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~ October 2008 NEWSLETTER ~

MEETINGS AND FIELD TRIPS

We meet on the third Thursday of the month at 7:30 pm. Following the TENPS general meeting, the speaker will commence at 8pm. Tea & coffee are available during the meeting. The venue for the meeting is Marrara Christian College, on the corner of Amy Johnson Avenue and McMillans Road. All welcome. Bring plants to swap, sell or have identified.

~ NEXT MEETING Thursday 16th October ~

The details of the next meeting are yet to be confirmed due to unforeseen circumstances. Our apologies for any inconvenience.

~ NEXT FIELD TRIP- Sunday 19th October ~

Black Jungle Conservation Reserve

Dave Liddle will lead the trip. We will visit a spring fed rainforest in Black Jungle Conservation Reserve, on Lambell's Lagoon Road. There is potential to find the elusive fern *Vittaria ensiformis* and other rare or threatened species. Meet at the Boxing Crocodile at Humpty Doo at 9:00 am on Sunday 19th October

WHAT IS YOUR COMMITTEE DOING???

- Coolalinga Plant Sale is on Sat 29th November. Please think about propagating plants for the sale at Coolalinga shopping centre or volunteering a short time to help out. Contact Russell if you wish to volunteer.
- A new TENPS website is in progress and should be completed very soon.
- A number of new members have been approved.
- Palmerston Apostolic Church project at Rocky Knoll. Russell and Marj will attend the site to assess for plant suitability
- The AGM is on Thurs 20th November. Due to people leaving town and increased commitments of some committee members, there are a number of people standing down. Please consider joining the committee for the next year.
- Next committee meeting will be held at 7.30 Tuesday 21st October Gerry Woods office at Howard Springs. Members are very welcome to attend committee meetings if they wish so to do.

Meeting the third Thursday of the month at 7:30 pm at Marrara Christian College

~ Notes from GENERAL MEETING – September ~

Friends of Fogg Dam – Leisa Baldwin

Fogg Dam is a man-made structure and was built in 1956.

Rice growing was attempted here but failed mainly due to

- Poor water quality – high salinity and heavy wet seasons
- Management issues
- Magpie Geese – these birds were protected in the mid 60's and flourished

Friends of Fogg Dam formed in 2007. The monsoon boardwalk was closed indefinitely in 2005 and the local group banded together to try and get it rebuilt/fixed. They also wanted to put Fogg Dam back on the map.

Fogg Dam has a diverse range of habitat and is an ideal location for wetland research.

The boardwalks have now re-opened and there is extensive research happening at Fogg Dam with plants, reptiles and cane toads (and probably much more).

Friends of Fogg Dam are hoping to encourage school groups to come out and visit in the future.

Seed Banks and Dormancy of 3 Native Riparian Grasses with Contrasting Life History. Dr Sean Bellairs

Bambusa arnhemica is a bamboo that grows on river banks in monsoonal northern Australia. It is long-lived but only flowers once at the end of its 40 – 50 year lifespan. Native rices (*Oryza spp.*) occur in similar habitats. These native rice species include a more typical annual species, *Oryza meridionalis* along with a perennial species *O. rufipogon*. These three species all produce large quantities of seeds and it was expected that development of a persistent soil seed bank would be important for “bet-hedging” establishment of the *Bambusa arnhemica* and *Oryza meridionalis*. This study assessed seed dormancy and persistence of the soil seed bank of seeds of the three species.

Seeds were collected from plants in the Mary River and Fogg Dam floodplain. Viability, germination and longevity of seeds collected from the plants and from the soil were assessed.



Fig 1. *Bambusa arnhemica*
D. Greig www.anbg.gov.au

Both *Oryza* species flower late in the wet season and shed seeds early in the dry season. Both species were found to have seed dormancy mechanisms that prevented seeds germinating when they were first dispersed into the moist floodplain soil. Seeds then generally had dormancy broken during the dry season and germinated at the start of the following wet season. Seed predation of *O. meridionalis* is high with more than 75% of seeds being predated on the soil surface. A small proportion of the seeds that are not predated and are buried in the soil (5%) are able to survive dormant in the soil seed bank to regenerate new rice plants after two wet seasons.

Bambusa arnhemica flowered at the start of the wet season, the seeds were not dormant and seedlings were well established within weeks of initial rains. A persistent *B. arnhemica* soil seed bank was not present following the first wet season after dispersal. It was expected that for the semelparous species in particular, a dormant soil seed bank could be important for allowing subsequent establishment following poor seasons, but this did not occur. The absence of substantial long-lived soil seed

banks may be due to warm, moist tropical riparian conditions tending to reduce the viability of stored seeds. While “bet-hedging” of establishment success through the establishment of a persistent seed bank occurs to a limited extent in *Oryza* it does not occur in the long-lived semelparous *B. arnhemica*.

~ September Field Trip – Fogg Dam Open Day ~

On Sunday 21st September, Fogg Dam had an open day with activities and talks for everyone. It attracted high quality and very interesting speakers about current research and activities happening in the area.

One session that I found interesting was the cane toad talk. Michael Crossland discussed the research that has been undertaken and had many enlightening features. For some interesting articles about their research go to <http://www.bio.usyd.edu.au/Shinelab/cane%20toads/toads.html>

For less scientific information go to the site: <http://www.canetoadsinoz.com/foggdam.html>

Russell and Stridor led a native plant walk for about 40 people in the afternoon.

~ WHAT'S IN FLOWER? ~

Wrightia pubescens



Small attractive tree up to 3-7 metres high. Semi-deciduous, grows well in domestic gardens.

CONTRIBUTIONS WELCOME

Photos of flowers, plants, gardens, vegetation ... ☺

If you are willing to have your photographs included in newsletters please forward to Melina McDowell

melinajmcdowell@yahoo.com.au

~ FUTURE EVENTS ~

Field Naturalists Diary:

October 2008 meeting. Wednesday October 8.

Peter Dostine: The Flock Bronzewing.

November 2008 meeting. Wednesday Nov. 12.

Don Franklin: Slow boat on the Mekong.

For more information contact: Don Franklin & Christine Maas

eucalypt@octa4.net.au or 8948 1293

**SENDER: TOP END NATIVE PLANT SOCIETY
PO BOX 135 PALMERSTON
NT 0831**

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