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News from the herpetological community

The new face of  
the ASG



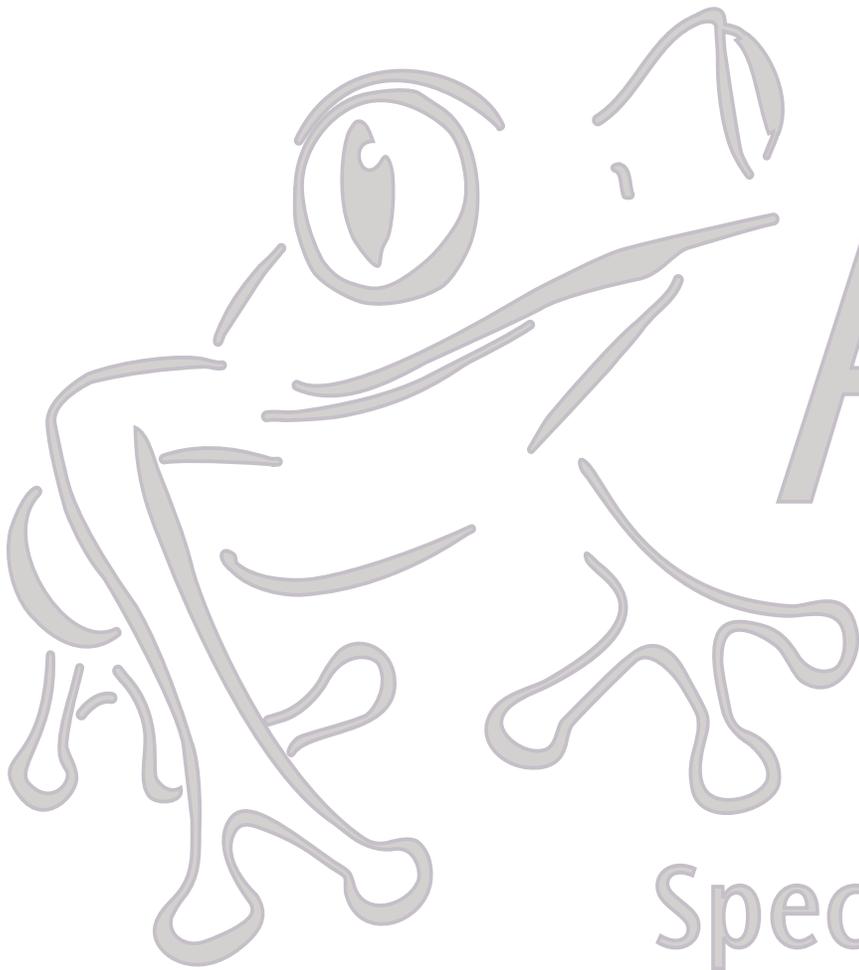
## “Lost” Frogs

The global search comes to an end. Where next?



## Red List

Updating South Africa's Red Lists.



ASG

IUCN/SSC  
Amphibian  
Specialist Group

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# Updating the IUCN Red List status of South African amphibians

By John Measey

Five years after the publication of the South African Frog Atlas (Minter et al, 2004) which coincided with the end of the Global Amphibian Assessment (Stuart et al, 2004), it was time to re-assess South Africa's 118 species of anuran amphibians. The very solid foundation laid by the former Red List was essential to produce the update, and with it an opportunity to look back over the last five years of amphibian research and decide what we need to know for before the next assessment is due. What has emerged is not only an updated Red List, but also a policy document that will guide researchers, policy makers and conservationists to prioritise research on threatened amphibians for the next five years. The South African National Biodiversity Institute (SANBI) is proud to announce the publication of this book which is available for free download from the SANBI website (details below).

Assessments of all species took place from September 2009 and were finalised in a workshop at SANBI on 2 December 2009, when the South African Frog Re-assessment Group (SA-FRoG) was formed. Prior to the workshop, taxonomic leaders were charged with investigating all South Africa's amphibian taxa to assess all data gathered since the 2004 assessments. Only those considered to be threatened (CR, EN or VU), Data Deficient (DD) or species which had previously been listed as threatened were discussed at the workshop, all others having already been considered by leaders as continuing to be of Least Concern (LC).

For all 35 species reassessed during the workshop, sufficient data were available to make global assessments. Only 13 were deemed to hold the same status as in the 2004 assessment. All 7 species classified



Thanks to everyone who attended the workshop (3-4 December 2009) to prioritise research on South Africa's amphibians.

as Data Deficient (DD) in 2004 had sufficient data obtained to make full assessments. Of the threatened species, 8 were downlisted (2 CR to EN, 1 EN to VU, 2 VU to LC and 3 VU to NT) while 3 were uplisted (2 EN to CR and 1 VU to EN). Full details of all threatened amphibian species in South Africa (assessed by SA-FRoG & IUCN SSC Amphibian Specialist Group) are detailed in an appendix of the book

the Red Listing, attended by a forum of the region's amphibian scientists. The aim was prioritise research by producing a list of clear actions and responsible agencies together with a time frame for the research required. Four sessions discussed priorities for threatened species in the following areas, which are also the chapter titles in the resulting book:

- Understanding and Documenting Species Diversity
- Conservation and Ecological Studies
- Assessing Status and Trends
- Education, Awareness and Capacity Building

Despite a history including some of the world's best herpetologists, South Africa still has new frogs to describe, and these require a combined approach including molecular studies in conjunction with morphological and call analysis.

Priorities include undescribed species of *Anhydrophryne*, *Capensibufo*, *Microbatrachella*, *Poyntonophrynus* and *Xenopus*. Timely descriptions are important as each new species is



*Arthroleptella rugosa* is the only new frog described in South Africa since 2004 and joins the Red List in 2010 as Critically Endangered. Credit: Andrew Turner

(Measey, 2011) as well as on the IUCN Red List website ([www.iucnredlist.org](http://www.iucnredlist.org)).

A second two day workshop followed

likely to have an increased threat status, also requiring reassessments of other species within the genus.

Priorities for conservation and monitoring include the (now) Critically Endangered *Vandijkophrynus amatolicus*, last seen in September 1998 and the subject of a co-ordinated effort to find them again (see CI's The Search for Lost Frogs). In general, most species continue to be assessed on their distribution data (Extent of Occurrence and Area of Occupancy) and a priority to collect population data and set up long-term monitoring programmes for several threatened species was identified.

The list of priorities for conservation research is particularly long and this caused a lot of concern as there is not sufficient capacity or locally available funding to conduct the work that is required. Including museums, universities, research institutes and provincial nature conservation organisations, South Africa has a total of 14 amphibian researchers, most of whom also work on reptiles and other small vertebrates. This capacity needs to grow in order to meet the increasing threats to the country's frogs.

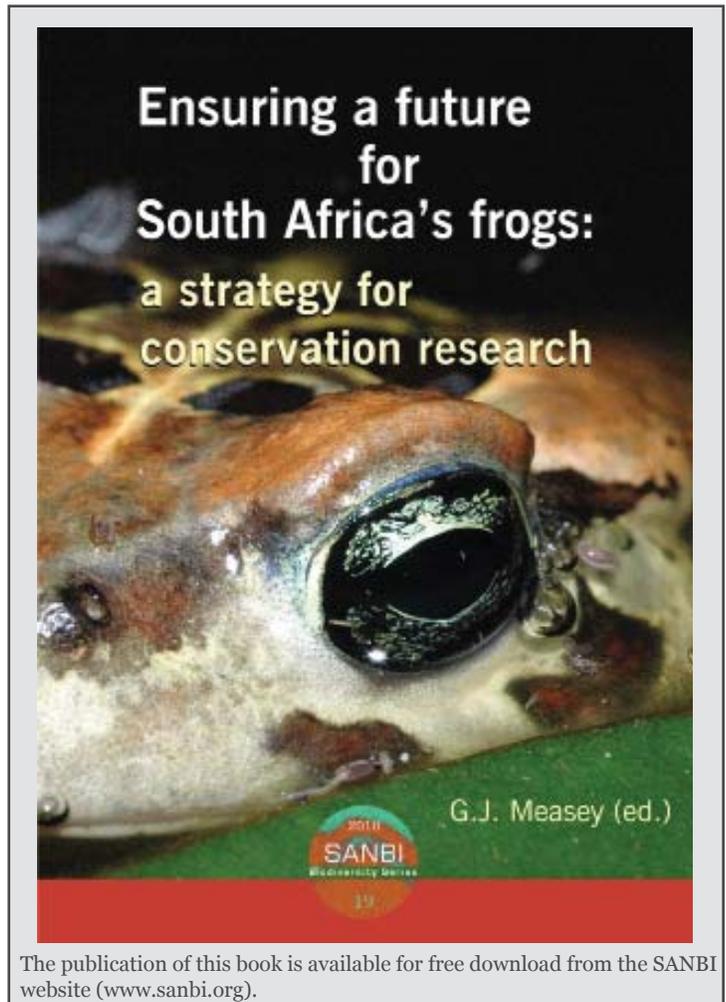
The reassessment and research strategy represents an important step for the conservation of amphibians in South Africa, and a model approach for other areas of the globe. The fulfilment of the targets presented is ambitious given the small capacity and lack of local funds, but would represent a significant step to redress the loss of the region's amazing amphibian biodiversity.

#### References

Measey, G.J. (ed.) 2011. Ensuring a future for South Africa's frogs: a strategy for conservation research on South African amphibians. Biodiversity series 19. South African National Biodiversity Institute, Pretoria. 95pp

Minter, L. R., Burger, M., Harrison, J. A., Braack, H. H., Bishop, P. J. & Knoepfer, D. (eds.) (2004) Atlas and Red Data Book of the Frogs of South Africa, Lesotho and Swaziland. SI/MAB Series No. 9 Smithsonian Institution Press, Washington, D.C.

Stuart, S. N., Chanson, J. S., Cox, N. A., Young, B. E., Rodrigues, A. S. L., Fischman, D. L. & Waller, R. W. (2004) Status and trends of amphibian declines and extinctions worldwide. *Science*, 306, 1783-1786.



The publication of this book is available for free download from the SANBI website ([www.sanbi.org](http://www.sanbi.org)).

#### SA-FRoG

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## Amphibians on the IUCN Red List: Developments and changes since the Global Amphibian Assessment

By Ariadne Angulo

The Global Amphibian Assessment (GAA) was a landmark initiative spearheaded by the International Union for Conservation of Nature (IUCN), Conservation International and NatureServe, producing comprehensive conservation assessments for all amphibian species known at the time. The GAA helped catalyze global amphibian conservation initiatives and the formation of the IUCN SSC (Species Survival Commission) Amphibian Specialist Group (ASG). Results from the GAA now reside in the IUCN Red List of Threatened Species (<http://www.iucnredlist.org/initiatives/amphibians>). Updates to Amphibians on the IUCN Red List are now coordinated through the IUCN SSC Amphibian Red List Authority (Amphibian RLA),

a group of people tasked by the Chair of the IUCN SSC with overseeing the process of updating, maintaining and curating amphibian assessments in the IUCN Red List. The Amphibian RLA has developed a wiki site that contains a series of resources and information pertaining to amphibian assessments (<http://amphibianrla.pbworks.com/w/page/29057098/Home-page>). While this website was originally intended for the RLA itself, it contains useful assessment-related information for the broader herpetological and conservation communities. Please visit our wiki site and for further information on amphibian assessments please contact the Amphibian RLA Focal Point, Ariadne Angulo at [ariadne.angulo@iucn.org](mailto:ariadne.angulo@iucn.org).

## Contributing Authors

Vásquez-Almazán, C., Papenfuss, t. J., Moore, R. D., Aga Khan, H. & Church, D. (2011) The Sierra Caral of Guatemala: a refuge for endemic amphibians. *FrogLog 95*. Author Contact Robin Moore [rdmoore@conservation.org](mailto:rdmoore@conservation.org).

Measey, J.<sup>1</sup> (2011) Updating the IUCN Red List status of South African Amphibians. *FrogLog 95*. Author Contact: [john@measey.com](mailto:john@measey.com)

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Angulo, A. (2011) Amphibians on the IUCN Red List: Developments and changes since the Global Amphibian Assessment. *FrogLog 95*. Author Contact: [ariadne.angulo@iucn.org](mailto:ariadne.angulo@iucn.org).

Gerlach, J. (2011) The forced closure of conservation work on Seychelles Sooglossidae. *FrogLog 95*.

Tingley, R., Phillips, B. L. & Shine R. (2011) Alien amphibians challenge Darwin's naturalization hypothesis. *FrogLog 95*. Author Contact: [reid.tingley@gmail.com](mailto:reid.tingley@gmail.com).

Karunarathna, D. M. S. S. & Amarasinghe, A. A. T. (2011) Is there a decline of amphibian richness in Bellanwila-Attidiya Sanctuary? *FrogLog 95*.

Bell, R. C.<sup>1</sup>, Gata Garcia, A. V.<sup>1</sup>, Stuart, B. L.<sup>2</sup> & Zamudio, K. R.<sup>1</sup> (2011) High prevalence of the amphibian chytrid pathogen in Gabon. *FrogLog 95*. Author Contact: Rayna C. Bell [rcb269@cornell.edu](mailto:rcb269@cornell.edu) (phone) 415.847.4118 (fax) 607.255.8088

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Pereyra, L. C., Lescano, J. N. & Leynaud, G. C. (2011) Breeding-site selection by red-belly toads, *Melanophryniscus stelzneri* (Anura: *Bufonidae*), in Sierras of Córdoba, Argentina. *FrogLog 95*. Author Contact: Pereyra, L. C. [laurech@gmail.com](mailto:laurech@gmail.com).

Moore, R. D. (2011) The Search For Lost Frogs. *FrogLog 95*. Author Contact [rdmoore@conservation.org](mailto:rdmoore@conservation.org).

Streicher, J., Meik, J., Smith, E. & Campbell, J. (2011) Recent diversification in old habitats: Molecules and morphology in the endangered frog, *Craugastor uno*. *FrogLog 95*. Author Contact: [streicher@uta.edu](mailto:streicher@uta.edu).