

Chapter 9C3. Focal Taxonomic Collections: Polychaete Worms

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Summary

Nearly all of the Prince William Sound samples of polychaetes collected during the 1998 Expedition have been examined. Certain taxa, such as the Spirorbinae, have not yet been identified. Excluding the latter subfamily, 61 species have been tentatively identified and partially described. In essence, there appear to be no clearly defined species that could be listed as a NIS. However, at least five species may be new to science (species of *Eumida*, *Scoloplos*, *Exogone*, *Nephtys* and *Glycera*). At least three new range extensions may be noted for *Phyllodoce medipapillata*, *Chaetozone senticosa* and *Rhynchospio glutaea*. Finally, six species that have widespread distributions in the northern hemisphere are represented in the present material, including: *Pholoe minuta*, *Eteone longa*, *Barantolla americana*, *Harmothoe imbricata*, *Capitella capitata* and *Amphitrite cirrata*. The systematics of each of these species is terribly confused and precise identifications are impossible to render presently. For example, *Eteone longa* was originally described from Greenland (1780), and has since been reported from numerous localities in the Arctic, Atlantic and Pacific Oceans where it appears to be phenotypically “identical” wherever it occurs. Of course, this is likely not true since the distributions of most species are restricted spatially and temporally. Resolving such dilemmas falls outside the scope of this study, and these six species are therefore identified as above, pending future revisions. Although all identifications are reasonably precise and non-indigenous species are represented in these samples, all results are based on literature descriptions and are preliminary; present materials must be more carefully compared to known reference specimens.

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Table 9C3.1 POLYCHAETA, PRINCE WILLIAM SOUND, SUMMER 1998

SIGALIONIDAE

Pholoe minuta Fabricius, 1780

PHYLLODOCIDAE

Eteone longa (Fabricius, 1780)

Eulalia bilineata (Johnston, 1840)

Eumida species A (new species)

Phyllodoce medipapillata Moore, 1909

Phyllodoce species

NEREIDIDAE

Chelonereis cyclurus Harrington, 1897

Platynereis species (?bicanaliculata)

CAPITELLIDAE

Barantolla ?americana Hartman, 1963

GONIADIAE

Glycinde picta Berkeley 1927

GLYCERIDAE

Glycinde ?armigera Moore, 1911

ORBINIIDAE

Scoloplos species A New Species

POLYNOIDAE

Harmothoe imbricata (Linnaeus, 1767)

Harmothoe extenuata (Grube, 1840)

Harmothoinae

Lepidonotinae

CHRYSOPELATIDAE

Chrysopetalum occidentale Johnson, 1897

SYLLIDAE

Exogone cf. *dwisula* Kudenov & Harris, 1995

Sphaerosyllis cf. *californiensis* Hartman, 1961

Trypanosyllis gemmipara Johnson, 1901

?*Eudontosyllis* species A

Tyosyllis alternata (Moore, 1908)

Tyosyllis hyalina Grube 1863

Tyosyllis pulchra Berkeley & Berkeley, 1938

Tyosyllis stewarti Berkeley & Berkeley, 1942

Autoylus (Procerea) *cornutus* Agassiz, 1863

LUMBRINDERIDAE

Lumbrineris latrielli Audouin & Milne-Edwards, 1834

ORBINIIDAE

Leitoscoloplos pugettensis (Pettibone, 1957)

Naineris dendritica (Kinberg, 1867)

SPIONIDAE

Spio filicornis (Müller, 1776)

OPHELIIDAE

Armandia brevis Hartman, 1938

Ophelia limacina (Rathke, 1843)

NEREIDIDAE

Nereididae (postmetamorphic juvenile)

SPIONIDAE

Prionospio steenstrupi Malmgren, 1867

CIRRATULIDAE

Cirratulus cingulatus Johnson, 1901

Chaetozone senticosa Blake, 1996

CAPITELLIDAE

Capitella capitata (Fabricius, 1780)

NEPHTYIDAE

Nephtys species A (*N. ciliata*)

Nephtys species A (juvenile)

Nephtys species B (juvenile)

ARENICOLIDAE

Abarenicola pacifica Healy & Wells 1959

OWENIIDAE

Owenia fusiformis della Chiaje, 1841

GLYCERIDAE

Glycera cf. *nana* Johnson, 1901

SPIONIDAE

Rhynchospio glutaea (Ehlers, 1887)

?*Prionospio* sp.

Dipolydora cf. *socialis* (Schmarda, 1861)

Dipolydora sp. A (near *bidentata*?) Zachs, 1933

Dipolydora sp. B

Dipolydora sp. C (near *giardi* (Mesnil, 1896))

Polydora ?*limicola* Annenkova, 1934

Diplydora ?*quadrilobata* (Jacobi, 1883)

Polydora sp.

MALDANIDAE

Nicomache personata Johnson 1901

PECTINARIIDAE

Pectinaria granulata Johnson 1901

AMPHARETIDAE

Ampharete species A

TEREBELLIDAE

Amphitrite cirrata Müller. 1771

Polycirrus species III Hobson & Banse, 1981

SABELLIDAE*Laonome* cf. *kroyeri* (Malmgren, 1866)*Schizobranhia insignis* Bush 1904**SERPULIDAE***Crucigera zygophora* (Johnson, 1901)*Serpula vermicularis* Linnaeus, 1767*Spirorbis* species**Table 3. Polychaeta Collected in 1998 PWS Expedition**

Note: Materials listed below as PWS NIS 1998 include Stations followed by the number of specimens in parentheses.

***Pholoe minuta* Fabricius, 1780**

PWS NIS 1998: Sta 1(1 specimen); Sta 5(1); 6 (fragments); Sta 7 (2); Sta (3); Sta 10(4); Sta 11(1); Sta 41(3).

Based on specimens, these are not *Pholoe minuta* sensu Fabricius. Original taxon described as having papillae disbursed over entire ventral and parapodial surfaces. Specimens all have small, close-set, short papillae over entire ventral surface; parapodia with conspicuous digitiform papillae. Whatever "*Pholoe minuta*" represents, it must be a polyphyletic species at the very least. It has a recorded distribution in both the Arctic and south Atlantic Oceans. This species is correctly identified to a single taxon. However its actual identity is questionable in view of its widespread distribution.

***Eteone longa* (Fabricius, 1780)**

PWS NIS 1998: Sta 3(1 specimen); Sta 15(2); Sta 16(3); Sta 17(8); Sta 18(9); Sta 36(1); Sta 41(1).

Technically, the *Eteone longa/flava* group is in severe disarray and is undoubtedly represents a complex taxonomic assemblage of closely related species. Whatever taxon is represented by PWS specimens of "*E. longa*" must remain obscure until a definitive study is published.

***Eulalia bilineata* (Johnson, 1840)**

PWS NIS 1998: Sta 21(1 specimen).

Keys out according to Blake (1996) and Pleijel (1991). Only one specimen, which is poorly preserved used for this identification; therefore it is considered to be tentative.

***Eumida* species A (new species)**

PWS NIS 1998: Sta 21(2 specimens).

Genus identification correct. Prostomium small, with 4 distal and one median unpaired antenna. Dorsal cirri triangular, pointed, lanceolate. Ventral cirri subtriangular, subtly pointed. Segment 1 highly reduced, not fused to segment 2; in largest specimen it actually extends onto prostomium (although this may be artifactual); tentacular cirri lateral to prostomium. Segment 2

with two pairs of tentacular cirri, ventral pair shortest; lacking setae. Segment 3 with one pair tentacular cirri, with fascicle of setae in neuropodium.

Parapodia all distally rounded, without hint of dorsal lobe; all about the same length throughout the body. Ventral cirri asymmetrical, subquadrangular, longest anteriorly and gradually decreasing in length, size posteriorly.

Pygidium lacking appendages (lost).

***Phyllodoce medipapillata* Moore, 1909**

PWS NIS 1998: Sta 21(1); 36(1).

Two beautiful specimens, complete, well preserved with proboscides everted. Key out according to Blake (1994). Present record is a range extension, and potentially also an introduced species to PWS, assuming there are no other records of it between here and central to southern California (0-300 m) where it seems to be restricted.

***Phyllodoce* species**

PWS NIS 1998: Sta 15(2 specimens)

Juvenile individuals, one of which has proboscis everted. Both extremely small, unidentifiable.

***Chelonereis cyclurus* Harrington, 1897**

PWS NIS 1998: Sta 3(3 specimens); Sta 5(4); Sta 6(3); Sta 9(1); Sta 10(1); Sta 11(32); Sta 12(33); Sta 14(1); Sta 16(2); Sta 19(7); Sta 21(65); Sta 22(7); Sta 23(28); Sta 24(14); Sta 24N(2); Sta 25(10); Sta 28(57); Sta 30(8); Sta 31(2); Sta 32(3); Sta 34(35); Sta 35(106); Sta 36(2); Sta 40(1); Sta 41(2); Sta 44(2).

Characteristic species. Notosetae homogomph spinigers. Neurosetae heterogomph spinigers and falcigers. Largest specimen lacks homogomph falcigers in neuropodia.

***Platynereis* species (?*bicanaliculata* (Baird, 1863))**

PWS NIS 1998: Sta 12(1 specimen).

Juvenile lacking tentacular cirri. This identification is highly tentative, based on a single specimen!

Nereididae (postmetamorphic juvenile)

PWS NIS 1998: Sta 6(1 specimen).

Identified as "*Platynereis*?" but the specimen is a postmetamorphic juvenile that is not identifiable to genus.

***Glycinde picta* Berkeley 1927**

PWS NIS 1998: Sta 4(1 specimen); Sta 7(1); Sta 15(1); Sta 16(2); Sta 41(1).

All with ventral arc of micrognaths, characteristic of *Glycinde picta* along Pacific coast of North America.

***Glycinde ?armigera* Moore, 1911**

PWS NIS 1998: Sta 13(1 specimen); Sta 23(1).

Identification tentative in light of a dissection performed previously and prior to the present examination that damaged the critical region of macro- and micrognaths.

***Harmothoe imbricata* (Linnaeus, 1776)**

PWS NIS 1998: Sta 5(2 juveniles); Sta 6(2 juveniles); Sta 10(3 specimens); Sta 11(10); Sta 14(2); Sta 19(2); Sta 21(8); Sta 23(4); Sta 24(3) Sta 24(1); Sta 28(7); Sta 30(2); Sta 34(7); Sta 35(17); Sta 36(9).

Another widespread species that must be re-examined critically. Tentatively assigned to *Harmothoe imbricata*.

***Harmothoe extenuata* (Grube, 1840)**

PWS NIS 1998: Sta 35(3 specimens).

Seems to key out well. Some of the specimens included as *H. imbricata* likely identical to this taxon.

Harmothoinae

PWS NIS 1998: Sta 19(1 specimen); Sta 24N(2).

These are most likely "*H. imbricata*" juveniles, and should be referred to above as "?"

Lepidonotinae

PWS NIS 1998: Sta 23(1 specimen); Sta 24N(1); 34(2).

Note that Station 34(2 specimens) contains the best specimens, which seem to key out to *Parhalosydna*, which seems somewhat of a stretch. Most of the specimens are not well preserved, nearly all lack elytra, and identification can not be made positively.

***Chrysopetalum occidentale* Johnson, 1897**

PWS NIS 1998: Sta 23(1 specimen); 24(1).

Highly characteristic species.

***Exogone cf. dwisula* Kudenov & Harris, 1995**

PWS NIS 1998: Sta 19(1 specimen); Sta 21(1); Sta 23(10); Sta 32(1).

This species is very closely allied to *E. dwisula*, and also to *E. gemmifera*. Antennae closely set, laterals about .67-.75x length of median. Pharynx extends through 1.5-2 segments, with anterior unpaired middorsal tooth. Proventriculus extends through 2 segments, with 15 rows muscle cells. Peristomial antennae small, inconspicuous, not visible in dorsal view. Setae number 4-5 per parapodium, of 3 kinds: a) falcigers with deeply incised blades, confined to anterior setigers; b) stout awl-shaped spinigers, numbering 1-2 per anterior parapodium, 1 per median and posterior parapodia; c) dorsal and ventral simple seta, the former present in all setigers, the latter in the last few setigers. Aciculae numbering 1 per parapodium, all terminating in distally enlarged heads (blunt or beaked??)

***Sphaerosyllis cf. californiensis* Hartman, 1961**

PWS NIS 1998: Sta 10(1 specimen); Sta 19(1); Sta 19(11); Sta 21(2); Sta 21(2); Sta 23(65); Sta 23(5).

One difference between these specimens and those examined by Kudenov & Harris (1995) is the presence of an additional pair of conspicuous papillae on distal parapodial surfaces; one is

anterior, the other posterior. A most unusual aspect to the setal morphology is the fact that the cutting teeth on blades of compound falcigers are set in 2 rows, members of one row alternating with those of the other row.

This has not been reported for *S. californiensis*. Then again, I don't believe anyone has ever looked closely enough! These specimens will represent a new species if *S. californiensis* lacks these alternating rows of teeth on blade cutting surfaces.

***Trypanosyllis gemmipara* Johnson, 1901**

PWS NIS 1998: Sta 23(1 specimen).

One small specimen, 61 segments. Bidentate falcigers. Trepan with 10 teeth; middorsal tooth absent.

?*Eudontosyllis* species A

PWS NIS 1998: Sta 19(1 specimen); 23(1).

Only 2 specimens, both anterior fragments. Specimen of Sta 19 in 2 pieces, with dorsal cirri; Sta 23 in 1 piece, lacking dorsal cirri. Specimens key out to *Eudontosyllis* Knox 1960, which according to Fauchald (1977) is represented by a single species.

Essential descriptive elements include: Prostomium reduced, with 2 pairs of large lenticulate; eyes Palps reduced, fused only basally. Paired occipital nuchal organs extending over setiger 1, not fused to dorsum; Antennae very long, smooth basally, terminating in a few distal moniliform elements, each long and cylindrical; Peristomial tentacles long, number 1 pair; Notoacicula present, each conspicuous, with distally bent tips; Notosetae as multispinose capillaries in small inconspicuous tufts. Neurosetal fascicles with bidentate compound falcigers.

The one specimen with notosetal fascicles may be epitokous (Sta 23). Need to check out the specimen from Sta 19 for comparison.

***Tyosyllis alternata* (Moore, 1908)**

PWS NIS 1998: Sta 5(1 specimen); 9(1); Sta?10(1, juvenile).

***Tyosyllis hyalina* Grube 1863**

PWS NIS 1998: Sta 21(1 specimen).

***Tyosyllis pulchra* Berkeley & Berkeley, 1938**

PWS NIS 1998: Sta 21(1 specimen); 24(1).

***Tyosyllis stewarti* Berkeley & Berkeley, 1942**

PWS NIS 1998: Sta 21(5 specimens); 21(1); 23(1).

Characteristic increase in thickness of falcigers in posterior segments. Many of these have lost their blades.

***Autoylus (Procerea) cornutus* Agassiz, 1863**

A. cornutus Okada, 1933:645-647, figs. 3,4; Pettibone, 1963:144, fig. 37e.

A. cornatus Hartman, 1944:338, pl. 13, fig. 5.

A. (Regulatus) cornutus, Imajima, 1966:49-51, Text-fig. 13a-i.

PWS NIS 1998: Sta 19(1 specimen); Sta 20(2); Sta 25(1).

Only two specimens include in these samples. Specimen (Sta. 19) is small, lacking tentacular and dorsal cirri. Dorsal cirri of setiger 1 longest; those from setiger 2 all shorter and about the same size. Both asexual forms exhibiting stolons between segments 13-14. Trepan with 18 teeth: 9 larger and 9 smaller. Dorsal simple setae thick, distally truncate and serrated. Nuchal organs restricted to posterolateral regions of prostomium; not extended to posterior margin of setiger 1.

The species was originally reported from Atlantic habitats (Labrador to Chesapeake Bay; Plymouth) and has also been reported from Japan to British Columbia-Washington.

Specimens (Sta. 20) are sexual forms for which only the genus is a certain identification. Swarming or sexually swimming stages have not been related to asexual phases, unfortunately, along the Pacific coast of North America (or most other places, except see Gidholm 1965, 1966).

***Nephtys* species A (*N. ciliata*)**

NIW NIS 1998: Sta 10(1 specimen); Sta 11(1); Sta 15(3); Sta 16(1); Sta 16(4); Sta 36(5).

This appears to be a new species. It does not key out to anything in Banse & Hobson (1974) where, in the key, this species drops out of the key at couplet 6 (page 73). The couplet provides a choice between large, postsetal notopodial lobes without a middorsal proboscideal papilla versus medium-sized postsetal notopodial lobes with out without a dorsal median proboscideal papilla.

To couplet 9, the next choice is interramal cirri, proboscis with unpaired dorsal papilla, which leads to a choice between *N. ciliata* or *N. caecoides*.

It is not *N. caecoides*. Key leads to *N. ciliata* which lacks a dorsal pigment pattern. Notopodial postsetal lobe partly covered by acicular lobe, which, in *N. caeca* is large, but is relatively small, compared to the postsetal notopodial lobe. Proboscis proximally with small warts.

In all, this appears to be *N. ciliata*. One principal difference appears to be the size of the postsetal notopodial lobes.

Specimen 11(1) poorly preserved; assignment tentative.

***Nephtys* species A (juvenile)**

NIW NIS 1998: Sta 15(7 specimens); Sta 17(1); Sta 17(1).

All specimens are postmetamorphic or young juveniles and are unidentifiable to species. Note that all have conical acicular lobes and poorly defined postsetal lamellae. Specimen (17(1)) obviously a newly postmetamorphic juvenile; assigned to this taxon for convenience.

***Nephtys* species B (juvenile)**

NIW NIS 1998: Sta 11(3 specimens).

Interramal cirri short, almost straight except for distally curved tip, hanging almost straight down. Interramal cirri beginning from setiger 5. Acicular lobes generally rounded although notopodial lobe slightly bilobed; neuropodial lobe more evenly rounded.

***Glycera cf. nana* Johnson, 1901**

NIW NIS 1998: Sta 10(1 specimen); Sta 11(1); Sta 16(1); Sta 24(3); Sta 36(1).

These specimens are mighty peculiar! Postsetal lobes are rounded, with biramous parapodia as per *Glycera*. Ailerons winged as per *Glycera*. Proboscis with 3 kinds of papillae including long, slender and shorter tapering forms plus spherical papillae. Inferior presetal lobe pointed, appearing rather different from that for *Glycera nana*.

Hilbig (1994) describes *Glycera nana* in terms that, compared to the present materials, intimates that the PWS specimens are sufficiently different to represent a new species.

***Lumbrineris latrielli* Audouin & Milne-Edwards, 1834**

PWS NIS 1998: Sta 5(2 specimens); Sta 11(1).

Keys out according to both Banse & Hobson (1974) and also Ruff (1995), particularly in view of the latter's comments. Specimen (Sta. 11) with dental formula: 1+1, 5+4, 2+2, 1+1. Yellow aciculae. Compound falcigers in anterior segments. Posterior pre- and postsetal lobes not elongate. No obvious pigmentation patterns in preserved specimens.

***Scoloplos* species A New Species**

As *Scoloplos armiger* PWS NIS 1998: Sta 4(2 specimens); Sta 10(4); Sta 15(2); Sta 36(1); Sta 41(22).

As *Scoloplos* species PWS NIS 1998: Sta 7(1 specimen); Sta 10(3).

As Orbiniidae PWS NIS 1998: Sta 10(4 specimens); Sta 41(1).

All of these individuals represent a new taxon. There are no subpodial lobes present whatsoever. Number of thoracic segments numbering 14-15. Branchiae from posterior thoracic segments. Thoracic neurosetae with distally smooth, transparent hoods. Abdominal neurosetae include both capillaries and delicate spines. Neuropodial lobes in larger specimens digitiform; smaller specimens notched. These lobes are clearly different from those of both *S. armiger* and *S. acmeceps*.

***Leitoscoloplos pugettensis* (Pettibone, 1957)**

PWS NIS 1998: Sta 5(1 specimen); Sta 15(2); Sta 17(14).

Specimens correctly identified to species. No abdominal subpodial lobes present.

***Naineris dendritica* (Kinberg, 1867)**

PWS NIS 1998: Sta 17(36 specimens).

Agrees well with descriptions. Originally identified as *N. quadricuspida* on label, however, only one record can be assigned to this species, and even then, Hartman (1961) noted distinct and significant differences between her material compared to those described by Fabricius. In other words, *N. quadricuspida* does not occur on this coast!

***Spio filicornis* (Müller, 1776)**

PWS NIS 1998: Sta 5(2 specimens); Sta 10(1); Sta 15(12); Sta 17(1).

Keys out according to Blake (1996).

***Armandia brevis* Hartman, 1938**

PWS NIS 1998: Sta 5(3 specimens); Sta 7(3); Sta 10(5); Sta 11(12); Sta 11(1*); Sta 15(4).

Everything keys out extremely well to this taxon following Hartman (1969). Need to check out the validity of this genus based on Colin Herman's comments a few years ago. Specimen (Sta. 11(1*)) is poorly preserved, has a pair of prostomial eyespots, and hints of lateral eyespots, and is taken here to represent *Armandia brevis*.

***Ophelia limacina* (Rathke, 1843)**

PWS NIS 1998: Sta 5(1 specimen).

This is a supposedly cosmopolitan species. It has 37 setigers compared to 39 originally described. First 10 setigers abranchiate. Ventral groove present from around setiger 10-11.

***Prionospio steenstrupi* Malmgren, 1867**

PWS NIS 1998: Sta 6(1 specimen); Sta 9(3); Sta 11(10).

Specimens poorly preserved, and trashed in most cases. Gills not well intact, and in a few specimens (Sta. 11) they are of variable lengths. The neuropodial lamella of setiger 2 with the characteristic ventral protuberance; those of setiger 3 squarish to ventrally pointed also.

Identification tentative pending additional specimens.

***Cirratulus cingulatus* Johnson, 1901**

PWS NIS 1998: Sta 6(1 specimen); Sta 11(1); Sta 16(2); Sta 17(8) + Sta 17(3); Sta 24(3); Sta 24N(1).

Specimens agree fairly well with description provided by Blake (1996:350-351). Neurosetal spines begin from setigers 23-26; notosetal spines from setigers 35-37. Specimen from Sta 24N may be a juvenile, with neurosetal spines from setiger 9. and notosetal spines from setiger 16. Eyes present in all specimens as line of 4-6 individual eyespots. The three specimens from Sta 17 are very large and show size-dependent morphology concerning transverse band of tentacles/cirri.

***Chaetozone senticosa* Blake, 1996**

PWS NIS 1998: Sta 15(9 specimens); Sta 17(57).

Keys out according to Blake (1996), although the final identification needs to be confirmed based on methyl green. Specimens with around 60-70 setigers, hooks beginning from around setiger 35-40. Prostomium short, triangular, with a single achaetous annulus.

Originally reported from Central and Northern California. This may be a range extension, assuming the identification is valid.

***Barantolla ?americana* Hartman, 1963**

PWS NIS 1998: Sta 3(1 specimen); Sta 4(1); Sta 9(2); Sta 15(3); Sta 19(1); Sta 41(1).

This is a dubious taxon. Originally described has having capillary setae only in notosetiger 6 and neurosetiger 7; mixed capillaries in notosetiger 7 and neurosetiger 8; hooks only in notosetigers 8-11 and neurosetigers 9-11. In contrast, Fauchald (1977) lists *Barantolla* as having 6 setigers with capillaries followed by 1 mixed capillaries and hooks, and then 4 more with hooks only.

The present specimens are at odds with the above discrepancies. Specimen 3(1) with mixed notosetae on setiger 5; 7(2) with capillaries only in notosetigers 1-5 and neurosetigers 1-6, mixed setae in notosetiger 6 and neurosetiger 7, and hooks only thereafter in notosetigers 7-11 and neurosetigers 8-11; specimen 41(1) with capillaries only in both noto- and neurosetigers 1-6, and hooks only in both noto- and neurosetigers 7-11 (setiger with mixed setae apparently absent).

***Capitella capitata* (Fabricius, 1780)**

NIW NIS 1998: Sta 7(3 specimens); Sta 9(1); Sta 15(9); Sta 41(17).

Whatever *Capitella capitata* is, these specimens can be assigned to the stem species. But this is one the “cosmopolitan” species that can be almost anything.

***Abarenicola pacifica* Healy & Wells 1959**

NIW NIS 1998: Sta 7(1 specimen); Sta 17(3); Sta 18(9).

One large specimen (Sta. 7), intact; all others are juveniles. No question concerning identity.

Owenia fusiformis della Chiaje, 1841

NIW NIS 1998: Sta 7(1 specimen); Sta 41(1).

Only two specimens. Have a collar as per *Owenia collaris*. Setae appear to have configuration found in *Owenia fusiformis*. Refer to recent paper on the family from IP4 (Paris).

***Rhynchospio glutaea* (Ehlers, 1887)**

PWS NIS 1998: Sta 10(1 specimen); Sta 10(1).

New record for Alaska. Not particularly surprising.

?*Prionospio* sp.

PWS NIS 1998: Sta 18(12 specimens).

Recheck. One specimen appeared to have gills on middle body segments. These are not polydorids as noted on label.

***Dipolydora cf. socialis* (Schmarda, 1861)**

PWS NIS 1998: Sta 17(1 specimen).

Tentative identification, but not *Dipolydora socialis*. Falcate spines of setiger 5 strongly falcate, with hint of flange; bristle absent. Setiger 1 postsetal lamellae poorly developed. Gizzard-like structure present around setigers 17-18, but not as portrayed by Blake (1996).

***Dipolydora* sp. A (near *bidentata*?) Zachs, 1933**

PWS NIS 1998: Sta 17(18 specimens); Sta 19(1); Sta 23(2).

This taxon may be a shell borer. Spines of setiger 5 without distal bristles, with flange-tooth on lateral surface (not on convex surface as far as I can see). Caruncle to posterior setiger 4.

Notosetae present on setiger 1. Prostomium deeply incised, bifurcate. Posterior notosetae capillaries; spinous packets, modified setae absent. Neurosetae without manubrium, from setiger 7, bidentate to end of body.

***Dipolydora*. sp B**

PWS NIS 1998: Sta 17(1 specimen).

Prostomium incised, strongly bilobed. 4 pairs of eyes. Notosetae setiger 1 present, lobe reduced to papillar lobe. Caruncle to posterior setiger 3. Setiger 5 strongly modified; heavy spines distally falcate, heavy triangular tooth on concave surface, bristles present in notch between tooth and tip of spine. Bidentate neurosetae without manubria, from setiger 7. Branchiae from setiger 7.

Does not key out using Blake 1996...falls out at couplet 10 (10B where choice is presence of 2 accessory teeth) since this specimen has only 1 visible accessory tooth, and appears to lack a cowling.

***Dipolydora* sp. C (near *giardi* (Mesnil, 1896))**

PWS NIS 1998: Sta 21(>100 specimens); Sta?30(1).

Numerous specimens. Prostomium incised, bilobed. No eyes. Setiger 1 complete, notosetae present, notopodium reduced to digitiform lobe. Caruncle to setiger posterior margin setiger 3. Setiger 5 modified; spines with accessory tooth on concave surface, with partial cowling on opposite side of concave surface extending to convex surface; bristles absent.

Branchiae from setiger 9. Neurosetal hooks without manubria, from setiger 7.

***Dipolydora ?quadrilobata* (Jacobi, 1883)**

PWS NIS 1998: Sta 15(1 specimen).

Incomplete specimen, and identification is tentative.

***Polydora ?limicola* Annenkova, 1934**

PWS NIS 1998: Sta 10(1 specimen); Sta 16(1); Sta 23(1).

Incomplete specimen, and identification is tentative.

***Polydora* sp.**

PWS NIS 1998: Sta 17(1 specimen).

This is a juvenile specimen. It is small and slender. Prostomium entire. Eyes numbering 8. Setiger 5 is not modified. Pygidium 4-lobed. Probably not assignable to any known taxon.

***Nicomache personata* Johnson 1901**

PWS NIS 1998: Sta 11(1 specimen).

Identification certain to this species, although specimen is incomplete. Pigmentation pattern characteristic of species.

***Pectinaria granulata* Johnson 1901**

PWS NIS 1998: Sta 11(5 specimens); Sta 16(3); Sta 17(1); Sta 36(22).

Correct identification.

***Laonome cf. kroyeri* (Malmgren, 1866)**

PWS NIS 1998: Sta 17(14 specimens).

Avicular uncini with short bases; companion setae absent. Both capillary and spatulate setae present. Radioles lacking external stylodes; collar bilobed. Need to reconfirm identity.

***Schizobranhia insignis* Bush 1904**

PWS NIS 1998: Sta 19(4 specimen); Sta 23(2) + Sta 23(>20).

Identification correct. Smallest specimen placed into shell vial (Sta. 23) is perhaps a juvenile, with all the setal features consistent. Note that large vial (Sta. 23) mislabeled as Terebellidae (instead of Sabellidae).

***Amphitrite cirrata* Müller, 1771**

PWS NIS 1998: Sta 19(2 specimens); Sta 23(3); Sta 24(2); Sta?35(1); Sta 36(1).

This is another “cosmopolitan” species...at least in the northern hemisphere. A taxonomic black hole similar to *Phole minuta* and *Eteone longa*!! Specimen (Sta. 35) is juvenile terebellid, probably *Amphitrite cirrata*; it is not Ampharetidae!

***Polycirrus* species III Hobson & Banse, 1981**

PWS NIS 1998: Sta 36(1 specimen).

This keys out as per Hobson & Banse (1981). However, as a general comment, the key is extremely poor and relies on imprecise terminology that overlaps features used to describe notosetae! In any case, it would seem appropriate to attach names instead of roman numerals.

***Ampharete* species A**

PWS NIS 1998: Sta 41(1 specimen).

The generic identification is correct. Single specimen lacks a tail, and cannot be identified to species. It is not *Ampharete labrops*, which has eyespots on upper buccal lip; present specimen lacks eyespots in corresponding region.

***Crucigera zygophora* (Johnson, 1901)**

PWS NIS 1998: Sta 19(6 specimens); Sta 23(>20); Sta 24(1).

Identification correct. Present specimens are textbook examples.

***Serpula vermicularis* Linnaeus, 1767**

PWS NIS 1998: Sta 23(3 specimens).

Identification correct. Tentacles solid red or banded red and white, at least in preservative.

***Spirorbis* species**

PWS NIS 1998: Sta 17(>50 specimens).

Dextrally spiraled tubes, 3 thoracic setigers. Species identifications pending examination of remaining materials.