Freshwater Mollusk Conservation Society
Names of Freshwater Mollusks Subcommittee
Petition for Proposed Scientific or Common Name Change

Title: Changing the generic placement of *Anodonta cellensis var. beringiana* Middendorff, 1851 from S*inanodonta* Modell, 1945 to *Beringiana* Starobogatov in Zatravkin, 1983

Background: Williams et al (2017) reassigned *Anodonta beringiana* Middendorff, 1851 (=*Anodonta cellensis var. beringiana* Middendorff, 1851) to *Sinanodonta beringiana* (Middendorff, 1851) because "In a phylogenetic analysis of western North American Anodonta, Chong et al. (2008) found *A. beringiana* to be more closely related to the Asian species *Sinanodonta woodiana* than to North American species. Based on this evidence, we reassign *beringiana* to *Sinanodonta* (see *Sinanodonta*)". Bolotov et al. (2020) recovered a similar topology (i.e., *Anodonta beringiana* sister to *Sinanodonta*) but recognized *Anodonta beringiana* Middendorff, 1851 as member of *Beringiana.* Bolotov et al. (2020) commented that "Williams et al. assumed that *Beringiana* is a junior synonym of *Sinanodonta*, but this genus represents a distant genus-level phylogenetic lineage and the two are here treated as distinct taxa". Bolotov et al. (2020) diagnosed *Beringiana* from its sister taxon *Sinanodonta* by having "much higher, elliptical shells, although several morphological varieties of *B. beringiana* from small lakes have short, rounded shells with broad posterior margin". The taxonomic opinion *Beringiana beringiana* (Middendorff, 1851) has subsequently been used by Lopes-Lima et al. (2020), Graf and Cummings (2021), Bieler (2021), and Konopleva et al. (2023).

Supplemental Information: NA

Specific Recommendation: Change *Sinanodonta beringiana* (Middendorff, 1851) to *Beringiana beringiana* (Middendorff, 1851).

Literature Cited:

Bieler, R. 2021. Isaac Lea's (1792-1886) substitutions and other modifications of his own names of molluscan species. Malacologia 64(1): 1-56. Link

Bolotov, I.N., A.V. Kondakov, E.S. Konopleva, I.V. Vikhrev, O.V. Aksenova et al. 2020. Integrative taxonomy, biogeography and conservation of freshwater mussels (Unionidae) in Russia. Scientific Reports 10. 3072 (20 pp.). Link

Chong, J.P., J.C. Brim-Box, J.K. Howard, D. Wolf, T.L. Myers & K.E. Mock. 2008. Three deeply divided lineages of the freshwater mussel genus *Anodonta* in western North America. Conservation Genetics 9: 1303-1309. Link

Graf, D.L. & K.S. Cummings. 2021. A 'big data' approach to global freshwater mussel diversity (Bivalvia: Unionoida), with an updated checklist of genera and species. Journal of Molluscan Studies 87(1). eyaa034 (36 pp.). Link

Konopleva, E.S., I.N. Bolotov, I.V. Vikhrev, K. Inkhavilay, M.Yu. Gofarov et al. 2023. A freshwater mussel species reflects a Miocene stream capture between the Mekong Basin and East Asian rivers. Zoosystematics and Evolution 99(1): 29-43. Link

Lopes-Lima, M., A. Hattori, T. Kondo, J.H. Lee, S.K. Kim et al. 2020. Freshwater mussels (Bivalvia: Unionidae) from the rising sun (Far East Asia): phylogeny, systematics, and distribution. Molecular Phylogenetics and Evolution 146: 1-27. Link

Modell, H. 1945. Die Anodontinae, Ortm. emend. (Najad., Mollusca). Jenaische Zeitschrift für Naturwissenschaft herausgegeben von der Medizinisch-naturwissenschaftlichen Gesellschaft zu Jena 78:58-100.

Zatravkin, M.N. 1983. Unionidae in the fauna of the USSR and their role as intermediate hosts of Trematoda and as eliminators of cercariae. pp. 40-44 in I.M. Likharev (ed.). Molluscs. Their systematics, ecology and distribution. Nauka (Leningrad). 262 pp.

von Middendorff, A.T. 1851. Wirbellose Thiere: Annulaten. Echinodermen. Insecten. Krebse. Mollusken. Parasiten. Reise in den Äussersten Norden und Osten Sibiriens, Zoologie 2(1):163-508. Link

Williams, J.D., A.E. Bogan, R.S. Butler, K.S. Cummings, J.T. Garner et al. 2017. A revised checklist of the freshwater mussels (Mollusca: Bivalvia: Unionida) of the United States and Canada. Freshwater Mollusk Biology and Conservation 20(2): 33-58. Link

Submitted By: John Pfeiffer

Proposal Date: 1/26/2023

Petition Number: B-2023-01

Subcommittee Member Voting:

☐ I support the petition ☐ I do not support the petition

In the event of rejection, subcommittee members should provide a detailed summary of their consensus opinion.

Freshwater Mollusk Conservation Society
Names of Freshwater Mollusk Subcommittee
Petition for Proposed Scientific or Common Name Change

Title: New common names of *Corbicula* species (Cyrenidae) in North America.

Background: *Corbicula* Megerle von Mühlfeld 1811, a genus of invasive freshwater bivalves, has become well established in the United States and Canada. *Corbicula* taxonomy has been in a state of confusion and was most recently reviewed by Bieler and Mikkelsen (2019). Tiemann et al. (2017, 2018) shed light on four different forms/species that occur in the United States. The common name Asian Clam has been widely used for *Corbicula fluminea* (Müller 1774) (e.g., Turgeon et al. 1988, 1998; Williams et al. 2008; FMCS 2021). This common name is considered offensive by some and should be replaced.

Supplemental Information: Glaubrecht et al. (2007) noted the name *Corbicula* was based on *"corbus*" which translates as basket. Schmidlin et al. (2012) used the common name Basket Clams for both *C. fluminea* and *C. fluminalis* (Müller 1774) found in lakes in Switzerland. Kamburska et al. (2013) used the common name Asian Basket Clam for *Corbicula fluminea* from northern Italy. The Japanese Basket Clam (*Corbicula japonica* Prime 1864) is an economically important food resource for inland estuarine fisheries in Japan (Takahara et al. 2019). Tieman et al. (2022) noted a variety of common names for *Corbicula* including Asian Clams, Basket Clams, and Golden Orbs. They also applied the common name Basket Clam to the three *Corbicula* species they recognized (Tiemann et al. 2022).

Recommendation: We accept the common name Basket Clams for *Corbicula* as used in the literature. Regarding the use of Asian Basket Clam and Japanese Basket Clam, we suggest dropping the term Asian and following the example of the Japanese Basket Clam for a separate *Corbicula* species. We propose new common names for the two recognized species of *Corbicula* found in the United States and Canada as:

Corbicula fluminea (Müller 1774): **Chinese Basket Clam,** based on the type locality of China.

Corbicula largillierti (Philippi 1844): **Yangtze Basket Clam,** based on the type locality of Yangtze River, China.

Literature Cited:

Bieler. R. and P.M. Mikkelsen. 2019. Chapter 35: Cyrenidae Gray, 1840. Pages 187-192. In C. Lydeard and K.S. Cummings (eds.) *Freshwater Mollusks of the World: A distribution atlas*. Johns Hopkins University Press, Baltimore. 242 pp.

Freshwater Mollusk Conservation Society [FMCS]. 2021. Appendix 1. The 2021 FMCS checklist of freshwater mussels (Mollusca: Bivalvia: Unionida) of the United States and Canada. https://www.molluskconservation.org/MServices_Names-Bivalves.html

Glaubrecht, M., Z. Fehér and F. Köhler. 2007. Inventorizing an invader: annotated type catalogue of Corbiculidae Gray, 1847 (Bivalvia, Heterodonta, Veneroidea), including Old World limnic *Corbicula* in the Natural History Museum Berlin. *Malacologia* 49(20:243-272.

Kamburska, L., R. Lauceri, M. Beltrami, A. Boggero, A. Cardeccia, I. Guarneri, M. Manca, and N. Riccardi. 2013. Establishment of *Corbicula fluminea* (O.F. Müller 1774) in Lake Maggiore: a spatial approach to trace the invasion dynamics. *BioInvasions Records* 2(2): 105-117.

Megerle von Mühlfeld J.C. 1811. Entwurf eines neuen Systems der Schaltiergehäuse. *Magazin für die neuesten Entdecklungen in der gesammten Naturkunde von der Gesellschaft Naturforschaft Freunde zu Berlin.* 5(1): 38-72, plate 3.

Müller, O. F. 1774. Vermium terrestrium et fluviatilium, seu animalium infusorium, Helminthicorum, et testaceorum, non marinorum, succincta historia. vol 2: I-XXXVI, 1-214, 10 unnumbered pages. Havniae et Lipsiae, apud Heineck et Faber, ex officina Molleriana.

Philippi, R. A. 1844. Descriptiones testaceorum quorundam novorum, maxime chinensium. *Zeitschrift für Malakozoologie.* 1(11): 161-167.

Prime, T. 1864-1867. Notes on species of the family Corbiculadae, with figures. *Annals of the Lyceum of Natural History of New York.* 8(3): 57-92 [June 1864]; 8(6): 213-237 [April 1866]; 8: 414-418 [1867]. New York.

Schmidlin, S., D. Schmera, S. Ursenbacher, and B. Baur. 2012. Separate introductions but lack of genetic variability in the invasive clam *Corbicula* spp. in Swiss lakes. *Aquatic Invasions* 7(1): 73-80.

Takahara, T., T. Ikebuchi, H. Doi, and T. Minamoto. 2019. Using environmental DNA to estimate the seasonal distribution and habitat preferences of a Japanese basket clam in Lake Shinji, Japan. *Estuarine, Coastal and Shelf Science* 221:15-20.

Tiemann, J.S., A.E. Haponski, S.A. Douglass, T. Lee, K.S. Cummings, M.A. Davis, and D. Ó Foighil. 2017. First record of a putative novel invasive *Corbicula* lineage discovered in the Illinois River, Illinois, USA. *BioInvasions Records* 6 159-166.

Tiemann, J., C. Lawlis, and S. Douglass. 2018. First occurrence of a novel *Corbicula* (Bivalvia: Corbiculidae) Form D lineage in the Ohio River, USA. *The Nautilus* 132(1):30-32.

Tiemann, J.S., A.P. Stodola, S.A. Douglass, R.M. Vinsel, and K.S. Cummings. 2022. Nonindigenous aquatic mollusks in Illinois. *Illinois Natural History Survey Bulletin* 43:2022002. DOI: 10.21900/j.inhs.v43.862

Turgeon, D.D., A.E. Bogan, E.V. Coan, W.K. Emerson, W.G. Lyons, W.L. Pratt, C.F.E. Roper, A. Scheltema, F.G. Thompson, and J.D. Williams. 1988. Common and Scientific Names of Aquatic Invertebrates from the United States and Canada: Mollusks. *American Fisheries Society, Special Publication* 16. 277 pp, 12 plates.

Turgeon, D.D., J.F. Quinn, A.E. Bogan, E.V. Coan, F.G. Hochberg, W.G. Lyons, P. Mikkelsen, R.J. Neves, C.F.E. Roper, G. Rosenberg, B. Roth, A. Scheltema, F.G. Thompson, M. Vecchione and J.D. Williams. 1998. Common and Scientific Names of Aquatic Invertebrates from the United States and Canada: Mollusks. Second edition. *American Fisheries Society, Special Publication* 26. 526 pp.

Williams, J.D., A.E. Bogan, and J.T. Garner. 2008. *The Freshwater Mussels of Alabama and the Mobile Basin of Georgia, Mississippi, and Tennessee*. University of Alabama Press, Tuscaloosa. 908 pp.

Submitted By: Arthur E. Bogan and John L. Harris

Proposal Date: 5 February 2023

Petition Number: B-2023-02

Subcommittee Member Voting:

☐ I support Chinese Basket Clam as the common name for *Corbicula fluminea* (Müller 1774).

☐ I do not support Chinese Basket Clam as the common name for *Corbicula fluminea* (Müller 1774).

☐ I support Yangtze Basket Clam as the common name for *Corbicula largillierti* (Philippi 1844).

☐ I do not support Yangtze Basket Clam as the common name for *Corbicula largillierti* (Philippi 1844).

In the event of rejection, subcommittee members should provide a detailed summary of their consensus opinion.

Freshwater Mollusk Conservation Society
Names of Freshwater Mollusks Subcommittee
Petition for Proposed Scientific or Common Name Change

Title: Corrected publication date for the nomen currently recognized as *Elliptio pullata* (I. Lea, 1856).

Background: Bieler (2021: 16) discussed the corrected spelling of *Unio pullatis/pullatus*, I. Lea (1857: 262), as well as the publication date for the original description. As listed in the literature cited, Bieler (2021: 43) found that Proceedings of the Academy of Natural Sciences of Philadelphia, 8(6): 262–263 was dated as 1856 by Scudder (1885: 71), but the earliest acknowledged receipt documented by Fox (1913: xi) for number 8(5) was 25 April 1857]. Therefore, the most likely publication year is 1857.

Supplemental Information: Graf and Cummings (2021) and MolluscaBase (accessed 12 March 2023) both appear to have accepted 1857 as the publication date.

Specific Recommendation: Correct the publication date for the scientific name of Gulf Spike in the FMCS Checklist to *Elliptio pullata* (I. Lea, 1857).

Literature Cited:

Bieler, R. 2021. Isaac Lea's (1792-1886) substitutions and other modifications of his own names of molluscan species. Malacologia 64(1): 1-56.

Fox, W. J., 1913, Dates of publication. Pp. vii–xiv, in: E. L. Nolan, ed., An index to the scientific contents of the Journal and Proceedings of the Academy of Natural Sciences of Philadelphia. The Academy of Natural Sciences, Philadelphia, xiv + 1419 pp.

Graf, D.L. & K.S. Cummings. 2021. A 'big data' approach to global freshwater mussel diversity (Bivalvia: Unionoida), with an updated checklist of genera and species. Journal of Molluscan Studies 87(1). eyaa034 (36 pp.).

Lea, I. 1857. Description of eleven new species of exotic [*sic*] uniones, from Georgia. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 8(6): 262–263 [dated as 1856 by Scudder (1885: 71), but earliest acknowledged receipt documented by Fox (1913: xi) for number 8(5) was 25 April 1857; Scudder no. 116; reissued as part of 1857h].

MolluscaBase. 2023. *MolluscaBase*. http://www.molluscabase.org/ [Last accessed 3/12/2023].

Scudder, N. P., 1885, Bibliographies of American naturalists. – II. The published writings of Isaac Lea, LL. D. Bulletin of the United States National Museum, 23: lix + 278 pp.

Submitted By: John L. Harris and Arthur E. Bogan

Proposal Date: 3/12/2023

Petition Number: B-2023-03

Subcommittee Member Voting:

☐ I support the petition ☐ I do not support the petition

In the event of rejection, subcommittee members should provide a detailed summary of their consensus opinion.

Freshwater Mollusk Conservation Society
Names of Freshwater Mollusks Subcommittee
Petition for Proposed Scientific or Common Name Change

Title: Assessment of *Elliptio nasutidus* (I. Lea, 1863) as a valid species.

Background: Lea (1863: 192) described a new species from North Carolina as *Unio nasutidus*. Bieler (2021: 15) discussed the nomenclatural history of the names *Unio nasutidus, U. nasutulus,* and *U. nasutilus.* Recently, usage has shifted to the variant spelling *Unio nasutilus* (e.g. Burch 1975: 167, Bogan 2017: 9, Perkins et al. 2017: 752, Inoue et al. 2018: table S2). None of the subsequent spellings rose to the level of prevailing usage. *Unio nasutulus, U. nasutilus,* and *U. nasululus* are considered incorrect subsequent spellings by Bieler (2021). Current status: Traditionally (e.g. Haas 1969: 231) considered a junior synonym of *Elliptio producta* (Conrad, 1836). Johnson (1970: 334) considered *U. nasutulus* and *U. nasutilus* as junior synonyms of *Elliptio lanceolata* (Lea, 1827). Treated as valid species *Elliptio nasutilus* [*sic*] (I. Lea, 1863) by Perkins et al. (2017: 752), Unionidae.

Supplemental Information: MolluscaBase (accessed 12 March 2023) accepted *Elliptio nasutidus* (I. Lea, 1863) as valid.

Specific Recommendation: Accept *Elliptio nasutidus* (I. Lea, 1863) as a valid species.

Literature Cited:

Bieler, R. 2021. Isaac Lea's (1792-1886) substitutions and other modifications of his own names of molluscan species. *Malacologia* 64(1): 1-56.

Bogan, A. E. 2017. *Workbook and key to the freshwater bivalves of North Carolina*. North Carolina Freshwater Mussel Conservation Partnership, Raleigh, North Carolina, 115 pp., 11 pls.

Burch, J. B. 1975. *Freshwater unionacean clams (Mollusca: Pelecypoda) of North America*. Malacological Publications, Hamburg, Michigan, xviii + 204 pp.

Conrad, T. A. (1835-1838). *Monography of the family Unionidae, or naiades of Lamarck, (fresh water bivalve shells), of North America, illustrated by figures drawn on stone from nature*. Philadelphia: Dobson. 1: 1-12, pls 1-5 [1835]; 8: 65-72, pls. 36-40 [1837]; 10: 81-94, pls 46-51 [1838]; 11: 95-102, pls 52-56 [1838].

Haas, F., 1969, Superfamilia Unionacea. *Das Tierreich*, 88: i–x, 1–663.

Inoue, K., D. M. Hayes, J. L. Harris, N. A. Johnson, C. L. Morrison, M. S. Eackles, T. L. King, J. W. Jones, E. M. Hallerman, A. D. Christian & C.R. Randklev. 2018. The Pleurobemini (Bivalvia: Unionida) revisited: molecular species delineation using a mitochondrial DNA gene reveals multiple conspecifics and undescribed species. *Invertebrate Systematics*, 32: 689–702.

Lea I. 1827. Description of six new species of the genus *Unio*, embracing the anatomy of the oviduct of one of them, together with some anatomical observations on the genus. *Transactions of the American Philosophical Society*. new ser., 3: 259-273, pls 3-6.

Lea, I. 1863. Descriptions of twenty-four new species of Unionidæ of the United States. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 15: 191–194.

Perkins, M. A., N. A. Johnson & M. M. Gangloff. 2017. Molecular systematics of the critically endangered North American spinymussels (Unionidae: *Elliptio* and *Pleurobema*) and description of *Parvaspina* gen. nov. *Conservation Genetics*, 18: 745–757. Online: https://doi.org/10.1007/s10592-017-0924-z.

Submitted By: John L. Harris and Arthur E. Bogan

Proposal Date: 3/12/2023

Petition Number: B-2023-04

Subcommittee Member Voting:

☐ I support the petition ☐ I do not support the petition

In the event of rejection, subcommittee members should provide a detailed summary of their consensus opinion.