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GPO BOX 249
CANNBERRA ACT 2601

FIELD NATURALISTS' ASSOCIATION OF CANNBERRA INC.

FIELD NATURALIST

MEETING—THURSDAY

7:30 pm Australian National University

Gould Seminar Room, Building 116, Daley Road, ANU, ACT

Details back page

The Camellia Ark Strategy, conservation of Australia's rare camellias

Speaker: Stephen Utick

Camellia, a genus of the Family Theaceae and originally endemic to East and South East Asia, now represent a globalised flora prized for commercial value and its use in ornamental horticulture and floriculture. These plants may seem an odd choice for conservation, but in Australia's case it has become necessary due to strict quarantine restrictions that severely restrict future importation into Australia. Any camellia species or cultivar that Australia now has, if lost, cannot be replaced. In response, the Camellia Ark project aims to conserve for Australia its rarest camellias: initiated by the E. G. Waterhouse National Camellia Garden.

The presentation will conclude with a brief overview of the newly formed Historic Camellias Group of the International Camellia Society, and the work of preservation of endangered species in Vietnam by Australian plant explorers and scientists Dr George Orel and Tony Curry.



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Macquarie Island is declared officially pest-free

Media release by the Hon. Greg Hunt MP, Minister for the Environment

I am delighted to announce the Macquarie Island Pest Eradication Programme has been completed—and after two years of extensive monitoring the island can now officially be declared pest free.

The island is the largest and most remote location where the total eradication of three invasive species has been successfully completed; ship rat, rabbit and house mouse.

This success is due to the hard work and dedication of scientists, ecologists, hunters and trainers and their remarkable detector dogs.

Tonight the dogs have arrived home in Hobart signalling the completion of their task. Before the programme started the Macquarie Island World Heritage Area was in severe

danger. Ship rats were attacking and killing the chicks and eggs of endangered seabirds. Rabbits had destroyed the breeding grounds of nesting seabirds, including albatrosses, petrels and prions, and the pests had caused extensive erosion and destabilisation of the island's mountain slopes.

A landslip at Lusitania Bay resulted in the deaths of over 100 king penguins. The decline of the island's vegetation was an immediate threat to nine seabird species that used the area for breeding. It was estimated the island's rabbit population exceeded 100 000.

The Australian and Tasmanian governments have invested more than \$24 million to ensure

one of the world's most fascinating places, and its inhabitants, is preserved.

After extensive planning and research, aerial baiting for the pests began in winter 2010. In

2011, to prevent seabird deaths from the consumption of poisoned rabbit carcasses, people were sent to the island to find and remove carcasses before they were eaten by the scavenging seabirds.

Teams of skilled hunters and specially trained detector dogs eliminated the remaining rabbits. The dogs were trained to locate rabbits but not to harm native animals. Three specially trained rodent detector dogs were sent to the island in March 2013.

Since August 2011 six dog handlers, four hunters plus two rodent hunters and a team leader have covered more than 90 000 km on foot looking for signs of rabbits, rats and mice.

There have been no confirmed sightings of ship rats or house mice since July 2011 and no confirmed sightings of rabbits since December 2011.

The programme has resulted in a dramatic recovery of the island's flora and fauna. Plant species that were at considerable risk of extinction and those which give Macquarie Island its distinctive character such as tussock grass, Macquarie cabbage and silver-leaf daisy are all showing a remarkable recovery.

The blue petrel is now breeding in a more widespread area on the main island and terns are now able to breed on cobblestone beaches. Grey petrels have had their most successful breeding season since recording of their populations commenced in 2000.

Most of the dogs are now enjoying a well earned retirement with some continuing to work with Tasmanian Parks and Wildlife Service.

I would like to thank everyone who has been involved in this important programme.

Background on Macquarie Island

Macquarie Island is roughly halfway between Tasmania and Antarctica and is recognised as having one of the greatest concentrations of seabirds in the world.

The island is renowned for the spectacular beauty of its remote and windswept landscape. Its steep escarpments, lakes, and dramatic changes in vegetation provide an outstanding spectacle of wild, natural beauty and are complemented by vast congregations of wildlife such as penguins and seals.

Macquarie Island was placed on the World Heritage List in 1997.

At almost 34 km long and 5.5 km wide, Macquarie Island is the only island in the world composed entirely of oceanic crust and rocks from deep within the earth's structure or mantle. Ten million years ago the rocky outcrops on the north of the island began their journey from 6 km below the earth's surface to the ocean's floor. Macquarie Island was born as the rock and oceanic crust was squeezed upwards in a 2.5 km journey to emerge above the sea surface nearly 700,000 years ago.

A permit system administered by the Tasmanian Parks and Wildlife Service allows just 1000 people to visit the island each year.

For more information on Macquarie Island go to <http://www.environment.gov.au/node/34799>

Media contact: John O'Doherty 0402 047 852

Tree selection at the National Arboretum

The tree species planted at the National Arboretum have been carefully selected by an expert panel for their conservation status, symbolic nature, aesthetic value and suitability for the site and climate. Many of the trees for the Arboretum forests were chosen from the International Union for Conservation of Nature's Red List of Threatened Species, an international listing of all trees considered endangered. The expert panel responsible for selecting the trees was chaired by Professor Peter Kanowski from the Australian National University and included botanists, arborists, horticulturists, consultants, ecologists and taxonomists.



The cork oak tree plantation

Currently, at least thirty two species of threatened trees are growing at the Arboretum, including two species that are extinct in the wild and only survive in cultivation, five critically endangered, eleven endangered and fourteen vulnerable species. Nine of these threatened species are native to Australia. The forests also act as botanical arks and seed banks for the future.

Some trees were chosen because they provide outstanding seasonal colour, are a national tree and/or provide habitat for Australian native wildlife.

Bob Lehman

Fungi airborne and earthbound

John of the Friends of the Pinnacle held a guided bird walk in the Pinnacle Nature Reserve on 6 April. This was a joint venture with the Field Naturalists, with a few additional visitors. In all we saw or heard a total of 31 birds.

However, birds were not the only attraction. The group also spotted some interesting fungi. After the recent rain it seems to be perfect

weather for fungi, and not just earthbound.

Straight after the bird walk I attended the Hawker Primary School fete, then walking home afterwards, I noticed an interesting cloud formation that looked just like a mushroom, or perhaps a toadstool.

During the next week I also found some fungi near the lake behind the Hyatt Hotel, as well as in the Pinnacle Reserve.



Interesting observation

On each of my visits to the Hawker ovals in the past weeks I have seen or heard the fabulous King parrots.

Easter Monday was no exception as I counted at least 23 parrots feeding on the ground, with others in the trees above. What was unusual however, was that of all the parrots I saw, not one was a male. They were all female or juveniles.

Can anyone explain this?

The photo is of a more typical flock.



Spotter's spotlight

What have you spotted this month?



Erosion west of Strathnairn. Devastation and potential: Creekline with line of Murrumbidgee in mid-distance.



Unimproved paddock: Strathnairn 2013: dung beetles target & quizzical cattle.

Rosemary Blemings sent these photos

If you have made an interesting observation send a photo and / or a short report to the Editor at alison.milton@health.gov.au

Soils for life

The ANBG Friends Thursday lecture series brought an inspiring presentation to a full house on Thursday 10th April. Simon Gould discussed “the role of the Soils for Life program in encouraging change in managing agricultural landscapes”. Julian Cribb was quoted early in the presentation, setting the scene for the severity of the situations faced by all nations; the ability to feed the world’s present population, the future prospect of 9 billion mouths to feed and the continuing degradation of the planet’s agricultural land.

The objective of the Soils for Life program is “To facilitate positive and sustained change in how the Australian landscape is managed to ensure a thriving natural environment for the benefit of all Australians.”

The organisation has documented, as case studies, the leadership shown by 19 farmers around the country as they improved soil health, managed water flows, enhanced native vegetation, changed cropping and grazing regimes and increased the biodiversity and productivity of their properties.

The slides gave glimpses of several of the 19 properties, with three local to our area also being featured: John and Robyn Ives’ grazing at Talaheni 40 kms south of Yass and Martin Royd’s Jillamatong near Braidwood. Gunningrah’s closest township is Bombala with a century of connection to the Maslin family. Each property is different and no single technique provides an answer, however restoring the natural elements of the properties’ soils is the vital common thread and key to their owners’ successes.

Soil health is improved by re-applying natural biological cycles involving fertilisers in the form of composts, animals’ dung; utilising weeds and green

manures to build the humus content of soils; applying a variety of ‘interventions’ to capture rainfall, re-direct its flow across the landscape and utilising plants to slow and filter water and reduce evaporation.

Studies of previously existing vegetation patterns in each landscape inform strategic re-planting of species native to the properties at each elevation. Such plantings create shelterbelts, restore water-tables where salinity dominated, attract insectivorous bird species, which provide pest-control services and recreate the balanced micro-climates destroyed by the mantras of land clearing and land-exploitation.

Owners have their faith in and love for their land enhanced as the pioneering changes recreate relationships between their agricultural production and the ecological influences that have guided traditional farming and land-management practices for millennia.

As their journeys towards genuine sustainability began neighbours’ and sometimes family eyebrows were raised. Patience and time have proved that the natural methods work, resilience returns to the landscape and production that is geared to the land’s carrying and cropping capacity rests on the firmest of foundations: healthy soils.

The Soils for Life inspiration generated a suite of questions, but beyond them, ‘what proportion of Australian land and Country is now under sensitive care and wise management’ is a question that is constantly in my mind? Between us we know of thousands of people who own ‘bush-blocks’ for the land’s sake and may have conservation covenants on their blocks. Large organisations such as Bush Heritage Australia, Australian Wildlife Conservancy,

Rainforest Rescue and the myriads of traditional owners, nature reserve managers, farmers, horticulturalists, orchardists and nursery people have their work and endeavours infused with respect, traditional knowledge, love and informed by state-of-the-art science. But do all these agents of change ‘talk to each other’? Can individuals and groups draw inspiration from each other as we did from Simon’s presentation on Soils for Life?

Once home I began a fleeting investigation emanating from the Soils for Life website and its links:

- Friends of Grasslands has organised field trips to Martin Royd’s Jillamatong. “The cattle are building our soils”. He’s one of many graziers who’ve devised ways to utilise moveable fencing to control stock grazing patterns & timing.
- We’d also been to Talaheni where salinity had been countered by re-vegetation which also enticed birds’ return. “Salinity levels were 7000 ppm now they’re less than 100 ppm which is better than Canberra’s drinking water” John Ives said at a conference....
- Greening Australia has hundreds of examples in our region (and beyond) where direct seeding, paddock restoration and Bringing back the Birds has transformed landscapes and landowners’ fortunes.
- John Feehan gave a presentation on Dung-beetles to Field Naturalists some years ago. He’s shown countless graziers how selected, introduced dung beetle species restore soil structure by burying the huge volumes of cattle dung that

overwhelmed Australian dung beetles.

- Peter Andrews’ success at Taryn Park generated the Natural Sequence Farming movement. Erosion and water shortages are countered by reintroducing natural valley flow patterns which return water to floodplains and allow water-borne sediments to fertilise soils and paddocks. He also showed that slashed weeds returned nutrients to soils as they decayed. Herbicides against the weeds became unnecessary as did expensive fertilisers.
- David Tongway has developed Landscape Function Analysis to assess the stresses and changes properties experience. The analyses lead to land managers’ designs of restoration techniques tailored to their situations.
- Maarten Stapper has a link from his website to Soils for Life and the case studies. He has travelled thousands of kilometres to bring the science of soil biology to farmers seeking bio-logical ways towards sustainability and to reduce the costs of inputs.
- Walter Jehne of Healthy Soils Australia brings specialist understanding of soil microbiology - the trillions of minute organisms which recycle and free-up nutrients to drive plant health - to farmers and conferences alike. He spoke at the London Climate summit on sequestering of carbon from air to soils.
- Michael Croft from Mountain Creek Farm links the importance of soil health and holistic management to food production, Southside Farmers’ Markets and through the Food Sovereignty Alliance.
- Biodynamic Farming utilises composted cow manure which is added to water and applied to vegetation and soils. New Zealander, Peter Proctor’s work in India carries this principle further using cow dung fermented for 3 months in buried cow horns. There is a film *One man, One cow, One planet*, which shows how effective the methods are in low-income situation even though the details may raise some eyebrows in Australia.
- Throughout the ramifications of my searching land-managers succeeded when they “Let

biology have a go” and when they returned to understanding the biological make-up of soils and Country. Livestock were used as farming tools to manage grazing and provide nutrients from their dung. Land managers maximise the use of water through infiltration and retention within humus-rich soils.

- It seems that results for the above land-management changes are gaining momentum in rural Australia just as urban agriculture, community and home-gardens are catching attention in our cities. The apparently simple goals of healthy soils, healthy food and healthier people are being achieved by land-managers with persistence and dedication.
- Can we draw hope from **Soils for Life** that there is a ground-swell movement whose networking brings those on the land together to extend landcaring practices that respect nature, stock, vegetation and soils?

Rosemary Blemings

Newsletter distribution

The Field Naturalists’ Association of Canberra Inc. (FNAC) would like to hear from any member currently receiving the “Field Natter” newsletter via Australia Post who would prefer to receive it by email please contact:-

Bob Lehman by Email: helbo@westnet.com.au ; or mail: FNAC, GPO Box 249, CANBERRA ACT 2601

The objective behind this request is to provide a more efficient, possibly less paper wasteful, and a more cost effective method for the supply of the monthly “Field Natter” Newsletter.

Grateful thanks are extended to members who give this request serious consideration.

Bob Lehman, FNAC Treasurer

Month	Speaker	Topic
1 May	Stephen Utick	Camellia Ark and Australia’s role: Floral treasures of the vanishing forests
5 June	Dr Alex Ritchie	Ages of fishes

Glycine tabacnina

As I walk along Belconnen's Josephson Street parallel to the bus depot it's astonishing to find several flourishing colonies of *Glycine tabacnina*. The plants typically emerge, from obviously resilient roots, in late summer, defying the temperatures and associated dryness. Like *Wahlenbergia*'s bluebells, thriving in harshness is a speciality as there's no depth of soil left amongst the roots of a row of Casuarinas. People have created an eroding path beside the road and workers' parked cars.

The plants' trefoil leaves and intense purple flowers point to the fact that residual species can survive the industrialised devastation of the anthropo-

cene. In the last 6–8 weeks the rain events have helped. The *Glycines* aren't alone for there are at least three native grass species Spear grass, Redleg grass and a small cluster of Kangaroo grass. Fuzz weed *Vittadinia cuneata* is a coloniser, taking advantage of disturbed areas and bare spaces where the suite of weeds have yet to establish themselves.

This little discovery just shows how important observant people



are in finding native vegetation where others don't appreciate it. Long live Field Natters and Citizen scientists!

Rosemary Blemings

Activities

A Special Presentation - "Rediscovery of the Night Parrot" Wednesday 11 June 2014 at 7:00 pm. Australian Centre for Christianity and Culture Chapel cnr Kings Avenue and Blackall Street Barton ACT.

You are invited to attend a special event, that will be co-sponsored by Eremaea eBird (ACT) and the Canberra Ornithologists Group to hear a presentation by John Young about the 'Rediscovery of the Night Parrot'.

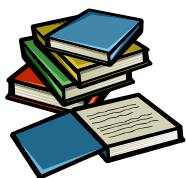
The Chapel is a concrete bunker-looking building right on the corner of Kings Avenue. Come and hear this wonderful story of a search lasting 17,000 hours for a parrot considered extinct. The presentation will take about 90 minutes and will begin with the natural history of the Night Parrot. It will then cover the search for the parrot from when John first recorded its call until its subsequent sighting and capture by digital photography. It will conclude with the ongoing study of the bird's ecology. The presentation will contain about 25 still images and a short video of the Night Parrot. There will be time set aside for questions at the end of the presentation. On the night, John will also be selling limited edition prints of the Night Parrot (\$300) to raise funds for continuing study about this bird.

You will need to register for this event as the auditorium has limitations on its capacity. You should email your intention to attend the event to Alastair Smith of Eremaea eBird (ACT) at ebirdact@gmail.com. The cut-off date for registrations is 9 May 2014 or earlier if the capacity level of the auditorium is reached, so please ensure you register as early as possible.

Raffle prizes needed

Had a recent Spring clean and found all those items you no longer use or want!

Why not donate them as raffle prizes for the FNAC general meeting raffle.





Field Naturalists' Association of Canberra Inc.

Who are the Field Naturalists?

The Field Naturalists' Association of Canberra (FNAC) was formed in 1981. Our aim is to foster interest in natural history by means of meetings and regular field outings. Meetings are usually held on the first Thursday of each month. Outings range from weekend rambles to long weekends away. Activities are advertised in our monthly newsletter. We emphasise informality and the enjoyment of nature. New members are always welcome. If you wish to join FNAC, please fill in the member application below and send it in with your subscription to the FNAC Treasurer at the address below.

President: Rosemary von Behrens pH: 6254 1763

Email: fieldnaturalist@yahoo.com.au

Website: under construction

All newsletter contributions welcome.

Editor



Monthly meeting venue: Division of Botany and Zoology, Building 116, Daley Road, Australian National University Park (the Xmas meeting is at the adjacent building 44 and will start at the earlier time of 6:30 pm)

Field Naturalists' Association of Canberra
GPO Box 249
Canberra ACT 2601



MEMBERSHIP APPLICATION OR RENEWAL

Family name: First name:

If a family membership, please include the first names of other members of the family:

.....

Postal address:

Suburb: State: Postcode: Home phone:

Work phone: Email address:

Subscription enclosed: \$.....(Single/Family \$25) Donation: \$.....

How did you hear about FNAC? Please circle: FRIEND? OTHER? Please specify: