

FAMILY PANDALIDAE Haworth, 1825

Common names

Coonstriped shrimp, Spot prawns, Pacific pink shrimp

Geographic Range

Species of *Pandalus* are well represented in the North Pacific as a whole. Species of *Pandalopsis* have been reported in cool seas of the northern and southern hemisphere.

Most species occur on the continental shelf and slope but those of several genera inhabit abyssal depths

Description

Pandalids are among the largest carideans. Many species are common offshore on muddy bottoms, but *Pandalus danae* can occur at the lowest intertidal zone of bays and rocky coasts from Marin County, California northward.

Pandalids have a long, slender, laterally compressed rostrum armed with teeth or spines. The first pereopod is slender and simple or microscopically chelate, which distinguishes them from the Hippolytidae, in which the first pereopod is robustly chelate. As in the Hippolytidae, the second pereopod is slender and has numerous carpal articles. The outer margin of the outer uropod has two distal spines. Many species are striped with red and white, or are colored uniformly scarlet.

Many species of pandalids are protandrous hermaphrodites, in which the male is smaller, has subchelate third pereopods and has a proportionally more slender rostrum than the female. There may be some geographic variation in the number of rostral spines and teeth as well. The reader should be generous in interpreting meristic features of species of pandalids, recognizing that there may not be a set number per species.

Two genera, *Pandalopsis* and *Pandalus*, are found in BC waters.

Pandalopsis

Pandalopsis ampla

Pandalopsis dispar

Pandalopsis lucidirimicola

Pandalus

Pandalus borealis

Pandalus danae

Pandalus goniurus

Pandalus hypsinotus

Pandalus jordani

Pandalus platyceros

Pandalus stenolepis

Pandalus tridens

References

Butler, T.H. 1980. Shrimps of the Pacific coast of Canada. Ottawa; Department of Fisheries and Oceans Canada.

Wicksten, M.K. 2012. Decapod Crustacea of the Californian and Oregonian Zoogeographic Provinces. Magnolia Press, Auckland, New Zealand.

PANDALOPSIS AMPLA

Spence Bate, 1888 Deepwater Big Eye

Geographic Range

Pacific: Washington State to Acapulco; Gulf of California
Southeastern Atlantic. Type locality off Montevideo, Uruguay.

Habitat

Offshore mud and sand, 550-2000 m

Morphology

Rostrum: as long as the carapace, curved upward, with 7-14 dorsal spines and teeth between the middle of the carapace and the midpoint of the rostrum, with 13 ventral teeth, tip with 1-3 small teeth. **Eye** pigmented. **Antennae:** twice length of carapace; scaphocerite with blade nearly as long as carapace, blade broadly rounded and exceeded bilateral tooth. Third **maxilliped:** without exopod, with epipod and with broad laminate expansion on ischium. **Carapace:** with antennal and pterygostomial teeth; surface punctate. **Pereopods:** P2 equal or subequal, carpus with 20-24 articles; P3-5 long and slender, with slender spinulose dactyls, 1-2 carpal spines and 5-6 meral spines. **Abdomen:** A3 with posterior dorsal lobe; A6 1.5 x long as wide.

Size

Total length to 165 mm.

Coloration

Bright red.

Synonyms

Pandalopsis amplus, Spence Bate, 1888

References

original description: Spence Bate, C., 1888. Report on the Crustacea Macrura collected by the Challenger during the years 1873-76.— Report on the Scientific Results of the Voyage of H.M.S. "Challenger" during the years 1873-76 24: i-xc, 1-942, Plates 1-157

Wicksten, M.K. 2012. Decapod Crustacea of the Californian and Oregonian Zoogeographic Provinces. Magnolia Press, Auckland, New Zealand.



PANDALOPSIS DISPAR

Rathbun, 1902 Sidestripe Shrimp

Geographic Range

Pribilof Islands to Manhattan Beach, Oregon. Type locality Chernofski Harbor, Unalaska. First taken on the West coast of Canada by the Albatross in Queen Charlotte Sound at 436 m, 1888.

Habitat

Continental shelf and upper slope, 46-649 m.

Morphology

Rostrum: long, arched over eyes, with 13-18 dorsal teeth and 2-3 spines; 9-15 ventral teeth. **Eye:** large, pigmented. **Antennae:** peduncle short; stylocerite short and flat; outer flagellum longer than body; scale much longer than antennular peduncle, with blade longer than lateral tooth; antennal flagellum 1.5X body length. **Third maxilliped:** antepenultimate segment with broad lamella, distal 2 segments slender, epipod present. **Carapace:** with strong antennal and moderate pterygostomial teeth. **Pereopods:** P1-4 with epipod; P1 shorter than M3, dactylus with rounded tip; P2 long and slender, chelate; P3-5 slender, with simple dactyls. **Abdomen:** posterior margin of A3 projecting over fourth; pleura of A1-3 rounded; A4-5 with distolateral points, small spinule at midlateral posterior border of somites 4-5; A6 with posterolateral point. **Telson:** narrow, with acute tip, 5-7 pair dorsolateral spines: outer uropod longer than telson

Distinctions

Known by the antennules, both more than twice as long as carapace; broad laminate expansions on antepenultimate segment of third maxilliped and ischium of P1; unequal propodi, increasing in length from P3-5, and dactyli of some pereopods decreasing posteriorly; inner uropods considerably shorter than outer pair; in freshly caught specimens, white bars on the abdomen. Dorsal spines distributed along entire length of rostrum distinguishes this species from *P. ampla*.

Size

Male: total length 182 mm; female: total length 208mm.

Coloration

Reddish orange, broken white bars on abdominal somites and posterior half of carapace, pereopods 3-5 with red and white bars (Butler plate 8D)

References

original description: Rathbun, M.J., 1902a. Descriptions of new decapod crustaceans from the west coast of North America.— Proceedings of the United States National Museum 24: 885-905.

Butler, T.H. 1980. Shrimps of the Pacific coast of Canada. Ottawa; Department of Fisheries and Oceans Canada.

Wicksten, M.K. 2012. Decapod Crustacea of the Californian and Oregonian Zoogeographic Provinces. Magnolia Press, Auckland, New Zealand.

Side striped shrimp, *Pandalopsis dispar*

Single, long horizontal stripe



wide expansion on first periopod

Photo: Scott Groth, ODFW

Pandalopsis dispar



RBCM



PANDALOPSIS LUCIDIRIMICOLA

Jensen, 1998 Sparkling Shrimp

Geographic Range

Keystone, Whidbey Island, Washington, to Husser Point, Nigei Island, British Columbia

Habitat

7-23m depth, residing in deep rock crevices, under boulders, and in association with large sea urchins

Morphology

Integument naked, smooth, without transverse patch of setae near posterior margin of carapace. **Rostrum**: with little or no arch over eyes, distal two-thirds strongly ascending, 1.25-1.6 times carapace length; dorsal margin with 10-13 spines including two or three (usually two) subdistal teeth; three or four spines on carapace posterior to orbit with posteriormost situated at or near midlength of carapace; all dorsal spines movable except for subdistal spine and sometimes one or two anterior spines with incomplete or no basal suture; ventral margin with 7-10 teeth, posteriormost smaller than preceding tooth. **Eye**: with cornea darkly pigmented, ocellus. Distinct **Antennular** peduncle: reaching to 0.36-0.45 of scaphocerite length, with 0-8 dorsodistal spinules and several long, plumose setae on the basal article; 0-5 dorsodistal spinules on second article; stylocerite broad and rounded, usually with minute terminal spine; outer flagellum 0.8-1.5 times carapace length; inner flagellum 1.2-1.8 times carapace length; scaphocerite narrow, 1.0-1.3 times carapace length and 6-9 times as long as wide, reaching distal one-sixth of rostrum; lateral margin strongly concave. **Third maxilliped**: relatively stout, reaching from slightly beyond middle of scaphocerite to near end of scaphocerite; epipod present, exopod absent. **Pereopods**: P1-4 each with epipod bearing terminal hook; P1 minutely chelate, short of or just reaching midpoint of scaphocerite, propodus subequal to or slightly shorter than carpus; P2 subequal, chelate; P3-5 long and slender; dactyls laterally compressed; **Abdomen**: somites smooth; pleura of A1-3 broadly rounded; A4-6 with posteroventral tooth; A6 0.43-0.57 times as long as carapace.

Telson: 0.63-0.88 of carapace length, armed with 5-7 pairs of dorsolateral spines and three pairs of posterior spines.

Distinctions

Can be recognized by a number of different features. It has a relatively short rostrum and unusually long scaphocerite (1.0-1.3 times the carapace length), resulting in the rostrum overreaching the scaphocerite by only one-sixth or less of its length as compared to one-fourth to two-thirds of the rostrum length in other species. The outer flagellum of the antennule is shorter than the inner flagellum and proportionately much shorter (0.8-1.5 times the carapace length) than in other eastern Pacific species, where the outer flagellum is at least 2.5 times the carapace length and much longer than the inner.

References

Jensen, G.C.1998. A new shrimp of the genus *Pandalopsis* from the eastern Pacific, with notes on its natural history. *Species Diversity*, 1998: 3, 81-88.



PANDALUS DANAE

Stimpson, 1857 Dock Shrimp

Geographic Range

Resurrection Bay, AK , to Point Loma, CA

The first known collection of the species was in Esquimalt Harbour in 1862

Habitat

Intertidal to 185 m

Morphology

Body stout, compressed. **Shell** thick, surface finely pitted. **Rostrum**: 1.0-1.6 x carapace, nearly straight to sharply upcurved, with 10-15 dorsal teeth and spines and 6-12 ventral teeth, tip trifold. **Eye**: large. **Antennae**: stylocerite of first antennae short; flagella shorter than carapace; scaphocerite narrow, lateral tooth exceeding blade; flagellum about equal to body length. **Third maxilliped**: without exopod but with epipod. **Carapace**: with antennal and pterygostomial teeth. **Pereopods**: P1 slender and chelate; P2 unequal, left with about 60 carpal articles and right with 18-21 articles; P1-4 with epipods; P3-5 slender with spinulose margins, with 6-9 meral spines. **Abdomen**: A3 dorsal posterior margin slightly produced; A4 pleuron with weak posterolateral point; A5 pleuron with strong posterolateral spine; A6 shorter than telson. **Telson**: with 5-6 pair dorsolateral spines, 2 pair terminal spines; uropods about equal, reaching or exceeding tip of telson.

Distinctions

Separated from *P. stenolepis*, which also has a stout body, a relatively short, ascending rostrum, and a dorsal transverse sulcus on the second abdominal somite, by its antennal scale, with lamella wider distally than thickened outer axis; rostrum with tip normally lack of any pubescence on the carapace; eyes conical (including stalk), rather than almost spherical.

Size

Males: total about 123 mm; females: total about 140 mm.

Coloration

Background translucent, marked with irregular striping and spots of brick red or chocolate brown, with fine brick-red dots between stripes. Fine blue spots on cardiac region of carapace. Antennae and appendages marked with striking bands of white, yellow, red or brown (Butler color plate 4A)

Synonyms

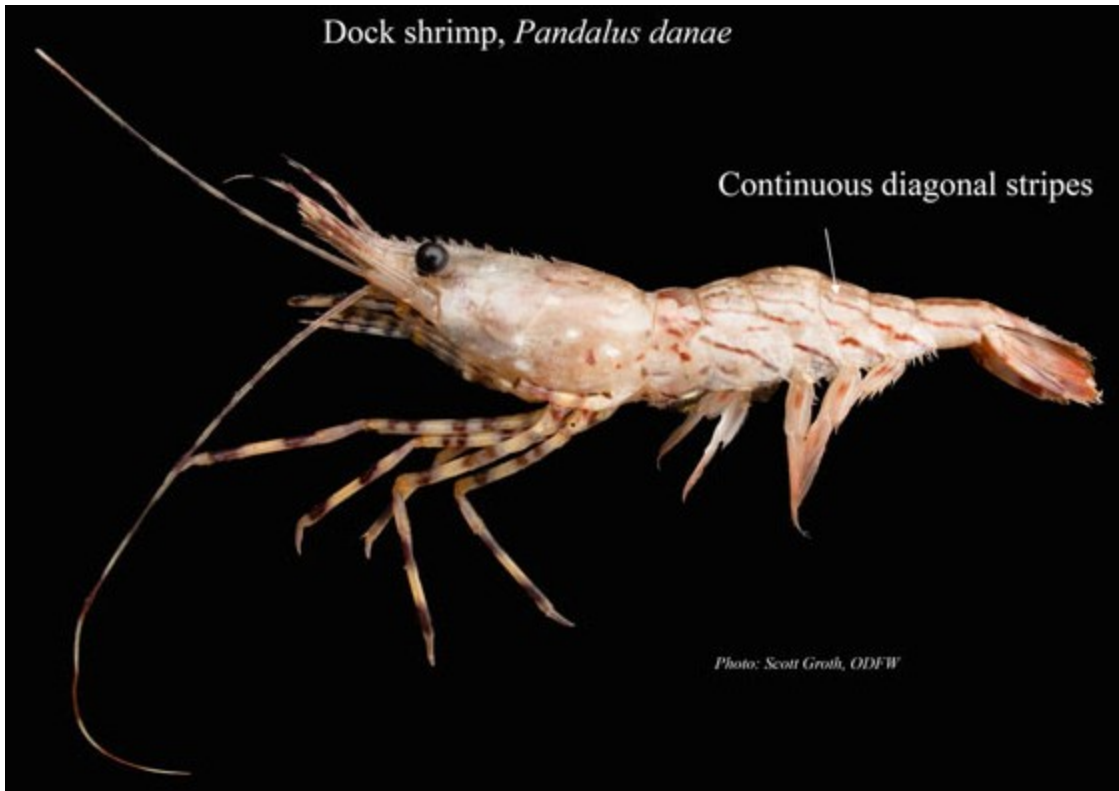
Pandalus franciscorum, Kingsley, 1878a

References

original description: Stimpson, W., 1857. On the Crustacea and Echinodermata of the Pacific shores of North America. Boston Journal of Natural History 6: 444-532, Plates 18-23

Butler, T.H. 1980. Shrimps of the Pacific coast of Canada. Ottawa; Department of Fisheries and Oceans Canada.

Wicksten, M.K. 2012. Decapod Crustacea of the Californian and Oregonian Zoogeographic Provinces. Magnolia Press, Auckland, New Zealand.



PANDALUS EOUS

Makarov, 1935 Northern Shrimp

Geographic Range

Northeast Pacific.

First taken in British Columbia waters by Albatross west of Race Rocks at 183 m 1891

Habitat

16-1380 m.

Morphology

Similar to *Pandalus borealis*, but Makarov(1935) and more recently Squires(1992) are of the opinion that *P. eous* is a distinct Pacific species and should be recognized as such.

The following account is the description for *P. borealis*, which can now be applied to *P. eous*.

Body slender, compressed. **Shell** thin, surface smooth. **Rostrum**: long, 1.5-2.1 carapace length, arched over eyes, distal half ascending, 12-16 dorsal spines, movable tip. **Eye**: large, cornea well developed. **Antennae**: peduncle moderately long, second segment about twice length of third; stylocerite short, rounded lobe; both flagella somewhat longer than carapace, inner longer; scale longer than telson, moderately broad, lamella exceeds spine slightly; basicerite, upper lateral lobe, lower strong spine; peduncle short; flagellum about body length.

Carapace spines: antennal strong, with supporting carina; pterygostomian weak.

Third maxilliped: long, moderately stout; antepenultimate segment with slight lamina; epipod. **Pereopods**: P1 longer than M3, as stout, epipod; P2 chelate; P3 longer than P2, epipod; P4 about as long as 3, as slender, epipod; P5 shorter than 4, as slender. **Abdomen**: A3 with dorsal posterior part compressed and carinated, produced posteriorly as strong median spine or lobe, posterior margin produced as acute lobe with small terminal spine; fourth with strong median posterior spine, pleuron with moderate to weak ventral spine; posterolateral margins of A4-5 widely recessed at articular knobs; A5 with weak posterolateral spine; A6 shorter than telson, with weak posteroventral spine. **Telson**: narrow, tapering to blunt tip, 6-10 pairs dorsolateral spines; inner uropod slightly shorter than outer, both normally shorter than telson

Distinctions

Squires(1992) compared *P. eous* and *P. borealis* with respect to the following anatomical features and found sufficient difference to propose establishment of *P. eous* as a separate subspecies or species:

- Rostrum length to carapace length
- Ventral spines on rostrum (posterior three)
- Tip of rostrum ahead of dorsal spine
- Second anteriormost dorsal spine of rostrum
- Two posteriormost spines of rostral series
- Lateral proximal lobe at base of stylocerite
- Spine on inner distal edge of 2nd antennular article
- Width of antennal scale to its length
- Median dorsal lobe on 3rd abdominal somite
- Long spinous setae on appendix masculina
- Accessory cusp in mandibles

Size

Males: total about 121 mm; females: total about 150 mm

Coloration

Fine red dots over entire animal, with translucent background. Darker red due to concentration of red dots on dorsal surface and along ventral margin of carapace, distal part of rostrum basicerite and peduncle of antenna, antennular peduncle and flagella, dorsal surface of abdomen especially A3-6, proximal part of telson, and uropods. P5 more or less uniformly dark red; red dots sparse on proximal segments of other pereopods; propodi and dactyli of P3-4 dark red (Butler Plate 2E).

Synonyms

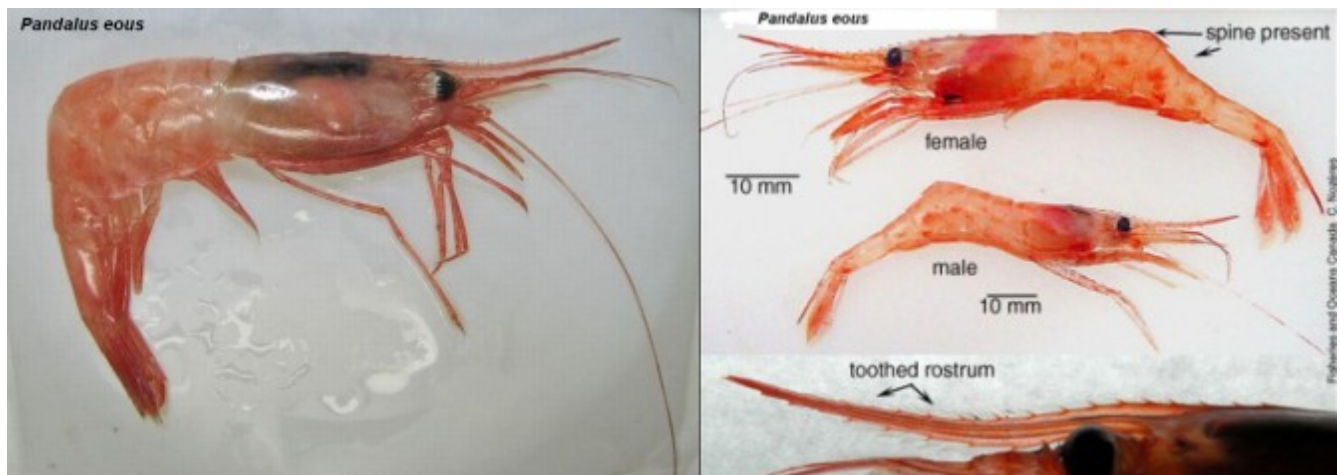
Pandalus borealis var. *eous* Makarov, 1935

References

original description: Makarov, W.W., 1935. Beschreibung neuer Dekapoden-Formen aus den Meeren des Fernen Ostens. Zoologischer Anzeiger 109: 319-325

Butler, T.H. 1980. Shrimps of the Pacific coast of Canada. Ottawa; Department of Fisheries and Oceans Canada

Squires, H.J. 1992. Recognition of *Pandalus eous* Makarov, 1935, as a Pacific Species Not a Variety of the Atlantic *Pandalus borealis* Krøyer, 1838 (Decapoda, Caridea). Crustaceana, Vol. 63, No. 3 (Nov., 1992), pp. 257-262



PANDALUS GONIURUS

Stimpson, 1860 Humpy Shrimp

Geographic Range

Chukchi Sea; Bering Sea, to Puget Sound; Okhotsk Sea; Sea of Japan, to near Vladivostok. First taken in British Columbia waters by Albatross west of Jordan River at 97 m, 1891.

Habitat

5-450 m

Morphology

Body slender, compressed. **Shell** thin, surface smooth. **Rostrum**: moderately long, carapace length, distal half ascending, dorsal spines movable, rostral distal half lacks spines, tip bifid. **Eye**: moderately large, cornea well developed. **Antennae**: peduncle moderately long, third segment shorter than second; all segments with distal setae; stylocerite short, distal end rounded; inner flagellum slightly longer than total rostrum length, outer over half as long; scale longer than telson, moderately wide, spine exceeds lamella slightly; basicerite, upper lateral lobe, lower strong spine; peduncle short; flagellum longer than body. **Third maxilliped**: moderately long, moderately stout; antepenultimate segment with slight lamina; epipod. **Carapace** spines: suborbital rounded; antennal rounded; pterygostomian strong. **Pereopods**: P1 about as long as M3, more slender, epipod; P2 chelate, epipod; P3 with epipod; P5 slightly shorter than 4, as slender. **Abdomen**: anterior lateral margin of pleuron of A1 straight or slightly convex; anterior lateral margin, and part of ventral margin of A2 straight or slightly convex; A3 with dorsal posterior part strongly compressed, extended posteriorly as median lobe; posterolateral margins of A4-5 widely recessed at articular knobs; fourth with moderate ventral spine on ventral margin of pleuron; strong posterolateral spine on A5; A6 about as long as telson, with moderate posteroventral spine. **Telson** moderately wide, tapering to blunt tip, 5-7 lateral spines; uropods about equal, and exceed telson.

Distinctions

Separated from its congeners, also with slender bodies and thin shells, by median dorsal lobe as if "pinched" on A3; absence of median spine on dorsal posterior margin of A4; moderately long, slightly ascending rostrum that lacks dorsal spines on distal half.

Size

Males: total about 62 mm; females: total about 78 mm.

Coloration

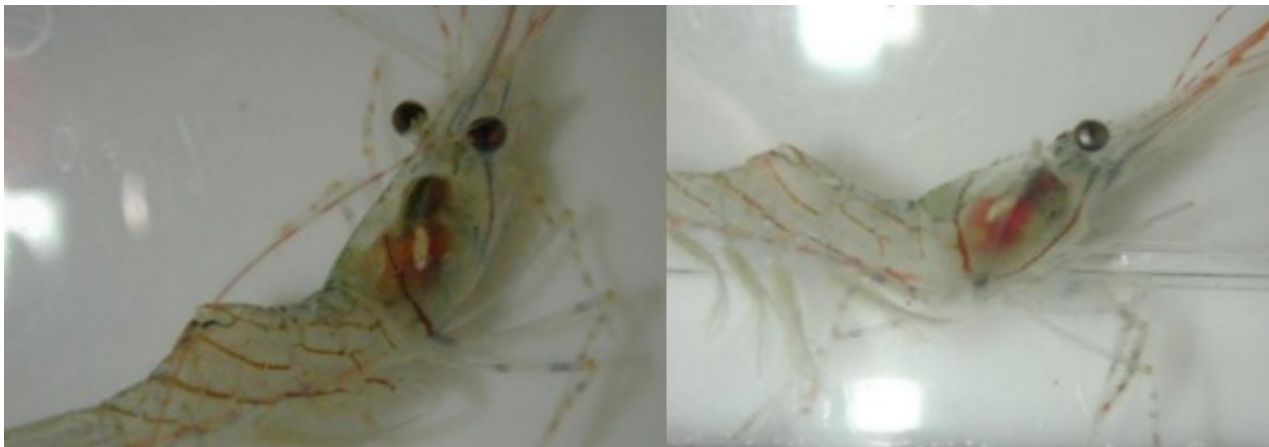
Background transparent to whitish; striping of red to orange dots on sixth abdominal somite dorsally and laterally, latter extending forward across lower parts of pleura of A3-5 somites; other oblique striping from dorsal surfaces of A3-5 extending to A2 pleuron; another stripe borders anterior margin of A1. On carapace, red dots form oval outline on dorsal and lateral surfaces, dots of outline meet ventral margin adjacent to bases of all pereopods, also along frontal margin from antennal spine to above orbit, along gastric region confluent with band of dots below 6 posterior dorsal spines on rostrum and carapace; another band extends along lower limb of rostrum from near base to tip; yellow patches on lateral surface. Groups of red

dots on protopodites of pleopods; also scattered on telson and uropods, with large yellow spots on proximal parts of these appendages; yellow spots on each segment of third maxilliped, with red spots on distal segment; all pereopods except P2 have red spots, with yellow spots on ischium of P1; also red banding on outer antennular flagellum; outer margin of antennal scale and basicerite marked with red (Butler Plate 7E).

References

original description: Stimpson, W., 1860a. Prodrromus descriptionis animalium evertibratorum, quae in Expeditione ad Oceanum Pacificum Septentrionalem, a Republic Federata missa, Cadwaladore Ringgold et Johanne Rodgers Ducibus, observavit et descripsit. Pars VIII, Crustacea Macrura.— Proceedings of the Academy of Natural Sciences of Philadelphia 1860: 22-47. [pages 91-116 on separate]

Butler, T.H. 1980. Shrimps of the Pacific coast of Canada. Ottawa; Department of Fisheries and Oceans Canada.



PANDALUS HYP SINOTUS

Brandt, 1851 Coonstriped Shrimp

Geographic Range

St. Michael, Norton Sound, AK, Juan de Fuca Strait, and Puget Sound; western Bering Sea, Cape Navarin, Bering Island; Okhotsk Sea; Sea of Japan, Hokkaido, Korea; Korea Strait, Nagasaki. There was no published record of [*i*]P. hypsinotus[/*i*] in British Columbia waters until 1929.

Habitat

5-460 m

Morphology

Body stout, little compressed. **Shell** thick, surface smooth. **Rostrum**: moderately long, 1.2-1.7 carapace length, distal two thirds ascending steeply; dorsal spines movable except solitary distal spine; tip oblique. **Eye**: moderate, cornea well developed. **Antennae**: peduncle moderately long, third segment about a third as long as second; stylocerite short, distal end rounded; inner flagellum longer than outer, both shorter than carapace; scale longer than telson, moderately wide, outer margin slightly concave, spine exceeds lamella slightly; basicerite, moderate upper lateral spine, lower pronounced spine; peduncle short; flagellum almost as long as body. **Third maxilliped**: moderately long, moderately stout; antepenultimate segment with slight lamina, lower distal spine; epipod. **Carapace**: dorsal profile of carapace arched strongly; carapace spines: antennal strong; pterygostomian moderate to weak. **Pereopods**: P1 shorter than M3, more slender, epipod; P2 chelate, epipod; P3 stout, epipod; P4 shorter than 3, as stout, epipod; P5 about as long as 4, as stout. **Abdomen**: dorsal posterior margin of A3 produced slightly; posterolateral margins of A4-5 widely recessed at articular knobs; pleuron of A4 with moderate to strong ventral spine; posterolateral spine of A5 strong; A6 shorter than telson, deeper at proximal end, strong posteroventral spine extended laterally, giving a flared margin in dorsal view. **Telson**: moderately wide, tapering to blunt tip, 5-6 pairs dorsolateral spines; outer uropod shorter than inner, neither reaching tip of telson.

Distinctions

Known by stout body; smooth surface; strongly arched dorsal profile of carapace; sharply ascending rostrum; many (17-22) dorsal spines, extending into posterior half of carapace; elongate dactylus on P3 with over 20 spines on flexor margin

Size

Males: total 151 mm; females: total 192 mm.

Coloration

Background light tan. On carapace, pinkish area on midlateral surface overlaid with fine red dots; in cardiac region extending to base of posterior dorsal spines, chocolate brown to sooty black, overlaid on lower edge with mottling of red dots; other red spots on branchial and orbital regions, along bases of dorsal spines of carapace and rostrum; also white spots in hepatic region. Abdomen has chocolate brown on dorsal and posterior parts of sixth somite, and on tail fan; stripe of same color on dorsal surfaces of fifth and fourth somites, mixed with

rust on latter; brown to sooty black blotches on dorsal and lateral surfaces of first to fifth somites; blotches of red spots mainly on first to fifth pleura and protopodites of pleopods. Pereopods and third maxilliped have alternating light tan and chocolate brown bands for entire lengths of these appendages, except on P2, where bands occur only on ischium and merus. Banding also present on antennular flagella, and antennal flagellum (Butler, Plate 7A).

References

original description: Brandt, J.F., 1851. Krebse. In: Middendorff, A.T. von, Reise in den äussersten Norden und Osten Sibiriens während der Jahre 1843 und 1844 mit allerhöchster Genehmigung auf Veranstaltung der Kaiserlichen Akademie der Wissenschaften zu St. Petersburg ausgeführt und in Verbindung mit vielen Gelehrten herausgegeben, 2 (Theil 1): 77-148, Plates 5-6. St. Petersburg.

Butler, T.H. 1980. Shrimps of the Pacific coast of Canada. Ottawa; Department of Fisheries and Oceans Canada.



PANDALUS JORDANI

Rathbun, 1902 Ocean Shrimp

Geographic Range

Iliuliuk Harbor, Unalaska Island to San Nicholas Island, CA. The first recorded capture in Canadian waters was by the Albatross off Port San Juan at 212 m, 1891.

Habitat

Offshore green mud or mixed sand and mud, 36-457 m.

Morphology

Body slender, surface smooth. **Rostrum**: as long as carapace, with 4-17 dorsal spines and teeth and 7-10 ventral teeth, tip acute or bifid. **Eye**: large. **Antennae**: stylocerite: of first antennae short, both flagella longer than carapace; scaphocerite of second antenna about 0.5 x rostrum length, lateral tooth and blade equal; basicerite with moderate upper lateral, and strong lower spines, flagellum longer than body. **Third maxilliped**: with antepenultimate segment having slight lamina, epipod present. **Pereopods**: P1 slender, proximal end of merus with slight lamina; epipods on P1-4; P2 unequal, left longer; P3-5 slender, with slender dactyls bearing 4-7 spinules. **Abdomen**: A3 with dorsal posterior part compressed and with carina; posterolateral margin of A4 pleuron with moderate ventral point; A5 with strong posterolateral spine; A6 shorter than telson. **Telson**: with 8-13 pairs dorsolateral spines and 3 pairs distal spines; inner uropod slightly shorter than outer, both exceed telson.

Distinctions

Separated from *P. eous*, which is very similar in morphology, by absence of a median dorsal spine on posterior margin of A4; antennular flagella shorter than total length of rostrum.

Size

Male: total length to 125 mm; female; total length to 175 mm.

Coloration

Fine red dots on translucent grayish background. Proximal part of antennal flagellum pale pink (Butler Plate 4D)

Remarks

Pandalus jordani is fished from Vancouver Island to Morro Bay, California, but the highest population density is off central Oregon. Fishing is conducted at depths of 1110-183 m, but catches are highest at 110-183 m.

References

Butler, T.H. 1980. Shrimps of the Pacific coast of Canada. Ottawa; Department of Fisheries and Oceans Canada.

Rathbun, M.J., 1902a. Descriptions of new decapod crustaceans from the west coast of North America. Proceedings of the United States National Museum 24: 885-905.

Wicksten, M.K. 2012. Decapod Crustacea of the Californian and Oregonian Zoogeographic Provinces. Magnolia Press, Auckland, New Zealand.



PANDALUS PLATYCEROS

Brandt, 1851 Spot Shrimp

Geographic Range

Unalaska Island to off San Diego; Sea of Japan north along Asiatic Pacific coast. Type locality Unalaska.

Habitat

Juveniles usually shallower than adults, among sea grasses and algae; adults usually among rocks or on steep slopes; intertidal to 487 m.

Morphology

Body stout, carapace pubescent. **Rostrum**: 1.2-2.0 x carapace length, with 4-17 dorsal spines and teeth, 6-8 ventral rostral teeth, usually one tooth dorsal and proximal to rostral apex. **Eyes**: large. **Antennae**: first antenna with short stylocerite, inner flagellum longer than outer, both longer than carapace; antennal scaphocerite slightly longer than 0.5 x rostrum, spine slightly exceeding blade; basicerite with moderate upper lateral spine and strong lower spine; flagellum equaling or exceeding body length. **Third maxilliped**: stout, antepenultimate segment with slight lamina, epipod present. **Carapace**: with antennal and pterygostomial teeth. **Pereopods**: P1-4 with epipods; P1 with minute chela, ischium with slight lamella; P2 chelate, left longer than right; P3-5 with dactyls having 4-7 spinules. **Abdomen**: dorsal posterior margin of A3 slightly produced pleuron of A4 with strong ventral points; A5 with strong posterolateral point; A6 shorter than telson. **Telson**: with 4-6 pairs dorsolateral spines; uropods about equal, reaching tip of telson.

Distinctions

Characterized by stout body; carapace almost entirely pubescent; absence of dorsal spines on posterior half of carapace. On living specimens, and persisting for some time in preservative, are 3 or 4 lateral white stripes on lateral surface of carapace; and 2 large white spots on each of dorsal surfaces of A1 and A5.

Size

Male: total length to 230 mm; female: total length to 253 mm.

Coloration

Dull red to fawn or tan, with 3-4 lateral white stripes on carapace. Pair of conspicuous round white spots on dorsolateral surface of each of first and fifth abdominal somites. Third maxillipeds, pereopods and antennal flagella banded with red and white. Juveniles camouflaged with brown, green or red color similar to algae and eelgrass (Butler Plate 2A)

Synonyms

Pandalus pubescens, Dana, 1852a

Remarks

Observations off British Columbia suggest that the shrimp are primarily nocturnal, and may move into shallower waters during the night (Butler, 1980)

References

original description: Brandt, J.F., 1851. Krebse. In: Middendorff, A.T. von, Reise in den äussersten Norden und Osten Sibiriens während der Jahre 1843 und 1844 mit allerhöchster Genehmigung auf Veranstaltung der Kaiserlichen Akademie der Wissenschaften zu St. Petersburg ausgeführt und in Verbindung mit vielen Gelehrten herausgegeben, 2 (Theil 1): 77-148, Plates 5-6. St. Petersburg.

Butler, T.H. 1980. Shrimps of the Pacific coast of Canada. Ottawa; Department of Fisheries and Oceans Canada.

Wicksten, M.K. 2012. Decapod Crustacea of the Californian and Oregonian Zoogeographic Provinces. Magnolia Press, Auckland, New Zealand.



PANDALUS STENOLEPIS

Rathbun, 1902 Roughpatch Shrimp

Geographic Range

Unalaska Island to Hecate Bank, Oregon. Type locality Strait of Juan de Fuca. First found on the British Columbia coast by the Albatross off Amphitrite Point at 62 m, 1888.

Habitat

Muddy bottoms, 49-229 m

Morphology

Body stout. **Rostrum**: with distal two-thirds ascending sharply, 8-12 dorsal teeth and spines and 5-7 ventral teeth, tip bifid. **Eye**: large, cornea almost spherical. **Antennae**: antennular peduncle short; stylocerite short and rounder; scale narrow, lateral tooth exceeding blade.

Third maxilliped: moderately stout; epipod present. **Carapace**: with strong antennal and moderate to weak pterygostomial teeth; patch of pubescence on cardiac region.

Pereopods: epipods on P1-4; P1 slender; P2 chelate; left leg longer and more slender than right; P3 moderately stout, dactyl stout and spinous; P4 about as stout as P3, with stout dactyl; P5 with stout dactyl. **Abdomen**: A2 with distinct transverse dorsal sulcus; A3 with dorsal posterior margin moderately produced; pleuron A4 with weak ventral point; A5 with strong posterolateral point; A6 with moderate posteroventral point. **Telson**: moderately wide, tapering to blunt tip, with 4-5 pairs dorsolateral spines; uropods about equal, both reaching or exceeding tip of telson.

Distinctions

Recognized by stout robust body; relatively short, ascending rostrum with normally bifid tip; relatively few dorsal spines (8-12), all movable.

Size

Male: total length about 76 mm; female: total length 82 mm.

Coloration

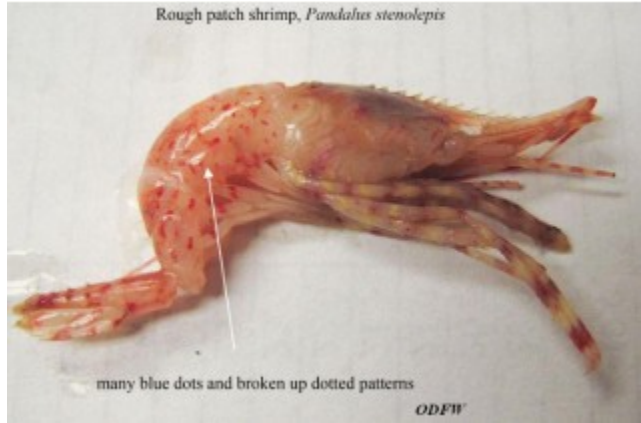
Grayish to whitish, with patches of red on carapace, abdomen and appendages; blue dots on abdominal somites.

References

original description: Rathbun, M.J., 1902a. Descriptions of new decapod crustaceans from the west coast of North America.— Proceedings of the United States National Museum 24: 885-905.

Butler, T.H. 1980. Shrimps of the Pacific coast of Canada. Ottawa; Department of Fisheries and Oceans Canada.

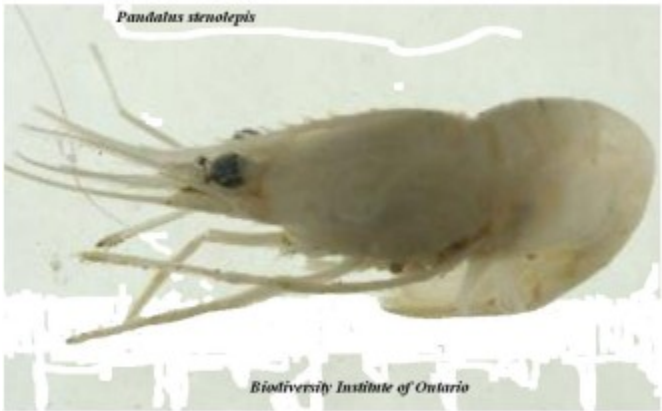
Wicksten, M.K. 2012. Decapod Crustacea of the Californian and Oregonian Zoogeographic Provinces. Magnolia Press, Auckland, New Zealand.



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PANDALUS TRIDENS

Rathbun, 1902 Yellowleg Pandalid

Geographic Range

Cape Oyutorsky, Pribilof Islands to San Nicolas Island, California, but few records south of Washington state. Type locality off North Head, Akutan Island, Alaska.

First collected in Canadian waters by the Albatross in Queen Charlotte Sound at 373 m, 1888.

Habitat

Rocky areas, 5-1984 m.

Morphology

Body moderately stout, shell thin, surface smooth. **Rostrum:** 1.3-1.8 carapace length, distal half slightly ascending, with 9-13 dorsal spines and teeth and 6-8 ventral teeth; no dorsal teeth on distal half, tip bifid or trifid. **Eye:** large. **Antennae:** first antenna with short stylocerite; flagella extending beyond rostrum by about 0.3x their lengths; second antenna with scaphocerite reaching middle of rostrum, scaphocerite narrow with lateral tooth slightly exceeding blade; basicerite with weak lower tooth; flagellum longer than body.

Third maxilliped: with slight lamina on antepenultimate segment, epipod present.

Carapace: with pterygostomian and antennal teeth. **Pereopods:** epipods on P1-4; P1 chelate; P2s unequal, left longer; P3-5 with 5-7 spinules on dactyl. **Abdomen:** posterior margin of A3 with moderate projection; pleuron of A4 with weak ventral point; posterolateral margin of A5 with strong point; A6 shorter than telson. **Telson:** with 5 pair dorsolateral spines; inner uropod slightly shorter than outer, both exceeding telson.

Distinctions

Separated from other generally slender and thin-shelled species of the genus on the British Columbia coast, as *P. jordani*, *P. borealis*, *P. goniurus*, by more steeply ascending rostrum with trifid tip; absence of dorsal median carina or lobe on A3; median dorsal spine on posterior margin of A4.

Size

Male: total length to 83 mm; female: total length to 123 mm

Coloration

Fine red dots over translucent background. Red blotches and bands on pereopods, canary yellow blotches on pereopods 3-5, third maxilliped with yellow tip. Antennal flagellum colored by alternate red and transparent bands, flagella of first antenna with red and white bands (Butler Plate 8B).

Synonyms

Pandalus montagui tridens, Rathbun, 1902a

Remarks

Pandalus tridens has been fished off British Columbia. Farther south, it has been reported southwest of the Colombia River and off Point Arena and San Nicolas Island in California. Most recent records are from Puget Sound northward.

References

original description: Rathbun, M.J., 1902a. Descriptions of new decapod crustaceans from the west coast of North America. Proceedings of the United States National Museum 24: 885-905.

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