•
Oxyria digyna (L.) Campt. (Rumex digynus L.
Mountain Sorrel. Etah, Aug. 4.
Polygonum viviparum Linn. Alpine Bistort
Etah, Aug. 6. Kudlisat, Disco Id., Sep. 6.
Juncoides hyperboreum (R. Br.) Sheldon. (Luzula
hyperborea R. Br. Northern Wood-rush
Etah, Aug. 6.
Eriophorum polystachyon Linn. Tall Cotton-
grass. Etah, Aug. 6.
E. Scheuchzeri Hoppe. Scheuchzer's Cotton
grass. Godhavn, Disco Id., July 30.
Poa alpina Linn. Alpine Spear-grass. Etah,
Aug. 4.
P. cenisia All. Arctic Spear-grass. Etah, Aug.
4, Netiulume, Aug. 19.
Savastana alpina (Sw.) Scribn. (Hierochloa a. R.
& S). Alpine Holy Grass, Etah, Aug. 27.
Alopecurus alpinus J. E. Smith. Alpine Foxtail.
Etah, Aug. 4. Netiulume, Aug. 19.
Elymus arenarius Linn. Downy Lyme-grass.
Kudlisat, Disco Id., Sep. 2.
Woodsia ilvensis R. Br. Rusty Woodsia. Cape
Sabine, Aug. 5. Etah, Aug. 13.
Equisetum pratense Ehrh. Thicket Equisetum.
Kudlisat, Disco Id., Sep. 2.
E. variegatum Schleicher. Variegated Equisetum.
Kudlisat, Sep. 2.
PRELIMINARY REPORT ON THE
CRUSTACEA AND PYCNOGONIDA
CROSINCEM AND PICHOGONIDA

## PRELIMINARY REPORT ON THE CRUSTACEA AND PYCNOGONIDA OF THE PRINCETON ARCTIC EXPEDITION. 1899.

## BY A. E. ORTMANN.

The larger part of the Crustacea and the Pycnogonids of the collections made by the North Greenland expedition of 1899 have been identified. There are only a few smaller groups left, which offer unusual difficulties: they will be treated in a supplementary report to be published later. Among them are the Copepods, Ostracods, the genus Daphnia of the Phyllopods, and the Cumacea, and some parasitic forms of different groups.

We shall proceed to give here first a list of the species collected, with localities, depth, and number of specimens, and shall add a few remarks on the general results offered by the collection, and on some of the single species.

)	PHYLLOPODS. Number of individuals coll.
•	Branchinecta paludosa (Muell.) Fresh water
	ponds of Northumberland Island and
	Payer Harbor Many hundreds-
χ	Lepidurus glacialis (Kr.) Fresh water pond
•	Northumberland Island
	CIRRIPEDS.
-	Balanus porcatus (Cost.) Barden Bay; Ro-
	bertson Bay; Cape Alexander, 10-40 fath. 15
-	Balanus crenatus (Brug) Sarkak (Waigat),
	9 fath
	Balanus balanoides (L.) Godhavn (Disco
	Island), between tides 4
	LEPTOSTRACA.
	Nebalia bipes (Fabr.) Saunders Island, 5-10
	fath
	AMPHIPODS.
	Hyperia galba (Mont.) Olriks Bay, 7-25 fath.
	(but probably surface) 1
	Euthemisto libellula (Mndt.) Melville Bay;
	Whale Sound; Barden Bay: surface;
	Olriks Bay, 7-25 fath., but probably also
	surface 14
	Socarnes bidenticulatus (Bate.) Northumber-
	land Isl.; Barden Bay; Robertson Bay,
	5-40 fath 8
	Anonyx nugax (Phipps.) Northumberland Isl., surface; Barden Bay, 10-40 fath. 6
	Pseudalibrotus littoralis (Kr.) Northumber-
	land Isl.; Barden Bay; Littleton Island:
	beach and surface; Payer Harbor,
	mouth of fresh water stream. Several hundred.
	Onesimus edwardsi (Kr.) Granville Bay;
	Olriks Bay, 15-40 fath 9
	Byblis gaimardi (Kr.) Barden Bay, 20-25 fath. 11
	Stegocephalus inflatus (Kr.) Granville Bay;
	Barden Bay; Olriks Bay; Karnah;
	Foulke Fjord, 7-40 fath 105
	Paroedicerus lynceus (M. Sars.) Saunders
	Isl.; Robertson Bay, 5-15 fath 2
•	Monoculodes borealis (Boeck.) Olriks Bay;
	15-20 fath
	Pleustes panoplus (Kr.) Olriks Bay, 7-25 fath. 3 Paramphithoë bicuspis (Kr.) Upernavik;
•	Olriks Bay, 7-25 fath
4	Acanthozone cuspidata (Lep.) Barden Bay,
	10-40 fath
1	Rachotropis aculeata (Lep.) Granville Bay;
	Northumberland Island; Barden Bay;
	Olriks Bay; Karnah; Robertson Bay;
	Cape Chalon; Foulke Fjord, 10-40 fath. 43
£	Halirages fulvocinctus (M. Sars.) Upernavik;
	Robertson Bay; Foulke Fjord, 5-15 fath. 9

Pontogeneia inermis (Kr.) Upernavik; Saun-		Spirontocaris spinus (Sow.) Granville Bay;
ders Island; Foulke Fjord, 5-10 fath	14	Olriks Bay; Karnah; Robertson Bay,
Amphithopsis megalops (Buchh.) Olriks Bay;		5-40 fath
Foulke Fjord, 5-25 fath	16	Spirontocaris gaimardi (M. E.) Upernavik;
Atylus carinatus (Fabr.) Saunders Isl.; Gran-		Saunders Isl.; Northumberland Island;
ville Bay; Northumberland Isl.; Robert-		Barden Bay; Foulke Fjord, 5-25 fath 8
son Bay; Foulke Fjord, 5-40 fath	65	Spirontocaris groenlandica (Fabr.) Uperna-
Amathilla pinguis (Kr.) Upernavik; Saun-		vik; Saunders Isl.; Granville Bay; Bar-
ders Island; Olriks Bay; Payer Har-	•	den Bay; Olriks Bay; Karnah; Murchi-
bor, 5-20 fath	8	son Sound; Cape Chalon; Cape Alex-
Gammarocanthus loricatus (Sab.) Payer		ander; Foulke Fjord, 5-40 fath 14
Harbor, mouth of fresh water stream	1	Spirontocaris polaris (Sab.) Upernavik;
Gammarus locusta (L.) Godhavn; Barden		Saunders Isl.; Granville Bay; Barden
Bay; Foulke Fjord: between tides;		Bay; Olriks Bay; Murchison Sound;
Payer Harbor, mouth of fresh water	0.0	Cape Chalon; Cape Alexander; Foulke
stream	83	Fjord, 5-40 fath 23
Melita dentata (Kr.) Robertson Bay, 5-15 fath.	<b>2</b>	Crangon boreas (Phipps.) Saunders Island;
Ischyrocerus anguipes (Kr.) Saunders Island;	0	Granville Bay; Barden Bay; Olriks Bay;
Olriks Bay, 5-25 fath.	2	Karnah; Robertson Bay; Murchison
Unciola leucopis (Kr.) Olriks Bay, 15-20 fath.	. 1	Sound; Cape Chalon; Cape Alexander;
Paradulichia typica (Bock.) Olriks Bay;	0	Foulke Fjord, 5-40 fath 9
15-20 fath.  Aeginella spinosissima (Stps.) Granville Bay;	3	Nectocrangon lar (Ow.) Saunders Isl.; Gran-
		ville Bay; Northumberland 1sl.; Barden
Barden Bay; Olriks Bay; Murchison	14	Bay; Karnah; Cape Chalon; Cape Alex-
Sound; Cape Alexander, 15-40 fath	1.4	ander; Foulke Fjord, 5-40 fath 43
Caprella linearis (L.) Battle Harbor (Labrador), 12-14 fath.	18	Sabinea septemcarınata (Sab.) Granville Bay;
Caprella septentrionales (Kr.) Godhavn; Sar-	10	Barden Bay; Olriks Bay; Karnah;
kak; Upernavik; Saunders Isl.; North-		Foulke Fjord, 15-40 fath 10
umberland Isl.; Robertson Bay, 0-15 fath. 1	IN8	Eupagurus pubescens (Kr.) Battle Harbor,
_ •	100	0–1 fath
Isopobs.		Hyas araneus (L.) Battle Harbor and
Synidotea marmorata (Pack.) Battle Harbor	0	Domino Run (Labrador), 1-14 fath
(Labrador), 12-14 fath	2	Pycnogonids.
Arcturus baffini (Sab.) Granville Bay; Barden		Nymphon longitarse (Kr.) Granville Bay;
Bay; Olriks Bay; Robertson Bay; Cape	104	Robertson Bay, 5-40 fath.
Chalon; Cape Alexander, 5-40 fath 7	104	Nymphon grossipes (L.) Granville Bay;
Jolanthe libbeyi (spec. nov.) Cape Alexander,	E	Barden Bay; Olriks Bay; Cape Chalon;
27 fath	5	Cape Alexander, 15-35 fath.
Olriks Bay; Foulke Fjord, 15-40 fath.	23	Nymphon hirtipes (Bell.) Granville Bay,
	40	30-40 fath
Schizopods.		Bay, 20-30 fath
Mysis oculata (Fabr.) Godhavn; Saunders		Pallene discoidea (Kr.) Granville Bay, 20-40
Isl.; Granville Bay; Northumberland		fath
Isl.; Barden Bay; Robertson Bay; Payer	H 1	
Harbor, 5-40 fath	71	Disregarding 7 species found exclusively
DECAPODS.		south of Melville Bay (Balanus crenatus
Pandalus borealis (Kr.) Kudlisat (Waigat),	_	Balanus balanoides, Caprella linearis, Syno
5–30 fath	8	dotea marmorata, Pandalus borealis, Eupa
Spirontocaris phippsi (Kr.) Battle Harbor;		gurus pubescens, Hyas araneus), the collect
Upernavik; Granville Bay; Barden Bay;		tion consists of 2 Phyllopods, 1 Cirriped
Olriks Bay; Robertson Bay; Cape	-	
Chalon; Cape Alexander; Foulke Fjord,		1 Nebalia, 27 Amphipods, 3 Isopods,
5-40 fath	51	Schizopod, 8 Decapods, and 5 Pycnogo

Consulting the published results of former expeditions, we find that only 26 of them have been mentioned before from these parts (Northwater of Baffins Bay to Grinnell Land), but we have to add to the list 7 species not represented in our collection. These are: 2 CIRRIPEDS, the identical species found by us only farther south, recorded by Miers and Stimpson from Grinnell Land and Port Foulke resp.; 2 Amphipods, Anonyx gulosus and Eusirus cuspidatus, both recorded by Miers from Grinnell Land; 1 Isopod, Glyptonotus sabinei, recorded by Hansen from Cape York; and 2 Pycnogonids, Nymphon stroemi and robustum, both recorded by Miers from Grinnell Land

On the other hand, among the 48 species collected by our expedition are the following recorded for the first time from the neighborhood of Inglefield Gulf:

Lepidurus glacialis, Nebalia bipes; 14
Amphipods: Hyperia galba, Socarnes bidenticulatus, Pseudalibrotus littoralis, Byblis gaimardi, Stegocephalus inflatus, Monoculodes borealis, Paramphithoë bicuspis, Pontogeneia inermis, Amphithopsis megalops, Amathilla pinguis, Melita dentata, Ischyrocerus anguipes, Unciola leucopis, Paradulchia typica; and further: Jolanthe libbeyi, Nectocrangon lar; Nymphon longitarse, Nymphon grossipes, Nymphon serratum, Pallene discoides.

Thus 22 species have been discovered, which are new for North Greenland, bringing up the total number known from these parts from 33 to 55.

The most interesting form of them is the new Isopod recorded above under the name of Jolanthe libbeyi spec. nov. It is so far the first new species discovered among our collections, and it seems appropriate to connect with it the name of Professor William Libbey, the organizer of the expedition, whose former experience in dredging is largely responsible for the fact, that our dredging operations were

carried out with so much success and with hardly any of the hitches and failures so frequently occurring in this difficult work.

Jolanthe libbeyi belongs to a group of Isopods called hitherto by the generic name Janthe. But since this name has been pre-occupied twice, it was deemed advisable, and indeed is necessary, to change it, and the generic name Jolanthe is proposed here for it. The species shows the closest affinity with a species known as Janthe erostrata, Richardson, from the Aleutian Islands (Alaska), but it differs from the latter chiefly by the presence of a long rostrum and the stronger development of the lateral angulations of the head.

Among the other forms, those which are most important are the following:

Amphithopsis megalops, so far a purely Greenlandic form, that has never been found in any other part of the Arctic regions.

Paradulichia typica, which has never been found previously outside of Norway.

Nectocrangon lar, which is very abundant in the Arctic seas of North America, and it seems strange, that it has not yet been recorded from these parts.

Nymphon serratum, which is a rare species, found hitherto only in the Spitzbergen Sea.

Pallene discoidea, whose range is extended by our expedition into the true Arctics, it having been found so far only in the boreal parts of the Atlantic Ocean (New England, South Greenland, Norway).

## A LIST OF VERTEBRATE MATERIAL COLLECTED FOR THE MORPHO-LOGICAL LABORATORY BY THE PRINCETON ARCTIC EXPEDITION OF 1899.

## C. F. W. McCLURE.

This material consists of the skins, soft parts and skeletons of a number of vertebrates found in Greenland,