



SHELL-O-GRAM

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Editorial

These are unusual times, and groups such as our Jacksonville Shell Club have encountered unprecedented challenges to the ability to execute their mission, most notably to meet, to share common experiences, and to create and disseminate knowledge. The *Shell-O-Gram* intends to carry on its aim, the dissemination piece of the mission. Just when the membership can physically assemble remains in doubt, but this organization has been in existence since 1959, and that's before Jacksonville's consolidation, before the Moon landing, before the Beatles, and well before the Internet. The latter may prove to be a medium to allow a form of assembly during the era of social distancing and sheltering-in-place which keeps us physically apart. An example of what I mean is President Jones, who has kept kindred souls around the world aware of his conchological passion through Facebook with photographs of highlights in the Paul & Teddy Jones Collection as well as personal field trip retrospectives likewise illustrated. Think about how you can keep up with conchology and conchologists during the various stages of shut-down, practice good hygiene, and, above all, stay well until we meet again.

Upcoming meetings (see also p. 2)



The **June** meeting of the Jacksonville Shell Club (JSC) **may** be held at the usual place, the Southeast Branch of the Jacksonville Public Library <http://www.yelp.com/biz/jacksonville-public-library-southeast-regional-jacksonville>, on the customary **fourth** Thursday (the **25th**). The specific venue continues to be Function Room D and President Paul Jones will rap the gavel at 7:00 PM. Harry Lee will present the Shell-of-the-Month, *Orectospira babelica* (Dall, 1905) holotype on L [image courtesy of the US National Museum]. The original monotype of *Orectospira* Dall, 1925, it is a 1-2 inch deepwater Japonic marine snail with a somewhat murky systematic placement. Rick and Roz Edwards are back from a recent Caribbean cruise COVID-19-free and able to share their shelling experiences with the rest of us. They were able to go ashore in Labadee, Haiti; St. Thomas (US Virgin Is.); and St. Maarten/Martin, where Rick assembled an impressive collection of beach-collected shells. Many of the species he collected cannot be found in NE Florida, so be prepared for some Antillean novelties.

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This club meets monthly at the Southeast Branch of the Jacksonville Public Library, 10599 Deerwood Park Blvd., Jacksonville, Florida <<http://jpl.coj.net/lib/branches/se.html>>. Please address any correspondence to the club's address above. Annual membership dues are \$15.00 individual, \$20.00 family (domestic) and \$25.00 (overseas). Lifetime membership is available. Please remit payment for dues to the address below and make checks payable to the Jacksonville Shell Club. The club's newsletter and scientific journal, the *Shell-O-Gram* (ISSN 2472-2774) is issued bimonthly and mailed to an average of 15 regular members and friends by specific request and no less than ten scientific institutions with permanent libraries. An electronic (pdf) version, identical except for "live" URL's and color (vs. B&W) images, is issued the next day and sent to about 200 individuals who have demonstrated an interest in malacological research. These pdf's (ISSN 2472-2782) have also been posted to <<http://jaxshells.org/letters.htm>> since November, 1998. We encourage members and friends to submit articles for publication. Closing date for manuscript submission is two weeks before each month of publication. Articles appearing in the *Shell-O-Gram* may be republished provided credit is given the author and the *Shell-O-Gram*. As a courtesy, the editor and author should receive a copy of the republication. Contents of the *Shell-O-Gram* are intended to enter the permanent scientific record.

Upcoming meetings (cont'd)

Our second summer meeting of the year **may** be on Thursday **July 23** at the customary time and place. We'll first hear from Paul Jones, who has selected *Asaphis deflorata* (Linnaeus, 1758) on the R [credit Femorale Shells] as his Shell-of-the-Month. As with many of the shells Rick presented at the preceding meeting, this 2-3 inch variably-colored clam is found only south of us on the Florida coast and points beyond. Paul has been an outspoken proponent of bivalve collecting, and he intends to show us why. Harry Lee will present a discussion of the valid species proposed in 1786 by Rev. John Lightfoot. The topical publication, an auction catalogue of curios left behind by the late Duchess of Portland (U.K.), has a long and somewhat tortured history in the annals on molluscan taxonomy and nomenclature. There is a general consensus as to the validity of 53 nominal species in this publication, but a couple more, with more contentious standing, will receive fuller treatment by Harry.



What is *Seila adamsii* (H.C. Lea, 1845) anyway?

by Harry G. Lee



Background:

With a little work, there aren't many Florida marine collecting spots where shells traditionally identified as this nominal species (L; ~ 10 mm) cannot be found. The only checklists on jaxshells.org which make no mention of it are those with a manifest neglect of shells in the micro- (< 5 mm) and meso- (5-10 mm) mollusk category. By presenting a chresonymy below (tip of the hat to Campbell, 1993), confined to works illuminating substantive taxonomic issues, I hope to walk the reader through the history of our concept of this cerithiopsid touching on several interesting aspects of our evolving definition of this interesting snail, including conformity with the rules of taxonomy (ICZN, 1999), the fossil-Recent continuum, and the emergence of skepticism of the meaning of "*Seila adamsii*."

[HOLOCENE] *Cerithium emersonii* Var. α C.B. Adams, 1839: 285

<<https://www.biodiversitylibrary.org/page/32266943>>. N.B. New Bedford, MA; not a nomenclatorial act.

[HOLOCENE] *Cerithium terebrale* C.B. Adams, 1840: 373

<<https://www.biodiversitylibrary.org/page/30954840>> non Lamarck, 1804. Type locality: New Bedford, MA; lectotype: Clench and Turner (1950: pl. 37, figs 5-7 <<https://www.biodiversitylibrary.org/page/7756583>>). N.B. Primary junior homonym; permanently invalid.

[PLIOCENE] *Cerithium clavulus* H.C. Lea, 1843: 11

<<http://www.jaxshells.org/pdfs/leah.pdf>>; first figured in Lea, 1845: plate 37, fig. 89 <<https://www.biodiversitylibrary.org/page/21733055>> non Eude-Deslongchamps, 1842 N.B. Primary junior homonym; permanently invalid.

[HOLOCENE] *Cerithium adamsii* H.C. Lea, 1845: 42 footnote under the redescription of *C. clavulus* H.C. Lea, 1843 (H.C. Lea, 1845: 42 (footnote)

<<https://www.biodiversitylibrary.org/page/21733023>>, and 1846: 268 (footnote)

<<https://www.biodiversitylibrary.org/page/28857736>>. N.B. An **available** name introduced in replacement of *C. terebrale* C.B. Adams, 1840, non Lamarck, 1804.

[HOLOCENE] *Cerithium terebellum* C.B. Adams, 1847: 19

<<https://www.biodiversitylibrary.org/page/12095954>> replacement name for *C. terebrale* C.B. Adams, 1840 non Brown, 1831. N.B. Both an objective junior synonym of *C. adamsii* H.C. Lea, 1845 and a primary junior homonym; permanently invalid.

[PLIOCENE?] *Cerithium annulatum* Emmons, 1858: 269-270

<<https://www.biodiversitylibrary.org/page/17555227>>; fig. 161 (p. 268)

<<https://www.biodiversitylibrary.org/page/17555226>> non Zekel, 1852. N.B. *Nomen dubium* as well as a primary junior homonym; permanently invalid. Type material lost teste L. Campbell, 9 Feb., 2015.

[PLIOCENE] *Cerithium pseudoclavulus* d'Orbigny, 1852: 83; sp. 1535

<<https://www.biodiversitylibrary.org/page/31730070>> N.B. Replacement name for *C. clavulus* H.C. Lea, 1843 non Deslongchamps, 1842. Probably qualifies as a *nomen oblitum*.

***** 101 YEARS *****

[PLIO-PLEISTOCENE & HOLOCENE] *Seila* sp. cf. *S. adamsii* Olsson & Harbison, 1953: 302. N.B. Reported that Recent shells from southern Florida had a globose 2 whorled protoconch (pc) whereas St. Petersburg Plio-Pleistocene specimens had more slender 3-whorled pc's. No figures provided.

[HOLOCENE] *Seila adamsii* var. *beaufortensis* Thiriot-Quévreaux, 1980: 4

<<https://www.biodiversitylibrary.org/page/42412183>>; figs. 26-29 (p. 5). N.B. Proposed taxon, unavailable under the provisions of Article 45 of the *Code* (ICZN, 1999), applied to shells dredged 20 mi E Beaufort, NC with a dumpy pc of 2.5-3.5 whorls and a tiny exerted nucleus [Fig. 1 (p. 5)]. Taken with a morph identified as *S. adamsii*) with an approximately 5-whorled conical pc [Fig. 2 (p. 5)].

[HOLOCENE] *Seila adamsii*, *S(eila)* sp. 1, *S(eila)* sp. 2 Reed & Mikkelsen, 1987: 122. N.B. Two taxa mentioned as distinct from *S. adamsii* off E. Central FL but without description or illustration of the three taxa.

[HOLOCENE] *S(eila)* [sp. 4], *S(eila)* [sp.5] Lyons, 1989: 14. N.B. Lyons was clearly quite familiar with the Reed & Mikkelsen material and agreed with their three-species paradigm. Further, he indicated there were two additional taxa in the Florida-Caribbean area and **conspecificity of none of them with *S. adamsi* [sic] was certain.**

[HOLOCENE] *Seila adamsi* [sic] Rolán & Fernández, 1990. N.B. Described a 2.25 whorled pc on specimens presumably from up to six reported stations in Cuba [Fig. 3 (p. 5)].

[HOLOCENE] *Seila adamsii* Lee, 2009: 88. N.B. Two pc morphs were described as "planktotrophic" and "lecithotrophic" in northeast Florida. Companion figures are too small to perceive much detail.

[HOLOCENE] *Seila* sp. Redfern, 2013: 142-143. N.B. Protoconchs of Abaco, Bahamas shells dumpy, 2.5 whorls with variation in size of the nuclear whorl and overall width [Fig 3 (p. 5)].

[HOLOCENE] *Seila adamsii* PW2.5, *Seila adamsii* PW4.5 Krisberg, M, 2010-2015 on the website "Let's Talk Seashells" [quotes added; hereafter LTS] <<https://olram9.wixsite.com/letstalkseashells/copy-of-template-379>>. N.B. Recognized two protoconch morphs among Florida (inshore-collected) specimens: 2.5-whorled dumpy-cylindrical [Fig. 3 (p. 5)] (Palm Beach Inlet, Palm Beach Co., Key Largo, Racoon, and Tavernier Keys, Monroe Co. and the 4.5-whorled elongate conical [Fig. 2 (p. 5)] (Port Canaveral, Brevard Co., Ponce Inlet, Volusia Co., St. Augustine Inlet, St. Johns Co., Blind Pass, Pinellas Co.) PW2.5 and PW4.5 occurred together in Sebastian Inlet, Indian River Co.; PW4.5 was only found N and PC2.5 S of that latitude. Illustrations are excellent.

Observations, mostly from above:

1. From 1839 to 1953 the **only mention** of a protoconch was by Henry Carey Lea ([1845]: 42 <<https://www.biodiversitylibrary.org/page/21733023>>; 1846: 168), in his discussion of *C. clavulus*, where he stated that not one fully grown shell in all his 50 specimens possessed that feature. The writer can attest to this affliction in both fossil and Recent material. Consequently, even with the discovery of type material, e.g., Clench & Turner (1950), we haven't a clue as to its pc morphology.

2. Apparently *S. adamsii* (H.C. Lea, 1845) is the only available name for what appears to be a complex of several species - at least five *fide* Lyons (1989) - which differ principally or solely in protoconch morphology, and nobody is sure which of these, if any, is the real *S. adamsii*.

3. Three pc morphologies emerge in the living Carolinian-Floridian-Bahamian-Cuban fauna, as depicted in the figures above. Although Redfern's (2013) remarks indicate a certain variation in the morphology depicted in Fig. 3, the absence of that morphology in the numerous specimens examined from SMR 10, where the "carvel" morph is found (Fig. 1), militates in favor of the three-species paradigm.

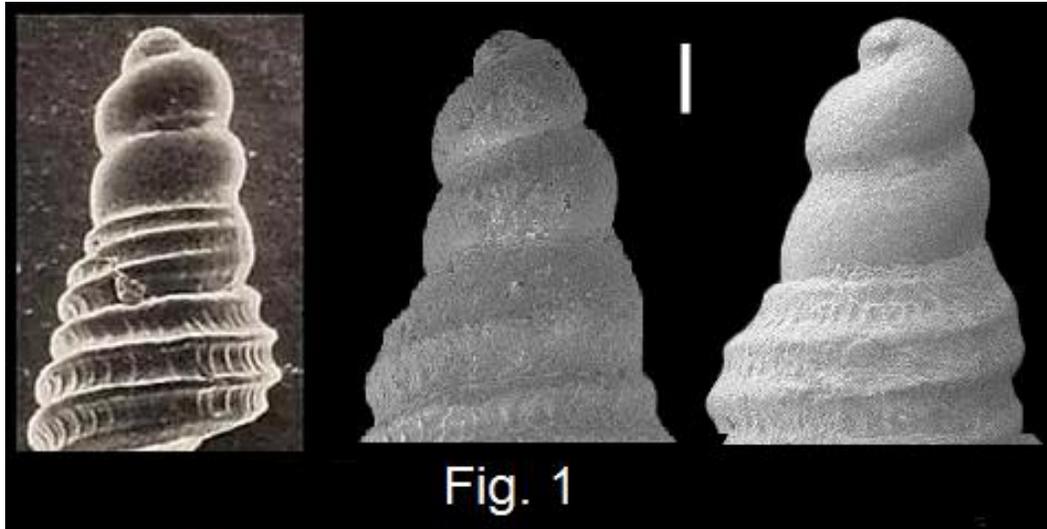


Fig. 1. L to R: *S. adamsii* var. *beaufortensis*; 2 *Seila* "carvel" pc from SMR 10, NE Sarasota Co., FL Late Tamiami Fm. (Pliocene ~ 3MYA). Scale 100 micrometers.

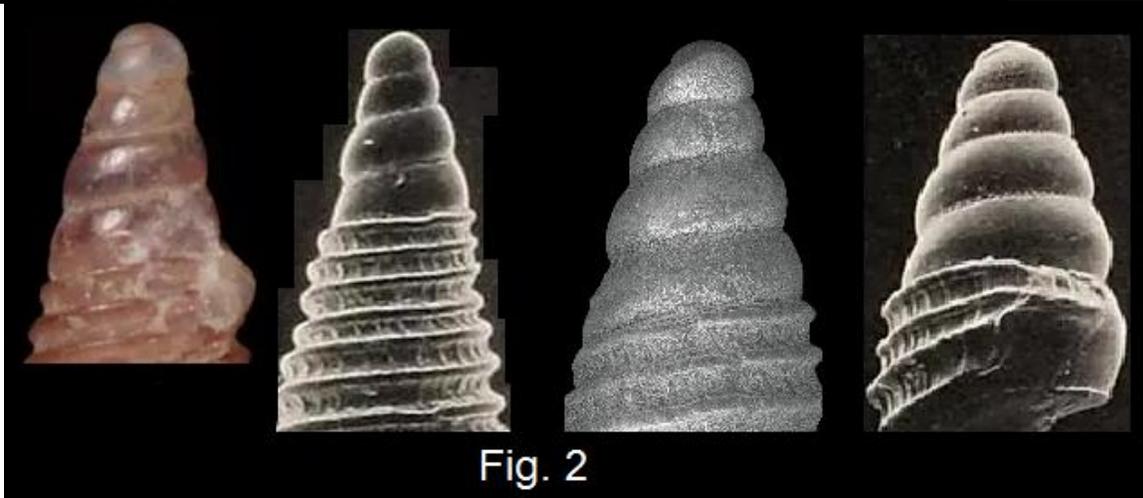


Fig. 2

Fig. 2. L *Seila* PW4.5 of LTS; next and far R: *Seila adamsii* sensu Thiriote-Quévreaux, 1980. Mid-R: *Seila* "conical pc" Cedar Keys, FL. SEM's of three other specimens depicted at <http://www.jaxshells.org/sa99.htm>.



Fig. 3

Fig. 3. L to R: *Seila* sp. Redfern (2013: sp. 409), Middle: Krisberg LTS *Seila* PW2.5; R: *Seila adamsi* [sic] of Rolán & Fernández, 1990. Duane Kauffmann has photographed the pc's of single specimens from Bradenton, Sarasota, and Venice, as well as three from Long Key (Middle FL Keys), and they are quite similar to these.

4. As yet unpublished work performed by me and fellow JSC member Rick Edwards under the supervision of Roger Portell, Collections Director of Invertebrate Paleontology at the Florida Museum of Natural History has revealed four or five pc morphologies including the “carvel” morph [Fig. 1 (p. 5)] and Krisberg’s PW4.5 in shells from the Pinecrest fauna (late Pliocene; ~ # MYA) [Fig. 2 (p. 5)]. As with Olsson & Harbison (1953) the Krisberg 2.5PW morph was not found as a fossil. Likewise a dredging trip by us along with JSC stalwart Paul Jones and Captain Matt on May 24, 2019 to Cedar Key produced the four intact specimens, all PW4.5; see Fig. 2 (p. 5).

5. The ranges (in time and space) of these three putative taxa overlap to some degree as shown by Thiriot-Quévreaux (1980) and Lee (2009) for Recent material. The Krisberg 4.5PW morph seems limited to the Carolinian (sub)Province with records from NC through Indian River Co. and NW FL as well as at SMR 10 (Pliocene). The “Carvel” morph also seems to have originated in the Pliocene and persists in NC waters. Finally, the Krisberg 2.5PW morph overlaps the Krisberg 4.5PW offshore in NE FL (Lee, 2009: only offshore) and Indian

River Co. (inshore). From there to about Tampa Bay it has sole dominion in the shallows, but the 4.5PW morph replaces it in Pinellas and Levy Cos. In other words 4.5PW favors the northern half of the peninsula, and 2.5PW the southern [see map on L], the latter confirmed by Olsson & Harbison (1953). The 2.5PW morph reappears in TX (Tunnell *et al.*, 2010). This is admittedly and over-simplification as there is at least one other roughly sympatric congener in SE FL (Reed & Mikkelsen, 1987; Lyons, 1988). Perhaps not surprisingly, the only morph



reported from the West Indies is the 2.5PW (Rolán & Fernández, 1990; Zhang, 2012; Redfern, 2013).

6. Clearly more needs to be done before clarity is reached. Paramount in the campaign to reach that persistently elusive goal is the examination of well-preserved shells from New Bedford, MA or nearby waters. Such topotypical material will go a long way to the organization of a taxonomic system in the *Seila* of the western Atlantic. Repeated entreaties to collectors in that part of New England have been thus far unrequited, but there's always hope for a productive response (or a post COVID expedition by one or more JSC members). There are certainly be museum specimens from various localities (S at least to Brazil), but that old bugaboo of poor pc preservation will rarify opportunities to extend this inquiry. Anyway, perhaps this little vignette will stir the spirit of at least one reader to pick up the gauntlet and help lead us to an answer of the titular question.

Acknowledgements: The photograph of the adult *Seila adamsii* was taken from the Bailey-Matthews Shell Guide at <<https://www.shellmuseum.org/shell-guide>> and used with the permission of Curator Jose Leal, who was also the photographer.

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