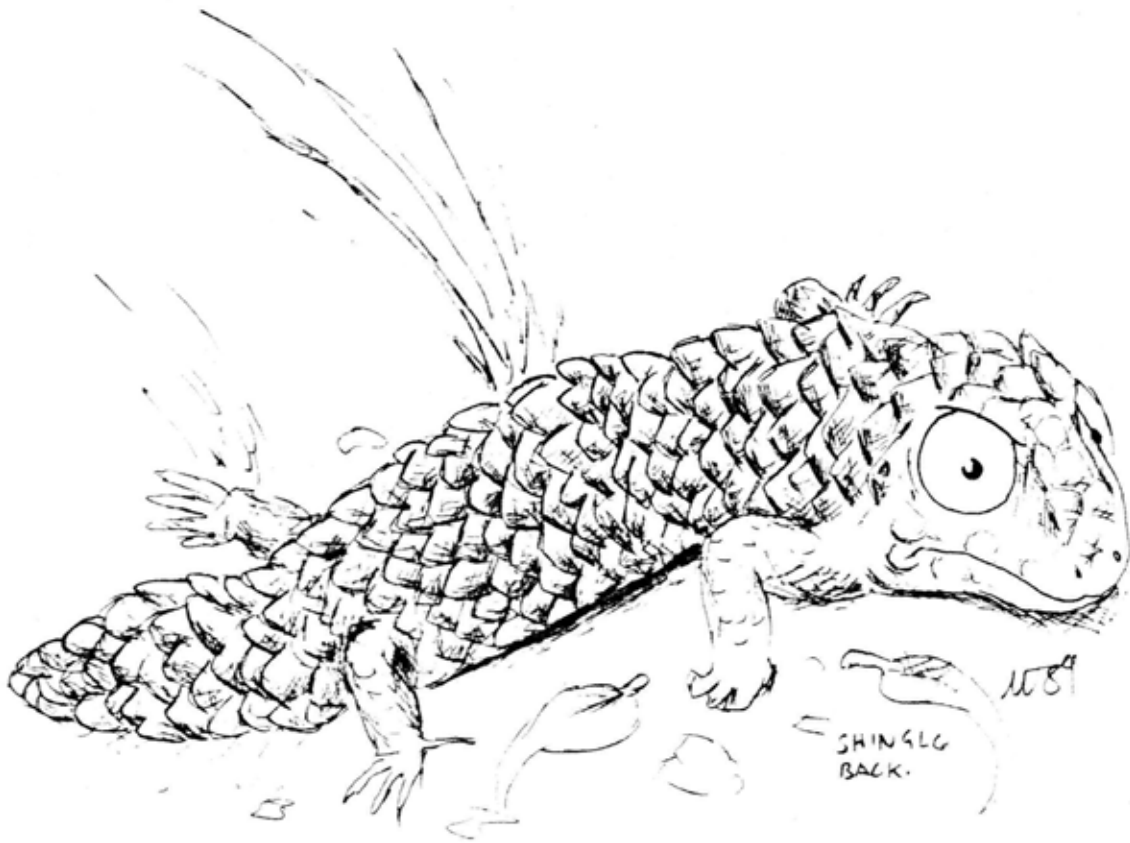


A.C.T. HERPETOLOGICAL ASSOCIATION.
1989.

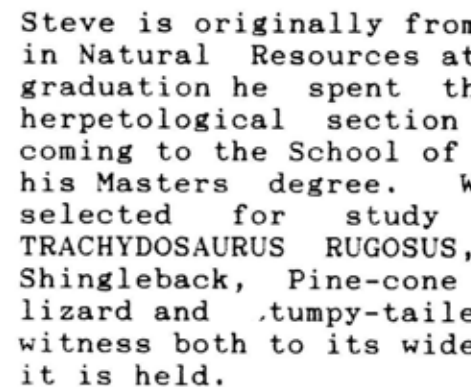


MAY
NEWSLETTER

MAY MEETING

"SHINGLEBACKS, GENETICS & CONSERVATION"

SPEAKER : STEVE SARRE .



Steve is originally from South Australia, his early studies being in Natural Resources at Roseworthy Agricultural College. After graduation he spent three and a half years working in the herpetological section of the South Australian Museum before coming to the School of Applied Science at C.C.A.E. to study for his Masters degree. What more engaging reptile could he have selected for study than the irresistible, inoffensive TRACHYDOSAURUS RUGOSUS, variously known as the Sleepy lizard, Shingleback, Pine-cone lizard, Bob-tailed lizard, two headed lizard and tumpy-tailed lizard - a range of names which bear witness both to its wide distribution and the affection in which it is held.

Steve will be showing some slides, and will run through the basic biology of sleepy lizards as a prelude to his report on his study of population genetics. We have been fortunate in our run of excellent meetings over the last six months and Steve's talk promises to be another talk of great interest to members.

PLEASE NOTE THE DATE: As May began on a Monday, the third Monday comes very early this month.

MONDAY MAY 15TH: ANU ZOOLOGY 7.30 PM.

(Downstairs - entrance from the car park)

7.30 - 8.00 PM - Informal, Members exchange over a cup of tea.

8.00 PM - Speaker

MEETINGS COMING UP:

JUNE: A.G.M. & SYLVIA SPRING
"Marine Turtles of Papua-New Guinea"

JULY: DAVE CARTER
"Freshwater Crocodiles"

Australian Frogs

by M.J.Tyler, Published by Viking O'Neil, Melbourne 1989.

About a year ago I heard a rumour that South Australian frog expert Michael Tyler was producing a new book on Australian frogs. At the time I fancied that Tyler may have been working on a comprehensive field guide to update and replace Barker and Grigg's "Field Guide to Australian Frogs". This notion was, however, put aside when I learnt that the book was to cover aspects of the biology and ecology of Australian frogs. Knowing that Tyler, a scientist with an outstanding knowledge of the Australian frog fauna and, more over, an infectious inquisitiveness about the biology of the Australian species, was to be the author, I naturally eagerly awaited the arrival of this new volume. My one hope was that it would not just be a rewrite of his earlier work "Frogs" (Collins, Sydney, 1976). I was not to be disappointed.

Michael Tyler states in the preface of Australian Frogs that "thirteen years have elapsed since I last sat down to write a book on the natural history of the frogs of Australia. Ironically the book was destined to become rapidly out of date, for this period has witnessed the most dramatic improvement in the knowledge of frog biology.....It is against this background of an exciting and stimulating period of discovery that I have tried to provide a new perspective on the biology of Australian frogs. The principal objective is that of a commentary up dating and building upon the knowledge of "Frogs" of 1976, but not duplicating material contained there."

The book covers a broad range of topics which include; origins of the frog fauna, the classification of species, an account of the present day families of frogs, diet and feeding behaviour, calling behaviour, reproduction, tadpole development, adaptations of desert frogs and tree frogs, a fascinating chapter on cane toads, a chapter on the sandhill frog (Arenophryne rotunda) which Tyler described as a species in 1976, a brief account of the gastric brooding frogs (Rheobatrachus silus and R. vitellinus (covered in much greater detail in other books by Tyler), and a final, in depth, review chapter which outlines the possible use of frogs as environmental monitoring agents. Although some sections of the book appear unnecessarily brief, if the information in the new text is combined with that already presented in the 1979 book, a more detailed account of the subject can be gained.

The book is illustrated with 48 large, clear, colour plates (two to a page), and a further 64 figures which include black and white photographs, and excellent line drawings by Ruth Evans and Marg Davies. The figures provide such useful information as the developmental stages of Litoria rubella, and scanning electron microscope photographs of the skin, toes and tongue of various Australian tree frogs .

Two features of Australian frogs should be of particular interest to the keen naturalist and herpetological student. The first is the book's comprehensive tables which summarise much of the known information about specific topics such as: studies on the effects of insecticides on frogs; high temperatures experienced by frog spawn or tadpoles in northern Australia; types of spawn of Australian frogs; and published data on the eggs and tadpoles of Australian frogs. The second useful feature of the book is its comprehensive bibliography which provides an avenue for further reading of the scientific literature.

Whilst the book stands alone as an introductory Australian text on anuran biology, a broader knowledge of our frogs can be gained by reading both of Tyler's books, along with an examination of the sections on frogs in Harold Cogger's "Reptiles and Amphibians of Australia". These books together provide a very thorough introduction to the Australian anuran fauna.

I would strongly recommend "Australian Frogs" to anyone interested in natural history. It should be of specific value to biology teachers, and to students in classrooms where close observation is encouraged. "Australian Frogs" is available for \$45.00 in many Canberra bookshops. I picked up my copy for \$35.95 at Academic Reminders in Fyshwick.

Will Osborne

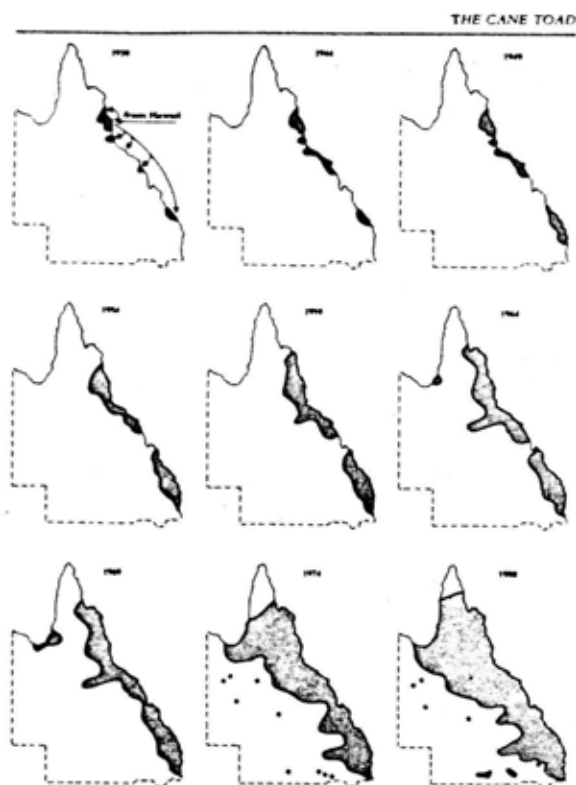
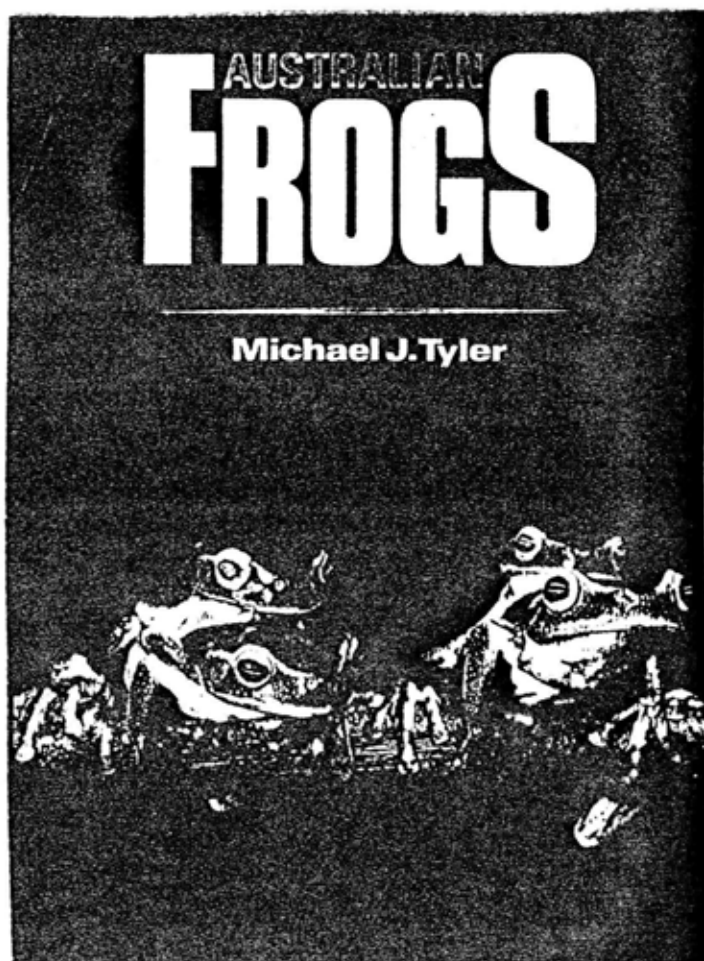


FIGURE 44. Progressive expansion of the geographic range of the cane toad in Queensland. After Sabath et al. (1981) and Fernald et al. (1985).



As MAY has five Mondays, we are taking advantage of the fifth Monday, MAY 29th, to have a COMMITTEE MEETING at 248 Dryandra Street, O'Connor at 8 p.m. On the agenda will be a draft constitution and the A.G.M. in June as well as planning for a third workshop and our programme for the second half of the year.

ELECTION TIME!

June is traditionally the A.G.M. and time for the election of office beavers for 1989 - 1990, so the present committee is most anxious to hear from those members who would like to help steer the A.C.T. Herpetological Association into the next decade!

With financial membership now having topped sixty, there must be some new blood out there prepared to accept some responsibility for the running of the Association. Some of the present office-beavers are not only suffering from the usual problems of over commitment, but feel that after three years continuous service they need some respite.

IF YOU ARE A NEW MEMBER and feel that you could participate in running the A.C.T. Herpetological Association don't wait to be nominated (people probably don't know you well enough yet to nominate you) but please volunteer at the May meeting or by phoning JO VANDERMARK on 47 7963.

IF YOU ARE AN OLD MEMBER and feel that this is the year when you can make your contribution please make it known as soon as possible.

Positions to be filled include:

PRESIDENT

VICE - PRESIDENT

SECRETARY

TREASURER

NEWSLETTER EDITOR

EXCURSIONS OFFICER

STUDENT REPRESENTATIVES (2)

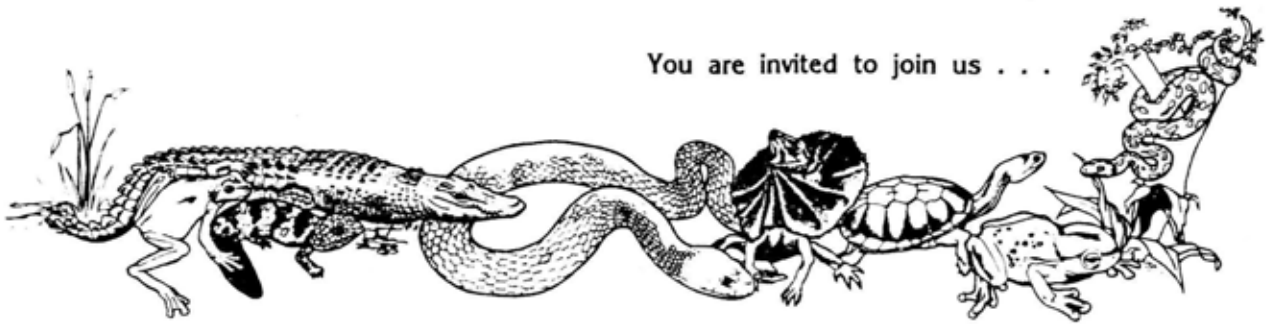


HERPETOLOGICAL TECHNIQUES COURSE

is presumably still making its laborious way through the layers of bureaucracy. Keep your fingers crossed we are still hoping it will be offered this spring.

FORTHCOMING FIELD TRIPS

You are invited to join us . . .



- * WINTER HERPING WEEKEND IN SYDNEY - behind the scenes at the Australian Museum and the reptile house at Taronga Park Zoo - Dean Ward, who is organising this weekend would like to leave it until July, as he is tied up with his new business this month. Arrangements therefore will be discussed at the June, not the May meeting.

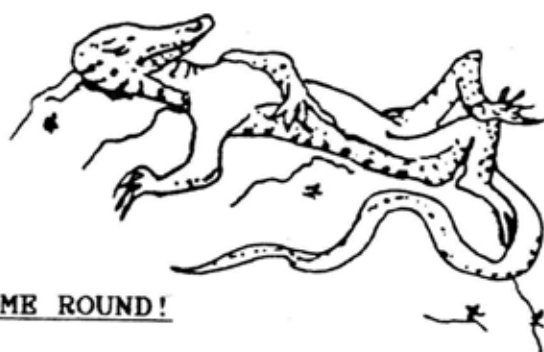
- * DAY TRIP TO BALLABA VALLEY

Members David and Andrew Gregory have invited us to visit their property which is situated between Captain's Flat and Braidwood. The Shoalhaven River runs through the front 200 acres of the property, and one of the purposes of the trip would be to investigate the possibility of diamond pythons winter basking, particularly along the north-easterly aspect. The Gregory family would also welcome the assistance of the group in a more general investigation of the herpetofauna of their eight hundred acres. Travelling time from Canberra is under an hour and a half, and we would probably include a barbecue on the agenda. Is Sunday preferred to a Saturday? Please let us know if you are interested.

- * SOUTH COAST WEEKEND

Are any members interested in a weekend checking out south coast herpetofauna? Not camping this time, but in rather more civilized accommodation for a winter weekend. Two of our members discovered (on the Goanna excursion) that they had holiday houses just across the road from each other at Rosedale, one of the more natural areas left south of Batemans Bay (although the developers are moving in fast). Between them, the two houses can offer sixteen beds, which is more than enough bodies for a herping trip anyway. Again a date has not been fixed, but we would like to have an indication of interest.

Any other suggestions?



SUCCESS SECOND TIME ROUND!

The weather was indeed clement for our second attempt to visit Dave Carter's research site in the beautiful Deua River area, following his fascinating and informative talk in March, - the first date having been abandoned after torrential rain. Twelve members met Dave at the Araluen pub (outside actually) at 1.00 p.m. on Saturday May 6th to proceed in convoy through the several creek crossings to the camp site.

After some initial reticence, everyone had a turn using the radio transmitter to track a particular goanna to the tree where it was comfortably ensconced. Meanwhile, as everyone WAS taking turns, a nearby lyre-bird provided non-stop entertainment with its brilliant and extensive repertoire of the bird-calls of Deua National Park. Next the group visited one of Dave's key termite mounds and listened with fascination to Dave's observations and discoveries before winding its way back to camp to cook dinner before dark.

Spot-lighting was on the agenda for after dinner, but the brushtails weren't prepared to wait that long. One of the highlights of the weekend has to be the look on Andrew Hill's face when he not only saw his first possum in Australia but discovered its willingness to eat sultana cake from his hand!

Finally everyone managed to fight off the marauding brushtails to go for a "proper" spotlight. Excellent views of sugar glider augured well for spot-lighting.

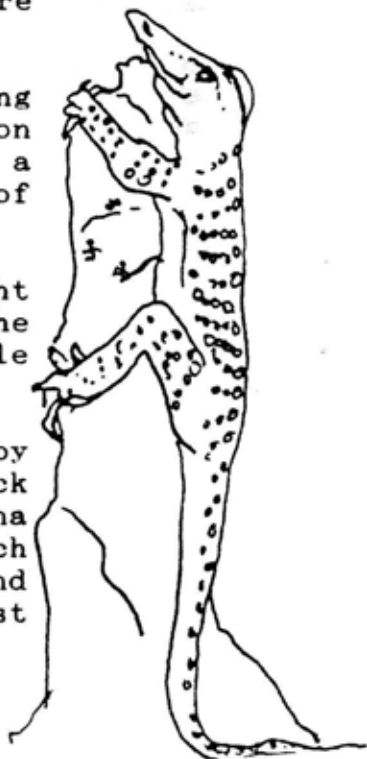
The frogs were surprisingly quiet considering the amount of water lying around, the only two species caught being *Littoria lesurii* and *Crinia*. It was a superb night both for walking and for swapping herp stories around the campfire afterwards. Midnight arrived with surprising speed.

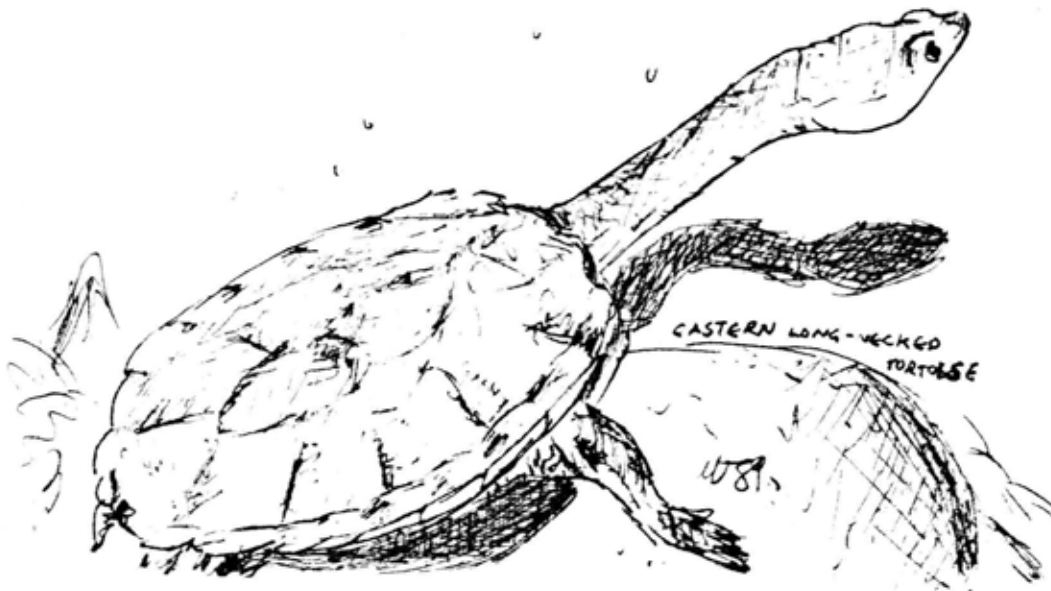
Before the beasts were due to be cut basking next morning the boys were out looking under a few rocks. Mike Thompson enjoyed the magical moment of finding his first snake, a small-eyed, Andrew caught a beautiful water dragon, and of course there were the inevitable skinks.

The weather was superb, solid blue sky with a light scattering of white cloud as the group wandered along the river bank with Dave, - a very pretty red-bellied juvenile black snake warranted another rush of cameras.

It was a wonderful twenty-four hours at Deua, enjoyed by Charles Atkinson, David and Andrew Gregory, Allan and Nick Thorne, Joshua Dorrough, Andrew Hill, Mike Thompson, Fiona Brand, Reg Alder and Jo Vandermark. Everyone learnt so much from being with Dave, listening to him, questioning him and seeing everything first-hand, and it was also so good just to be in such a beautiful place.

THANK YOU DAVE CARTER!





TERRIFIC TURTLE

& TORTOISE WORKSHOP

The ninety odd people who turned up to the April workshop were treated to an outstanding evening from Arthur Georges.

Arthur's wealth of information was accompanied by superb slides of a range of turtles which was a revelation to most of the people present and an inspiration to the many budding young herpetologists in the audience - obviously the potential for research project on turtles is almost unlimited.

After refreshments, participants were able to move into the laboratory to examine at first hand some of the turtles which had been discussed, the greatest scene stealer being the pig-nosed turtle. With shells, skulls, eggs, research equipment, articles and posters on display it was great to have also Mike Palmer-Allan, Ken Thomas, Steve Sarre and of course T.C. ably assisting Arthur in answering the many questions from people moving around the exhibits.

It was pleasing that such well-presented informative evening was rewarded with such an excellent public response.

The evening provided further evidence that there is a growing awareness of our fascinating and marvellous herpetofauna, an interest which I hope we can nourish and develop further.

A very big thank you to Arthur and his team for a magnificent workshop.

HERPING HIGHLIGHTS HOVERING AHEAD

As most of you know, the A.C.T. Herpetological Association has chosen the water dragon as its emblem. It seemed highly appropriate then to approach PETER HARLOW at Sydney University who has been studying water dragons for his thesis. The good news is that he has promised to come to Canberra to speak to us either late this year or early next year to bring us up-to-date with the latest research findings on *Physignathus lesueurii*.

Nor is this the only good news. I am delighted to report that the great man himself HAL COGGER, (Australia's leading herpetologist) author of *REPTILES & AMPHIBIANS OF AUSTRALIA* and Deputy Director of the Australian Museum has also indicated his willingness to speak to the A.C.T. Herpetological Association later this year - an occasion not to be missed.

Members' News.

PAUL SCANLAN has done it again - at least his blue-tongues have! Just after we reported a singular lack of breeding activity among his lizards this year, Paul arrived home from school on Friday April 21 to discover eleven common blue-tongues had been born, eight healthy and three still born. This is a full month later than last years drop.



A large female common blue-tongued lizard, about 35-40 centimeters long walked up through our garden and I heard my dog fighting. I grabbed the dog and saw the lizard, which was very distressed and bleeding. I put her in a box for about an hour, but when I examined it I saw its intestines were ruptured, so we put it down.

Two minutes later we observed movement in the stomach. We cut her open and extracted eleven young. Two were dead, but the others came out in their sacks with placentas attached. We removed the placentas and immediately fed them some mince in the sun.

We observed that from the start, one lizard, the smallest was visibly more aggressive. We measured them all and noted down their major distinguishing scales and features.

NICK THORNE



PUBLICITY: As part of a project to publicise the existence of a herpetological association in Canberra, it is planned to put posters up in public libraries, tertiary institutions and secondary colleges. MIKE THOMPSON and MILES YEATES are designing posters to bring along to the May meeting. To implement this plan quite a large number of posters will be required. There must be lots more artistic talent in the group so is anyone else interested in joining the poster production working group?

Members' News.



An example of the interest and competence of some of our student members can be seen in two excellent assignments submitted by JOSHUA DORROUGH last year when he was in year ten.

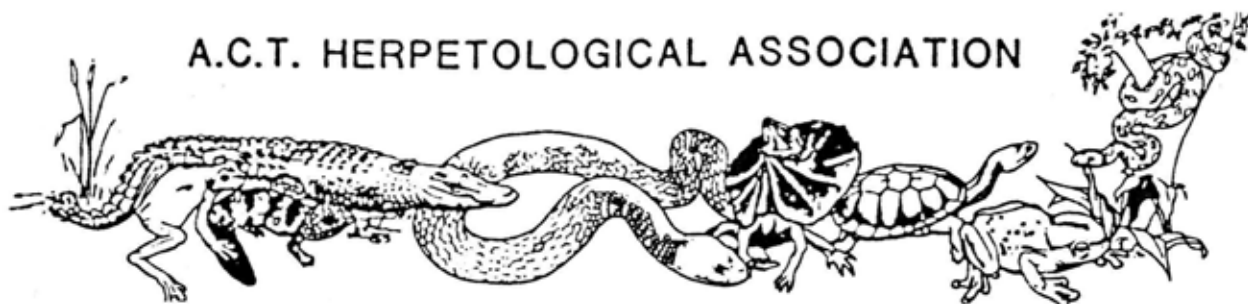
Superbly presented, the first assignment entitled "Mapping and Distribution of *Physignathus lesueurii howittii*" involved Joshua, with the able and willing assistance of friend and neighbour NICK THORNE in locating, observing and catching 15 water dragons along a stretch of the Molonglo River accessible to their Curtin home base. Anyone who has tried catching water dragons will be aware that such an undertaking was not without some physical costs - to the boys not the dragons!

"As part of this geographic study it was necessary to map the area. This was done by use of a compass and approximate estimations of distances between each point. Prominent features were plotted along the water course to help identify locations of lizards on return visits. The location of each lizard, when found, was plotted and the habitat and the lizards size was noted. This would hopefully determine preferable habitats and distribution of the water dragons and whether geographic features affect their preference. To determine this longer term observations would be needed and also further studies into geographic features relating to their habitat. Unfortunately this was not possible in such a short space of time".

The second assignment, "Ecological Study of the Breeding Habit of the Frog Species *Limodynastes tasmaniensis* and *Crinia signifera*, aimed "to study the breeding environment of frog species in a degraded "natural" area, an area subjected to various changes brought about by human interference. These include direct interference such as potential water pollution to the breeding areas from urban run off and indirect alteration to the natural drainage system, changes in vegetation through clearing and weed introduction resulting in potential change in insect, bird and mammal population and types".

Joshua has been requested to have these assignments available at the May meeting for anyone who is interested in having a close look at them.

A.C.T. HERPETOLOGICAL ASSOCIATION



BACKGROUND NOTES UPDATE

Last month when running through the history of the A.C.T. Herpetological Association I mentioned that there was no record in the files of the names of the fourteen people who met on the 13th June, 1985 to form the A.C.T. Herpetofauna Working Group. Well Richard Longmore delved into his records and came up with the original attendance list.

So the inaugural members were:

Richard Barwick
Robert Jenkins
Klaus Henle
Arthur Georges
Jenny Lawrence
Kim Day
Mary Nazer

Richard Longmore
Will Osbourne
Mark Lintermans
John Wombey
Greg Mengden
Peter Ormay
Eve Bugledich

Despite the fact that the Herpetological group is in only its fourth year, it is great to have the next generation already making their appearance at the workshop. As well as "T.C." Georges, who at the age of six was competently guiding people around the exhibits, Stephen Carter was celebrating his second month of existence at his second herpetological meeting and Alexander Osborn now in his second year also came along!

STOP PRESS: Jenkins Robert and Bartell Roger.
"A FIELD GUIDE TO REPTILES OF THE AUSTRALIAN HIGH COUNTRY".

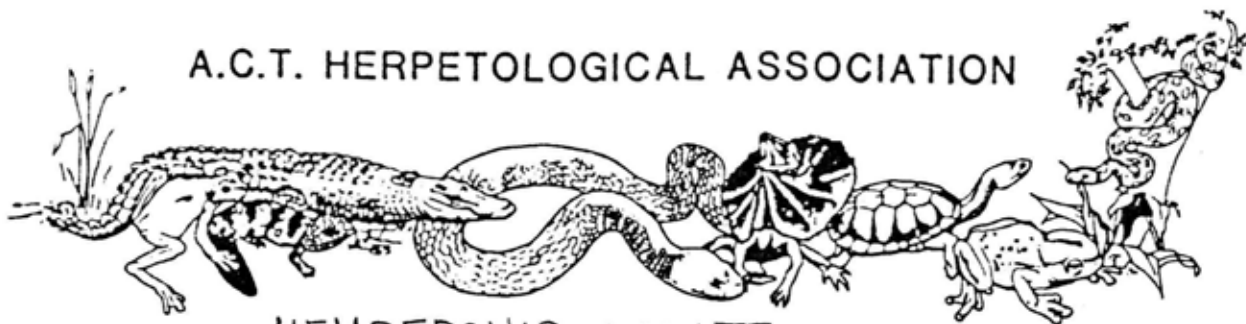
If you don't already have a copy of this, our local text-book, Academic Remainders are offering it for \$10.95, discounted from the original \$21.95.



SPECIAL HERPETOFAUNA OFFER

As a gesture of good-will (and encouragement?) the Australasian Affiliation of Herpetological Societies, (which we hope to join as soon as we are properly constituted) has offered the A.C.T. Herpetological Association copies of its latest "HERPETOFAUNA" at the member discount price of \$3.00 per copy. Orders will be taken at the May Meeting.

A.C.T. HERPETOLOGICAL ASSOCIATION



MEMBERSHIP UPDATE

SURNAME :

FIRST NAME :

MS
MRS
MR
DR

ADDRESS :

TELEPHONE : HOME :

WORK :

MEMBERSHIP : ADULT

STUDENT

FAMILY

DATE OF SUBSCRIPTION :

SPECIAL INTERESTS :

CONTRIBUTION TO THE A.C.T. HERPETOLOGICAL ASSOCIATION

I am able to assist in the following area/areas :-

COMMITTEE

PUBLICITY/ POSTERS

SPEAKER

SUPPER

FIELD TRIP LEADER

NEWSLETTER articles art-work editing collating

TYPING

ACCESS TO WORD PROCESSOR

ACCESS TO PHOTOCOPIER