

# FROGLOG

Newsletter of the Declining Amphibian  
Populations Task Force

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## Report from the DAPTF Chair

By W. Ronald Heyer

Fundamental actions that impact amphibian conservation were taken by the DAPTF Board at its meeting on 13-14 June 1999, and at a meeting held on 21-23 June 1999 by the Species Survival Commission to recommend how amphibian and reptile conservation should best be approached within the SSC.

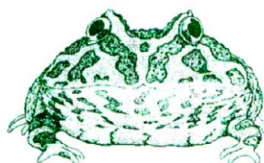
The DAPTF Board endorsed a plan that will provide a comprehensive summary of the declining amphibian phenomenon in 2001. The plan consists of three main elements: (1) a multi-authored book providing an assessment of knowledge to date, including an analysis of the ecogeography of declines, evaluation of causal factors and case studies of particularly well-studied declines; (2) a compact disc containing the DAPTF data with database software that will allow users to exhaustively query the data; (3) a compilation of reports from Regional Working Groups that have not published their reports elsewhere.

The DAPTF Board agreed that the Seed Grant Program should be continued.

The DAPTF Board, after considerable thought and discussion, concluded that it was most unlikely that, although substantial progress had been made, not all of the causes of amphibian declines would be resolved by 2001. Given that situation, it was concluded that it would be a mistake to disband or significantly change the Task Force in 2001. The DAPTF will be needed to keep an international presence and activity on the scientific issues involved. It was thought that some level of metamorphosis of DAPTF would be appropriate in 2001 upon completion of the comprehensive summary targeted in the paragraph above. Both Tim Halliday and I

expressed our convictions that new DAPTF leadership was necessary for the Task Force beyond 2001. In order to phase the new leadership in, a search committee will identify a Chair-elect as soon as possible to work with the DAPTF Board to determine the appropriate role and structure of the DAPTF beyond 2001. The Chair-elect will assume full duties at an appropriate point of the annual DAPTF Board Meeting to be held in conjunction with the joint ASIH-HL-SSAR meeting in Baja California in June 2000.

The SSC sponsored meeting recommended to SSC Chair David Brackett that new specialist groups be established for (1) amphibians, (2) snakes and (3) lizards not currently covered by existing SSC specialist groups. These would complement the existing lizard, turtle and crocodilian specialist groups. It was recognized that each of these new groups would require support in terms of a program officer. The SSC is unable to provide such support under current and projected budgets. For amphibians, the meeting recommended enthusiastic acceptance of an offer put forward by Conservation International to pay for salary and support costs for a program officer for a global amphibian specialist group and for the non-marine turtle specialist group already in existence. The to-be-formed global amphibian specialist group would concentrate on amphibian conservation issues that are outside of the DAPTF mandate, such as red-listing and action plan activities. This new specialist group was also encouraged to establish a small-grants program for on-the-ground amphibian conservation work. The DAPTF will remain a separate unit within the SSC structure rather than a unit within the new SSC global amphibian specialist group.



## NEW SEED GRANT ROUND

We are pleased to announce a new round of Seed Grants for 1999. These awards are intended as one-time awards of between \$500 and \$2,000 for the support or initiation of research projects which further the DAPTF's mission to determine the nature, extent and causes of amphibian population declines. The awards will be divided into several categories:

### (1) CONSERVATION INTERNATIONAL AWARDS.

Conservation International (CI) is providing \$10,000 in seed grant funds for projects that meet joint CI-DAPTF goals. The criteria for these awards stipulated by CI are: (a) the proposed work would be undertaken in one of the biodiversity hotspots and wilderness areas identified by CI (California Floristic Province; Caribbean; Mesoamerica; Choco/Darien/ Western Ecuador; Tropical Andes; Brazilian Cerrado Atlantic Forest Region; Central Chile; Amazon Basin; Mediterranean; Caucasus; Guinean Forests of West Africa; Congo Basin; Eastern Arc Mountains and Coastal Forests of Tanzania and Kenya; Cape Floristic Region; Succulent Karoo; Madagascar and Indian Ocean Islands; Western Ghats and Sri Lanka; Indo-Burma; Mountains of South-Central China; Philippines; Sundaland; Wallacea; New Guinea; northeast Australia; southeast Australia; New Zealand); (b) the projects should contain one or more of the following characteristics - be primarily field-based, involve local herpetologists, provide training and/or equipment that will be used subsequently, determine the status of poorly-known species, and result in the publication of results. We would appreciate seed grant applicants self-identifying whether they meet these criteria in their seed grant application.

(Continued next page.....)





### Expansion of *Rana ridibunda* in the Urals - a Danger for Native Amphibians?

From Vladimir Vershinin &  
Irina Kamkina

In the last 20-30 years, due to thermal pollution, an active expansion of the lake frog (*Rana ridibunda*) has occurred outside its natural area in Russia. The main sources of introduction are fish-breeding farms and medical and biological institutes, which are using this species in their own experiments.

The first information on the introduction of lake frogs in the Urals dates to 1977 (Toporkova, 1977, 1978; Vershinin, Toporkova, 1981). Its presence in Ekaterinburg (Sverdlovsk) was noted in 1967 in a report by E.L. Shchupak. Several populations of *R. ridibunda* have been found in the city since that time. Some of these (3) have disappeared and 6 new ones have been formed. Reproduction occurs only in the warmest years. So, last year (1998) in connection with unusual summer warmth, reproduction was noted in the city, city suburbs and in forest parks.

Similar processes occur in Nizhny Tagil - a city with heavy industrial contamination. Anecdotal reports date the appearance of this species in the city to 1978. During a survey in 1988, only one population was found in the city. Now, the lake frog inhabits 14 sites in the city area and reproduction has been noted in 10. The situation in Nizhny Tagil differs from that in Ekaterinburg as *R. ridibunda* is displacing native species of amphibia. This process is leading to the decrease or disappearance of some natural populations. The same has been observed in Europe (Arano et al., 1995) and in some regions of the USA (Moyle, 1973) with the bullfrog (*Rana catesbeiana*). Our assessment of the situation is that *R. ridibunda* is becoming dominant because of its higher tolerance to industrial pollution.

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Arano, B., Llorente, G., Garcia-Paris, M. & Herrero, P. (1995) Species translocation menaces Iberian waterfrogs. *Conserv. Biol.* **9**(1): 196-198.

Moyle, P.B. (1973) Effects of introduced Bullfrogs, *Rana catesbeiana*, on the native frogs of

San Joaquin Valley, California. *Copeia* **1**: 18-22.

Toporkova, L.Y. (1977) [Influence of human activity on amphibian distribution]. *Problems of Herpetology*. Leningrad. pp. 204-205.

Toporkova L.Y. (1978) [New records for herpetofauna in the mountain taiga zone of the Middle Ural]. *Fauna i Ekologiya Zhivotnykh UASSR i Prilezhashchikh Raionov. Pt.2.* Izhevsk. pp. 63-65.



### Advances in the Conservation Status of Uruguayan Amphibians

By Raul Maneyro & Jose A.  
Langone

Using as a basis the work by Roca et al (1994, Conservación de la fauna de tetrápodos I. Un índice para su evaluación. *Mastozoología Neotropical* **1**(1): 17-28), the SUMIN (addition index) values for the 41 species of Uruguayan amphibians so far recorded were calculated. In order to better reflect the variability of native species, the variables used by the cited authors were modified and one of them was not used. The resultant matrix was constructed using eleven variables: (1) continental distribution (transformed into regional distribution); (2) national distribution; (3) spread of habitat use; (4) spread of vertical space use; (5) body size; (6) reproductive potential; (7) trophic spread; (8) relative abundance; (9) taxonomic singularity; (10) singularity & (11) extractive actions (e.g. hunting, collection for trade).

For the treatment of results, data for all the species were ordered in an 11 (columns = variables) by 41 (rows = species) matrix. The data obtained allowed us to conclude that the Uruguayan species of amphibians can be divided into three groups. One of these is composed of seven fragile taxa (SUMIN >= 12) that require efforts for their conservation and that are endemic or with a restricted distribution (*Melanophryniscus devincenzii*, *M. montevidensis*, *M. orejasmirandae*, *M. sanmartini*, *Argenteohyla siemersi*, *Pleurodema bibroni* and *Lysapsus limellus*). Another group (SUMIN between 8.5 and 12) is composed of 12 species that are occasionally found or have a marginal distribution, but are not endemic (*Chthonerpeton indistinctum*, *Ceratophrys ornata*, *Limnomedusa macroglossa*, *Physalaemus fernandezae*, *P. henselii*, *P. riograndensis*, *Hyla minuta*, *H. nana*, *H. uruguayana*, *Scinax fuscovarius*,

*Phyllomedusa iheringii* and *Elachistocleis ovalis*). The other group (SUMIN < 8.5) is composed of 22 species with regional distribution, wide trophic amplitude and stable populations (*Bufo arenarum*, *B. dorbignyi*, *B. fernandezae*, *B. paracnemis*, *Melanophryniscus atroluteus*, *Hyla pulchella*, *H. sanborni*, *Scinax berthae*, *S. engiophila*, *S. squalirostris*, *Leptodactylus chaquensis*, *L. gracilis*, *L. latinasus*, *L. mystacinus*, *L. ocellatus*, *L. podicipinus*, *Odontophrynus americanus*, *Pseudopaludicola falcipes*, *Physalaemus biligonigerus*, *P. gracilis* and *Pseudis minutus*). The implementation of a National System of Protected Areas is evaluated as being an important factor to favour the conservation of the amphibian fauna of Uruguay.

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### Request for Information from Working Groups

As discussed in Ron Heyer's report and in the information for the new Seed Grant round, the next few years will be particularly important for the DAPTF because we will be publishing information on what we have collectively found out so far about the declining amphibian phenomenon. A crucial part of this will be information from our national, regional and issue-based Working Groups which we hope to have published as a Collected Report. Much of this information will also contribute to the DAPTF Database CD-ROM.

Working Groups are always asked for an annual report as a means of reporting any progress in understanding amphibian declines, but this time we will be asking all Working Groups to begin preparation of a comprehensive report which will elucidate amphibian declines in their particular area. We will, in particular, be looking for decline data for particular sites which have suffered declines (or are known NOT to have