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*Notes on the Natural History of East Fiamark.* By Canon  
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[Continued from p. 361.]

[As it was quite possible that in the introductory notes to these papers I might have fallen into some errors, I sent a proof to Herr Schneider and requested him to criticize closely. To-day (Nov. 13) I have received his reply. In respect of *Mammalia* :—

*Fulva leopon*, 1 dead (Arctic Fox). The two hundred were killed by poison in one winter at Vardø (not Vadø).

*Haliaeetus leucos*, 1 dead (Grey Seal) is still living in Fiamark.

A large male specimen was killed at Nordholt this last spring. I got the specimen from Herr Schneider.

The following are the specimens. My head dredger's name should be given (H. K. Bjerkedal). M. Fjersmann's place should be given (Kirkens and Kjøbenhavn). P. Fjersmann's name should be given (at Fiamark). The



ditions, n'ont accusé aucune croissance sensible (ex de I2 à I9 mm.). Mais nous avons déjà signalé plus ha durant tous les mois d'été elles sont ovigères. Chez

- Schistomys borealis*, Phipps. Varanger, Bøg, and Klosterelv Fiords.
- Sabinea septemcarinata*, Sabine. Vadsø, Klosterelv, and Lang Fiords.
- *Sarsi*, S. I. Smith. One specimen, Lang Fiord.
- Spirontocaris securifrons*, Norman. Vadsø Harbour; Lang and Klosterelv Fiords.
- *Gaimardi*, H. M.-Edw. In all the fiords.
- *polaris*, Sabine. Varanger, Bøg, and Klosterelv Fiords; Svolveær.
- *turpida*, Krøyer. In all the Sydvaranger Fiords, Laksefiord, and Tromsø.
- *pusilla*, Krøyer. Vadsø; Klosterelv and Lang Fiords; Svolveær.
- Pandalus borealis*, Krøyer. Varanger Fiord.
- *Montagu*, Leach.
- Caridium Gordonii*, Bate.
- Mysis oculata*, Fabr. Klosterelv Fiord.
- Michtheimysis mixta*, Lilljeborg. Bøg and Klosterelv Fiords. Considering the number and characters of the genera into which the old genus *Mysis* has now been divided, *Mysis mixta* can no longer remain in the same genus as *M. oculata*. I therefore propose a genus *Michtheimysis* to receive it. From *Mysis*, as represented by *M. oculata* and its allies, it differs in having the antennal scale unprovided with a second joint, but drawn out to an excessive length, and finally terminated in a spine-like point. In the male the sexual fourth pleopod is quite different from the same organ in *Mysis* (proper) and agrees in structure with that of *Schistomysis*.
- Eurythroa Gossii*, G. O. Sars. In all the fiords.
- *abyssorum*, G. O. Sars. Varanger Fiord, 110–150 fathoms.
- Pseudomma truncatura*, S. I. Smith.
- Amblyops abbreviata*, G. O. Sars. Taken by the Norwegian North-Atlantic Expedition east of Vadsø (Stat. 262).
- Pareurythroa robusta*, S. I. Smith.
- *abyssicola*, G. O. Sars.
- Stichomysis gracilis*, Goss.
- Microsomys incana*, Rathke. Klosterelv Fiord.
- Antiphrax norvegica*, M. Sars.
- *mixta*, Krøyer. Vadsø; Bøg, G. O. Sars.

après deux mois de vie en aquarium, dans les conditions plus haut. Au contraire, pour Leander serratus (F. Crangon crangon (Leach) (= C. vulgaris Fabr. ) que l'u

FINMARK.

*Leander serratus*, O. Sars. Vidso, Svolver.

*Leander serratus*, O. Sars. Lang and Klosterelv Fiords.

*Leander serratus*, O. Sars. Lang and Heg Fiords.

*Leander serratus*, O. Sars.

*Leander serratus*, Krøyer. Lang and Klosterelv Fiords.

*Leander serratus*, O. Sars.

*Leander serratus*, Krøyer. Lang and Heg Fiords, only a single specimen in each locality.

*Leander serratus*, Krøyer. In all the fiords.

*Leander serratus*, Krøyer. In all the fiords. The variety figured by Sars in

his paper on Norway, *Functio*, pl. lxx, occurred in 110-125

feet in the Aranger Fiord.

*Leander serratus*, Krøyer.

*Leander serratus*, Krøyer.

*Leander serratus*, Krøyer. Aranger Fiord, rare.

*Leander serratus*, Krøyer. In all the fiords and down to 125

feet.

*Leander serratus*, Krøyer. Lang Fiord, in 5-30 fathoms.

*Leander serratus*, Krøyer. In all the fiords, and especially

abundant in a bay on the west side of Heg Fiord.

*Leander serratus*, O. Sars.

*Leander serratus*, O. Sars.

*Leander serratus*, Krøyer.

*Leander serratus*, Krøyer. Lang Fiord.

*Leander serratus*, Krøyer. Lang Fiord.

*Leander serratus*, Krøyer. Lang Fiord.

*Leander serratus*, Krøyer.

*Leander serratus*, Krøyer.

*Leander serratus*, Krøyer.

*Leander serratus*, Krøyer.

*Leander serratus*, Krøyer.

*Leander serratus*, Krøyer. Aranger Fiord, in 110-125

feet.

*Leander serratus*, Krøyer. Klosterelv Fiords.

*Leander serratus*, Krøyer. Klosterelv Fiords.

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*Leander serratus*, Krøyer. Klosterelv Fiords.

Giard (A.).- 1907.-Sur l'Anisarthrus pelseneeri (nov. sp.) Bopyrien parasite d'Athanas nitescens L sur la synonymie du genre Hemiarthrus.

- 129 A. M. Norman.-Notes on the  
*Colobocera brachata*, Stimpson. Varanger and Bog Fjords, 100-125 fathoms.  
*Gracilaria elongata*, Krøyer. In all the fjords.  
*Pisidium*, Linn. One specimen in Varanger Fjord.  
*Lumbrus lignorum*, Latke. Klosterly Fjord.  
*Ascaridia bouyocensis*, Nov.  
*Aster bedfordi*, Pallas. Vadsø and Svølver.  
\_\_\_\_\_*neglecta*, G. O. Sars. Vadsø.  
*Janira maderata*, Leach. Klosterly and Bog Fjords.  
*Janira marina*, Linn. Vadsø, tide-marks.  
*Pteropodium rubicundum*, G. O. Sars. Vadsø.  
\_\_\_\_\_*spinosissimum*, G. O. Sars.  
*Mannopsis typica*, M. Sars. Varanger and Bog Fjords, in 80-120 fathoms.  
*Echinocore coronata*, G. O. Sars.  
*Aspidirochela elyptata*, G. O. Sars.  
*Heterochela hirticeps*, G. O. Sars. Varanger Fjord.  
*Eurycope cornuta*, G. O. Sars.  
\_\_\_\_\_*parvi* to G. O. Sars.  
*Bryopsis hypoglyca*, Krøyer.  
*Phereusa abnormis*, Krøyer.  
*Hyas mysidis*, Krøyer.

AMPHIPODA.

- Hyale*, Malmgren, Latke  
*Oypae kochioides*, Krøyer.  
*Squilla*, Fabric, Krøyer. Varde, J. S. Skarvder.  
*Libinia*, Latke, Krøyer. Lang and Klosterly Fjords, but only a single example in each locality.  
*Arctidius nepletos*, Hansen. One only, Bog Fjord, 20-30 fathoms.  
*Parasquilla*, Krøyer.  
*Hippomedon dorsalis*, Latke. Entrance to Vadsø Harbour.  
\_\_\_\_\_*propinqua*, G. O. Sars. A few specimens in Bog Fjord and at Vadsø.  
*Stomatopoda*, Latke. 100-125 fathoms, Klosterly Fjord, 25 fathoms.

Des que la ponte est commecée il n'y a plus  
 lation. Notons enfin que les mâles ne se rapprochent  
 que pendant la courte période où celles-ci sont réelles.  
 état d'être fécondées.

<i>Cytheropteron nodosum</i> , G. S. Brady.	<i>Paradoxostoma variabile</i> , Baird.
<i>Bythocythere constricta</i> , G. O. Sars.	— <i>rostratum</i> , G. O. Sars.
— <i>recta</i> , G. S. Brady.	— <i>inflexum</i> , Brady & Norman.
<i>Pseudocythere caudata</i> , G. O. Sars.	<i>Polycopse orbicularis</i> , G. O. Sars.
<i>Sclerochilus contortus</i> , Norman.	<i>Philomeles brenda</i> , Baird.

The six following species were additions to the Norwegian fauna:—

<i>Cythere cluthi</i> .	<i>Cytherura rudis</i> .
— <i>mirabilis</i> .	<i>Bythocythere recta</i> .
<i>Cytherura granlandica</i> .	<i>Paradoxostoma inflexum</i> .

Professor G. O. Sars has recorded the following additional species from East Finmark:—

*Herpetocypris glacialis*, G. O. Sars.

The following East Finmark Crustacea have as yet not been found elsewhere:—

<i>Typhlotanaïs finmarchica</i> .	<i>Apherusa megalops</i> .
<i>Pseudotanaïs Lilljeborgii</i> .	<i>Paradoxostoma rostratum</i> .
<i>Gitanopsis inermis</i> .	— <i>inflexum</i> .
— <i>arctica</i> .	

Arctic species not known to occur further south than East Finmark:—

<i>Pseudotanaïs truncatum</i> .	<i>Aceroides latipes</i> .
<i>Myxis oculata</i> .	<i>Parapleustes pulchellus</i> .
<i>Dyastylis spinulosa</i> .	<i>Paratylus Smitti</i> .
<i>Calathura brachiata</i> .	<i>Merra Gössii</i> .
<i>Dajus mysidis</i> .	<i>Idunella ispicornis</i> .
<i>Opisa Eschrichtii</i> .	<i>Uciola leucopis</i> .
<i>Aristias tumidus</i> .	<i>Paracyamus boopis</i> (?)
<i>Ediceros borealis</i> .	<i>Cytherura granlandica</i> .
— <i>sagittatus</i> .	— <i>rudis</i> .
<i>Monoculodes longimanus</i> .	<i>Herpetocypris glacialis</i> .

Species which are not as yet known to occur under more arctic conditions than those of East Finmark:—

<i>Stenobothrus ussuriensis</i> .	<i>Henilamprops rosea</i> .
<i>Cyrtopus vulgaris</i> .	— <i>ussuriensis</i> .
<i>Paratylus acanthostylis</i> .	<i>Eucypris acanthostylis</i> .
<i>Calanella truncatula</i> .	<i>Eucypris truncatula</i> .
<i>Leptostylis villosa</i> .	<i>Leptostylis villosa</i> .
<i>Paratylus ampallensis</i> .	— <i>ampallensis</i> .
<i>Paratylus ampallensis</i> .	<i>Paratylus ampallensis</i> .

sence de femelles qui viennent de muer. Les mâles, de taille moyenne, font immédiatement preuve de gran- tion, se chassent mutuellement en se menaçant et en

- Yuccella spinosa.*
- Pleurophthalus brevicornis.*
- Pleurophthalus macrocheles.*
- Limacina ligasorum.*
- Urtica baltica.*
- *neglecta.*
- Aspicella longicornis.*
- Pleurophthalus rubicundum.*
- *spinosissimum.*
- Echinazone coronata.*
- Aspicularachna clypeata.*
- Pseudarachna hirsuta.*
- Eurycopa coronata.*
- *producta.*
- Hyalæ Nilssami.*
- Anabasis Druelzevi.*
- Hippodamia deatoculatus.*
- *propinquus.*
- Tegophilites longipes.*
- Eumyr chelatus.*
- Hacpina neglecta.*
- Biblis erythropis.*
- Andanopsis noronatica.*
- Aspea abissi.*
- Gastrea Sicca.*
- Metopa rubrovittata.*
- Stenometopa robusta.*
- Monoculodes tessellatus.*
- *inceptus.*
- *orbicularis.*

- Monoculodes Packardii.*
- Perioculodes longimanus.*
- Halimelon parvimanus.*
- Paramphithoe brevicornis.*
- Parapleustes latipes.*
- Halice abyssii.*
- Rhachotropis Helli (?)*
- Apherusa tridentata.*
- Paratylus Swammerdamii.*
- Decaminus spinosa.*
- *thea.*
- Melphidippa borealis.*
- Lilljeborgia pallida.*
- Parajassa pelagica.*
- Corophium affine.*
- Dalichia monacantha.*
- *falata.*
- Phthisica murina.*
- Pontocypris trigonella.*
- Argilloecia cylindrica.*
- Cythere pellucida.*
- Loxocoela fragilis.*
- Catherura affinis.*
- *sella.*
- *similis.*
- *nigrescens.*
- *cellulosa.*
- Cytheropteron nolosum.*
- Bythocythere recta.*
- Polycope orbicularis.*

Future investigations will undoubtedly greatly modify these lists, and also, though in a very much less degree, the division of the Mollusca into Arctic and Boreal species. North and south are not in these papers so much regarded as affecting distribution as the more or less arctic conditions. Thus from a distributional point of view the North Cape, although really north of the greater part of East Finmark, may be regarded zoologically as to the south, since all boreal species must pass round the North Cape to reach East Finmark, and are also at the North Cape living under less arctic conditions. On the other hand, all South Greenland, Iceland, and the Murman coast may zoologically be considered to be more northern, since their climate is more

To be continued