

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

The Newsletter of the Western Australian Threatened Species & Communities Unit

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MONTEBELLO RENEWAL



Montebello Renewal is a project designed to rid the Montebello Islands Conservation Park of feral animals and re-introduce locally extinct species. Montebello Renewal is part of "Western Shield", a major initiative by the Department of Conservation and Land Management (CALM) to control feral animals and re-introduce threatened species to parts of their former ranges. Montebello Renewal is being carried out by CALM through its WA Threatened Species and Communities Unit and Pilbara Region. Logistic support has been provided by CALM's Wildlife Protection Section and Engineering and Communications Branches.

Support from sponsors has been invaluable. The major sponsor, West Australian Petroleum Pty Ltd (WAPET) has provided transport of equipment from Perth to Hermite Island and return and has also donated seats for CALM staff and volunteers on its Ansett jet charters between Perth and Barrow Island. Apache Energy, who operate oil and gas fields near the Montebellos, has transported CALM staff to and from Karratha and has also provided some helicopter support and fresh food to keep the teams working. ACI Plastics Packaging donated 13,800 plastic bottles to be used as bait stations for the rat eradication program. ICI Crop Care provided

the rodent poison Talon® G at a discount price and Selleys Chemical Company donated some of the "All Clear", needed to glue bait stations to rock, free of charge.

The Montebello Islands have suffered considerable abuse by



Spinifex bird

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humans. Feral Cats and Black Rats were introduced about 100 years ago, probably from shipwrecks or careening vessels. Their introduction caused the local extinction of at least four native animals the Spectacled Hare-wallaby (*Lagorchestes conspicillatus*), Golden Bandicoot (*Isodon auratus*), Black-and-white Fairy-wren (*Malurus leucopterus leucopterus*) and Spinifex-bird (*Eremiornis carteri*).

Then, in the 1950s, the islands were used by the British as a site for testing atomic weapons. During Operation Hurricane, in 1952, a nuclear device was exploded below the waterline in a Royal Navy Frigate, HMS Plym, off Main Beach at Trimouille Island. Two further weapons were exploded on 30 m towers in 1956, one at Gladstone Point on Trimouille Island, and another near Burgundy Bay on Alpha Island; this series of tests was code-named Operation Mosaic. During these tests, the islands were occupied by military forces and many tonnes of equipment were left lying around to rust when the nuclear weapons testing program shifted to Maralinga.

Until July 1992, the islands were officially a Prohibited Area under Commonwealth legislation. The islands were returned to Western Australian control and declared a Conservation Park in 1992. They are vested in the National Parks and Nature Conservation Authority and managed by CALM. A cultured pearl farm is located in sheltered waters within the archipelago and there is

increasing use by tourists, especially for fishing expeditions.

Montebello Renewal is planned in three phases. Phase 1 will involve rat eradication. Phase 2 will be the eradication of feral cats and Phase 3 will be the re-introduction of locally extinct mammals and birds. Trimouille Island may also be used for the introduction of species that are highly threatened on mainland Australia, eg, the Tanami Desert form of the Mala *Lagorchestes hirsutus*.

Phase I commenced on 29 May 1996, when three CALM staff and two volunteers left Dampier by charter boat for Hermite Island. The WAPET-chartered barge Karinya II arrived at CALM's Hurricane Hill Hut on Hermite Island on Monday 3 June and unloaded the large quantities of fuel, food, bait stations and other equipment required for the project. As well as organising these stores and other gear, the advance party had to repair the building which had been damaged during Cyclone Olivia, and set up a generator and reverse osmosis plant to ensure a regular supply of fresh water.

During the first four weeks, baiting of the outer islands in the group took place. Transport was by a chartered Jet Ranger helicopter. Baiting was scheduled to commence on 11 June. However, on the evening of 10 June a storm with 70 km winds and heavy rain hit Hermite Island, turning most of the cardboard boxes in which the bait stations were stored into pulp. So the first working day was spent rescuing and sorting gear. Baiting commenced on Trimouille Island on 12 June.

Further rain, accompanied by strong winds, fell on 17 June and another working day was lost. On Tuesday 18 June the CALM-chartered helicopter was used to search for two overdue boats at the request of Onslow Police. Both boats were located and a report made to the police on their whereabouts and intentions.

On Monday 24 June the rain was so heavy and persistent that the WAPET-chartered jet from Perth

was unable to land at Barrow Island until late afternoon and the CALM-chartered Jet Ranger helicopter was unable to fly from Barrow to Hermite. WAPET accommodated our team at Barrow Island overnight and they were able to get to Hermite the next day. The heavy rain during June, especially on 24 June, caused major problems with the rat bait, partly filling the bait stations with water and causing the bait to disintegrate and ferment. This necessitated re-baiting the whole of Trimouille Island for a fourth time so that fresh bait was available to the few remaining rats. Extra baitings were also necessary on Ah Chong, Brooke and Gardenia Islands because of very high rat numbers.

By 8 July the project was back on schedule and baiting commenced on the 1020 ha Hermite Island. At this time baiting was complete on the following larger islands: Trimouille (522 ha), North West (135 ha), South East (ca 10 ha), Karangi (ca 5 ha), Primrose (41 ha), Brooke (15.2 ha), Gardenia (ca 8 ha) and Ah Chong (22.6 ha). As well, about 80 small islands and rocks had been baited with plastic bags of bait laid from the helicopter.

On 15 and 16 July, further rain fell in the area from the remnants of Cyclone Lindsay. Fortunately, evaluation of bait condition following this most unseasonable rain showed that most was in good condition.

As well as causing bait deterioration, the heavy rain during winter 1996 has led to rapid vegetation growth and many plants are flowering and seeding, resulting in a substantial increase in the availability of natural food for rats at the Montebellos. On its own, this should not be of major concern, as the bait is highly attractive to rats and is consumed preferentially. However, combined with bait deterioration, the increase in natural foods is of major concern and the unseasonable rain must increase the chances of the project failing to eradicate rats from the archipelago. Evaluation of bait condition on islands already baited was programmed for late August,

together with an evaluation of rat numbers remaining, and plans will be developed for re-baiting as necessary.

From weeks five to the end of the project, transport around the islands was provided by CALM's Pseudorca II, a 9 m twin-hulled boat operated by staff from the Wildlife Protection Section.

Cats once occurred on several islands in the archipelago. However, searches in 1994 and 1995 suggested that they are now restricted to Hermite Island, and this was confirmed during the rat baiting. Cat control commenced on Hermite Island in mid-August when special cat baits developed by Dr David Algar of CALM's Science and Information Division were dropped by helicopter.


A feature of Montebello Renewal has been that the vast majority of the 25 or so volunteers who are working in the field are CALM staff who have donated part of their annual leave to help with the project.

Follow up work to evaluate the success of Montebello Renewal will occur during winter 1997. If rats are found on any island, re-baiting will take place. Follow up surveys of cat abundance will take place after the August baiting and again in 1997 before a decision is taken on further control. If there is no evidence of either cats or rats remaining in 1997, a decision will be taken as to how long monitoring should proceed before the area can be declared cat and rat free and translocations can be commenced.



Sea eagle photographed on the Montebellos by Alan Gale

New Recovery Team for Threatened Ecological Community

 The sedgeland in Holocene dune swales of the southern Swan coastal plain are largely restricted to the Becher Point area and have been shown to be of considerable ecological and geomorphological interest. In particular, Neil Gibson, Bronwen Keighery, Greg Keighery, Allan Burbidge and Michael Lyons conducted a broad study of plant assemblages of the southern Swan coastal plain, and defined the assemblage of these swale wetlands as one of the most threatened on the coastal plain. The Threatened Ecological Communities Advisory Group assessed the Holocene dune swale community as being Critically Endangered. The criteria used for this assessment were developed by WATSCU, as part of the threatened ecological communities project being supported by the National Reserves System Cooperative Program of the Australian Nature Conservation Agency.

The management of this ecological community is controversial because of the Port Kennedy development at Becher Point. Given the changes taking place around the main occurrences of the community, the degradation which has resulted from vehicle use in some occurrences, possible hydrological changes due to surrounding land uses, and continuing modification by very frequent fire and the invasion of weeds, a recovery plan is urgently needed.

A recovery team was established for the Holocene dune community, endorsed by CALM in June 1996 and held its first meeting in the same month. Recovery Team members are Alan Briggs, Manager, Perth District, CALM, (Chair); Neil Gibson, Senior Research Scientist, CALM; John Blyth and Val English,

WATSCU; Bev Walker, Bowman, Bishaw, Gorham; Phil Jennings, Murdoch University and Wetlands Conservation Society; Ian Elliot, University of WA; John Tucker, Manager, Parks and Gardens, Rockingham City Council; Rezina Shams, Water and Rivers Commission; and Jenny Davis, Murdoch University.


A draft interim recovery plan (IRP) has been prepared by Bev Walker and Val English and circulated to all members of the recovery team. It is hoped to have this IRP completed and accepted by all interested parties by the end of 1996. Its implementation will then depend upon the continuing support of all those groups and individuals, and especially upon close cooperation with the Port Kennedy Management Board and the developer of the Port Kennedy project. A number of useful steps, including fencing the conservation area which contains most of the remaining Becher Point occurrences of this community, had begun already at the time of the recovery team being established.

In the meantime the discussions and liaison resulting from the formation of the Recovery Team have generated ideas about actions which can begin immediately, and several steps have already started. One of these was a brief survey of the Lark Hill area to the east of the known occurrences at Becher Point. The survey located several previously unknown occurrences of the Holocene dune swale community. Development is also imminent in this area, and although finding these occurrences has not altered the status of the community, it has resulted in the City of Rockingham being able to include their management needs in a management plan currently being prepared for the area.

In common with Toolibin Lake, the issues to be dealt with in attempting to recover the Holocene dune swale community are complex, with considerable potential for disagreement and conflict. However, the transparent and positive nature of the recovery process, a very supportive Recovery Team, good liaison with the Port Kennedy Management Board and goodwill from all of those involved provide a good basis for the long term survival of many occurrences of this very special community.

John Blyth

SECOND WORK-SHOP ON THREATENED COMMUNITIES

 The Australian Nature Conservation Agency funded project to identify and conserve threatened ecological communities in the State's south west, is nearing completion. To date, 105 ecological communities have been proposed for the threatened communities database. Of these, 38 have been entered onto the database and assessed against the criteria for assigning communities to categories. These categories are similar to those used for threatened flora (presumed totally destroyed, critically endangered, endangered, vulnerable, data deficient and lower risk). There was enough information for the advisory group, acting as a preliminary review panel for the project, to determine that 33 of these communities fit the

definition of "threatened" (presumed totally destroyed, critically endangered, endangered or vulnerable), the remainder being "data deficient".

The results of the project and the implications for land managers will be presented at the second workshop on 21 August at the CALM Training Centre in Como. The workshop will be opened by Keiran McNamara, CALM's Director of Nature Conservation. The invitation list includes people

from a wide range of interest groups who are involved in land management. These include shire councils, conservation groups, government departments, industry groups, farmers, the Soil and Land Conservation Council, Land Conservation District Committees, research institutions and consultants.

Six communities will be considered at the workshop. Each presenter - with expert knowledge of the community type, will provide

a brief description, then define threats to the community. Possible ways the land can be managed to overcome the threatening processes will be open for discussion.

The threatened communities project will be completed in October, 1996, with ideas from the workshop being incorporated into the final report.

Val English

TOOLIBIN LAKE



The Progress Report from the Toolibin Lake Recovery Team, written by its Chairman, Ken Wallace, indicates continuing progress towards achieving the aims of the Recovery Plan. Some of the highlights from the Report are presented briefly below.

Following last year's rather spectacular achievements, including the placement of the production bores in the bed of the Lake and the completion of the bund and separator structure, this year has been one of equal effort and continuing achievement, but with the results being rather less obvious. In particular, the implementation of the urgent, short term salt amelioration works has continued in pursuing a number of associated steps, each one apparently small, but complex and important.

Air displacement pumps have now been fitted to the six production bores on the Lake floor, and the power supply provided to them. The uniqueness and complexities of the projects required detailed contracts in each case. The final step in the groundwater pumping project will be the construction of the water transfer system from Toolibin Lake to Lake Taarblin, which includes a tank, pumps and pipeline. The specification for this operation have been completed. Inspection

bores have been established in the floor of both Toolibin Lake and Lake Taarblin and on private land adjacent to Lake Taarblin, so that the hoped for draw-down of groundwater under Toolibin Lake, and any changes around the area of discharge, can be measured.

Run-off this winter has tested the Separator and its associated control structure and, with minor modifications, it has done exactly as required - bypassing the early flows of poor quality water around Toolibin Lake and then directing later, better quality water into the Lake, which is now just under half full.

Work by landowners and others in the Toolibin catchment also continues to gain momentum. Grade banks have been extended to reduce waterlogging and, with later related works, are expected to decrease the recharge of groundwater. The Revegetation Manual for Landowners, funded by the National Landcare Program via the Revegetation Strategy for Toolibin Catchment, is now being printed. The replanting program for 1996 is well under way with significant areas of private farmland being revegetated, with sponsorship from Western Power and Alcoa and other private companies. The program combines plantings of mixed species to enhance remnant bushland and to revegetate farmland, eucalyptus oil plantings, and the continuation of

the Toolibin Alley Farm Trial project.

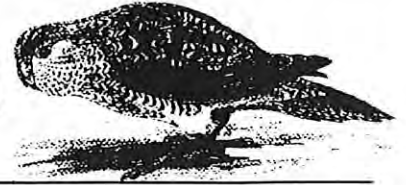
An honours student has begun a study, sponsored by Edith Cowan University, on the natural revegetation of *Casuarina obesa* on the floor of Toolibin Lake and several practical revegetation projects in the Toolibin Reserve are planned for 1996/97.

Finally, the first stage of a project to review past monitoring and future needs has been completed. The intention is to ensure that results of all of the wide variety of actions relevant to the Toolibin Lake Recovery Plan are recorded, and the lessons of success or failure are learned. In this way the whole complex project can provide guidance for future landcare and nature conservation activities in similar situations.

The Toolibin Lake Recovery Plan will only be implemented successfully, both to save the Lake itself and to protect the agricultural resource in the catchment, by the contributions and efforts of many groups and individuals. While Agriculture WA, Alcoa, the Australian Nature Conservation Agency, and CALM are major sponsors, a total of about 20 community, industry and government groups have contributed significantly, as have large numbers of individual landholders.

John Blyth

NIGHT PARROTS: STILL ELUSIVE



An interim recovery plan for this least known of all Australian parrots has been completed and endorsed by CALM's Director for Nature Conservation. The primary aim of the interim recovery plan is to find one or more populations of Night Parrots in Western Australia to study and if necessary conduct protective management.

As the primary current action, CALM is conducting a public campaign to gain information about possible sightings of Night Parrots. Over thirty reports have now been received and field outings (including an Easter Campout by the WA Group of the Royal Australasian Ornithologists Union) have been conducted to four places from which one or more such reports have come. These field trips were to Maranalgo Station near Paynes Find in May 1995, Burnerbinmar Station, between Paynes Find and Yalgoo in August 1995, Lake King chain of lakes in January, 1996 and April 1996, and Maroubra Station, north of Beacon in May 1996.

Various people including members of CALM, the Museum of WA and keen amateur birdwatchers have also searched likely places on an opportunistic basis over the last several years.

No sightings of Night Parrots have yet been confirmed, although only one report has actually been proved to be in error. Not surprisingly, the searches so far have been very much like looking for a needle in a haystack. If the Night Parrot is largely solitary, especially outside the breeding season, and if numbers are as low as we expect, searches using spotlighting or disturbance of vegetation during the day depend greatly on good fortune. That is, on such things as disturbing the one

samphire patch out of many thousands in which a Night Parrot happens to be hiding, or covering in a night of spotlighting the few hectares out of many thousands in which Night Parrots may be feeding. This experience has confirmed the idea that where possible searches should be based on surveillance at isolated watering points in an otherwise dry area.

All of the field outings so far have been confined to the southern Goldfields and the Wheatbelt. Consistent with the interim recovery plan CALM is planning to conduct an expedition later this year to a more remote region, such as the eastern Pilbara to Rudall River area, traditionally considered to be among the strongholds of the Night Parrot. Coincidentally, a very recent, and rather convincing

report of two Night Parrots has come from east of the Rudall River National Park on the Canning Stock Route. An exact position is available for this report and we will try to include the area in the planned field trip.

Given the secretive nature of this species, the vast areas of potential habitat still available, and the likelihood that numbers anywhere will be small, many more trips may still be needed before the Night Parrot's survival is confirmed. Once one or more populations are found the tasks of studying the species, clarifying its conservation status, identifying any processes threatening it and ensuring its conservation can begin in earnest.

John Blyth

Interim Recovery Plans (IRPs) for Critically Endangered Taxa

Recently a new *Guideline* was approved and circulated throughout CALM for the preparation of Interim Recovery Plans (IRPs). These Plans are written to guide the recovery of threatened taxa and ecological communities, especially those that are Critically Endangered. They are prepared when urgency or insufficient information make it inappropriate to prepare full Recovery Plans. IRPs will usually prescribe recovery actions over a three year period. It is CALM's aim that at the end of this period either a full Recovery Plan will be prepared or the taxon or community will have been recovered to Vulnerable or a lower category of threat.

All IRPs will be numbered in a series. A number will be assigned by WATSCU once the IRP has been judged by the Director, WATSCU, to be ready for approval by the Director of Nature Conservation.

Approved IRPs will be published in groups at or near the end of each calendar year as one issue of the *Western Australian Wildlife Management Program* series.

PROGRESS WITH INTERIM RECOVERY PLANS FOR 33 CRITICALLY ENDANGERED PLANT SPECIES

The Interim Recovery Plans for 33 Critically Threatened species are all currently at draft stage, with 26 presently with the Director of Nature Conservation for endorsement. Recovery actions have commenced for several of the species with involvement from Regional/District staff and volunteers from local communities. The following species are currently on their way to recovery!!!



Eucalyptus phylacis
by Susan J Patrick

Eucalyptus phylacis
Meelup Mallee

The carpark that was situated smack bang in the middle of the single known population has been removed and relocated with help from the local Meelup Regional Park Management Committee and CALM Busselton staff.

Darwinia carnea
Mogumber Bell

Fencing materials were delivered to the owners of private property at Mogumber in April and installation is currently underway. The plants have been severely grazed by sheep in the past and now hopefully we shall see a good recovery with successful flowering seasons and an increase in numbers.

Grevillea maccutcheonii ms.
McCutcheon's Grevillea

This single known population near

Busselton has been fenced off from cattle and damage from road maintenance. In autumn this year several seedlings germinated in a clump. In July these were separated and transplanted at spaced intervals within the fenced area, hopefully providing a greater chance of survival. The seedlings will be monitored and watered over the coming summer months.

Dryandra montana ms.
Stirling Range Dryandra

This *Dryandra* is only known from a few small pockets at the top of Bluff Knoll in the Stirling Ranges. The greatest threat to this species' survival is *Phytophthora* dieback. In April, dieback control measures were commenced by spraying with phosphonate. To ensure the protection of the entire mountain top community (which includes several other species of DRF), it is recommended that aerial spraying with phosphonate is undertaken.



Dryandra montana
by Susan J Patrick

Pterostylis sp Northampton
Midget Greenhood

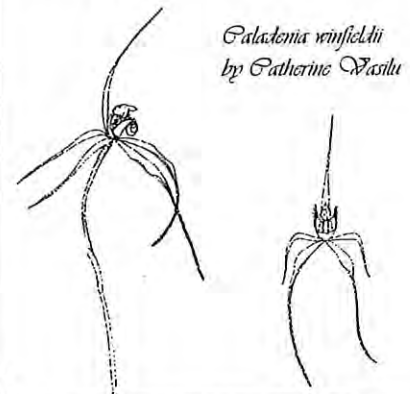
Fencing of private property at Northampton has been arranged so as to ensure the long term survival of this small orchid and protect its habitat from degradation from grazing and clearing.

An additional 18 species of

priority flora have been proposed for DRF in 1996 and it is likely that IRPs will be required to ensure their survival in the wild. Surveying of these species has commenced and has already resulted in good news.

Caladenia winfieldii ms. Majestic
Spider Orchid

Protection from wild pigs and grazing kangaroos is of major importance for the single known population near Manjimup. Fencing has commenced and hopefully we shall see a successful flowering season in 1996.



Caladenia winfieldii
by Catherine Waslin

Darwinia sp. Carnamah
Harlequin Bell

This species was only known from two populations up until July when additional surveying led to the discovery of a third population. The new population is comprised of approximately 35+ plants and is in moderate condition.

Caladenia elegans
Elegant Spider Orchid

Additional surveys for this attractive Orchid, just completed, resulted in the discovery of three new populations. These findings increase the total number of populations to six (up from three), resulting in a range extension for the species and an increase in the chance of survival in the wild.

Recovery Team Update

New "Threatened Birds Recovery Team"

Recently approval was given for the formation of the Western Ground Parrot Recovery Team. This will be the third Recovery Team dealing with threatened birds in the South Coast Region. It has become apparent that it would be much more cost-effective to have a single Threatened Birds Recovery Team. This would include the Noisy Scrub-bird, Western Bristlebird, Western Ground Parrot and in future the Western Whipbird. Not only do these species tend to occur together but also tend to be affected by the same threatening processes.

The first meeting of the combined team is scheduled for early December.

New Recovery Team - Harlequin or Sunset Frog

A new Recovery Team is being set up as a result of an ANCA funded project under the Forest Biodiversity Regional Program to the *Distribution and Status of the Sunset Frog*. Dr Dale Roberts from The University of Western Australia's Department of Zoology will be the Project Investigator.

Good news for the Ground Parrot and Western Bristlebird

Promising news has come from volunteers Mary Hart, Shapelle McNee and Brenda Newbey who, with Allan Burbidge from CALM's Science and Information Division, have recently censused Ground Parrots in a section of Fitzgerald River National Park which was partially burnt six and a half years ago. They have recorded Ground Parrots establishing themselves back into the burnt area from the



adjacent long-unburnt vegetation. This has important implications - previously, it was thought that Ground Parrots in Fitzgerald River NP needed vegetation unburnt for at least 15 years.

Lindsay and Nadine Brown reported the recent sighting, by Nadine, of a Ground Parrot near West Mt Barren. This sighting was confirmed during the censusing trip described above. Not only is this a new locality for the species, it is also an area burnt only six and a half years ago.

Busy volunteers Shapelle McNee and Brenda Newbey have made a trip to the Walpole area (in their own time and vehicle) to visit areas from where there have been recent reports of Ground Parrots. Unfortunately they were unable to confirm any of these reports. However, they were able to establish useful contacts with local residents and CALM staff.

Since that trip, Carl Beck, Lanny Bleakley and Charlie Salamon, all of CALM's Walpole District, have been learning how to recognise calls of the Ground Parrot and Western Bristlebird. With recorders in hand they have in turn passed on their new found knowledge to interested local volunteers who are now searching potentially suitable habitat in Walpole District.

Such efforts from this enthusiastic group of people, together with ongoing collaboration between WATSCU, Science and Information Division, District staff and volunteers, augers well for much improved management of these mysterious and poorly known birds.

Numbat News

Numbats appear to be maintaining their presence at Karroun Hill Nature Reserve, which seems to be turning into one of our translocation success stories. Both cat and fox baiting has continued on the Reserve. During surveys in October 1995 and April 1996 there were very few signs of cats or foxes, and no Numbat mortality recorded. Added to this were signs of numbat presence in the most preferred sites. This is very promising news as numbats have not been released within Karroun Hill since 1993 and the last major release was in 1991.

Recovery Team meetings

Meeting dates for the next round of animal recovery team meetings are as follows:

- Western Swamp Tortoise 18 November
- Numbat and Chuditch 19 November
- Lancelin Island skink and Shark Bay Mouse 20 November
- Thevenard Island Mouse 21 November
- White-bellied and Orange-bellied Frogs 22 November
- Gilbert's Potoroo, Dibbler - week of 25 November
- Threatened birds Recovery Team (combination of Noisy Scrub-bird, Western Bristlebird and Western Ground Parrot Recovery Teams) 10 December at Two Peoples Bay

Conservation of Threatened Species and Threatened Ecological Communities - CALM Briefing Paper 1/96

An updated version of this Briefing Paper 1/94 has now become available. This paper is being distributed.

This briefing paper provides guidance on the rigorous procedures that must be followed for those involved in the management of threatened species and ecological communities, or in research into their conservation biology. Coordination of all threatened species and ecological community conservation is carried out by CALM's Nature Conservation Division, primarily through the Western Australian Threatened Species and Communities Unit (WATSCU).

The 'recovery process' provides the overall framework for the conservation of threatened species and communities.

This Guideline describes the Recovery Process, Recovery Team membership and duties of the Recovery Team Chairs as well as the approach when developing Recovery Plans and Interim Wildlife Management Guidelines. This Briefing Paper will be distributed throughout CALM and to anyone else who wishes to obtain a copy.

Copies can be obtained by contacting the Editor.

Recovery Plans

Two Recovery Plans have recently been published under the Wildlife Management Program series:

No 12 *Noisy Scrub-bird Recovery Plan* by A Danks, AA Burbidge, AH Burbidge and GT Smith

No 16 *Woylie Recovery Plan* by AN Start, AA Burbidge and D Armstrong

Monitoring and Weed Control on Populations of Critically Endangered Flora

Weeds are present within several habitats of the Critically Endangered plant species and are threatening their long term survival due to competition, increased grazing pressures, inhibition of seedling recruitment and increased fire risks.

Frank Obbens is currently working on weed control of Critically Endangered Flora. He is combining this with research so as to monitor the success of spraying.

Based on the outcome of Frank's report on this project, CALM will be looking at the possibility of setting up a weeds monitoring program.

WATSCU Data Directory

The second edition of the data directory has been despatched to those locations which returned the first edition diskettes.

The update contains data on all of WA's gazetted threatened and priority fauna and flora, with the exception of 24 non-vascular plants which have not yet been included in the Herbarium's SPMASTER database.

If anyone would like a copy of the updated Directory, please contact me at the Wildlife Research Centre, Woodvale.

Hugh Clift

WATSNU

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