

FIELD NATTER



FIELD NATURALISTS ASSOCIATION OF CANBERRA

OBJECTS: To foster an interest in, an awareness and an understanding of nature.

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Meetings are held downstairs in the Division of Zoology and Botany, ANU, on the first Thursday of each month. Meetings commence at 8.00 pm and are followed by refreshments.

NEWSLETTER - FEBRUARY 2003

MEETING: John Wombey will talk about **local reptiles and amphibians** and will refer to what the Herpetologists do these days. Do come along, bring a friend and stay for supper and a chat afterwards.

February 6th 8pm. A great speaker.

UNSUNG HEROES

There are many in the current bushfire crisis, and in the devastation following the destruction of 530 houses in our western suburbs on Saturday January 18. It has brought out the best in people and congratulations to all for the wonderful way in which Canberrans have pulled together. And it has reconnected us with all our interstate and overseas friends/relatives who have been concerned for our welfare.

ABC Radio Tripple 6. ABC666, many many thanks for the community service performed over the last week. Where would we have been without you? RvB

TOWN & COUNTRY NATURE NOTES

Bushfires.

- * All infrastructure and animals at Tidbinbilla have been destroyed, except visitors centres. Park staff have lost 10 houses, including all their possessions in Tidbinbilla and reserves.
- * Environment staff are under siege. They have worked day and night for weeks to save Namadgi and surrounds, have blistered faces and hands, etc., now lost their entire life's work, even their workplace, plus houses and possessions, breeding programs, then to top of it off are being criticised.
- * We all need to come up with constructive ways of assisting through this period, including ways of addressing fire recovery period and management of Namadgi.
- * Only the waterbirds appear to have survived without significant loss.
- * Local farmers are bringing their dead sheep and cattle to a burial site in Tidbinbilla to join the native animals.
- * 300 pets and more than 100 horses are homeless after Canberra's bushfires destroyed the RSPCA's headquarters.

More next Newsletter. I haven't seen a Canberra Times for over a week and still have much to do in my garden as we are in the alert zone for NW Belconnen. RvB

**Our wonderful Mt Stromlo is no more.*

*Sunday 9 Feb Sam Terra Bomberra Wetlands
Meet at main entrance on Dairymilk Rd*

OUTING:

CONFERENCES

NATURE CONSERVATION COUNCIL

Anne Reeves <areeves@ozemail.com.au> on
21/01/2003 17:05:54

Subject: [koscitalk]

ANU FIRE FORUM

for ANU website details on fire forum
<http://cres.anu.edu.au/fireforum>

2-day event, 19 and 20th Feb 2003

cost for full-time student \$40,

\$70 for non student, ;

register by 7 February.

Dinner \$26 extra.

Thanks to Di Thompson for passing on this
information.

RECOVERY: A DECADE TOWARDS A BIODIVERSE FUTURE

Fifth Australian Network for Plant
Conservation National Conference and Plant
Conservation Techniques Workshops
Tues. 25th February - Sat. 1st March 2003
Geelong, Australia.

Dr. Kingsley Dixon ANPC President
more details: anpc@anbg.gov.au

RIVER RESEARCH

The Ninth International Conference on River
Research and Applications will be held on the
banks of the River Murray at Albury, New
South Wales, Australia, from Sunday 6 July to
Friday 11 July, 2003. It will be an opportunity
for environmental scientists, managers and
students from throughout the world to share
their discoveries and ideas about river
ecosystems. The theme for the meeting is THE
NATURE OF VARIABILITY IN RIVER
ENVIRONMENTS and is hosted by the
Cooperative Research Centre for Freshwater
Ecology, a network of scientists and managers
with headquarters at the University of
Canberra. The CRC maintains a river
laboratory in Albury.

<http://www.conlog.com.au/NISORS>.

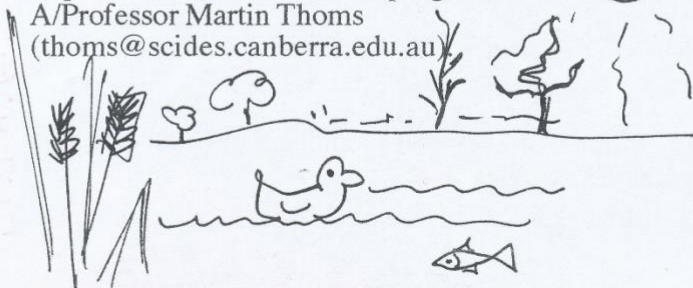
Registration details etc

(conference@conlog.com.au).

Inquiries about the scientific program

A/Professor Martin Thoms

(thoms@scides.canberra.edu.au)



STUDIES CONFLICT

on Common Herbicide's Effects on
Frogs

By Carol Kaesuk Yoon, The New York Times
11/18/02 HerpDigest Sunday, December 1,
2002 Publisher/Editor Allen Salzberg Volume
3 Issue # 14

Despite the release of a flurry of new results in
what is becoming an increasingly intense
debate, scientists still have not reached a
consensus as to whether the nation's most
commonly used herbicide is harming
amphibians in the wild. The new studies raise
questions about whether atrazine, used
primarily for killing weeds in cornfields, is
acting as an endocrine disrupter in amphibians,
interfering with normal hormonal functions,
and causing males to become hermaphrodites,
producing eggs in their testes. Some 60
million to 70 million pounds of atrazine are
applied each year in the United States, and it
has been found in rivers, ponds, snowmelt
and rainwater. Scientists have taken a
particular interest in the new studies because
such a widespread endocrine disrupter could
help explain worldwide declines of
amphibians. The studies could also affect
continued use of atrazine. The Environmental
Protection Agency is reviewing the herbicide's
environmental risks as part of the periodic
reregistration process required for continued
sale of such chemicals. Much of the newest
research was presented yesterday at the
Society of Environmental Toxicology and
Chemistry in Salt Lake City. //NP. ☺
The controversy began in April when Dr.
Tyrone Hayes, an endocrinologist at the
University of California at Berkeley, and
colleagues published results in The
Proceedings of the National Academy of
Sciences indicating that very low
concentrations of atrazine, similar to those
seen in the wild, could turn males of the
African clawed frog into hermaphrodites in the
laboratory. Then last month in Nature, Dr.
Hayes and colleagues published studies
showing that males of the leopard frog, a
native species, could also be feminized by
exposure to low levels of atrazine in the
laboratory. More worrisome, the researchers
found that in the seven field sites from Utah to
Iowa where they could detect atrazine, they
also found hermaphroditic frogs. At the one
site without detectable atrazine, there were no
hermaphrodites. Two industry-sponsored
studies, carried out by a team that has been
critical of Dr. Hayes's work, have failed to
replicate the findings with the clawed frog.

The work was paid for by Syngenta, a maker of atrazine. Yesterday the team also reported that it had examined wild-caught males of the clawed frog where it is native in Africa and where atrazine is widely used and found no hermaphrodites.

"Validated information should be replicable," said Dr. Ronald Kendall, an environmental toxicologist at Texas Tech University and a leader of the industry-sponsored team.

Dr. Hayes said he was surprised by the high levels of hermaphroditism caused by sometimes minute levels of atrazine, with sometimes as many as one-third of the males affected. The effects were less severe at higher levels of the herbicide. But while that might seem counterintuitive, Dr. Hayes said it was typical for chemicals affecting hormones to have highly different, even opposite effects at increased levels.

Dr. Kendall said his team's work had been wrongly impugned as biased because of its industry financing, and he pointed out that Dr. Hayes also formerly received Syngenta financing. Dr. Hayes said his original research showing that atrazine could create hermaphroditic frogs was sponsored by Syngenta, which never published the work. The April publication in which he replicated that research was sponsored by the National Science Foundation; the Nature study was paid for by the W. Alton Jones Foundation, which finances environmental work, and the conservation group WWF.

It remains unclear why the studies conflict. Dr. Hayes, when interviewed, had seen only one of the Kendall team's unpublished studies. Based on the methods, Dr. Hayes said he was not surprised they had not replicated his results. He said that the researchers had raised the frogs under unhealthy conditions and that they did not properly control levels of atrazine in the frogs' water. "Even if their animals were healthy, you can't compare them to our study," he said. But Dr. Jim Carr, comparative endocrinologist at Texas Tech and a member of Dr. Kendall's team, said that in another study team members had mimicked Dr. Hayes's experimental conditions more closely but still did not produce his results. Dr. Carr and colleagues have also criticized Dr. Hayes's omission of certain experiments considered standard. "There are not a lot of details published in the Hayes work," said Dr. Carr. "So it's hard to compare."

AUSSIE CROCS RUN DRY AS DROUGHT BITES

HerpDigest

Sunday, December 8, 2002

Publisher/Editor Allen Salzberg

Volume # 3 Issue # 15

Sydney, Reuters, December 2, 2002, Australia's grains and livestock farmers are not the only rural folk praying for rain -- so are some crocodile breeders who say a severe drought has stopped their male crocodiles from producing sperm.

"They shoot blanks," said John Lever, owner of the Koorana Crocodile Farm in the eastern state of Queensland, which has about 3,000 crocodiles bred for their skin and meat. "It's pretty rough when your sex life is determined by the weather. Thunder and lightning is the ultimate aphrodisiac for crocs," Lever said on Monday.

Lever said if one of the worst droughts in the past century did not break soon, his production of 1,600 baby crocodiles per year would be cut by half.

Not only did male crocodiles' sperm count fall during dry spells but females tended to reabsorb their eggs as a survival mechanism if droughts became prolonged. There are artificial ways of stimulating crocodiles. For instance, crocodiles seem to react much the same way to helicopters flying overhead as they do to thunderstorms. "That might be an idea but I think it's a rather expensive way to go about getting crocodiles to mate," Lever said.

HOW TO ATTRACT FROGS TO YOUR BACKYARD

They need

- * a constant source of water, such as a little bog or wildlife pond.
- * sufficient vegetation and rocks as places for shelter, perching and protection
- * plenty of different plants in and around the water garden to attract insects for frog food.

See the following website for details on pond construction.

www.nwf.org/backyardwildlifehabitat/frogpond.cfm

FIELD NATURALISTS ASSOCIATION OF CANBERRA INC.

The Field Naturalists Association of Canberra was formed in 1981. The aim of the club is to stimulate interest in the natural history of the ACT through regular meetings and field outings. Meetings are usually held on the first Thursday of each month. Field outings are also planned each month and range from day outings to long weekends and camping. The emphasis is on informality and fun. New members are always welcome, especially family groups and young people. Information on activities is circulated in the monthly newsletter. If you wish to join FNAC, please complete the form below and send it with the appropriate subscription to:

The Treasurer, FNAC, GPO Box 249, Canberra ACT 2601.

FAMILY NAME: FIRST NAME:

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

.....

POSTAL ADDRESS:

SUBURB: STATE: POSTCODE:

PHONE: HOME: WORK:

SUBSCRIPTION ENCLOSED: \$..... Single/Family \$20.

How did you hear about FNAC? Please circle. FRIEND OTHER Please state

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