

**New data on recent Dutch Mollusca,  
a critical compilation, 2<sup>1)</sup>**

by

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Three specimens of *Aegopis verticillus* (Fér.) were found by L. P. POUDEROYEN (27, Apr. 1947, p. 166) in the woods near Voorthuizen (Gelderland). This Central and South Eastern European species was probably brought to the Netherlands during the second world war by military transports.

D. ATEN (49, Apr. 1953, p. 452) collected a comparatively large specimen of *Oxychilus cellarius* (Müll.)<sup>2)</sup> having a shell of *Carychium* spec. in its intestine.

J. G. J. KUIPER (33, July 1949, p. 263) observed and figured the hatching of eggs of *Zonitoides excavatus* (Bean) in captivity. The eggs were deposited in the end of May; the measurements of one of these were  $1.29 \times 0.95$  mm. Altogether 14 eggs were deposited by three specimens in folds of wet blotting paper; 13 of these did not hatch. Probably the environment had too high a relative humidity. One egg showed a small opening on June 2nd; 30 hours later the aperture of the shell was near the opening in the egg. Afterwards the animal made crawling movements outside the egg, but did not succeed to hatch before June 5th. The animal was colourless, except the head and the tentacles, which were dark grey. The eyes showed a black colour and the mantle cavity was yellowish. The faunistical data on this species were already summarized by VENMANS (Basteria Vol. 14, 1950, pp. 44—53).

J. B. HENRARD (20, Nov. 1942, p. 119) collected *Eucobresia diaphana* (Drap.) near Schinnen (Limburg); the species was already reported from the banks of the river Geleen (cf. VAN REGTEREN ALTENA, 1939, loc. cit., p. 4). D. ATEN (35, Feb. 1950, p. 284) found this species near Nuth, in the neighbourhood of the already mentioned localities.

Specimens of *Arion rufus* (L.) from Botshol (Utrecht), erroneously mentioned s.n. *A. ater* (L.), were found to be infested with a Nematode parasite identified as *Alloionema appendiculatum* Schn.; they were collected by W. F. DE WIT (36, May 1950, p. 297).

<sup>1)</sup> Continued from this vol., p. 52.

<sup>2)</sup> For the food of this species, see: FRÖMMING, Biol. Mitteleur. Landgast., Berlin, 1954, pp. 98-100.

H. ODÉ (14, June 1939, p. 89) found the slug *Milax gagates* (Drap.), new to the Dutch fauna, at Gulpen (Limburg), while D. ATEN (43, Jan. 1952, p. 378) collected it at Herkenrade, not very far from the first-mentioned village. *M. sowerbyi* (Fér.), known only from small gardens in the city of Amsterdam (cf. SCHOUTEN, Basteria Vol. 13, 1949, pp. 45—54), was recorded from the Eastern parts of the city of Utrecht (Utrecht) by Dr. C. O. VAN REGTEREN ALTENA (48, Feb. 1953, p. 437). The specimens were received through the courtesy of Dr. N. POSTMA, who found them in his house and garden.

*Limax flavus* L. was reported from Tilburg (Noord-Brabant) by Dr. L. A. W. C. VENMANS (50, June 1953, p. 469) and from Domburg (Zeeland) by Dr. A. D. J. MEEUSE (43, Jan. 1952, p. 373), both localities being new. In the wood of Eijsden (Limburg) Dr. C. O. VAN REGTEREN ALTENA (43, Jan. 1952, p. 378) found that *L. cine-reoniger* Wolf is reddish when young, and brownish red with a pure white sole when adult.

*Fruticicola fruticum* (Müll.), known only from two localities in the Southern part of Limburg (Sint Pieter and Bunde), was found in two additional localities near the river Geleen: at Spaubeek by J. B. HENRARD (20, Nov. 1942, p. 119), and near Nuth, by D. ATEN (35, Feb. 1950, p. 284). HENRARD collected a specimen of the brownish red variety; W. H. NEUTEBOOM (23, June 1944, p. 131) discovered specimens of this colour near Schinnen (Limburg). The most recent records of this species were compiled by VAN BENTHEM JUTTING (loc. cit., p. 74).

F. E. LOOSJES (19, May 1942, p. 113) collected a sinistral specimen of *Helicella heripensis* (Mab.) in the dunes of the provincial waterworks of Noord-Holland.

*H. virgata* (Da C.), known from some localities in West-Friesland, the North Eastern part of the province of Noord-Holland, was discovered in the same province on the sea-dike near Petten by A. C. HAZEVOET (43, Jan. 1952, p. 381); obviously this new record is also due to dispersal by Man.

D. ATEN (56, Dec. 1954, p. 536) made some interesting observations on the copulation of *Helicella caperata* (Mont.), *H. ericetorum* (Müll.), *H. heripensis* (Mab.), and *H. unifasciata* (Poir.). He collected *H. unifasciata* near Wijk aan Zee in the dunes (Noord-Holland), a new locality for this *Helicella*, which up to the present was known only from the Southern part of the province of Limburg. He observed seven copulations at home and two out of doors on the following dates:

*H. caperata* two on Sept. 30 and one on Oct. 4 (all in captivity) and another on Oct. 4 (out of doors).

*H. ericetorum* one on Sept. 22 (in captivity), one on Oct. 4 (out of doors).

*H. heripensis* one on Sept. 12 and on Sept. 22 (in captivity).

*H. unifasciata* one on Sept. 12 (in captivity).

He estimates the duration of the process to be about 20—30 minutes. In eight cases the animals were opposite each other with the right sides of the heads against each other; he saw the lovedarts going in and out of the bodies of the snails in a pulsing movement, occasionally four together in *H. ericetorum*. The frequency of the pulsing movement was variable, viz., 42—46 times (*H. caperata*), 40 times (*H. heripensis*), or 20 times a minute (*H. ericetorum*). The last mentioned species showed a variable and slow pulsing movement with two additional darts. In the containers he frequently found stray darts of *H. ericetorum*, sometimes two together, evidently expulsed at the same time.

A. R. SCHOUTEN (27, Apr. 1947, p. 167) collected three specimens of *Monacha cantiana* (Mont.) in Gerendal in the Southern part of the province of Limburg. This species is common along the Western coast of the country. Besides numerous localities in the coastal districts VAN BENTHEM JUTTING (loc. cit., p. 75) mentioned Wittem (Limburg) as the only southern one.

D. ATEN (51, Aug. 1953, p. 481) made some observations on the production of love-darts of *Zenobiella rubiginosa* (Schmidt). He collected the animals near Rhoonse Veer (Zuid-Holland) and obtained the following result concerning the darts of captive specimens:

	alive	dead	stray darts	darts from dead animals	
May 20	17	1	4	1	
June 12	7	10	9	5	(eggs)
July 2	3	4	—	3	(eggs and juvenile specimens)
July 29	—	3	—	2	

Together 24 darts, produced by 18 snails. Another sample of 14 specimens gave the following figures:

	alive	dead	stray darts	darts from dead animals	
May 20	14	—	12	—	(eggs)
June 10	10	4	29	1	(eggs and juvenile specimens)
June 30	5	4	5	3	
July 29	—	5	—	4	

Together 54 darts, produced by 14 specimens. The juvenile snails always died after a short time.

An albinistic specimen of *Zenobiella incarnata* (Müll.) was found by W. H. NEUTEBOOM (41, Oct. 1951, p. 357) in the Southern part of the Wijlerberg (Gelderland).

*Helicigona lapicida* (L.), known to occur alive in some localities in Southern Limburg (vide MEEUSE & VERVOORT, Zool. Meded., Vol. 24, 1942, pp. 276—280), was discovered by J. H. AAFJES (21, May 1943, p. 125) in large numbers on the dike of the IJsselmeer near Schellinkhout (Noord-Holland); these snails probably were introduced with basalt stones from Germany already in 1922 (LOOSJES, 22, Dec. 1943, p. 128). Dr. H. SCHLESCH (25, Mar. 1946, p. 150) found that the specimens belonged to the var. *nigrescens* (Taylor), a form known from some localities in Germany, Denmark, and England<sup>3</sup>). Although W. H. NEUTEBOOM (59, July 1955, p. 560) reported it as having disappeared from the said locality, it was found again some time ago.

H. VAN DER MAADEN (20, Nov. 1942, p. 117) collected an albinistic specimen of *Cepaea nemoralis* (L.) at Nieuwersluis (Utrecht); H. G. DE SMIT (31, Jan. 1949, p. 223) found a specimen of this species belonging to the very rare var. *fascialba* (Pic.) in combination with band formula 1 2 3 0 0 in 1939 near Domburg (Zeeland).

W. C. VAN HEURN (28, Feb. 1948, p. 176) among more than 2000 shells of *C. nemoralis*, collected at Voorst near Zutphen (Gelderland), discovered one sinistral specimen with five bands and a yellow ground colour. This is the second sinistral specimen found in the Netherlands; the first was collected by SCHEPMAN at Rhoon (Zuid-Holland). It was yellow having the band formula 0 0 0 4 5. At Voorschoten (Zuid-Holland) A. A. VAN HEURN (28, Feb. 1948, p. 176) found a specimen of this *Cepaea* with a small pearl inside the shell at the suture, about 1 cm from the aperture; the shell was yellow with band formula 0 0 3 0 0.

Also of *C. hortensis* (Müll.) a sinistral specimen was reported, viz., by G. SPAINK (39, May 1951, p. 331), who found it between Eijs and Trintelen (Limburg); the shell shows the common yellow colour and five bands. Although TAYLOR (Mon. Land Freshw. Moll. Brit. Isl., Leeds, Vol. 3, 1914, p. 340) regards the bandless form as much commoner in the present species than in *C. nemoralis*, VAN BENTHEM JUTTING (Fauna van Ned. VII, 1933, p. 343) remarked (transl.): "In *hortensis* the absence of bands does not occur as frequently as it does in *nemoralis*." B. HUBERT (60, Oct. 1955, p. 578) reported the find

<sup>3</sup>) In my opinion this variety has no taxonomical value at all.

of a population of *C. hortensis* near Vijlen (Limburg) of which approximately 75% was bandless (40 specimens collected, 29 specimens bandless). One shell showed a pale yellow colour with translucent unpigmented bands, thus belonging to the var. *arenicola* (Macgill.).

J. VAN DALSUM (25, Mar. 1946, p. 147) collected a subscalarid specimen of *Helix aspersa* Müll. in a small garden at Leiden (Zuid-Holland).

### SCAPHOPODA

No records of any importance could be traced in the here discussed numbers of the CB.

### LAMELLIBRANCHIA

#### TAXODONTA

A. K. SCHUISTEMA (39, May 1951, p. 332) found among other things in the stomachs of flat-fishes caught at the Uithuizerwad (Waddenzee near the province Groningen) 6 valves and 38 hinge fragments of *Nucula nucleus* (L.) and 37 valves of *N. turgida* Leck. & Marsh. (syn. *N. nitida* Sow. non Brocchi). The last mentioned species was previously reported twice only, viz., from off Vlieland (Noord-Holland) and from the beach of Domburg (Zeeland). The Zeeland record probably concerns a fossil shell (vide VAN BENTHEM JUTTING, Fauna van Ned. 12, 1943, p. 33).

*Arca tetragona* Poli was found washed ashore on a fragment of cork on the beach of Zandvoort (Noord-Holland) by Messrs. GERRITS (54, Aug. 1954, p. 524). This is the first record of the species from the Dutch coast; earlier records (cf. VAN BENTHEM JUTTING, loc. cit., p. 38) proved to be erroneous.

#### ANISOMYARIA

Messrs. GERRITS (54, Aug. 1954, p. 524) reported from Zandvoort (Noord-Holland) a specimen of *Lima loscombi* Sow., still containing the animal. The species had been mentioned twice only, viz., by VAN BENTHEM JUTTING (loc. cit., p. 80), and by LUCAS (Basteria Vol. 20, p. 32).

A. W. LACOURT (15, Dec. 1939, p. 92) mentioned *Anomia squamula* L. from the island Ameland in the Waddenzee (Friesland); this species had not yet been recorded from the said island.

#### EULAMELLIBRANCHIA

A valve of *Unio crassus batavus* Mat. & Rack. was collected by D. A. J. BATJES (44, Feb. 1952, p. 390) in the alluvia of the river

IJssel near Zwolle (Overijssel); it is the first record of this Bivalve in this arm of the Rhine.

*Pisidium milium* Held, not previously mentioned from the river Geul in Limburg, was collected by the members of an excursion of the Society (28, Feb. 1948, p. 172) near Meerssen.

The members of another trip organized by the Society (37, Nov. 1950, p. 305) to the island Schiermonnikoog (Friesland) discovered *P. obtusale* Pfr., new to the fauna of this island.

*P. moitessierianum* Palad. was found to occur in the river Merwede near Giessendam (Zuid-Holland). The species generally occurs in the larger rivers; accordingly the said locality fits well in with those already known. It was, however, reported also from the lake district near Ankeveen (Noord-Holland); this part of the country consists merely of shallow stagnant lakes and moors. Both discoveries were made during excursions of the Dutch Malacological Society (33, July 1949, p. 265, and 52, Dec. 1953, p. 494).

In the above cited stomach-contents of flat-fishes, reported on by A. K. SCHUITEMA (39, May 1951, p. 332), also three valves of *Thyasira flexuosa* (Mont.) were found; this is the second record of this species in the Netherlands.

A. L. BRANDHORST (32, Apr. 1949, p. 233) collected on the beach of Katwijk (Zuid-Holland) a specimen of *Cardium echinatum* L., still containing the dead animal; odd valves of this species are to be found regularly along the Dutch coast, complete specimens, however, are very rare.

A complete specimen of the rare species *Venus ovata* Penn. was collected by G. SPAINK (46, July 1952, p. 412) near Heemskerkerduin (Noord-Holland).

L. S. PAARDEKOOPER (49, Apr. 1953, p. 451) found 4 specimens of *Paphia rhomboides* (Penn.) at the beach near Scheveningen (Zuid-Holland) after the disastrous tempest of the beginning of February 1953. This Venerid, though perhaps living at a small distance off the coast, occurs but rarely only and up till now less than ten complete specimens are known from the Netherlands.

From the island Terschelling (Noord-Holland) *Mysia undata* (Penn.) was reported twice, viz., by J. S. GRÜSCHKE (49, Apr. 1953, p. 460) and by Messrs. GERRITS (54, Aug. 1954, p. 524). As this species occurs also in pleistocene deposits eroded near the island it is possible that these shells are not recent.

The food of a number of flat-fishes caught in the Waddenzee (vide supra) was found to be composed largely (approximately 98%) of *Abra alba* (Wood) by A. K. SCHUITEMA (39, May 1951, p. 332).

A. C. VAN BRUGGEN (39, May 1951, p. 331) collected *Tellina pyg-*

*maea* Lovén on the beach of the nature reserve "De Beer" near Hook of Holland (Zuid-Holland); this is the southernmost locality of the species in the Netherlands.

Dr. C. O. VAN REGTEREN ALTENA (39, May 1951, p. 337) was the first to mention the occurrence of *Ensis arcuatus* (Jeffer.) along the Dutch coast; in the past this species in Holland has been named *E. ensis* forma *major* Colbeau. LUCAS (loc. cit., p. 37) reported the species from numerous localities.

New localities were mentioned for *Saxicava arctica* (L.), viz., by A. W. LACOURT (15, Dec. 1939, p. 93) the island Ameland (Friesland), and by J. VIERGEVER (20, Nov. 1942, p. 120) Flauwersinlaag (Schouwen, Zeeland), two living specimens washed ashore with the seaweed *Himantalia*.

A right valve of *Mya arenaria* L. with a chondrophore was collected by D. A. J. BATJES (44, Feb. 1952, p. 390) on the island Terschelling (Noord-Holland); the hinge of this shell has to be considered inverted, a very rare phenomenon among the Myidae.

L. DE PRIESTER (52, Dec. 1953, p. 498) reported the finding of large quantities of the boring species *Barnea candida* (L.), *Zirfaea crispata* (L.) and *Petricola pholadiformis* Lam. on the beach of Walcheren (Zeeland) near Zoutelande in October 1953. Over a distance of 200 m he found 242 *Barnea candida*, 86 *Zirfaea crispata* and 184 *Petricola pholadiformis*. The two last mentioned species were mainly represented by juvenile shells; the material of *Petricola* consisted for approximately 20% of complete specimens. Perhaps this exceptional occurrence of great numbers of fragile shells was brought about by a combination of S. and S.E. winds and a very quiet sea.

*Thracia convexa* (Wood), previously never mentioned from near the Dutch coast was reported by Miss W. S. S. VAN BENTHEM JUTTING (20, Nov. 1942, p. 118) as being collected by a trawler near Terschellinger Bank in the North Sea.

C. SCHIPPER (60, Oct. 1955, p. 578—579) found the following species of Lamellibranchia in the intestine of the starfish *Astropecten irregularis* (Penn.) (cf. also sub "Stenoglossa" and "Gastropoda Opisthobranchia"): *Nucula nucleus* (L.) (once five specimens in one starfish), *Mysella bidentata* (Mont.), *Montacuta ferruginosa* (Mont.), *Venus striatula* (Da C.) (sometimes five together), *Venus casina* L. (new to the Dutch fauna, a complete specimen collected by P. SMIT), *Mactra corallina atlantica* B.D.D., *Psammobia fervens* (Gmel.) (1/2 specimen), *Albra alba* (Wood), *A. prismatica* (Mont.) (one specimen), *Tellina pygmaea* Lovén (one specimen), *Aloidis gibba* (Ol.), *Mya arenaria* L., and *Thracia papyracea* (Poli) (three times). Generally the large species were represented by juvenile specimens.

Bivalves were found in the intestine of sea-urchins also; a big one appeared to contain  $12\frac{1}{2}$  specimens of *Astarte triangularis* (Mont.), vide C. SCHIPPER (60, Oct. 1955, p. 579). P. SMIT (ibidem) found two specimens of *Moniacuta substriata* (Mont.) in *Echinocardium cordatum* (Penn.). The here discussed Echinoderms were collected by fishermen from Den Helder in the North Sea.

#### CEPHALOPODA

As faunistic information on Dutch Cephalopoda is still rather scattered and scarce, it is interesting to note that no less than ten records of some importance on this group are found in the here discussed issues of the CB.

*Sepia elegans* Orb. and *S. orbignyana* Fér. were found by L. DE PRIESTER (52, Dec. 1953, p. 495) on the coast of the island Walcheren (Zeeland) on September 2, 1953, near Zoutelande-Biggekerke. Over a distance of approximately 500 m he collected some 40 shells of *S. elegans*, and 1 shell and some fragments of *S. orbignyana*.

Specimens of the common cuttlefish *S. officinalis* L. were found washed ashore on the already mentioned island near Dishoek on June 24, 1954, by D. J. BOERMAN (54, Aug. 1954, p. 517); over a distance of about 300 m he found eight complete animals and some tens of shells, most of these still with remnants of the flesh. E. BATTEN (56, Dec. 1954, p. 538) mentioned the finding of some complete specimens near Cadzand (Zeeland) in the summer of 1949 or 1950. Complete specimens of this cuttlefish are scarce on the Dutch beaches; the (clean) shells, however, can often be found on the beach. Deformed shells were collected by D. VAN ROMBURGH at Noordwijk (Zuid-Holland) and by A. L. BRANDHORST at Hoek van Holland-Terheide (Zuid-Holland) (Dr. C. O. VAN REGTEREN ALTENA, 57, Mar. 1955, p. 545); these specimens remind one of those figured by DATHE (Arch. Molluskenk. Vol. 79, 1950, pp. 21—24, Taf. 2—5).

Two shells of *Sepiolo atlantica* Orb. were collected on the beach of Scheveningen (Zuid-Holland) by A. L. BRANDHORST (53, Mar. 1954, p. 509).

*Ommastrephes sagittatus* (Lam.), a species rarely occurring along the Dutch coast, was reported ten times washed ashore on the beach, sometimes still alive:

Noordwijkerhout (Zuid-Holland), April 4, 1936, head only (A. W. LA-COURT, 15, Dec. 1939, p. 93);

Karwijk (Zuid-Holland), winter 1936, bad specimen (ibidem);

Karwijk-Noordwijk (Zuid-Holland), April 9-10, 1939 (N. P. W. BALKE, 14, June 1939, p. 90);

Schouwen (Zeeland), April 9-10, 1939 (ibidem);

island Vlieland, east of the harbour (Friesland), April 21, 1954, length about 60 cm (Dr. A. B. VAN DEINSE, 54, Aug. 1954, p. 515);



Scheveningen (Zuid-Holland), April 29, 1954, length of mantle 37 cm, length arms included 60 cm (ibidem);

ibidem, May 1, 1954 (B. ENTROP, 54, Aug. 1954, p. 515);

's-Gravenzande (Zuid-Holland), May 27, 1954, length of mantle 55 cm (VAN DEINSE loc. cit.);

ibidem, end of May, 1954 (ibidem);

island Schiermonnikoog (Friesland) (ibidem)<sup>1)</sup>;

Noordwijk (Zuid-Holland), April 17, 1955, 1 female collected, more specimens found (Dr. C. O. VAN REGTEREN ALTENA, 58, Mar. 1955, p. 556).

The measurements of this specimen are:

length of mantle (ventral)	31 cm	
"    "    "    (dorsal)	32 cm	
"    "    "    fin from tip of tail to beginning of fin	14 cm	
major diameter of fin	17.5 cm	
length of arms:	left	right
dorsal	13 cm	13.5 cm
laterodorsal	15.5 cm	16 cm
lateroventral	16.5 cm	16 cm
ventral	13 cm	12 cm
length tentacles	24.5 cm	23 cm
circumference of body just above fin	14 cm	
major circumference of body above fin	20 cm	
length from tip of tail to tip of tentacles	62.5 cm.	

The months in which the above mentioned specimens were found agree fairly well with those in the figure on p. 3 of KAAS & TEN BROEK (Basteria Vol. 5, 1940). The localities show that *Ommastrephes sagittatus* occurs occasionally in or near the Waddenzee in the North (viz., Vlieland and Schiermonnikoog) and near Zeeland in the South (viz., Schouwen).

<sup>1)</sup> Later on (54, Aug. 1954, p. 525) further particulars on this specimen derived from the press were published; parts of this note are inexact. Therefore this record has to be considered doubtful.