



CALM News

Official newspaper of the Department of Conservation and Land Management

Vol 3 No 36 February 1988



KEITH MORRIS investigates the work of the cochineal insect on West Lewis Island.

NW prickly pear plan on target

A BIOLOGICAL control programme in the Pilbara shows promising signs of eradicating the introduced prickly pear.

In November 1986, CALM Research Scientist Keith Morris, with the help of the Agriculture Protection Board, used a helicopter to drop pieces of prickly pear plants infested with *Cactoblatta cactorum*, or the cochineal, on two islands in the Dampier Archipelago.

The insect is the caterpillar of a moth that feeds on the prickly pear.

Keith said: "The insect seems almost to be sucking it dry so that the plant goes from lush, vigorous green, to yellow, to brown in various stages."

Just over a year after the start of the programme,

Keith said the eradication efforts look successful, with prickly pear plants on both East and West Lewis Islands in different stages of decline.

These two islands are the only ones which seem to be infested with prickly pear, apart from Jarman Island which is the target for a future eradication effort.

West Lewis is thought to have been a former pastoral site and the declared weed was probably introduced by its owners.

Prickly pear was first identified in Australia in Queensland, where it

spread quickly in the tropical climate.

In the 1920s and 30s, it threatened to take over and destroy many pastoral lands, and the cochineal, an insect from South America, was brought in to control it, according to CALM Entomologist Ian Abbott.

Keith said the natural flora of the islands is under threat from prickly pear, because the weed replaces all other vegetation.

"The islands are unique because they are remnants of what the mainland used

to look like, with the same geology and relatively undisturbed flora and fauna."

Keith is continually monitoring the effects of the cochineal, and keeping an eye out for infestation of other islands as the plant spreads easily.

Complete eradication of the prickly pear from the islands may require chemical treatment toward the end of the project, to remove all traces of the plant, which can reproduce from a single pad.

Keith said, "In three to four years, hopefully, the problem will be wiped out on West and East Lewis Islands."

Timber production ... TAFE OFFERS TRAINING IN NEW COURSE

By JOHN CLARKE

PEOPLE seeking a career in timber production have another avenue for training with the recent launch in W.A. of the Certificate in Timber Technology course.

The course, available through selected TAFE colleges throughout Australia, provides training in supervising and management careers in the timber processing industry.

The Certificate is a nationally developed course, a result of a cooperative effort between State TAFE authorities and the National Timber Industry Training Committee.

Topics covered by the course include:

- An introduction to the timber industry in Australia
- Timber harvesting
- Wood properties
- Timber seasoning and preservation
- Timber grading and quality control
- Sawlog conversion
- Particleboard manufacture
- Pulp and paper manufacture
- Timber engineered products

In WA, the course is being conducted one night a week at TAFE colleges at Thornlie and Manjimup.

Lecturers are selected from nominated experienced local personnel.

CALM's Timber Production Branch Manager, John Sclater, will lecture at Thornlie in Timber Harvesting.

Graham Siemon and Gary Brennan will lecture in Wood Properties.

Other lecturers include Ed Sprengel (former Managing Director of Millars WA Pty Ltd) and Norm Hoath (recently retired logging superintendent from Bunning Bros).

CALM Executive Director Syd Shea and WACAP Managing Director John Oldham joined the Chairman of the National Timber Industry Training Committee, Frank O'Shea, in commencing the course to the timber industry at large.

A number of CALM personnel from areas as far away as Wanneroo and Albany have expressed interest in the course.

Depending on the interest shown during TAFE enrolment week in February, the course will be conducted in future at Bunbury.

A course at Bunbury would be particularly convenient for CALM personnel involved in the Wood Utilisation Research Centre at Harvey.

Sheoak species found

A NEW species of Sheoak (*Allocasuarina sp*) has been collected from a 40,000 ha nature reserve near Lake King in the Katanning District.

The Lake King Nature Reserve was only gazetted as a Nature Reserve in April of 1986.

Reserves Officer Mal Graham was carrying out an inspection of the newly acquired reserve when he collected the specimen, which was unfamiliar to him.

This specimen was subsequently referred to Dr Eleanor Bennett of the Kings Park Botanical Gardens who considered that the plant was a previously undescribed species.

Following further collections during the 1987 flowering season, Dr Bennett confirmed that this is a new species.

A description and proposed specific name are shortly to be published in *Nuytsia*.

This latest discovery will make it the second new species which has been discovered by Katanning District staff within three years.

Guidebook

THE hottest selling CALM Publication, the *Bibbulmun Track Guidebook*, sold out long ago, and a new guidebook to the realigned and lengthened *Bibbulmun Track* will be on the shelves in July.

As an interim measure, Mapping Branch have produced three maps outlining the original track, which are available at SOHQ Front Counter, at the cost of \$1 each.

NATIVE CATS ARE OUT OF THE BAG

A RECENT release of captive-bred chuditch in the Lane Poole Reserve marks the first step in re-establishing the species in areas from which it has vanished.

Also known as the western native cat, chuditch used to be found throughout WA south of the Fitzroy River, but are now mostly restricted to the jarrah forest.

Even within the forest, many areas of apparently suitable habitat, such as the release site, totally lack chuditch.

Thanks to funds provided by Alcoa, all of the released animals have been

By Todd Soderquist

fitted with radio collars, allowing intensive monitoring of movements, den selection, and factors contributing to mortality.

The first few weeks after a release can be especially challenging not only for the animals but also the researcher: keeping track of numerous chuditch as they wander about in search of the Perfect Home Range can be frustrating.

Fortunately, the Dwellingup aerial fire spotting circuit passes directly over the release site, enabling pilots John Woodward, Hal Levison, and George Mur-

phy to provide general radio-telemetry estimates of where "lost" animals are located.

Scats collected near den sites suggest that the captive-reared animals have adjusted quickly to their new situation, and are dining on a typical array of insects as well as occasional mardos and bandicoots.

The main threat to their continued well-being appears to be human: two animals, found dead along the main track running through the area, were shot within their first few days of freedom.



MELODY SERENA gives last minute directions to the chuditch before it is released.



A sign helps solve the problem on Little Island where before there was no room to move.

FLOATING SIGN FOR THE TIMES

ON busy days in Marmion Marine Park last summer, management staff saw as many as 80 people with their attendant umbrellas and eskys crammed onto Little Island — along with 10 Australian Sea-lions and countless seabirds. This conflict of recreation and wildlife conservation on an island not bigger than a tennis court has largely been overcome with the in-

stallation of a floating pyramid sign in the bay, restricting the public to brief visits only, for the purpose of observing wildlife. The success of this aesthetically pleasing sign is no doubt a welcome relief to the weary sea-lions. Development of this concept could see its utilisation in other areas of coastal management. — RICK ALLISON.

Jarrah resource

By COLLEEN HENRY-HALL

CALM's new jarrah inventory, which will update estimates of the amount of jarrah in timber production areas, has begun with more than half of this year's photography target completed.

The project relies on space technology, computers and a sophisticated system of photography. The information gathered will be used for strategic level planning of the hardwood industry.

Inventory Branch Manager, Hugh Campbell, said the project was developed by a team of people with a variety of skills.

Paul Biggs is the project officer responsible for day-to-day coordination and development of forest measurement techniques.

The computing side of the project was handled by Tim Westcott, Colin Pearce and Mike Green.

The camera systems, which allow synchronised photography, were developed by Bob Selkirk, and Gerard van Didden oversaw the design, construction, installation and modifications of the helicopter.

Three CALM officers, all with experience in aeri-

al photography missions, have been trained for the special project: Alf Lorkiewicz as camera operator, and John Webb and Derek Winters as navigators.

The photography target for this year is 400,000ha in

in picture

an expected 116 hours of flying time.

Once the photography has been completed, Stephen Quain will estimate heights from photographs.

Greg Strelein will lead a team of field assessors from Inventory Branch to measure ground plots and derive the volumes of timber products there in the second sampling stage of the project.



Alf Lorkiewicz (left) uses the computer to operate the cameras, while Derek Winters and John Webb observe data necessary for navigation.

Danger warning

WATCH out! This is a risk area!

Gorges, caves and coastal cliffs are all dangerous areas, especially for the unwarrior visitor, and a new sign being used by CALM alerts people to possible dangers.

The symbol, an exclamation mark in the middle of a red triangle, is internationally recognised as indicating danger.

The sign, for use in the field by CALM, was developed by Interpretive Officer Gil Field.

"What we wanted was a way to inform people of

possible hazards, without polluting the scenery with lots of signs," Gil said.

The sign is small, 400cm by 300cm, and installed in discreet places near the possible hazard.

Gil said: "Danger is an attraction, just like food or sex and a big sign could draw people to the dangerous area."

"This way, the sign is only obvious to people who have actually entered the area and are at risk."

The symbol is accompa-

nied by text that tell the visitor what risk area he is in, why it is dangerous, and what he should do.

The signs are already in place on the south coast, indicating areas where king waves are known to strike, and the signs seem to be working well.

Gil said the signs are one component of a programme to educate people about certain areas.

Brochures, displays and personal communication with rangers also help spread the word.



Ranger Rick France with a Code of the Coast sign.

Region takes action . . .

CROCODILE AWARENESS PROGRAMME

By MIKE OSBORN

CROCODILES were a bonus for the Kimberley tourist trade, even before Mick Dundee came on the scene, but as the expanding resident populations of Kununurra, Broome and Derby accommodate the tourist boom in the region, so the likelihood of interaction between crocodiles and people increases.

Many recreational pursuits in the Kimberley are centred along its waterways.

Barramundi fishing, swimming, water skiing, sailing and camping attract locals and visitors alike.

Crocodile attack victims usually suffer horrific injuries and few survive the ordeal to warn others of the do's and don't's in crocodile areas.

CALM's Kimberley regional staff carried out a major crocodile awareness programme during 1987.

The initial priority was public safety and the prevention of crocodile attacks.

Crocodile warning signs were erected in problem areas, many talks were given to schools, service clubs and remote Aboriginal communities.

The publication branch assisted greatly and produced "take care in crocodile areas" brochures and drink coasters giving advice on crocodiles and displaying the crocodile warning sign and both are now widely distributed throughout the region.

The Kununurra agricultural show provided an opportunity for a crocodile display and with the assistance of the resource branch of the Northern Territory Conservation Commission, an interesting and informative display was set up, the star attractions being hatchling estuarine and Johnstone crocodiles giving the public the opportunity to view both species side by side and at a size acceptable to most.

Part of the display is now permanently fixed in the foyer of the regional office.

Second on the list of priorities was to gain a higher level of public acceptance of crocodiles as an integral part of the Kimberley landscape.

Monitoring recreational areas with boats and spotlights after dark pinpointed the location of most saltwater crocodiles along the accessible areas of the Ord River, identified problem areas and enabled staff to confidently approach the questions relating to crocodiles in the Ord that frequently came from members of the public.

These surveys were extended to the Kununurra Diversion Dam and Dunham River.

The surveys are repeated at different times of the year.

The deaths of about 40 large freshwater crocodiles at the Lake Argyle Spillway spurred considerable interest within the community.

Kimberley staff captured and relocated 20 crocodiles from the area and conducted or arranged various tests in attempts to solve the riddle of the deaths.

It was good to see considerable concern and discussion throughout the community about the problem and it was the first sign that public attitudes towards crocodiles are changing.

This will be the subject of a future CALM News article.

The capturing and relocation of problem saltwater crocodiles created a lot of interest and showed that CALM is prepared to manage crocodile populations and act efficiently when problems occur.

Other commitments to the crocodile awareness programme are the selling

of replica crocodile warning signs which have been well accepted and are now adorning the walls of various toilets, swimming pools and bars around Australia.

Sampling of both saltwater and freshwater crocodiles for Bacteria cultures is providing a bank of information on crocodile bacterium for the state health laboratories.

All in all, the programme has run well and continues to do so.

CALM's responsible approach to the issue has been well accepted and the results, although difficult to determine, are pleasing.

There have been a few negative responses to occasionally take the smiles from our faces and stop the back-patting for a while.

I recently flew to the remote Oombulgurri Aboriginal Community to erect warning signs and talk to the community on safety in crocodile areas.

The talk and videos shown were well accepted, but as my plane was leaving the rough bush runway, it flew over the Forest River to see a dozen or so of the intent listeners at my talk, standing waist deep in the tidal river just below his newly erected warning sign, fishing for Barramundi!!!!

The crocodile warning signs have been the target of souvenir hunters, some signs lasting only a matter of hours before being stolen.

There will always be an element in any community who refuse to heed the warnings, but at least the general public are now aware that living with crocodiles is easily achieved with a simple and commonsense approach.

Plan released

THE final management plan for the Shannon and D'Entrecasteaux National Park was released at Pemberton District office recently, following an extensive public consultation exercise.

Preparation of the management plan involved public discussion and debate, and hundreds of submissions were considered.

The draft management plan was released in May 1986 for a four-month public comment period.

The plan was prepared by Planning Officer Sue Moore.

It is the sixth to be completed by CALM and approved by the National Parks and Nature Conservation Authority since CALM was formed in 1985.

In releasing the plan, Warren MLA Dave Evans, said he was positive that the best position had been reached on the numerous issues that confronted the park's planners.

Mr Evans said, "One of the most vexing issues

which needed to be resolved in the planning process was the use of power boats on water bodies within the park."

The plan states that power boats will be permitted in the lower reaches of the Donnelly River and the Gardner River.

Also, the biggest inland water body in the D'Entrecasteaux National Park, Lake Jasper, will be zoned to allow some use by power boats.

A monitoring programme also will be established to check wildlife values in the lake.

Implementation of the management plan will begin as resources become available, with many new jobs beginning and rangers applying protection prescriptions immediately.

UNIVERSITY OFFERS OPPORTUNITY

MURDOCH University is offering seven re-entry research scholarships this year to support and encourage women of high academic ability to undertake postgraduate research.

The \$1000 scholarships, one in each School of Study, will provide opportunities for women whose careers have been dis-

rupted by family responsibilities.

Successful candidates will be offered the chance to work in an honorary capacity with an academic for one semester or two semesters part-time.

In this time they will be encouraged to carry out independent research and/or assist an

academic's research.

Following this experience, women showing aptitude and interest will be encouraged to apply for a Murdoch Research Grant to study for a PhD or MA.

For further information, contact Mr Ian Gell on 332 2367.

BENGER SWAMP PLAN RELEASED

THE final management plan for Benger Swamp Nature Reserve is now available.

Benger Swamp, 25km north-east of Bunbury, is one of only seven known breeding sites in south-west Australia for the Freckled Duck, a rare and endangered species.

In addition, it provides a seasonal wetland for a wide range of waterbirds, from diving ducks to waders.

The plan, produced by CALM provides a basis for managing Benger Swamp for the next five years, when the plan will be reviewed.

The management plan recommends division of the Swamp, with one half being left to dry naturally rather than be drained.

This will allow the Department to determine whether natural drying increases waterbird usage or conversely leads to salt problems or excessive nutrients and algal blooms.

The plan also recommends continuing cultivation of the Swamp bed over summer months to control the spread of bulrushes (*Typha*).

Cultivation and additional fire-breaks will assist wildfire control.

A new Advisory Committee, nominated by CALM's minister, will be formed to advise on management of the Swamp.

The new Committee will be nominated after close consultation with the existing Advisory Committee, Shire of Harvey and local farmers.

Copies of the plan and summary of public submissions can be purchased from CALM at 50 Hayman Road, Como and Harvey District Office for \$5 and \$3 respectively.



PHILLIP BLAKEWAY (left) and Mitchell Davies prepare to fell a pine with a hand-saw, while Mark Humble (foreground) and Carl Beck supervise.

Penguin Island KEEPING VISITORS INFORMED

By COLLEEN HENRY-HALL

THE Penguin Island Information Centre, staffed by volunteers and open on weekends, is a point of contact between CALM and the hundreds of visitors that come to the island each day.

The centre, which is in the hall next to the shop, is decorated with colourful displays and posters.

It has been open since early December.

A continuous slide programme shows viewers what they may see on the island, such as the Fairy Penguin and other wildlife, and items such as brochure packs, Landscape magazine and posters are on sale.

There is also a touch table, with things collected by volunteers from the beaches.

The centre was the result of a Metropolitan Region initiative, aided by Environmental Consultant Dr Nic Dunlop, who organised the volunteers to staff the centre.

One of the main functions of the centre is the collection of visitor information for the development of the Shoalwater Bay Islands Draft Management Plan, which includes Penguin Island.

Holiday in Park

COOKING up a real Aussie brekky was just one of the many activities offered by CALM during its annual holiday activity programme in the Walpole Nornalup National Park.

Other activities designed specifically for children by volunteer Jenny Yeatman included a discovery party of the pond life in Collier Creek and a mini fauna survey of the bush around Coalmine Beach caravan park.

Despite the unseasonably cold and sometimes wet weather, activities were well-attended by both adults and children to discover the bush and its inhabitants under the guidance of trained rangers and volunteers.

Hardy Derschow, Park Ranger and organiser of the holiday programme, was pleased with the response and plans are already being made to make next year's programme even bigger and better.

Volunteers, most of whom are members of the RAOU, record the number of visitors and the questions they ask, and observe the wildlife on the island.

They are also there to observe how people use the island, and could make suggestions on future management of the island.

Visitors are also asked to fill out a questionnaire about their reasons for visiting Penguin Island.

Rodney Vestest, of the RAOU, and Sheryl Stephens, were volunteers at the centre recently.

Rodney said he had never been to Penguin Island before, and thought the chance to be a volunteer in the centre was a good way to see the island.

Sheryl said "It was good to be involved in something like this, to help out in a place where people can come and see such a special place like Penguin Island.

They both said they feel the information centre fills an important gap in educating the public about the beauty and the fragility of Penguin Island.

Award to forester

BUNBURY forester Peter Keppel has been announced the recipient of the 1987-1988 Lane Poole Memorial Trust award.

The award was announced in Bunbury recently by the Chairman of Directors of WESFI, Denis Cullity, who initiated the Trust to commemorate the link between WA's first Conservator of Forests, Charles Edward Lane Poole, and his father, Thomas Cullity, who founded the timber business now known as WESFI.

The award, made annually to a staff member of CALM provides financial assistance to inspect and study forest operations or research anywhere in Australia and New Zealand.

The award, which is worth about \$3000, was initiated in 1982 and six have been made since then.

Peter Keppel, who was trained at the Department's Dwellingup Cadet School and was recently transferred to Bunbury after working as a District Forester at Harvey, will use the

award to look at procedures and controls in district management work in Queensland and Victoria.

He said the trip would improve his knowledge of specific operations and provide him with a better understanding of land management problems and potential solutions.

"This type of award provides me with a wonderful opportunity to broaden my perspective, which is so important when you are as isolated as we are in WA," he said.

Mr Cullity also took the opportunity to present certificates of election into the Trust as Fellows to last year's award winners.

They are Gerard van Didden, who studied fire control in various other States, and Tony Brandis, who looked at staff training programmes.

The Lane Poole Memorial Trust comprises CALM's Executive Director, Dr Syd Shea (Chairman), the President of the Forest Officers Field Sta. Association, Tom Wood, and Mr Cullity.

Cadet class of '88

TWELVE people have been chosen as first-year field officer cadets for the 1988 course in Conservation and Land Management.

Luke Coney, Peter Batt, David Lee-Steere, Charles Newman, Wayne Fuller-

ton, Aaron Lori, Carl Woodley, Phillip Blake-way, John Roddy, Mitchell Davies, Grant Pronk and David Algaba have begun their two-year cadetship at the South West College in Bunbury.

The 12 were chosen following a week-long selec-

tion course held at the Cadet School at Dwellingup, where they selected trees to retain, did manual pruning and thinning, and took examinations in Mathematics and English.

There were 173 applications for the 12 cadetships; 95 of those made it to the

interview stage; 32 participated in two separate selection courses.

The selection courses were supervised by Dwellingup Forest Ranger Carl Beck and Collie Forest Ranger Mark Humble, and Training Officer Alan Scott.

WANNEROO EXERCISE PINPOINTS PROBLEMS

A FIRE exercise in Wanneroo District, which was run in real time, with real resources, helped to accurately pinpoint problem areas in fire control.

The exercise was organised by Ross Mead, Chris Muller, Rick Sneeuw-jagt and other Protection Branch Officers.

Ross said: "Previous exercises have been mostly a paper exercise while the one at Wanneroo, and a similar one at Manjimup recently, were more realistic and practical, thanks to using real time, real resources and fully setting up the control point."

The Wanneroo exercise was one of a series of training days conducted this fire season by Protection Branch to test and improve the large fire organisation arrangements and procedures in the field, the district and regional offices.

Similar exercises are planned for the Central Forest and South Coast Regions in February and March.

In the Wanneroo exercise, the simulated fire burnt through a pine plantation before burning part of Yanchep National Park

and threatening nearby settlements.

This meant that CALM officers from Wanneroo, Mundaring, Jarrahdale and Kelmscott Regional Offices filled the various roles of the fire organisation.

In addition, officers from the Police Department, the Wanneroo Shire and the Bushfires Board were called on to participate.

This allowed a thorough examination of the various command and coordination arrangements between the participating groups.

Ross said: "Before the exercise, we were not sure how physically close these vans could be and still operate communications systems properly.

"Now we have a fair idea, and we will be involved with the Bush Fires Board in drawing up a plan outlining the necessary distances and how best to set up the control point," he said.

But perhaps the greatest benefit of the exercise came by chance.

Only a few days after the exercise, officers and crews were called to LFOs at Jarrahdale and Brigadoon.

Ross said: "Some of the things that came out of the exercise were able to be used at the fires.

"Also, we had the exercise, we could see some problems occurring and the actual fires confirmed some of our observations.

"Now we can go ahead and work on further improving our organisation."

Future fire training ef-

forts may see individual districts holding "real" LFOs, and regions holding "real" CFOs, to highlight departmental, regional and district training needs.

Other organisations involved in the training exercise reported it very beneficial.

Ross, who spent many hectic days organising and many sleepless nights worrying, said he would like to thank all the people involved in the exercise, both from CALM and outside organisations, for their cooperation.

School's Safety Success

THE Cadet School at Dwellingup is achieving safety excellence.

The last lost time injury occurred on November 27, 1985, and there have been no serious injuries since.

On February 18, 1988 the cadets will have worked for 100,000 hours without a lost-time injury accident.

To take on completely untrained staff

and put them through 2 1/4 years of training without serious injury is a great achievement.

The building of the right safety attitude and awareness in preparation for when they join Districts and Regions cannot be overemphasised.

The staff at the Cadet School are to be congratulated on their efforts along with all the cadets who have built this record.

