

watsnu



Species and Communities Branch newsletter for Threatened Species and Ecological Communities conservation
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Island search for rare fern

by Nikki Rouse

Just south of Walpole's well known Mandalay Beach, a huge granite dome emerges from the Southern Ocean. This dome – Chatham Island, has been shaped by the roaring Southern Ocean and icy winds.

The Department of Environment and Conservation's (DEC's) Frankland District nature conservation team took a boat trip across to Chatham in March this year to survey the Declared Rare fern species that occurs on the island – *Asplenium obtusatum* subsp. *northlandicum*, also known as 'shore spleenwort'. The subspecies is known from one mainland population and several island populations. These populations are highly fragmented as the species occurs in shady, cool microhabitats among the otherwise exposed granite islands along the coastline. The populations are extremely difficult to survey, with several populations only known from surveys by expert rock climbers. Despite its specific habitat requirements, the species survives remarkably well in its harsh environment, highly exposed to salt-water

water spray, with limited substrate for root development.

The team travelled to the island using a boat volunteered by the Walpole Sea Rescue Group. The island is spectacular, with weathered granite containing large freshwater rock pools, remarkable drainage patterns, caves and fault lines. There is a diverse array of habitats on the small island, which is only 600 metres by 1000 metres, particularly associated with the general steepness and exposure of the granites. The main habitat consists of *Poa poiformis* hummocks (filled with thousands of shearwater burrows), *Taxandria marginata* dominated gullies, berry saltbush (*Rhagodia baccata*) dominated slopes and *Andersonia sprengelioides* dominated peaks.

Two populations of shore spleenwort were located down a steep, well vegetated gully. The plants were healthy and occurred in sheltered and shaded areas with steep granite cliffs rising up on either side. It was not possible to survey two further populations due to their location at the high water mark at the base of sheer granite cliffs.



Top View across Chatham Island onto Walpole coastline.

Above New Zealand fur seal. Photos – Gary Hunter

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Also of interest were the high numbers of bush rats (*Rattus fuscipes*) and king's skinks (*Egernia kingii*) on the island. A variety of land and sea birds, and a number of other skinks (*Egernia* and *Ctenopus* species) were also spotted during the trip. A large colony of about 70 adult New Zealand fur seals (*Arctocephalus forsteri*) was also recorded, with many smaller groups scattered on rocks around the island. The majority of females had young pups, which frolicked in smaller 'nursery' rock pools.

The island is a unique refuge for a variety of species and is highly deserving of its status as a nature reserve.

For more information contact Nikki Rouse on (08) 9840 1027 or by email (nikki.rouse@dec.wa.gov.au).

Search for a threatened ecological community in the deep pools of the Avon River

by Monica Batista

The Avon River basin is the major river system in the south-west of Western Australia. During the 1950s and 1960s the Avon River was modified under the River Training Scheme in an attempt to prevent flooding. Channel manipulation such as removing the islands and vegetation resulted in severe erosion of river banks and destabilisation of the channel bed. Before that time, however, the Avon River contained many areas of braided channels. The islands in the braided areas reduced the speed of the water allowing it to spill out onto the flood plain which caused flooding of the towns situated on the river.

There are now around 26 pools on the main channel of the Avon River, most of which are either full or nearly full of sediment as a result of the River Training Scheme. Only two pools, Gwambygine and Glenavon are relatively free from sediment. Sedimentation is the process whereby sediments from upstream are deposited in the river pools, smothering aquatic habitat. As the pools fill with sediment the water temperature increases and the sediment may bring nutrients and salts with it, resulting in eutrophication and salinisation of the deep pools.

The deep pools are considered important refuge sites for flora and fauna during the dry summer months when most of the river dries out. Some flora and fauna species have adapted to factors such as low temperatures that occur in winter when the pools become part of the swift flowing cold river. In summer they become still lakes and are highly productive. The warmer summer temperatures encourage rapid reproduction of micro and macro flora



Top Sedimentation occurring at Gwambygine Pool, Avon River. Photo – Mia Morley

Above Invertebrate sampling at Mile Pool, Dale River. Photo – Monica Batista

and fauna which support a relatively abundant bird life on the river banks and in the pools themselves. The tortoise population at Gwambygine Pool is abundant and uniquely adapted to make the most of the unusual conditions in the Avon River. This population is quite

different from the tortoise population on the Swan River. The water rat population, once very common on the river, is now extremely rare with only one individual being spotted at Gwambygine Pool in the past few years. The once abundant native gilgies and some frog species are rarely seen upstream of Toodyay today, except in the remaining pools (Glenavon and Gwambygine).

A project aimed at identifying unique ecological communities in these deep pools has been initiated. The work is part of the State Salinity Strategy-funded project for identifying threatened ecological communities, and the Avon Catchment Council-funded *Back from the Edge* project. Project officers from DEC's Wheatbelt Region and Species and Communities Branch visited four pools along the Avon and Dale rivers in February and undertook aquatic invertebrate sampling, water quality testing and bird surveys. The four pools were chosen for sampling after discussions with staff from the Department of Water and with the River Conservation Society's Cecily Howell.

DEC's Species and Communities Branch is awaiting identification of the aquatic invertebrate samples and hopes to use the information to describe an ecological community. Previous research by the River Conservation Society, university students and DEC will be used for comparison and to support a possible nomination for a new threatened ecological community.

For more information contact Monica Batista on (08) 9334 0115 or by email (monica.batista@dec.wa.gov.au).

Implementing recovery actions for Declared Rare Flora

Jessica Wright has joined DEC's Swan Coastal District as a flora conservation officer to implement recovery actions for species of Critically Endangered and Endangered flora species located in the Swan Natural Resource Management Region. The project is funded by the Commonwealth's Natural Heritage Trust through the Swan Catchment Council and focuses on the recovery of the following flora taxa:

- swamp starflower (*Calytrix breviseta* subsp. *breviseta*);
- cinnamon sun orchid (*Thelymitra dedmaniarum*);
- Purdie's donkey orchid (*Diuris purdiei*);
- glossy-leaved hammer orchid, (*Drakaea elastica*);

- baby blue orchid (*Epiblema grandiflorum* var. *cyaneum* ms);
- grand spider orchid (*Caladenia huegelii*);
- split-leaved grevillea (*Grevillea althoferorum*);
- curved-leaved grevillea (*Grevillea curviloba* subsp. *curviloba*);
- narrow curved-leaved grevillea (*Grevillea curviloba* subsp. *incurva*);
- and
- *Macarthuria keigheryi*.

Jessica will be responsible for the implementation of actions such as monitoring existing populations and surveying for new ones, undertaking weed control, fencing, preparing fire response plans and dieback surveys.



Above Swamp starflower (*Calytrix breviseta* subsp. *breviseta*). Photo – Andrew Brown

For more information contact Jessica Wright on (08) 9405 0713 or by email (jessica.wright@dec.wa.gov.au).

Yongergnow Australian Malleefowl Centre, Ongerup WA

by Melissa Savage



Top The Yongergnow Australian Malleefowl Centre.

Above Interpretive signage at the Yongergnow Australian Malleefowl Centre. Photos – Fred Duncan

On 15 February a new and exciting interpretive centre opened in Ongerup after seven years of planning and construction. The Yongergnow Australian Malleefowl Centre offers a unique adventure into the mallee environment, the people who are working to protect the mallee, the vulnerable malleefowl (*Leipoa ocellata*) and the town of Ongerup.

The centre is situated in the Great Southern region, between Albany and Hyden, or halfway between Perth and Esperance. Ongerup has distant views of the Stirling Range and is the western gateway to the Fitzgerald Biosphere and national park. The centre is proudly community owned and managed and is staffed by local volunteers who are trained to provide visitors with a top class experience.

The centre includes the 'Fowl Play' exhibit and has plenty of hands-on opportunities that showcase the iconic malleefowl and its habitat and the story of how this amazing bird has galvanised local community conservation and economic development activities. The centre also has a pair of malleefowl in a 1200 metre by 10 metre tall aviary, which gives visitors an opportunity to view these birds up close and learn about the future captive breeding program to be run at the centre. Yongergnow is open daily from 9.30am to 4pm. A small entry fee applies.

The community of Ongerup and the Shire of Gnowangerup has been involved in the conservation of malleefowl for many years. The Malleefowl Preservation Group has been based in Ongerup since it formed

in 1992. Ongerup seemed like an obvious place to build the centre, where there was plenty of community support. The dynamic Malleefowl Preservation Group's office is located at Yongergnow and information on their associated research projects is available during their office hours.

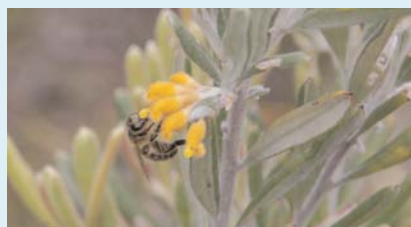
For more information contact Melissa Savage at the Yongergnow Australian Malleefowl Centre on (08) 9828 2325 or by email (msavage@yongergnow.com.au).

Warren Region receives funding for Critically Endangered species

by Cassidy Newland

DEC's Warren Region has been granted \$100,000 through the State Biodiversity Conservation Initiative *Saving our Species* for a project entitled 'Management of threats to Critically Endangered flora and assessment of the conservation status and threats to Priority listed flora species in the Warren Region'. This project focuses on a review of the conservation status of several priority plant species, and the preparation of interim recovery plans for Critically Endangered flora in the region.

A conservation officer has been appointed to the project to work with DEC's nature conservation staff in the Donnelly and Frankland districts to conduct surveys, review conservation status and prepare interim recovery plans for nominated species.



Mt Lindesay has been the main focus of the project in the Frankland District as it contains a number of taxa, which are highly restricted and only known to occur on and around the Mt Lindesay landform. These include *Grevillea fuscolutea*, *Cryptandra congesta* and *Laxmannia grandiflora* subsp. *brendae*. In the Donnelly District the focus is on *Grevillea acropogon*, *Andersonia annelsii* and *Rhacocarpus rehmannianus* subsp.

webbianus (see 'Search for Webb's moss' on page 4), which are all listed as Critically Endangered or are likely to be in the future.

The project is funded until July by which time target species will have been nominated for a change of status and draft interim recovery plans for the six species will have been completed.

For more information contact Cassidy Newland on (08) 9840 1027 or by email (cassidy.newland@dec.wa.gov.au).

Above left *Grevillea fuscolutea*, one of the Priority 2 species surveyed which has found to be endemic to Mt Lindesay and has been nominated for listing as DRF. Photo – Cassidy Newland



Protection of Duckpond Reserve

by Melissa Hoskins

Duckpond Reserve, which is a part of the Mundijong Road Reserve, has recently been fenced to protect its environmental values. The reserve, which is located in the Shire of Serpentine–Jarrahdale covers an area of about 3.5 hectares and contains two threatened ecological communities (TECs). These are known as ‘*Corymbia calophylla* – *Xanthorrhoea preissii* woodlands and shrublands’, listed as Critically Endangered, and ‘Dense shrublands on clay flats’, listed as Vulnerable.

This important piece of bushland has now been fenced to ensure the protection of its conservation values. This recovery action was undertaken by DEC’s Swan Coastal District in conjunction with the Serpentine–Jarrahdale Landcare Group and Greenskills, with funding from the South West Catchment Council. The Armadale Noongar Corporation, a group established to mentor young

Aboriginal people, installed the fence.

It is hoped that the fence will prevent rubbish dumping in the reserve and protect it from off-road vehicles accessing the site. A number of other recovery actions are planned for the site including weed control and rehabilitation in degraded portions of the reserve. The Landcare Group has been collecting seed from the site with the aim of using the propagated material for rehabilitation of the degraded portions of the reserve later this year.

There are a number of reserves in the Shire of Serpentine–Jarrahdale that contain TECs for which recovery actions are being implemented. It is hoped that the district and the Landcare Group can continue to work together to achieve positive outcomes for the conservation of these sites.

For more information contact Melissa Hoskins on (08) 9405 0740 or by email (melissa.hoskins@dec.wa.gov.au).



Above Fiona Felton (DEC Swan Coastal District) and Kristy Gregory (Serpentine–Jarrahdale Landcare Group) with the Armadale Noongar Corporation at Duckpond Reserve.

Photo – Colleen Rankin

Left The completed fencing at Duckpond Reserve.

Photo – Kristy Gregory

Search for Webb’s moss

by Cassidy Newland

The search is on to rediscover the critically endangered Webb’s moss (*Rhacocarpus rehmannianus* var. *webbianus*) where it was originally located. The moss was first found near Mt Lindesay in 1882 by one of WA’s earliest naturalists, William Webb. Webb, who came to Western Australia from England as a convict, developed a strong interest in the natural environment and collected many plant specimens in the Denmark–Albany area, sending collections to Baron Ferdinand von Mueller.

The original moss specimens still exist today in herbarium collections held in Germany, however the voucher and any knowledge of the exact location of the population has been lost. Webb’s moss has since been discovered at Mt Chudalup to the south of Northcliffe and, more recently, near Mt Roe to the north of Walpole. But it has not been rediscovered at Mt Lindesay.

An interim recovery plan is being prepared for the species and a search is underway to rediscover the original location at Mt Lindesay with funds from the State Government’s Biodiversity Conservation Initiative *Saving our Species* (see ‘Warren Region receives funding for threatened species’ on page 3). However there is a large area of semi-potential habitat to be searched and the terrain is often difficult.

The threatened species project, which has been focused on the Warren Region, has also included surveys of several other species around Mt Lindesay. These surveys have confirmed that the species are endemic to the Mt Lindesay landform. One of these species, *Grevillea fuscolutea*, was also first collected by Webb. The project has resulted in the species being nominated for listing as Declared Rare Flora.

For more information contact Cassidy Newland on (08) 9840 1027 or by email (cassidy.newland@dec.wa.gov.au).

Corella count 2007: Muir's corella

by Marnie Swinburn

Muir's corella (*Cacatua pastinator pastinator*) once inhabited most of the south-west of Western Australia. Today the southern population of the Muir's corella occurs in a single, isolated sub-population in the south-west of the State in the area of the Tone and Perup rivers, Boyup Brook, Rocky Gully, Frankland and Lake Muir.

It was ranked as Endangered by the Western Australian Threatened Species Scientific Committee because the number of mature individuals was fewer than 2500 and all individuals occur in a single sub-population. The current total number of Muir's corella, however, is not precisely known because previous counts have varied from 1500 to 3000 mature birds. Recently, it has been thought that the current population far exceeded these estimates based on accounts from landholders reporting nuisance issues, including damage to cereal crops due to large numbers of birds.

On Wednesday 14 March a simultaneous count of Muir's corella was carried out between 6pm and 6.30pm on private properties spanning from Kenninup, Tonebridge, Frankland and Rocky Gully to Lake Muir, Bokerup and many other locations in between. Survey teams were dispatched from Unicum Hall to designated properties where Muir's corellas are known to occur in large numbers. The aim of the survey was to gain an up-to-date estimate of the Muir's corella population in this small area and collect information on behaviour patterns and habitat preferences. This information is required to manage this threatened species throughout its range, including providing information on how landholders can reduce the nuisance caused by Muir's corellas, thus mitigating threatening processes such as illegal shooting and poisoning.

The count was an overwhelming success with 22 properties surveyed by 55 landholders, volunteers and DEC and Southern Forests Landcare staff. This current survey, which by no means covered the whole range of Muir's corella, resulted in about 9000 birds being counted. The survey confirmed the high numbers of birds reported by landholders, with one property alone having about 2500 birds. Large flocks such as these are attracted to sheep and cattle feedlots where there is a large amount of grain freely available to the birds.



Future simultaneous counts are being planned to include a larger number of properties and areas on the boundary of their range and at different times of the year. The corella count was supported by the South West Catchment Council.

For more information contact Marnie Swinburn on (08) 9771 7949 or by email (marnie.swinburn@dec.wa.gov.au).

Top Sheep feedlots often attract hundreds of corellas. Photo – Brad Barton

Middle Survey teams met at Unicum Hall. Photo – Lee Fontanini

Above A flock of approximately 100 birds feeding on grain pile. Photo – Peter Taylor



Interim Recovery Plans for Western Australia's rich endemics

by Craig Douglas

Interim recovery plans (IRPs) are being prepared for the Critically Endangered cape spider orchid (*Caladenia caesarea* subsp. *maritima*) and spike poison (*Gastrolobium glaucum*) with funding from the Commonwealth's Natural Heritage Trust program. Preparation of IRPs for these taxa revealed that more up-to-date population data was needed.

In collaboration with staff from DEC's Busselton Work Centre and South West Regional Office, surveys for the cape spider orchid were completed in late August and early September 2006. These documented plant numbers in each location identified threatening processes, provided accurate GPS coordinates and mud maps for each locality. Surveys proved fruitful with the discovery of one new subpopulation. Many extensions to the plant's area of occupancy were also recorded. Prior to survey the subspecies was thought to be represented by only 188 mature plants. But it is now known to total 625 mature plants. Grazing of the leaf tips by an unknown herbivore continues to

be a threat at most sites. However, this threat did not prevent the subspecies flowering well in 2006.

Before the survey in mid September 2006, *Gastrolobium glaucum* was known from four populations and a total of 178 mature plants, but it is now known that the species totals 386 mature plants. The largest was an increase of 182 plants within a large patch of remnant vegetation. Due to the small area of occupancy, restricted extent of occurrence and decline in habitat quality this species continues to meet Critically Endangered status.

With funding assistance from the Natural Heritage Trust program and the State Biodiversity Conservation Initiative *Saving our Species*, IRPs are also being prepared for a number of other Declared Rare Flora across the south-west of Western Australia. These include the Critically Endangered *Caladenia melanema*, *Caladenia williamsiae*, *Darwinia carnea*, *Calectasia cyanea*, *Eremophila koobabbiensis* ms, *Isopogon robustus*, *Lysiosepalum abollatum* and *Dryandra*

ionthocarpa subsp. *chrysophoenix*, the Endangered *Conostylis seorsiflora* subsp. *trichophylla* and the Vulnerable *Conostylis rogeri* and *Conospermum undulatum*. IRPs for the following taxa have also been updated: the Critically Endangered *Symonanthus bancroftii*, the Endangered *Acacia insolita* subsp. *recurva* and the Vulnerable *Acacia auratiflora* and *Grevillea dryandroides* subsp. *hirsuta*.

For more information contact Andrew Brown on (08) 9334 0122 or by email (andrew.brown@dec.wa.gov.au).

Main photo Despite weed invasion, road verge population of *Gastrolobium glaucum* healthy and in heavy flower.

Inset left Spike poison (*Gastrolobium glaucum*).

Inset right Endangered cape spider orchid (*Caladenia caesarea* subspecies *maritima*). Photos – Craig Douglas



Information day for Native Vegetation Protection Group

by Val English

An information day was held last December for staff from DEC's Native Vegetation Protection group from the Swan Coastal District. The group evaluates applications for permits to clear native vegetation in Western Australia's Wheatbelt, Swan and Goldfields regions and in the Kwinana–Peel area. The purpose of the day was to provide an opportunity for an exchange of information that may be useful in evaluating proposals to clear native vegetation where there is potential for impact to threatened ecological communities (TECs).

Three staff members with expertise in TEC identification and land planning issues from DEC's Species and Communities Branch and one from

DEC's Swan Coastal District provided informal presentations at four separate sites in the field. Each presentation included information about the identification of the community as a 'unique assemblage', development and land management issues that regularly arise in relation to the community type and how clearing of native vegetation in the surrounding areas may impact on the TEC.

The first site visited was a 'tumulus organic mound spring' in Bullsbrook. The main issues that arise with clearing around springs involve possible changes to hydrology. The difficult issue of determining the 'buffer' distance required between the springs and specific developments on adjacent lands

to protect the hydrology was discussed.

A claypan community near Gingin was then examined. The issues of determining 'condition' at these wetlands, when native herbs that occur in the understorey have been replaced by weeds later in the flowering season, was considered at this site.

The next sites visited were communities of massive limestone ridges where proposals to quarry limestone is a matter that commonly arises. The issue of differentiating the various communities that occur on limestone ridges was discussed. The final site visited was a Banksia community in Koondoola. The issue of the need for very good species lists to differentiate the various Banksia communities was considered at this site.

The information day provided a useful forum for consideration and discussion of specific TEC issues, some of the major issues that arise when permits to clear native vegetation are evaluated and how these might be dealt with in the absence of conclusive background information were considered.

For more information contact Val English on (08) 9334 0409 or by email (val.english@dec.wa.gov.au).



Left Discussions about the Banksia community at Koondoola Open Space.

Below At a wetland site near Gingin. Photos – Val English



Managing club-leaved synaphea

by Fiona Felton

Club-leaved synaphea (*Synaphea* sp. Pinjarra) is a compact yellow flowering shrub to 0.4 metres, which occurs on white to grey clays in low-lying areas. It is known from only four populations in a linear range of less than three kilometres along a railway line south of Dandalup. In August 2001 it was listed as Declared Rare Flora under the *Wildlife Conservation Act 1950*.

As it occurs in a highly restricted range on unsecured tenure it is at high risk of being affected by a single catastrophic event. A good understanding of the biology of the species is required so that it can be actively managed. DEC commissioned a consultant to undertake a range of studies on the species in an effort to find out more about it.

This work revealed that the species was likely to respond well to manual disturbance and fire under prescribed conditions. In autumn 2006 DEC's Swan Coastal District undertook a disturbance trial funded by the South West Catchment Council.

Nine three metre by three metre plots were installed in three of the four populations. Each plot underwent

burning, manual disturbance (using a mattock) or acted as a control plot. The burn plots were loaded up with extra newspaper to replicate the effect of a prescribed burn on the species.

Preliminary data has been extremely positive with mature plants re-sprouting following both burning and disturbance by mattocking and more than 150 new germinants being recorded. There has been some loss of seedlings, possibly due to the excessively hot summer, but the losses were not great. The plots will continue to be monitored throughout the year.

For more information contact Fiona Felton on (08) 9405 0700 or by email (fiona.felton@dec.wa.gov.au).

Below Fiona Felton recording data while the trial plot is burning. Photo – Leigh Sage

Right Club-leaved synaphea (*Synaphea* sp. Pinjarra).

Below right Close up of a club-leaved synaphea (*Synaphea* sp. Pinjarra) flower. Photos – Fiona Felton



The elusive, endangered and enigmatic western ground parrot

by Renée Hartley

Unconfirmed sightings of a very rare and elusive parrot have sparked interest in the Jurien and Badgingarra areas. The Critically Endangered western ground parrot (*Pezoporus walllicus flaviventris*) is known to have occurred in places from Perth to Wongan Hills and up to Dongara more than 100 years ago but the birds had not been seen in the area for some time.

Renowned naturalist John Gilbert collected specimens of the western ground parrot near Perth in 1842 and two of the specimens in the Gould collection in the British Museum are from Wongan Hills. Yet the species is now only known from a few populations on the South Coast, east of Albany (See WATSNU January 2007, 'Western Ground Parrot Recovery Project update').

This autumn, Birds Australia and *Back from the Brink* (a DEC project funded by the Federal and State governments and administered by the Northern Agricultural Catchment Council), are joining forces in the hope of relocating this elusive bird.

Adequate searching has never been conducted within this part of the bird's historical range and due to the species' cryptic nature; it may have easily been overlooked in the past. The birds spend most of their time among vegetation on the ground and rarely call during the day. They are often the first birds to call at dawn and the last to call at dusk. Therefore, surveys are conducted in the hours before sunrise and after sunset for the greatest chance of hearing the calls.

Surveys conducted on the South Coast have been very successful during the past few years, with much being learnt about the western ground parrot's distribution and behaviour. The species favours low heathland with a high diversity of flora. Habitat clearing and degradation are thought to be the primary causes of its decline with predation from cats and foxes being major factors, as the birds feed and nest on the ground.

A recent habitat survey between Badgingarra and the coast has identified a number of areas that appear to be suitable habitat for the western ground parrot. Community involvement will be pivotal in surveying these areas this year and into the future.

For further information or how you can help contact Renée Hartley on (08) 9652 1911 or by email (renee.hartley@dec.wa.gov.au).



Top Could this be home to the western ground parrot?

Above A rare glimpse of a cryptic bird.

Left Western ground parrot (*Pezoporus walllicus flaviventris*). Photos – Brent Barrett



Spring surveys locate additional *Calectasia* sp. Pinjar

by Melissa Hoskins

Calectasia sp. Pinjar is listed by DEC as a Priority 1 species, as it is currently known from one location, north of Perth in the Swan Coastal District.

Priority 1 species are described as those which are known from one or a few populations which are under threat, either due to small population size or being located on lands under immediate threat, or the plants are under threat. These species are under consideration for declaration as 'rare flora', but are in urgent need of further survey.

Calectasia sp. Pinjar is a perennial herb, which grows to a height of about 40 centimetres and has attractive purple flowers in November. It is differentiated

from the more common species *Calectasia narragana* by its narrow petals and the presence of stilt roots. The stilt roots act to raise the perennating buds (part of the plant that allows it to survive adverse conditions) above the level of the hot sand, giving a temperature difference of a couple of degrees, allowing the species to have a greater drought tolerance. A disadvantage of this, however, is that it makes the buds very vulnerable to fire. The stilt roots also allow asexual division of the plant, into ramets ('individuals' arising from the same clone).

With only two individual plants known, surveys to locate new populations were

undertaken by DEC Swan Coastal District staff, with the assistance of the Conservation Volunteers Australia, in spring 2006. The surveys, which covered an area of approximately 200 hectares, resulted in the discovery of an additional eight plants.

Further surveying for this species is planned again in 2007, focusing in areas of Banksia woodland within Melaleuca Park. DEC is keen to hear from people who might be able to assist with the surveys.

For more information or to register your interest in the spring surveys contact Melissa Hoskins on (08) 9405 0740 or by email (melissa.hoskins@dec.wa.gov.au).



Left Conservation Volunteers Australia assisting with *Calectasia* sp. Pinjar surveys. Photo – Vanessa Clarke

Below left The stilt roots of a *Calectasia* sp. Pinjar plant.

Below The flowers of *Calectasia* sp. Pinjar.

Bottom Habitat of *Calectasia* sp. Pinjar. Photos – Adam Williams



WetlandBase – The Western Australian Wetlands

Database by Catherine Prideaux and Stephen Quiterio

WetlandBase is a free, publicly accessible database that brings wetland data together from various sources enabling it to be viewed and queried through an easy to use map-based web interface. The database was developed by DEC with assistance and support from the Department of Agriculture and Food, World Wide Fund for Nature (WWF) Australia, the Natural Heritage Trust, Murdoch University and Edith Cowan University. WetlandBase can be accessed through the 'Nature and Biodiversity' section of NatureBase at www.naturebase.net.

WetlandBase first became available at the beginning of 2006. Currently a number of additional datasets are being negotiated for inclusion in the database; these include datasets on coastal movements and boundaries, coastal fauna and Aboriginal community locations.

The database has easy-to-use automated functions that enable the user to search for an area by name and display it in the map viewer to see what wetland sampling has been conducted and generate maps and reports on a wetland or coastal area of interest.

In 2006 a series of demonstrative workshops on how to use the database were conducted in Perth and in the South Coast and Kimberley regions. A user manual has been prepared that will assist people to use the database for



their own wetland projects or to research their particular area of interest. The data is being updated to ensure that the currency of the information provided to the public is maintained.

For more information contact Catherine Prideaux on (08) 9334 0442 or by email (catherine.prideaux@dec.wa.gov.au).

Above Wetlandbase workshop.
Photo – Catherine Prideaux

Improved protection for two Midwest threatened ecological communities

by Monica Batista

In 2001 the vulnerable listed threatened ecological community (TEC) that occurs on unusual ironstone substrate in the Eneabba and Three Springs areas known as 'Ferricrete Floristic Community (Rocky Springs type)' and a number of Priority flora were discovered in a reserve on Bunney Road in the Shire of Three Springs which had been created in 1910 for camping. Following this discovery the area was transferred to the Conservation Commission of WA and became a nature reserve in April 2002.

Since the creation of the nature reserve, DEC has been approached by two neighbouring landowners interested in selling their properties for inclusion in the conservation estate. One of the properties has now been purchased and added to the reserve, increasing the area

of the nature reserve from 187.6 ha to 214 ha. This area contains an occurrence of the endangered mound spring TEC known as 'assemblages of organic mound springs of the Three Springs area'. This community is characterised by continuous seepage of groundwater in raised areas of peat. The peat and surrounds provide a stable, permanently moist series of 'micro-habitats'.

In January 2007, the property belonging to the second landholder was purchased by DEC. This land parcel includes additional occurrences of the endangered mound springs community and processes are underway to have this land parcel added to the nature reserve.

On-ground survey work done as part of the Natural Heritage Trust *Back from the*

Brink project funded through the Northern Agricultural Catchment Council has supported the land purchases. A rehabilitation plan has also been developed for areas that had been acquired and then burnt by a wildfire in January 2006.

The addition of these two high conservation value areas to the reserve system provides lasting security of tenure for these important areas and new opportunities to manage them in perpetuity for conservation.

For more information contact Monica Batista on (08) 9334 0115 or by email (monica.batista@dec.wa.gov.au).



Recovery plans approved

Two recovery plans and one interim recovery plan (IRP) have recently been endorsed by DEC's Director of Nature Conservation.


The two recovery plans for birds have been written with the assistance of the Commonwealth Department of the Environment and Water Resources' (previously the Department of the Environment and Heritage) Natural Heritage Trust program. All plans have been sent to the Commonwealth for consideration for adoption under the *Environment Protection and Biodiversity Conservation Act 1999*.

No/Series No.	Title	Prepared by	DEC Region involved
IRP 231	Saltmat, <i>Roycea pycnophylloides</i>	Robyn Luu, Kim Kershaw, Bethea Loudon, Andrew Brown	Wheatbelt
WMP 34	<i>Cacatua pastinator pastinator</i> Muir's Corella Recovery Plan 2007-2016	Tamra Chapman and Belinda Cale	Warren, Wheatbelt
WMP 42	Forest Back Cockatoo (Baudin's Cockatoo), Forest Red-tailed Black Cockatoo Recovery Plan 2007-2016	Tamra Chapman	Swan, Wheatbelt, South Coast, Warren, South West

WMP = WILDLIFE MANAGEMENT PROGRAM



Department of
Environment and Conservation

Our environment, our future 

The Department of Conservation and Land Management merged with the Department of Environment, forming the new Department of Environment and Conservation (DEC) on 1 July 2006.

