

APACE

Revegetation Catalogue

Wetland Herbaceous Species & Native Grasses



**The Appropriate Technology Development Group Inc.
2013**

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APACE WA

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APACE and the surrounding land is the home of the Appropriate Technology Development Group Inc. and APACE AID Inc. Collectively these organisations are known as APACE WA and are non-profit and community based. The location is on one hectare of land adjacent to the banks of the Swan River in North Fremantle. The offices are housed in historic Winter House, built in the 1880's and restored by a community project in the early 1980's. APACE WA has been resident at Winter House since 1983.

Activities undertaken by APACE WA include:

- The APACE Revegetation Nursery specialises in the propagation and supply of plant species indigenous to the Swan Coastal Plain and the Darling Range. Plants from the nursery are used in revegetation and landscaping projects throughout the Perth metropolitan region. The nursery is accredited with the Nursery Industry Accreditation Scheme of Australia (NIASA) and all stock is grown under strict hygienic conditions. Each year the nursery produces more than four hundred thousand plants and provides a selection of two hundred and eighty different species that are generally unavailable elsewhere. The APACE nursery was the first West Australian nursery to bring into cultivation a range of common rush and sedge species for wetlands revegetation projects.
- Consultancy services are provided in landscape architecture, revegetation design and site rehabilitation, including species selection, remedial works, weed eradication and other management issues. Flora and fauna surveys, where required, are also conducted. Clients include government departments, local government, schools, community groups and the private sector.
- APACE provides a comprehensive project management and implementation service. We conduct project management of both large and small-scale revegetation projects. We offer services in landscape architecture, project design, seed collection, planting, fencing and follow-up maintenance works. We also undertake a variety of construction projects including bird hides, boardwalks, beach shelters and dunal fencing.
- Since 1983 APACE has been providing education and training programmes for the community. Many of these programmes have had an environmental focus and have been conducted by APACE throughout Western Australia.

APACE offers two special courses to assist people with revegetation - "Introduction to Bush Regeneration" and "Seed Collection of West Australian Native Plants". Both courses include practical components and provide an excellent introduction to bush regeneration techniques and practices.

- The Swan Regional Seedbank has been set up by APACE to develop and maintain a regional seed bank of species indigenous to the Swan Coastal Plain and Darling Scarp and Range. The Swan Regional Seedbank provides a facility that enables community groups to store seed collected from their own reserves. The Seedbank acts as a training and education facility to support collection of indigenous seed material.

APACE COMMUNITY REVEGETATION NURSERY



Contracts

All plant species shown in the catalogue are propagated in preparation for the planting season (May to August). Contract orders are welcome. Orders can be placed at any time, however to secure supply of your preferred species it is advisable to order nine months prior to the planting season.

Indigenous species not shown in the catalogue but that are required can be grown on a contract basis.

Wherever possible species are grown from regional provenance seed. A seed collection service is available should you require plants to be grown from local seed.

Costs

All plants are grown in 70 x 70 x 100 mm pots or 50 x 50 x 125 mm native tree tubes.

• 1 – 19 plants	\$2.73 each	\$3.00 incl. GST	No delivery
• 20 – 49 plants	\$2.28 each	\$2.50 incl. GST	No delivery
• 50 – 99 plants	\$1.81 each	\$2.00 incl. GST	No delivery
• Members		\$2.00 incl. GST	No delivery
• 100 – 999 plants	\$1.50 each	\$1.65 incl. GST	Zone 1, 2 or 3 (see below)
• 1000 – 4,999 plants	\$1.455 each	\$1.60 incl. GST	Zone 1, 2 or 3
• 5,000 – 9,999 plants	\$1.41 each	\$1.55 incl. GST	Zone 1, 2 or 3
• 10,000> plants	\$1.363 each	\$1.50 incl. GST	Zone 1, 2 or 3
Zone 1 (within 15 kms) \$60 (inc) Zone 2 (15-30 kms) \$90 (inc) Zone 3 (30-45 kms) \$120 (inc)			

Recycling

All plastic pots and trays can be returned to the nursery for re-cycling, where they are put through our pot sanitisation process before re-use.

How to use the Catalogue

Many of our Western Australian plants are difficult, if not impossible to propagate. The lists shown in this publication are refined from the total plant species that grow in this vegetation complex. These refinements are made after considering the following factors:

- Seed and cutting material availability
- Plants can be produced in commercial quantities
- No annual and ephemeral species are included
- No rare flora or orchid species are included
- Species for which cultivation techniques have not yet been developed

With the advent of smoke-induced germination we have seen an increase in the numbers of species brought into commercial cultivation. These numbers are likely to increase still further with continued research.

This catalogue presents the plant species in lists according to the soil type in which they naturally occur. A map indicating the locations of the different soil types is included to assist with project area identification. The lists are formed from those species that are currently able to be cultivated and for which seed and cutting material are available. Common names shown in inverted commas, such as “Mooja”, are Aboriginal names. Sizes shown are median sizes (in metres). The ranges of flowering times are shown in months. Flower colours are also indicated.

Notes on Soil Types

The map on the following page shows the different soil types of the Swan Coastal Plain.

The soils of the Quindalup Dune System, Cottesloe and Karrakatta soil associations and the Bassendean Dune system are termed 'aeolian' and are named after the Greek god of the wind, *Aeolos*. Aeolian soils are deposited on the coast by the ocean and then transported by the wind to form dunes. The Quindalup dunes, being the furthestmost west are the youngest at approximately 0 to 7,000 years, while the Bassendean dunes are the oldest at approximately 118,000 to 225,000 years.

Within this band of dunes is a system of north - south trending lakes and swamps, which have a surrounding peaty soil known as Herdsman soils. Yoongarillup soils on the other hand are the result of marine deposits and are found bordering Peel Inlet and Lakes Clifton and Preston and the Leschenault Inlet.

Alluvial soils are soils that have been washed and transported by water. On the Swan Coastal Plain these soils are termed Forrestfield, Guildford, Swan, Beermullah, Vasse and Yanga. Southern River soils are aeolian over alluvial and consist of Bassendean sands blown over Guildford and Forrestfield soils.

The Darling Range consists of a complex mosaic of soil types that are collectively known as Darling Range laterites. In the catalogue these have been identified as Darling Scarp and Darling plateau - laterite, granite and valleys.

Acknowledgements

The plant species arrived at in this catalogue have been obtained from the authors' experience and by reference to previous works by others. In particular the authors wish to acknowledge the work of Powell and Emberson in *Growing Locals - gardening with local plants in Perth*. This publication systematically lists the location of approximately 1,500 native plants in the Perth region and we recommend it to the reader. We would also like to acknowledge Havell in Forest Department Bulletin, numbers 86 and 87. All errors and omissions remain of course the responsibility of the authors. All comments will be gratefully appreciated and should be directed to the Secretary, Appropriate Technology Development Group (Inc.), 1 Johannah Street, North Fremantle.

References

1. Bennett, E.M. (1991). *Common and Aboriginal Names of Western Australian Plant Species*. Wildflower Society of Western Australia.
2. Green, J.W. (1985). *Census of the Vascular Plants of Western Australia*. Department of Agriculture, Perth.
3. Heddle, E.M., Loneragan, O.W. and Havell, J.J. (1980). *Darling System - Vegetation Complexes*. Department of Conservation and Environment, Western Australia.
4. Marchant, N.G., Wheeler, J.R., Rye, B.L., Bennett, E.M., Lander, N.S., MacFarlane, T.D. (1987). *Flora of the Perth Region. (Parts 1 & 2)* Department of Agriculture, Perth.
5. McArthur, W.M. and Bettenay, E. (1974). *Development and Distribution of Soils of Swan Coastal Plain*. CSIRO, Melbourne.
6. Powell, R. and Emberson, J. (1996). *Growing Locals - gardening with local plants in Perth*. Western Australian Naturalists' Club (Inc.), Nedlands.
7. Trudgen, M. (1991). *A Flora and Vegetation Survey of the Coast of the City of Mandurah*. Department of Planning and Urban Development, Perth.
8. Trudgen, M. (1984). *Flora and Vegetation of the Leschenault Peninsula*. Department of Conservation and Environment, Perth

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MAP

Swan Coastal Plain Soil Types

Aeolian Soils

Quindalup



Cottesloe



Herdsmen



Karrakatta



Bassendean



Aeolian over Alluvial

Southern River

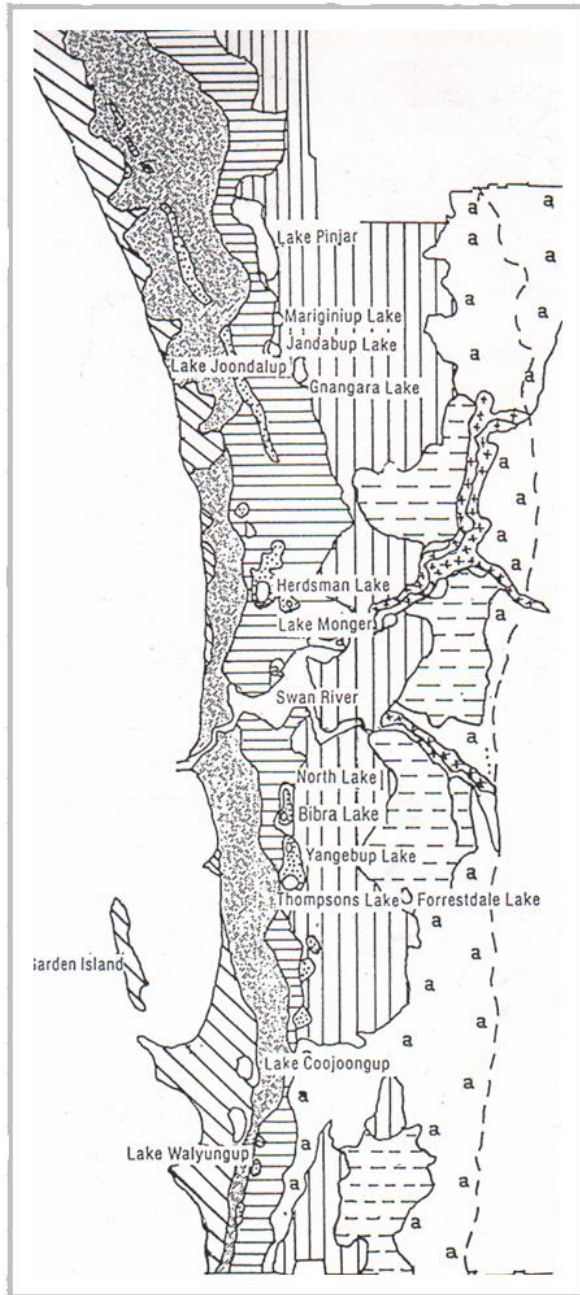


Alluvial

Swan



Other Alluvial



Adapted from "The Atlas of Natural Resources: Darling System, Western Australia" (WA Department of Conservation and Environment). In "Leaf and Branch: Trees & Tall Shrubs of Perth" by Robert Powell, CALM Perth (1991), p. 14.

WETLAND HERBACEOUS SPECIES

Genus	Species	Common Name	Size	Flower	Depth - mm	Substrate
<i>Baumea</i>	<i>articulata</i>	Jointed Twig-rush	2.5	Dec	800 mm	Sand peat or clay
<i>Baumea</i>	<i>juncea</i>	Bare Twig-rush	1.0	Oct-Jan	200 mm	Sand peat or clay
<i>Baumea</i>	<i>preissii</i>	Broad Twig Sedge	1.0	Sept-Oct	200 mm	Sand peat or clay
<i>Baumea</i>	<i>rubiginosa</i>	River Twig Sedge	1.0	May-Aug	300 mm	Sand peat or clay
<i>Baumea</i>	<i>vaginalis</i>	Sheath Twig Sedge	1.2	Oct-Nov	200 mm	Sand or peat
<i>Bolboschoenus</i>	<i>caldwellii</i>	Marsh Club-rush	1.0	Aug-Nov	300 mm	Clay
<i>Carex</i>	<i>appressa</i>	Tall Sedge	1.5	Sept-Oct	100 mm	Peat
<i>Carex</i>	<i>fascicularis</i>	Tassell Sedge	1.5	Nov	100mm	Peat
<i>Carex</i>	<i>tereticaulis</i>		0.7	Sept-Oct	100mm	Clay
<i>Centella</i>	<i>asiatica</i>		0.2	All year	0mm	Sand peat or clay
<i>Chorizandra</i>	<i>enodis</i>	Black Bristle-rush	0.8	Jul-Nov	100 mm	Peat or clay
<i>Chorizandra</i>	<i>multiarticulata</i>	Bristle Rush	0.6	Aug-Sep	100 mm	Clay
<i>Cotula</i>	<i>coronopifolia</i>	Waterbuttons	0.3	All Year	100	
<i>Cyperus</i>	<i>gymnocaulus</i>	Spiny Flat-sedge	1.0	Dec	100mm	Peat
<i>Dielsia</i>	<i>stenostachya</i>		0.6	Feb-May	100mm	Peat
<i>Eleocharis</i>	<i>acuta</i>	Common Spike-rush	1.5	Dec	400 mm	Sand peat or clay
<i>Goodenia</i>	<i>filliformis</i>	Thread-leaved Goodenia	0.2	Sept-Jan	0mm	Sand peat or clay
<i>Hopkinsia</i>	<i>anoectocolea</i>	Steel Rush	0.7	Nov	100 mm	Sand
<i>Hypolaena</i>	<i>exsulca</i>	Rope Rush	0.6	Dec	0mm - Dry	Sand or peat
<i>Isolepis</i>	<i>cernua</i>	Nodding Club-rush	0.2	Oct-Dec	0mm	Sand peat or clay
<i>Isolepis</i>	<i>nodosa</i>	Knotted Club Rush	1.0	Nov-Mar	200 mm	Sand or peat
<i>Juncus</i>	<i>kraussii</i>	Sea Rush	1.5	Nov-Dec	100mm	Sand or peat
<i>Juncus</i>	<i>pallidus</i>	Giant Rush	2.0	Oct-Nov	100mm	Sand
<i>Juncus</i>	<i>pauciflorus</i>	Loose Flower Rush	1.5	Nov-Dec	100mm	
<i>Juncus</i>	<i>planifolius</i>	Broadleaf Rush	0.6	Oct-Nov	0mm	Peat
<i>Juncus</i>	<i>subsecundus</i>	Finger Rush	1.0	Nov	100mm	Peat or clay
<i>Lepidosperma</i>	<i>angustatum</i>		0.8	Mar-July	Dry	Clay
<i>Lepidosperma</i>	<i>effusum</i>	Spreading Sword Sedge	1.5	Nov	200 mm	Peat or clay
<i>Lepidosperma</i>	<i>gladiatum</i>	Coastal Sword-sedge	1.0	Nov-Jan	Dry	Sand
<i>Lepidosperma</i>	<i>longitudinale</i>	Pithy Sword-hedge	2.5	May-June	200 mm	Sand peat or clay
<i>Lepidosperma</i>	<i>tetraquetrum</i>		3.0	Aug-Jan	200 mm	Clay
<i>Lobelia</i>	<i>alata</i>	Angled Lobelia	0.2	Mar-Apr	0mm	
<i>Myriophyllum</i>	<i>crispatum</i>	Milfoil	0.5	Oct-Feb	300mm	
<i>Schoenoplectus</i>	<i>validus</i>	Lake Club-rush	2.0	Dec-Jan	1300mm	Sand peat or clay
<i>Tremulina</i>	<i>tremulus</i>	Quivery Cord-rush	1.0	Nov-Feb	100mm	
<i>Triglochin</i>	<i>procera</i>	Water Ribbons	0.3	Jun-Nov	500mm	

NATIVE GRASSES

Genus	Species	Common Name
<i>Amphipogon</i>	<i>debilis</i>	
<i>Astrebla</i>	<i>lappacea</i>	Curly Mitchell Grass/Wheat Mitchell
<i>Astrebla</i>	<i>pectinata</i>	Barley Mitchell Grass/Cow Mitchell
<i>Brachiaria</i>	<i>miliiformis</i>	Green Summer Grass
<i>Cymbopogon</i>	<i>ambiguus</i>	Lemon Scented Grass
<i>Cymbopogon</i>	<i>obtectus</i>	Silky Heads
<i>Dactyloctenium</i>	<i>radulans</i>	Button Grass
<i>Danthonia</i>	<i>setacea</i>	Small Flowered Wallaby Grass
<i>Enneapogon</i>	<i>avenaceus</i>	Common Bottlewashers
* <i>Enneapogon</i>	<i>intermedius</i>	Tall Bottlewashers
<i>Enneapogon</i>	<i>nigricans</i>	Niggerheads
<i>Enneapogon</i>	<i>oblongus</i>	Purple-head Nineawn
<i>Eragrostis</i>	<i>eripoda</i>	Woollybutt Grass
<i>Eragrostis</i>	<i>falcata</i>	Sickle Lovegrass
<i>Eragrostis</i>	<i>setifolia</i>	Neverfail Grass
<i>Eriachne</i>	<i>aristidea</i>	Broadleaf Manderrie Grass
<i>Eriachne</i>	<i>benthamii</i>	
<i>Imperata</i>	<i>cylindrica</i>	Blady Grass
<i>Monachather</i>	<i>paradoxa</i>	Bandicoot Grass
<i>Neurachne</i>	<i>alopeuroidea</i>	Foxtail Mulga Grass
<i>Panicum</i>	<i>decompostium</i>	Native Millet
<i>Plectrachne</i>	<i>danthonioides</i>	
<i>Sorghum</i>	<i>timorense</i>	
<i>Stipa</i>	<i>elegantissima</i>	Feather Speargrass
<i>Stipa</i>	<i>nitida</i>	
<i>Stipa</i>	<i>semibarbara</i>	Bearded Speargrass
<i>Tetarrhena</i>	<i>laevis</i>	Forest Ricegrass
<i>Themeda</i>	<i>australis</i>	Kangaroo Grass
<i>Themeda</i>	<i>pilbara'</i>	
<i>Themeda</i>	<i>triandra</i>	Kangaroo Grass
<i>Triodia</i>	<i>angusta</i>	
<i>Triodia</i>	<i>irritans var. laxispicata</i>	Porcupine Grass
<i>Triodia</i>	<i>mitchellii</i>	Buck Spinifex
<i>Triodia</i>	<i>pungens</i>	
<i>Triodia</i>	<i>wiseana</i>	
<i>Yakirra</i>	<i>australiensis</i>	Bunch Panic
<i>Zygochloa</i>	<i>paradoxa</i>	Sandhill Canegrass

Grasses are generally only grown on contract and supply unfortunately cannot be guaranteed.

Notes



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