

LIST OF EGG-CAPSULES OF RAJIDAE WASHED ASHORE IN THE NETHERLANDS

by

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Egg-capsules of the following four *Raja*-species have been known with certainty for many years from the shores of the Netherlands: *Raja clavata* Linnaeus, *Raja montagui* Fowler (*Raja maculata* Montagu), *Raja radiata* Donovan, and *Raja batis* Linnaeus.

It is therefore of interest to note that from 1931 to 1935 and in 1936 egg-capsules diverging strongly from the well-known species, have been found on the beach between Wassenaar and Noordwijk (in the province of South-Holland). These capsules appeared to belong to the following five species: *Raja brachyura* Lafont, *Raja naevus* Müller and Henle, *Raja undulata* Lacépède, *Raja microcellata* Montagu, and *Raja marginata* Lacépède.

The determinations have been made with Clark's (1922) paper, with the exception of *Raja radiata* Donovan, as this species is not mentioned by him.

After studying and comparing the material of the collections of the Museum of Natural History at Leiden, several private collections, and my own, the following list of the species, occurring on the shore of the Netherlands, could be compiled:

1. *Raja clavata* Linnaeus. Egg-capsules are known from nearly the whole shore. Very common.

2. *Raja montagui* Fowler. Egg-capsules known from the shore of the province of South-Holland and the isle of Ameland. Rather common.

3. *Raja radiata* Donovan. Egg-capsules chiefly known from the northern part of the shore, south as far as Oostvoorne (South-Holland). Rather rare, capsules have been found single or in small groups. Once, on 2 IX 1935, 82 capsules have been found by the author on the isle of Ameland. One egg-capsule containing an embryo, has been found by Dr. van der Sleen on the beach of Zandvoort.

4. *Raja batis* Linnaeus. Only three capsules have been found on the shore of the province of South-Holland.

5. *Raja brachyura* Lafont. Rather rare, one egg-capsule of this species was found already in 1924 by Dr. Koumans.

6. *Raja naevus* Müller and Henle. Only one capsule has been found on the beach of Wassenaar in January 1931 by the author.

7. *Raja undulata* Lacépède. Two egg-capsules have been found on the beach of Wassenaar in January 1931 by the author. After that time one more capsule has been found.

8. *Raja microcellata* Montagu. Two egg-capsules have been found; the first on the beach of Kijkduin on 9 VIII 1931 by Miss M. H. Lever.

9. *Raja marginata* Lacépède. Only one capsule has been found on the beach of Noordwijk in spring 1935 by Mr. H. H. van der Horst.

LITERATURE

- CLARK, R. S., 1922. Rays and Skates (Raiae). No. 1. — Egg-capsules and young. Jour. Mar. Biol. Assoc., N. S., vol. 12.