

PLANT COMMUNITY FIELD GUIDE



Swamp Oak—Rushland Forest— Phragmites Rushland



Map
Unit
40



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: <i>please circle</i>			
River bank	Wetland	Floodplain	Drainage line
Open Forest	Closed Forest	Rainforest	Disturbed / Grazed (Livestock)
Shrub(2-4m)	Heath (< 2m)	Grassland	Other:
Position on Slope : <i>please circle</i> Watercourse Flat Lower Slope Upper Slope Crest Dune			Altitude in metres
Geology		Aspect: <i>please circle</i> N NE E SE S SW W NW	
Soil Description			
Colour	Type	pH	Sand Clay Loam
Vegetation Description			
Vegetation community, association, type		Weed Invasion: <i>please circle</i> High Medium Low	
Dominant upper storey species		Species diversity: <i>please circle</i> High Medium Low	
Dominant middle storey species		Species diversity: <i>please circle</i> High Medium Low	
Dominant lower storey/groundcover species		Species diversity: <i>please circle</i> 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).



Melaleuca quinquenervia
Broad-leaved Paperbark



Casuarina glauca
Swamp-Oak



Eucalyptus robusta
Swamp Mahogany



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

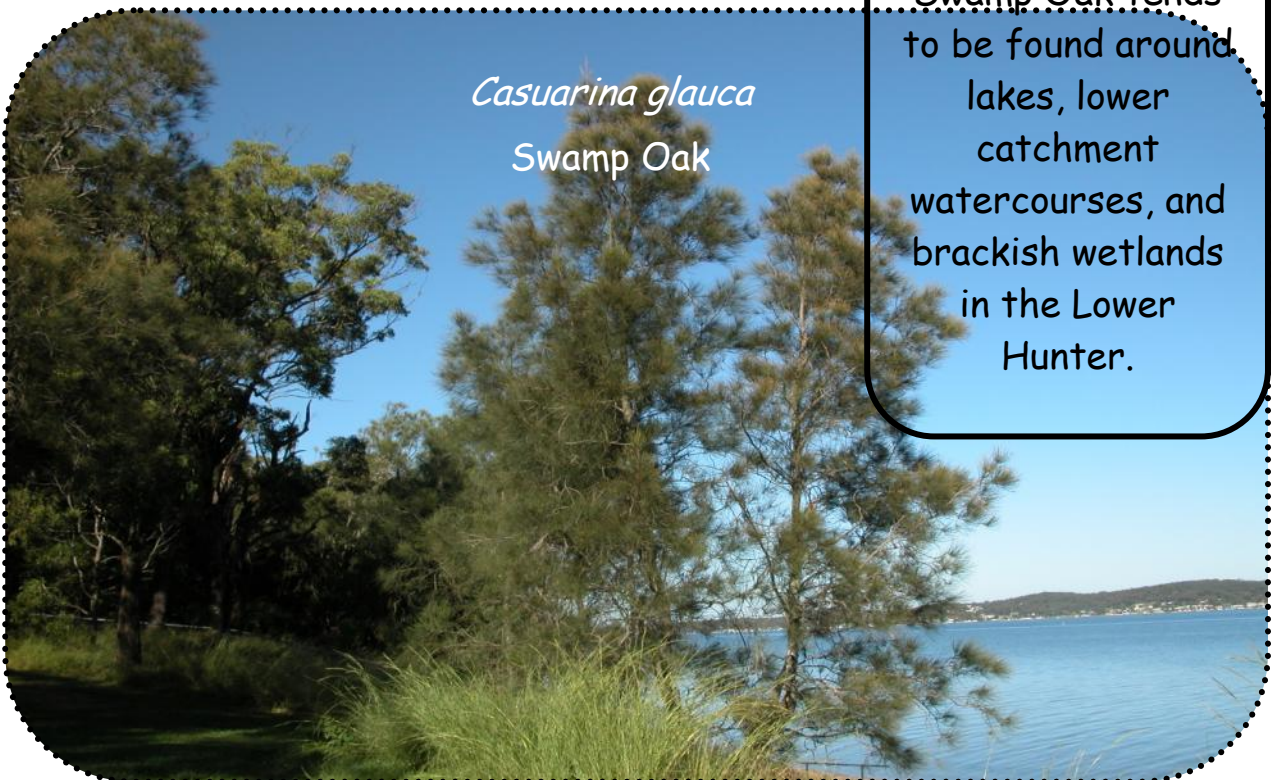


Eucalyptus robusta
Swamp Mahogany

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

http://www.lhccrems.com.au/biodiversity/mu38_41.html#mu40

MU 40 Swamp Oak-Rushland Forest

MU40a Phragmites rushland

Canopy Label:

Casuarina glauca / *Melaleuca ericifolia* / *Baumea juncea*

Structural Classification (Specht):

Open Forest Closed Forest

Description

Swamp Oak - Rushland Forest occurs in low-lying areas and along coastal lagoon fringes where brackish-saline groundwater or periodic inundation by saline tidal waters exerts a strong influence on the range of species present. The low forest canopy ranges from moderate to open depending on the relative abundances of *Casuarina glauca* and *Melaleuca quinquenervia*.

This community is often characterised by monospecific stands of Swamp Oak. In other areas where the saline influence is less pronounced, canopy species might include *Melaleuca ericifolia*, *Melaleuca quinquenervia*, *Eucalyptus robusta* and *Eucalyptus tereticornis*. Mid-storey vegetation is sparse and often absent, although when present it is usually characterised by tall reeds and rushes (2 to 3 metres) such as *Phragmites australis* and *Cladium procerum*. The dense ground layer is characterised by salt tolerant rushes, grasses and herbs including *Baumea juncea*, *Juncus kraussii* subsp *australiensis*, *Sporobolus virginicus* and *Apium prostratum*. Where aerial photograph interpretation has identified open rushlands comprising *Phragmites* spp these have been mapped as sub unit MU40a.

Swamp Oak - Rushland Forest is widespread along lake foreshores and tributaries of the coastal plain. Examples occur on Tuggerah Lakes, Lake Macquarie and Wamberal Nature Reserve.

This community is similar structurally and floristically to Map Unit 41: Swamp Oak Sedge Forest. However, in the Estuarine Rushland-Swamp Oak Forest the understorey is characterised by salt tolerant rushes rather than freshwater sedges and herbs. Wetland communities have not been described and mapped by NPWS (1999(a)) for the north coast region.

MU 40 Swamp Oak-Rushland Forest

MU40a Phragmites rushland

Stratum	Scientific name	Species frequency in community	Common name
Tallest	<i>Casuarina glauca</i>	73%	
	<i>Melaleuca ericifolia</i>	40%	
	<i>Melaleuca quinquenervia</i>	33%	
	<i>Eucalyptus robusta</i>	20%	
	<i>Eucalyptus tereticornis</i>	13%	
Mid	<i>Phragmites australis</i>	46%	
	<i>Cladium procerum</i>	6%	
Lowest (<1m)	<i>Baumea juncea</i>	73%	
	<i>Juncus kraussii subsp australiensis</i>	66%	
	<i>Sporobolus virginicus</i>	40%	
	<i>Apium prostratum var prostratum</i>	26%	
	<i>Apium prostratum var filiforme</i>	13%	
	<i>Mimulus repens</i>	13%	
	<i>Gratiola pedunculata</i>	6%	
	<i>Pratia pedunculata</i>	6%	
	<i>Baumea teretifolia</i>	13%	
	<i>Baumea rubiginosa</i>	6%	
	<i>Leptocarpus tenax</i>	6%	

A picture guide to plants in
MU 40 Swamp Oak-Rush land Forest
MU40a Phragmites rush land

Tall trees



*Casuarina
glauca*
Swamp She
-oak



*Melaleuca
quinquenervia*
Broad-leaved
Paperbark



*Eucalyptus
robusta*
Swamp
Mahogany



A picture guide to plants in
MU 40 Swamp Oak-Rushland Forest
MU40a Phragmites rushland

Mid
storey



Phragmites australis
Native Reed

Cladium procerum
Leafy
Twig-rush



E.Fisher © 2007



Lowest
storey



Baumea juncea
Bare Twig-Rush

E.Fisher © 2007



Juncus kraussii
Sea
Rush

E.Fisher 2007

Sporobolus virginicus
Sand Couch,
Salt-grass



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References

Hunter Councils Inc (2003) Lower Hunter and Central Coast Regional Environmental Strategy http://www.lhccrems.com.au/biodiversity/mu38_41.html#mu40 (Accessed 10.05.07)

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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

Land Managers



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