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THE OCCURRENCE OF *BRAMA BRAMA* (BONNATERRE, 1788) ALONG THE  
COAST OF THE NETHERLANDS IN 1974 AND 1975  
(PISCES, PERCIFORMES, BRAMIDAE)

H. NIJSSEN & S.J. DE GROOT

## ABSTRACT

The occurrence of Ray's Bream, *Brama brama* (Bonna-  
terre, 1788) along the coast of the Netherlands is  
recorded for 1974 and 1975.

It is known that Ray's Bream, *Brama brama* (Bonna-  
terre, 1788) is not uncommon in our coastal wa-  
ters; the species is often referred to as *Brama*  
*rayi* or *Brama raii* (Bloch, 1791). However, it only  
appears during the last months of the year, when  
specimens are caught by inshore fishing vessels or  
anglers, or - in most cases - are washed ashore.  
The reason for publishing this short note is that  
in the scientific literature on the distribution  
of this species Dutch records are mentioned hard-  
ly or not at all. Wheeler, Blacker & Pirie, e.g.,  
state (1975: 183) in relation to Ray's Bream:

"At present we have no data from the continent for  
recent years ....". The existing data are diffi-  
cult to trace for the non-Dutch reader. Only once  
Kristensen (1950) reported on the captures during  
1948 through 1950 in the English language. Most of  
the particulars of the Dutch records of *Brama*  
*brama* are covered by Redeke (1941) up to the date  
of his publication. Since then the second author  
(De Groot, 1971) published a short note in a Dutch  
fisheries journal concerning 14 specimens brought  
to the Netherlands Institute for Fisheries Inves-  
tigations (RIVO) at IJmuiden in the period from  
1968 to 1970. Notwithstanding the fact that *Brama*  
*brama* occurs in our coastal waters each year, we  
confine our note to the data obtained in the years  
1974 and 1975 in which 39 and 28 specimens, re-  
spectively, were brought to our attention. A re-

cent popular account of this material was published by Van Tuyl (1976).

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*Brama brama* is a mesopelagic species of temperate and subarctic waters, usually found at a depth of about 450 meters. The distribution of the North Atlantic population is thoroughly described by Mead & Haedrich (1965). Juvenile specimens occur in subtropical Atlantic waters and in the Mediterranean. Adult specimens seem to concentrate in March off northwestern Spain at a depth of about 200 meters, where the temperature is about 12° C (Mead & Haedrich, 1965: 35). They show temperature controlled seasonal migratory habits, preferring a water temperature of 13° C and higher. A part of the population starts during April its northward migration as the temperature of the surface water becomes higher than 13° C. In August records of adult specimens are numerous off-shore in the North Atlantic to the South coast of Iceland. In September and October they retreat southward due to lower water temperatures. The 10° C isotherm seems to limit their northernmost occurrence. Their concentration off Scotland and in the North Sea is then increased. During November and December the water temperature drops below 10° C, which the species cannot endure. Many specimens moving South, finding themselves east of Scotland - also due to western storms - are caught in the North Sea, which functions as a huge trap, since the cold water becomes shallower gradually. Their typical deep-bodied built makes it difficult for them to swim upright in the turbulent coastal waters, so that they are often found alive or virtually undamaged on our beaches (fig. 1).

The rate of immigration into North-European waters by adult specimens varies from year to year. This was already reported among others by

Kristensen (1950), Von Brandes (1952), Wheeler (1969) and Wheeler et al. (1975).

During the winter of 1974 39 specimens of *Brama brama* were recorded from our coast (table I), of which only one was caught alive. Of the 28 specimens known to us from the winter of 1975 (table II), nine specimens were found alive. More striking is the difference in location of the observations (fig. 2). In the winter of 1974 all 39 specimens were recorded from localities in the northern part of the Netherlands. During the winter of 1975 17 out of the 28 specimens were found in Zeeland, the most southwestern province of the Netherlands. In earlier years the observations from the southern part of the Netherlands are few or lacking at all (Redeke, 1941; Kristensen, 1950; De Groot, 1971). This is due to annual fluctuations of hydrographic conditions along our coast and of the number and severity of storms. We realize that the annual number of recorded specimens is strongly influenced by the number of people helpful enough to report their findings.

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TABLE I

RECORDS OF 39 SPECIMENS OF *BRAMA BRAMA* (BONNATERRE, 1788) DURING THE WINTER OF 1974

DATE	NUMBER	LOCALITY	TOTAL LENGTH IN CM	COLLECTOR	AUTHORITY
10 - XI	1	Noord-Holland : Bloemendaal, beach	61.0	-	RIVO
16 - XI	1	Noord-Holland : St.-Maartenszee, beach pole 18-19	* 57.0	-	NIOZ
17 - XI	1	Noord-Holland : Petten, beach	57.0	-	RNMH 27137
26 - XI	4	Noord-Holland : Egmond aan Zee, beach	* 59.0	-	RIVO
26/27-XI	6	Texel : Cocksdoorp, beach pole 25-29	51.5-59.5	J. I. Boon	ZMA 113.757/762
29 - XI	1	Groningen : Hornhuizer Mad	52.0	-	NIOZ
1/7 - XII	15	Terschelling : beach pole 15-30	-	J. Roos e.a.	G. Doeksen
1 - XII	1	Noord-Holland : Petten/Grote Keeten, beach	59.0	-	NIOZ
2 - XII	1	Noord-Holland : Hordsbossche Zeewering	56.0	-	-
2 - XII	1	Noord-Holland : Ljuiden, beach	-	-	RIVO
3 - XII	1	Noord-Holland : Zandvoort, beach	-	-	RIVO
7 - XII	2	Noord-Holland : Egmond aan Zee, beach	51.0-54.5	P. R. Kok	ZMA 113.755/756
7/14 - XII	3	Schiermonnikoog: beach	52.0	-	NIOZ
19 - XII	1 (alive)	Schiermonnikoog: ferry-boat pier	50.0	-	NIOZ

TABLE II. RECORDS OF 28 SPECIMENS OF *BRAMA BRAMA* (BONNATERRE, 1788) DURING THE WINTER OF 1975

DATE	NUMBER	LOCALITY	TOTAL LENGTH IN CM	COLLECTOR	AUTHORITY
25-XI	1 (alive)	Texel : N.E.point (trap)	60.5	C. Dijkster	ZMA 114.046
30-XI	1 (alive)	Zeeland : Vrouwenpolder (angler)	-	angler	RIVO
30-XI	1	Zuid-Holland : Katwijk, beach	-	-	RWNH
1-XII	1 (alive)	Zeeland : Hoge Hil, Domburg, beach	57.0	G.J. van Welbergen	ZMA 113.880
3-XII	1	Zeeland : Westkapelle, beach	57.0	J. van Peenen	Provinciale Zeeuwse Courant
4-XII	1 (alive)	Noord-Holland: Callantsoog, breakwater	58.0	J. Konijn	ZMA 114.047
4-XII	1 (alive)	Zeeland : Oostkapelle	56.0	W. Melise	C.H. van Schelven
5-XII	1 (alive)	Texel : S.E.point, 't Horntje (trap)	56.0	J. Beumkes	ZMA 114.048
5-XII	1 (alive)	Terschelling : beach pole 20	62.0	H.J. Mier	G. Doeksen
5-XII	1	Terschelling : beach pole 18	± 55.0	G. Doeksen	-
7-XII	1	Zeeland : Schouwen, Banjaard	58.0	-	Provinciale Zeeuwse Courant
7-XII	1	Zeeland : Westenschouwen, beach	-	-	C.H. van Schelven
9-XII	1	Noord-Holland: Schoorl, beach pole 24-25	54.0	B. Buijzer	-
10-XII	1	Texel : beach pole 19	55.0	Rijkswaterstaat	ZMA 114.045
14-XII	2	Noord-Holland: Bakkum, beach	± 65.0	-	B. Buijzer
± 15-XII	7	Zeeland : Westkapelle, beach	-	-	De Wit
23-XII	1 (alive)	Zeeland : Haamstede, beach	60.0	A. & W. Provoost	C.H. van Schelven
28-XII	1 (alive)	Noord-Holland: Bergen aan Zee, beach	56.5	N. Niessen	ZMA 114.049
28-XII	1	Zeeland : Westkapelle, sea dike	± 50.0	H. Suurmond	Provinciale Zeeuwse Courant
28-XII	1	Zeeland : Zoutelande, beach	54.0	J.K. Eerland	Provinciale Zeeuwse Courant
28-XII	1	Zeeland : Westenschouwen, beach	-	-	C.H. van Schelven

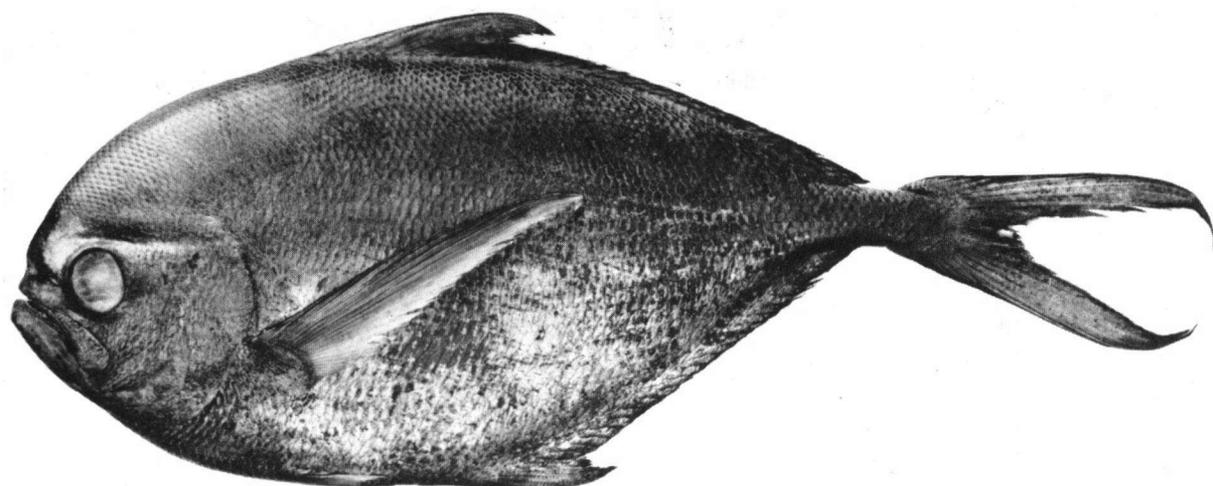


Fig. 1. *Brama brama* (Bonnaterre, 1788), total length 56.5 cm (ZMA 109.994).  
(Photo L.A. van der Laan, ZMA.)



Fig. 2. The coast of the Netherlands, showing localities of records of *Brama brama* (Bonnaterre, 1788) during 1974 and 1975.

H. NIJSSEN  
Institute of Taxonomic Zoology  
University of Amsterdam  
Plantage Middenlaan 53  
Amsterdam - The Netherlands

S.J. DE GROOT  
Netherlands Institute for  
Fishery Investigations  
Haringkade 1  
IJmuiden - The Netherlands

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