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IT IS THE MISSION OF THIS CLUB to encourage the study, appreciation and preservation of our natural and cultural environment, the animals, plants, geology and landforms, including those of the coastal and marine areas in the North East region of Tasmania.

The Club conducts outings on the second Saturday of the month.

MARCH 11

WARATAHS ON THE BLUE TIER: Reviving the old tradition NOVEMBER 12

of exploring the Blue Tier when the waratahs are in flower. A leisurely day....some may camp...maybe a barbeque late in the after-

noon. Meet at 10 am on the top. Contact: Lou Brooker 63 522122.

**DECEMBER 10** TAM O'SHANTER BAY: Interesting land forms at sea level, endangered orchids, pond life with poss. of green and gold frogs. Gumboots may be useful. Another Ross Coad special. guided by Henry Shannon and Graeme Smith. Meet at Pipers River Store, 32

kms. west of Bridport at 10 a.m. Contact: ph. 63 523269.

JANUARY 14 **SOUTHEAST BEN LOMOND:** An alpine walk of 8km. to Coal

> Falls and the plateau. Participants must be fit and equipped for mountain walking. Route includes some steep, rocky terrain. Meet at Lords Car Park, Scottsdale 7.15 am. to rationalise cars. Others meet at Storys Creek at 8.45 am. Suggest you ring Mike Douglas if

attending ph. 63 561243.

FEBRUARY 11 **SOUTH SISTER:** Semi-alpine vegetation, spectacular views.

Meet 10 am. at old railway station at western end of St. Marys. See

next page for background info. Contact: Lou Brooker 63 522122.

MOULTING BAY, LONG POINT RESERVE. Helen has arranged for us to visit the Reserve. This weekend can be as big as you like. It's a long weekend and we will be able to camp and are

> planning to take kayaks and get on the water. Info about the reserve on next page. DETAILS NEXT NEWSLETTER. PLAN FOR THIS!!

# news / reports

Note from Editor: AFTER printing, I noticed I had omitted to check out WHEN the Lower Marsh Creek was declared a reserve..... could you read 1987 in the second line of that report, please?

## Long Point - purchased at last

After two years of delays, the Tasmanian Land Conservancy owns the magnificent Long Point Reserve.

Long Point has been rated among the highest priorities for conservation in the state. It includes important values such as native grasslands, woodlands, saltmarshes and wetlands. The list of threatened species that inhabit the property is extensive and includes Tasmanian devils and Eastern curlews, endangered migratory wading birds that spend summers in Australia after their breeding season in Siberia, 10,000 km away. Other smaller wading birds make similar remarkable journeys From Japan and China. Birds such as the red-necked stint, the whimbrel and the bar-tailed godwit can be found on the shores of these wetlands.

When the TLC set out in 2002 to buy 1000 acres of this property, it had \$49 in the bank. Early membership dues combined with personal and group contributions and a flood of support from worldwide communities enabled the reserve to be purchased.

## Historic Tramway Vandalised.

It was not a pretty site, whilst on our July outing, to see parts of the old timber tramway at Pearly Brook damaged by firewood cutters.

The woodcutters had felled a swathe of dogwoods in order to drive along the remnant of the railway to retrieve their firewood. Not only this, but they had dumped piles of domestic rubbish as well.

The tramway formation was recommended for protection in an archaeological survey conducted some time ago by the timber industry to investigate historical sites in the north-east. Mike has urged anyone with information about the damage to contact Bushwatch on 1800 055 555.

## Swift Parrot Habitat Logged.

Here are some serious points of concern:

- A coupe at the Gardens [near St. Helens] which was known to provide foraging habitat for the Swift Parrot was logged three months ahead of the scheduled harvesting date on the Forest Practices Plan. This coupe also provided old growth tree hollows for the masked owl, another threatened species.
- Old growth *E. amygdalina* forest is **under-reserved** by 565 ha. in the Flinders Bioregion.

Source: N.E. Bioregional Network News.

## South Sister update 1st October. 2005

The South Sister, near St Marys is a local icon, popular tourist destination, and recreation area for the locals BUT it is earmarked for logging. Many residents and past visitors to the area are very concerned that this will have devastating effects on the biodiversity of the area, the water supply of local residents (including St Marys), damage to eco-tourism and the local economy.

The Forest Practice Plan was certified in January 2005 and was seen to be deficient in many respects. It failed to assess adequately the risk of landslide should logging proceed as well as risk to water and threatened species.

There are numerous species of plants and trees on South Sister and during spring and summer the mountain is extremely colourful as many plants flower and fruit. There are banksias, hakeas, cheeseberries, correas, pimeleas, native pepper bushes and many other beautiful flowers. In addition there is threatened flora, Euphrasia collina ssp deflexifolia, recorded on the proposed coupe. The Eucalyptus brookeriana forest community is a threatened vegetation community protected under the RFA. Haloragis heterophylla (designated by Tasmanian Threatened Species Protection Act as rare) has been found 400 metres north of the coupe boundary in an adjacent coupe. An additional twelve threatened species have been found within 5000 metres of the coupe. A botanical survey was carried out on this coupe in December 2004 and found 86 species of flora. Since then a further seven have been identified taking the total to 93. It is possible that there are many more species which have not yet been found but work continues to find more.

Eucalyptus brookeriana (protected under the Regional Forest Agreement) borders the eastern boundary of the coupe. This area is steep and Forestry Tasmania have proposed not to log this part of the coupe (under the RFA they are not able to anyway). However, as the road passes through the stand, some trees will have to be sacrificed to widen the road.

The rare *Euphrasia collina* ssp. *deflexifolia* is in abundance in clumps on the coupe. The myth that *Euphrasia* only grow in areas of disturbance is not supported by members of S.O.S. who have found *Euphrasia* all over the coupe and have taken photos and GPS readings of the sites it is growing on.

It is with great regret and enormous disappointment that the SOS applicants had to withdraw late on 1st October from the scheduled hearing at RMPAT with Foresty Tasmania.

The legislation (Environmental Management and Pollution Control Act (EMPCA)) required their experts to establish that landslip was 'likely'. On Wednesday September 30 Forestry Tasmania experts submitted a further three reports to the Tribunal which were then reviewed by their experts. As recommended by SOS experts in their earlier reports, further surveys had been carried out by Forestry, some of which partially satisfied one of their experts and he therefore had to change his opinion from 'likely to cause a landslip' to 'possibly cause a landslip'. His inability to hold the opinion 'likely to cause a landslip' was insufficient therefore for the group to proceed to the Tribunal. Source: www.southsister.org

#### Tasmanian Bushland Garden

On a 20 hectare site right next to the Pulchella Nursery on the Tasman Highway at Buckland, 50 kms from Hobart, a new bushland garden is being developed.

The dry sclerophyll woodland block will be restored to its former beauty and enhanced by new plantings.

Display gardens will feature most of the major plant species and communities of east and south east Tasmania and will follow the concept of regional botanic gardens elsewhere in Australia.

# news / reports

The planting is being organised into a dozen plants communities which occur in nature including Poa grassland, a she-oak / correa community, a Dodonea / bursaria woodland, a sandstone heath, a granite heath etc.

The work is being done by a committee consisting of keen native gardeners from the Australian Plant Society. They work once a month in the garden planting around the dams, developing picnic areas, eradicating weeds and making pathways. The Tasmanian Bushland Garden is an incorporated group; it is a registered Environmental Organisation and is therefore able to make donations tax-deductible. Membership is \$12.

More information from: The Treasurer, Tasmanian Bushland Garden Inc., 12 Calder Crescent, Blackman's Bay, 7032. Phone: 6229 4076.

## **Bridport Study Begins.**

Bridport is another of our coastal towns which could, if allowed become a little Gold Coast. But before decisions about the town's future can be made, the Dorset Council has commissioned a Planning and Development Strategy. This has begun already and will be carried out by GHD Pty Ltd. Issues like urban design, foreshore management, and the nature, appropriateness and sustainability of economic development will be considered in the preparation of the strategy.

Community consultation will be a critical part of the program. Some members of our club are preparing a submission.

#### New Book ..... Blue Genes.

By 2020, the world will be eating almost as much farmed as wild fish, marine bacteria could yield the cure for cancer and deep-sea bacteria may be exploited to consume oil spills. The demand for genetic resources is growing rapidly – yet governance and policy lag far behind.

Blue Genes, by David Greer and Brian Harvey, is the first book to tackle the ownership and trade in aquatic genetic resources, including who's collecting aquatic genetic resources and why. Special attention is paid to the rights of Indigenous and local communities providing access to those resources.

*Blue Genes* presents provocative case studies from four continents, and concludes with policy recommendations specifically tailored to aquatic resources.

Source: http://www.mccn.org.au

#### **Boullanger Bay/Robbins Passage.**

The Boullanger Bay/Robbins Passage wetland area lies in the far north-west of Tasmania and is another important site for migratory shorebirds in Tasmania. The area is home to more shorebirds than all of the other known sites around Tasmania combined, supporting internationally significant numbers of eight species of shorebird including the eastern curlew, ruddy turnstone, red-necked stint, curlew sandpiper, double-banded plover, sooty oystercatcher and pied oystercatcher.

The Boullanger Bay/Robbins Passage area contains over 100 km2 of tidal mudflats and provides a diversity of habitats for shorebirds to roost, feed and breed, including: beaches, estuaries, sandflats, mudflats, saltmarshes, sandy and rocky islands, and offshore shoals and rocks.

Important shorebird roosting sites have been located at Shipwreck Point (Perkins Island), Mosquito Inlet, Back Banks and Bird Point (Robbins Island), Five Islets, Kangaroo Island, Montagu Island, Wallaby Island and Seven Mile Beach (eastern and western ends).

Recently a Values Mapping Project was carried out in the area. The catalyst for the project was a nomination to have the wetlands listed under the Ramsar convention identifying it as a wetland of international importance. Considerable opposition was voiced by locals who were concerned that such a listing would impose restrictions on use of the area. The important habitat value of the Robbins Passage Wetlands has only been fully appreciated in recent times. However, the area has been utilised for commercial and recreational purposes for well over a century.

Problems facing the site include human disturbance—by the inappropriate use of four wheel drives, over-fishing, impacts on water quality from surrounding dairy farms, and the spread of weeds such as rice grass, which have the potential to make shorebird roosting and feeding sites unusable.

Following local opposition, the nomination for Ramsar listing was not endorsed by the State Government. Instead a local plan for managing the area was adopted. This involved the formation of the Robbin's Passage Wetlands Coast and Landcare Group which has built partnerships with Birds Tasmania, WWF Australia, DPIWE's Nature Conservation Branch, the local oyster grower's association, local council, local schools and indigenous groups. Together, they have secured \$100 000 funding for a range of projects.

The Values Mapping Project is important because it enabled all stakeholders to work together co-operatively; it utilised the media well, and it will allow quantitative monitoring programs to be carried out on a regular basis.

Source.....1. www.wwf.org.au 2. The paper "Shorebird Conservation—Robbins Passage/Boullanger Bay Wetlands Area, Values Mapping Project."

#### At the Movies - August.

In August, we had a very social day. The main attraction was the DVD "Travelling Birds". This film was a 2003 academy award nominee from the creators of "Microcosmos" which we had seen at a previous At Home.

Travelling Birds is an attempt to unravel the mystery of bird migration. It is neither fiction nor documentary, but tells a story in pictures. There were five hundred people involved in the making of the film, which was shot over four years on every continent of the world.

The original concept was to try and fly with the birds.

The work of Konrad Lorenz, a Nobel Prize winner of the 1930's inspired the film-making team. They tried 'imprinting' - the process of transferring parenthood - on dozens of baby geese, and with the help of a team of young veterinary students and biologists, who lived with, slept

with, ate and swam with and ultimately flew with the geese, they began to apply the concept to making a movie. Absolute trust between birds and imprinters began to build up.

At the same time research went into reconciling the restraints of flying in ultra-light planes with the needs of film making.

It was unknown territory. There were no established techniques. The team began to design and build ultra-lights that would allow shooting a 280° panorama. They built all terrain, remote controlled, robotic vehicles: the ultimate in team work.

All this work was carried out with the utmost respect for the birds' natural behaviour, for what they were doing was insinuating themselves into their private lives.

The result is a spellbinding journey alongside the birds as they make their annual trips from one pole to another. One almost felt like an honorary member of the bird family.

We had pictures from three other presenters during the day: Jeff Jennings with his cleverly crafted moving through still pictures of Tasmanian scenes; Anne O'Connor with images of Central Australia and the new abstract pictures she recently presented in an exhibition; and Peter and Kim Eastman with their impressive collection of orchid and fungi pictures taken on their North Scottsdale property.

It was a great day.....thankyou to the three presenters! The D.V.D. is available on loan [from me—L.B.] if anyone missed it or would like to see it again. The information above was sourced from the bonus material on the D.V.D.

## At the Harris' Haven—October

Anyone who makes a judgement about whether to come on an outing based on Friday's weather .... **Beware!!** There couldn't have been a greater contrast than what we experienced on this occasion. Overnight the storms and rain of Friday turned into beautiful warm spring weather.

It was exciting to drive along the bumpy track parallel with the Great Musselroe River and to suddenly come upon the platform Ron and Jill had built ready for their yurt, sitting high above the river bank.

It was a bit nerve wracking to then have to strip off shoes and socks and cross the river on the wattle trunks felled especially. The river level was up after the Friday rain, but we managed without serious incident.

It was ironical to have to wash our boots in detergent to stop the spread of phytophthera. But we did it! Wondering all the time what should we do with the washing water? And what measures will Forestry actually take when they soon move into this area for their operations? And what will they do with their washing up water?

We had a great walk through different forest types, includ-

ing a swamp area with swamp she-oaks, uphill through *Hibbertia* and grassland and dry schlerophyll to have lunch on the top of the hill near the newly protected *Dockrillia striolata* habitat.

Jill was able to alert Forestry Tasmania to the presence of this colony of *Dockrillia* and they have avoided them in their forthcoming operations. Just as well, because they are even more special than Jill originally thought. After our visit, Mike sent a sample to Alex Buchanan of the Tasmanian Herbarium and received confirmation that it is *Dockrillia striolata subsp. striolata* - the streaked rock orchid. This is the first report of the subspecies from the Tasmanian mainland. It was previously thought to be confined to the Furneaux Group and Victoria and New South Wales.

Dockrillia has only recently been described: being segregated from Dendrobium in 1996. They are clumping epiphytes that grow on granite rock faces, boulders and sometimes trees. They have course fleshy roots, slender canelike stems and fleshy mostly terete leaves. The flowers which open widely and are often colourful are pollinated by small native bees.

## Other orchids seen:

Pterostylis nana
Pterostylis nutans
Pterostylis pendunculata
Glossodia major
Thelymitra (buds)

Dwarf Greenhood
Nodding Greenhood
Waroonhood
Waxlip Orchid
Sun Orchid

Source: The Orchids of Tasmania, Jones, Wapstra, Tonelli and Harris.

## **WILLIAMS HILL WALK**

Williams Hill is in state forest, 16 km NE of Scottsdale. Its western slopes overlook the Forester River and a tributary, the Pearly Brook. The walk is through tall forest on the western face of Williams Hill and then along a remnant of the Forester to Bridport tramway past the Forester River and returning to the Scouts Cabin.

It takes a good twenty minutes, this July day, to meet, greet, and change cars. Twenty four field nats. have opted for this outing because they know it'll be full of interesting historical anecdotes and natural history tid-bits, as Mike Douglas' outings always are. We drive in fewer cars from the Scout Cabin to the top of Williams Hill.

The upper and middle slopes of the western face of Williams Hill carry tall wet eucalypt forest dominated by *Eucalyptus obliqua*, stringy bark, and *E. regnans*, stringy gum, with an understorey of tree ferns: *Cyathea australis*, the rough tree fern and *Dicksonia antarctica*, the soft tree fern or manfern. and dogwoods, *Pomaderris apetala*.

The track descends through old growth stringy bark to Murgatroyd's Creek, where there is an attractive corridor of mature stringy gums, among them the impressive "Uncle Reg" with a height of 67m. and a girth of 7.3 m. Ironically this fire sensitive species, depends on fire for its survival. A very light-demanding species, it needs a severe fire of a frequency of at least once every 300—400 years to provide an unshaded seed bed for germination and rapid growth—before the shade tolerant understorey species can re-establish. Initially there may be 2.5 million seedlings per hectare. Eventually, natural thinning reduces this to 2 or 3 stems after about 400 years.

The understorey was interesting and diverse, with *Coprosma quadrifida*, native currant; *Beyeria viscosa*, pinkwood; *Pittosporum bicolor*, cheesewood; *Notelaea ligustrina*, dorrel or native olive; *Zieria arborescens*, stinkwood; *Olearia argophylla*, musk; Monotoca glauca, currant wood; *Bursaria spinosa*, prickly box; and many other species. The orchid lovers with their heads to the ground were not disappointed. Early on in the downhill walk we came across a patch of helmet orchids in flower, and a little later on, the tail-end charlies gloated over a lone specimen of the Gunn's tree orchid, Sarcochilus australis, not in flower, which everyone else had passed at close hand.

Not many have seen this orchid. Its not that its difficult to identify, but you need to look up—not down which is where orchid lovers generally look. It's a clumping green epiphyte growing on small shrubs and trees at about eye height. Its not exactly rare but rather has a specific habitat which over the last twenty years has seriously depleted. Its found most commonly in sheltered, shady, moist gullies in the east, central north, north west and the Furneaux Group. Because it will not tolerate prolonged exposure to sun and drying wind, it is most threatened by the clearing of forest around moist gullies causing its habitat to dry out permanently. The aerial roots are long and white, there is a tuft of flat leathery leaves, and the flowers appear in a long pendulous, sweetly scented raceme. This drawing of the Gunns Tree Orchid is from the Society for Growing Australian Plants Tas. Region Inc. plant Identikit titled "Orchids of Tasmania".

At the bottom of Williams Hill, the track joins the Pearly Brook Road, and it would be possible to follow this back to the Scout Cabin, but it is much more interesting to follow the old tramway formation along the banks of the Pearly Brook. In 1912 - 13 the Tasmanian Timber and Tramway Company built a large mill alongside the Pearly Brook and then constructed a 27 km railway to Bridport, from where stringybark, stringy gum and blackwood sawlogs were shipped to Melbourne.

The Pearly Brook is beautiful: lush and green, mossy and ferny. The king fern, *Todea barbera*, thrives on the rocky banks. The damp flats are dominated by *E. ovata*, swamp gum and *A. melanoxylon*, blackwood. Amongst the dense low layer of ferns is *Hypolepis meulleri*, the harsh ground fern; a species that is uncommon in Tasmania except for flats along the Forester and Boobyalla Rivers.

We are pleased to welcome some new members to the club. Welcome to Liz Springer who has already been on a couple of outings, but this was the first for Rina Boekhout from Branxholm and Adrian and Leonie Geard from Hagley. We look forward to your company on future outings.

Have you noticed how generous Field Nats are? It'll put your mind at rest to know that if you come without lunch our quick whip around can produce enough for a three course meal.

Another thing we are is punctual. Even though it seems like we stand around talking a lot, we do like to get "out there" as soon as we can after 10am. Apologies to Christine who missed us on this occasion.

Thanks to Mike for another 'bonza' day and for allowing the use of his notes for this report.

# Birds Australia.

Birds Australia began life as the Royal Australasian Ornithologists Union (RAOU) in 1901. It was thought that title was a bit of a mouthful, so it is now called Birds Australia. It is an organisation dedicated to the conservation, study and enjoyment of Australia's native birds and their habitats. It works with scientists, wildlife managers, land holders and nature lovers across the continent to study, monitor and protect native birds and their natural habitats.

B.A. has an Australia-wide membership for whom they publish a magazine **Wingspan** and an ornithological journal **Emu.** Birds Australia runs four bird observatories, non-profit enterprises with running costs met by visitors' fees and donations. Scattered over the Australian continent in very different habitats, each has a unique character defined by the landscape, climate, vegetation, and the birds and other animals that live there, as well as by the history of the land and buildings. All observatories are run by resident wardens and are open to the public. They offer outdoor activities, educational and environmental courses, and participation in research projects such as bird banding and fauna surveys.

## **Gluepot Reserve**

The Black-eared Miner is one of Australia's most endangered birds. The species looked doomed to extinction, when in 1996 a Birds Australia volunteer reported sighting Black-eared Miners in the region of Gluepot Station. However, the owner of Gluepot Station had applied for approval to burn areas of the extensive mallee to increase fodder for his sheep.

Further surveys by volunteers confirmed that not only were Black-eared Miners and Malleefowl present in good numbers, but robust populations of four other nationally threatened birds occurred on Gluepot Station. The owner of the property indicated that he was happy to sell what was a marginal pastoral lease.

The 54,390 ha (134,000 acres) property measuring 37 x 14 km underwent detailed assessments of its significance in the land-scape, its vegetation communities and its birds, and the decision to purchase it was made. The effort to raise \$360,000 began. Over 2,400 people and organisations helped buy Gluepot Station in just ten weeks. Moreover, Founders pledged over \$30,000 per year for the next five years to assist with management.

As the volunteer Management Committee and first volunteer Rangers took up office in July 1997, it was time to take stock of what Birds Australia had purchased. Gluepot Reserve joins the Bookmark Biosphere Reserve (900,000 ha), an internationally significant area with direct links to other large conservation reserves in New South Wales and Victoria. It is part of the largest block of intact mallee left in Australia and so the viability of threatened bird populations and other flora and fauna there is high.

The six nationally threatened species of bird on Gluepot Reserve include the Black-eared Miner, Mallee-fowl, Red-lored Whistler, Regent Parrot, Scarlet-chested Parrot and Striated Grasswren. A further 17 species of regionally threatened bird live there (eg Major Mitchell Cockatoo, Hooded Robin and Redthroat). In all, 190 species of bird have been recorded on Gluepot Reserve.

Gluepot Reserve has a diversity of vegetation communities which support important wildlife other than birds. Reptiles are particularly abundant with 42 species located so far, including the threatened Bandy Bandy. The last big fire on the Reserve occurred 50 years ago, but many areas were not burnt leaving substantial areas of mallee and Casuarina woodland with trees that are hundreds of years old. These old trees have numerous hollows for nesting birds and deep litter for ground-foraging species. The vegetation quality is particularly high in the eastern third of Gluepot because the lack of water for a 10 km radius means that grazing impacts have been minimal.

The property is open to visitors who for a small fee can take advantage of the extensive improvements and infrastructure that the voluntary Management Committee and rangers have put in place.

Newhaven Station is 262,600 ha (approximately 80 x 35 km) or 650,000 acres in size, and lies 363 km or four and a half hours drive north-west of Alice Springs. It has many of the characteristics of the remote Great Sandy Desert and yet it is very accessible. The area is extensive, complex and intact. It is home to at least 15 nationally threatened species of animals and plants. It boasts ten vegetation communities and a wide array of landforms, none of which are well represented in existing reserves. Most intriguingly, however, Newhaven is also the site of one of the latest sightings of a pair of Night Parrots. Habitat suitable for the parrots remains intact and abundant because of the unusually conservative stocking rates and careful management in the past. It is essential that this habitat, which is also favoured by grazing stock, is protected for Australia's most enigmatic bird. If the property were sold elsewhere, we could not be certain of continued good management.

### **Eyre Bird Observatory**

Eyre is the oldest and remotest of Birds Australia's observatories. It is situated in the wilderness of Nuytsland Nature Reserve, nestled among the mallees (small multi-stemmed gum trees) and sand dunes 50 km from Cocklebiddy Roadhouse (on the Eyre Highway) and one kilometre from the sea to the south, sandwiched between the coast of the Great Australian Bight and the southern edge of the Nullarbor Plain in Western Australia The observatory and its surrounds provide a sense of isolation and adventure

and a base from which to relax and watch birds.

The building is of historical importance; formerly the Eyre Telegraph Station, it was built in 1897 near a spot where explorer Edward John Eyre camped during his epic overland journey across the continent in 1841. For thirty years it was occupied by workers maintaining the east-west telegraph line, but was abandoned in 1927. It remained unused and virtually forgotten for the next fifty years until the RAOU (now Birds Australia), with the WA Dept of Fisheries & Wildlife and the Post Office Historical Society, collaborated to restore the building in 1977. In the 40 kilometres between the Highway and the Observatory the road plunges over the 70-metre escarpment from the Nullarbor to the sandy, mallee-covered coastal plain. The old telegraph station lies within a short walk of the ocean, and is dwarfed by towering white sand dunes.

Because of its remoteness, courses at Eyre usually run for a full week rather than a weekend. Camping is not permitted. Casual visitors who drive to the Observatory along the main access road need a fourwheel drive vehicle to negotiate the steep escarpment and the sandy track. Pre-booked visitors can arrange to be picked up from the Cocklebiddy Roadhouse where cars and caravans may be parked for the duration of the visit to Eyre.

Eyre has an impressive bird-list of over 240, comprising a mix of mallee and grassland birds, waders, seabirds and many other vagrants and regular visitors, including species driven to the coast by inland droughts. Mammals seen regularly include a variety of bats, Western Pygmy-Possums and Southern Right Whales. Eyre also has the easternmost records of the tiny nectar-feeding Honey Possum.

#### **Barren Grounds**

Situated in the Barren Grounds Nature Reserve, a plateau on the Illawarra Escarpment of New South Wales, this Bird's Australia Observatory was opened in 1982. The 2000-hectare Reserve is predominantly heathland (created by means of shallow soils in a hanging swamp) with pockets of woodland, wet eucalypt forest and rainforest. The Reserve boasts spectacular scenery, with breathtaking views along its various trails towards the coast.

The Reserve, managed by the NSW National Parks and Wildlife Service, is home to a diverse array of wildlife, including the threatened Ground Parrot and Eastern Bristlebird (endangered in NSW) - as well as other heathland and woodland species, and is particularly attractive to honeyeaters in winter. It has been a protected area for over 40 years and has a bird-list of over 150 species, with more than 500 species of plants. Spotted-tail Quolls and Long-nosed Potoroos have been seen.

The Observatory offers a regular program of weekend nature courses which are fully catered and accommodated. Expert guidance is provided for people to participate in outdoor activities and scientific research.

#### Broome

Broome Bird Observatory lies about 25 kilometres by road from the old pearling township and tourist centre of Broome in north-west Australia. It is situated on Roebuck Bay, summer home to 150,000 migratory waders (or shorebirds) and is recognised as the most significant shorebird site in Australia. Established in 1988 as Birds Australia's only tropical observatory, it serves as the base for regular international wader study expeditions and other research projects.

Within walking distance of the Observatory are mangroves, the mudflats of Roebuck Bay, tropical Pindan woodlands and natural grasslands. These varied habitats hold a corresponding variety of birdlife, and BBO's bird-list has more than 310 species (40% of Australia's total), including some notable rarities such as Arctic Warbler.

The coast of north-western Australia experience the two dramatic extremes of a tropical monsoon climate - simply called the Wet and the Dry. Generally the Wet lasts from November to March and the Dry from May to September. The Wet is the hottest and most humid season, and is also the time to see the huge numbers (both of species and absolute) of the migratory waders that breed in northern Asia and the Arctic, and spend the non-breeding season in Australia. The Dry is cooler and drier - with maximum daytime temperatures normally around 26-35 Celsius - and is the main tourist season. Wader numbers are lower, but still significant - being mainly of first or second-year birds not ready to return to the breeding grounds.

Various types of accommodation are available at the Observatory, including the Chalet, single, double, family and bunk rooms, as well as both powered and unpowered camp sites. Return pickups from Broome are available for overnight guests. A small charge applies for casual day visits to the Observatory.