

ARTICLES FROM THE LAUNCESTON NATURALIST

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JUNE 3 - PATRICK FILMER-SANKEY

Patrick Filmer-Sankey gave members a lecture on the future of the Museum. He spoke of how he became committed to natural history and to museums when he was young and his subsequent areas of employment over the years and how he finally arrived in Launceston as Director of the Queen Victoria Museum and Art Gallery.

He outlined the progress made with the two sites and the events of the last couple of years. One large change will be the re-location of the Planetarium to Inveresk although the precise site had not been chosen when he spoke to us.

Patrick was excited by the prospect of revealing the fine original 1890's décor and design of the Royal Park building and considered it a special place to exhibit the extensive and wonderful collections. The role of the Royal Park site will change to being an art gallery, the building to be restored to its original configuration with the mezzanine floor re-instated. Fortunately all early decor and features are still there and were only covered up when the building was re-modelled. The present zoology gallery will be used as a venue for contemporary art and travelling shows as it will be the only 'environmentally controlled space' available.

The back section of Royal Park is to be utilized for safe storage of the collections as, among other pluses, it is above flood level. Royal Park has been closed and will not be open again until 2010.

Patrick also gave details of the future plans for some of the galleries and exhibitions at Inveresk and of co-operative use of an area with the University. He told us how successful the Phenomena Factory had been with about 9000 people through on the first day of the school holidays.

He also mentioned the huge amount of work needed to bring the natural science collections up to scratch to be finally able to make them available for worldwide access. Marion Simmons

JUNE 28 - MUSEUM VISIT WITH PATRICK FILMER-SANKEY

Fifteen LFNC members enjoyed a very informative tour of the Queen Victoria Museum's site next to Royal Park, Launceston. At the end of May this part of the QVM closed to the public to allow changes to its structure and contents. It should re-open in 2010.

While inside the main building the visitors formed two sub-equal groups which swapped places at "half-time". The Director, Patrick Filmer-Sankey led one group throughout the ground floor and first floor to explain the planned changes to the building. Meanwhile a zoologist, Judy Rainbird, introduced the other group to the Natural History dry-preserved collections which are kept in the basement.

The original core of the museum was opened in 1891. During the 20th Century there were several additions to this building, the last of them in the 1960s. At present most displays have been cleared from the galleries and removal of unwanted fittings has begun. Some long-hidden ornate metal ceilings are visible again.

In earlier years two large skylights allowed daylight to reach galleries underneath. Some false partial ceilings will be detached to expose these light sources and the roof beams nearby.

The large rooms nearest to Wellington Street will house a revised Art Gallery and Fine Arts and Crafts displays. Beyond them the former Zoology gallery will be a neutral room with good temperature and humidity control, suitable for travelling and other special exhibitions.

The 1960s wing, furthest west, will become a storage area for collections which are now cramped for space at Royal Park and for some to be transferred from the QVM's other site at Inveresk. Access and study space will be available for people who wish to research items held here.

The museum's basement contains workrooms for Natural History staff and the "dry stores" for specimens in their care. The Staff and these collections will remain at Royal Park while future Natural History displays will be shown at Inveresk.

Our tour group concentrated on Vertebrate Zoology plus a brief look at pinned insects. Judy explained that the museum's holdings are used for research study by specialists, including people from beyond Australia. In many animal groups the Tasmanian fauna is particularly important.

Information about the QVM's specimens is being added progressively to OZCAM, an online Museums database.

At present there is no staff Curator for either Botany or Geology. However, these collections, also, are available for study when needed.

The basement tour ended with a quick look at live dermestid beetles whose larvae are cleaning the skeleton of an alpaca. Their container is well isolated. When all flesh has been eaten the bones will be frozen to make sure that stray dermestids die. They are not wanted elsewhere!

After 1.5 hours in the museum's main building the two LFNC groups re-united and accompanied out guides to the Vertebrate Zoology "wet store". This modern structure is located in the grounds. Most of the animals here are preserved in 75—80% ethanol. Recent additions include two red foxes; those caught in Burnie and near Cleveland, Tasmania.

At present the Invertebrate Zoology "spirit store" is located in the TAFE College next door to the museum. Eventually when funds permit, a special building on the QVM's Royal Park site should be provided for these many invertebrates preserved in ethanol.

Thank you to Patrick Filmer-Sankey and Judy Rainbird for a very interesting morning which combined a preview of future changes with an awareness of the ongoing curation and study of the Queen Victoria Museum's Zoology collections. We look forward to 2010. Alison Green

JULY 1 - DAVID OBENDORF ON TASMANIAN MONOTREMES AND MARSUPIALS

During the General Meeting Dr David Obendorf discussed conditions which affect Tasmania's two monotremes, platypus and echidna, and seventeen marsupial species.

The latter were the thylacine (now presumed extinct), Tasmanian devil, spotted-tail quoll, eastern quoll, eastern barred bandicoot, southern brown bandicoot, common wombat, forester kangaroo, Bennett's wallaby, Tasmanian pademelon, Tasmanian bettong, long-nose potoroo, brushtail possum, ringtail possum, sugar glider, eastern pygmy-possum and little pygmy-possum.

For each of these species, in turn, he dealt with distribution, abundance, health and threats. Not included were our three smallest species of Dasyuridae, the rarely seen dusky antechinus, swamp antechinus and white-footed dunnart.

Platypus are widespread in Tasmanian freshwaters. However, a fungal disease which causes ulcers is gradually increasing its range. Also platypus accumulate toxins from pesticides which filter into water and pollute the small animals on which they feed.

Echidnas also are widespread in Tasmania and they are basically healthy. Their main threats are habitat loss and road kill.

Thylacines were driven to extinction because of a sheep-killer reputation which they did not deserve. Strychnine and arsenic were used in baits and a bounty was paid from 1888 to 1912. Formerly widespread, the last thylacine in captivity died in 1936.

Among Tasmania's living marsupials some are common and familiar, eg. Bennett's wallaby, pademelon and brushtail possum. Others are little known and rarely seen, such as the two species of pygmy-possum. In comparison with past years some species have declined in number, eg. Spotted-tail quoll, or their distribution has reduced considerably, as with forester kangaroo. Tasmania is the only remaining territory for the eastern quoll which no longer inhabits mainland Australia while some other species are now rare there.

Several diseases affect Tasmanian marsupials. A particular risk is toxoplasmosis, a disease of cats which is caused by parasitic Protozoa. Native mammals can be infected when in areas used by feral cats. Barred bandicoots, Bennett's wallabies, pademelons and wombats are among those susceptible.

Wombats also suffer scabies, a skin complaint caused by parasitic mites. A fungal infection affects ringtail possums. Brushtail possums acquire "wobbly possum disease" whose cause is not known yet.

Bennett's wallabies and pademelons are targeted by 1080 baits because of, respectively, their competition with sheep on grazing land or their browsing on juvenile trees. Carnivorous animals which feed on 1080-killed victims can die from secondary poisoning, eg spotted tail quolls.

Smaller marsupials are preyed on by cats and sometimes by dogs. Bandicoots, sugar gliders, ringtail and pygmy-possums are at risk here.

According to tradition, sugar gliders were introduced to Tasmania from mainland Australia in or

about the 1830s. If this was so then they spread quickly here.

Dr Obendorf reviewed the history of the Tasmanian devil from the earliest written reference, in 1807, until now. During the first half of the 20th Century devils became rare. In 1953 there was a change in use, from strychnine to 1080, in baits for species causing trouble. Unlike some other marsupials, devils are not vulnerable to 1080 so they can eat animals killed by this poison and not die themselves. Thus their numbers increased rapidly from a relatively small source.

From the 1990s onwards there has been much concern about the Devil Facial Tumour Disease which has spread outwards from the NE corner of Tasmania where it was first recognised. This cancer is transmitted by biting. A newly-infected animal does not recognise the cancer cells as foreign so no rejection occurs. Too close a genetic relationship between current devils may be a factor here. Research into this major threat continues.

The species of monotremes and marsupials in Tasmania differ considerably in their relative abundance and well-being. Habitat loss and road kill are general hazards for them all. Other risks, such as disease, poisoning and predation, vary according to the species involved. For all of them monitoring should continue in an attempt to keep them safe.

Thank you to Dr David Obendorf for his thought-provoking talk and for admired photos of the animals presented.

Alison Green

JULY 5 - FIELD TRIP TO TASMANIAN ARBORETUM, EUGENANA

Members met at Windmill Hill as usual and headed off with a planned stop at a Latrobe Park for morning tea. This was an extra long morning tea after one member discovered the nearby bakery and its delicious meat pies and pasties. On the road again we arrived at the Arboretum a little later than expected and were met by Dick Burns (from Australian Plant Society NW Group) a volunteer at the Arboretum. He informed us he would be our guide on the site and that Marion and John Simmons were already on the track heading to the Tasmanian native collection.

Dick advised that the tree park was founded in 1984 and planting first began in 1986. The park is 58 hectares with steep and gentle slopes and large areas of flat land. Melrose Creek and the Don River flow through the property and there is a lake with a couple of islands. Work in the park is carried out by a group of volunteers.

We first walked through trees and shrubs descendent of the Gondwanan areas while heading uphill to the Western Hill Lookout where we could see over a fair portion of the park. Down below large numbers of native hens were running around and squawking loudly on a flat area adjacent to the lake.

Heading downhill Dick pointed out an area that had been recently planted with 20 Wollemi pines. Next we came to a magnificent grove of white gums which were well established when the property was purchased. We caught up with the Simmons at the collection of Tasmanian native trees and shrubs. There were many eucalypts and Dick said that all the Tasmanian conifers were present. We continued into the Tasmanian Rainforest area and from here members headed in a couple of directions - the Don River walk and others with Dick to have a look over some recently planted areas adjacent to the rainforest area, with everyone meeting up again at the picnic area shortly thereafter to thank Dick for showing us around.

Lunch was next on the agenda and was either taken at the kiosk (they make a beaut hot chocolate) or in one of the huge undercover picnic areas.

After lunch, with the sun out for the first time that day, we walked half way round the lake to Limestone Hill with some members climbing to the lookout which overlooked the neighbouring cabin park. We then headed back to the lakes edge where we saw 2 swans with 2 cygnets, a goose, large and small platypus at four different locations, many grouse and ducks. Other birds seen during our visit included blue wrens, fantails, green rosellas and swallows. We also saw a dark grey mystery mouse hopping about on a trail on the only lake island which is accessible by bridge.

The visit was very enjoyable and we are very thankful to Dick for giving his time to show us this beautiful area.

Karen Manning

PLANTS AT EUGENANA

The plants were very interesting. Our walk started on a path winding up the hill from the visitors centre, many of the trees looked vaguely familiar and we soon discovered why. A number were from

South America, including quite a few from Chile, a country that was also once a part of the ancient continent of Gondwana.

There were several pine trees and various species of *Nothofagus* (Myrtles), in one case a species of *Tasmannia* (one we call 'Native Pepper'), several species of *Eucryphia* (Leatherwoods) from Chile, as well as some from New Zealand, followed by a series of deciduous species of Myrtles from other countries.

A beautiful grove of tall, straight-trunked white gums (*Eucalyptus viminalis*) was a feature of the walk. We walked around and up the hill to the Tasmanian alpine section where we noted, among others, some mature plants of various endemic *Richea* species, several very large plants of *Boronia citriodora* (lemon-scented), waratahs (*Telopea truncata*), Blanket Bush (*Bedfordia salicina*), the vine *Muehlenbeckia* and the endemic *Acacia pataczekii* with plenty of room for it to sucker.

Below this we could see numerous new plantings. It will be interesting to see how they progress now that the whole area is enclosed by a possum proof fence. Marion Simmons

CORMORANTS

After watching cormorants surfacing among the pelicans fishing in the Trevallyn Tailrace, it occurred to me that not much is written about these birds, so I set out to find out something about them. They are well adapted to a life of fishing for food in an aquatic environment. They have developed short legs with broad, webbed, four-toed feet set well back on their bodies to enable them to propel themselves forward powerfully when chasing prey. Some species swim low in the water before diving with a small leap and stay underwater for about half a minute before re-surfacing. Food is mostly fish or small crustaceans caught in long beaks that are armed with tooth-like hooks on the tips of the upper jaw to enable them to hold their catch. They swallow prey head first. After feeding, these birds are a common sight perching with wings outstretched to dry on rocks, jetties, posts etc. along the Tamar River and in other areas of the State.

Four species are seen around Tasmanian waterways:

Black-faced Cormorant - c. 65cm measured from bill tip to tail tip. A black and white bird larger than the Little Pied Cormorant, it has a black back, black flanks and head, the black taking in the eye area, below which all is white; the bill is black, the legs and feet black, the eyes emerald. Largely a marine species, often referred to as a 'shag'. It has highly developed nasal glands capable of excreting excess salt from its system. Its distribution is southern coastal Australia including Tasmania. It feeds on scale fish and squid that it catches in underwater dives.

Great Cormorant - 80-85 cm or larger. The largest of the cormorants, it is nearly all black except for white or yellowish patches on cheeks and throat; its feet and legs are black, eyes green. Widespread and common in Australia as well as overseas, it is found on inland lakes, rivers, dams and coastal areas. As with other species its presence is determined by the food available. It eats a wide variety of fish, crustaceans and even eels.

Little Pied Cormorant - 50-55 cm. is a black and white bird, the most common and smallest of the species in Tasmania. It has a black back, including the top of the head, is white above the eyes, with a white or sometimes rusty coloured chest and short yellow bill; legs and feet are black. It does not have black flanks as found in the larger Black-faced species. It ranges over most of the mainland and in Tasmania is found mostly along freshwater waterways, highlands to the coast. It is a common resident or nomadic species following the food supply. It feeds mainly on crustaceans.

Little Back Cormorant - 60-65 cm. is a slender, all black bird, including its face. It often associates with the Little Pied and tends to feed in flocks often working together to round up schools of fish. It is a less frequent visitor than the Great Cormorant.

An occasional rare visitor is the larger **Pied Cormorant** - 70-75 cm. A black and white bird with black flanks, distinguished by a long pale flesh pink bill and a yellow or orange patch of skin in front of the eye.

On checking the Tailrace recently, the cormorants seem to have disappeared, along with the pelicans, so I will have to wait until they return to check which species fish there. Marion Simmons

ANN GET-TOGETHER 2008 - TOP END

This was a great week, so good that Sherry decided to move there permanently. But where were the crocodiles? They must be like fish: plenty if you had been fishing yesterday, or tomorrow, but

never any fish today. I only saw one, crossing the South Alligator River bridge (the bus, not the crocodile).

Accommodation at Mary River was fairly basic, more or less a tin box with 2 beds, cold shower and toilet. They were air-conditioned, however, and the shower/toilet had frogs and geckos.

On the first night, the aboriginals of the area welcomed us to country with dancing, didgeridoo music and singing around their fire.

On the first full day we visited a nearby billabong and spent a little time at Windows on the Wetlands. We had to return to camp, however, as someone in the other group had become lost. We found out later he had become separated from his group and wasn't sure of the way back to the bus. He could hear traffic on the Arnhem Land Highway so walked that way. Almost certainly he would have been better to stay where he was but he made the road, flagged down a car and asked the way back to camp. Meanwhile search parties were out with at least one helicopter. Meanwhile, back at the camp the news got worse, helicopters circled and everyone was feeling grim until he walked in and asked what all the fuss was about. Good outcome, poor process and a lesson to us all.

The next 2 days were spent at Kakadu. Half of the group spent a day at the Culture Camp. The other half visited Bardedjildji and Ubirr on the Arnhem Land Escarpment or took a flight over the Escarpment. The Culture Camp group were shown bush tucker, cooking in an earth oven, weaving, dyeing, didgeridoo making and playing and hunting with spears and spear throwers. For morning tea there was damper with bush plum or rosella jam (for southerners, this is a fruit, not a parrot, and very good it is too). Lunch was buffalo stew.

Around 90% of Australian bush fires are in the Northern Territory. The early Dry season, when we were there, is the best time to clean up the dead wild sorghum that would otherwise choke the grasslands. The ground is still a little damp so a fire lit in late afternoon will burn quietly and go out overnight. Those who went to Bardedjildji on the second day saw this. The people who visited it first said the bush and flowers were lovely. On the second day, however, it was black and still smoking a little. Safe to walk through, though. Nothing like the hot fires in Tasmania, where the burnt areas are dangerous days later.

The next day (Wednesday) we were taken along the Marrakai track, through typical Top End savannah. African savannahs are covered by huge herds of grazing animals. So are Australian savannahs but here the herds are termite mounds. Free-standing mounds such as those of Cathedral termites are grass-eaters. The nests of wood-eating termites are on or inside trees. Frequent fires and termites mean that savannah eucalypts are small. Just about the right size for a didgeridoo, once the termites have eaten out the heartwood. The melaleucas are usually much bigger, so that, with their sickle-shaped leaves, a casual glance can mistake them for eucalypts.

Thursday was, for many, the highlight of the week when we went to the Territory Wildlife Park. Here we were up close and personal with their raptors. Almost all Australian raptors can be found in the Northern Territory. Helped by the little train that circles the grounds, most tried and failed to see all the exhibits, which were based on Territory habitats. Easily worth another visit.

Then it was Fogg Dam, originally built for the Humpty Doo rice project and now a large wetland habitat, with adjoining swamp and monsoon forests. Also vicious mosquitos. I had been telling myself that a tough Queenslander could take anything the Top End had but here I had to take to the repellent. There were Royal Spoonbills, Pied Herons, 3 species of egret, Rajah Shelducks, Jacanas, Scrub-fowl, Glossy Ibis, Magpie Geese, Crimson Finches, Wagtails, a Darter and a Lemon-breasted Flycatcher. Some even saw a crocodile. Of course, I didn't. Someone did suggest, however, that if I went and danced at the water's edge, I might get a very close view indeed. I must have upset him.

The last trip was to 3 sites along the Point Stuart Road. At Brian Creek I got only about 100 metres along the track where *Utricularias* and *Droseras* were flowering. Also, unless I am very much mistaken, one yellow *Xyris*. At Mistake Billabong, a small Water Monitor posed on the edge of the viewing platform until everyone had taken all the photos they possibly could.

The next day it was all over. Back to Darwin and then home. Actually, most left for home the day after that. Planes leave Darwin for the eastern States at very stupid o'clock, somewhere around 2 am. But it had been a great week. Roll on August 2010, when the next ANN Get-together will be in Chinchilla, in the brigalow country about 400 km north-west of Brisbane. Be there. John Elliott