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A SUPPLEMENT TO W. M. TATTERSALL'S REVIEW OF THE MYSIDACEA OF THE UNITED STATES NATIONAL MUSEUM[1]

By Albert H. Banner[2]

In 1942 Dr. Walter M. Tattersall completed the manuscript of his lengthy study of the crustaceans of the order Mysidacea of the U. S. National Museum. This study, more than a simple catalog of specimens stored at the museum, was a listing of all species of the order ever reported from the Americas, both North and South, and a review of all literature pertinent to them. Many species were described and depicted, taxonomic confusions were cleared, and 1 new genus and 19 new species were described.

This study, as it stands, is the most valuable contribution to the knowledge of the order yet made in America and will be invaluable to every worker, specialist or not, who will need to identify these crustaceans. However, Dr. Tattersall died on October 1, 1943, before even the initial preparations were made by the U. S. National Museum for the publication of the study. Because of the war-induced delay, the manuscript was not finally published until October 4, 1951. In the intervening eight years several papers on the group appeared, and others, published earlier in Europe during the war, became available for the first time. Some of these contain references to the species discussed by Tattersall, and a few changes in taxonomic status have been introduced. As references to these additional studies were not inserted in the manuscript in the course of editing, the actual date of publication is deceptive.

[1] Tattersall, Walter M., A Review of the Mysidacea of the United States National Museum. U. S. Nat. Mus. Bull. 201, x + 292 pp., 103 figs., Oct. 4, 1951.

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As author of one of the pertinent papers mentioned above, I was asked by Dr. Fenner A. Chace, Jr., of the U. S. National Museum, and by Mrs. Olive S. Tattersall to prepare this short paper to supply the information needed to bring Dr. Tattersall's study up to its actual date of publication. I wish to thank Dr. Chace and Mrs. Tattersall for asking me to make this emendation.

In preparing these addenda, I hope also to keep the seeming errors, resulting from the long delay in printing, from reflecting in any way on the excellent reputation of Dr. Tattersall in the eyes of those who may not know the true cause of the omissions, and to keep these omissions from confusing later workers, especially those nonspecialists who may not be in a position to investigate all the literature on the group.

No more will be done than to point out under the various species the additions to the literature pertinent to their taxonomic status or to the American records. Where there may be a question about the taxonomy of any species, it will merely be mentioned but not resolved; finally, any publications issued after the date of publication of Tattersall's work will not be reported.

Addenda

Page 3.

The list of American species should be changed as follows:

Subfamily Boreomysinae	8 species
Tribe Erythropini	28
Tribe Mysini	35
Subfamily Mysidellinae	1

Page 4.

To the fresh-water species of mysids should be added *Neomysis mercedis,* from the west coast of North America (Banner, 1948, pt. II, p. 75).

The total of littoral species for the Pacific coast should be raised to 32 and *Mysis oculata* should be added as a species common to both coasts of North America (see the discussion under that species below).

Page 5.

In table 1 the number of west coast species of *Acanthomysis* should be changed to 9.

Page 7.

To the list of deeper-water species found only off the continental shelf of the Pacific slope should be added *Katerythrops* sp. and *Mysidella americana.*

To the list of pelagic species common to both the Atlantic and Pacific coasts should be added *Boreomysis microps.*

Page 8.

To the list of pelagic species known only from the Pacific side should be added *Boreomysis kincaidi*, *Euchaetomeropsis pacifica*, and *Caesaromysis vanclevei*, while *Caesaromysis* sp. should be substituted for *Caesaromysides liguriae*.

In table 2, *Neomysis mercedis* should be listed as a species distributed from Alaska to California rather than from British Columbia to California. (The identification of the Alaskan specimens was somewhat uncertain.)

Page 14.—*Chalaraspidum alatum* (Willemoes-Suhm)

Fage (1941, p. 4) not only discussed the anatomy and relationships of this species but also recorded its capture from the Pacific Ocean near Panamá.

Pages 15–22.—*Lophogaster* M. Sars

Any worker dealing with the genus *Lophogaster* should also consult the work of Fage (1942, pp. 1–39) in which, like Tattersall, he reviewed the known species and described new species. Fage, moreover, established new criteria, not used by Tattersall and previous workers, which serve to distinguish the species.

Below is a listing of the species of *Lophogaster* recognized by Tattersall and Fage, those arranged in opposition being presumably the same. In Fage's list, the species prefaced by an asterisk are those for which he gave additional records, some of which are American.

Tattersall	Fage
L. rotundatus Illig	**L. rotundatus*
	**L. typicus*
L. typicus M. Sars	**L. subglaber* Hansen [3]
	**L. challengeri* Fage
L. americanus Tattersall	
L. spinosus Ortmann	**L. spinosus*
L. hawaïensis Fage	**L. hawaïensis*
L. longirostris Faxon	*L. longirostris*
	**L. pacificus* Fage
L. intermedius Hansen	*L. intermedius*
	**L. multispinosus* Fage
	**L. schmitti* Fage
L. japonicus Tattersall	
L. erythraeus Colosi	*L. typica* var. *erythraeus*
L. affinis Colosi	*L. subglaber* var. *affinis*

On the basis of the published descriptions it would appear that the new species described by Tattersall (*L. americanus* and *L. japonicus*) are not synonyms of the six described or reestablished by Fage (*L. subglaber*, *L. challengeri*, *L. hawaïensis*, *L. pacificus*, *L. multispinosus*,

[3] Nouvel (1943, p. 90) described *L. subglaber insulare* a new variety from the eastern Atlantic (referred to earlier in his paper as *L. challengeri* Fage).

and *L. schmitti*). However, final judgment on the validity of Tattersall's species will have to wait until the specimens are examined.

Pages 25–32.—*Gnathophausia* Willemoes-Suhm

Like the species of the genus *Lophogaster*, the species of this genus were reported on by Fage (1941) on the basis of the extensive Dana collections. In his work Fage discusses both the morphology of the species and their distributional patterns.

Page 25.—*Gnathophausia ingens* (Dohrn)

This species was discussed by Fage (1941, p. 15) and many new records were given for it, including some from the Caribbean and adjacent waters.

Page 26.—*Gnathophausia gigas* Willemoes-Suhm

Records of this species, including some from off Central America, were given by Fage (1941, p. 24). Nouvel (1943, p. 12) gave some records from off Newfoundland. In addition, new records from off the northwestern coast of North America were given in my paper (Banner, 1948, pt. II, p. 358).

Page 28.—*Gnathophausia gracilis* Willemoes-Suhm

Records of this species from off Central America were given by Fage (1941, p. 27).

Page 29.—*Gnathophausia zoea* Willemoes-Suhm

One record was given by Fage (1941, p. 34) from off the northeastern coast of South America; Nouvel (1943, p. 15) gave two records of capture from off Newfoundland.

Pages 32–34.—*Eucopia* Dana

Three papers dealing with the names applied to the species and the separation of the species of this genus were published while Tattersall was finishing his manuscript. The studies were those of Nouvel (1942a, 1943) and Fage (1942).

Page 32.—*Eucopia sculpticauda* Faxon

Fage (1942, p. 56) recorded many captures of this species, including one off the eastern coast of the United States, two in the Caribbean Sea, and several off the Pacific coast of Central America and northern South America.

Page 33.—*Eucopia australis* Dana

Fage (1942, p. 41) recorded additional distributional records for this species, including two captures on the Pacific side of Panamá and one in the eastern Caribbean.

Page 33.—*Eucopia major* Hansen

Fage (1942, p. 41 ff.) has placed this species in the synonymy of *E. australis;* Nouvel (1943, pp. 95–97) rejected the proposal and retained *E. major* as a separate and distinct species. Nouvel (p. 28) gave one record from off Newfoundland in addition to non-American collections.

Page 34.—*Eucopia unguiculata* (Willemoes-Suhm)

This species was divided into *E. hanseni* and *E. grimaldii*, two new species, by Nouvel (1942a, pp. 3–6). This distinction was accepted by Fage (1942, p. 40) but he used the names only provisionally until an examination of the type should determine which form must retain the name *E. unguiculata.* Tattersall and Tattersall (1951, p. 99) established that the name *E. unguiculata* should be retained for *E. hanseni* Nouvel and that *E. grimaldii* Nouvel is to be accepted. Unless subsequent work makes it necessary to reject Nouvel's separation, the specimens recorded by Tattersall should be reexamined and separated into the new species.[4]

Additional records for the two species were given by Fage (1942, p. 47), including some records from near the coasts of the Americas, by Nouvel (1943, pp. 30–43), where there is one record from off Newfoundland, and by Banner (1948, pt. I, p. 359), including many records from off the northwestern coast of North America.

Page 45.—*Boreomysis* G. O. Sars

Instead of about 20 species belonging to this genus, as given by Tattersall, there are now about 25 or 26 species recognized; only one of these new species has been described from American waters.

Page 48.—*Boreomysis tridens* G. O. Sars

Nouvel (1942b, p. 1; 1943, p. 45) described a variety *lobata* as new from off Newfoundland.

Page 49.—*Boreomysis arctica* (Krøyer)

Add synonym: *B. tregonboffi* Băcesco (1941a, p. 168; 1941b, p. 12) [according to Nouvel, 1943, p. 52].

Page 52.—*Boreomysis californica* Ortmann

A description, figures, and additional records from off the northwestern coast of North America were given by Banner (1948, pt. I, p. 367).

Page 55.—*Boreomysis microps* G. O. Sars

Additional records for this species were given by Nouvel (1943, p. 48), including one record from off Newfoundland, and by Banner (1948, pt. I, p. 365) from off the northwestern coast of North America.

[4] I plan to publish in the near future a review of the names and the specific distinctions applied within this genus.

Page 60.

To the American species of *Boreomysis* should be added the species *B. kincaidi* Banner (1948, pt. I, p. 362) with a range from Washington to Alaska.[5]

Page 60.—*Siriella thompsonii* (H. Milne-Edwards)

Perhaps reference here should be made to the records of Nouvel (1943, p. 62), some of which are from locations that lie between the Azores and Newfoundland.

Page 81.—*Archaeomysis grebnitzkii* (Czerniavsky)

This species also has been described and depicted by Banner (1948, pt. I, p. 369, pl. 5). The records are for the ocean coast and the inland waters of Washington, the middle of the range established by Tattersall.

Page 100.—*Anchialina typica* (Krøyer)

This species was recorded from American waters south of Newfoundland by Nouvel (1943, p. 70).

Page 106.—*Holmesiella anomala* Ortmann

This species has been redescribed and discussed with additional records (Banner, 1948, pt. I, p. 395). It should be noted that both Tattersall and Banner observed that there are two races of the species that reach different sizes at maturity.

Page 112.—*Euchaetomera tenuis* G. O. Sars

To the records of this species should be added those collections made off British Columbia (Banner, 1948, pt. I, p. 383), a considerable extension of the range as given by Tattersall.

Page 112.

After the genus *Euchaetomera* should be added the genus and species *Euchaetomeropsis pacifica* Banner (1948, pt. I, p. 285), a new species described from British Columbia and the first record of the genus from American waters of either coast.

Page 113.—*Meterythrops robusta* S. I. Smith

Additional records for this species have been given from Washington to Alaska (Banner, 1948, pt. I, p. 377). This paper also noted that there were small-eyed individuals similar to those described by Tattersall as the new species *M. microphthalma*, but that after the examination of over 85 specimens the conclusion was reached that differences between the two forms were bridged by intermediate forms. If *M. microphthalma* is considered to be a synonym of *M.*

[5] I plan to discuss *B. californica* and *B. kincaidi* in a subsequent paper.

robusta, then the record given for the new species constitutes the furthest extension of the range for *M. robusta.*

Page 118.—*Katerythrops* Holt and Tattersall

To the species of the genus should be added *Katerythrops* sp. Banner (1948, pt. I, p. 379), which is the only record of the genus in the Pacific.

Page 120.—*Longithorax capensis* Zimmer

Tattersall states that his specimens from Bermuda are the only ones known save the type; however, Nouvel (1943, p. 75) has recorded from the Azores a damaged specimen probably of this species.

Page 128.—*Amblyops abbreviata* (G. O. Sars)

To Tattersall's record of this species from Alaska should be added the two records from Alaska and one record from British Columbia (Banner, 1948, pt. I, p. 382).

Page 134.—*Pseudomma truncatum* S. I. Smith

To the west coast records of this species should be added the records from Washington (Banner, 1948, pt. I, p. 381).

Pages 137, 244.—*Caesaromysides liguriae* Colosi

This genus should be cancelled as an immature stage of *Caesaromysis;* the worth of the species could not be determined because of the immaturity of the specimen described (Banner, 1948, pt. I, p. 389).

To Tattersall's account of American mysids, *Caesaromysis vanclevei* Banner (loc. cit.,) should be added here, with its records from off Oregon to off Alaska.

Page 160.—*Inusitatomysis serrata* Tattersall

To this species should be added the reference *Inusitatomysis* sp. Banner (1948, pt. II, p. 67), which is apparently the same species as Tattersall's *I. serrata.* One major difference between the two sets of specimens is in the depth of the terminal cleft of the telson, which is one-eighth the length of the telson in Tattersall's specimens and one-third the length in mine; however, this may well be a growth difference and the two groups of specimens are probably the same species.

If they are the same, then the records of *Inusitatomysis* sp. from off British Columbia should be added to Tattersall's record from the Bering Sea.

Page 165.—*Mysis oculata* (Fabricius)

To the list of synonyms of this species should be added *Pugetomysis litoralis* Banner (1948, pt. II, p. 104), and the range of the species in the Pacific should be extended to include the waters of Washington.[6]

[6] I plan to discuss this change in a forthcoming publication.

Page 181.—*Neomysis rayii* (Murdoch)

Tattersall and Banner arrived independently at the same conclusion that *N. franciscorum* Holmes is a synonym of *N. rayii*. The records given by Banner (1948, pt. II, p. 78) augment those given by Tattersall.

Page 187.—*Neomysis mercedis* Holmes

Under this species should be added the observations that it penetrates and lives in fresh-water lakes, such as Lake Washington near Seattle (Banner, 1948, pt. II, p. 75).[7]

Page 192.—*Neomysis kadiakensis* Ortmann

Additional records of this species from Washington and British Columbia have been given (Banner, 1948, pt. II, p. 82).

Pages 208, 248.—*Acanthomysis sculpta* (Tattersall)

Observations have shown that this species exhibits great variation on many points, especially in the sculpturing of the abdomen (Banner, 1948, pt. II, pp. 97–101). The records have extended the range of the species from Washington to southern California.

Page 215.—*Acanthomysis macropsis* (Tattersall)

The known range of this species has been extended to include the inland waters of Washington (Banner, 1948, pt. II, p. 91).

Page 217.—*Acanthomysis pseudomacropsis* (Tattersall)

Tattersall, in an earlier publication (1933, p. 94) and again in this publication, states that he believes the exopod of the fourth pleopods of the male to be of three articles; this appendage was found to be composed of a single article (Banner, 1948, pt. II. p. 89). In addition, the records cited have extended the range southward into Washington and also give another Alaskan record.

Page 218.

To the genus *Acanthomysis* should be added two new species described from the northwestern coast of America, *A. nephrophthalma* Banner and *A. davisi* Banner (1948, pt. II, pp. 93, 95), and an unnamed specimen from Alaska, *Acanthomysis* sp. Banner (1948, pt. II, p. 101).

Pages 220, 249.—*Proneomysis wailesi* Tattersall

In an additional record for this species from Washington a new location has been given (Banner, 1948, pt. II, p. 104).

Pages 242 or 250.

To Tattersall's list of genera and species occurring in the waters of the Americas should be added *Mysidella americana* Banner (1948, pt. II, p. 109), a member of the last subfamily of the Mysidae, the Mysidellinae, which was described from British Columbia and which is the only record of the subfamily from American waters.

[7] I plan to discuss the validity of this species in a forthcoming publication.

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