Comment on the proposed conservation of *Hydrobia* Hartmann; 1821 (Mollusca, Gastropoda) and *Cyclostoma acutum* Draparnaud, 1805 (currently *Hydrobia acuta*) by the replacement of the lectotype of *H. acuta* with a neotype; proposed designation of *Turbo ventrosus* Montagu, 1803 as the type species of *Ventrosia* Radoman, 1977; and proposed emendation of spelling of HYDROBINA Mulsant, 1844 (Insecta, Coleoptera) to HYDROBIUSINA, so removing the homonymy with HYDROBIIDAE Troschel, 1857 (Mollusca)

(Case 3087; see BZN 55: 139-145; 56: 56-63, 143-148, 187-190)

Ruud A. Bank

Graan voor Visch 15318, NL-2132 EL Hoofddorp, The Netherlands

(1) The first modern author to critically revise the genus Hydrobia Hartmann, 1821 in Western Europe was Dollfus (1912). He was clearly aware of the existence of two taxa: one with flattened whorls and the other with convex whorls. Dollfus used the name Hydrobia stagnalis Baster, 1765, described from the Kaaskenswater near Zierikzee, The Netherlands, for the species with convex whorls (with Turbo ventrosus Montagu as a synonym). The species was referred to by Linnaeus (1767) as Helix stagnalis, a name which was replaced as a junior secondary homonym of Helix stagnalis Linnaeus, 1758 (currently placed in Lymnaea) with Helix stagnorum by Gmelin (1791). The identity of H. stagnorum was fixed by the designation of a neotype by Bank, Butot & Gittenberger (1979) and it is currently placed in Heleobia Stimpson, 1865 (family HYDROBIIDAE, subfamily COCHLIOPINAE Tryon, 1866). Most (if not all) records of stagnalis Baster or stagnorum Gmelin before the publication of Bank et al. (1979) in fact refer to Turbo ventrosus Montagu, 1803. That this is the case with 'stagnalis' as used by Dollfus (1912) is shown by his clear pictures, description and distribution records, and by his own synonymy. The identity of ventrosus Montagu was fixed by a lectotype designated by Bank, Butot & Gittenberger (1979). The species intended and described by Radoman (1977) as the type of Ventrosia is evidently T. ventrosus. Thus, I agree that this should be designated the type species of Ventrosia, as proposed in the application.

(2) Dollfus (1912) considered the species with the flattened whorls to be conspecific with *Hydrobia acuta* (Draparnaud, 1805), and his description, figures and distribution show that he referred to the species later characterized by Radoman (1977). Dollfus (1912, pl. 4) figured two syntypes of *Cyclostoma acutum*, obtained from the Draparnaud collection (Naturhistorisches Museum, Vienna). The uncertainty expressed by Giusti, Manganelli & Bodon (1998; para. 6 of their application and BZN 56: 145) about the syntypic status of these two specimens (now housed in the Muséum National d'Histoire Naturelle, Paris) seems to be unfounded. The syntype figured by Dollfus (1912, pl. 4, figs. 6 and 7) is clearly the species with the flattened whorls, *H. acuta*; that in pl. 4, figs. 5 and 8 is partially encrusted. It is the latter specimen that Boeters (1984, pl. 1, fig. 1) designated the lectotype of *C. acutum*. Because of the encrustations the convexity of the whorls was not obvious and it is understandable that Dollfus overlooked that this specimen actually belonged to the species with convex whorls (i.e. *Turbo ventrosus*). The two syntypes figured by Dollfus (1912) are with certainty the same two specimens figured by Boeters in 1984. The remaining four

specimens figured by Dollfus (pl. 4, figs. 11–18; two from Palavas and two from Étang de Leucate) clearly belong to the species with the flattened whorls. This species (*H. acuta*) is common along the Mediterranean coast, whereas the species with the convex whorls (*Ventrosia ventrosa*) is common along the Atlantic coast. Several authors, such as A.J. Wagner (1928, p. 275), Germain (1931, pp. 647–650), Wenz (1939, p. 555), Forcart (1965, p. 73), Gasull (1965, p. 145), Alzona (1971, pp. 30–31) and Radoman (1977, pp. 205–209) treated *H. acuta* and *V. ventrosa* as separate taxa and/or applied the name *acuta* to the species with the flattened whorls (see Hoeksema, 1998, p. 110 for additional references). Radoman (1977) described and figured both the shell and the anatomy of *H. acuta* and suggested the original locality.

(3) Boeters (1984, pp. 3–5) studied the two syntypes of *Hydrobia acuta* and discovered that they were different species: the taxon with the convex whorls and that with the flattened whorls. He fixed the identity of *H. acuta* by designating the specimen with the convex whorls as its lectotype (para. (2) above). However, the shell of this specimen does not differ from *V. ventrosa* and as a consequence *H. acuta* formally became a junior synonym of *V. ventrosa*. This was noted by Giusti & Pezzoli (1984). Remarkably, Boeters has not synonymized *H. acuta* with *V. ventrosa* (see Backhuys & Boeters, 1974, p. 114; Boeters, 1976, p. 98; 1984, pp. 3–5; 1988, p. 189). Only in his most recent revision of the HYDROBIIDAE of middle Europe has Boeters (1998, p. 24) shown awareness of the conspecificity of the lectotypes of *H. acuta* and *V. ventrosa* ('Möglicherweise sind Taxa wie *acutum* Draparnaud 1805 [*Cyclastoma*] und *procera* Paladilhe 1874 [*Hydrobia*] jüngere Synonyme'). He has not referred to the papers of Giusti et al. (1984, 1995) and Haase (1993), who criticized his lectotype selection.

(4) Although the lectotype selection by Boeters (1984) formally fixed the identity of *Hydrobia acuta*, it has not, and cannot, result in nomenclatural stability. This is not surprising because if *H. acuta* becomes invalid as the name of the species with the flattened whorls, the question arises as to how this species should be named. Boeters (1980, 1984, 1988) has referred to it as *Hydrobia glyca* (Servain, 1880), *Hydrobia* sp. and *Hydrobia* (*Hydrobia*) minoricensis (Paladilhe, 1875), respectively. All subsequent authors (examples are Giusti et al., 1984, 1995, 1998; Cesari, 1988; Haase, 1993; Hoeksema, 1998; Kabat & Hershler, 1993; Kadolsky, 1995; Gittenberger et al., 1984) have followed the interpretation of Radoman (1977) and not Boeters's (1984) lectotype selection.

(5) According to Boeters (1984, p. 4), selection of the *H. acuta* lectotype also stabilized the current understanding of the genus *Hydrobia*. He characterized the penis and bursa in *Hydrobia* as 'pfriemförmig' (awl shaped) and 'hammerförmig' (hammer shaped) respectively, anatomical characters essentially based on dissections of *Hydrobia ventrosa*. However, these features are by no means diagnostic for *Hydrobia*. For example, Boeters (1988, pp. 189–192; 1998, p. 24) placed in *Hydrobia (Hydrobia)* not only *ventrosa* (= *acuta* sensu Boeters), but also *minoricensis* Paladilhe (= *acuta* sensu Radoman). The last species does not show a long and pointed penis, nor a hammer-like bursa.

(6) As I have noted, Boeters's (1984) lectotype designation threatens the nomenclatural stability of a wide-spread and common species, known since the revision of Dollfus (1912) as *Hydrobia acuta*, and it has not been followed by subsequent authors. Clearly, this situation needs to be resolved. The application by Giusti, Manganelli & Bodon to set aside the lectotype is in accord with the concept stated in the Preamble of the Code 'to promote stability and universality in the scientific names of animals'. The proposed neotype selection of Giusti et al. will maintain the name and concept of the genus *Hydrobia* as currently understood by the majority of authors and I therefore fully support the application.

(7) Naggs et al. (BZN 56: 143–144) have commented that Giusti et al. have not proposed a neotype from among the series of 74 paralectotypes. However, Draparnaud (1805) did not record a locality for *Cyclostoma acutum*, either in the original publication (other than 'France' in the title) or on the labels of the original type series. Selection of a neotype from among the paralectotypes would have the unwanted consequence that the type locality of *C. acutum* would remain unknown. Moreover, in France there is more than one species with less convex shells having a similar appearance to that of *Hydrobia acuta*. The HYDROBIINAE are often poorly defined by shell characters, whereas the genitalia are much more characteristic. The proposed neotype selection will have the advantage that not only will a precise locality be fixed, but anatomical data as well, and the identity of *H. acuta* will be unambiguously secured.

Additional references

- Alzona, C. 1971. Malacofauna Italica. Catalogo e bibliografia dei molluschi viventi, terrestri e d'acqua dolce. Atti della Società Italiana di Scienze Naturali e del Museo Civico di Storia Naturale. Milano, 111: 1–433.
- Backhuys, W. & Boeters, H.D. 1974. Zur Kenntnis marokkanischer Binnenmollusken, I. Archiv für Molluskenkunde, 104(4-6): 107–114.
- Boeters, H.D. 1976. Hydrobiidae Tunesiens. Archiv für Molluskenkunde, 107(1-3): 89-105.
- Boeters, H.D. 1998. Mollusca: Gastropoda: Superfamilie Rissooidea. In Schwoerbel, J. & Zwick, P. (Eds.), Süsswasserfauna von Mitteleuropa, Band 5/1-2. ix, 76 pp. Fischer, Stuttgart.
- Forcart, L. 1965. Rezente Land- und Süsswassermollusken der süditalienischen Landschaften Apulien, Basilicata und Calabrien. Verhandlungen der Naturforschenden Gesellschaft in Basel, 78(1): 58–184.
- Gasull, L. 1965. Algunos moluscos terrestres y de agua dulce de Baleares. Boletin de la Sociedad de Historia Natural de Baleares, 11(1-4): 7-161.
- Gittenberger, E., Janssen, A.W., Kuijper, W.J., Kuiper, J.G.J., Meijer, T., Van der Velde, G. & De Vries, J.N. 1998. Nederlandse fauna 2. De Nederlandse zoetwatermollusken. Recente en fossiele weekdieren uit zoet en brak water. 288 pp., 12 pls. Naturalis/KNNV/EIS, Leiden.
- Kadolsky, D. 1995. Stratigraphie und Molluskenfaunen von 'Landschneckenkalk' und 'Cerithienschichten' im Mainzer Becken (Oberoligozän bis Untermiozän?), 2: Revision der aquatischen Mollusken des Landschneckenkalkes. Archiv für Molluskenkunde, 124(1-2): 1-55.

Comment on the proposed conservation of *Disparalona* Fryer, 1968 (Crustacea, Branchiopoda)

(Case 2990; see BZN 54: 89-91; 55: 105, 169; 56: 191)

Dietrich Flössner

Universität Jena, Institut für Ökologie, Arbeitsgruppe Limnologie, Jena, Germany

1. The describer of the genus *Phrixura*, P.E. Müller (1867), did not know that the individual of '*Phrixura rectirostris*' on which it was based was a teratologically



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>

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



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>

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



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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. Rights Holder: International Commission on Zoological Nomenclature License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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. Rights Holder: International Commission on Zoological Nomenclature License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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. Rights Holder: International Commission on Zoological Nomenclature License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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. Rights Holder: International Commission on Zoological Nomenclature License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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. Rights Holder: International Commission on Zoological Nomenclature License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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. Rights Holder: International Commission on Zoological Nomenclature License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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. Rights Holder: International Commission on Zoological Nomenclature License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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. Rights Holder: International Commission on Zoological Nomenclature License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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. Rights Holder: International Commission on Zoological Nomenclature License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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. Rights Holder: International Commission on Zoological Nomenclature License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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. Rights Holder: International Commission on Zoological Nomenclature License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>



View This Item Online: https://doi.org/10.5962/bhl.part.23091 Permalink: https://www.biodiversitylibrary.org/partpdf/23091

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. Rights Holder: International Commission on Zoological Nomenclature License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>

largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.