Artificial Key to the Families of Gammaridean Amphipods
Reported in the Southern California Bight
(Modified from J.W. Chapman 2007 by Dean Pasko, 31-May-2019)*

1. Pereonites typically elongate, cylindrical in free-living forms (Plate 254A); pereonite 1 fused to head; gills not exceeding three pairs; female brood plates not exceeding two pairs, pleon and urosome (abdomen) vestigial .......................................................... Caprellida (Plates 305–311)
   — Pereonites generally laterally compressed although may be cylindrical, typically not notably elongated; pereonite 1 and head separate; more than three pairs of gills and brood plates; abdomen prominent.................................................................................................................. 2
2. Body vermiform, without coxal or epimeral plates (Plate 254D); movable compound claw (“dactyl”) of gnathopods formed of articles 6 and 7; pleopods leaf-like, vestigial, or absent
   ............................................................................................................................. Inostracidea
   — Body typically not vermiform, coxal and epimeral plates well developed, visible (Plate 254E); dactyl formed of article 7 only ...................................................................................................................... Gammaridea… 3
3. Telson fleshy, thick, short, or minute not readily articulated at base, unleft or cleft (Plate 255A–F); telson lobes broadly separate (Plate 255G) or telson indistinct (Plate 255H); rami of uropod 3 (if present) shorter than peduncle (with numerous exceptions) ............................................... 4
   — Telson flat, laminar, and moveable, unleft or deeply cleft, always distinct, never both unleft and fleshy (Plate 2551–N); rami of uropod 3 always present and usually longer than the peduncle .......................................................................................................................... 26
4. Antenna 1 no longer than the head, much shorter than antenna 2 (Plate 255O); telson with 10 or more irregularly distributed stout spines (Plate 255A); pereopods particularly heavy; terrestrial or semi-terrestrial .................................................................................................... Taliatidae (Plates 303–304)
   — Antenna 1 significantly longer than the head, subequal to or larger than antenna 2 (Plate 255P and PP); telson with six or less irregularly spaced stout spines (not counting long spines or setae) entirely aquatic or intertidal ........................................................................................................... 5
5. Uropod 3 indistinct or absent (Plate 255F, H, Q) .................................................................................. 6
   — Uropod 3 large and readily visible (Plate 255R–V) ....................................................................... 9
6. Telson fused to urosome and urosomites 2 and 3 fused (Plate 255H); body tubular, ant- or tanaidacean-like, burrows into kelp .............................................................................................. Eophliantidae (Plate 258)
   — Telson separate from urosome (Plate 255F2, Q–V); body either laterally or dorsoventrally flattened, not ant- or tanaidacean-like .............................................................................................................................................. 7
7. Urosome less than twice as long as deep, urosomite 1 not extremely elongate (Plate 255Q); rostrum spatulate (Plate 255W) ........................................................................................................ Phliantidae (Plate 258C–E)
   — Urosome more than twice as long as deep, urosomite 1 or urosomites 1 and 2 extremely elongate (Plate 255F2); body laterally compressed .................................................................................................................. 8
8. Gills absent from pereonite 6; urosomites 2 and 3 fused .......... Dulichiidae (Plate 259C–D, H–J)
   — Gills present on pereonite 6; all urosomites separate .......... Podoceridae (Plate 259A–B, E–G)


NOTE: This Key is constantly under revision. Users are cautioned to contact the author at deanpasko@yahoo.com for the most recent revision or update. Suggested corrections are welcome!
9. Pleonite 3 with immense posteriorly projecting dorsal tooth (Plate 255P, 260A); uropod 2 peduncle greatly expanded, uropods 2 and 3 enormous and urosomites 1–3 fused (Plate 255P) ........................................................................................................ Cheluridae (Plate 260)
   — Pleonite 3 without posteriorly projecting dorsal tooth; uropod 2 without greatly expanded peduncle (Plate 255F2, Q–V).................................................................................................................. 10
10. Uropod 3 with two prominent short or long rami that may not be equal, inner ramus not scale-like (Plate 255X–BB) .............................................................................................................................................. 11
   — Uropod 3 with one ramus only or with minute, scale-like inner ramus this is indistinct and difficult to observe (Plate 255S, U–V, CC–DD) ........................................................................................................ 19
11. Urosome much reduced relative to pleon, decurved and positioned ventral to pleonite 3 (Plate 255R); articles 2–4 of pereopods 5–7 strongly expanded; telson lobes widely separated (Plate 255G) ................................................................................................................................. Haustoriidae (Plate 261)
   — Urosome normally aligned with, not decurved and ventral to, pleonite 3 (Plate 255S–V); articles 2–4 of pereopods 5–7 not strongly expanded; telson lobes adjacent or fused (Plate 255B–E) ................................................................................................................................. 12
12. Uropod 3 rami\(^1\) with setae or with short, straight spines but not hooks or denticles (Plate 255AA–BB) .......................................................................................................................................................... 14
   — Uropod 3 outer ramus bearing conspicuous hooks or small denticles, the latter of which may only be visible under high magnification (Plate 255X–Z) ........................................................................................................ 13
13. Outer ramus of uropod 3 stout, with two heavy, hooked spines and inner ramus flat and apically setose (Plate 255X) ................................................................................................. Ampithoidae (Plates 265–266)
   — Outer ramus of uropod 3 apically stout, bearing a single large hook (Plate 255Y) or relatively slender, either denticulate (Plate 255Z) or unornamented (an exception is Notopoma, which lacks an inner ramus [Plate 255S]) .... Ischyroceridae (in part; Plates 267–268)
14. Eyes completely enclosed on produced ocular lobes that extend about one-half way along the first article of antenna 1 (Plate 267B); uropod 3 biramus, peduncle shorter than rami, without disto-ventral corona of fine spines; male gnathopod 1 carpochelate ........................................................................................................................................ Kamakidae (Amphideutopus oculatus)
   — These character states not combined .............................................................................. 15
15. Gnathopod 2 more robust than gnathopod 1 – compare articles 6 of gnathopod 1 and gnathopod 2; more prominent and distinctive in males than females (Plate 263D–E) .......... 16
   — Gnathopod 1 larger and more robust than gnathopod 2; more prominent in males than females (Plate 262A–B, T–V) ........................................................................................................................................ 18
16. Urosomites 1 and 2 fused (Plate 263M, examine carefully); dactyls of pereopods 5–7 strong, heavy, bifurcate .............................................................................................................. Chevalliidae (Chevalia inaequalis)
   — Urosomites 1 and 2 free (Plate 263D, N); pereopods 5–7 dactyls simple ....................... 17

\(^{1}\) Grandidierella has a uniramus uropod 3.
Artificial Key to SCB Amphipoda

17. Coxa 1 larger than coxa 2 (Plate 263D, N, P); uropod 3 inner ramus between one-third to two-thirds of outer ramus (Plate 263A, C) .......................... Corophiidae (in part: Protomedeinae)²
   — Coxa 1 smaller than coxa 2 (Plate 263G, O, S); uropod 3 rami either subequal (Gammaropsis: Plate 264E) or less than one-third of outer ramus (Photis; Plate 263B) .........Photidae (in part)
18. Head lobe acute (Plate 267B); pereopod 7 not very elongate, article 6 not extending beyond pereopod 6 ............................................................................. Uncioliidae (Acuminodeutopinae)³
   — Head lobe blunt or rounded (Plate 262A, P); pereopod 7 article 6 extends beyond pereopod 6 .................................................................................................................. Aoridae (Plate 262)
19. Head lobe immense, extending beyond first article of antenna 1; uropod 3 peduncle short, slightly longer than broad..........................Photidae (in part: Ampelisciphotis podopthalma)
   — Head not immense, not extending beyond first article of antenna 1; uropod 3 peduncle long, twice as long as broad..................................................................................20
20. Combined lengths of urosomites 2 and 3 greater than one-half of urosomite 1 (Plate 255T) or urosomites 1–3 fused (Plate 255U); mandibular palp present (Plate 255EE–HH); oöstegites lined with evenly curved or straight setae (Plate 255MM) ........................................................................21
   — Urosomites 2 and 3 combined lengths less than one-half of urosomite 1 (Plate 255V); mandibular palp absent (Plate 255II–LL); oöstegites lined with distally curled setae (Plate 255NN)................................................................................................................23
21. Male gnathopod 1 or gnathopod 2 carpochelate (Plate 254V); pereonite 2 with coxal gill......22
   — Male and female gnathopod 2 basket-shaped, merochelate, or simple, ventrally lined with long pinnate setae (Plate 254U) and larger than gnathopod 1; pereonite 2 lacking coxal gill ..........
     ............................................................................................................................ Corophiidae (in part: Corophiinae; Plates 269–270)
22. Gnathopod 1 carpochelate (Plate 269A) .................................................................................... Aoridae (in part: Grandidierella japonica; Plate 269A–C)
   — Gnathopod 2 carpochelate (Plate 267L) ............................................................................. Ischyroceridae (in part: Notopoma sp A; Plate 267A, C)
23. Head anteriorly square, antenna 1 insertion dorsal to the eye (Plate 255O); mandibular molar prominent (Plate 255JJ–KK); uropod 3 ramus short, readily apparent (Plate 255CC–DD) .....24
   — Head anteriorly decurved, antenna 1 insertion ventral to the eye (Plate 255PP); mandibular an molar indistinct flat plate (Plate 255LL); uropod 3 ramus indistinct.... Najnidae (Plate 271A–F)

² Note that Cheiropohotis has a short uropod 3 inner ramus like Photis, just different in structure.
24. Pereopods 2–7 fossorial, pereopod 6 articles 4–6 densely lined with long, straight setae and with straight dactyl (Plate 256A); uropod 1 peduncle lined with long spines and rami without spines (Plate 256C); epistome of upper lip proboscid (nose-like) (Plate 256B) ................................................................. Dogielinotidae (Plate 271G–H)
   — Pereopods 2–7 non-fossorial, articles 4–7 with sparse, short setae and with curved dactyls (Plate 256D); uropod 1 rami and lateral peduncle with short stout spines (Plate 256E); epistome reduced (Plate 256F) .......................................................................................................................... 25

25. Telson uncleft or cleft less than one-third of total length (Plate 255D); maxilla 1 palp extremely reduced or absent, extending well short of the distal end of outer plate (Plate 256G) .............................................................................................................................. Hyalellidae (Plate 272)
   — Telson cleft more than one-half of the entire length into subtriangular lobes (Plate 255C); maxilla 1 palp extending to distal end of outer plate (Plates 256H–II) ............... Hyalidae (Plate 273)

26. Coxa 1 tiny and obscured by coxa 2; coxae 2–4 often enlarged (Plate 256J–K) .................. 27
   — Coxa 1 at least half as large as coxa 2; coxae 2–4 not greatly enlarged (Plate 256L–M) ............. 30

27. Gnathopod 1 vestigial, reduced to coxa plus linear basis (Plate 296B); telson laminar and deeply cleft (Plate 254Q) ................................................................................................................................. Bateidae (Plate 296)
   — Gnathopod 1 normally articulated; telson uncleft (Plate 256Q) .......................................................... 28

28. Gnathopod 1 carpochelate (Plate 256O–P) ................................................................. Leucothoidae (In part: Anamixinae, Anamixis pacifica)
   — Gnathopod 1 simple, transverse or subchelate but not carpochelate ............................................. 29

29. Uropod 3 biramous, each ramus composed of single article; uropod 2 not reaching distal end of uropod 3; telson acute (Plate 256Q); gnathopods 1 and 2, article 5 extending along the posterior palm edge of article 6 (Plates 254X, 256R) .................. Amphilochoidea (Plate 274)
   — Uropod 3 uniramous, ramus biarticulate (Plate 256T); uropod 2 extending as far as distal uropods 1 and 3 (Plate 256K); telson evenly rounded or bluntly acute (Plate 255L); gnathopod 2 article 5 not extending along posterior edge of the palm of article 6 (Plate 256S) ................................................................. Stenothoidae (Plate 275)

30. Urosomites 2 and 3 fused (Plate 256L, U) ................................................................. 31
   — Urosomites separate (Plate 256J–K, M); interpret carefully as some taxa (e.g., Pardaliscidae) have a narrowed urosomite 2 ........................................................................................................................................ 33

31. Body elongate, subcylindrical, thin; flagellum of antennae 1 and 2 strongly reduced (one to few segments); coxae very short and overlapping; telson entire .................. Colomastigidae
   — Body laterally compressed, not notably elongate or cylindrical; flagellum of antennae not reduced, normal with multiple segments; coxae of varying lengths, not uniformly short; telson typically notched to deeply cleft ................................................................. 32

4 Represented by one reported SCB species Colomastix sp A SCAMIT 2012§.
Artificial Key to SCB Amphipoda

32. Head subequal to combined lengths of pereonites 1–3; pereopod 3 and 4 dactyls as long as or longer than combined articles 5 and 6; pereopods 6 and 7 dissimilar; eyes, when present, tiny, consisting of one dorsolateral and one anterodorsal cuticular lens (Plate 256L)................................. Ampeliscidae (Plates 276–278)
   — Head shorter than the combined lengths of pereonites 1–3; pereopods 3 and 4 dactyls shorter than combined articles 5 and 6; pereopods 6 and 7 similar; eyes normal, generally large with numerous ommatidia (Plate 256V) .................................................. Dexaminioidea\(^5\) (Plate 279)
33. Eyes, when present, coalesced into a single dorsal anterior mass on a strongly decurved, usually helmet-shaped rostrum (Plate 256W–X) ................................................................................. 34
   — Eyes, when present, lateral; rostrum present or absent, rarely strongly decurved (Plate 256M–N, Y–AA) ................................................................................................................................. 35
34. Telson emarginated (Plate 256BB) or evenly rounded; urosome dorsally unarmed and telson not extending beyond uropod 3 peduncle (Plate 256CC); gnathopod 1 article 6 stout (Plate 254X); pereopod 7 much longer than pereopod 6 ................. Oedicerotidae (in part, Plate 280)
   — Telson deeply cleft (Plate 256DD); urosomites 1 and 2 dorsally toothed and telson extending beyond uropod 3 peduncle (Plate 256EE); gnathopod 1 article 6 weak (Plate 256FF); pereopod 7 only moderately longer than pereopod 6 .................................................. Synopiidae (Plate 281)
35. Gnathopod 1 carpochelate (Plate 256O–P) ......Leucothoidae (In part, Leucothoinae; Plate 282)
   — Gnathopod 1 not carpochelate ................................................................................................. 36
36. Coxa 4 nearly 50% (or more) deeper than coxa 3 (Plate 256HH) .............................................. 40
   — Coxae 3 and 4 within 30% of the same depth (Plate 256II) ....................................................... 37
37. Coxa 1 strongly tapered, narrow distally (Plate 256JJ); mandibles needlelike with molars weak or lacking (Plate 256KK–LL) ........................................................................................................ 38
   — Coxa 1 square or rounded, broad (Plate 257A); mandible not as above................................. 42
38. Telson tapered, narrowing distally, cleft or not (Plate 283B); pereonites smooth, without dorsal or dorsolateral teeth (Plate 283A) ........................................................................................................ 39
   — Telson sides parallel, distally broad (Plate 283G–H); pereonites with dorsal or dorsolateral teeth (Plate 283D–E) ...................................................................................................................... Iphimiidae
39. Gnathopod 2 article 6 distally broad, subchelate; telson distal margin entire ........... Ochlesidae\(^6\)
   — Gnathopod 2 article 6 narrowed distally, nearly simple; telson cleft.............................. Stegocephalidae\(^7\)

\(^5\) Includes the Atylidae, represented by *Atylus tridens* (Alderman 1936) and Dexaminidae, represented by *Guernea reduncans* (JL Barnard 1958), *Polyicerca osborni* Calman 1898, and *Paradexamine* sp SD1 Pasko 1999\$. A key to SCB species is being posted to the SCAMIT website in the SCAMIT toolbox [http://www.scamit.org/taxontools/toolbox](http://www.scamit.org/taxontools/toolbox).

\(^6\) This family has not been reported from the SCB. Only one species, *Cryptodiusspellieri* (Brüggen 1907), of this Arctic-Boreal family is found in northern California (Fort Bragg and northward).

\(^7\) Represented by one SCB reported species, *Alania hancocki* Hurley 1956.
40. Head wider than long; rostrum long and distally truncate; coxa 4 large and distally acuminate (see Plate 283D) .................................................................................................................. Lafystiidae
   — Head as long as or longer than wide; rostrum, if present, tapered; coxa 4 rounded distally (Plate 283A) .................................................................41
41. Eye round, composed of four distinct ommatidia (Plate 257B); coxae 1–3 getting progressively smaller, coxa 4 enlarged (Plate 284A); uropod 3 rami posteriorly tapered (Plate 257C); mandibular palp slight, article 3 longest (Plate 257D) .............................................Argissidae (Plate 284)
   — Eye variously shaped, multifaceted (Plate 257E); coxa 2 larger than coxae 1 or 3; uropod 3 rami foliate (Plate 257F: although this appendage is often lost); mandible palp stout, article 2 is longest (Plate 257G) ..................................................................................Megaluropidae (Plate 285)
42. Gnathopod 2 “mitten-shaped” (dactyl minute, concealed by dense setae) and article 3 elongate, at least 1.5 times longer than wide (Plate 257K); antenna 1 article 1 depth usually half or more of length (Plate 257I–J); body usually white, compact, shiny and densely calcified .............................................................................................................Lysianassoida (Plates 286–287)
   — Gnathopod 2 article 6 not “mitten-shaped”, dactyl prominent and article 3 less than 1.2 times longer than wide (Plate 257L–M); antenna 1 article 1 usually longer than deep (Plates 256M–N, 257N–Q) ..................................................................................................................43
43. Fossorial—antennae 2 peduncle and pereopod 5 articles 4–6 lined by dense, typically long, stout lateral spines (Plates 256A, M; 257N–P); body often white, compact, shiny and well calcified ..................................................................................................................44
   — Nonfossorial—antennae 2 and pereopod 5 articles 4–6 not lined with long, dense, stout lateral spines (Plate 257Q–R) ..................................................................................................................47
44. Rostrum present; entirely marine or high-salinity estuary ..........................................................................45
   — Rostrum absent; entirely freshwater or low-salinity estuary ..........Pontoporeiidae (Plate 293)
45. Head truncate, short, rostrum weak or absent; ventral cephalic margin extended downward (ventrally; see arrow, Plate 257N); antenna 1 peduncular articles elongate ..................................................................................................................46
   — Head typically elongate, rostrum strong, occasionally weak or narrowed in front of eyes; ventral cephalic margin poorly developed, not ventrally produced (see arrows; Plates 256M, 257Z); antenna 1 articles compact ..................................................................................46

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8 Represented by one SCB reported species, Protolafystius sp A SCAMIT 2012§.
9 See Key to NEP [North Eastern Pacific] Lysianassoida genera – D Cadien, 26 June 2007, which can be found in the SCAMIT toolbox http://www.scamit.org/taxontools/toolbox or D Pasko, 14 April 2018, Artificial Key to the Lysianassoida Reported from the Southern California Bight, SCAMIT Ed 11.
Artificial Key to SCB Amphipoda

46. Rostrum strong, cylindrical, with subapical ventral process directed posteriorly between antennae; pereopods 6 and 7 subsimilar, pereopod 7 slightly longer. ......................................................................................................................... Platyischnopidae
—— Rostrum visor-like or narrowed anterior to eyes, not cylindrical and without ventral process; pereopod 7 different in form and ≥40% shorter than pereopod 6 (Plate 256M) .................................................................

— Phoxocephalidae (Plates 289–292)

47. Coxae 1–4 fairly uniform (squared or rectangular) with coxae 3 and 4 subequal and posterior margin of coxa 4 not excavate or concave (anterior and posterior margins parallel) ..............................................

—— Coxae 1–4 vary in size, with coxa 3 typically of different size or shape from 4 and coxa 4 concave to excavate behind (anterior and posterior margins parallel) .................................................................

48. Telson deeply cleft ........................................................................................................................................................................................................................................

—— Telson not cleft, convex to emarginate (Plate 256BB) .................................................................................................................................................................

49. Head lobe without antennal sinus, often blunt or obtusely produced (See Plate 257E, Z, UU); uropod and telson spines not robust (typically thin, delicate, not exceptionally long, Plate S1); mandible lacking molar, although incisor may be prominent (Plate S1) ............ Pardaliscidae

—— Head lobe with antennal sinus (Plate 257R, SS–TT); uropod 3 rami and/or telson often lined with long, robust spines (often as long as telson lobes; Plate 257S–T, MM–NN); mandible molar present ........................................................................................................................................................................ Hadzioida (in part)

50. Pleonites strongly toothed, epimera posterior margins serrate (see Plate 259D); gnathopods 1 and 2 nearly simple, articles 5 unproduced (see Plate 256JJ) ........................................................................................................................................................................ Melphidippidae (Melphisana bola Cmplx)

—— Pleonites smooth; epimera without serrate or toothed margins; gnathopods subchelate, fifth articles often produced (See Plates 256R, 257W) ........................................................................................ Oedicerotidate (in part)

51. Accessory flagellum of two or more articles and apparent at magnifications of 40x or less (Plate 257Q–R); telson cleft with prominent distal setae or spines (Plate 257S–T) .................................................................

—— Accessory flagellum absent or represented by tiny article(s) apparent only at high magnifications (40x; Plates 257U–W); telson deeply cleft or evenly rounded with few or no prominent distal setae or spines (Plate 257X–Y) .................................................................................................................................................................

52. Telson evenly rounded (Plates 257X, 296I) or emarginate (Plates 255J, 296H) ........................................

—— Telson cleft more than one-quarter length (Plates 257Y, 296F) or elongate and notched (Plate 296E) ........................................................................................................................................................................................................................................................................

10 Represented by one SCB representative, Tiburonella viscana (JL Barnard 1964).
11 SCB representatives include Halicoides symopiae (JL Barnard 1962); Nicippe tumida Bruzelius 1859; Pardalisca tenuipes GO Sars 1895; Pardaliscella symmerica JL Barnard 1959.
12 Includes Maeridae (Ceradocus and Maera) and Melitidae (Dulichiella). A key to the genera can be found in Cadien (2015): Cadien, D. 2015. Key to NEP Hadzioida genera: Maeridae & Melitidae. In Amphipoda of the Northeast Pacific (Equator to Aleutians, intertidal to abyss); X. Hadzioida – an expanded and updated review, which can be found in the SCAMIT toolbox http://www.scamit.org/taxontools/toolbox.

7 of 8 plus plates
53. Antennal sinus without a notch (Plate 257W); upper lip ventrally bilobed (Plate 257AA–BB); lower lip with inwardly tilting pillow shaped inner and outer lobes (except for Anomalosymtes coxalis) (Plate 257CC) and with short mandibular extensions (see arrows, Plate 257DD–EE)....

— Antennal sinus notched or distinctly incised (Plate 256N); upper lip ventrally convex (Plate 257FF); inner and outer lobes of lower lip not pillow shaped and bearing large extensions of the outer lobes (Plate 257GG–HH)

Pleustidae (Plates 294–295)

54. Telson relatively short, barely reaching beyond uropod 3 peduncle, each lobe typically rounded or squared (Plate 296X–Y)

— Telson elongate, often reaching to mid-point of uropod 3 rami, tapered (Plate 296D–F)

Pontogeneiidae

Eusiridae\(^{13}\)

55. Dactyls of pereopods 5–7 generally long, straight (Plate 257Q); uropod 3 rami tapered distally, nearly equal in length and lined with single thick spines (Plate 257II–JJ); molar reduced (Plate 257KK)

Liljeborgiidae (Plate 298)

— Dactyls of pereopods 5–7 stout and slightly curved (Plate 257R); uropod 3 rami with thick spines in clusters and/or inner ramus greatly reduced (Plate 257LL–NN); molar prominent (Plate 257OO–PP)


56. Urosome with dorsal clusters of large stout spines or setae (Plate 257QQ)

— Urosome dorsum bare (Plate 257P) or variously toothed (Plate 257RR) but without clusters of spines, spines, when present, occurring singly

57. Antenna 2 longer than antenna 1; accessory flagellum long, up to seven segments (Plate 256GG); eye large, reniform (see Plate 257E)

Hornellidae (Hornella occidentalis)

— Antenna 1 longer than antenna 2; accessory flagellum short; eye typically round, relatively small (Plate 257SS–UU)

58. Head without antennal sinus (Plate 257UU)

Crangonyctidae\(^{15}\) (Plate 302)

— Head with antennal sinus (Plate 257SS–TT)

Hadzioidae\(^{16}\) (in part)

\(^{13}\) SCB representatives include Eursiroides, Eusirus, and Rhachotropis.

\(^{14}\) Members of the superfamily Gammaroidea are found along shorelines in estuaries, tidal creeks, and freshwater environments, and are not represented in the present edition of the SCAMIT Species List, Ed 12.

\(^{15}\) Crangonyctidae are a primarily freshwater family, but some members may be found in low salinity environments.

\(^{16}\) Includes Maeridae (Elasmopus) and Melitidae (Desidmelita and Melita). A key to the genera can be found in Cadien (2015): Cadien, D. 2015. Key to NEP Hadzioida genera: Maeridae & Melitidae. In Amphipoda of the Northeast Pacific (Equator to Aleutians, intertidal to abyss): X. Hadzioida – an expanded and updated review, which can be found in the SCAMIT toolbox http://www.scamit.org/taxon/tools/toolbox
Artificial Key to the Families of Gammaridean Amphipods Reported in the Southern California Bight According to SCAMIT Edition 11, July 2016. (Modified from J.W. Chapman 2007 by Dean Pasko, 18-Apr-2018)*

Amphipod Key Plates

*Photis brevipes; Photo by D Pasko

Amphipod Key – Plate 254

PLATE 254 Amphipoda. A, Caprellidae—Caprella mutica; B, Cyamidae—Cyamus scammoni; C, Hyperiidea—Hyperoche medusarum (Müller, 1776) in situ; D, Ingolfiellidea—Ingolfiella fuscina Dojiri and Seig, 1987; E, Gammaridea—generalized body; F, G, generalized upper lip; H, generalized mandible; I, generalized head; J, generalized lower lip; K, generalized maxilla 1; L, generalized maxilla 2; M, Polycheria mandible; N, generalized maxilliped; O, uropod 1, Paragrubia uncinata; P, telson, Eohaustorius; Q, telson, Batea lobata; R, telson, Parallorchestes leblondi; S, telson, Stenothoe estacola; T, telson, Paracorophium sp.; U, gnathopod 1, Aoroides secundus; V, gnathopod 2, Ericthonius brasiliensis; W, gnathopod 1, Americhelidium shoemakeri; X, gnathopod 2, Americhelidium rectipalmum; Y, gnathopod 1, Stenothoe valida.
PLATE 255 A, Telson, Orchestia gammarellus; B, telson, Americorophium brevis; C, telson, Apohyale aniceps; D, telson, Allorchestes bellabella; E, telson, Ampithoe aptos; F, urosome, Podocerus cristatus; G, telson, Eohaustorius; H, urosome, Lignophliantis pyrifera; I, telson, generalized; J, telson, Oligochinus lighti; K, telson, Ampelisca; L, telson, stenothoid; M, telson, Leucothoe; N, telson, Lysianassa; O, head, Orchestia georgiana; P, body, Chelura terebrans; Q, urosome with uropod 1 removed, Pariphinotus seclusus; R, urosome, Eohaustorius washingtonianus; S, urosome, Cerapus tubularis; T, urosome, Bemlos concavus; U, urosome, Laticorophium baconi; V, urosome, Carinonajna kitamati; W, head and rostrum dorsal, Pariphinotus escabrosus; X, uropod 3, Ampithoe plumulosa; Y, uropod 3, Jassa falcata; Z, uropod 3, Ischyrocerus pelagops; AA, uropod 3, Cheiriphotis megacheles; BB, uropod 3, Columbaora cyclocoxa; CC, uropod 3, Parallorchestes bellabella; DD, uropod 3, Prohyale frequens; EE, mandible, Aoroides exilis; FF, mandible, Grandidierella japonica; GG, mandible, Corophium alienense; HH, mandible, Americorophium spinicorne; II, mandible, Allorchestes angusta; JJ, mandible, Parallorchestes americana; KK, mandible, Proboscinotus loquax; LL, mandible, Carinonajna bicornata; MM, oöstegite, pereopod 5, Americorophium salmonis; NN, oöstegite, pereopod 5, Proboscinotus loquax; OO, head, Ptilohyale longipalpa; PP, head, Carinonajna bicornata.
PLATE 256 Family Key. A, pereopod 6, B, head and upper lip, C, uropod 1, Proboscinotus loquax; D, pereopod 6, Apohyale anceps; E, uropod 1, Apohyale anceps; F, head and upper lip (UL = Apohyale pugettensis), Ptilohyale littoralis; G, maxilla 1, Allorchestes rickeri; H, maxilla 1, Apohyale anceps; I, maxilla 1, Parallorchestes cowani; J, body, Gitana calitemplado; K, body, Stenula modosa; L, body, Ampelisca milleri; M, body, Eobrolgus chumashi; N, head, Pontogeneia rostrata; O, gnathopod 1, Leucothoe alata; P, gnathopod 1, Leucothoides pacifica; Q, telson and uropods 1 and 2, Apolochus littoralis; R, gnathopod 1, Apolochus barnardi; S, gnathopod 2, Stenothoe estacola; T, uropod 3, Stenula incola; U, urosome, V, body, Atylus levidensus; W, head, Americhelidium shoemakeri; X, head, Metatiron tropakas; Y, head, Foxiphalus obtusidens; Z, rostrum, Thorlaksonius grandirostris; AA, head, Elasmopus antennatus; BB, telson, Monoculodes emarginatus; CC, urosome, Americhelidium micropleon; DD, telson, Tiron biocellata; EE, urosome, Metatiron tropakas; FF, gnathopod 1, Tiron biocellata; GG, antenna 1, Tiron biocellata; HH, coxae 3 and 4, Gibberosus myersi; II, head and 3 pereonites, Cryptodiplus kelleri; JJ, gnathopod 1, Cryptodius kelleri; KK, left mandible, Cryptodius kelleri; LL, right mandible, Coboldus hedgpethi.
**PLATE 259** Podoceridae. C, D, Dulichia rhabdoplastis; H, I, Dyopedos arcticus; J, Dyopedos monacanthus; A, B, G, Podocerus brasiliensis; E, Podocerus cristata; F, Podocerus spongiclus.

**PLATE 260** Cheluridae. A-D, Chelura terebrans.

**PLATE S1.** Pardaliscidae. Mandible (m) showing enlarged incisor (arrow); telson (t).
PLATE 296 Eusiroidea. S, Accedomoera vagor; B, K, L, M, Batea lobata; I, Calliopius pacificus; H, Oligochinus lighti; C, Paramoera bousfieldi; W, X, Pontogeneia inermis; T, Paramoera mohri; J, O, R, Pontogeneia intermedia; N, P, Q, V, Y, Z, Pontogeneia rostrata; D, E, Rhachotropis barnardi; G, Rhachotropis inflata; A, F, Rhachotropis oculata.


**PLATE 259** Figures modified from Alderman 1936; Barnard 1962a, 1970; Laubitz 1977; and McClosky 1970.

**PLATE 260** Figures modified from Barnard 1950, and Bousfield 1973.

**PLATE Suplement 1** Figures modified from Barnard and Karaman 1991b.

**PLATE 296.** Figures modified from Barnard 1952b, 1964c, 1969a, 1971, 1979; Bousfield 1973; Bousfield and Hendrycks 1995a, 1997; Sars 1895; Shoemaker 1926; and Staude 1995.