R'n'R

A newsletter for wildlife carers

Issue 4, July 2003

Rehabilitate and Release

Queensland Government
Environmental Protection Agency
Queensland Parks and Wildlife Service

Curly the echidna gives Editor and friend the slip

RSPCA State Wildlife Co-ordinator Janet Gamble and R'n'R Editor Debra Hotchkis spent a week tracking a young rehabilitated echidna near Gympie in May in a bid to gather information about post-release behaviour.

The purpose of the project was to determine which echidna rehabilitation strategies and techniques were successful and if the release process caused the animal to suffer.

"We know that an echidna's hide, forage and escape behaviours are innate and it is likely that a hand-reared echidna can be successfully rehabilitated back into the wild," Janet said.

"However, it is our belief that post-release monitoring should be an essential part of the rehabilitation process."

The project revealed that Curly made a secure dig near her release point in the Goomboorian Forest Reserve and stayed inside for 52 hours.

Janet and Debra saw her feed and forage for food for about an hour one night during the monitoring.

"I am encouraged that she is doing all the right things and that she will have no trouble in setting up a home range and surviving to reproduce someday," Janet said.

Janet Gamble and Debra Hotchkis release Curly

The project began on 29 April when Curly was returned to the area where she was rescued.

The Biotelemetry Australia radio transmitter was glued to her back with a two-part epoxy glue just before her release. QPWS provided the receiver and Dreamworld supplied a back-up system and transmitter.

Unfortunately, the project was cut short when Curly dislodged her tracking equipment after seven days. The tracking device was found 400m south-south-east of this point on 6 May.

However, Janet and Debra remain upbeat about the results.

"It was disappointing to lose touch with Curly because we wanted to monitor her for 30 days to gather post-release data," Janet said.

Curly was given to Janet after she was brought to Dreamworld in 2002 weighing 685g. A Wildcare member found Curly near Gympie.

Janet raised the echidna on milk formula, meat mix and termites. She weighed 3.3kg when she was released.

Acknowledgements
Dreamworld staff, in particular, Dr Jon Hanger, Kristie Jones and Janine McKay. QPWS, in particular, Debra Hotchkis. Cooloolah Nature Volunteers Kelvin and Ameilia Nelson. Demonstrator, Paul Mander

Profile
Janet worked at Western Plains Zoo from 1987 to 2001 as the elephant keeper, senior keeper and lead veterinary nurse. She spent about two years at Dreamworld (2001-March 2003) as Senior Wildlife Officer and looked after the captive management of a wide variety of native birds and mammals. She has been the State Wildlife Co-ordinator for the RSPCA since March.

Committee heralds start of new era

Editorial

The winds of change are blowing in wildlife care in Queensland and they are bringing with them more benefits for carers and better standards of care for native animals.

One of the major changes under way is the establishment of a statewide volunteer wildlife association, the Queensland Wildlife Rehabilitation Council (QWRC), to co-ordinate carer interests.

Affectionately known as "QUIRK" , this exciting development is the result of a commitment by the QPWS made during the review of wildlife management in Queensland to give a stronger voice to carers and increased responsibility for setting the directions for wildlife care.

The purpose of the body is to set standards for wildlife rehabilitation and activities such as accredited training, wildlife hotlines, ongoing development of the *Code of Practice for the care of orphaned, sick or injured protected animals by wildlife care volunteers* and collective group insurances.

The inaugural steering committee held a day-long workshop in Brisbane in May with representatives from nine wildlife care groups, the RSPCA, Wildlife Preservation Society of Queensland (WPSQ) and the Queensland Parks and Wildlife Service (QPWS). The issues discussed are covered in a story in an insert in this edition.

To establish the steering committee the QPWS asked wildlife care organisations to nominate representatives from across the state to ensure all regions were covered.

The committee members are: Adrian Caneris (WPSQ), Lee Curtis [for Annabelle Olsson] (FNQ Wildlife Rescue - Cairns), Eleanor Pollock (North Queensland Wildlife Care - Townsville); Anne Saunders (Rockhamptom Wildlife Rescue), Bruce Lewis (South Burnett Wildlife Group), Gabrielle Friebe (WILVOS – Sunshine Coast), Cassandra Shaw (ONARR - Brisbane), Julie Zyzniewski (Wildlife Rescue Logan), Gail Gipp (Wildcare – Gold Coast), Deborah Turnbull (Griffith University), Janet Gamble (RSPCA), Julie Firkins (WPSQ/carer), Karen Welsh (WPSQ/carer), Kate Kraschnefski (QPWS) and Debra Hotchkis (QPWS). I had the pleasure of facilitating the workshop — and making sure everyone worked hard all day!


photo Bradley Skinner

Leslie Shirreffs

The steering committee has an enormous job ahead of it in setting the "reform agenda" and guiding QWRC to its destiny as a statewide wildlife care organisation. However, all committee members appear to have readily embraced the challenge and are excited and enthusiastic about its role – with e-mails flying everywhere.

I think that commitment is reflected in the Council's draft mission statement, which was developed at the May meeting (and is still being evolved — so feel free to add your two cents worth):

"To lead and facilitate improved and consistent management of native animal care in Queensland, to the greater benefit of the community and nature conservation". *And to the critters themselves!!!*

We'll keep you posted on the Council's progress.

Meanwhile, Queensland wildlife carers were heavily represented at a national conference on wildlife rehabilitation being held in Melbourne as we went to press.

Queensland wildlife care "identities" Gail Gipp, Lee Curtis, Andrew Tribe (veterinarian and lecturer at University of Queensland), Wendy Gillespie (Seabird Rescue), Tina Janssen (carer), Dr Jim Pollock (Townsville vet) and Jon Hanger (Dreamworld vet) were presenting papers at the National Conference on Wildlife Rehabilitation.

The conference was also to address the establishment of a national body to co-ordinate wildlife interests (sounds like a familiar good idea!). While this might ultimately be the way to go, I'd like to see us get our QWRC right first ... and then let the Council decide about national involvement. After all, there needs to be time left to look after our charges!

'til next time
Leslie

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Contributions
Please forward all correspondence and contributions to Debra Hotchkis, Wildlife Ranger, QPWS, PO Box 3454, Burleigh Town LPO, Burleigh Heads QLD 4220.
Email:debra.hotchkis@epa.qld.gov.au

Artist captures wildlife

Brisbane artist Helen Clarke is making a name for herself among wildlife carers with her portraits of native wildlife, which capture the character and appearance of her subjects.

Helen began drawing animals when her friend and wildlife carer Penelope Hacker asked if she would draw portraits of her two joeys.

"I found marsupials fascinating subjects and the work of the wildlife carers enthralling," she said.

"Penelope spread the word and I haven't stopped since!"

Helen's work

Drawing one of our amazing echidna babies is Helen's idea of heaven.

"I haven't had the chance to draw one yet, but I'm longing to," Helen said.

"They have so much character!"

Art was a hobby for Helen until 2001, when she won a Regional Arts Bursary to McGreggor Winter School to study painting in acrylics with Lucja Ray. She studied animation this year and is now doing realistic portraits and book illustrations.

Perhaps one of the reasons why Helen's animal portraits are so successful is her love of animals.

"I find all Australian wildlife wonderful. I've loved frogs since I was little and I'm fascinated by marsupials and reptiles.

"I wish I could be a wildlife carer, but I live in a rental property with no pets allowed – although I do have a family of possums in my yard and a mob of geckoes in my house!"

Instead, Helen works as a volunteer at the RSPCA to get her "animal fix". She also relishes the chance to see her portrait subjects up close.

Because her subjects don't fancy keeping still, Helen works from photographs that she takes herself or from supplied photos.

For more information, contact Helen Clarke on 07 3899 8913 or on 0405 123 106.

Now here's an idea!

We enjoy receiving pictures of your charges. In the next edition we would like to dedicate a page to the animals that have come into care. Please send a picture (we cannot send it back) or scan in a photo and e-mail it to Debra Hotchkis at debra.hotchkis@epa.qld.gov.au. The photos need to be scanned in at 300 dpi and sent as a jpeg or tiff file. Don't forget to include some information about the animal and your contact details.

Who am I?

Congratulations to Kahleana Stannard of Julatten in far north Queensland who correctly identified the regent bowerbird in January's Who Am I? quiz. Kahleana has won a book from David Fleay Wildlife Park.

Here's the new clue:

I'm camouflaged both young and old,
And noted for my knees.
At night my parents call mournfully,
And when sighted I just freeze.

Send your entries to debra.hotchkis@epa.qld.gov.au or Debra Hotchkis, Queensland Parks and Wildlife Service, PO Box 3454, Burleigh Town LPO, Burleigh Heads QLD 4220.

New treatment for botulism?

South-east Queensland wildlife carer Ailsa Watson has developed a new, unorthodox method of treating waterbirds suffering from botulism.

Ailsa said she has had a 95 percent success rate rehabilitating seabirds that are believed to be suffering from botulism.

The procedure involves eliminating food from the animal's diet for a number of days.

"One bird came in early one morning and was taken directly to the vet as no bird had survived more than 24 hours to date and it was considered kinder to euthanase," Ailsa said.

"As it had been a particularly busy day for the vet, he did not get to the bird until the next morning.

"During this time the bird had been left in a cardboard box with water in a quiet room. The vet was surprised to see that the bird had lifted its head. The vet felt it showed enough interest in living to hold off for a while.

"That afternoon (36 hours after it came into care), the bird was definitely much more alert and...had drunk some of the water in the container.

"We decided that, as it appeared to be doing so well, we would continue with this rather unorthodox treatment."

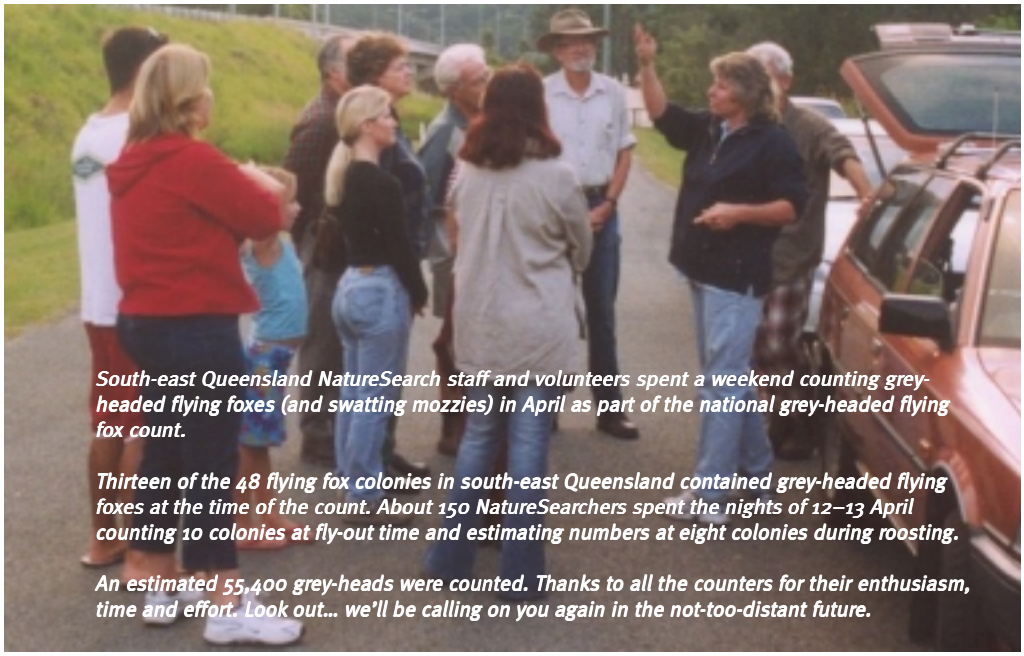
Ailsa kept the bird in a closed cage in a quiet, warm area. She syringed 5ml of water down the bird's throat and checked it every two hours.

The recovery milestones were:

Day 4: The bird was drinking a large amount of water by itself.
Day 5: The bird stood, was moved to an aviary and offered fresh fish.
Day 9: The bird was released back to the wild.

Profile
Ailsa is the secretary of the Sunshine Coast Riverwatch and Seabird Rescue Inc. Her great love is birds. She writes manuals and facts sheets (available for the cost of photocopying) and conducts introduction to bird caring workshops for Wildlife Volunteers Association Inc. and Cooloola Wildlife.

BattySearch held for second time



South-east Queensland NatureSearch staff and volunteers spent a weekend counting grey-headed flying foxes (and swatting mozzies) in April as part of the national grey-headed flying fox count.

Thirteen of the 48 flying fox colonies in south-east Queensland contained grey-headed flying foxes at the time of the count. About 150 NatureSearchers spent the nights of 12–13 April counting 10 colonies at fly-out time and estimating numbers at eight colonies during roosting.

An estimated 55,400 grey-heads were counted. Thanks to all the counters for their enthusiasm, time and effort. Look out... we'll be calling on you again in the not-too-distant future.

Journal supports relocation

The QPWS has been concerned about the relocation of bats, particularly flying foxes, to areas outside their normal geographical range.

A recent journal article supports the notion that flying fox should not be released outside their normal geographical range.

QPWS Wildlife Manager Craig Walker said spectacled flying fox *P. conspicillatus*, have been seen as far south as the New South Wales/ Queensland border area.

"I observed a spectacled flying fox *[normally found in north Queensland]* in the Cascade Gardens campsite at Broadbeach on the Gold Coast in December 2001," he said

"This may have been an escape or a release. While the willingness to care for flying foxes demonstrates that people have good intentions, it's important that animals are released in appropriate areas."

To access this journal please go to:
http://www.cdc.gov/ncidod/eid/vol9no1/02-0104.htm

Craig Walker
Wildlife Manager (QPWS)

Legal changes for volunteers

New legislation that will affect public liability for volunteers was passed in April. The *Civil Liability Act 2003* particularly addresses the role of volunteers in Part 3, Division 2. I encourage all volunteers to become familiar with this legislation and seek legal advice if need be.

The thrust for volunteers is that you **do not** incur personal civil liability in relation to any act or omission done or made in good faith when doing community work (organised by a community organisation or as an office holder of a community organisation).

Some important points to consider are:

- The Act only provides protection for volunteers who are members of community organisations (not for people acting as individuals).
- A volunteer must be performing community work, on a voluntary basis and you can receive remuneration to cover reasonable expenses.
- The Act may not protect you in the event that you are committing a criminal offence, are intoxicated, are acting outside the scope of your activities or contrary to instructions, if you are subject to a law that says you must be insured or in the event that the liability is covered by compulsory third party. This is a snapshot of the relevant exemptions.

This legislation has the ability to bring a good deal of peace of mind to volunteer organisations and their members in relation to public liability claims.

Tom Philp
QPWS Volunteer Co-ordinator

Wildlife welcome at uni clinic

Finding a sympathetic and knowledgeable vet has always been a major worry for wildlife carers.

The University of Queensland Small Animal Clinic in Brisbane is open to carers with sick or injured wildlife.

Penelope Hacker from The Gap WildlifeCare said the clinic was supervised by Dr Chris Jensen, who had helped her with wildlife for many years.

The clinic employs an avian and exotic birds consultant (Dr Bob Doneley from West Toowoomba Vet Surgery) and is equipped with two humidicribs and CAT scanning machines. It is staffed around the clock by 4th year vet students.

The students are supervised by highly qualified vets, many of who are experts and specialists in their fields.

Aside from offering carers a place to take sick and injured animals, the clinic gives students the chance to learn and treat wildlife that they may encounter during their careers.

To book an appointment, call (07) 3365 2110 between 8am-6pm. You may access the free on-line newsletter at www.univet.com.au/freenewsletters

WORMS?

Carers may be interested in an article in the September 2002 issue of *Australian Veterinary Journal* about research that is examining nematodes seen in flying fox brains and describing the associated clinical disease and pathology. The reference is *Neuro-angiostrongylosis in wild Black and Grey-headed flying foxes (Pteropus spp)*. Aust Vet J 2002 Sep; 80(9): 554-8. You can find it on the web at: http://www.ava.com.au/content/avj/0209/0209.htm.

Rock wallabies predisposed to lumpy jaw

One of my fond memories from my zoo vet days is of a hand raised male brush-tailed rock-wallaby who had become the main breeding male in a colony at Healesville Sanctuary.

In the early hours of the morning we were attempting to dart the female rock-wallabies to perform pouch checks. Little Rory knew we weren't after him, so he was following me around the rock mound and at one point he grabbed the business end of the dart rifle in his little hands and started licking the condensation from the barrel tip. Now I had to ask him, did he feel lucky?

One of the veterinary problems of rock wallabies in captivity is lumpy jaw. This is a bacterial infection of the bones of the upper or lower jaw. All macropods are susceptible to it because they have a system of dental replacement known as molar progression. This process allows them to successfully grind up a fibrous diet throughout their lives by keeping some molars "in the bank" below the gum line of the maxillae and mandible. As they age, the worn teeth migrate forward and fall out, and the fresh teeth move forward into wear.

The flaw in this otherwise clever system is that as the tooth erupts through the gum, bacteria in the mouth have direct access into the bone. Macropods regularly pass some species of bacteria in their faeces, which when ingested can invade the bone and cause a local abscess or more generalised osteomyelitis. A major culprit is the anaerobe *Fusobacterium necrophorum.*

"Clinical signs include drooling and asymmetry of the face"

A major predisposing factor in this disease is overcrowding and poor hygiene around feeding stations. If there is faecal contamination of feeding areas there is more opportunity for harmful bacteria to invade the bone. Another predisposing factor is a diet that is either abrasive to the gums (e.g. stalky hay) or too soft (e.g. bread), which encourages tartar formation.

yellow-footed rock-wallabies

Rosie has fond memories of her zoo vet days

The clinical signs include drooling and asymmetry of the face. Diagnosis should include x-rays to determine the extent of bone involvement. Treatment may involve tooth removal, culture and sensitivity to identify the bacteria causing the problem, and long-term treatment with appropriate antibiotics that readily enter bone. Care must be taken with antibiotic therapy of herbivores that rely on bacteria to ferment the cellulose in their diet. Severely affected animals may need to be euthanased. Macropods can best be persuaded to take oral medication ground up on a honey or peanut butter sandwich.

Another interesting thing about brush-tailed rock-wallabies in captivity is that they have been observed to opportunistically eat mice and dead birds in their enclosures. This has implications in predator control programs where the use of meat baits could pose a threat to this species.

Yellow-footed rock-wallabies often have heavy ectoparasite burdens, particularly lice. Subordinate individuals in bachelor groups usually have the heaviest burdens. Ectoparasites are readily controlled with ivermectin administered at sheep doses.

If you have a question for Rosemary, send it to:

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The secret life of rock wallabies

Proserpine rock-wallabies, *Petrogale persephone*, and yellow-footed rock-wallabies, *Petrogale xanthopus celeris*, are being bred in captivity at the QPWS Macropod Research centre at Pallarenda in Townsville to unveil some of their life history secrets and help with population recovery and management.

The Proserpine rock-wallaby was only brought to the attention of science in 1976 and identified as a species in 1982. Since this time, the species has been declared endangered due to a combination of habitat disturbance, predation, road kills, disease and possibly competition with a more widespread relative, the unadorned rock-wallaby, *Petrogale inornata*.

Proserpine rock-wallabies prefer vine thickets, outer rainforest margins and partially disturbed rainforest, especially where large rocks that form caves and crevices cover a high proportion of the ground. Colonies only exist in isolated patches around Proserpine in north Queensland.

A captive colony of Proserpine rock-wallabies was established in 1990 to investigate the reproduction of this new and mysterious species. The research provided important life history information for the management of the species and founding stock for release into a new population. Data was gathered through observing pairs and recording when matings took place. Following the initial mating, subsequent matings were observed and recorded to determine oestrus. Births were also recorded through observation of mating behaviour (birth is usually followed by oestrus and mating) and routine pouch examinations.

This allowed for the collection of three important items of data: gestation; the birth measurement of the newborn, which is essential when preparing aging tables for developing pouch young; and recording if a post-birth mating had taken place and was followed by a birth when the first young had vacated the pouch. This indicated that the Proserpine rock-wallaby, like many other macropods, exhibits embryonic diapause.

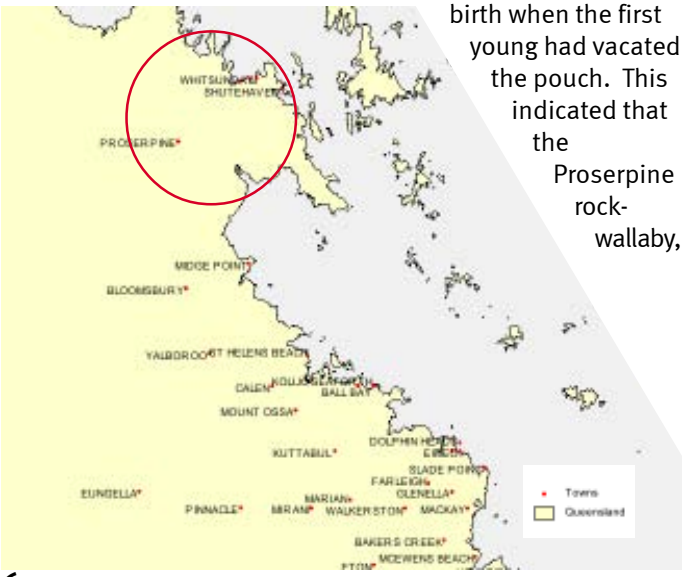


photo Anthony Contarino

Three-month-old Proserpine rock-wallaby pouch young

Part of the recovery plan for the species is the establishment of new Proserpine rock-wallaby populations. Offspring bred during the reproduction project were selected as the founders for release on the first selected site, Hayman Island. Over the past year, a further five Proserpine rock-wallabies have been bred at Pallarenda and these animals will also be introduced to Hayman Island.

The yellow-footed rock-wallaby project is designed to gather information about the Queensland subspecies *Petrogale xanthopus celeris*, which is currently considered a common species in Queensland.

Research on yellow-footed rock-wallabies will complement field work because it ages the developing pouch young by recording measurements of head, tail and foot length and collating the information into an aging table. Development of pouch young is also recorded. Information such as when whiskers appear, when they open their eyes, ear position and when fur appears, is determined on a weekly basis. This improves the accuracy of field observations by relating information to published data that is collected over a two to three-year period at the facility.

The information is also useful to wildlife carers as the ability to age offspring through measurements can provide carers with an accurate method to determine the requirements for care of pouch young that arrive on their doorsteps.

Profile

Ranger Anthony Contarino completed a Bachelor of Science at James Cook University in Townsville in 1994. From 1996, he worked at Dreamworld's Tiger Island, Currumbin Wildlife Sanctuary and The Australian Wildlife Park in Sydney. He has worked at QPWS Pallarenda since April 2002. He is interested in husbandry, training for rehabilitation and public education about birds of prey, particularly eagles and owls. He's also taken a shine to rock wallabies since his exposure to the animals at Pallarenda.

Zoo's roo program boosts numbers

With about 12 critically endangered Victorian brush-tail rock-wallabies left in the wild, the Adelaide Zoo is increasing the population by using surrogate macropods.

David Schultz from the zoo's veterinary department said the zoo was using yellow-footed rock-wallabies (YFRW) and tammar wallabies (TW) as surrogate mothers for Victorian brush-tailed rock-wallaby (BTRW) pouch young.

He said that it was important to build the population quickly before anything happens to the three breeding animals (one male, two females) in captivity.

There are about 12 BTRWs in three known locations in the wild.

The program involves gently prising a BTRW pouch young from its mother's teat 10 days after it is born and placing it in the surrogate's pouch.

The teat is directed into the mouth of the BTRW pouch young with forceps. The attachment (a pouch young's mouths cannot open because its lips are fused along the sides) is confirmed over the next two hours and the next morning.

The surrogates' pouch young is euthanased. This program fits into Adelaide Zoo's macropod husbandry since most male pouch young are euthanased because of the difficulty of housing males together.

Once the pouch young is removed, the donor BTRW starts embryonic diapause. It gives birth again in 30 days.

The number of BT births/year has slowly increased. Twelve were born last year and nine survived. Some releases to the wild are expected early 2004.

The cross-fostering technique has also been used to bring in pouch young (40-80g) from the wild in order to increase genetic diversity of the captive colonies.

Proserpine rock-wallaby

Description: a large rock-wallaby with a mauve-grey head and body. The ears and the base of the tail are rufous brown. The underside is a lighter colour. Most have a white tip on their tail. The adult male weighs an average 6.9kg; females average 5kg.

Behaviour: rests in rock piles and under rock ledges. Adults are mainly nocturnal; they are active on overcast days. They are usually seen individually, but will form small feeding groups. They use sloping trees to escape predators.

Diet: seeks fallen green and dry leaves and fungi from the forest floor. They will forage in the grassy edge of the forest in dry spells.

Reproduction: can breed all year round. Gestation is 33 to 34 days. The pouch life of young is about 209 days.

Distribution: Populations occur on the Clarke Range west of Proserpine, Dryander National Park and neighbouring freehold and leasehold land.

Predators: dingoes, feral dogs and feral cats.

Status: endangered

Threatening processes: habitat destruction, vehicle collisions, predation, disease and parasites.

Information from QPWS Wildnet

Whitsunday's Judith Pannan is a rock for endangered macropods

Judith's article demonstrates how skills developed on a common species, in this case eastern grey kangaroos, can be applied to a threatened species re-introduction program with strong conservation benefits.

Wildlife carer Judith Pannan is raising endangered Proserpine rock wallabies for release in a monitored colony on Hayman Island in the Whitsundays and captive breeding programs.

The Proserpine rock-wallaby joey she is currently caring for was 250g when she received it. Judith is also raising an unadorned rock wallaby; it was 290g when it came into care.

"Rock-wallabies are a delight — naughty, interactive and playful, highly skilled, fast and smart," she said.

"By virtue of the above, their housing must be specific and well thought-out. A roof is essential, snake proofing is highly desirable, padding around the chain meshing will allow them to 'bounce off' without injury, and a raised shelter and large rocks are important.

"We have very high ceilings at home and I have one little fellow who sits on the top pantry shelf — a height of 12ft! The males are horrendous biters and can cause nasty injuries.

"They are difficult to move from house environment to enclosure and do not take to separation easily. This is a time consuming exercise. I have not found them to be strongly pouch-orientated; as long as they are attached to you they are content."

In 2002, the Whitsunday Council gave Fauna Rescue of Queensland, of which Judith is a member, a grant to establish a dual Proserpine rock wallaby enclosure in the large macropod compound on her property.

Profile

Judith's career as a wildlife carer began eight years ago when she started teaching international tourists about native wildlife at her resort, the Bush Village Resort. She now specialises in caring for eastern grey kangaroos and has done a large amount on work on hand-rearing growth rates. She has also used the resort as a drop-off center for injured animals.

New bait bag sea friendly

Turtle with bait bag in its mouth

The first commercial Australian biodegradable bait bag is on sale in south-east Queensland after Environment Minister Dean Wells launched them at the Gold Coast in June.

Mr Wells said that the new bags would not only help protect Queenslands' wildlife from untimely death but would also drastically cut the pollution levels on its beaches and waterways.

"Conventional plastic bags get stuck or washed up in our foreshore areas and turtles, dugongs, whales, dolphins as well as countless seabirds are harmed and killed every year by mistakenly swallowing them," he said.

"If Queensland's recreational fishermen adopt these bags, they will be doing their bit to protect our native marine life.

"The switch from plastic to biodegradable bags, made from renewable corn-starch, has a number of additional benefits.

"The starch used to make the bags can be sourced from locally grown corn and sugar, giving a much needed boost to Queensland's agriculture as well as reducing our dependence on imports."

Mr Wells, along with supporters Sea World, PCC Packaging and Healthy Waterways, praised Markwells Bait for becoming the first company to sell bait in 100 percent biodegradable bags.

The new biodegradable bait bags are being endorsed by the EPA in partnership with Sea World and Healthy Waterways and will be widely available around the state in the coming months.

Jenny enjoys care and share role

Jenny Davis (pictured with Henry) is the Wildlife Officer for the Redland Shire Council in beautiful bayside Brisbane.

Jenny said Redlands Shire, aside from being home to a large urban koala population, had a strong wildlife care focus.

Her office is at the Redlands IndigiScapes Centre, an environmental education centre nestled in 14.5ha of remnant bushland.

The Centre runs a number of community-based programs and conservation officers co-ordinate an after-hours wildlife ambulance service and a recently established Wildlife Care Network.

The Redlands Wildlife Care Network (RWCN) aims to facilitate the care and rehabilitation of injured or orphaned wildlife and, by hosting workshops and information evenings, to raise awareness and enhance the understanding of the local fauna.

"We have not only formulated a list of available registered carers within the shire, but also set up a support network with the aim of making the lives of our overtaxed carers a little easier and hopefully less demanding on their purse strings!" Jenny said.

"This support network consists of just about everyone or anyone who can help in any way — from knitting and sewing, donations of materials, cage building, rescue, identification, advice, research, temporary housing, release sites and native food supply.

"There are so many ways in which people can help."

Any goods donated become part of a "Lending Library" of supplies (e.g. cages, bottles, teats, pouches, heat pads) for members to borrow. This is especially helpful for new carers who are also encouraged to "buddy up" with a more experienced carer to learn the ropes.

An important aspect of the RWCN is its wildlife rescue phone line, staffed by trained volunteers who field calls from the general public.

This service grew in response to suggestions from the local community, who found they had to make numerous calls to find help for injured animals.

The volunteers perform triage by providing advice (and hopefully alleviating the need for the animal to come into care) or organising for a carer or support volunteers to contact the caller.

"It's early days yet, and apart from the shortage of available bird carers (hello, anyone out there?), things seem to be progressing well," Jenny said.

"You don't have to be a carer (unless you are a bird carer) to join our network, you just need to be interested in helping or learning about native fauna.

"Did I mention we need bird carers?"

For information, call Jenny on 3824 8611.

Watch this space!

The QPWS Wildlife Conservation Branch is developing a reference tool for carers that will be posted on the Environmental Protection Agency's website.

The reference kit contains information on caring for mammals, reptiles, amphibians and frogs.

It is anticipated it will be available by the end of the year.

Stay alert, say antechinus carers

Our SOS to carers in the January edition for help raising antechinus has been answered, with two readers sending in valuable information. We have forward the information to the carer who requested it. We hope by publishing one of the letters we will help others raising these agile animals.

Ann Coyle from WIRES Coffs Harbour has successfully raised brown antechinus. She wrote:

Antechinus usually come into care quite small (still on mum). I tie all antechinus babies in a pouch to help calm and settle them.

It is essential at this stage to keep the antechinus warm. Use a heat pad or hospital box to maintain an ambient temperature of 28–30deg until they maintain their own body heat overnight. This is usually when they are fully furred and their ears are off their head and becoming noticeably large.

Very young animals (eyes closed, just beginning to fur) should be put in a small pouch. I feed babies every two hours for the first 24 hours. Once they begin feeding, I feed them five times a day. This drops to four times when they are feeding easily and taking a good volume of food. The suggested feed amounts are on the formula packaging (e.g. 30 percent of their body weight each day), but the rule of thumb is to allow each animal to take as much as it wants at each feed.

I always use two pouches for feeding. I take each antechinus from the first bag (tying the others in), feed it and tie it in the second bag. Always remember to tie them in otherwise they will disappear!

I have used both Divetalac and Biolac (M150), but prefer Biolac. I use a 1–2ml syringe with a cut-down short length of vein infusion set tubing (paediatric size) to feed the animals. By the time they are ready for the aquarium, they will lap from a 2l milk bottle top while I hold them.

Offer water from the syringe before feeds on hot days and always provide water in the aquarium and bathtub.

They need quiet, familiar surroundings and slow movement around them when they are young. They can be difficult to handle and are the world's best escape artists. I hold them in my hand to feed, covered and with quite a firm grip. I feed at the same time, in the same place and in very quiet surroundings as I have found they will not feed if I move to a different spot in the same room!

When the babies can maintain their own temperature, they can move to a larger pouch, such as an inside-out pillow slip. Still tie off the pouch. Reduce their milk feeds to three a day and begin offering mealworms or other live insects from your fingers. I offer the babies squeezed mealworm guts when their eyes are open and ears are up.

When the antechinus jump at, and eat, whole mealworms, I transfer them to a glass aquarium. They are still in a pouch, which is placed inside a small box with an entry hole cut in it. Live and still food is put in the aquarium twice a day. Milk is put in a bottle top for them to lap. For the first few nights, I still hand feed each animal solid food as it takes a while for them to settle into a routine. Put some leaf litter and branches in the bottom of the aquarium for them to jump and climb on. It is essential to have a firm lid on the aquarium.

They should be eating whole mealworms when they are in the aquarium. I mash a mix of insectivore and avocado together and roll it into little balls. I also put both dead and live mealworms in the aquarium and start providing grasshoppers, cockroaches, wood cockroaches, ground crickets and beetles. I initially pull these insects apart. As the antechinus grow and learn to catch their own food, I just wound the insects. They must be catching their own food for at least a week before I consider releasing them.


yellow-footed antechinus

photo courtesy C & D Frith

Two to three weeks after the antechinus have become used to the aquarium and if they are beginning to catch their own food in it, I transfer the nest box and pouch to a bathtub with a half-solid/half-mesh lid. The tub has in it a thick layer of dirt, lots of leaf litter and small stumps. The nest box is under the solid cover and has long dry grasses and leaf litter surrounding it. At this point the antechinus usually pull the pouch out of the box and build a nest in the box instead. Or they will vacate the box and build a nest under a log.

When the antechinus are catching and eating live food, leaving the milk untouched and behaving in a self-sufficient manner (generally about three weeks after going into the bathtub), they are ready to release.''

My Little Antechinus

by Jane Powell

There's an antechinus in my house.
He's smaller than a rat
But he's larger than a mouse.
He is a native dasyure –
A carnivorous marsupial.
He is cute and quick
And likes to run up and down the wall.

He'll sit atop the painting frames
And twitch his whiskers at us.
He likes to eat the moths and flies
And particularly the spiders.

He steals my kitchen paper
To make himself a bed.
We've suggested that he live outside
But he prefers inside, instead.

His big dark eyes and soft grey fur
Make him so endearing
His anti-gravity antics are really quite appealing.

A prehensile tail and little hands
To grasp and climb and leap with
But my little antechinus
Must beware the girl he sleeps with.

For when an antechinus
Takes himself a wife
The price he pays is very high,
For he pays with his life.

Website links

http://wwildlife.com/www/mammals/index.htm

An interesting site that lists some common birds, mammals, reptiles and amphibians and the problems they face in the urban environment.

http://www.usyd.edu.au/su/ohs/animalhse.html

Health & safety guidelines for animal houses in NSW – the business of working with animals is taken very seriously.

http://www.families.qld.gov.au/news/documents/pdf/volunteering_policy.pdf

Hot off the press "Engaging Qld – The Qld Government Policy on Volunteering" a must read for all volunteers and wildlife carers in Qld.

http://www.legislation.qld.gov.au/LEGISLTN/CURRENT/C/CivilLiabA03_001_030409.pdf

The *Civil Liability Act 2003*: again a must read to protect yourself in this day and age. This site also gives you access to all legislation in Qld.

http://www.netspeed.com.au/wombadilliac/main.htm

An absolutely delightful site for anyone with a wombat fetish.

http://www.wilderness.org.au

The Wilderness Society is an Australian, community-based, environmental advocacy organisation. Their mission is to protect, promote and secure the future of wilderness and other high conservation areas.

http://groups.yahoo.com/group/faunaoz/

A site for carers to ask questions of other carers or have a say.

Ranger retires to farm

Marian Bangay in action

After nearly 20 years with the QPWS, Ranger-in-Charge (Wildlife) South Coast Marian Bangay has bowed out.

Marian retired on July 4.

Marian's involvement in the wildlife field began in 1969 when she started working for noted naturalist David Fleay at his Fauna Centre on the Gold Coast.

She came to the QPWS in 1983 when the Fauna Centre was passed to the State Government and became the David Fleay Wildlife Park.

In 1985, Marian took the position of Ranger-in-Charge (Wildlife) in an office at the Gold Coast City Council's old dog pound site near the Pine Ridge Conservation Park.

She managed South Coast wildlife issues from this site until 1995 when she moved to the new District Office at West Burleigh.

After many years of duty, Marian is keenly looking forward (we wish she wouldn't smile so much!) to the rural life that awaits her and partner, Malcolm, on their new property at Goomeri, near Gympie.

A bit of cultivation, some cattle and, of course, a few Clydesdales should keep Marian very busy.

Gerri keen to return

The QPWS has welcomed back long-serving and valued Wildlife Ranger Gerri Kluver to the Cooloola Region after a period of leave.

Gerri started with us in 1978 and was the "old" National Parks and Wildlife Service's first female field overseer in Queensland.

Gerri's area stretched from Woodgate to Caboolture and out to the Bunya Mountains, which she covered in a 2WD Falcon ute fitted with a "limited slip diff". Gerri can't remember the number of times she had to dig herself out from being bogged.

In the mid-1980s, Gerri worked with volunteers to establish the WILVO network, which brought individual carers together and allowed them to join in training sessions and form invaluable support groups to assist in wildlife care.

Gerri Kluver returns to the fold

Gerri is looking forward to continuing her educational role in the Cooloola region's schools and Environmental Education Centres.

She is especially looking forward to working closely again with the wildlife carers and wildlife licensees.

We wish Gerri all the best.

Keep your eyes open for owls

A nationwide project to seek a better understanding of Australia's nine owl species is underway!

The project, funded and supported by Australian Geographic and the Victorian Museum, is being co-ordinated in Queensland by the QPWS NatureSearch program. A single feather is all it takes to help out.

Please contact Ric Nattrass on 3227 7836 or e-mail ric.nattrass@epa.qld.gov.au

Julie's taking care of animal business

Wildlife carer Julie Firkins has set up a supplies company to help carers provide native animals with the best possible care.

Australian Wildlife Supplies provides 200 carers across Queensland with food and feeding equipment, surgical equipment, hygiene products, vitamin/mineral supplements and emergency care requirements.

"The motivation behind establishing the business was the hope that one day it will be known as having made a positive contribution to wildlife rehabilitation by providing carers with a range of products and services that help carers meet and maintain the best possible standards of care," she said.

Julie Firkins

The Brisbane business opened in opened on 1 April 2002. The clientele and number of products have steadily grown and it now stocks 350 product lines.

Julie plans to expand her range to include reference books, more economic and versatile housing and field equipment.

The clients include groups, individuals and EPA staff caring for wildlife.

"The most interesting order I have received to date was for 100 dung beetles," Julie said.

"A lovely gent couldn't find any on his farm out in south-west Queensland and the dung was accumulating. Apparently the flies were unbearable.

"Adrian (Julie's partner) gave him some advice on where to look for the beetles and to give us a call back if he couldn't find any.

"We didn't hear from him after that, so we can only hope he was successful!"

Profile

A decade ago, Julie was working for a veterinary wholesaling company when she was given an orphaned ringtail possum. She joined ONARR the next day and said she would be forever grateful for the support and help she received from members. She believes carers should join groups so they can enjoy the support, share their stories and have fun with other carers. She also finds it sad to hear stories of bitterness or rivalry between carers in regard to wildlife rehabilitation, which she said can have a detrimental effect on the animals coming into care and the efforts of carers generally. Julie spends most of her time (when she is not running her business) caring for flying foxes and koalas.

South African cranes have avian malaria

This article was sent to R'n'R by a reader. It carries information that may be of interest to carers. It is reproduced as it appeared in the publication.

A moratorium has been placed on the release of captive crowned cranes into the wild following the discovery in KwaZulu-Natal that many of the birds have avian malaria. It is the first time that malaria has ever been found in the crane species, according to the South African Crane Working Group. Crowned cranes are listed as endangered in the Eskom Red Data index.

Although the captive birds show no symptoms, the discovery has called into question captive-bred release programs that run the risk of allowing avian malaria a transport vector from infected captive cranes to wild cranes, which show no signs of carrying the disease, according to Pietermaritzburg vet Dr Oliver Tatham.

The decision to quarantine the captive cranes follows a protocol set up by the American-based International Crane Foundation to protect wild crane species.

Dr Tatham first detected the plasmodium parasites [the cause of malaria] after taking blood smears during a routine health check on captive cranes in the Swartberg Wildlife rehabilitation centre. It is believed mosquitos transport the parasites.

Avian malaria is caused by a number of different parasites such as the protozoans haemoproteus and plasmodium, all of which cause similar symptoms in birds to malaria in humans. However, the significance of discovering the disease in captive populations needs more research, Dr Tatham added.

Centre owner Jackie Wells said that only eight crowned cranes tested positive for malaria, despite being caged with a blue crane.

Dr Tatham said more knowledge was needed about wild cranes before release programs can resume. In addition, he said that it is proving difficult to test wild birds to see whether they carry malaria parasites. "We do not know the situation in the wild. There is more pressure on wild cranes, as they have to hunt and compete with other birds and deal with environmental stress and simple flying."

Often, cranes from different parts of the country end up in the same rehabilitation and release centre. "The danger with captive birds is that they have different parasites from different sources. We could be releasing Eastern Cape cranes into a Natal population, and so it is better to err on the side of caution."

The Swartberg region is also home to the critically endangered wattled crane species. Only 234 are thought to exist in the wild in South Africa and there are fears that this small population could be at risk if captive and infected crowned cranes are released and allowed to intermingle.

The South African Crane Working Group's projects manager Kerryn Morrison said the organisation is very concerned by the presence of malaria in captive cranes. She said that in the past captive cranes have been released into the wild without any precautionary principles. "I am looking [towards] completing a full disease risk assessment by the end of this year to find out whether there is any risk in releasing rehabilitated or captive cranes into the wild."

[According to information kindly obtained [sic] from Dr Anders Permin, from the Danish Centre for Experimental Parasitology, Royal Veterinary and Agricultural University, Frederiksberg, Denmark, one would always expect to find plasmodia in wild birds, including cranes, but it would be very unusual to see significant mortality in the infected birds.

Dr Oliver Tatham's statement that more knowledge is needed about wild cranes before release programmes can resume is a reflection of the currently prevailing precautionary principle. His caution and the steps taken will be justified if indeed they are followed by the contemplated disease risk assessment; ProMED-mail would be grateful if the results of such could be made available.

The use of the term malaria should not mislead: as stated in the posting,"avian malaria causes in birds symptoms which resemble malaria in humans" — but the parasites involved are not common to animal and man. This is not a zoonotic disease. - Mods.EP & AS]

ProMED-mail. Cranes found to have avian malaria. ProMED-mail 2003; 7 Feb: 20030207.0327 ‹http://www.promedmail.org›Accessed 03 June 2003.

Dogs, pigs threaten eastern bristlebird

The eastern bristlebird *Dasyornis brachypterus* is a critically endangered species that occupies grassy open forests or shrublands at only a few locations in southeast Queensland and New South Wales.

Conondale National Park is one of these locations and is also the northern extent of the species' distribution in Australia. The eastern bristlebird forages on the ground and nests in tussock grasses or low growing shrubs.

Feral pigs are a major threat to the conservation of the eastern bristlebird within Conondale National Park. This threat is due to major habitat destruction brought about by the pigs digging up native ground cover plants in search of food and potentially via direct predation on bristlebird eggs and nestlings.

The extensive disturbance to the ground cover also causes loss of nesting sites and allows the establishment of weeds which may displace preferred native habitat plants such as native sorghum *Sorghum leiocladum* and another tussock grass *Poa labillardieri.*

Feral pigs also represent a direct threat to many native plants and animals, including locally restricted freshwater crayfish and several rare and threatened frogs.

Several attempts have been made in recent years to control the feral pig population in Conondale National Park. Trapping by QPWS rangers and contractors has not achieved successful control.

This is largely due to the pig population being highly mobile and covering a large area, with abundant food resources. Other constraints include wet weather access difficulties, competing operational priorities and vandalism of traps.

Recent track analysis also confirms the presence of very large dogs within the national park.

Wild dogs, including dingoes and feral domestic dogs are likely to prey upon both native and feral animals, including wild pigs.

As a result, the control of wild dogs may result in an increased wild pig population and potentially increased destruction of eastern bristlebird habitat. Dog control may also allow an increase in foxes, which are likely to be more of a direct threat to bristlebirds than dogs.

Profile
QPWS Senior Conservation Officer Ross Patterson is a currently working on the Moreton Island management plan and natural integrity statements for parks in south-east Queensland. His first project with QPWS was the national koala survey in the mid 1980s and he is interested in all aspects of nature conservation.

The critically endangered eastern bristlebird

Mellissa's in great shape

Apart from producing Land for Wildlife publications and assisting with R'n'R, another aspect of my job with QPWS is presenting stories on Channel 10's *Totally Wild*. Recently I was lucky to spend some time in south-west Queensland.

I met some really dedicated landholders protecting their wetland areas at Lake Dartmouth, west of Charleville. But by far the highlight was catching up with Loie Wilson and Mellissa the bilby (featured in issue 2 of R'n'R). Loie cared for orphaned bilby Melissa until she was ready to become part of the captive breeding program in Charleville. Melissa is in great condition and breeding well — thanks to Loie.

Donna Walsh and Mellissa the bilby in Charleville

I also travelled down to Currawinya to meet up with some great characters working together to "Save the Bilby". The genuine enthusiasm and welcoming nature of the people out west and the amazing colours in the landscape made my trip very memorable.

Thank you,
Donna Walsh

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