ON ELEGINUS OF FISCHER, OTHERWISE CALLED TILESIA OR PLEUROGADUS.

BY

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An Arctic type of the family of Gadids, to which the specific names *Gadus navaga*, *G. gracilis*, and *G. wachna* have been given, is distinguished by beam like parapophyses of the abdominal vertebræ channeled below. This peculiarity, it was supposed, had been first made known by Dr. Bean. By American authors the name *Tilesia* (of Swainson) or subsequently *Pleurogadus* (given by Bean because *Tilesia* was preoccupied) has been used as a subgeneric or generic name. No one supposed that a previous name could have been given; but in looking through volumes of the "Mémoires de la Société Impériale des Naturalistes de Moscou," recently obtained to fill gaps in the series in the library of the Smithsonian Institution, I came across a memoir previously entirely unknown to me as well as to others. The memoir is entitled "Recherches zoologiques par G. Fischer," and is in the fourth volume (2d ed., pp. 237–275). The volume was originally published in 1812 and 1813, but a second edition was issued in 1830 (1812–1813. Réimprimés en 1830). The Researches comprised four chapters, viz: "I. Sur le Sym du Caucase" (p. 240); "II. Sur le Jeltopusick" (p. 241); "III. Sur le Navaga" (p. 252); "IV. Notices sur l'anatomie des poissons: A. Sur l'ouie des poissons" (p. 265) and "B. Sur une articulation propre aux poissons; articulation annulaire" (p. 272). The memoir was illustrated by eight plates (pl. 2–9), on four of which (pl. 5–8) were delineated structural details of the Navaga as well as a good figure of the entire fish, the best indeed that has been published.

Dr. Fischer, in the chapter on the Navaga (III. Sur le Navaga), designated that fish as the "*Eleginus navaga*, Fischer.—*Gadus navaga*, Pallas." He recalled that Pallas had recognized it as a distinct species but that Tilesius regarded it as a mere variety of the common Cod (*Gadus callarias*). He, however, not only considered it to be specifically distinct, but even generically different from *Gadus*.* After

* Je tâcherai de démontrer que le Navaga est non seulement une espèce distincte, ce que Pallas a déjà prouvé, mais qu'il diffère meme génériquement du genre *Gadus*. Fischer, *o. c.*, p. 254.

enumerating the Cuvierian subdivisions of *Gadus Linn.*, he gave the characteristics of the new genus in the following terms:*

Le genre Eleginus, (ἐλεγῖνος, d'Aristote, désignant des poissons qui vivent en société) auquel le Navaga de la mer blanc sert de type, a beaucoup de ressemblance avec la première section des Gades, ayant trois nageoires dorsales et deux anales, mais dont le barbillon est si petit qu'on a peine à l'apercevoir. La tête est forte, les mâchoires sont moins dentées, et le corps est plus arondi que déprimé. La ligne laterale est complète et fait une grande courbe derrière l'anus. Le squelette offre une peculiarité qu'on ne trouve dans aucun autre poisson, c'est que les apophyses transversales des vertèbres du dos sont très alongées, et creusées, et se terminent dans un petit corps obtusement conique et évasé de sorte que toute l'apophyse ressemble assez à la forme d'une pantoufle. Aussi les Allemands à Moscou, à cause de cette singulière conformation de son squelette, appellent-ils ce poisson *Pantoffelfisch.*

While mistaken in supposing that the possession of elongated hollowed transverse apophyses was entirely peculiar to the Navaga, Fischer's description was admirable for the time and quite pertinent to the genus. Strange that we have to go back to the early part of the century to a Russian† naturalist for definite information respecting a common North European fish!‡ Dr. Günther, in his great work (v. 4, p. 330), gave a brief diagnosis merely of the external features of the Navaga immediately after his diagnosis of the common Cod (*Gadus morrhua*), and no reason was therein given for supposing it was notably distinct from the latter species. Its vertebræ were noticed simply as "Vert. 58," thus contrasting with the "Vert. 19–32" of the Cod, nothing being said of the structure of either.

It therefore now appears that the name *Eleginus* must be revived as the generic designation of the arctic Gadid variously named *G. navaga*, *G. gracilis* and *G. wachna.*

ELEGINUS.

Synonymy.

Eleginus G. Fischer, Mém. Soc. Nat. Moscou, v. 4, (2d ed., p. 252–257), 1813.
Tilesia Swainson, Nat. Hist. Fishes, etc., v. 2, p. 300, 1839 (not *Tilesia* Lam., 1821).
Pleurogadus Bean with Jordan, Cat. Fishes N. Am., p. 130, 1885.

ONLY SPECIES.

Eleginus navaga (Kölreuter, 1770) G. Fischer = *Gadus gracilis* Tilesius§ = *Gadus wachna* Pallas.

HABITAT: Northern Russia, Bering Sea.‖

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*The peculiarities of the original accentuation and spelling are reproduced.

†Dr. Fischer, like most of the early Russian naturalists, was of German birth and a fellow-student at Leipzig with Tilesius.

‡Le Navaga, qui gelé en hiver est transporté du port d'Arkhangel en très grande quantité à Moscou et à St.-Pétersbourg, ou il fait partie des mets délicats qui se consomment dans les deux capitales. *Fischer, o. c.*, p. 252.

§ Tilesius regarded the Russian navaga as a variety of the common cod (*o. c.*, p. 253, etc.).

‖ In mare boreo versus hyemem magna copia capitur - - -; capitur etiam ad oceani glacialis oram, usque ad Ob fl. ostia. In balthico deest. Pallas, Zoogr. R. As., v. 3, p. 196.

APPENDIX ON ELEGINUS OF CUVIER AND VALENCIENNES.

ELEGINUS Cuv. & Val.

The restoration of the name *Eleginus* of Fischer necessitates the suppression of the name *Eleginus* of Cuvier and Valenciennes, proposed in 1830 as the generic designation of a peculiar genus of notothenioid fishes characteristic of the southern Pacific. For the notothenioid genus the term *Eleginops* may be used. *Eleginops* was suggested for two fishes originally referred to *Aphritis* by Jenyns (*A. undulatus* and *A. porosus*). The present author appreciated the relation of those fishes to *Eleginus* (C. V.) about the time he received proof of a "Synopsis of the *Notothenioids*" and appended to that paper an addendum, viz:

NOTE.—After the preceding paper had been forwarded to the Academy, it was discovered that two species (*Aphritis undulatus* and *A. porosus*), referred by Jenyns to the genus *Aphritis*, not only are generically distinct, but belong to a different family, and form a genus nearly related to *Eleginus*, which will be at an early date described as *Eleginops*. *Aphritis* is apparently most nearly related to the genus *Percophis**.

On subsequently endeavoring to diagnose *Eleginops*, the author became convinced that there was no generic difference between it and *Eleginus*, and that the two nominal species were probably the young of the typical *Eleginus*. Dr. Günther, in whom the young author had then much confidence, had adopted Jenyns's species, but thought that "the two following species appear to form another genus," viz: "2. *Aphritis undulatus*" and "3. *A. porosus*."† He evidently had no suspicion that they were at all related to *Eleginus*.

* Gill, Proc. Acad. Nat. Sc., Phila., 1861, p. 522.

† Günther, Cat. Fishes, IV, 243, 1860.