

FROGLOG

Newsletter of the Declining Amphibian
Populations Task Force

June 2006, Number 75



**Transitioning
the Declining
Amphibian
Populations
Task Force**

**By James P. Collins
Chairman, Board of Directors,
DAPTF**

Issue #75 of *Froglog* is the last one produced by the Declining Amphibians Task Force (DAPTF). On June 30, 2006 the DAPTF will become part of the World Conservation Union (IUCN) Amphibian Specialist Group (ASG), which will continue and expand the DAPTF's mission as an organization devoted to amphibian research and conservation. I want to summarize for you the DAPTF's transition to the ASG so that everyone knows what to expect, make some general comments about amphibian decline research and conservation efforts, and then formally record some thanks to those whose hard work have made the DAPTF possible.

The DAPTF-ASG transition

The DAPTF Seed Grant program will continue under the ASG with Tim Halliday as liaison for all existing projects. Tim will ensure a smooth transition by overseeing ongoing developments and collecting final reports. Rapid Response funds will also continue under the ASG. The DAPTF website will have information for applying for Seed Grants and Rapid Response Funds as well as provide information on the ongoing developments of the new ASG website.

The Declining Amphibian Database (DAD) is maintained on a small, private server with access limited to one person at a time. We

are determining if these data can be exported to a larger server for easy access by multiple users. The DAPTF website will have further information regarding access to this resource.

The ASG will require the continuing involvement of Working Group Chairs. Appointments to these positions will be assessed according to guidelines and objectives that will be available shortly. All current Working Group Chairs will be contacted personally.

The DAPTF/CEPF (Critical Ecosystems Partnership Fund) grants will continue. Robin Moore at Conservation International (rdmoore@conservation.org) is the contact for information.

Froglog will continue on a bimonthly basis. For now, information on submitting articles and editorial guidelines will be available on the DAPTF website or by email asg@ci.conservation.org. All past issues of *Froglog* will be archived on the DAPTF legacy website and hopefully with the British Library as well. The Smithsonian Institution in Washington, D.C. will archive all other material concerning the DAPTF.

Details on the ASG itself

The ASG is a unit of the IUCN Species Survival Commission. ASG's mission is to conserve biodiversity by stimulating, developing, and executing practical programs to study, save, restore, and manage amphibians and their habitats around the world. Following the Global Amphibian Summit which produced the Amphibian Conservation Action Plan in 2005, Holly Dublin, Chair of IUCN's Species Survival Commission, asked Claude Gascon, Senior

Vice-President of Regional Programs Division at Conservation International, and myself if we would co-Chair the ASG. We agreed and since then we have worked together with Tim Halliday and Jeanne McKay on augmenting activities of the ASG and merging the DAPTF and the ASG. After July 1, 2006, the ASG will have an Advisory Board and an Executive Committee to raise funds, engage policy-makers, and lead programs related to amphibian conservation. Three Divisions will round out the ASG's portfolio: Research, Conservation, and Assessment.

The Research Division most closely reflects the DAPTF's current mission. It will integrate a global network of national and regional working groups to coordinate research into the causes of global amphibian declines and disseminate the results. The Conservation Division complements research with activities directly related to conserving populations and species. The recent effort to develop in-range and out-of-range *ex situ* conservation facilities for Panamanian amphibians is a good example of the kind of project that would fall into this area. The Assessment Division will provide a baseline for research and conservation activities by using the Global Amphibian Assessment (GAA) to evaluate regularly the status of every amphibian species.

Placing the DAPTF within the framework of the ASG and under the umbrella of the Species Survival Commission's Specialist Groups ensures that the DAPTF's mission will continue by taking advantage of the international connections and intellectual capital of the IUCN's global network.

Practically speaking, it also affords a broad, diverse platform for raising funds for amphibian research, conservation, and assessment. The ASG, through connections with the IUCN and Conservation International, will be able to take advantage of a valuable infrastructure to support amphibians.

Will science and conservation as usual work?

Global amphibian declines are an unfortunate example of the general decline in global biodiversity. The DAPTF's mission has been to determine the nature, extent and causes of amphibian declines throughout the world, and to promote means by which declines can be halted or reversed. It has fulfilled that mission. The fact that an enlarged institution—the ASG—will continue and expand the DAPTF's mission is a testimony to the vision of our founders.

Within amphibians we have seen in one class of animals a range of pressures including commercial exploitation, competition and predation by exotic species, land use change, global climate change, toxins, and pathogens come to a head in the latter part of the twentieth century. If there is one set of observations that drew the world's attention to the importance of understanding the causes of declines, it was the fact that scientists recorded the disappearance of amphibians in protected areas, wildlife reserves and national parks, areas humans reserved for protecting species and conserving biodiversity. Losses within these enclaves signalled that the strategy of locking away habitat was insufficient for protecting amphibians; "conservation as usual" was not working. Thus, we have to re-examine what we mean by a refuge, and in some cases a refuge of last resort may be an ex situ conservation facility. Scientists must also broaden our view of research programs and projects. "Science as usual" will not solve complex questions like, 'What is causing amphibian declines?' Studies by individual investigators help us to understand changes in amphibian population dynamics, but accelerating our progress is

most likely done with an integrated, interdisciplinary approach that may incorporate everything from molecular biology to global climate change. Teamwork invites collective knowledge and experience and presents the opportunity for the rapid resolution of complex challenges.

Finally, as stewards of our environment who want to protect our biodiversity, we must examine our values because decisions we make concerning everything from which fuels we use to the land use changes we make affect our environment. Even the most remote places on Earth are no longer completely isolated from human actions. Researchers and supporters of the DAPTF realized all of this and fostered programs that helped bring the problem of global amphibian declines to the world's attention. The DAPTF's vision will live on through the ASG.

Acknowledgements for exceptional service

We owe a special thanks to the Chairmen who preceded me: David Wake, Robert Johnson, W. Ronald Heyer, and James Hanken. All of whom played key roles in starting and sustaining the DAPTF.

The current Board of Directors (Ross A. Alford, Cynthia Carey, Alan Channing, Martha L. Crump, Mario García-París, David M. Green, Tim Halliday, James Hanken, Roberto Ibáñez D., Michael J. Lannoo, Karen R. Lips, James B. Murphy, Rohan Pethiyagoda, George B. Rabb, Michael J. Tyler, David B. Wake) and previous members of the Board (Sergius Kuzman, Kraig Adler, Mike Tyler, Neville Passmore, Pim Arntzen, Elke Zimmermann and Jaime Pefaur) have supported the Task Force intellectually and financially and deserve the thanks of our global community.

Tim Halliday, the DAPTF's International Director, deserves special thanks. His commitment to DAPTF as an organization and to amphibian research and conservation has helped make the DAPTF the influential organization that it is. We have been fortunate to have his time, advice, and insights over all of these years.

Jeanne McKay is the DAPTF's International Coordinator and *Froglog* Editor; she was preceded by John Baker and John Wilkinson. Their hard work and constant involvement made all of the things happen that were needed to make the DAPTF run well.

On behalf of the DAPTF, I would also like to take this opportunity to thank our Regional and Thematic Working Group Chairs for their dedication in collecting data on amphibian declines and their causes around the world.

A special thanks to the following individuals, institutions and organizations whose sustained contributions over the years helped to make up the DAPTF's core funds: David & Marvalee Wake, George B. Rabb, James Hanken, Margaret M. Stewart, Mark Klein and Mary Wagner, Ronald & Miriam Heyer, Moira Hope, Arizona Zoological Society, Columbus Zoological Park Association, Geraldine R. Dodge Foundation, Inc., International Amphibian Day, Pacific Rivers Council, Inc., Thomas and Sue Pick Family Fund, Zoological Society of Philadelphia, Peace Frogs, Arizona Game & Fish Department - Herpetology Program, Association of Reptilian and Amphibian Veterinarians, Audubon Commission, California Academy of Sciences, Captive Born Reptiles, Center for North American Herpetology, Central Illinois Herpetological Society, Cheyenne Mountain Zoo, Chicago Herpetological Society, Desert Fishes Council, John Ball Zoological Society, Jumping Frog Research Institute, Melbourne Zoo, Minnesota Herpetological Society, North Carolina Herpetological Society, Oklahoma Zoological Park Association, Quebec Ministry of Natural resources, RANA, Rosamund Gifford Zoo, Sainte Lawrence Valley Natural History Society, Tuscon Herpetological Society, US EPA and the Wyoming Natural Diversity Database. The USGS/ARMI group and Conservation International were also major partners in funding the

research of the DAPTF's investigators.

Finally, thanks to all of you who have supported the DAPTF as an organization, and most importantly its mission through your efforts to understand the causes of amphibian declines and your actions to conserve our dwindling heritage.

DAPTF Seed Grants

Recipients of DAPTF Seed Grants are generally expected to publish the results of their projects in refereed journals, or as articles in *Froglog*. They are also required to send us reports, so that their results can be made available to DAPTF members. Below is a list of reports that we have received recently. Anyone wanting a copy of a report should contact the author in the first instance; we can supply copies if you cannot reach the author.

Adrian Hailey, John E. Cooper & Racquel Mohammed (2005) **Progress Report:** Health monitoring of amphibians in Trinidad - a pilot study on the cane toad *Bufo marinus*. (ahailey@fsa.uwi.tt)

Amy J. Lind (2004) Development of a database on reintroductions, translocations, and associated captive breeding in amphibians. (alind@fs.fed.us)

Ryan T. Schell & Gregory D. Maniero (2005) **Progress Report:** Detection of the antibody response in northern leopard frogs (*Rana pipiens*) by ELISA using reagents developed in *Xenopus* (gmaniero@stonehill.edu)

The following papers report work supported by DAPTF Seed Grants: Demeter, L., Hartel, T. & Cogalniceanu, D. (2006) Distribution and conservation status of amphibians in the Ciuc basin, eastern Carpathians, Romania. *Zeitschrift für Feldherpetologie*: **Suppl. 10**; 217-224.

(Grant to Tibi Hartel, 2004) (asobeka@yahoo.com)

Hartel, T., Moga, C. I. & Nemes, S. (2005) Use of temporary ponds by amphibians in a wooded pasture, Romania. *Biota*: **5**; 21-28.

(Grant to Tibi Hartel, 2004) (asobeka@yahoo.com)

Romansic, J. M., Diez, K. A., Higashi, E. M. & Blaustein, A. R. (2006) Effects of nitrate and the pathogenic water mold *Saprolegnia* on survival of amphibian larvae. *Diseases of Aquatic Organisms*: **68**; 235-243.

(Grant to John Romansic, 2002) (romansij@science.oregonstate.edu)

DAPTF/CEPF Grants

We are supporting the following projects under the DAPTF/CEPF grant scheme, which focuses on selected 'biodiversity hotspots':

Southern Mesoamerica: Ronald W. Gagliardo (Atlanta Botanical Garden, USA) & Brian Kibicki (Costa Rican Amphibian Research Center), Recovery of the lemur leaf frog (*Phyllomedusa lemur*) in a mid-elevation site along the Atlantic versant of the Talamancan mountain range of Costa Rica.

Northern Mesoamerica: Jesse Delia (Prescott College, Arizona, USA) et al., Conservation and biodiversity of some amphibians from southern Mexico.

Karoo: Alan Channing (University of the Western Cape, South Africa), Threatened amphibians in the Succulent Karoo hotspot: an integrated approach to conservation.

Eastern Arc: Simon Loader (Natural History Museum, London) et al, The endemic amphibians of the Nguru Mountains, Tanzania: an integrated study of an Eastern Arc Mountain hotspot.

West Africa: Annika Hilliers (University of Mainz, Germany) & Mark-Oliver Rödel (University of Würzburg, Germany), Assessment of endangered and endemic amphibians in the forests of southern Ghana.

West Africa: Mark-Oliver Rödel (University of Würzburg, Germany), Highly endemic, highly threatened? Amphibian survey in the Mts. Nimba Biosphere Reserve, south-eastern Guinea.

The DAPTF Rapid Response Fund

The DAPTF has awarded a grant from its Rapid Response Fund to

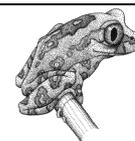
Kevin G. Smith, Ché Weldon and Louis H. du Preez (North-West University, South Africa) for their project:

Batrachochytrium dendrobatidis as a threat to amphibians in the Drakensberg Mountains of Southern Africa: causes and consequences of a mortality event.

Books received

• Lawrence L. C. Jones, William P. Leonard & Deanna H. Olson (Eds.) (2006) *Amphibians of the Pacific Northwest*. Seattle Audubon Society, Seattle. (227 pp.)

The Pacific Northwest has a special place in the unfolding story of amphibian declines. Itself a region where several species have declined dramatically, it is home to many of the leading researchers into amphibian declines and, in Corvallis, provided the original home of the DAPTF. This beautifully produced book lives up to its claim to be 'more than a field guide'. With contributions from over 30 expert authors, it contains authoritative introductory chapters on amphibian biology. The main body of the book contains detailed accounts of 47 species, including a number that are newly described. The colour photographs, showing all life stages of each species, are of an exceptionally high quality. This book sets a new standard of excellence for herpetological field guides.



First Mediterranean Herpetological Congress

16-20 April 2007

Marrakech – MOROCCO

Organized by: the UER (Biodiversity & Management of the Natural Heritage), Faculty of Sciences, Sémmlalia, Cadi Ayyad University, Marrakech – Morocco In collaboration with: Centre d'Etudes Biologiques de Chizé (CNRS)-France, Société Herpétologique de France and Muséum d'Histoire Naturelle de Marrakech, Morocco with the contribution of: Societas Herpetologica Italica-Italy and Societas Herpetologia Española-Spain. The Mediterranean Herpetological Congress is an

international congress on the subject of herpetofauna of Mediterranean-Type Ecosystems. It is bilingual (French and English) and includes plenary sessions, oral presentations, poster sessions and/or round tables. It is open to any herpetologist, whether professional or volunteer, interested in amphibians and reptiles of the Mediterranean-Type Ecosystems. It is also open to palaeontologists interested in paleobiodiversity and the evolution of amphibians and reptiles and the dynamics of paleo-environments within these ecosystems. The Congress will play a vital role in strengthening capacity to study and conserve the herpetofauna of the Mediterranean regions, and will give participants opportunities to share experiences and information, to set up collaborative networks and to review the progress of Herpetology in Mediterranean environments.

The congress topics include:

1. Systematics, biogeography and paleontology
2. Morphology, ecomorphology, physiology and developmental biology
3. Evolutionary biology, Ecophysiology and behavioural ecology
4. Individual ecology and population biology
5. Global change impacts and species-space conservation
6. Any other contribution related to the study and/or the conservation of herpetofauna of the ecosystems other than Mediterranean-Type Ecosystems can be submitted for the congress.

If you are interested in attending the congress and would like to receive further correspondence, please contact the local organizing committee at cmh1@ucam.ac.ma or refer to the congress website at www.ucam.ac.ma/cmh1



Workshop on the amphibians of Madagascar

A workshop on amphibian conservation entitled *A Conservation Strategy for the Amphibians of Madagascar*

(ACSAM) will be held from 18 to 23 September at Antananarivo, the capital of Madagascar. This will provide an important opportunity for many renowned scientists studying highly diverse frogs of the Grand'Ile to meet.

Madagascar is well known for its high number of amphibian species (more than 220), and for their endemnicity (more than 99%). However, habitat degradation and deforestation pose serious conservation problems for the survival of these species. In the last fifteen years many studies and surveys were conducted in rainforests, dry forests and other natural environments, which yielded a large amount of distributional, ecological, and taxonomic information. It is now evident that to achieve a more long-term conservation strategy it is necessary to develop a new scientific alliance that fosters a multi-focused programme. The ACSAM workshop is the first step towards coordinating this effort. During the workshop researchers and conservationists interested in Madagascan amphibians will begin outlining a sustainable long-term conservation strategy for these animals.

The workshop will be organised within the framework of the DAPTF / Madagascar, and will benefit from the financial and organisational assistance of *Conservation International, Madagascar Fauna Group, Wildlife Conservation Society* and many other environmental NGOs. The themes will incorporate the design of protected areas based on amphibian presence, the coordination of survey work, and the application of biomolecular approaches in defining taxonomic status. Moreover, special attention will also be given to the possibility of captive breeding, the impact of the international pet-trade, the realisation of a national scientific collection, and increasing public awareness. Participation in the ACSAM workshop is free, but registration is required. After four days of scientific presentations and discussions there will be an interesting post-workshop

excursion to one or more herpetologically interesting areas.

For more information please contact : Franco Andreone, Museo Regionale di Scienze Naturali, Torino, Italy (f.andreone@libero.it) and Herilala Randriamahazo, WCS Madagascar, Antananarivo, Madagascar (Herilala@wcs.org).

More detailed information is also available on the following website: www.francoandreone.it (section "Projects").



Publications updates

From June 2006, the monthly update of recently published papers on amphibian declines and related issues, compiled by Tim Halliday and provided at the DAPTF web site, will be available at the AmphibiaWeb web site: <http://www.amphibiaweb.org/aw/declines/lit/index.html>

DAD yields its first publication

The Declining Amphibian Database (DAD) contains 3020 datasets on amphibian populations, covering 1170 species at 529 sites in 61 countries and is available to anyone interested in amphibian declines. Amy Drew of Texas Tech University is the first person to publish a paper using the data in DAD:

Drew, A., Allen, E. J. & Allen, L. J. S. (2006) Analysis of climatic and geographic factors affecting the presence of chytridiomycosis in Australia. *Diseases of Aquatic Organisms*: **68**; 245-250.

DONATIONS:

We gratefully acknowledge receipt of the following donations received prior to June 1, 2006: *Hidetoshi Ota, Mary S. Kostalos, Michael De Santis and Cheyenne Mountain Zoo.*

FROGLOG is the bi-monthly newsletter of the Declining Amphibian Populations Task Force. After June 30th, 2006, articles on any subject relevant to the understanding of amphibian declines should be sent to the IUCN / SSC Amphibian Specialist Group: asg@ci.conservation.org c/o Jeanne McKay