide advice on a nominated ecological community. They are helpful in clarifying the description and distribution of the community and advising on condition thresholds.

The assessment of the Lowland Seasonal Wetlands of South-eastern Australia follows two public nominations from the 2008 FPAL. Because the Temperate Lowland Plains Grassy Wetland and the Victorian Volcanic Plain Freshwater Swamps were based on similar types of wetlands with a focus on occurrences in Victoria, they are now described as the Lowland Seasonal Wetlands of South-eastern Australia. The assessment is due to be completed by September.

A technical workshop for the nominated wetlands was held at Colac in October last year. Experts and land managers familiar with these wetlands



Example of a Lowland Seasonal Wetland of SE Australia near Colac Vic. The wetland occurs in a gilgai landscape amongst natural temperate grassland. (M. White)

attended. As a result of workshop discussion, valuable knowledge about the distribution, seasonal cycle, vegetation structure and condition indicators were brought together for the assessment of the combined ecological community.

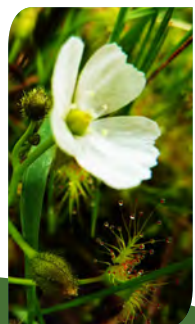
The outcomes of the workshop include a draft description and explanation of condition thresholds for the ecological community and lists of characteristic native species. Corresponding vegetation and wetland units were also developed into a technical workshop report.

We appreciate the involvement of experts and other stakeholders who provided valuable technical knowledge about the ecological community throughout the workshop and public consultation process. All genuine comments received are forwarded to the TSSC and the minister. Scientific information received may also contribute to the development of the final listing advice for the ecological community.

The technical workshop report can be viewed on the department's website at: www.environment.gov.au/biodiversity/threatened/nominations-comment.html.

Contact officer:

John Vranjic, John.Vranjic@environment.gov.au



Consultation field trips for communities currently under assessment

Giant Kelp Forests of the East and South Coasts of Tasmania ecological community

Assessment of the Giant Kelp Forests of the East and South Coasts of Tasmania ecological community is progressing. The assessment is due to be completed by March next year. Consultation began with a presentation at the Australasian Society for Phycology and Aquatic Botany (ASPAB) Conference on Rottnest Island WA. This gathering of marine specialists provided a useful vehicle for promoting the giant kelp assessment and allowing various experts to contribute to the process.



Macrocystis forest, Shag Rock, Tasman peninsula, Tasmania
(Neville Barrett)

In December 2010, a site visit to a remnant giant kelp population in Fortescue Bay, Tasmania, occurred with Eaglehawk Dive Centre. During this visit, the department's ecological communities team met with Tasmanian marine experts to discuss the giant kelp assessment. Experts provided invaluable information. The expert consultation period is ongoing and public comments on the assessment will be invited later this year. For more information go to: www.environment.gov.au/biodiversity/threatened/index.html.

Contact Officer:

Ramone Bisset, Ramone.Bisset@environment.gov.au

Arnhem Plateau Sandstone Sclerophyll Shrubland Complex ecological community

The Arnhem Plateau is an extensive, sandstone tableland, which rises up to 400 metres above sea level in the top end of the Northern Territory. The area has been deeply weathered and eroded to form a maze of narrow valleys, gorges and elevated flat areas such as pavements with shallow soils.

It supports several ecological communities, including sandstone heathlands and other shrublands, rainforests (characteristically dominated by the endemic tree *Allosyncarpia ternata*), monsoon vine-forests (semi-deciduous forest), hummock grasslands and eucalypt open woodlands (known as savanna). The ecological communities provide habitat for an unusual and diverse variety of plants and animals, including many remnant and endemic flora and fauna species such as Oenpelli python (*Morelia oenpelliensis*) and the black wallaroo (*Macropus bernardus*). However, inappropriate fire regimes across large areas of the plateau are a significant management issue, as frequent and intense fires lead to the decline of some fire sensitive plant species. The management of these fires is currently constrained by accessibility, small population centres and limited resourcing within such a large area.



Rugged landscape of the Arnhem Plateau - flight to Karbulwarnamy
2010 (A. Hoffman)





Micraira sp. (resurrection plant) and Spinifex on rock platform.
(A. Hoffman)

During October 2010, discussions about the assessment of the ecological community took place at the Manwurrk (Warddeken) outstation, Karbulwarnamyo, on the plateau and at Kakadu National Park. Indigenous elders, members of the Warddeken Land Management Board and Warddeken Indigenous rangers from the Warddeken Indigenous Protected Area attended.

Warddeken rangers, along with the Djelk (Bawinanga), Jawoyn, Mimal and Adjumarllal Indigenous people are participating in the West Arnhem Fire Management Agreement project. The agreement aims to tackle uncontrolled wildfire on the plateau via various methods including a return to traditional fire regimes. Indigenous rangers also undertake other threat management activities, including the control of invasive animals such as feral cats, buffalo and plants like gamba and mission grasses. Fire regimes and invasive species are impacting upon the integrity of the ecological community and considerable effort is required to manage the threats.

The Warddeken people supports the ecological community assessment, and pointed out the importance of acknowledging all groups that have been working to look after Arnhem Plateau country. They are proud to continue the protection of the plateau, working from outstations such as Karbulwarnamyo.

The assessment will be provided to the minister by 30 June 2011.

Contact officer:

Anthony Hoffman, Anthony.Hoffman@environment.gov.au

New threatened Species Listings

Since the last newsletter, the Species Listing Section has overseen changes to the EPBC Act's listing status of 16 species. This included assessment of one species from the 2007 FPAL and 12 species from the 2009 FPAL. Through the department's memorandum of understanding with state and territory governments, the species listing section has also administered the listing of five species endemic to Tasmania, and reviewed the listing status of one species from New South Wales. *Euphrasia arguta* (a herb), previously believed to be extinct, was recently re-discovered near Tamworth, New South Wales. The department's memorandum of understanding with the New South Wales Government allowed *Euphrasia arguta* to be transferred from the extinct category of the EPBC Act to the critically endangered category.



Details of changes to the EPBC list of threatened species are provided in the table below.

Species	Listing category
<i>Thunnus maccoyii</i> (southern blue-fin tuna)	Listed as conservation dependent
<i>Aipysurus apraefrontalis</i> (short-nosed sea snake)	Listed as critically endangered
<i>Aipysurus foliosquama</i> (leaf-scaled sea snake)	Listed as critically endangered
<i>Corunastylis littoralis</i> (Tuncurry midge orchid)	Listed as critically endangered
<i>Stiphodon semoni</i> (opal cling goby)	Listed as critically endangered
<i>Hyridella glenelgensis</i> (Glenelg mussel)	Listed as critically endangered
<i>Euastacus bispinosus</i> (Glenelg spiny crayfish)	Listed as endangered
<i>Botaurus poiciloptilus</i> (Australasian bittern)	Listed as endangered
<i>Liopholis guthega</i> (Guthega skink)	Listed as endangered
<i>Sternula nereis nereis</i> (fairy tern)	Listed as vulnerable
<i>Caladenia dienema</i> (windswept spider-orchid)	Transferred from critically endangered to endangered
<i>Thelymitra jonesii</i> (sky-blue sun-orchid)	Transferred from critically endangered to endangered
<i>Hoplogonus simsoni</i> (Simson's stag beetle)	Listed as vulnerable
<i>Euphrasia arguta</i> (a herb)	Transferred from extinct to critically endangered

In addition to these new listings, the species listing section has also updated the scientific names of four nationally listed species. The name changes are outlined below:

Former EPBC Act listed name	Updated EPBC Act listed name
<i>Boehmeria australis</i> var. <i>australis</i>	<i>Boehmeria australis</i> subsp. <i>australis</i>
<i>Dendrobium lithocola</i>	<i>Vappodes lithocola</i>
<i>Raja</i> sp. L	<i>Zearaja maugeana</i>
<i>Sympterichthys</i> sp. [CSIRO #T6.01]	<i>Brachiopsilus ziebelli</i>



Sternula nereis nereis (Fairy Tern), Brian Furby Collection

Listing and conservation advices for species listed in the tables above can be downloaded from: <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>.

For further information about these species listings and name changes contact: Claire Edwards: Claire.Edwards@environment.gov.au



Conferences and Events in 2011

20 – 23 June 2011: **15th Australasian Vertebrate Pest Conference**, 'Security from the impact of vertebrate pest animals', Sydney, New South Wales www.avpc.net.au/

28 June – 7 July 2011: **Earth on the edge: Science for a Sustainable Planet**, Melbourne Convention and Exhibition Centre, Victoria www.iugg2011.com/program-union.asp

3 – 7 July 2011: **48th Australian Marine Sciences Association (AMSA) Conference**, Fremantle, Western Australia <http://www.amsa2011.com.au/>

22 – 24 July 2011: **Australian Society for Fish Biology 2011 Conference**, Townsville, Queensland <http://www.asfb.org.au/events/2011/>

23 – 30 July 2011: **XVIII International Botanical Congress**, Melbourne, Victoria www.abc2011.com/Program.htm

9 – 13 July 2011: **12th International Coral Reef Symposium**, Cairns, Queensland <http://www.icrs2012.com/>

26 – 28 October 2011: **Aelert Conference 2011**, Darwin Convention Centre, Northern Territory www.aelert2011.com.au

27 – 30 October 2011: **Watermarks: Water's Heritage**, Melbourne, Victoria <http://www.aicomos.com/2011-watermarks/>

7 – 10 November 2011: **Hydro 2011 Conference**, Fremantle, Western Australia <http://www.hydro2011.com/>

21 – 25 November 2011: **Ecology in Changing Landscapes**, Hobart, Tasmania <http://www.esa2011.org.au/index.asp?IntCatId=14>

Who's who in the Ecological Communities Section

Director: Matthew White

Assistant Directors: Gina Newton, John Vranjic, Tori Wright

Project Officers: Paul Barraclough, Collette Barton, Ramone Bisset, Mark Bourne, Neisha Burton, Anthony Hoffman, Karina Richards, Anne Radimin

Media enquiries

Please direct all media enquiries to the Public Affairs Section:

GPO Box 787

Canberra ACT 2601

Phone: +61 2 6275 9880

Fax: +61 2 6274 1094

media@environment.gov.au

Image credits: *Calytrix* sp. Arnhem Plateau (A. Hoffman) Rugged landscape of the Arnhem Plateau (A. Hoffman) *Drosera Peltata* (Pale Sundew) (M. White)

© Commonwealth of Australia 2011

This work is copyright. You may download, display, print and reproduce this material in unaltered form only (retaining this notice) for your personal, non-commercial use or use within your organisation. Apart from any use as permitted under the *Copyright Act 1968*, all other rights are reserved. Requests and inquiries concerning reproduction and rights should be addressed to Commonwealth Copyright Administration, Attorney General's Department, Robert Garran Offices, National Circuit, Barton ACT 2600 or posted at www.ag.gov.au/cca

Disclaimer

The views and opinions expressed in this publication are those of the authors and do not necessarily reflect those of the Australian Government or the Minister for Sustainability, Environment, Water, Population and Communities.