

**Comment on *Spracklandus* Hoser, 2009 (Reptilia, Serpentes, ELAPIDAE): request for confirmation of the availability of the generic name and for the nomenclatural validation of the journal in which it was published**

(Case 3601; see BZN 70: 234–237; 71: 30–38, 133–135, 181–182, 252–253)

(1) Raymond Hoser

*Snakebusters, PO Box 599, Doncaster, Victoria, 3108, Victoria, Australia*  
(e-mail: snakeman@snakeman.com.au)

The comments by Kaiser (BZN 71: 30–35), Schleip (BZN 71: 35–36), Wüster et al. (BZN 71: 37–38) and Thomson (BZN 71: 133–135) provide no hard evidence to rebut any element of Case 3601 as originally published in BZN. Correspondents on Taxacom and the ICZN list online have correctly dismissed the claims of these authors as ‘bluster’. Thorpe (in litt.) added that the comments submitted by Hoser’s enemies on Case 3601 were absolutely laughable in terms of the Code, and this view was repeated in similar words by Dubois, Wellington and others (in litt. 2014). Furthermore all claims raised by Kaiser, Schleip, Wüster et al. and Thomson, merely repeated earlier discredited claims of Kaiser (2013) and Kaiser et al. (2013). These were rebutted in detail by Hoser (2012a) (regarding the *Spracklandus* matter), Hoser (2012b) and Dubois (in litt.) in relation to other issues alleged by the group. However I here deal briefly with some of the points for purpose of further rebuttal and for discussion in BZN.

Claims by Kaiser (BZN 71: 133–135) that the Hoser works have been criticized by others have no bearing on the nomenclature and the case for ICZN confirmation of the nomenclatural availability within the Code of the name *Spracklandus* Hoser, 2009. In any event, the criticism of scientific papers is normal scientific discourse, even if labelled by critics as ‘unscientific’. Kaiser has not in fact produced any evidence to suggest that Australasian Journal of Herpetology (AJH) Issue 7 did not comply with Article 8.1.3 of the Code. The distributed issue of AJH Issue 7 is no different from other acknowledged Code-compliant papers published daily. It was published in print with ink on paper in numerous durable copies. An alleged printing defect in terms of printing quality control as suggested by Kaiser (2014) does not in any way make AJH Issue 7 invalid under the Code or Article 8 of the Code. Kaiser’s statement that ‘I have seen no proof that there were ever more than a handful of copies produced’ is meaningless. Absence of evidence is not evidence of absence. Furthermore at no stage have Kaiser, Wallach, Wüster, Broadley or Schleip asked the logical question of me as to where and by whom original copies were distributed.

Hoser (2012a) stated that ‘All issues of AJH were published in hard copy (over 100 originals of each) and later online, being posted online on average 10 days after the print copies were first received and distributed, by which stage receipts from recipients had been received and archived.’ Kaiser, Schleip or Wüster et al. have never produced any evidence to contradict this obvious fact or properly sought contradictory evidence. Kaiser (2014b) used four arguments to allege that AJH was in violation of Article 8.1.3 of the Code. These arguments are refuted in detail below.

- (1) It was published in an edition, in the usual meaning and understanding of this word, and even cited as such by his close colleagues (Wallach et al., 2009, p. 34).

- (2) There is uncontradicted evidence that numerous copies were made (e.g. Hoser, 2012a). The only evidence provided by Kaiser, Wallach, Wüster, Broadley or Schleip is a statement that they did not make proper or reasonable enquiries as to where copies were distributed. This included failing to check the most likely repositories, such as Zoological Record, as specified in the Code (Recommendation 8A) or persons named in the relevant papers.
- (3) The original copies were all identical in words, fonts, pagination, margins and all other relevant details.
- (4) The copies were 'durable' in the commonly accepted meaning of the word, including being printed on high quality white gloss paper (superior to that used by most other published journals) and printed in black ink.

Furthermore, all Kaiser's claims against the method of printing of AJH in terms of potential Code-compliance (repeated in part by Wüster et al., 2014) are in fact rejected by Schleip (BZN 71: 35–36) in his point 5.

Schleip's claim 'The existence of this outlet [AJH] was primarily proclaimed in herpetoculture internet forums, and zoologists unlikely to participate in such forums were widely unaware of its existence (see the Code, Appendix B.8, General Recommendations).' is clearly false. In the pre-checking of Case 3601, the Commission Secretariat independently established that AJH was sent to numerous places including Zoological Record as the most important part of the Code's 'wide dissemination' recommendation (Recommendation 8A). Significantly, Schleip's claim is also refuted by Wüster (in litt. 2009), who wrote 'You have been accused of many things. Lack of dissemination of your articles has not been one of them'. Schleip's claim 'However, on the date [Issue 7 of AJH] was distributed, it was not obtainable by the public' is patently false. AJH was available at all relevant times.

Schleip (BZN 71: 35–36) stated 'In the absence of evidence to the contrary, it is not possible to determine whether or not the copies were printed in accordance with Article 8.1.3 or 'printed on demand'. Kaiser (BZN 71: 30–35) asserted 'I believe this shows that there really was no print run of numerous identical and durable copies'. These and similar statements about the availability of AJH and the relevant website are incorrect. Printed issues have always been offered for sale, the price of each being determined by size. I have often chosen to waive fees to persons requesting issues or photocopies of papers, as was the case with Wallach in 2009. As each issue of the journal was published, the relevant details were added to the relevant parts of the website in accordance with similar practices by publishers of other scientific literature.

Kaiser's (BZN 71: 30–35) prediction of mass disobedience against the Code in the event of a judgement in favour of *Spracklandus* was repeated by Wüster et al. (BZN 71: 37–38), Thomson (BZN 71: 133–135) and Schleip (BZN 71: 31–36), who said 'If the Commission, however, were to vote in favor of Case 3601 and declare the name *Spracklandus* Hoser, 2009 available . . . I predict that the majority of herpetologists will follow the recommendations of Kaiser et al. (2013) and continue to ignore AJH as a reliable source for nomenclatural and taxonomic information'. This is the same prediction made in BZN in relation to the Wells & Wellington papers and names proposed within them made by Stone and others. Stone (1988) wrote: 'If the Commission takes no action with respect to the nomenclature proposed in these publications other scientists may of course choose to ignore that obligation'. King

(1988) made similar comments to those of Kaiser et al. (2013) when he said: 'If [the ICZN] fail to [suppress the works of Wells and Wellington] they will jeopardise the survival of the system of nomenclature which we all use'. Following the Commission's judgement in favour of Wells & Wellington (ICZN, 1991) there was no such mass disobedience against the Code, and in the fullness of time the original Code-compliant names were accepted and widely used (Cogger, 2014a; Shea, in litt.) and the Code survived intact. This usage included the original Code-compliant names being used by authors in favour of the junior synonyms coined by the protesters who had hoped the ICZN would formally suppress the earlier Code-compliant papers (Cogger, 2014a; Shea, in litt.).

Kaiser's claim to represent 'the herpetological community' (as also made by Wüster et al., BZN: 37–38) is false, as demonstrated by Wellington, Wells, and others (in litt. 2013–2014), but is similar to the claims made by those seeking to suppress the Wells & Wellington papers (see ICZN, 1991). Similar claims made by Kaiser in comments on the current case must also be rejected.

Cogger (2014 and in litt.), Dubois, Eipper, Mutton, Shea, Thorpe, Wellington, Wells and many other eminent herpetologists (in litt. 2013–2014) have condemned the Kaiser scheme to replace the names of hundreds of valid taxa with new names. This clearly disproves the claim by Kaiser (2014) that he has broad agreement within the herpetological community for his plan to step outside the Code. In a public online forum Wells told Wüster and Schleip, 'what you and others are doing in this regard is highly contemptuous of the authority of the ICZN'. Thorpe (in litt. 2013) wrote 'At the end of the day, Wolfgang, you are just complaining about the authorship of names which may have to be used as valid . . . complaining that they are not yours (or those of people you choose to consider to be colleagues. . .)'. Shea (in litt.), described Kaiser et al.'s (2013) plan as being 'unworkable'. Eipper (in litt.) noted 'You cannot use a viewpoint to act as a veto to disregard the use of the Code'.

More recently, Schleip (2014) renamed *Leiopython hoseae* Hoser, 2000 with his own name '*L. meridionalis*'. Schleip claimed that Hoser (2000) did not comply with Article 8.1.1 of the code (invoking Kaiser et al. 2013 and Kaiser 2014), which reversed his own opinion expressed in Schleip (2008), Schleip & O'Shea (2010) and even Kaiser et al. (2013), all of whom accepted and used the correct Hoser's (2000) name. Significantly, Schleip (2014) was published in the face of advice by two separate expert reviewers that his paper's claims against Hoser (2000) were false and that he would be acting in contempt of the Code (Shea, Raw, in litt.). Shea formally recommended rejection of the Schleip paper to the editors of Journal of Herpetology. The publication of Schleip (2014) was also condemned by Wellington, Uetz and Cogger (in litt.) within hours of its appearance online. Uetz asked 'How can this go past a reviewer or editor?' In a similar example, Hedges et al. (2014) used the Kaiser 'veto' to overwrite the previously accepted and used *Argyrophis* Gray, 1845 with their own coined name, seriously destabilizing the nomenclature of the blindsnakes.

The claim by Wüster et al. (BZN 71: 37–38) that Hoser had unethically scooped their own allegedly pending work by naming *Spracklandus* is rebutted by Wüster himself (in litt.) where six days after the publication of Hoser (2009), he condemned the taxonomy in that paper to a global audience and added: 'The case for keeping [*Naja*] as a single genus was made by Wüster et al., 2007.' Fry (in litt.) followed this on the same date with 'Wolfgang's 2007 paper already considered the higher order

taxonomy of cobras and quite rightly lumped them into a single genus'. Hoser (2009) had clearly rejected Wüster's own published taxonomy and the appropriate Code-compliant nomenclature of *Spracklandus* Hoser, 2009 followed from this. From the content of Wüster (in litt., 2009) it is clear that Wüster et al. amended their own taxonomic views to align with those of Hoser, well after the publication of Hoser (2009). This means it was not possible for Hoser to have improperly knowingly 'scooped' any work or ideas of Wüster at the time Hoser (2009) was published, as Wüster et al. have more recently alleged.

Case 3601 as originally put by myself should therefore be upheld by the Commission. It is in the interests of long-term nomenclatural stability that the Commission act decisively. It should make a strong statement condemning the actions of Kaiser et al., who have aggressively operated in contempt of the Code. Failure to do so will destabilize taxonomy and nomenclature. The issue is not 'Hoser' but the stability of the Code. The Commission must protect the Code from Kaiser et al. and others who will emulate them to create nomenclatural chaos if their current campaign is successful.

#### Additional references

- Cogger, H.G.** 2014. *Reptiles and amphibians of Australia*, Seventh Edition, CSIRO Publishing, Sydney, NSW, Australia.
- Hedges, S.B., Marion, A.B., Lipp, K.M., Marin, J. & Vidal, N.** 2014. A taxonomic framework for typhlopoid snakes from the Caribbean and other regions (Reptilia, Squamata). *Caribbean Herpetology*, **49**: 1–61.
- Hoser, R.T.** 2000. A revision of the Australasian Pythons. *Ophidia Review*, **1**: 7–27.
- ICZN, 1991.** Case 2531, Decision of the Commission: Three works by Richard W. Wells and C. Ross Wellington: proposed suppression for nomenclatural purposes. *Bulletin of Zoological Nomenclature*, **48**: 337–338.
- Kaiser, H.** 2013. The Taxon Filter, a novel mechanism designed to facilitate the relationship between taxonomy and nomenclature, vis-à-vis the utility of the Code's Article 81 (the Commission's plenary power). *Bulletin of Zoological Nomenclature*, **70**: 293–302.
- Kaiser H.** 2014b. Best practices in herpetological taxonomy: Errata and Addenda. *Herpetological Review*, **45**: 257–268.
- King, M.** 1988. Comments on the proposed suppression for nomenclature of three works by R. W. Wells and C. R. Wellington (Case 2531). *Bulletin of Zoological Nomenclature*, **45**: 150–151.
- Schleip, W.D.** 2008. Revision of the genus *Leiopython* Hubrecht 1879 (Serpentes: Pythonidae) with the redescription of taxa recently described by Hoser (2000) and the description of new species. *Journal of Herpetology*, **42**: 645–667.
- Schleip, W.D.** 2014b. Two new species of *Leiopython* Hubrecht, 1879 (Pythonidae: Serpentes): Non-compliance with the International Code of Zoological Nomenclature leads to unavailable names in zoological nomenclature. *Journal of Herpetology*, **48**: 272–275.
- Stone, J.** 1988. Comments on the proposed suppression for nomenclature of three works by R. W. Wells and C. R. Wellington (Case 2531). *Bulletin of Zoological Nomenclature*, **45**: 53–54.

(2) Anders G.J. Rhodin

*IUCN SSC Tortoise and Freshwater Turtle Specialist Group & Chelonian Research Foundation, 168 Goodrich Street, Lunenburg, Massachusetts 01462, U.S.A.*  
(e-mail: rhodincrf@aol.com)

Hinrich Kaiser

*Department of Biology, Victor Valley College, 18422 Bear Valley Road, Victorville, California 92395, U.S.A. & Department of Vertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20013, U.S.A.*  
(e-mail: hinrich.kaiser@vvc.edu)

Peter Paul van Dijk

*IUCN SSC Tortoise and Freshwater Turtle Specialist Group & Conservation International, 2011 Crystal Drive, Suite 500, Arlington, Virginia 22202, U.S.A.*  
(e-mail: pvandijk@conservation.org)

Wolfgang Wüster

*School of Biological Sciences, Bangor University, Bangor LL57 2UW, Wales, U.K.*  
(e-mail: w.wuster@bangor.ac.uk)

Mark O'Shea

*Faculty of Science & Engineering, University of Wolverhampton, Wulfruna Street, Wolverhampton, WV1 1LY, U.K. (e-mail: oshea@markoshea.info)*

Michael Archer

*Evolution of Earth & Life Systems Research Group, School of Biological, Earth & Environmental Sciences, UNSW Australia (University of New South Wales), Sydney, New South Wales 2052, Australia (e-mail: m.archer@unsw.edu.au)*

Mark Auliya

*Department of Conservation Biology, Helmholtz Centre for Environmental Research GmbH – UFZ, Permoserstraße 15, 04318 Leipzig, Germany*  
(e-mail: mark.auliya@ufz.de)

Luigi Boitani

*IUCN SSC Large Carnivore Initiative for Europe & Department of Biology and Biotechnologies, University of Rome “La Sapienza”, viale Università 32, 00185-Roma, Italy (e-mail: luigi.boitani@uniroma1.it)*

Roger Bour

*Reptiles et Amphibiens, Muséum National d'Histoire Naturelle, 25 rue Cuvier, 75005 Paris, France (e-mail: bour@mnhn.fr)*

Viola Clausnitzer

*IUCN SSC Dragonfly Specialist Group & Senckenberg Museum of Natural History  
Görlitz, PF 300154, 02806 Görlitz, Germany  
(e-mail: viola.clausnitzer@senckenberg.de)*

Topiltzin Contreras-MacBeath

*IUCN SSC Freshwater Conservation Sub-Committee & Centro de Investigaciones  
Biológicas, Universidad Autónoma del Estado de Morelos, Avenida Universidad  
1001, Cuernavaca, Morelos, México (e-mail: topis@uaem.mx)*

Brian I. Crother

*Department of Biological Sciences, Southeastern Louisiana University, Hammond,  
Louisiana 70402, U.S.A. (e-mail: bcrother@selu.edu)*

Juan M. Daza

*Grupo Herpetologico de Antioquia, Biology Institute, University of Antioquia,  
Medellín, Colombia (e-mail: juanm.daza@udea.edu.co)*

Carlos A. Driscoll

*Department of Conservation Genetics, Wildlife Institute of India, Chandrabani,  
Dehradun, Uttarakhand, India (e-mail: driscoll.carlos@gmail.com)*

Oscar Flores-Villela

*Museo de Zoología, Facultad de Ciencias, Universidad Nacional Autónoma de  
México, Circuito Exterior de CU S/N, México D.F. 04510, México  
(e-mail: ofvq@unam.mx)*

Jack Frazier

*Department of Vertebrate Zoology, Division of Amphibians & Reptiles, National  
Museum of Natural History, Smithsonian Institution, P.O. Box 37012, Washington,  
D.C. 20013, U.S.A. (e-mail: kurma@shentel.net)*

Uwe Fritz

*Society of Biological Systematics (GfBS) & Senckenberg Dresden, Königsbrücker  
Landstr. 159, 01109 Dresden, Germany (e-mail: uwe.fritz@senckenberg.de)*

Alfred L. Gardner

*AAZN & USGS Patuxent Wildlife Research Center, Smithsonian Institution, PO  
Box 37012, MRC 111, Washington, D.C. 20013–7012, U.S.A.  
(e-mail: gardnera@si.edu)*

Claude Gascon

*Amphibian Survival Alliance, 1133 15th Street NW, Washington D.C. 20005,  
U.S.A. (e-mail: claud.gascon@nfwf.org)*



Arthur Georges

*Institute for Applied Ecology, University of Canberra, Canberra, ACT 2601, Australia (e-mail: georges@aerg.canberra.edu.au)*

Frank Glaw

*Sektion Herpetologie, Zoologische Staatssammlung München, Münchhausenstraße 21, 81247 München, Germany (e-mail: frank.glaw@zsm.mwn.de)*

Felipe G. Grazziotin

*Museu de Zoologia da Universidade de São Paulo, Divisão de Vertebrados (Herpetologia), Avenida Nazaré, 481, Ipiranga, 04263-000, São Paulo, São Paulo, Brazil (e-mail: fgrazziotin@gmail.com)*

Colin P. Groves

*School of Archaeology & Anthropology, Building 14, Australian National University, Canberra, ACT 0200, Australia (e-mail: colin.groves@anu.edu.au)*

Gerhard Haszprunar

*Lehrstuhl für Systematische Zoologie and Council of GeoBio-Center der Ludwig-Maximilians-Universität München & Staatliche Naturwissenschaftliche Sammlungen Bayerns, Münchhausenstraße 21, 81247 München, Germany (e-mail: haszi@zsm.mwn.de)*

Peter Havaš

*Titogradská 18, 04023 Košice, Slovak Republic (e-mail: peter.havas@seznam.cz)*

Jean-Marc Hero

*Secretary General, World Congress of Herpetology & Environmental Futures Research Institute, School of Environment, Griffith University, Gold Coast Campus, Southport, Queensland 4222 Australia (e-mail: m.hero@griffith.edu.au)*

Michael Hoffmann

*IUCN Species Survival Commission, International Union for Conservation of Nature, 28 rue Mauverney, CH-1196, Coland, Switzerland and United Nations Environment Programme – World Conservation Monitoring Centre, 219 Huntingdon Road, Cambridge, CB3 0DL, U.K. (e-mail: mike.hoffmann@iucn.org)*

Marinus S. Hoogmoed

*Former Chair, CITES Animals Committee & Museu Paraense Emilio Goeldi / CZO-Laboratorio de Herpetologia, Caixa Postal 399, 66017-970 Belém, Pará, Brazil (e-mail: hoogmoedms@gmail.com)*

Brian D. Horne

*IUCN SSC Tortoise and Freshwater Turtle Specialist Group & Wildlife Conservation Society, 2300 Southern Boulevard, Bronx, New York, New York 10460, U.S.A. (e-mail: bhorne@wcs.org)*

John B. Iverson

*Department of Biology, Earlham College, Richmond, Indiana 47374, U.S.A. (e-mail: johni@earlham.edu)*

Manfred Jäch

*World Water Beetle Collection and Research Centre, Naturhistorisches Museum Wien, Burgring 7, 1010 Wien, Austria (e-mail: manfred.jaech@nhm-wien.ac.at)*

Christopher L. Jenkins

*IUCN SSC Viper Specialist Group & The Orianne Society, 100 Phoenix Road, Athens, Georgia 30605, U.S.A. (e-mail: cljenkins@oriannesociety.org)*

Richard K.B. Jenkins

*IUCN SSC Chameleon Specialist Group, 219c Huntingon Road, Cambridge, CB3 0DL, U.K. (e-mail: rkbjenkins@gmail.com)*

A. Ross Kiester

*Turtle Conservancy, 49 Bleecker Street, Suite 601, New York, New York 10012, U.S.A. (e-mail: ross@turtleconservancy.org)*

J. Scott Keogh

*Australian Society of Herpetologists & Division of Evolution, Ecology & Genetics, Research School of Biology, The Australian National University, Canberra, ACT 2601, Australia (e-mail: scott.keogh@anu.edu.au)*

Thomas E. Lacher, Jr.

*IUCN SSC Small Mammal Specialist Group & Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station, Texas 77843, U.S.A. (e-mail: tlacher@tamu.edu)*

Jeffrey E. Lovich

*U.S. Geological Survey, Southwest Biological Science Center, 2255 N. Gemini Drive, Flagstaff, Arizona 86001, U.S.A. (e-mail: jeffrey\_lovich@usgs.gov)*

Luca Luiselli

*Centre of Environmental Studies Demetra s.r.l., via Olona 7, 00198 Rome, Italy (e-mail: lucamlu@tin.it)*



D. Luke Mahler

*IUCN SSC Anoline Lizard Specialist Group & Center for Population Biology,  
University of California Davis, One Shields Avenue, Davis, California 95616, U.S.A.  
(e-mail: lmahler@gmail.com)*

David Mallon

*IUCN SSC Antelope Specialist Group & Division of Biology and Conservation  
Ecology, Manchester Metropolitan University, Chester Street, Manchester M1 5GD,  
U.K. (e-mail: d.mallon@zoo.co.uk)*

Roderic Mast

*IUCN SSC Marine Turtle Specialist Group & Oceanic Society, P.O. Box 437,  
Ross, California 94957, U.S.A. (e-mail: mast@oceanicsociety.org)*

Roy W. McDiarmid

*USGS Patuxent Wildlife Research Center, Smithsonian Institution, PO Box 37012,  
National Museum of Natural History, Room WG-5, MRC 111, Washington D.C.  
20013, U.S.A. (e-mail: mcdiarmr@si.edu)*

John Measey

*Centre for Invasion Biology, Department of Botany and Zoology, Stellenbosch  
University, Stellenbosch, South Africa (e-mail: john@measey.com)*

Russell A. Mittermeier

*IUCN SSC Primate Specialist Group & Conservation International, 2011 Crystal  
Drive, Suite 500, Arlington, Virginia 22202, U.S.A.  
(e-mail: rmittermeier@conservation.org)*

Sanjay Molur

*ZOO / WILD & Laboratory of Systematics, Ecology and Conservation, Zoo  
Outreach Organization, 96 Kumudham Nagar, Vilankurichi Road, Coimbatore,  
Tamil Nadu 641035, India (e-mail: herpinvert@gmail.com)*

Volker Mosbrugger

*Senckenberg Gesellschaft für Naturforschung, Senckenberganlage 25, 60325  
Frankfurt am Main, Germany (e-mail: volker.mosbrugger@senckenberg.de)*

Robert W. Murphy

*Centre for Biodiversity, Royal Ontario Museum, 100 Queen's Park, Toronto,  
Ontario M5C 2C6, Canada (e-mail: bob.murphy@utoronto.ca)*

Darren Naish

*Ocean and Earth Science, National Oceanography Centre, Southampton, University  
of Southampton, Southampton SO14 3ZH, U.K. (e-mail: eotyrannus@gmail.com)*

Manfred Niekisch

*Society for Tropical Ecology (GTÖ) & Zoologischer Garten Frankfurt, Bernhard-Grzimek-Allee 1, 60316 Frankfurt am Main, Germany*  
(e-mail: manfred.niekisch@stadt-frankfurt.de)

Hidetoshi Ota

*Institute of Natural and Environmental Sciences, University of Hyogo & Museum of Nature and Human Activities, Yayoigaoka 6, Sanda, Hyogo 669-1546, Japan*  
(e-mail: ohta@hitohaku.jp)

James F. Parham

*John D. Cooper Archaeological and Paleontological Center, Department of Geological Sciences, California State University, Fullerton, California 92834, U.S.A.*  
(e-mail: jparham@fullerton.edu)

Michael J. Parr

*Alliance for Zero Extinction & American Bird Conservancy, 1731 Connecticut Avenue, 3rd Floor, Washington, D.C. 20009, U.S.A.* (e-mail: mparr@abcbirds.org)

Nicolas J. Pilcher

*IUCN SSC Marine Turtle Specialist Group & Marine Research Foundation, 136 Lorong Pokok Seraya 2, Taman Khidmat, 88450 Kota Kinabalu, Sabah, Malaysia*  
(e-mail: npilcher@mrf-asia.org)

Ronald H. Pine

*Standing Committee on Nomenclature, American Society of Mammalogists & Natural History Museum and Biodiversity Research Center, University of Kansas, Lawrence, Kansas 66045, U.S.A.* (e-mail: ronpine@mac.com)

Anthony B. Rylands

*IUCN SSC Primate Specialist Group & Conservation International, 2011 Crystal Drive, Arlington, Virginia 22202, U.S.A.* (e-mail: arylands@conservation.org)

James G. Sanderson

*Small Wild Cat Conservation Foundation, 1510 South Bascom Avenue, Apt. 7, Campbell, California 95008, U.S.A.* (e-mail: gato\_andino@yahoo.com)

Jay M. Savage

*Department of Biology, San Diego State University, San Diego, California 92182, U.S.A.* (e-mail: savyl@cox.net)

Wulf Schleich

*Hanrathstraße 39, 53332 Bornheim, Germany* (e-mail: webmaster@leipython.de)

Gustavo J. Scrocchi

*Instituto de Herpetología, Fundación Miguel Lillo - CONICET, Miguel Lillo 251, 4000 Tucumán, Argentina (e-mail: gustavo.scrocchi@gmail.com)*

H. Bradley Shaffer

*Department of Ecology and Evolutionary Biology & Institute of the Environment and Sustainability, University of California, Los Angeles, California 90095, U.S.A. (e-mail: brad.shaffer@ucla.edu)*

Eric N. Smith

*Amphibian and Reptile Diversity Research Center, Department of Biology, The University of Texas at Arlington, Arlington, Texas 76019, U.S.A. (e-mail: e.smith@uta.edu)*

Robert Sprackland

*Virtual Museum of Natural History, 8608 Shadwell Drive, #43, Alexandria, Virginia 22309, U.S.A. (e-mail: robert.sprackland@gmail.com)*

Simon N. Stuart

*IUCN Species Survival Commission, International Union for Conservation of Nature, CH-1196 Gland, Switzerland & United Nations Environment Programme - World Conservation Monitoring Centre, Cambridge CB3 0DL, U.K. (e-mail: simon.stuart@iucn.org)*

Holger Vetter

*Kiefernweg 8, 55543 Bad Kreuznach, Germany (e-mail: antvet@t-online.de)*

Laurie J. Vitt

*Sam Noble Museum, 2401 Chautauqua Avenue, Norman, Oklahoma 73072, U.S.A. (e-mail: vitt@ou.edu)*

Tomás Waller

*IUCN SSC Boa and Python Specialist Group & Fundación Biodiversidad – Argentina, Suipacha 1311, 3rd Floor, C1011AAC Buenos Aires, Argentina (e-mail: twaller@fibertel.com.ar)*

Grahame Webb

*IUCN SSC Crocodile Specialist Group & Wildlife Management International, PO Box 530, Karama, Northern Territory 0813, Australia (e-mail: gwebb@wmi.com.au)*

Edward O. Wilson

*Museum of Comparative Zoology, Harvard University, 26 Oxford Street, Cambridge, Massachusetts 02138, U.S.A. (e-mail: ewilson@oeb.harvard.edu)*

Hussam Zaher

*Museu de Zoologia da Universidade de São Paulo, Avenida Nazaré, 481, Ipiranga, 04263-000, São Paulo, São Paulo, Brazil (e-mail: hussam.zaher@gmail.com)*

Scott Thomson (Corresponding Author)

*Museu de Zoologia da Universidade de São Paulo, Divisão de Vertebrados (Herpetologia), Avenida Nazaré, 481, Ipiranga, 04263-000, São Paulo, São Paulo, Brazil (e-mail: scott.thomson321@gmail.com)*

1. In Case 3601 Raymond Hoser has asked the Commission to validate for the purposes of nomenclature the name *Spracklandus* Hoser, 2009, and ‘the journal in which it was published,’ issue 7 of the *Australasian Journal of Herpetology* (AJH). We note that the entire run of AJH has been written, edited, and published solely by Hoser. Although his requests to the Commission were presented as narrow and, in his words, ‘routine matters,’ we are convinced that they represent an important tipping-point with broad implications of major concern for zoological taxonomy and nomenclature as a whole and, by extension, the greater scientific community. Since Hoser’s actions and works have failed to follow scientific best practices (e.g. Turtle Taxonomy Working Group, 2007, 2014; Kaiser et al., 2013; Kaiser, 2014) and both the Commission’s general Recommendations and Code of Ethics in Appendix A, the global herpetological community has widely rejected his taxonomic decisions and resultant nomenclature. This has unfortunately caused a confusing dual nomenclature to develop in the herpetological community, with most boycotting or ignoring Hoser’s 700+ new names coined in the AJH, while he and a few personal followers actively promote their usage. We believe that suppression of the name *Spracklandus*, and all issues of AJH, is the only effective way to bring this contentious and confusing issue to resolution. The plenary power available under Article 81.1 of the Code exist specifically to allow the Commission to make rulings in individual cases that disturb stability and cause confusion, whether the works are Code-compliant or not. We maintain that it is in the interest of nomenclatural stability, not only for herpetology, but for all of zoological taxonomy, that the plenary power be invoked to declare the works in AJH unavailable, regardless of any narrow interpretation of their technical Code-compliance. We present our arguments for rejection of the validity of AJH in the following commentary. In view of the wide-reaching implications of this case for all of zoology, and reflecting the deep and broad-based community concern over these issues, our contributing authors include 70 global scientific leaders and accomplished amateurs from a wide variety of zoological disciplines.

2. When it comes to identifying and naming taxa, herpetology has embraced the use of possibilities created by emerging technologies in desktop-publishing, open-source internet-based publishing, searchable online digital libraries and databases, and internet search engines (e.g. Chelonian Conservation and Biology, [www.chelonian.org](http://www.chelonian.org); Herpetological Conservation and Biology, [www.herpconbio.org](http://www.herpconbio.org); Amphibian Species of the World, <http://research.amnh.org/herpetology/amphibia/index.html>; The Reptile Database, [www.reptile-database.org](http://www.reptile-database.org); Turtle Taxonomy Working Group, [www.iucn-tftsg.org/checklist](http://www.iucn-tftsg.org/checklist)). Along with this acceleration and expansion of scientific communication, the last 20 years have witnessed unprecedented increases in the knowledge of reptile phylogeny and species

diversity, triggered by the ever-increasing application of molecular data, new analytical tools and conceptual advances, with the resulting taxonomic adjustments affecting most groups. Unfortunately, these advances in online informatics and desktop publishing have also created easier mechanisms for some individuals to bypass scientific publishing conventions in order to create self-published, poorly justified, and questionable nomenclatural and taxonomic acts, without the quality control of peer-review and editorial oversight. Case 3601, concerning the validity of the name *Spracklandus* and issue 7 of AJH, the journal in which it was presented, illustrates the potential of technological progress and internet-based data-mining by some individuals to enable the rapid production and wide distribution of this type of work, and with it the accelerating threats of destabilization and confusion that nomenclatural and taxonomic systems are facing as a result. Although rogue taxonomic journals such as AJH have appeared in the past and continue to appear (see Raghavan et al., 2014), it is our contention that it is incumbent on the scientific community and the Commission (ICZN) to protect and defend the integrity of nomenclatural taxonomy and the scientific process, lest both science and the ICZN itself fall victim to the destabilizing impact to nomenclature and taxonomy of the kind generated by individuals such as the originator of Case 3601.

3. Poor quality output is unacceptable in all fields of science, but it is particularly deplorable in taxonomy because it creates persistent nomenclatural instability and confusion, debases proper taxonomic and nomenclatural work, and bypasses accepted and established community standards for scientific inquiry and process. Kaiser et al. (2013) appropriately criticized this type of output, but in response to Kaiser and co-authors, Hoser (2013b) disingenuously and abrasively attempted to justify his own work and defend his actions of naming un-named phylogenetic clades identified in the works of other authors, while at the same time engaging in extensive personal defamatory rhetoric (e.g. Hoser 2013b:12, 15). We fear that unless the Commission addresses this type of divisive approach to taxonomy and nomenclature, and its potential ramifications, by setting a clear precedent to stabilize herpetological nomenclature, comparable practices are likely to surface in other branches of zoological taxonomy. If left unaddressed or validated, further destabilization and confusion are likely to develop, and the ICZN would then find itself facing an onslaught of analogous problems.

4. Case 3601 attempts to confirm the availability of the name *Spracklandus* and validate for the purposes of nomenclature issue number 7 of AJH. By implication, this could be misconstrued as validating the entire run of AJH as an acceptable medium for nomenclatural acts, and with it the many names (currently over 700, at various taxonomic levels) that Hoser created in isolation from (and frequently in conflict with) the global herpetological community. In addition, it would implicitly validate what we consider to be Hoser's disregard for proper scientific conduct and process. While we understand that any vote by the Commission is intended to be narrow in its application (i.e. covering only the specifics of the individual case) and not precedent-setting, we are certain that, given his long and public history of self-promotion, Hoser will interpret a decision in his favor as precedent-setting and comport himself accordingly, including the likely possibility of hundreds more requests to the Commission for validation of his many names. It is for this reason that our comment deliberately reaches beyond the specifics of Case 3601: to pre-empt

claims about the relationship between the Commission and herpetological taxonomists that manipulate the intent of a decision on Case 3601 and do lasting damage to the Commission and its effectiveness in science.

5. Hoser's output threatens to undermine the entire Code-compliant system that underlies nomenclatural stability (Kaiser et al., 2013; Thomson, BZN 71: 133–135). Having already impugned the scientific reputation and credibility of individual taxonomists (e.g. Hoser, 2009, pp. 16–19; Hoser, 2013b pp. 12, 15) and undermined the taxonomic profession itself (by self-publishing in a journal with no evidence of independent peer review), Hoser has triggered unprecedented community reaction and rejection (Kaiser et al., 2013; Thomson, BZN 71: 133–135). The herpetological community has expressed, justified, and implemented its intent to reject usage of Hoser names (e.g. Bates et al., 2013; Measey, 2013; Reynolds et al., 2014), but Hoser has continued to promote his alternative nomenclature and promulgated ever more names, with more issues of the AJH introducing many more new names posted in August 2014. Recent pending ICZN applications regarding Hoser names (Cases 3647 and 3648) and his comments on Taxacom and the ICZN-list online discussion forum have also indicated that his application regarding *Spracklandus* will not be an isolated case.

6. One of the most difficult situations arising from this scenario is the emergence of mutually exclusive, conflicting dual nomenclatures. One is based on accepted scientific principles to ascertain that the production of peer-reviewed taxonomy and nomenclatural acts is based on rigorous and focused analysis and a shared Code of Ethics; this is the method widely supported by the global herpetological and other taxonomic communities. The other is produced in isolation and based largely on apparent misappropriation and misrepresentation of others' work, or occasionally on baseless conjecture, without any notable adherence to acceptable scientific rigor or ethical principles. The ICZN is already aware of specific examples (see Thomson, BZN 71: 133–135), including Hoser's recent pre-emptive but technically flawed attempt to name *Macrochelys* taxa under active study by others (Roman et al., 1999; Echelle et al., 2010; Hoser, 2013a; Turtle Taxonomy Working Group, 2014; Thomas et al., 2014), in egregious disregard of Appendix A:2 of the Code. Developments of the most recent past have shown that the herpetological community is determined to uphold a boycott of Hoser names, and at least the *African Journal of Herpetology* has published an editorial that formalizes this boycott (Measey, 2013). Without action by the ICZN in opposition to Case 3601, we fear that dual nomenclature will be a perpetual problem for herpetological taxonomy.

7. An example of developing dual nomenclature is Hoser's attempted resurrection of three rattlesnake genera (*Aechmophrys*, *Caudisona*, and *Uropsophus*) from the synonymy of *Crotalus*, along with the description of new genera and subgenera (Hoser, 2009; Wüster & Bérnills, 2011). No data were presented to support these proposed changes, and Zaher et al. (2009) recommended that they not be followed. Despite this, the Brazilian Society of Herpetology unfortunately adopted these changes in their annually updated checklist (Bérnills, 2010; also see Wüster & Bérnills, 2011), triggering a proliferation of dual nomenclature for this medically important group of venomous snakes. This example illustrates how the output from AJH can proliferate and the harm that can potentially result from this dual nomenclature. It should also be clear that it is impossible to determine what to do with the resurrected



names without addressing the new names that were coined at the same time. This is a nomenclatural issue, requiring a complete review of the entire group's nomenclature and its inherent taxonomy to determine how to proceed.

8. In our opinion, the issue at hand is not a narrow question of whether the names proposed in AJH may technically be nomenclaturally available, but how the broader scientific community, and the ICZN specifically, should best address this type of open, repetitive disregard of time-honored nomenclatural and taxonomic practice. A firm and unequivocal decision on this case by the ICZN is necessary to safeguard the scientific integrity and global perception of the closely intertwined fields of zoological taxonomy and nomenclature. Neither the global scientific community nor the ICZN itself should be held hostage now or in the future by individuals adept at web-based data-mining and self-promotion, who circumvent the spirit of the Code, minimally attempt to adhere only to the Code's narrowest technical premises, and pre-empt those who work in compliance with both the Code's Recommendations and its Code of Ethics.

9. Governmental agencies, inter-governmental conventions, NGOs, and the global scientific and conservation communities depend on and value credible scientific and taxonomic work by the herpetological and wider taxonomic communities. Important in this regard is the expectation of reasonable nomenclatural stability and a precautionary approach to recommended taxonomic and nomenclatural changes. A decision in support of Case 3601 would implicitly sustain a dual nomenclature for many taxonomic groups of reptiles, and likely facilitate future chaos for additional taxonomic groups. The confusion stemming from such a dual nomenclature would cause many problems, ranging from legislative difficulties (e.g. during the development and enforcement of species management and conservation strategies or for trade regulations and quotas), to confusion over the identification and management of venomous species in a medical context (Williams et al., 2006).

10. We are not advocating that the practice of zoological taxonomy be restricted to scientific professionals—we welcome and encourage taxonomic and nomenclatural contributions from serious amateurs, naturalists, and biodiversity enthusiasts, as many of us are. However, such work needs to be original, acceptably published, and Code-compliant (including both the general Recommendations and the Code of Ethics), with a justified scientific underpinning. Additionally, we advocate strongly for quality-controlled peer-reviewed publishing as the only appropriate 'best practice' for new taxonomy and nomenclature (Turtle Taxonomy Working Group, 2007, 2014; Kaiser et al., 2013; Kaiser, 2014).

11. There are some similarities between the nomenclature presented in the AJH and that of Wells & Wellington (1983, 1985), the subject two decades ago of Case 2531 (BZN 44: 116–121) and several comments (e.g. BZN 45: 52–54, 145–153). This point has also been raised anecdotally on the ICZN online discussion forum and Taxacom, but we consider these cases to be dissimilar in important ways. The issues of concern in the Wells & Wellington papers were largely taxonomic and regionally focused (BZN 48: 337–338), whereas the issues with the AJH are primarily nomenclatural, ethical, and global. It has been argued in the past that the Wells & Wellington papers were also unethical and derived from substandard taxonomic practices (BZN 48: 337–338), but they were published prior to the existence of the Internet, and were not disseminated at the scale of AJH; nor did Wells & Wellington use their own self-edited



output as an opportunity to defame their critics in herpetology or professionals in other walks of life, as Hoser has done repeatedly, in breach of Appendix A:5 (e.g. Hoser, 2009, pp. 13, 16–19; Hoser, 2013b, pp. 12, 15), or to make political statements (e.g. Hoser, 2013a, p. 55) or to self-publicize business and other interests (e.g. Hoser, 2009, pp. 6, 9). In their ruling on Case 2531 the Commission concluded that the aim of that application would be best achieved by leaving the issue to taxonomic specialists to be settled through usage. In the present Case 3601, if the Commission were to consider the issue to be primarily taxonomic, this would have far-reaching destabilizing consequences for all of zoological nomenclature and taxonomy, consequences not readily resolved through usage.

12. Hoser's actions and abrasive comportment via AJH (citations in paragraph above) have created a highly contentious environment for zoological nomenclature and its intrinsic relationship to taxonomy. If the Commission upholds his request for validation of AJH issue 7, the greater scientific community and, importantly, future young scientists are likely to be misled into believing that output such as the AJH is an acceptable scientific medium for bringing knowledge to the public realm. Given also that Hoser's papers in AJH are, in our opinion, seriously flawed, unedited (evidenced by many uncorrected spelling errors), often potentially libellous and off-topic in content, and usually failing to present any measure of pertinent evidence to provide stability for the names they produce, their implicit endorsement by the Commission, if *Spracklandus* and AJH were to be validated, would in our opinion bring taxonomic science, zoological nomenclature, and the Code itself into unfortunate disrepute. Most herpetologists and many from other disciplines reject Hoser's output, as many have turned away from the ICZN online discussion forum, where Hoser has also been vocal and defamatory, including to ICZN Commissioners. In our opinion, this can in turn lead to an unwelcome erosion of the authority of the nomenclatural rules scientists have been following for over a century.

13. We believe Case 3601 represents a tipping-point in terms of where taxonomic science and its relationship with the Code might be headed. This relationship is currently being jeopardized by the actions of a single individual, which, if condoned or validated, are sure to further enable and facilitate others to follow. We therefore reiterate and support the proposal to suppress the entire run of AJH, as outlined in Proposals 9(1)b and 9(3) of Thomson (BZN 71: 134), inclusive of its most recent issues. Additionally, we urge that all scientists suspend the use of Hoser's nomenclature in order to avoid confusion. We contend that all taxa affected by new Hoser names contained in these issues of AJH be subject to prevailing usage under article 82.1 of the Code. Hence, no changes in order to use Hoser names should be formally made to their existing nomenclature while the Commission deliberates. This will prevent the names proposed in the AJH from coming into any further usage until such time that a Decision may be made. Should authors or editors feel a need to justify continued use of prevailing names for taxa affected by this proposal, they may cite Kaiser et al. (2013), Kaiser (2014), this comment, and Article 82.1 of the Code.

14. In summary, we contend that:

(1) the self-produced works by Raymond Hoser under the title of *Australasian Journal of Herpetology*, and the proliferation of names therein, are so contentious that they destabilize and cause confusion in the entire system of nomenclature, and undermine the scientific reputation and credibility of the discipline of taxonomy;

(2) the scope and reach of Hoser's nomenclatural output are made possible by relatively recent advances in internet communication, electronic publishing, and the use of social media, added to prior advances in desktop-publishing technologies. These tools are easily accessible across all biological fields, with concomitant risk of their deliberate misuse by some individuals. Thus, the nomenclatural issues we face in herpetology are already spreading and occurring in other branches of taxonomy and nomenclature. If left unchecked they will confound not merely nomenclatural stability in herpetology but taxonomic science as a whole;

(3) even though the Commission may be disinclined to rule on the basis of the recommended Code of Ethics contained in the Code, Hoser's demonstrated disregard for acceptable ethical practice is a key driver for many in both the herpetological community and other branches of zoology to categorically reject his writings and names, and support the retention of scientifically and ethically sound nomenclature. Without decisive pre-emptive action by the Commission, under Article 81.1 of the Code, the development of a dual system of nomenclature would appear inevitable, an outcome we regard as counter-productive in terms of Code-compliance.

15. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to declare the *Australasian Journal of Herpetology* (AJH) Volumes 1–24 unavailable for nomenclatural purposes; specifically pertaining to Case 3601, this would include issue 7 of AJH, thereby rendering the name *Spracklandus* unavailable;
- (2) to place on the Official Index of Rejected Works in Zoology issues 1–24 of the *Australasian Journal of Herpetology*, as ruled in (1) above;
- (3) to make a clear and decisive statement that the accepted scientific and ethical principles of zoological nomenclature, as recommended in the ICZN Code of Ethics, should be adhered to, and when evidence of failure to adhere to these principles leads to the matter being referred to the Commission for a decision, the Commission may apply and interpret the provisions of the Code of Ethics and determine whether it is appropriate to give a ruling.

These requests supersede those contained in three prior comments published by our co-authors (Thomson, BZN 71: 133; Wüster et al., BZN 71: 37–38; Kaiser, BZN 71: 30–35).

### Additional references

- Bates, M.F., Tolley, K.A., Edwards, S., David, Z., da Silva, J.M. & Branch, W.R. 2013. A molecular phylogeny of the African plated lizards, genus *Gerrhosaurus* Wiegmann, 1828 (Squamata: Gerrhosauridae), with the description of two new genera. *Zootaxa*, **3750**: 465–493.
- Bérnils, R.S. 2010. Brazilian reptiles – list of species. *Sociedade Brasileira de Herpetologia*. Available online at <http://www.sbherpetologia.org.br> (Accessed: 23/09/2014).
- Echelle, A.A., Hackler, J.C., Lack, J.B., Ballard, S.R., Roman, J., Fox, S.F., Leslie, D.M., Jr. & Van Den Bussche, R.A. 2010. Conservation genetics of the alligator snapping turtle: cytonuclear evidence of range-wide bottleneck effects and unusually pronounced geographic structure. *Conservation Genetics*, **11**:1375–1387.
- Hoser, R.T. 2009. A reclassification of the rattlesnakes; species formerly exclusively referred to the genera *Crotalus* and *Sistrurus*. *Australasian Journal of Herpetology*, **6**: 1–21.
- Hoser, R.T. 2013a. An updated taxonomy of the living Alligator Snapping Turtles (*Macrochelys* Gray, 1856), with descriptions of a new tribe, new species and new subspecies. *Australasian Journal of Herpetology*, **16**: 53–63.

- Hoser, R.T.** 2013b. The science of herpetology is built on evidence, ethics, quality publications and strict compliance with the rules of nomenclature. *Australasian Journal of Herpetology*, **18**: 2–79.
- Kaiser, H.** 2014. Best practices in herpetological taxonomy: errata and addenda. *Herpetological Review*, **45**: 257–268.
- Kaiser, H., Crother, B.I., Kelly, C.M.R., Luiselli, L., O'Shea, M., Ota, H., Passos, P., Schleip, W.D. & Wüster, W.** 2013. Best practices: In the 21st Century, taxonomic decisions in herpetology are acceptable only when supported by a body of evidence and published via peer-review. *Herpetological Review*, **44**: 8–23.
- Measey, J.** 2013. Taxonomic publishing, vandalism and best practice: African Journal of Herpetology makes changes that will safeguard authors. *African Herp News*, **60**: 2–4.
- Raghavan, R., Dahanukar, N., Knight, J.D.M., Bijukumar, A., Katwate, U., Krishnakumar, K., Ali, A. & Philip, S.** 2014. Predatory journals and Indian ichthyology. *Current Science*, **107**: 740–742.
- Reynolds, G.R., Niemiller, M.L. & Revell, L.J.** 2014. Toward a Tree-of-Life for the boas and pythons: multilocus species-level phylogeny with unprecedented taxon sampling. *Molecular Phylogenetics and Evolution*, **71**: 201–213.
- Roman, J., Santhuff, S.D., Moler, P.E. & Bowen, B.W.** 1999. Population structure and cryptic evolutionary units in the alligator snapping turtle. *Conservation Biology*, **13**(1): 135–142.
- Thomas, T.M., Granatosky, M.C., Bourque, J.R., Krysko, K.L., Moler, P.E., Gamble, T., Suarez, E., Leone, E., Enge, K.M. & Roman, J.** 2014. Taxonomic assessment of Alligator Snapping Turtles (Chelydridae: *Macrochelys*), with the description of two new species from the southeastern United States. *Zootaxa*, **3786**(2): 141–165.
- Turtle Taxonomy Working Group [Bickham, J.W., Parham, J.F., Philippen, H.-D., Rhodin, A.G.J., Shaffer, H.B., Spinks, P.Q. & van Dijk, P.P.].** 2007. Turtle taxonomy: methodology, recommendations, and guidelines. In Shaffer, H.B., FitzSimmons, N.N., Georges, A. & Rhodin, A.G.J. (Eds.), *Defining Turtle Diversity: Proceedings of a Workshop on Genetics, Ethics, and Taxonomy of Freshwater Turtles and Tortoises. Chelonian Research Monographs*, **4**: 73–84.
- Turtle Taxonomy Working Group [van Dijk, P.P., Iverson, J.B., Rhodin, A.G.J., Shaffer, H.B. & Bour, R.].** 2014. Turtles of the world, 7th edition: annotated checklist of taxonomy, synonymy, distribution with maps, and conservation status. In: Rhodin, A.G.J., Pritchard, P.C.H., van Dijk, P.P., Saumure, R.A., Buhlmann, K.A., Iverson, J.B. & Mittermeier, R.A. (Eds.), *Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group. Chelonian Research Monographs*, **5**(7): 000.329–479.
- Wells, R.W. & Wellington, C.R.** 1983. A synopsis of the Class Reptilia in Australia. *Australian Journal of Herpetology*, **1**(3–4): 73–129.
- Wells, R.W. & Wellington, C.R.** 1985. A classification of the Amphibia and Reptilia of Australia. *Australian Journal of Herpetology, Supplemental Series*, **1**: 1–64.
- Williams, D., Wüster, W. & Fry, B.G.** 2006. The good, the bad and the ugly: Australian snake taxonomists and a history of the taxonomy of Australia's venomous snakes. *Toxicon*, **48**: 919–930.
- Wüster, W. & Bérnills, R.S.** 2011. On the generic classification of the rattlesnakes, with special reference to the Neotropical *Crotalus durissus* complex (Squamata: Viperidae). *Zoologia*, **28**(4): 417–419.
- Zaher, H., Grazziotin, F.G., Cadle, J.E., Murphy, R.W., Moura-Leite, J.C. & Bonatto, S.L.** 2009. Molecular phylogeny of the advanced snakes (Serpentes, Caenophidia) with an emphasis on South American xenodontines: a revised classification and descriptions of new taxa. *Papéis Avulsos de Zoologia*, **49**: 115–153.