

Victoria Valley Falls Walking Track

How many volunteers does it take to erect a sign?

This is one question you may ask by looking at the photograph of a recent working bee at the Victoria Valley Falls. However, a more accurate question may be "How many volunteers do you need to construct about 500 metres of walking track through thick bush to a waterfall?" The answer to this one is about 20 volunteers for about 6 hours provided you give them a BBQ lunch!

I would like to report briefly on a very successful project that was recently completed at the Victoria Valley Falls near Osterley. The falls themselves are quite spectacular particularly after heavy rain, but have been, until now, quite difficult to find unless you are familiar with the area.



Benching & steps on the new track. Vic. Valley working bee 24/25 April 1999.

View of falls from the vantage point lookout. Vic. Valley Falls working bee 24/25 April 1999.



How many volunteers needed to install a sign? Vic. Valley falls working Bee 24/25 April 1999.

The falls are actually located on Forestry Tasmania land and form one of the popular stopping points along the Tasmanian Trail. Liawenee Field Centre was fortunate enough to successfully obtain some **WILDCARE** funding for the construction of a walking track to the falls, and after working jointly with Forestry Tasmania to mark a preferred route, a working bee was organised with **WILDCARE** volunteers, some private members of the public and also members of the Land Rover Owners Club (they are also members of **WILDCARE**).

To construct the track involved clearing of vegetation and many logs, with some benching work also undertaken. The volunteers arrived

early morning and were enthusiastic to start work and everything worked well, with good progress being made on the track to the falls, with a further extension to a vantage point providing a scenic lookout. This second section of the track also involved the construction of a low level creek crossing; this was done using treated pine timber.

I would like to thank all Wildcare members who assisted with this important project as I believe it clearly demonstrates how a considerable amount of work can be done in a reasonably short period of time. I am looking forward to a follow up working bee on this track in spring/summer this year and am also seeking funding for similar small projects within the Central Plateau Region.

John Cowburn
Senior Ranger — Liawenee

IN THIS ISSUE

- Endangered plant species
- Swift parrot
- Southern hairy red snail
- Fairy penguins
- Earth Education lecture
- And More...

Introduction of Endangered Plant Species into Community Gardens

A joint project led by the Friends of the Royal Tasmanian Botanical Gardens, in co-operation with the Royal Tasmanian Botanical Gardens, the Parks and Wildlife Service and **WILDCARE Incorporated (Botanical Guardians)**.

Are you interested in saving endangered plant species? Interested in collecting, propagating and growing endangered species?

The Friends of the Royal Tasmanian Botanical Gardens are calling for support for an innovative project that

has received Threatened Species Network funding. Read the article below and if you are interested in giving a bit of time contact Lynne Byrne, Co-ordinator of the Growing Friends for more information and registration.

The aim of the project is to establish endangered plant species in private gardens to collectively create significant ex-situ holdings that will be available for future recovery work.

The project relates directly to a number of Recovery plans

1. Draft Threatened Species Strategy for Tasmania.
2. *Phebalium daviesii* Flora Recovery Plan
3. *Epacris stuartii* Recovery Plan
4. *Tetralthea gunnii* Interim Recovery Plan
5. Tasmanian Forest *Epacrids* Recovery Plan 1999–2004 *Epacris barbata* and *Epacris limbata* are identified as the two species at greatest risk in the Recovery Plan.
6. Six endangered Tasmanian grassland species.

There are a number of our threatened plant species that have few populations and/or are few in number and there is no representation apart from in the wild. These are at high risk of extinction and, as an insurance against this possibility, representative holdings of these species need to be kept outside of the wild populations. In the past, recovery plans have undertaken to establish ex-situ populations. These have proved to be of limited success for a number of reasons. The main reason is the lack of a robust and perpetual system to ensure that these holdings are

maintained in the long term even in the event of establishment success. Additionally, establishment and maintenance of ex situ populations can be expensive. There are many species for which this approach is not a viable option. It is these species for which we need to set populations to ensure these species do not become extinct.

The aim is to distribute representative samples from the wild populations of endangered plants for holding in private gardens. A system will be set up to collect and retrieve relevant information on the origin of plants and establishment success in these gardens. The aim is to have each garden hold a small sub-sample of the variation occurring in the wild so that in totality there is a broad representative sample of the total population held in private gardens from which material can be collected for conservation actions should populations in the wild decline. The intention is to have this project build on and integrate with existing and future recovery plans.

The Friends of the Gardens with the support of the Royal Tasmanian Botanical Gardens and in partnership with the Threatened Species Unit and **WILDCARE Incorporated**, will undertake to collect, label, propagate and distribute number of the most endangered of our species, initially including *Phebalium daviesii*, *Epacris stuartii*, *Tetralthea gunnii*, *Argentipallium spiciferi*, *Epacris barbata*, *Epacris limbata* and threatened grassland species including, *Danthonia popinensis*, *Ranunculus prasinus*, *Colobanthus curtisiae* and *Leucochrysum albicans var. tricolor*.

Propagation material for the establishment of stock plants will be collected under the supervision of the Threatened Species Unit following guidelines prescribed in "Guidelines for the Translocation of Threatened Plants in Australia" by the Australian Network for Plant Conservation (1997). It is intended to propagate plants from these stock plants for distribution. Stock plants will be held at the Friends of the Gardens propagation area at The Royal Hobart Botanical Gardens and propagation activities will occur at this site.

It is envisaged that the plants will be distributed in the form of conservation planting packs consisting of up to three

GIS Database

The PWS is re-entering herbarium data into GTSpot (a wizbang GIS database) and would like help from one or two **WILDCARE** people who are good with numbers and maps. One task that will take at least one week (but best not done in one go) is to use locality info from 2500 records of rare and threatened species to generate grid refs and corresponding accuracies. Also with spring coming along Wendy is thinking about conducting training sessions for collection of field data for conservation status assessment. Any data-entry or survey volunteers interesting in participating in either of these projects should contact

Dr Wendy Potts

Parks and Wildlife Service

Ph: (03) 6233 3695 or

Fax: (03) 6233 3477

e-mail: wendyp@dpiwe.tas.gov.au

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plants labelled as to their origin (clone of seedling number). The planting of more than one individual in a garden will encourage production of seed. Included in the pack will be supporting information for the grower which will include information on threats to the species, growing information, unique identifier numbers for the plants, and forms to be filled out before the packs are taken which give the grower's name, address at which planting will take place and contact details. This information will have a twofold purpose, firstly to help the Friends and the Threatened Species Unit retrieve relevant information and plant material if needed, and, as a way to educate people about threatened species issues and what is involved in conserving highly threatened species. **WILDCARE** members will be involved in this system and will be called on to help assemble and distribute the planting packs. The Threatened Species Unit will be the repository for information regarding the origin and location of the plantings and will also monitor and review the system in collaboration with the Friends so that the retrieval of plant material and information about the plants is effective. It is hoped to distribute 150 planting packs per species.

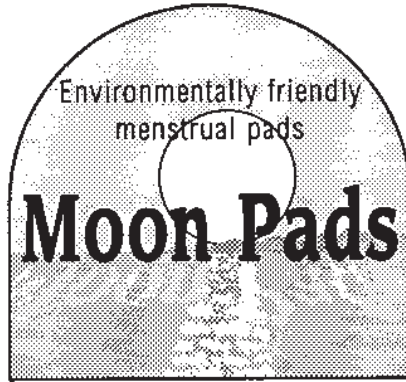
It is intended that there will be a small charge for the packs for two reasons, firstly, cost recovery for the Friends to be used to help perpetuate the system in the long term and, secondly, to ensure commitment from the growers. Involvement in this project by the Friends of the Gardens is desirable to encourage younger people to participate in the group and provide a focus to their activities. Propagation activities are currently popular amongst the group. This will mesh well with changes to operations and new developments that are currently occurring at the Royal Tasmanian Botanical Gardens. It will also support the role of the Royal Tasmanian Botanical Gardens in the conservation of endangered plants. The packs will be developed and promoted by the group and distributed through the Friends, **WILDCARE** Incorporated and other community groups.

The Friends will undertake to contact growers to monitor the establishment success of plants and detail conditions that the plants appear to like or dislike. Additional information such as seed set can also be collected. Initial

monitoring will occur approximately a year after distribution of the packs and will help to determine the feasibility of retrieving plant material.

The project has commenced with the distribution by the Threatened Species Unit of planting packs for *Phebalium daviesii*, each with plants of three clones. The packs have proved popular and over 100 have been distributed with demand outstripping supply. Growers are eagerly awaiting release of packs for other endangered species. The Unit now has stock plants available for *Epacris stuartii*, *Tetralochea gunnii* and *Argentipallium spiceri*.

As well as providing a welcome and, in the case of gardeners, effortless opportunity for members of the public to directly contribute to the recovery process, this project will create public awareness and encourage greater community participation in the recovery of the threatened species and the communities in which they occur. This project will kickstart a process whereby ex-situ holdings of other threatened species can be added to and maintained in community gardens in future years.



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Accredited Short Courses in Coastal Management

Organised by Greening Australia (Tasmania) Inc

The Short Courses in Coastal Management organised by Greening Australia and funded by Coasts and Clean Seas will be run again in August (Hobart) and October (Launceston) 1999.

Based on the findings of an initial training needs analysis conducted by Uinitas Consulting, the courses are tailored at both an introductory level (for those with limited involvement in coastal management) and at an advanced level (for those who deal with coastal issues on a daily basis).

The courses will include both class and field based learning in both the south and north of the state. The courses are also accredited in Tasmania and certification is provided on completion of each course.

Course 1, the Introductory Course has been designed for those with no

previous experience in coastal management. It provides participants with an overview on the Tasmanian State Coastal Policy and planning processes, the physical coastal processes impacting on the Tasmanian coastal zone, values of the natural resources of the coastal zone and basic coastal management techniques for specific locations. Courses 2, 3 and 4 are for those involved at a professional level and provide a greater depth of information on the modules delivered in the Introductory Course. Limited spaces are available for subsidised places for community group members to attend. If you are interested in attending the courses, please ring Lola at Greening Australia on 6223 6377 for further information and to register for the Courses.

Aboriginal Partnerships in the World Heritage Area

The first major component of the World Heritage Area Aboriginal Partnerships Project is now under way in the Resource Management and Conservation Division. Greg Lehman, who has been seconded from the University of Tasmania, has been appointed to the Integrated Policy and Strategies Branch to implement a range of strategies and other initiatives which have been developed in co-operation with the Aboriginal community.

Fire Management Symposium

The first of these tasks will be to convene a symposium entitled 'Native Solutions — Indigenous Knowledge and Today's Fire Management'. This will be held in Hobart in June of 2000. The symposium is intended to provide an international platform for communities, researchers and managers to explore the diverse array of issues pertaining to fire management — with a focus on the knowledge and participation of indigenous people. This will be particularly relevant to the Tasmanian Parks and Wildlife Service over the coming years as it considers new fire management strategies for risk minimisation and conservation of natural and cultural values in the Tasmanian WHA.

In recent years, an increasing understanding of the role of indigenous people and their traditional practices in fire ecology has been developing. In Tasmania, tentative steps are now being taken toward evaluation and experimental re-introduction of practices which parallel the burning regimes maintained by Aborigines over the past several thousand years. However, any proposal for active reintroduction of fire into an area where exclusion has been a key management principle over recent decades will require careful planning and considerable consultation.

Risks to public safety and assets, threats to fire sensitive vegetation and the implications for biodiversity conservation are all important issues for debate. At a more profound level there are questions raised about the

ethics of landscape manipulation, the objectives of biodiversity management and how we value the WHA landscape.

A steering committee for the symposium is currently being set up and Greg is looking forward to hearing from people who would like to share their ideas (and present papers!)

Interpretation

Funding for the employment of an Aboriginal Interpretation Officer is currently being finalised and it is hoped to have a person appointed within the next few months. This position will provide an important link

between the Aboriginal Partnerships project and the Interpretation and Education Section, enabling progress to be made on a number of interpretation projects at Lake St Clair, Sarah Island and Melaleuca, as well as reviewing existing Aboriginal interpretation in the WHA. The appointment will also provide additional resources with which to begin implementation of components of the WHA Aboriginal Interpretation Strategy.

Cross-Cultural Training

A training program in Managing Aboriginal Heritage was conducted for PWS Northern Region staff at Smithton last month. A similar event for Southern Region staff will be held later in the year. This program has been developed from a successful package first trialed in the North-east District in 1998.

Native Solutions: Indigenous Knowledge and Today's Fire Management An International Symposium Hobart, Australia 10 - 13 June 2000

Tasmania's Parks and Wildlife Service invites researchers, managers and Indigenous communities to participate in an inter-disciplinary forum which will consider the role of Indigenous knowledge, technologies and people in contemporary fire management.

The Symposium will be held in Hobart, Tasmania a city on the doorstep of one of the world's greatest temperate wilderness World Heritage Areas.

In Tasmania, as in other places where fire management is a critical issue, the effects of human intervention in the landscape are poorly understood and often overlooked.

The articulation of scientific and historical understanding with Indigenous experience is in its infancy. The implications for social and economic risk management, concepts of biodiversity and the place of people in the natural world are enormous.

Prescribed burning operations in the south west wilderness of Tasmania

Traditional cultural landscapes are maintained and biodiversity is managed by emulating Indigenous firing techniques to produce mosaic burning patterns.



Papers and workshop proposals are invited to explore issues in fire management including, but not limited to:

- uniting Indigenous knowledge and contemporary management practices
- articulation of scientific & Indigenous values
- ethics of landscape intervention
- valuing biodiversity
- case studies of Indigenous participation
- models for fire management/development
- influencing World Heritage values



Tasmanian Aboriginal fire making tools c. 1870

Early registrations of interest should be made by email to: glehman@dpiwe.tas.gov.au
Check www.parks.tas.gov.au for further information.

A range of field trips will be offered into the Tasmanian Wilderness World Heritage Area. These will be led by respected authorities in a range of disciplines including fire ecology, biodiversity, alpine and grassland ecology, Indigenous heritage and earth sciences.

Papers and proceedings of the symposium will be published.

Parks and Wildlife Service
Department of Primary
Industries, Water and the
Environment
GPO Box 44A, Hobart
Tasmania, Australia, 7001



Recreation and Tourism Strategy

Greg will be working in the near future to improve Aboriginal involvement in the RATS (recreation and tourism strategy) project. Local Aboriginal organisations, as well as the Tasmanian Aboriginal Land Council, will be consulted in order to ensure

that indigenous perspectives and participation are built into the strategy.

Aboriginal Values

A longer term task in the Aboriginal Partnerships project will be to develop and implement processes for identifying Aboriginal values, and examining opportunities for establishing management partnerships

with Aboriginal communities. This will build on work already done by the Tasmanian Aboriginal Land Council and is intended to maximise the involvement of local Aboriginal communities.

Greg Lehman
Project Manager, Aboriginal Partnerships
World Heritage Area

Conservation in Hong Kong and the ANPC Plant conservation Techniques Course from an International Perspective.

Time passes swiftly. It has been about one and a half months since I returned from Hobart where I had my first trip in Australia. I was sent by the Agriculture and Fisheries Department (AFD) of the Government of the Hong Kong Special Administration Region to attend the Plant Conservation Techniques Course organised by the Australian Network for Plant Conservation and the Parks and Wildlife Service Tasmania.

In this dynamic world, new conservation techniques keep on evolving to cope with the changing environment. In order to keep track with changing needs, AFD, the conservation authority in Hong Kong regularly sends staff to attend various training courses to acquire conservation experience from local or overseas experts. To me, it is a very good opportunity to meet conservation experts and frontier workers from Australia, and New Zealand, to learn their invaluable knowledge and experiences. The program of the Plant Conservation Techniques Course was very well designed. People with various backgrounds were invited to give seminars. This course presented comprehensive and exhaustive information regarding a range of aspects that should be duly considered in undertaking conservation work step by step to attendants. These include the significance of plant conservation, the basic information needed to be gathered before and after undertaking conservation works, and conservation management techniques. Workshops were also arranged for discussion of viewpoints. Furthermore, field trips were arranged for attendants to understand the current conservation work in progress and gain field

experience.

Apart from the training materials presented in the course, as a person coming from a different place, I was deeply impressed by the beauty of Tasmanian countryside, and the high incentive of Tasmanians in nature conservation. Many Tasmanians are concerned about their environment. They actively join various conservation programmes to protect endangered flora/fauna and pristine habitats. Efforts and resources are devoted to conserve forest remnants and restore disturbed habitats. I am impressed by the Co-operation between farmers in Brighton and the University of Tasmania in setting up arboretum to conserve the rare Tasmanian endemic *Eucalyptus morrisbyi*, preserving areas within the golf course of Campbell Town Golf Club for the protection of a number of threatened orchids; as well as the voluntary programme of rock climbers to rehabilitate a footpath on steep slopes of the Friendly Beaches in Freycinet National Park. I would like to take this opportunity to introduce some of the conservation work undertaken by AFD in Hong Kong. In comparison with Tasmania, Hong Kong has a much higher population density, approximately 6 million in 1,095 km² versus 0.47 million in 67,800 km². Despite being a small place with extremely high population, Hong Kong still has a high proportion of area covered with vegetation. About 40% of Hong Kong has been designated as Country Parks (CPs) for conservation, education, recreation and tourism purposes. AFD is the authority in the management of CPs.

Every year, some three hundred thousand tree seedlings are planted for soil erosion control, landscaping

purposes and improving habitats for wildlife. Visitor Centres and recreation facilities are provided strategically at suitable sites in CPs to avoid unnecessary environmental destruction but allow visitors to enjoy and appreciate the beauty of the Hong Kong countryside.

AFD maintains a herbarium with a collection of some 35,000 specimens of 2,815 local species and 2,500 species from nearby countries. The public are welcome to visit our herbarium where talks and slide shows are presented.

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Furthermore, the herbarium provides a free plant identification service to the public. Also, we have two arboreta planted with native and protected tree species for conservation and education purposes.

The Mai Po Marshes and its adjacent mudflat and mangrove, covering an area of 1,500 ha, has been designated as a Ramsar site wetland of international importance since 1995. Every year, hundreds of thousands of migratory birds visit this site. In winter, birds will come from Siberia and northern China and in summer, waders will come from countries in the Southern Hemisphere, including Australia. Among these migratory birds, it is worth mentioning that they include some globally endangered species such as Black-faced Spoonbill, *Platalea minor*.

Despite having systems to conserve our environment, we face a number of challenges in our conservation work. Litter and fire are the two major problems in the management of CPs.

In 1998, we collected 3,364 tons of litter from all CPs. Every year, hill fires occur frequently during the dry season, and burn away a large area of vegetation. Most hill fires are caused by carelessness of visitors. Vandalism also causes damage to the CP facilities as well as the landscape. The countryside areas are threatened by unplanned development and illegal dumping. In comparison with Tasmanians, many Hong Kong people seem to have less interest in conserving our natural environment. From my personal point of view, Hong Kong should put more resources and efforts in conservation education, which should aim at both family and institutional level. Opportunities should be given to children to learn more in school or at home about the importance of nature conservation. It is also important to influence the decision-makers as to the importance of nature conservation. Accordingly, conservation education programs should be further developed by the co-operation of schools, government departments and non-government organisations. If people are more interested in wildlife and the natural environment, the Hong Kong environment would benefit from their respect and care.

Tony Chan
Agriculture & Fisheries Department,
Hong Kong

Schools help swift parrot recovery

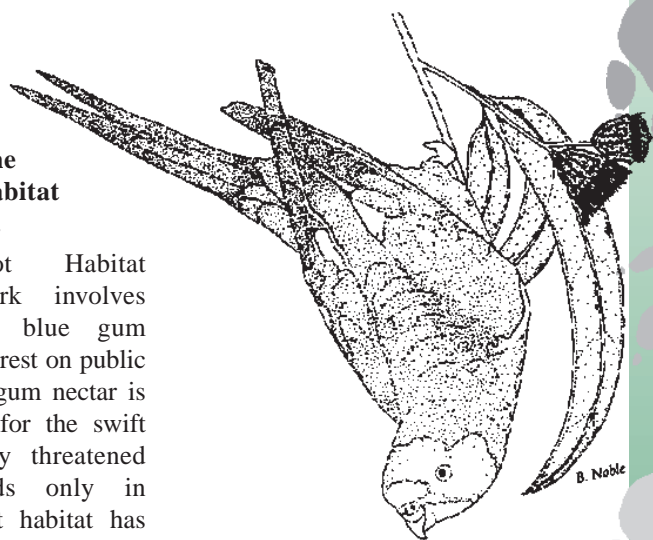
School children are becoming active contributors to the swift parrot recovery effort following the launch of a habitat rehabilitation network.

The Swift Parrot Habitat Rehabilitation Network involves pupils re-establishing blue gum (*Eucalyptus globulus*) forest on public and private land. Blue gum nectar is the main food source for the swift parrot — a nationally threatened species which breeds only in Tasmania. Swift parrot habitat has been drastically reduced through land clearance, and fewer than 1000 pairs of birds now remain. During autumn the parrot migrates to the mainland where it forages in flowering eucalypts across Victoria and New South Wales. The birds return to Tasmania in late winter and early spring.

The project aims to rehabilitate near-coastal areas within the swift parrot range from St Helens to Dover, including the Tasman and Forestier Peninsulas and Bruny Island. Work will run alongside the new Swift Parrot Recovery Plan which operates from 1997 to 1999. The scheme involves nine rural and eight urban schools and is supported by Landcare, Forest Industries Association of Tasmania, North Forest Products, the Parks and Wildlife Service and Forestry Tasmania.

Co-ordinated by Nel Smit of the Department of Education, the network aims to link pupils from rural and urban areas in a partnership program. Rural schools select partner urban schools to help collect seed, and propagate and plant trees, shrubs and grasses. The urban schools visit the proposed rehabilitation areas to meet their teams, collect and propagate seed, then return to the area to plant seedlings. The rural schools will be responsible for continuing maintenance at the sites.

School pupils are already busy collecting and propagating seed. Cambridge Primary School has visited its partner school, Tasman District. As well as



collecting seed from the Mount Rumney area, seed is sent up from Tasman where the trees will be planted within school grounds and on local property.

Cambridge teacher, Anne Gates, says there is great enthusiasm for the project, with over 50 pupils involved. Parents are also taking seed home to plant on their properties.

Participating rural schools are St Mary's District High, Woodbridge High, Triabunna District High, Dover District High, Geeveston District High and Sorell District High.

Urban schools are Invermay Primary, Illawarra Primary, Newtown Primary, Campbell Street Primary, Cambridge Primary, Bridgewater High, Princes Street Primary and Eastside Christian School.

Anna Knee
Threatened Species Unit
Tas PWS



Southern hairy red snail rediscovered

It may not be the most dynamic of creatures, but the intriguingly named southern hairy red snail, previously presumed extinct in Tasmania, caused quite a stir following its rediscovery on King Island.

Hairy snail — hard to believe?

Austrochloritis victoriae is just one of



Cartoon by Andrew Smith.

several hairy shelled species found around the world. It is unclear what purpose these hairs (visible under a microscope) serve, possibly to prevent dirt sticking to the shell. With a short stocky body, *A victoriae* is one of the slowest of a very slow snail family. It was last measured travelling at a leisurely 50 centimetres per hour!

Formerly widespread across the northern end of King Island, the southern hairy red snail was last recorded there in about 1920.

In December, Hobart snail expert and keen naturalist, Kevin Bonham, rediscovered the species at the Lavinia Nature Reserve despite the loss of an estimated one-third of the snail's original habitat.

A fascination with snails has been

passed down the generations to Kevin who remains modest about the rediscovery.

'I didn't know it would cause such a fuss, I'm always discovering things!' he says, having found three new Tasmanian species on the same trip. 'I was not convinced that enough searching had been done to say it was extinct.'

Kevin believes it is extremely unlikely that the snail occurs anywhere else in Tasmania. King Island has a distinctive snail fauna to the rest of the state and his recent survey of the neighbouring Hunter Group of islands ruled that area out. The southern hairy

red snail is widespread across southern Victoria, but this latest rediscovery forms the southern-most record of the Camaenidae family. The King Island form closely resembles that found on Victoria's Wilsons Promontory.

The snail, with its two centimetre reddish-brown shell, was first described by Cox in 1868 from southern Victoria. It lives in clusters among log piles in wet areas of tea trees and banksia scrub, feeding off rotting logs and leaf mulch. With few natural enemies, its greatest threat is habitat clearance.

Anna Knee

Threatened Species Unit

Tas PWS

Fairy Penguins *Eudyptula minor*

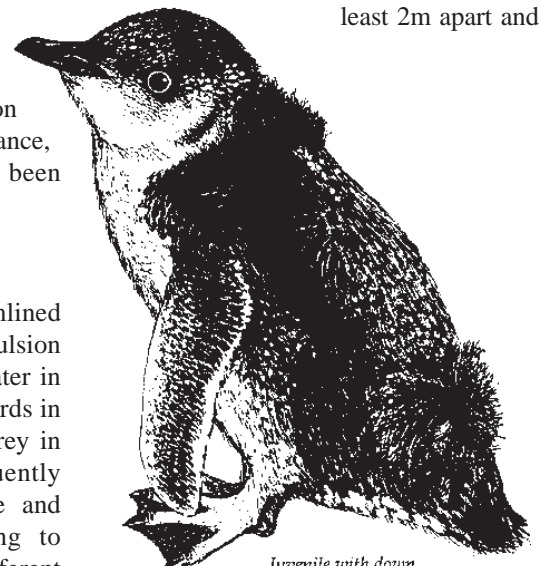
The scientific name of the fairy penguin (or little penguin) *Eudyptula minor*, is most descriptive. Not only is it the smallest of all penguins, but also the Greek work 'Eudyptula' means 'good little diver'.

This flightless seabird breeds in colonies along the southern coast of Australia, as far north as Port Stephens in the east to Fremantle in the west. Subspecies are also found in New Zealand. Very little is known about their populations. However, Tasmanian estimates range from 110,000-190,000 breeding pairs of which less than 5% are found on mainland Tasmania, where ever-increasing human pressure will probably result in their extinction. The most abundant populations are found on our offshore islands. Adults weigh about a kilogram, grow to a height of 40 cm and live, on average, 6 years. In one instance, an age of 21 years has been recorded.

locations but consists mainly of small school fish, some squid or krill (shrimp-like crustaceans). Occasionally items will be taken from the sea floor, such as crab larvae or sea horses. Prey is swallowed whole. Some fairy penguins return consistently to their burrows year round but most stay at sea throughout the autumn-winter period.

Colonies and nest sites

Most resident birds in a colony return to their burrows in small groups within an hour or so of darkness. Their return is preceded by groups of penguins gathering beyond the surf where they may be heard calling to each other. With large colonies hundreds of birds may come ashore in a brief space of time. Nests are usually at least 2m apart and



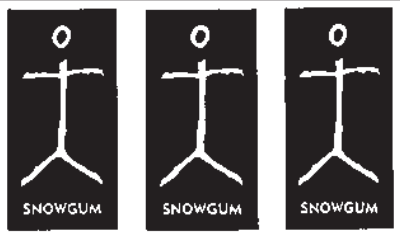
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generally consist of a 60–80 cm tunnel with a nest ‘bowl’ at the end. Other nests may vary from mere scrapes beneath a clump of tussock, to elaborate connecting tunnels or a home amongst coastal rocks.

Breeding

Between June and August male penguins return to either renovate old burrows or to dig new ones. Noisy male courting displays greet arriving female penguins. Although only one mate is chosen, they will not usually be their sole partner for life. Birds breed annually, but in eastern Australia the usual clutch of two eggs may be found as early as May or as late as October. In successful years, two clutches might be reared in one season, which is unusual among penguins. The penguin pair share incubation shifts of usually 1–2 days and hatching takes place within 33–37 days. About 60% of the eggs successfully hatch.

When 5 weeks old, the chicks stay outside burrows waiting to be fed by both parents. Within another 2 or 3 weeks they are ready to move to the sea, where they will grow to maturity.

Song

Song and displays serve to attract mates, stave off intruders and, as a duet, unite a pair’s attachment to each other. The distinctive individual song moves from a bass rumble to a trumpeting cry, accompanied by flipper, beak and body movements. These calls and displays vary in

intensity from a ‘half-trumpet display’ to a fever pitch of sound and body activity. At night, and especially during the breeding season, the noisy din of a penguin colony can be considerable.

Seasonal activities

Variations in food supplies caused by change in ocean currents or other factors, determine the pattern of life for each local population of fairy penguins and may differ considerably from the diagram below. In favourable years, eggs may be laid in May and up

until October, with two or even three broods of chicks reared in one year.

Penguin problems

Seasonal changes in natural food supplies from year to year cause many young birds to be washed up dead or in weak condition on our beaches. Thoughtless activities create extra problems for fairy penguins. Some are drowned when the amateur fisherman unknowingly sets gill nets near a penguin colony. Oil spills spell disaster for penguins and other sea birds. Not only is oil toxic when

Please forward completed form to:

Nick Mooney
WILDCARE Eagle Watch
GPO Box 44a Hobart 7001



EAGLE WATCH

Recorder’s name:

Address:

Phone number: (H)(W)

Date of sighting:

Species: Wedge-tailed eagle *Aquila audax*

White-bellied sea eagle *Haliaeetus leucogaster*

Adult Juvenile Other immature

Number sighted:

Remember: The size of eagles is not indicative of age but sex (females are larger). Adult wedge-tailed eagles are dark chocolate brown, juveniles are mottled brown with a blond nape and other immatures are mottled brown. Adult white-bellied sea eagles are grey on the back, white on the head, neck and front; juveniles are mottled tan with a white tail and other immatures intermediate.

Location (distance to nearest town or other feature, grid reference if you can):

Have you seen these birds in this area before? yes no

If yes, how frequently

Do you know of an eagle’s nest? yes no

Did the bird have any special identifying features? (eg missing primary feathers).
If so, describe them:

Describe what the bird was doing:

ingested, but also the buoyancy and insulation of penguin plumage is damaged. Plastics are mistakenly swallowed or bottle packaging becomes a noose around a penguin neck. Uncontrolled dogs or feral cats wreak havoc on penguin colonies (more than the penguin's natural predators) and may kill many individuals. The effects of human habitation, such as road kills, direct harassment, vegetation burn-off and housing development continue to threaten fairy penguin colonies.

Viewing guidelines

These guidelines are intended to protect the penguins and to allow you to see them under natural conditions. Please be sure you are familiar with them before visiting a penguin colony.

Left to themselves penguins will start to leave the water at last light so that they are under the cover of darkness, which helps to protect them from predators. At this time they are very vulnerable (remember they regard you as a potential predator) and hence are wary. If they sense a threat or are disturbed by torchlight or loud noise they stay at sea longer. This is stressful for them and can interfere with breeding, or may prevent them reaching their hungry young in the burrow. Besides, if they stay at sea, you may not see them at all.

It is important

Please read and observe any information signs, which may be placed at the penguin colony.

Remember you need to wear dark clothing for camouflage and ensure you will remain warm.

Approach your observation point from the land, preferably not by walking along the beach as this blocks the penguins' access to their burrows. Use existing tracks and do not walk through the colony as it destroys burrows. Please do not damage vegetation.

Choose a viewing position, which is at least 3m from, and does not block, the penguins' access to their burrows. Choose a site that has a dark background to camouflage yourself.

Settle yourself comfortably before last light. If there are experienced personnel available, please take their advice. Remain quiet and keep movement to a minimum. Penguins have excellent vision and easily spot

movement, especially if they see you outlined against the sky.

Only dim torches emitting a red light (red cellophane over the lens is OK) should be used and then never towards the water or directly at the penguins. Flash cameras should not be used on the beach. Video cameras, **without spotlights**, can be used and produce better results at dusk than conventional cameras. Often the best places to view penguins are behind the beach where they feel more secure. Again, only use red light. To aid viewing, binoculars are useful, even at night.

Do not under any circumstances visit a colony with dogs (or cats). They are a major threat to penguins. Even if dogs are leashed their smell remains to attract others. Take your food scraps away as these also attract dogs

and cats.

Penguins are protected wildlife. It is illegal to catch, attempt to catch or otherwise harass penguins. If this type of behaviour is observed, please report it to the nearest ranger. Offences are taken seriously. If you have interests or concern about your local penguin population please contact our nearest Parks and Wildlife Service ranger.

The penguins are a remarkable experience for us all. Let us keep it that way.

Further reading

Stahel, C. & Gales, R. (1987). *Little Penguins — Fairy Penguins in Australia*. Uni Press, Kensington, NSW.

Earth Education Lecture and Workshop

Professor Steve Van Matre

Wildcarers may recall the Earth Education Workshop run at the Botanical Gardens, Hobart in 1998. For those who missed it or have developed a taste for more, this is your chance to experience Earth Education with the Founder, Professor Steve Van Matre.

Steve will be giving a Lecture as part of the Richard Jones Memorial Lecture Series on Wednesday 29 September, at 7.30pm, Commerce Lecture Theatre, University of Tasmania.

Titled *'Mapbearers, Toolkeepers, Starmakers'* this is a truly inspirational speech for anyone who has anything to do with guiding the next generation. Sprinkled with wonderful stories and unusual perspectives, this powerful talk will provide insights and ideas for creating meaningful learning adventures.

Steve will also be conducting a one day workshop on SATURDAY OCTOBER 2, 9.00am–5.15pm at the Royal Tasmanian Botanical Gardens, Hobart. You will be introduced to programs for people of all ages to help them enjoy, understand and live in harmony with the natural world.

The cost of the workshop is \$45 including lunch. Workshop places are limited so please indicate your interest early by contacting **KIM WILLING on 6233 6427**.

A Voice For The Earth

Steve Van Matre's popularity in the field of nature education began with the publication of the *'Acclimatization'* and *'Acclimatizing'* books, and the 1974 *'National Geographic'* story on his program. Today, Steve enjoys a world wide reputation as an author, designer, educator — and yes, as an organizer, speaker and 'provocateur'. His animated talks and spirited commentaries seldom leave anyone unmoved.

The original Acclimatization books, now pioneering classics in the field, have been followed by *'Sunship Earth'* and *'Earthkeepers'* — powerful outdoor learning programs for upper elementary students, and *'The Earth Speaks'*, a collection of thoughts and impressions of those who have enjoyed a deep sense of relationship with the earth and its life. Professor Van Matre's most recent book, *'Earth Education. A New Beginning'*, represents a synthesis of his twenty-five years in the field and sets the course for a new educational path in the future.

Mt Direction

Thursday 6th August 1999 saw the completion of track work for the Mt Direction Semaphore Station undertaken by Green Corps. Approximately 2 km of track was constructed to link the information booth to the summit.

The completion of the Green Corps placement was marked by the presentation of certificates to the 8 graduates by Senator John Watson.

Also present at the ceremony were Michelle O'Byrne MHR, federal member for Bass, Lawrence Archer, the Mayor of George Town, members of the Mt Direction Restoration Committee Inc. and a large number of family and friends of the Green Corps team.

In congratulating the team, Senator Watson reminded the gathering that

the team members were there because they had volunteered to be involved with an environmental programme in their own locality and had demonstrated their commitment to the future of Australia.

"As a society, we are trying to do less damage to the environment which sustains us



Warmer Winter Fun at Botanical Discovery Centre

Don't bypass visiting the Royal Tasmanian Botanical Gardens this winter just because the temperature has dropped.

The Gardens are a sight too good to be missed, and if you're concerned it might be a bit cold in the great outdoors — don't worry, you can take a virtual tour of the Gardens from the new Botanical Discovery Centre. It's a great indoor venue for the whole family!

And to make it easier, during August, the entrance fees have been discounted as part of the Centre's 'Winter Warmer' introductory offer. You can take your whole family, with up to four children to the Centre for only \$10. There's also \$1 off normal entrance fees for individuals.

The Botanical Discovery Centre offers an array of exciting activities, including a multimedia exhibit, an interactive photosynthesis display and an image gallery full to overflowing with works by internationally renowned wilderness photographer, Peter Dombrovskis.

One especially exciting exhibit is 'The Ride of Your Life'. Hidden video cameras superimpose the

images of visitors in a spaceship onto a viewing screen. The spaceship lifts off from the Botanical Gardens and begins a journey to show visitors what the world would be like without plants.

Botanical Discovery Centre Manager Krissy Ward said this particular exhibit was a favourite with children.

Mrs Ward said, "the kids also like 'The Photosynthesis Factory', an interactive exhibit which shows how plants make oxygen and glucose from sunlight, water and carbon dioxide."

"They use equipment and controls to replicate photosynthesis — and get a sweet reward at the end if they get it right!" she said.

The aim of the Botanical Discovery Centre is to explain to people the importance of appreciating plants, and is the first of its kind in Australia. Funds raised through the Discovery Centre help support the important work of the Botanical Gardens.

Opening hours of the Centre during winter are from 10am to 4pm, seven days a week.

— but reversing 200 years of ignorance and neglect is a massive task, requiring in many cases, a great deal of painstaking and skilful hands-on work... These young people have developed new skills and confidence... What they have achieved here will make a big difference to the local community and in turn the larger community."

The support of, in particular, Hodges Transport and George Town Council, was acknowledged as was the input and expertise of the P&WS — in particular, Andrew Napier.

A contribution of \$30,000 from the Centenary of Federation programme (delivered through the local Federal member's office) was also acknowledged.

The track is not yet complete as a footbridge across the Bell Bay rail line is still to be completed. The Centenary of Federation funds will facilitate the completion of this stage of the overall programme.



National Biodiversity Month

*Earth Alive! National
Biodiversity Month,
September 1999.*

The ongoing decline of Australia's species and ecosystems is probably our biggest environmental problem, but few people even know what biodiversity means. Help us turn this around, and promote what your community is doing to conserve our rich natural heritage. For a National Biodiversity Month information kit, that includes an order form for free promotional and educational materials, contact the Community Biodiversity Network on: (02) 9380 7629, e-mail cbn@wr.com.au or check out their Website at: www.cbn.org.au

Thankyou!

Wildcare wishes to thank the following sponsors for their support of the *WILDCARE* Fund

Gold Sponsors (\$10,000 plus)

Paddy Pallin Adventure Equipment stores

Category 2 sponsors (\$5000–\$9999)

Australian Trust for Conservation Volunteers (in kind)

Category 3 sponsors (\$1000–\$4999)

Malcolm Murchison

And the following *WildCARE* member-discount sponsors

Snowgum equipment 10% discount

Par Avion Wilderness Flights 10% discount

Eaglehawk Neck Backpackers (\$1 discount on a \$12 night)

Moonpads 5% discount

(To claim your discount, simply present your *WILDCARE* member card.)

We are looking for other sponsors, both for the *WILDCARE* Fund and as discounters. Know someone who you think might be interested? Why not have a chat to them and suggest they contact **Andrew Smith at Parks and Wildlife Service** for more details (Ph 6233 2185 — GPO Box 44a Hobart 7001).

Tasmanian Trail Guidebook — **Tasmanian Trail**

This essential guide will give walkers, bicyclists and horse riders all the information needed to travel all or part of the unique **Tasmanian Trail**.

Detailed trail notes cover each stage of the journey, providing concise directions and information on access, campsites and facilities. Distances are given for trips in either direction, while each stage is supplemented with detailed maps.

Planning, safety and environmental issues are all thoroughly covered.

Fascinating snippets of information on the natural and cultural features you will discover along the trail are liberally spread throughout the book.

If you are contemplating a full traverse of the state or just a day trip, this book is a must.

Recommended Retail Price: \$15.00. Order through the *WildCARE* Office, GPO Box 44A Hobart 7001. Please make cheques payable to The Tasmanian Trail Association.

ISBN 9 318923 009651