

SECOND WORLD CONGRESS OF HERPETOLOGY



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PICTURE LEFT:
Painting by
BART WILLIAMS
kindly donated by
Adella Gallery,
Adelaide

"KUNIA" –
SNAKE DREAMING
THIS PAINTING
DEPICTS THE
DREAMTIME
SNAKE OF THE
WILLIAMS
KINSHIP.
THIS IS THE
SACRED SITE
OF KUNICE
WHERE THE
CARPET SNAKES
GUARD THIS SITE
AND THEIR EGGS
FROM THE
LIZARDS OR
STRANGERS.
ONLY THEIR KIN
MAY ENTER
THIS SITE.

ABSTRACTS

exploited the special features of larval amphibians have offered important insights into how these special features evolved and why they are retained. In this sense larval amphibians have been exemplary teachers as they have taught us about general ecological and evolutionary processes, they have also taught us about themselves. And like good teachers, their lessons have guided us toward clearer, more operational questions about more complex ecological and evolutionary problems such as the sources of chaotic population dynamics, the interaction of biotic and abiotic effects on population processes, and the evolution of the amphibian life cycle itself.

- Tucker
S12 **Demography of the freshwater crocodile, *Crocodylus johnstoni*, in Queensland.** A.D. TUCKER. *Centre for Conservation Biology and Dept of Zoology, University of Qld, Brisbane Qld 4072, Australia.* A population of *Crocodylus johnstoni* was studied in the headwaters of the Lynd River in Queensland from 1976–1993. Preliminary data on reproductive ecology (confirmed by laparoscopy and gonadal biopsy) suggests that maturity is primarily mass-related rather than age-related for males but less so for females. The study incorporates estimates of population size, age structure, survivorship, and sex ratio to determine if age or stage-based population models were most appropriate for the species. Revised skeletochronology methods were developed for age determination of wild crocodiles and validated from a mark-recapture study of individuals marked as hatchlings. The long-term history of the population permits changes in demographic factors to be investigated. Hatchling tissue samples were obtained for paternity testing to determine effective population size and to confirm if multiple paternity exists. Paternity testing offers a comparative method to contrast reproductive strategies between hole-nesting and mound-nesting crocodylians. Finally, ranching scenarios are simulated by population viability analyses to determine if sustained harvest of the species is possible. [KEYWORDS: crocodile, demography, modelling, viability analysis].
- Tuniyev
C06–189 **On morphological variation of the West Caucasian newts.** BORIS TUNIYEV. *Caucasian State Biosphere Reserve, Sochi RU-354347, Russia.* Eight morphometric characters were measured and used for analyses of variation of 3 species of newts from the both slopes of the Western Caucasus. A total 234 specimens (7 populations) of *Triturus vulgaris lantzi*, 35 specimens (2 populations) of *T. cristatus karelini* and 423 specimens (16 populations) of *T. vittatus ophryticus* were examined. Big geographic and altitude variation of *T. vulgaris* and *T. vittatus* is a result of autochthon (since Pliocene) development supposedly. Apparently more late penetration (since Holocene) of *T. cristatus* didn't give possibility for development of its adaptable radiation. [KEYWORDS: West Caucasus, newts, variation].
- Tunner
C02 **Why does the water frog *Rana lessonae* migrate at Lake Neusiedl (Central Europe)?** HEINZ G. TUNNER. *Dept of Zoology, University of Vienna, Althanstrasse 14, A-1090 Wien, Austria.* Lake Neusiedl, a shallow lake (max. depth 1.80 m) with an area of approx. 300 km², is the habitat of two water frog taxa *R. lessonae* and the hybridogenetic all female hybrid *R. esculenta*. *R. esculenta* can only persist through sexual parasitism on *R. lessonae* due to its hybridogenetic reproduction and unisexuality. *R. esculenta* females result from mating with *R. lessonae* males. The distribution