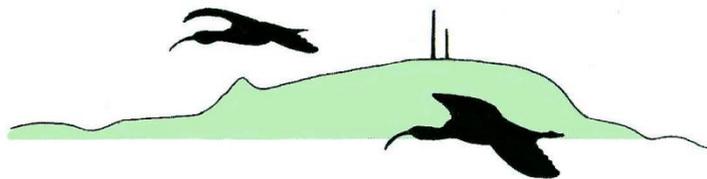


ORANGE FIELD NATURALIST AND CONSERVATION SOCIETY Inc



NEWSLETTER AUGUST 2018

NEXT MEETING

Thursday, 9th August, 7.30pm

SPEAKER: Tony Smith

TOPIC: The Fauna of Eastern Russia

NEW VENUE: Home & Community

Care Centre (HACC Centre),

286–290 Lords Place

(corner Lords Place & March Street - enter from Lords Place)

Committee Meeting at 6.30

All members are welcome

EXCURSION

Sunday, 12th August

Mt Canobolas

Meet at 9am

at the Orange High Bus Bay

Bring morning tea

OFNCS website

<http://www.orangefieldnats.com/>.

Next Meeting

Tony Smith has travelled to some very special places in recent years. Previously he has recounted his adventures in Borneo and, at our next meeting, he will be introducing us to the fascinating world of far eastern Russia.

Next Excursion

The next excursion is a special visit to Mt Canobolas to help clear some of the accumulated discarded rubbish that has been exposed following February's wildfire. The excursion will be led by **Dick Medd**.

Please note that you will need to wear hard hats and high-visibility clothing because the area is not yet safe for the public to enter. A number of helmets and vests will be available on loan from a local bushwalking club (helmets) and the Friends of Orange Botanic Gardens (hi-vis vests)

but, if you have your own, please bring them along.

Museum Display

From 13th August to 7th October, OFNCS will feature in the community showcase in the Orange Regional Museum. This display, which has been put together by your committee in collaboration with the Museum's **Jessica Dowdell**, provides details of the society's history and activities since its launch in 1974 with a map of local areas visited and information about current projects. Entry to the Museum is free so pop along and have a look at our display.

Last Month

There was no meeting or excursion last month because on July 8 we attended a CWEC Forum on Biodiversity addressed by a range of speakers whose presentations are summarised below (also see photo at end of newsletter).

A welcome from **Cilla Kinross** was followed by a Welcome to Country by Wiradjuri Elder **James Williams**.

Speaker: **Jemilah Hallinan**, Solicitor, Environmental Defenders Office (EDO)

Topic: NSW's New Native Vegetation & Biodiversity Laws

Jemilah outlined what was included in these new laws and covered what has changed in the process of clearing vegetation in rural and urban areas and how the assessment is supposed to be made. She explained what the new legislation was designed to achieve and where it falls short of expectations.

Assessment of clearing is done using Codes set up under the Local Land Services Act. Code-based clearing is currently the subject of court action by the EDO. Once regulated land has been cleared, it changes category to unregulated so it can be subsequently cleared again and again. This

means that NSW will gradually move from regulated to unregulated land. Another point of contention is that Critically Endangered habitat cannot be cleared but Endangered and Vulnerable habitats can, subject to certain approvals, which means they will move towards becoming Critically Endangered.

Jemilah's advice, if you suspect that a neighbour is clearing land illegally, was to:

- Take a photo if possible (without trespassing)
- Record observations in writing
- Note the date and time
- Call the Environment Line 131 555
- Ask for an incident number (make a note)
- Ask to be kept informed of any investigation/ enforcement action
- You can make reports anonymously

Jemilah also explained how the Biodiversity Offset Scheme (BOS) is supposed to work with thresholds set for assessments. It gets quite complicated when you start reading the requirements for a Biodiversity Assessment Report which can generate biodiversity credits which can be bought or swapped. In addition, the BOS requires like-for-like offsets which for many species is not possible. For example, if a mountain bike trail in the Mt Canobolas SCA requires an offset, where is that going to be established, considering that many of the ecosystems on the mountain do not occur anywhere else? There are variations allowable in this - if an identical offset cannot be found, then offsets for one ecosystem can be applied to a different ecosystem in the same bioregion or impact on one endangered species can be offset by providing benefit to a different species of similar threatened status.

Speaker: **Shirley Hall**, Nature Campaigner, NSW Nature Conservation Council

Topic: Deforestation and Land Clearing in NSW

Shirley started by outlining the value of biodiversity to human welfare, including food production, recycling of nutrients and water quality. She presented statistics that only 9% of NSW vegetation remains intact with 39% cleared and 52% degraded. Only 4% has been reserved and even that is under threat. Shirley noted that, under the new vegetation laws, 99% of koala habitat on

private land is at risk of being cleared. Shirley's advice was to STOP rampant clearing, EXPOSE the faults in the new laws through court action and MOBILISE the voices of the community.

Clearing of vegetation also loses the carbon drawdown that forests achieve, affects rainfall, increases soil erosion, causes dryland salinity and reduces natural disaster buffers.

The NCC is calling on the NSW government to:

1. Make koala habitat, other threatened species habitat and high conservation value areas off limits to clearing.
2. Invest in a restoration and conservation fund that financially supports landholders to repair and protect forests and bushland.
3. Deliver world class mapping, monitoring and reporting.

Shirley called on the NSW government to introduce stronger laws for biodiversity conservation and invest in forward-focused solutions.

After a delicious lunch, accompanied by an influx of additional audience members, the afternoon session focussed on Mt Canobolas.

Speaker: **Col Bower and Dick Medd**

Topic: Mt Canobolas - Biodiversity refuge and nursery

The presentation was made by Col and started with a summary of the physical attributes of the mountain, including its volcanic origins, the last volcanic activity being 12–11 million years ago. Of the original vegetation growing on the rich soils that have developed from the volcanic lava flows, 97% has been cleared for horticulture, cropping, grazing, pine plantation forestry and urban plus peri-urban development. The remaining 3%, mainly above 900m, is a land-locked island of natural vegetation supporting the last substantial remnant of the Mt Canobolas volcanic complex biodiversity. It is protected as a State Conservation Area although it is currently under threat.

Col presented a table showing details of the plant and animal diversity surviving in the SCA, highlighting the numerous endemic species and species of regional significance. There are 12 threatened species found on the

mountain, including the beautiful and critically endangered Giles' Mintbush and the vulnerable Canobolas Candlebark. Threatened mammals include the Greater Glider, Yellow bellied Sheath-tail Bat and Eastern Bentwing Bat. A number of threatened bird species have also been recorded in the SCA.



Giles' Mintbush, critically endangered and endemic to Mt Canobolas [photo: Col Bower]

Perhaps of greater interest is the increasing number of species recognised as being endemic to the mountain. This means they are only known from that locality. These include four vascular plants and three lichens. Invertebrates have not been well studied but the Mt Canobolas Velvet Worm, *Cephalofovea pavimento*, is a unique creature of the SCA and visitors to the mountain have noticed a bright yellow planarian worm on the walking trails following rain. This species does not appear to have been named. A number of insect species, including moths and leafhoppers, known only from the mountain have not yet been named scientifically. Preliminary studies have also shown that additional plant species on the mountain are yet to be scientifically named.



Mt Canobolas planarian worm
[photo: the editor]

Seven vegetation types have been recognised on the mountain and two of these are listed as Endangered under the NSW Biodiversity Conservation Act. An additional lichen community, the *Xanthoparmelia* lichen community, is listed as Endangered and is endemic to the SCA. This community comprises at least nine species of foliose lichens that inhabit soil and rock faces at higher altitudes. The community occurs only on Mt Canobolas and includes three endemic species and three other species that are known from few other localities, including one that is only known from Mt Canobolas and one location in Tasmania.



View of part of the *Xanthoparmelia* lichen community [photo: Helmut Berndt]

Col outlined some possible reasons why these species occur on the mountain. Many of the endemic species are likely to have evolved there from populations that became isolated on the land-locked 'island', while their source populations survived elsewhere.

However, it is also possible that other endemic species on the mountain are relict populations for which Mt Canobolas is their last refuge on earth. These populations represent the last survivors of formerly widespread species that have become extinct elsewhere and survive now on the last island of suitable habitat available to them. Endemic species on Mt Canobolas in this category may include the Mt Canobolas

Velvet Worm, the Mt. Canobolas planarian worm and some of the lichens.

Col concluded his presentation with a summary of why he regards Mt Canobolas as being so special:

- It is an isolated island of higher montane / sub-alpine environments.
- It is a nursery for new species and a locus of biological diversification.
- It is the last refuge for some relict species whose distributions have shrunk over the millennia. For many others it is one of only a very few places they can now be found.
- Its plant communities are distinctly different from those in other high altitude areas.
- It supports a diversity of threatened flora and fauna.
- It contains the last three percent of the original vegetation cover of the Canobolas compound shield volcano complex.

There is nowhere else quite like it.

Speaker: James Williams, Wiradjuri Elder

Topic: Gaanha Bula

After explaining his positions in both the Orange community and the Wiradjuri people, James provided details of what Mt Canobolas, or Gaanha Bula, means to himself as a descendant of the Wiradjuri people and as a person who has gone through lore.



Indigenous map of the Mt Canobolas complex
[image: James Williams]

The first European to ascend the mountain was Major Thomas Mitchell whose relationship with the local people was often quite poor and occasionally violent. The Walls Lookout and Federal Falls Picnic Area both have significance for indigenous heritage with evidence of cultural activities in the area, including stone flakes and other

artefacts. A scarred tree is present near the summit of the mountain.

James provided details of what stories are told by the scarred trees and showed how the trees in different areas have different patterns telling different stories. In particular, the scarred trees around Yuranigh's grave near Molong are highly significant and the site, now managed by NPWS, is well worth a visit.

James summarised the types of sacred places that are scattered around NSW including marked trees, grave markers and bora grounds. Much of the detail is highly confidential and restricted to those, like James, who have been through the process of indigenous lore.

Speaker: Roger Lembit, NSW National Parks Association

Topic: The environmental impacts of mountain bike trails.

Mountain bike trails in National Parks have standards set for their use, in a similar way to how standards are set for downhill ski runs with different levels of trails requiring different levels of skill and experience.

However, any level of trail has impacts on the terrain where it runs. Erosion and sedimentation causes track material to wash into the neighbouring bush and this is exacerbated by bikes which wander off course or overshoot corners, particularly in rocky areas. When trees are scraped, removal of treebark provides access for fungal pathogens and compaction increases the chance of *Phytophthora*, or root rot, getting into the soil.

Trails also provide easier access for weeds, particularly invasive perennial grasses and easier access for wild dogs, foxes, cats and pigs.

In some established trails, areas which may be boggy or loose are covered with recycled plastic mesh to allow bikes to traverse the area but these areas of mesh become a real issue in a bushfire because they melt into the ground.

A major concern is interaction between bike riders and other users, particularly walkers who will also use these trails.

This talk sparked considerable debate about the proposal to build trails in the SCA on Mt Canobolas.

Spring Creek bird survey

Each month, Cilla and other members of OFNCS have conducted a survey of Spring Creek Reservoir to monitor the birds using the site. Last month, the water levels were quite low, exposing a muddy beach around the edge and this attracted black fronted dotterels (see picture) who use such exposed surfaces.



Black fronted dotterel at Spring Creek
[photo: Rosemary Stapleton]

NSW Threatened Species Scientific Committee

You may be aware that Prof. Dave Watson (CSU Albury) publicly resigned from the NSW TSSC in June following the Government's passing of the Kosciusko Wild Horse Heritage Bill 2018 (see July newsletter) which ignored the advice from the TSSC concerning environmental damage caused by this non-native species in favour of its questionable "heritage" value. After all, horses have been a part of the high country for as much as 200 years (and feature in a couple of poems) while the delicate ecosystems they are destroying have only been there for thousands, if not millions, of years.

In his letter to the minister, Prof. Watson made a statement which I think is relevant to all situations where scientific knowledge conflicts with political expediency.

"Science is not a special interest group. Scientists don't lobby for favours, nor profit from political decisions. We are ambassadors for knowledge, the conscience of the natural world. The wilful disregard that you and your government colleagues have for science diminishes our collective future, relegating our precious national parks and priceless environment to political play things."

[Reproduced with permission]

Creature of the Month

Since this issue has a major focus on Mt Canobolas, I decided to repeat one of the invertebrate Creatures of the Month from the SCA which has appeared previously. The Mt Canobolas Velvet Worm featured in March last year and the Mt Canobolas Planarian Worm in October 2016 so I have gone back to July 2006 and here revamp the COTM for the Mountain Katydid, *Acripeza reticulata*, which appeared in that issue.



Female mountain katydid
[photo: Holger Löcker]

This odd looking creature is the female of a type of long-horned cricket (Family Tettigoniidae). Under normal circumstances, she has her forewings held over the abdomen so she looks like a dried piece of crinkled leaf lying in the undergrowth. If she is disturbed, however, she raises her forewings and expands her abdomen to display a series of blue, red and black stripes to warn off predators. While the female lacks hindwings and therefore cannot fly, the male is fully winged and capable of flight but still has this same defence response. The species is widespread in the higher areas of eastern Australia including Mt Canobolas where the photo above was taken. A specimen of both a male and a female Mountain Katydid will feature in our display at the Orange Regional Museum.

SUBSCRIPTIONS

Payment of Annual Subscriptions is due following the Annual General Meeting in February. Please send your cheque or money order made out to "OFNCS" to the Hon. Treasurer, Dr Dick Medd, OFNCS, PO Box 369 Orange NSW 2800.

Subscription rates:

Single member – \$25

Each additional family member – \$5

Concession rate (emailed newsletters) – \$12.50

Concession rate (printed newsletters) – \$25

Note: concession rate is for *bona fide* pensioners and students only



Speakers at the CWEC Biodiversity Forum on July 8th:

(L to R) Jemilah Hallinan, Shirley Hall, Roger Lembit, Col Bower and James Williams [photo: the editor]

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