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Some interesting fish species from the area of Elephant Island (South Shetland Islands)

ABSTRACT: During austral summer of 1979 in the area of Elephant Island ten species of fish representatives of five families, were identified.

Key words: Antarctic, fishes

During the trawls in the vicinity of Elephant Island, South Shetlands some species of fish were collected which are rare in this area; some of them are recorded the first time for this region of Antarctic. The fishes were caught at lat. S 61°11'–61°20' and lon. W 56°04'–56°32', at the depth 180–500 metres and surface temperature 0°C. An uncopleted specimen of *Anopterus pharao* Zügmayer lat. S at 62°30' and lon. W 54°32' at the depth of 300 metres and surface temperature –1°C.

This paper proved our knowledge on the zoogeographical distribution of Antarctic fishes.

All specimens are deposited in the Museum of Evolution, Polish Academy of Sciences.

Family *Rajidae*

1. *Breviraja griseocauda* (Norman) — one small specimen, total length 267 mm, disc width 182 mm, vent-tail distance 135.5 mm vent-snout distance 131 mm. Spines on tail only 15 in number. This species normally occurs in Falkland Islands region.
2. *Raja rakusai* Rembiszewski (Rembiszewski 1980) — 6 specimens, total length 232–325 mm, disc width 162–245 mm. They are characterized by single praeocular spine, single postocular spine, single scapular spine. There are no median spines. The spines are present on the tail only in number 8 to 12.

- Two egg-capsules were found also. Their long (without horns) were 122 and 110 mm and width 63 and 71 respectively. It is impossible to say at present to what species they belong.

Family *Nototheniidae*

3. *Notothenia squamifrons atlantica* Permitin et Sazanov — 3 specimens. Total length 200–309 mm, standard length 178–279 mm, *D* VI–VII 33–36, *A* 33–35, *P* 25–26, gill rakers on the lower part of arch 13–15. (Permitin and Sazanov, 1974 give the number of 7–9 gill rakers), *l.l.*₁ — 45–47, *l.l.*₂ — 18–20; interorbital width 17.6–18.5% of head length. So far, this species has been only found in the area of South Georgia Island
4. *Notothenia nybelini* Baluškin (Baluškin 1976) — 3 specimens, total length 135–160 mm, standard length 118–140 mm, no scales on the lower jaw, interorbital width 5.2–5.8% of the head length, *D* V 37–38, *A* 36–37, *P* 24, *l.l.* 50–53, gill rakers 7–8+13–14.
5. *Dissostichus* sp.

Two specimens were caught:

	No 1	No 2
Total length (mm)	690	—
Standard length (mm)	625	370
<i>D</i> (dorsal fin)	IX 27	VIII 27
<i>A</i> (anal fin)	27	26
<i>l.l.</i> ₁	92	94
<i>l.l.</i> ₂	40	41
lateral long. series	112	123
gill rakers (lower part)	17	12

The first specimen has an elongated naked area on the upper surface of the head characteristic for *D. eleginoides* Norman. It also has a greater, than cited in literature number of gill rakers. However, the number of scales is characteristic for the species *D. mawsoni* Norman. It is likely that the specimen is a hybrid of both species.

Family *Bathydraconidae*

6. *Gymnodraco acuticeps* Boul. — 3 specimens, total length 275–310, standard length 242–277, *D* 27–29, *A* 23–25, *P* 22–23. A species thought to be endemic in the eastern part of Antarctica (Norman 1938, Andrašev 1964, Hureau 1973). It is the first record for the west Antarctic.
7. *Parachaenichthys charcotti* (Vaillant) — 3 specimens, total length 231–468 mm, standard length 214–427 mm, *D* 41–43, *A* 29–31, *P* 19–22, gill rakers 10–15, interorbital width 12.3–17.1% head length. This species has a number of characteristics close to or identical with those of

P. georgianus Fischer. It seems that many morphometrical characteristics depend on the size of the specimen. For instance the upper jaw of adult specimens does not reach the front margin of the eye which is characteristic for *P. georgianus* and not for *P. charcotti*. A revision of both species based on larger samples seems to be necessary.

Family *Chaenichthyidae*

8. *Chionodraco kathleenae* Regan — 3 specimens, total length 396–403 mm, standard length 358–360 mm, *D* VI 38–41, *A* 35–36, *P* 21–22. A species recorded in the east Antarctic (Norman 1938, Hureau 1973) and in 1978 also for Anvers and King George Islands (Rembiszewski, Krzeptowski and Linkowski 1978).
9. *Chaenodraco wilsoni* Regan — 4 specimens, total length 239–314 mm, standard length 214–287 mm, *D* V–VII 39–40, *A* 33–36, *P* 21–22. In one specimen both dorsal fins are connected by a membrane. A species cited for the eastern part of Antarctica (Norman 1938, Hureau 1973). In 1978 it had been shown to occur at the islands of Anvers and King George (Rembiszewski, Krzeptowski and Linkowski 1978).

Family *Gadidae*

10. *Micromesistius australis* Norman — 1 specimen, total length 500 mm, standard length 460 mm, *D* 12 22, *A* 35 21, gill rakers 8+34. A species rare in this area. Probably it comes here to feed on krill.

Except for the species mentioned above, individual representatives of a number of other species such as *Notothenia kempfi* Norman, *Pagetopsis macropterus* Boul., *Harpagiferidae* gen. sp., *Austrolycichthys concolor* Boul. had been caught as well as many species of commercial value i.e. *Notothenia rossi marmorata* Fischer, *Notothenia coriiceps neglecta* Nybelin, *Trematomus hansonii* Boul., *Champsocephalus gunnari* Lönnb. *Cryodraco antarcticum* Dollo and *Chaenocephalus aceratus* (Lönnb.) Fishermen, as a rule, do not make a notice of rare species: *Chionodraco kathleenae* and *Chaenodraco wilsoni* are taken for *Champsocephalus gunnari*, while *Cryodraco antarcticum* is considered the same sort with *Chaenocephalus aceratus*.

Alltogether in this area (in Admiralty Bay, King George Island mostly) 43 species were gathered, which will be more precisely described in the next paper

Summary

The following species of fish from which some are rare were found in the summer of 1979 in the area of Elephant Island (lat. S 61°11'–61°20', lon. W 56°04'–56°32'): *Breviraja griseocauda*, *Raja rakusai*, *Gymnodraco ocuticeps*, *Chionodraco kathleenae*, *Chaenodraco wilsoni*, *Micromesistius australis* Norman.

Резюме

Летом 1979 г. в районе острова Элефант (61°11'—61°20' южной широты 56°04'—56°32' западной долготы) констатировалось появление следующих редко встречаемых в этом районе видов рыб: *Breviraja griseocauda*, *Raja rakusai*, *Gymnodraco acuticeps*, *Chionodraco kathleenae*, *Chaenodraco wilsoni*, *Micromesistius australis* Norman.

Streszczenie

Latem 1979 roku w rejonie Wyspy Słoniowej (szer. płd. 61°11'—61°20', dł. zach. 56°04'—56°32') stwierdzono występowanie następujących rzadko notowanych na tym obszarze gatunków ryb: *Breviraja griseocauda*, *Raja rakusai*, *Gymnodraco acuticeps*, *Chionodraco kathleenae*, *Chaenodraco wilsoni*, *Micromesistius australis* Norman.

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