A GUIDE TO THE TERRESTRIAL ISOPODS OF COASTAL CALIFORNIA

UPDATED BY R.WETZER, 30 April 2020 < rwetzer@nhm.org> updated based on conversation with Stefano Taiti 29April2020

Commonly encountered junior synonyms and generic reassignments are provided. Taxa marked with an asterisk (*) indicate species collected during the NHMLA's "Great Los Angeles Basin Terrestrial Isopod Hunt" of January 2011.

SCUTOCOXIFERA Dreyer & Wägele, 2002 SUBORDER ONISCIDEA Latreille, 1802

Family Alloniscidae Dana, 1854

Alloniscus mirabilis (Stuxberg, 1875) (=Alloniscus cornutus Budde-Lund, 1885). San Mateo, CA to Magdalena Bay, Baja. Littoral halophilic species common on sandy beaches above high-tide line, where it burrows in sand under driftwood. A. mirabilis can co-occur with A. perconvexus, e.g., Bolsa Chica (pers. comm. Stefano Taiti 29April 2020).

*Alloniscus perconvexus Dana, 1856. WA to west Baja CA, in 2011 collected at Pt. Dume to San Juan Capistrano, CA. A littoral halophilic species common on sandy beach above high-tide line, where it burrows in sand under driftwood. *A. perconvexus* can co-occur with *A. mirabilis*, e.g., Bolsa Chica (pers. comm. Stefano Taiti 29April 2020).

Family Armadillidae Brandt and Ratzeburg, 1831

Cubaris affinis (Dana, 1854). Nomen dubium. (formerly in Spherillo). California. This and the following species, which according to Budde-Lund (1904) are synonyms; original descriptions do not permit species recognition and type specimens are lost. Most probably they belong to the genus Venezillo.

Cubaris californica (Budde-Lund, 1885). Nomen dubium. (formerly in Armadillo). San Francisco and San Pedro, CA. = Armadillo speciosus Stuxberg, 1875, nomen praeoccupatum.

**Venezillo arizonicus (Mulaik and Mulaik, 1942). In 2011 collected near Mecca, Riverside County. Under rocks. Venezillo microphthalmus (Arcangeli, 1932). (formerly in Armadillo). Southern and central CA. *Venezillo n.sp. Malibu, CA. Blind. Under large boulders.

Family Armadillidiidae Brandt and Ratzeburg, 1831

*Armadillidium vulgare (Latreille, 1804). (formerly in Armadillo). Cosmopolitan species of Mediterranean origin.

Family Detonidae Budde-Lund, 1906

Armadilloniscus coronacapitalis Menzies, 1950. Marin County to San Miguel and Anacapa Islands. Littoral halophilic species.

*Armadilloniscus holmesi Arcangeli, 1933 (=Actoniscus tuberculatus Homes and Gay, 1909, preoccupied name). Littoral halophilic species found in mashes, bays, and estuaries under rocks and driftwood.

¹ Long ago *Venezillo* had been collected in San Pedro and San Francisco. No recent records. This genus is in great need of revision. Properly collected specimens would be welcomed (Natural History Museum of Los Angeles County, Marine Biodiversity Center, rwetzer@nhm.org).

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*Armadilloniscus lindahli (Richardson, 1905). Marin County (Tomales Bay) and south (to at least Huntington Beach). Littoral halophilic species. This is the only *Armadillonsicus* species that can fully roll up into a ball.

Detonella paillicornis (Richardson, 1904). Pacific Coast, Bering Island (Russia) and Alaska to San Francisco Bay. Littoral halophilic species common under rocks above high tide line.

Family Ligiidae Brandt and Ratzeburg, 1831²

*Ligia cf. occidentalis (undescribed) Dana, 1853. Oregon to Southern California. Rocky shores. Ligia pallasii Brandt, 1833. AK to Santa Cruz, CA. Rocky shores on open coast environments.

*Ligidium gracile (Dana, 1856). (formerly in Styloniscus). AK to CA. Riparian.

Ligidium latum Jackson, 1923. San Francisco Bay Area to Santa Barbara County, CA. Riparian.

*Ligidium lapetum Mulaik and Mulaik, 1942. Angeles National Forest, leaf litter, friable soil. Identification on iNaturalist 29 April 2020 would be accurate to genus only as it is not possible to identify to species without examining male 2nd pleopod. See Light's Manual key.

Family Oniscidae Latriellw, 1802

Oniscus asellus Linnaeaus, 1758. Native to Portugal and Azores. Mostly forests, sometimes meadows. Common in northeastern US.

Family Philosciidae Kinahan, 1857

*Littorophiloscia richardsonae (Holmes and Gay, 1909). (formerly in *Philoscia*). Vancouver Island, Canada to Baja California, Mexico. Littoral species common in marshes, along bays and estuaries.

Family Platyarthridae Verhoeff, 1949

*Niambia capensis (Dollfus, 1895). (formerly in *Metoponorthus*). Introduced from southern Africa; widespread along the Pacific coast from southern WA to southern CA. Supralittoral and riparian. = *Porcellio littorina* Miller, 1936.

Platyarthrus aiasensis Legrand, 1953. Introduced; western Mediterranean-Atlantic distribution; known in the United States from southern CA and Texas. A myrmecophile (sharing the nest of ants).

Family Porcellionidae Brandt and Ratzeburg, 1831

*Porcellio dilatatus Brandt, 1833. Introduced from Europe. = Porcellio spinicornis occidentalis Miller, 1936. In 2011 collected in Angeles National Forest and Malibu. Pleotelson with rounded apex.

*Porcellio laevis Latreille, 1804. A cosmopolitan species of Mediterranean origin. In 2011 collected at Malaga Cove, Bolsa Chica, including Malibu. Synanthropic. Pleotelson acute, dorsal surface of body smooth.

*Porcellio scaber Latreille, 1804. A cosmopolitan species of European origin. In 2011 collected in Angeles National Forest. = Porcellio scaber americanus Arcangeli, 1932. Pleotelson acute, dorsal surface of body granulated.

Revised by R. Wetzer 20 April 2020

² *Ligia* and *Ligidium* are not closely related as has been shown by molecular data. The family Ligiidae is not monophyletic. See Dimitriou et al. 2019, and Wetzer et al. 2013.

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*Porcellionides floria Garthwaite and Sassaman, 1985. Southern and western United States and Baja California. This species is very similar to the cosmopolitan synanthropic *Porcellionides pruinosus* (Brandt, 1833), which is present in the USA but does not seem to occur on the Pacific coast (Garthwaite and Sassaman, 1985).

Family Styloniscidae Vandel, 1952

Cordioniscus stebbingi (Patience, 1907). Seen on iNaturalist April 2020. If it truly occurs in Southern California it would be introduced as it is a tropical species. It is not possible to identify this species without dissection of male 2nd pleopods (pers. comm. Stefano Taiti's 29 April 2020.)

Family Trichoniscidae Sars, 1899

- *Brackenridgia heroldi (Arcangeli, 1932). (formerly in *Protrichoniscus*). Central and southern CA. In 2011 collected in Angeles National Forest and Malibu. Under big rocks. Seen on iNaturalist April 2020 be very careful of this identification as specimens would need to be dissected for accurate identification (per Stefano Taiti, pers. comm. 29 April 2020). Also, this species could easily be confused with one occurring in Arizona, which may have made it to Southern California.
- *Haplophthalmus danicus Budde-Lund, 1885. A cosmopolitan species. In 2011 collected in Angeles National Forest. Under logs.
- Trichoniscus pusillus Brandt, 1833. Seen on iNaturalist April 2020. If it truly occurs in Southern California it would be introduced. This species is parthenogenic and all are female (i.e., if you find a male, it is not *T. pusillus*. The family is also not monophyletic and could belong to either the family Trichoniscidae or Styloniscidae. In order to definitively identify this to species, specimens would need to be dissected (per Stefano Taiti, pers. comm. 29 April 2020).

Family Tylidae Milne Edwards, 1840

*Tylos punctatus Holmes and Gay, 1909. Southern CA to Baja California and the Gulf of California. A littoral halophilic species restricted to sandy beaches where it burrows above the most recent high tide line during the day and is active on surface at night (Hays, 1977). In 2011 collected in San Juan Capistrano.