trees IN NEWCASTLE

PLANT COMMUNITY FIELD GUIDE

Riparian Melaleuca Swamp Woodland

HCC REMS

Map Unit 42

Hunter-Central Rivers CMA CATCHMENT MANAGEMENT AUTHORITY

Natural Heritage Trust
Helping Communities Helping Australia
An Australian Government Initiative

CITY OF Lake Macquarie

LANDCARE

HCCREMS Extant Vegetation Mapping

Vegetation communities this guide have been classified and mapped according to Hunter Central Coast Regional Environment Management Strategy (HCCREMS) Vegetation Survey, using Mapping Units (MU). For more comprehensive and up-to-date information on this survey please contact HCCREMS.

http://www.hccrems.com.au

When you are starting out regenerating a bushland site, it may be that you don't know a lot of native species, but if you can provide a council vegetation officer, community support officer or local native plant nursery with some of the information from the Field Data sheet, it is likely that they would be able to identify the broader vegetation community.

The Site Orientation Booklet in this series has a useful contact list including:

Coastcare Officers
Landcare and Community Support Officers

National Parks Officers

Land Managers

Field Data Sheet

Habitat Type: *please circle*			
River bank	Wetland	Floodplain	Drainage line
Open Forest	Closed Forest	Rainforest	Disturbed / Grazed (Livestock)
Shrub(2-4m)	Heath (< 2m)	Grassland	Other:

Position on Slope :*please circle* Watercourse Flat Lower Slope Upper Slope Crest Dune	Altitude in metres

Geology	**Aspect**: *please circle* N NE E SE S SW W NW

Soil Description			
Colour	Type	pH	Sand Clay Loam

Vegetation Description	
Vegetation community, association, type	Weed Invasion: *please circle* High Medium Low
Dominant upper storey species	Species diversity: *please circle* High Medium Low
Dominant middle storey species	Species diversity: *please circle* High Medium Low
Dominant lower storey/groundcover species	Species diversity: *please circle* High Medium Low

Common swamp/wetland forest communities in the lower hunter

If this information is expanded to the other most common wetland forest communities in the Lower Hunter, a little bit of knowledge and access to the appropriate support officers should allow you to increase your knowledge of your site, and therefore manage your site better.

To do this, you need to be able to identify the dominant species by at least their common names. In a Swamp Forest community, the dominant species would be the tall trees. Swamp Oak (MU40 and MU41), Broad-leaved Paperbark, Swamp Mahogany, Forest Redgum (MU40, MU41 and MU37) .

Casuarina glauca

Swamp-Oak

Eucalyptus tereticornis

Forest Redgum

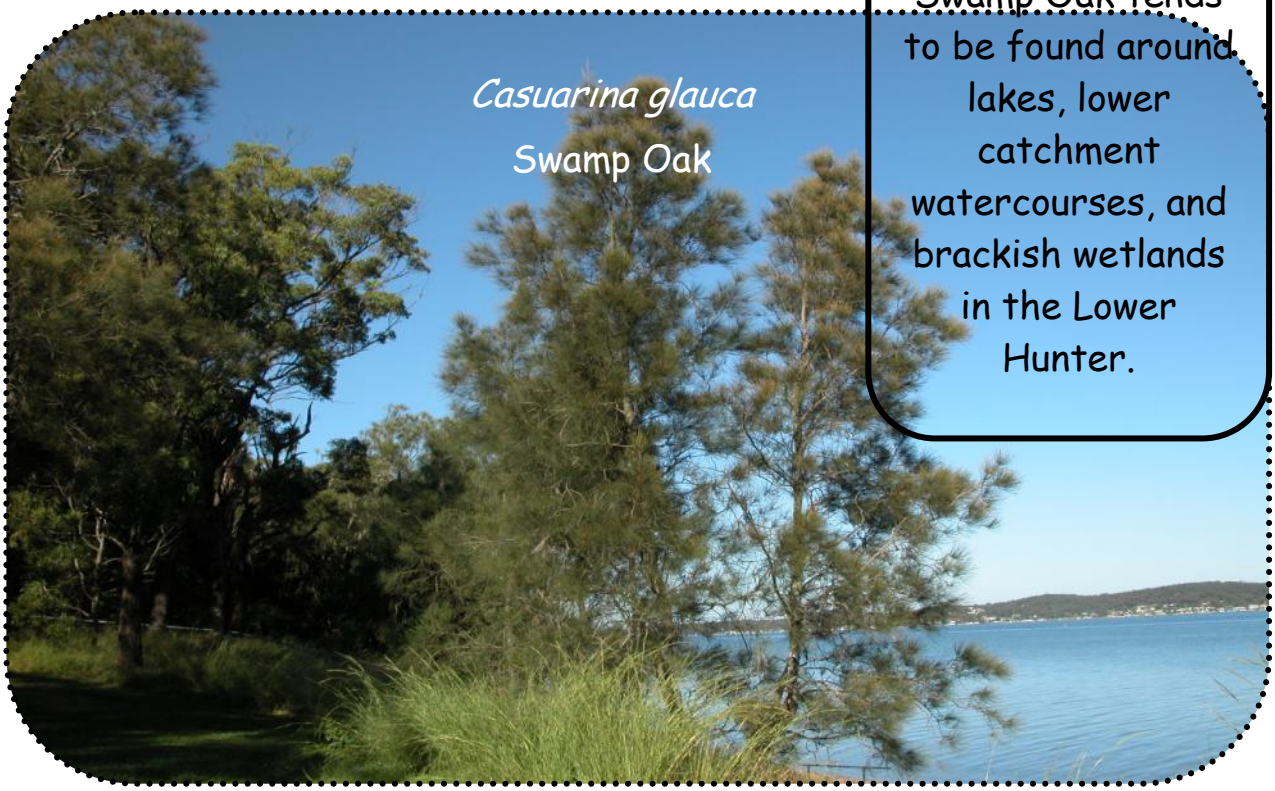
On many sites, there may be some overlapping of these species and other species.

You need to make a decision as to which species is most numerous on the site. If you are not sure, then take a photo and collect some foliage (not just one leaf) and capsules, and consult your support network.

Eucalyptus robusta
Swamp Mahogany

Eucalyptus robusta
Swamp Mahogany

If you have She-oaks on site this is also another good indicator. Swamp Oak tends to be found around lakes, lower catchment watercourses, and brackish wetlands in the Lower Hunter.



Casuarina glauca
Swamp Oak

A description of a plant community

Abridged from http://www.lhccrems.com.au/biodiversity/mu42_44.html#mu42

MU42 Riparian Melaleuca Swamp Woodland

MU42a Melaleuca Scrub

Canopy Label : *Melaleuca sieberi, E. robusta*

Structural Classification (Specht): Woodland - Low Open Forest

Description

Riparian Melaleuca Swamp Woodland occurs in deltaic floodplains and alluvial flats and drainage lines on the central coast lowlands from Wyong to Port Stephens. It is usually restricted to narrow creek lines, depressions and soaks.

This community is characterised primarily by a small tree stratum of *Melaleuca sieberi*. Its structural form can vary from woodland to scrub. Where delineated as scrub from air photo interpretation (MU42a) Melaleuca sieberi is generally the canopy species with an open low forest-woodland structure.

Where woodland occurs (MU42) *Eucalyptus robusta* is often found as part of this community on the alluvial flats, and others such as *Angophora costata* and *Eucalyptus haemostoma* are found where this community is found in narrow drainage lines merging with Map Unit 30 or Map Unit 31.

Other species associated with *Melaleuca sieberi* are *Leptospermum juniperinum, Melaleuca linariifolia* and *Melaleuca nodosa.* Where this community forms a scrub *Gahnia clarkei* and *Hakea teretifolia* can be abundant.

The lowest stratum is very dense and supports sedges, grasses, herbs common to moist areas. Typical species are *Lepyrodia scariosa, Entolasia stricta, Empodisma minu, Schoenus brevifolius,* and *Chorizandra cymbaria.* Where fire history is more recent grasses such as *Themeda australis* can become more prevalent.

Riparian Melaleuca Swamp Woodland is closely related to Map Unit 44: Coastal Wet Sand Cyperoid Heath. They share a very similar floristic composition however Coastal Wet Sand Cyperoid Heath occurs more often along the coastal strip in deep Pleistocene sands and is generally subject to greater inundation and hence has a greater abundance of sedges.

A similar community has not been described in NPWS (1999(a)).

MU 42 Riparian Melaleuca Swamp Woodland
MU 42a Melaleuca Scrub

Stratum	Species	% in community	Common Name
Tallest	*Eucalyptus robusta*	45	
	Angophora costata	25	
	Eucalyptus resinifera subsp resinifera	15	
	Eucalyptus haemastoma	15	
Mid	*Melaleuca sieberi*	95	
	Leptospermum juniperinum	70	
	Banksia oblongifolia	60	
	Gahnia clarkei	60	
	Hakea teretifolia	55	
	Leptospermum polygalifolium	45	
	Callistemon citrinus	30	
	Melaleuca linariifolia	30	
	Melaleuca nodosa	25	
Lowest (<1m)	*Lepyrodia scariosa*	80	
	Entolasia stricta	75	
	Melaleuca thymifolia	70	
	Gonocarpus micranthus subsp ramosissimus	65	
	Themeda australis	65	
	Pultenaea paleacea	55	
	Empodisma minus	50	
	Schoenus brevifolius	50	
	Chorizandra cymbaria	45	
	Eragrostis brownii	45	
	Ischaemum australe var australe	45	
	Panicum simile	45	
	Selaginella uliginosa	45	
	Comesperma ericinum	40	
	Gonocarpus tetragynus	40	
	Goodenia heterophylla	40	
	Lindsaea linearis	40	
	Pimelea linifolia	35	
	Pultenaea villosa	35	
	Genoplesium fimbriatum	15	
	Haemodorum planifolium	35	
	Baumea rubiginosa	30	
	Ptilothrix deusta	25	
Vines and Epiphytes	*Cassytha glabella forma glabella*	80	
Rare and Endangered: *Angophora inopina*			

A picture guide to plants in
MU 42 Riparian Melaleuca Swamp Woodland
MU 42a Melaleuca Scrub

Tall trees

Eucalyptus robusta

Swamp Mahogany

Angophora costata

Smooth barked Apple

Eucalyptus haemastoma

Scribbly Gum

Mid storey

Banksia oblongifolia

Rock Banksia

A picture guide to plants in
MU 42 Riparian Melaleuca Swamp Woodland MU 42a Melaleuca Scrub

Mid storey

Gahnia clarkei
Saw Sedge

Hakea teretefolia
Dagger Hakea

Leptospermum polygalifolium
Lemon-scented Teatree

Callistemon citrinus
Crimson Bottlebrush

A picture guide to plants in
MU 42 Riparian Melaleuca Swamp Woodland MU 42a
Melaleuca Scrub

Mid storey

Melaleuca nodosa
Ball Honeymyrtle

Lowest storey <1m

Entolasia stricta

Melaleuca thymifolia
Thyme Honeymyrtle

A picture guide to plants in
MU 42 Riparian Melaleuca Swamp Woodland MU 42a Melaleuca Scrub

Lowest storey <1m

Themeda australis

Kangaroo Grass

Pultenaea paleacea

Comesperma ericinum

Matchheads

A picture guide to plants in
MU 42 Riparian Melaleuca Swamp Woodland MU 42a Melaleuca Scrub

Lowest storey <1m

Goodenia heterophylla
Variable - leaved Goodenia

Pimelea linifolia

Rice Flower

Pultenaea villosa

Haemodorum planifolium
Blood Root

References

Hunter Councils Inc (2003) Lower Hunter and Central Coast Regional Environmental Strategy http://www.lhccrems.com.au/biodiversity/mu42_44.html#mu42 (Accessed 12.06.07)

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Useful people

The Site Orientation Booklet in this series has a useful contact list including

Coastcare Officers

Landcare and Community Support Officers

National Parks Officers

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