

Ref: (frog.new)

## FROG AND TADPOLE GROUP NEWSLETTER NUMBER 2

The second meeting was held in the Staff Room, Level 3, Building E (corner Thomas and Harris Streets, Ultimo) from 7.30 to 10.30 pm on the 4th, February 1992.

The meeting was attended by GERRY MARANTELO (visiting from Melbourne), LAUREN EBURN, SHANE GOW, GEOGG HIGGINS, MARY GIBBS, PHILLIP TESCHKE, PAUL EVERY, KAREN THUMM, JOHN EMEY, MARK WILSON, LOTHAR VOIGT, MERINDA VOIGT, GARY LAM, DAVID MILLAR, DAN WOTHERSPOON, PETER JONES, MARTYN ROBINSON, STEVE RUM JEW, GUNTHER SCHMIDA, and HARALD EHMANN.

Each person introduced themselves to the meeting by reporting on their current interests in and studies of frogs and tadpoles.

### FROG AND TADPOLE PROTECTION IN N.S.W

It was reported that anurans (ie. frogs and all their life stages) were protected in NSW from 17 December 1991 by the Endangered Fauna (Interim Protection) Act.

All Australian Frogs are now protected in NSW (similar to the situation with reptiles). The new Act provides for the establishment of a list of threatened species (these include ones deemed extinct in NSW) and a list of vulnerable and rare species. The primary purpose of the Act is to specifically protect the habitat of endangered fauna (ie. threatened, vulnerable or rare) which could be placed at greater risk by any land use change (eg. clearing forestry). However the subsequent Forestry Protection Act has effectively pulled most of the teeth of the Endangered Fauna (Interim Protection) Act. From a practical point of view persons taking frogs or any life stage of frogs from the wild will need to be licensed. Those keeping frogs or tadpoles will also need to be licensed. The import into and export from NSW of all frog species needs to be licensed. The National Parks and Wildlife Service is at present working out how to implement the licensing system (with a legally difficult Act to follow and limited resources) and they propose to generate an exempted species list under Section 98. In the meantime it is most unlikely that creditable field work, research and study of frogs or tadpoles would be prosecuted even if the worker does not hold a licence. The Act protects Cane Toads and makes the issuing of Scientific licences extremely difficult!!

MARTYN ROBINSON asked members to take copies of the FROGWATCH guide and provide him with feedback to be used to modify the 2nd edition.

HARALD EHMANN reported that funding may be available for frog work in NSW by the Frog and Tadpole Study Group. He will apply if the group may be eligible.

THE GROUPS FUTURE, was discussed including issues such as incorporation, meeting format, and field trip arrangement. A volunteer committee (DAN WOTHERSPOON, MARK WILSON, LOTHAR VOIGT, MICHAEL MAHONY and HARALD EHMANN) are to review these and other issues and report to the next meeting.

GERRY MARANTELLI reported that at Melbourne University a computerised frog identification key was being developed that included "on screen" photographs and actual frog calls from an audio system.

Guest speaker MICHAEL MAHONY reviewed his current and longer term research projects. During the past summer he led an EARTHWATCH volunteer group to the Border Rangers area to study the Hip Pocket Frog (*Assa darlingtoni*). He is also working on endangered frogs in wet forests, in particular the Great Barred Frog (*Mixophyes* 4 + species), and the Mountain Frogs (*Kyrtannus* or *Philoria*). His work involves assessing the genetic variability in the accessible populations. The lower the diversity the more likely it is that the population has gone through the "genetic bottleneck" and is therefore significantly restricted in its capacity to adapt [in an evolutionary sense] to shifts in habitat characteristics. He pointed out that most research funding from federal sources for this sort of animal work is directed forwards mammals.

MICHAEL then spoke at length about the Desert Burrowing Frogs (*Neobatrachus*). This is the most widespread genus in Australia, occurring over about 80% of the continent. The 9+ species include polyploid forms (where the amount of genetic material in the cells is double or more than in other similar species), and extreme variability in colour and pattern so that the best way to discriminate between species is by the mating call differences.

He gave a fascinating account of how these desert frogs breed, develop (tadpoles) and burrow within 28 days. He also discussed the consequences of polyploidy and hybridisation, and his talk was liberally illustrated with slides and some live species.

Light refreshments were available throughout the meeting which continued until 10.30pm with informal lively discussions.

THE NEXT MEETING of the Frog and Tadpole Study Group will be held on Tuesday 14, April at 7.30pm in the same place as usual (see first paragraph). We will have GUNTHER SCHMIDA as guest speaker, and the GROUP'S FUTURE REPORT and FUNDING APPLICATIONS will also be available. The usual informal style should ensure plenty of lively discussion.

Follow the signs from the lift foyer on Level one.

Harald Ehmman - Convenor  
07.04.92

If you want to continue receiving this newsletter please return the tear-off slip below if you are unable to attend the meetings.

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