Scaphiostreptus caperanus Attems

Deletion from fauna

This name was published for a milliped which in the original description was given no further data than "Honolulu". The label of this specimen however carries the name of the collector, F.X. Williams, which gives some credibility to the stipulated provenance. The same label states further "War mit dem sp. a" but since I could find no way to discover what Attems intended by the designation "sp. a" this possible clue proved useless. Regrettably Williams' original label is no longer present, so any potential insights from that source are also lost.

I cannot match the gonopod structure of "caperanus" exactly with any species known to me, but it comes very close to one of the local variants recorded for *Orthoporus ornatus* (Girard), the most common and widespread spirostreptid of southwestern United States and northern Mexico.

The occurrence of an endemic spirostreptid on the Hawaiian islands is totally improbable biogeographically. In my opinion, the most likely explanation is that the type of *caperanus* was accidentally transported to Honolulu in plant material and taken to the Bishop Museum by whomever found it after offloading. Williams then included the specimen in the collection of Hawaiian material he was preparing for shipment to Attems (and upon which the 1938 paper was based).

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New Records of Peracarid Crustacea in Hawaii (Crustacea: Peracarida)

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Recent investigations of peracarid Crustacea collected from various sites in the Hawaiian Islands have resulted in the establishment of new records for the islands, and at least 2 new peracarid species, which are currently being described elsewhere. All vouchers are deposited in Bishop Museum.

Gammaridea: Aoridae

Grandidierella bispinosa Schellenberg

New state record

Specimens of *Grandidierella bispinosa* Schellenberg were recovered in Pearl Harbor at a brackish water site on the northern shores of East Loch. *Grandidierella bispinosa* has been recorded elsewhere at the Bismarck Archipelago, Fiji, and the Marianas Islands (Myers, 1985). Congeners of this species have been recorded before in the Hawaiian Islands: *Grandidierella koa* Barnard and *Grandidierella palama* Barnard are endemic brackish water species which have been recovered from anchialine ponds on Maui and Hawaii (Barnard, 1977).

Material examined: OAHU: Pearl Harbor: Legacy Project, Station 14 (12 March 1996).

Grandidierella japonica Stephensen

New state record

Specimens of *Grandidierella japonica* Stephensen have been recovered from sites on the northern shores of Pearl Harbor, Oahu at West, Middle, and East Loch. *Grandidierella japonica* is endemic to brackish water sites in the north-west Pacific (Stephensen, 1938) and is believed to be an introduced species in Hawaiian waters.

Barnard (1970) described a new species from the Hawaiian Islands as *Neomicro-deutopus makena* (BPBM S7264). The genus was later synonymized with *Grandidierella* (Barnard 1971, 1991). It has been suggested that *Grandidierella makena* is, in fact, synonymous with *Grandidierella japonica* (Chapman & Dornan, 1975). I disagree—the holotype of *Grandidierella makena* was obtained from Makapuu Point, Oahu, and is clearly fully marine, while *Grandidierella japonica* is noted as a brackish water species, both by Stephensen (1938) and as evidenced by sampling in Pearl Harbor. Re-examination of the holotype of *Grandidierella makena* suggests clear differences to the description of *Grandidierella japonica*—in particular, proportions of gnathopod 1 are different, and *Grandidierella makena* lacks stridulation sculptures characteristic of *Grandidierella japonica*, which are present in males recovered from Pearl Harbor.

Material examined: OAHU: Pearl Harbor: Legacy Project, Stations 5 (16 April 1996) 12 (27 March 1996).

Gammaridea: Phoxocephalidae

Mandibulophoxus sp.

New state record

Specimens of an apparently new species of *Mandibulophoxus* Barnard were recovered from soft bottomed sediments in Hanalei Harbor, Kauai. These appear to be closely related to *Mandibulophoxus uncirostratus* Giles, which is endemic to India (Pillai, 1957), and are congeners also with *Mandibulophoxus gilesi* Barnard, endemic to the California coast (Barnard, 1957, 1960). The genus has never been previously reported from Hawaii.

Material examined: KAUAI: Various samples from 10-30m depth, Hanalei Bay..

Gammaridea: Leucothoidae

Paraleucothoe ?flindersi Stebbing

New state record

Leucothoid amphipods are commonly recovered in coastal Hawaiian samples, particularly where sponges and ascidians are abundant. Species found are most commonly either *Leucothoe hyhelia* Barnard or *L. tridens* Stebbing, species that are widely distributed in the Pacific and are characterized by a narrow, gracile article 6 of gnathopod 1, and a long, slender dactyl.

Sampling in Pearl Harbor recovered a leucothoid unlike any other in the Bishop

Museum collections. This species has a squat, short article 6 on gnathopod 1 and a very short, thick dactyl. There is marked sexual dimorphism, which is unusual in the leucothoids, and the species is characterized by a distinct and elegant fringe of long setae on the lower margin of the 5th article, apparently unique to this species. This fringe clearly allies it to Paraleucothoe flindersi, described by Stebbing (1888) from a single specimen taken in the Flinder's Passage during the HMS Challenger voyage, which appears not to have been found again or redescribed. Again, some confusion attends its systematics—it has alternatively been synonymized with *Leucothoe brevidigitata* (Barnard, 1974), reinstated as a species (Barnard, 1972), and finally re-synonymized with Paraleucothoe novaehollandae (Barnard, 1991). Examination of these specimens shows, however, that there are very clear distinctions that separate it from Paraleucothoe novaehollandae, though it is clearly part of that group of leucothoids with a squat article 6 and short dactyl on gnathopod 1. These characters of the first gnathopod also suggest that the species may be related to Leucothoe lihue Barnard, which is endemic to the Hawaiian Islands. It is clearly and easily distinguished from Leucothoe lihue, however by the possession of the setal fringe (on the margin of article 5) which is entirely absent in Leucothoe lihue.

While only recovered from Pearl Harbor so far in these studies, it is doubtful that this species of *Paraleucothoe* is endemic or indigenous to Hawaii. In my opinion, it is most probably an introduced species from the South Pacific.

Material examined: OAHU: Pearl Harbor: Legacy Project, Stations 2 (16 April 1996), 6 (30 April 1996), 8 (21 March 1996), 9 (27 March 1996), 13 (21 March 1996), 15 (11 January 1996).

Tanaidacea: Apseudidae

Parapseudes pedispinis Boone

New state record

The genus *Parapseudes* Sars is distinguished from other apseudids by the possession of 4 pleopods. Miller (1940) identified a new species of the genus in Hawaiian waters (*P. neglectus*), which is commonly found in shallow waters here. In samples from Pearl Harbor, a congener, *Parapseudes pedispinis* Boone was found, which is easily distinguished from *P. neglectus* by the structure of the first gnathopod and rostrum. The species was originally very poorly described by Boone (1923), and was redescribed by Menzies (1953) who defined its range from California to Ecuador. Therefore, it is probable, that this species is an introduction to Hawaii from the eastern Pacific.

Material examined: OAHU: Pearl Harbor: Legacy Project, Stations 1 (13 February 1996), 4 (16 April 1996).

Apseudes, n. sp.

Miller (1940) describes *Apseudes tropicalis* as the only member of the genus endemic to the Hawaiian Islands. Another member of the genus has now been discovered, very widely distributed in Kaneohe Bay and in Pearl Harbor, which clearly differs from *Apseudes tropicalis* in body form (it is larger and more robust), in rostrum shape, and in the structure of the chelipeds. It appears most closely related to *Apseudes nipponicus* from Japan, but has sufficient differences to warrant its probable designation as a new species.

Material examined: OAHU: Kaneohe Bay Sand Bar, various samples, 1996.

Cumacea: Nannastacidae

Nannastacus sp.

New state record

New state record

Low diversity is a feature of the marine fauna of Hawaii and many groups, common elsewhere, are absent. The relatively low diversity of peracarid crustacea in particular is thought be a reflection of the paucity of pelagic dispersal mechanisms (Barnard, 1970, 1971; Myers, 1991, 1993). To date, the Cumacea were believed to be absent from Hawaiian waters. Recent sampling, however, has shown that, though relatively uncommon, cumaceans are widely distributed, particularly in medium to fine grain, carbonaceous sediments. Specimens have so far been recovered from Kaneohe Bay and Pearl Harbor, Oahu, and Hanalei Bay, Kauai.

The specimens await full identification, but have been tentatively assigned to the genus *Nannastacus* (Les Watling pers. comm.). These collections mark the first record of the order and the genus from the Hawaiian Islands.

Material examined: OAHU: Kaneohe Bay: Sand Bar, various samples, 1996.

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New Helminth Records for the Mourning Gecko, Lepidodactylus lugubris (Gekkonidae) from Hawaii

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The mourning gecko, *Lepidodactylus lugubris* (Duméril & Bibron) has a wide geographic range which includes Oceania, much of Asia, Australia and the United States (Welch *et al.*, 1990). It presumably reached Hawaii from Asia via other Pacific Islands with the early Polynesian settlers. In this note new host and locality records for helminths from *L. lugubris* are given.

Some 280 Lepidodactylus lugubris were collected in Hawaii: Hawaii, 1991 (N = 35) southeast corner (19°43'N, 155°05'W); Oahu, 1991 (N = 18) eastern shore (21°20'N, 157°52'W) from sea level to ca. 375 m elev.; Oahu, 1992 (N = 44) various sites on the northern, eastern, western, and southeastern shores from sea level to 100 m elev.; Oahu, 1993 (N = 183) various sites on the northern, eastern and western shores from 5–100 m elev. The body cavity was opened by a longitudinal incision from vent to throat and the gastrointestinal tract was removed. The gastrointestinal tract and body cavity were examined for helminths. Cestodes were stained with Delafield's hematoxylin and mounted in Canada balsam for study as a whole mount. Nematodes and pentastomes were placed in glycerol, allowed to clear and examined under a light microscope. Helminth specimens were placed in vials of alcohol and deposited in the U.S. National Parasite Collection (USNPC), Beltsville, Maryland and the Bishop Museum Collection (BPBM).

Cestoda: Nematotaeniidae

Cylindrotaenia allisonae Schmidt

New state and host record

This species was originally described from a single specimen taken from the small intestine of *Hoplodactylus maculatus* (Sauria: Gekkonidae) collected on Stephens Island, New Zealand (Schmidt, 1980). It has also been found in *H. maculatus* from Ward Island and Turakirae, New Zealand and from *Heteronotia binoei* and *Hemiergis peronii* from Australia (Jones, 1987). The presence of this species in Hawaii extends the range of this helminth ca 800 km northeast to Hawaii. Prevalence (number infected hosts/number hosts