

Book Review

Marine Shells of Northeast Florida

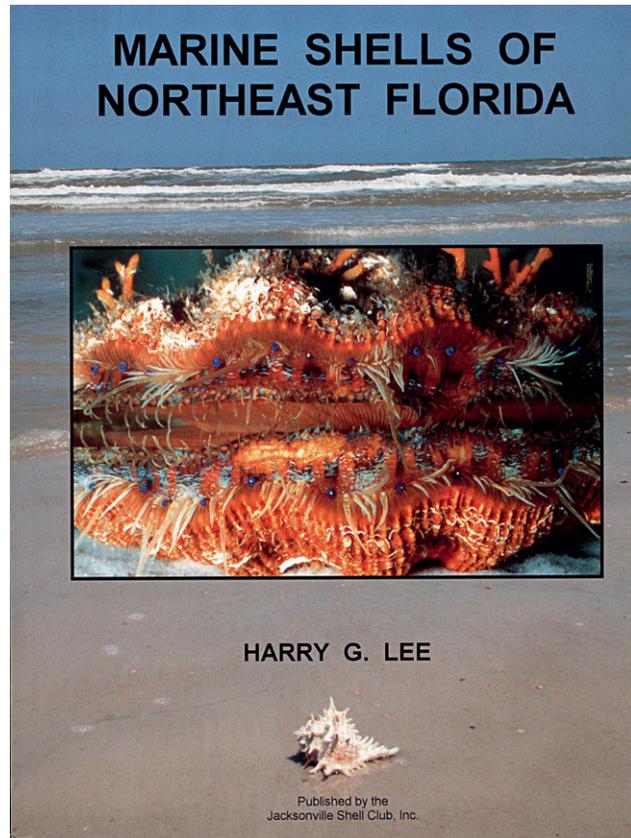
Lee, H.G. 2009. *Marine Shells of Northeast Florida*. Jacksonville Shell Club, Jacksonville, 204 pp., 19 color pls. nflshells@bellsouth.net, <http://www.jaxshells.org>.

In 1975, William G. Lyons, the well-known research malacologist and former senior administrator of the Florida Marine Research Institute in St. Petersburg Beach, Florida, provided the inspiration that began the project resulting in *Marine Shells of Northeast Florida*. Mr. Lyons, in an article in *Shell-O-Gram*, the publication of the Jacksonville Shell Club, noted that information on seashells of the northeastern coast of Florida was probably less available than for any other section of the state, and suggested that the Jacksonville Shell Club had the expertise to solve the problem. Under his capable hands, vast experience, intellectual know-how, and hard work, Dr. Harry Lee has led the Club to complete the challenge set by Mr. Lyons. They have achieved their goal *summa cum laude*.

The work is organized into a dedication, a preface, a table of contents, an introduction, materials and methods, a map of the area treated (with a legend depicting important landmarks and collecting stations), abbreviations for private and institutional repositories, inspirational quotations from several famous naturalists, taxonomic treatment, discussions and conclusions, acknowledgements, literature cited, and index.

Introductory comments state that the geographic boundaries of this study cover the estuarine and marine waters extending from Nassau, Duval, and St. Johns Counties eastward to near the edge of the Continental Slope (circa 55 m). A quick geological note and more extensive ecological observations of the area in question are followed by a review of the publications dealing with Florida's malacofauna.

In the Materials and Methods section the author seeks to impress upon the reader the collaborative efforts made for this project by no less than 63 individuals, in an expanse of time of some 34 years, and at more than 100 stations. This collaborative effort is emphasized by the use by of the first person plural "we" and "our" throughout the text. It is also reflected in the long list of acknowledgements at the end of the book. As expected from material collected by so many people for so many years, the list of collecting techniques is long and varied, from beachcombing to dredging, and from clam-raking to the analysis of gut contents of malacophagous marine creatures. Identification of species was made by using standard books and periodicals in the field, *Malacolog 4.1.0* (Rosenberg, 2005), and consultation with specialists. Almost all material presented was directly examined and identified by the author.



The taxonomic report lists the taxa according to contemporary arrangement, that is, at the family level and above in phylogenetic sequence, with genera and species following in alphabetical order. Species-level taxa are sequentially numbered. The official vernacular name (Turgeon et al., 1998) accompanies each species; where no official vernacular name was available, one was created. The vernacular name is followed by a bracketed number that indicates the frequency of occurrence of the species, and this in turn is followed by the maximum size recorded for the species collected in the course of the study. Many of these maximum sizes are larger than those published in world-records publications (e.g., Hutsell et al., 2001); if the species is not available in those publications, it is compared with Abbott's (1974) maximum stated size. No species-size bias was detected in this work, where such taxa as a 1 mm *Didianema* sp. and a 460 mm *Triplofusus giganteus* are represented. Special attention is given to the occurrence of sinistrality in a species.

The next entry is a listing of locality data, in bathymetric order, for the occurrence of the taxon being treated; data generally include depth, substrate, method of collection,

collector, and repository. A halftone image of the species accompanies the description in most instances. Whenever possible, an authentic northeast Florida specimen was figured. The final section of each of the species treated deals with comments by the author, which may include ecological, behavioral, nomenclatorial, taxonomic, or geographic perspectives. Emphasis is placed on species described after Abbott's (1974) publication.

The taxonomic section comprises 147 pages; although the last species treated is number 798, there are six last-minute entries for a total of 804 species. This section includes 2 species in the class Polyplacophora, 232 in Pelecypoda, 10 in Scaphopoda, 551 in Gastropoda, and 9 in Cephalopoda. Besides meticulous locality data, depth, substrate, and method of collection, in many instances there are additional data that contribute to a better understanding of the ecological and biological contexts of the species (e.g., ex heart urchin (*Meoma v. ventricosa*); ex-seastar (*Astropecten articulatus*); ex-batfish). Specialists in the field have been consulted for the proper identification of the host species. Many of the listed taxa (approximately 10%) are either undescribed or a specific epithet could not be applied to it, while others had not been recorded by some of the more recent publications (e.g., Camp et al., 1998; Turgeon et al., 1998).

Well-known species may lack "random comments," or they may have only a brief comment on geographical extension. These extensions usually refer to Abbott (1974), although many have already been reported by Rosenberg (2005). However, the years of careful research by the author make this section the heart and soul of the book. The more obscure the taxon and the more complicated a species-complex may be, the longer the comments are. Some of the more elucidating treatments are in members of the more cryptic families such as Cerithiopsidae, Triphoridae, Caecidae, and Eulimidae; some of the better treated genera are *Turbonilla* and *Olivella*. The comments deal with comparisons of the species with congeners, pseudo-congeners, Recent and fossil species, western Atlantic, eastern Atlantic, and even Panamic Province taxa. The possibility of synonymy with other species, the possibility of a complex of species within a taxon (e.g., *Ctena orbiculata* Montagu, 1808), errors in authorship (e.g., *Scaphella junonia* Shaw, 1808, instead of Lamarck, 1804), errors in dates, etc., are only some of the information that one may encounter in this section. Some taxa are treated conservatively (e.g., *Strombus costatus* rather than *Aliger costatus*), and many readers may agree with this assignment; others follow some of the latest research (e.g., *Cryoturris*, *Daphnella*, *Ithyocythara*, etc., placed in Conidae), and many readers will disagree with the assignment.

Although most of the species are accompanied by an image, these are of low definition and small, perhaps no more than one square inch. In most cases the images by themselves will not serve as a means of positive identification of the species; however, this drawback is overcome by the careful comparison of the species with similar taxa, by references to high definition images of the species in other publications (usually Gundersen,

1998), and by 19 color plates depicting the more commonly encountered species (including some living mollusks). Moreover, excellent images of many of the species shown in the book may be seen at <http://www.jaxshells.org/marine.htm>.

The careful research that culminated in the plethora of information provided in the comments is reflected in the 17 pages of "Literature Cited," which lists some 400 references, many of which had long been forgotten or ignored until now.

Few problems showed up in my reading of the text, mostly trivial "typos" easily overlooked. A *lapsus mentis* occurred when, in the comments on species No. 548, there appears the name *Costoanachis lafresnayi* instead of *C. translirata*. Also, a grammatical error was noted (*Eptonium echinaticostum* for *E. echinaticosta*), and two references were missing from the literature cited, those of *Agathotoma ethymata* García, 2008a and *Anna florida* García, 2008b). These omissions are understandable as the two taxa were last-minute additions to the ms.

Marine Shells of Northeast Florida is the essence of what a regional faunal treatment should be. It is exhaustive in the treatment of species, and is accurately and meticulously documented and researched in all aspects. But this publication deals with much more than the regional fauna, and it will prove to be of immense value to the malacologist, the amateur shell collector, and to researchers in related fields with interest not only on the marine malacofauna of northeastern Florida, but of the entire western Atlantic. Let us hope that future malacological books follow the 21st Century approach of this publication and its worthy companions *Bahamian Seashells* (Redfern, 2001) and *South Florida Seashells* (Mikkelsen and Bieler, 2000).

LITERATURE CITED

- Abbott, R.T. 1974. American Seashells, 2nd ed. Van Nostrand-Reinhold, New York, [viii] + 663 pp., 24 pls.
- Camp, D.K., W.G. Lyons, T.H. Perkins. 1998. Checklists of Selected Shallow Water Marine Invertebrates of Florida. Florida Department of Environmental Protection, St. Petersburg, xv + 228 pp.
- García, E.F. 2008a. Eight new molluscan species (Gastropoda: Turridae) from the western Atlantic, with the description of two new genera. *Novapex* 9: 1–15.
- García, E.F. 2008b. Four new buccinid species (Gastropoda: Buccinidae) from the western Atlantic. *Novapex* 9: 141–148.
- Gundersen, R.W. 1998. The seashells of Sanibel and Captiva Islands. Published privately, Racine, 32 pp.
- Hutsell, K.C., L.H. Hutsell, and D.L. Pisor. 2001. Registry of World Record Size Shells, 3rd ed.. Snails Pace Production, San Diego, pp. 1–158 + i–vii.
- Lyons, W.G. 1975. Shells of the Jacksonville area; a suggested club project. *Shell-O-Gram* 16(5): 3.
- Mikkelsen, P.M. and R. Bieler. 2007. South Florida Seashells: Living Marine Mollusks of the Florida Keys and Adjacent Regions. Bivalves, Princeton University Press, Princeton, [1]–viii + 503 pp.

- Redfern, C. 2001. Bahamian Seashells. A Thousand Species from Abaco, Bahamas. Bahamianseashells.com, Inc., Boca Raton, 280 pp. + 9 +120 pls.
- Rosenberg, G. 2005. Malacolog 4.1.0: A Database of Western Atlantic Marine Mollusca. [WWW database (version 4.1.0)] <http://www.malacolog.org/>
- Turgeon, D.D., J.F. Quinn, Jr., A.E. Bogan, E.V. Coan, F.G. Hochberg, W.G. Lyons, P.M. 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. 2nd ed. American Fisheries Society, Special Publication 26, Bethesda, ix + pp. 1–509 + 16 pls. (non-paginated).

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