Comments on the proposed conservation of *Hydromantes* Gistel, 1848 (Amphibia, Caudata) by the designation of *Salamandra genei* Temminck & Schlegel, 1838 as the type species

(Case 2868; see BZN 50: 219–223; 51: 149–153; 52: 183–186, 267–269)

(1) Sebastiano Salvidio

*Istituto di Zoologia, Università di Genova, Via Balbi 5, 16126 Genova, Italy*

As a student of European plethodontid ecology and conservation I wish to comment on Smith & Wake’s application (BZN 50: 219–223) to conserve the name *Hydromantes* Gistel, 1848. As already pointed out by Dubois (BZN 52: 183–186), Smith & Wake’s statement (BZN 50: 221, para. 7) that ‘Subsequent authors have not adopted Dubois’s (1984) nomenclature’ is incorrect. This assertion is based on the complete disregard of European literature. Indeed, since Lanza (1986) raised to generic level the subgenus *Speleomantes* Dubois, 1984, the name *Speleomantes* has been used by a large number of European zoologists in many scientific papers, books and field guides in English, German, Italian and Spanish. A rapid, and therefore incomplete, review of the scientific literature reveals that *Speleomantes* has been used in 11 works (six of which were edited before Smith & Wake’s application), in addition to those reported by Dubois (BZN 52: 184). These works include a publication on conservation biology published on behalf of the Conservation Committee of the Societas Europea Herpetologica (Corbett, 1989), two Red Lists of endangered species (Pavan, 1992; Groombridge, 1993), the checklist of Italian vertebrates edited under the auspices of the Scientific Committee for the Fauna d’Italia (Amori et al., 1993), a museum catalogue (Gavetti & Andreone, 1993), three Italian regional atlases (Ferri, 1990; Mazzotti & Stagni, 1993; Doria & Salvidio, 1994), a handbook on speleology (Zoia, 1987), and two herpetological field guides (Puddu, Viarengo & Erminio, 1988; Geniez & Grillet, 1990). Moreover, I counted 24 papers between 1987 and 1995 (18 of which were published before Smith & Wake’s application) by 27 different authors citing the name *Speleomantes* (the full list of these papers is held by the Commission Secretariat).

Last, but not least, the name *Speleomantes*, and not *Hydromantes*, was used by the Council of Europe in the international legislation on the conservation of habitats and species (Directive 92/43 of 21 May 1992, Annex II), and also in a regional act protecting reptiles and amphibians (L.R. 4/92 of Liguria, NW Italian administrative region).

There is sufficient evidence to demonstrate that in the European scientific community the name *Speleomantes* is successfully replacing *Hydromantes*. Therefore, conserving the name *Hydromantes* in the manner proposed by Smith & Wake in their application will maintain stability on the North American side of the Atlantic, but will cause confusion and instability on the European side.

Additional references

I have read the comment by Smith, Wake & Jennings (BZN 52: 267-269) and now appreciate from these colleagues that the proposed conservation of the name *Hydromantes* Gistel, 1848 is not meant to infringe upon the taxonomic freedom of zoologists and to discourage the recognition by some authors of distinct genera (or subgenera) for the European and American species of this group of salamanders. However, despite these reassurances, I am not sure that the proposed nomenclatural action would not be without taxonomic consequences. There have been occasions when actions by the Commission have had a strong impact on the taxonomy of a group (the amphibian generic name *Cynodon* is an example: see Dubois, 1981, p. 247).

I understand Smith, Wake & Jennings’s argument for the conservation of the name *Hydromantes*, based on the large usage of the name in many non-taxonomic publications and during a period of 61 years (1923-1984), before this usage was shown to be incorrect. Even if this reasoning is accepted, I have shown (BZN 52: 184) that it is possible to recognize a clear trend among European herpetologists to replace the invalid name *Hydromantes* with the valid *Speleomantes* Dubois, 1984 and, in the absence of Smith & Wake’s application, this replacement would probably have been virtually complete by the end of the century. It is clear that the major concern for the conservation of the name *Hydromantes* is among North American, not European, herpetologists. This is demonstrated in a number of ways.

Among the 19 supporting comments, 14 were from North American herpetologists, only three were from European authors, and two were from other parts of the world. On the other hand, as noted by Smith, Wake & Jennings themselves (BZN 52: 268, para. 4), in the period 1986-1994 most publications concerning these salamanders (and not least all those reported by the Zoological Record) were dealing with the...
European species of the group. There exists therefore a large discrepancy between the biological interest shown for the animals by European zoologists and the desire of these zoologists to protect the name *Hydromantes*.

I have already provided (BZN 52: 184) a list of 14 references to publications using the name *Speleomantes* for the European species of this group, including four major books. I can now add a further 30 additional references, the full list of which is held by the Commission Secretariat (1986: 1; 1987: 1; 1989: 3; 1990: 5; 1991: 3; 1992: 5; 1993: 7; 1994: 2; 1995: 3). This list does not show that the name *Speleomantes* has been 'more used' than *Hydromantes*, which is of course not the case, but it does underline the fact that Smith & Wake's statement (para. 7 of their application) that 'Subsequent authors have not adopted Dubois's (1984) nomenclature' is completely misleading. The fact is that in recent years two parallel nomenclatures have been used for these animals, one mostly by North American biologists (*Hydromantes* for both American and European species) and the other mostly by European researchers (*Hydromantoides* Lanza & Vanni, 1981 for North American species and *Speleomantes* for European species). It is not a question of counting the number of references for each scheme of nomenclature but of realizing that they have been developing in parallel for about ten years. One recent publication (the (1993) 1994 IUCN Red List of threatened animals, compiled by the World Conservation Monitoring Centre and edited by B. Groombridge) is particularly enlightening. In this the name *Hydromantes* is used for the American species of the genus, and *Speleomantes* for the European. Needless to say, this scheme of nomenclature is neither the correct one under the Code nor that proposed by Smith & Wake but it demonstrates the current usage of these names.

I am therefore offering a new solution to this nomenclatural problem. It is clear that the conservation of *Hydromantes* (formally a replacement name for *Geotriton*) is possible only by Commission action. I suggest that, instead of designating the European species *Salamandra genei* Temminck & Schlegel, 1838 as the type of *Hydromantes*, as proposed by Smith & Wake in their application, the American species *Spergerpes platycephalus* Camp. 1916 be designated the type. As a consequence the name *Hydromantoides* would become a junior objective synonym of *Hydromantes* and could never again threaten the usage of the latter name. As for the name *Speleomantes*, being much more recent this could not threaten *Hydromantes* if both groups are kept in a single genus but it would remain available for the European species if authors wish to recognize a distinct genus or subgenus for the latter. This solution would avoid any pressure of nomenclature upon taxonomic decisions and it would respect the wish of American zoologists to continue using *Hydromantes* for these salamanders.

I also suggest that, to avoid any confusion in the future, the status of the name *Geotriton* Bonaparte, [1832] be clarified. As I have pointed out previously (BZN 52: 185), this name would have been the most appropriate for the European group of salamanders but it has not been used since 1923. It is desirable to maintain *Speleomantes* and I therefore propose that *Geotriton* be suppressed.

I suggest that the following proposals replace those originally put forward by Smith & Wake (BZN 50: 221).

The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to suppress the name *Geotriton* Bonaparte, [1832] for

https://doi.org/10.5962/bhl.part.6818.

**View This Item Online:** https://www.biodiversitylibrary.org/item/44798  
**DOI:** https://doi.org/10.5962/bhl.part.6818  
**Permalink:** https://www.biodiversitylibrary.org/partpdf/6818

**Holding Institution**  
Natural History Museum Library, London

**Sponsored by**  
Natural History Museum Library, London

**Copyright & Reuse**  
Copyright Status: In copyright. Digitized with the permission of the rights holder.  
License: [http://creativecommons.org/licenses/by-nc-sa/3.0/](http://creativecommons.org/licenses/by-nc-sa/3.0/)  
Rights: [https://biodiversitylibrary.org/permissions](https://biodiversitylibrary.org/permissions)

This document was created from content at the **Biodiversity Heritage Library**, the world’s largest open access digital library for biodiversity literature and archives. Visit BHL at [https://www.biodiversitylibrary.org](https://www.biodiversitylibrary.org).

This file was generated 16 April 2022 at 01:15 UTC