

Nudibranch diversity (Gastropoda, Heterobranchia) along the coast of Norway

Jussi Evertsen & Torkild Bakken

Published on paper: 2005.

Published online: 2024-09-27.

ISSN 1502-4873 (paper).

ISSN 1891-5396 (electronic).

doi: [https://doi.org/](https://doi.org/10.5324/fn.v25i0.5937)

10.5324/fn.v25i0.5937.

Evertsen, J. & Bakken, T. 2005. Nudibranch diversity (Gastropoda, Heterobranchia) along the coast of Norway. *Fauna norv.* 25: 1-37.

Based on available information on nudibranchs from all published literature, sampling concentrated around the area of Central Norway, and the nudibranch collections at the Museum of Natural History and Archaeology in Trondheim, this study presents the distribution of nudibranch species along the Norwegian coast. All species reported in the literature from Norwegian waters are listed and discussed. A total of 81 species are confirmed being a part of the Norwegian fauna, of which four species (*Cuthona rubescens*, *Polycera faeroensis*, *Eubranchus vittatus* and *Onchidoris depressa*) are new to Norwegian waters, and two that have previously been mentioned but not documented, *Cuthona caerulea* and *Geitodoris planata*, are confirmed found for the first time. Six species, *Triopella incisa*, *Cadlina glabra*, *Rostanga setidens*, *Cuthona distans*, *Cuthona norvegica*, *Berghia norvegica* are considered endemic to Norway, and four species, *Doridunculus echinulatus*, *Doris nobilis*, *Doto crassicornis*, *Goniaeolis typica* are considered endemic to Scandinavian waters. After the review six species previously reported from Norwegian waters, are considered insufficiently supported, or due to misidentifications (*Onchidoris aspersa*, *Onchidoris oblonga*, *Onchidoris sparsa*, *Thecacera virescens*, *Doto tuberculata* and *Flabellina browni*) and are not longer considered a part of the Norwegian fauna. Sampling has in large been based on SCUBA diving, and proved to be very efficient when sampling in the upper sublittoral in kelp forest habitat.

Key words: Nudibranchia, Heterobranchia, Gastropoda, Norway, Norwegian coast, taxonomy, biodiversity, SCUBA diving

Jussi Evertsen¹ & Torkild Bakken²

¹Trondhjem Biological Station, Department of Biology, and ²Section of Natural History, Norwegian University of Science and Technology, NO-7491 Trondheim, Norway

E-mail: jussi.evertsen@bio.ntnu.no Phone: +47 73 59 15 82, fax: +47 73 59 15 97

INTRODUCTION

Nudibranchia is a diverse group of shell-less marine gastropods previously represented by 83 species according to publications treating Norwegian coastal waters (excluding Svalbard and the islands Bjørnøya and Jan Mayen) (Høisæter et al. 1997).

Records of nudibranchs from the Norwegian coast have been the result of sporadic expeditions and local investigations. Occasional knowledge of the distribution of nudibranch taxa emerged with naturalists who often studied the fauna in specific geographical areas where nudibranchs as such were mentioned or recorded along with the fauna in general. These were Gunnerus (1770) and Storm (1879a, 1879b) from Central Norway, Ascanius (1774) from southern Norway, O.F. Müller (1776-1806), M. Sars (1870), Asbjørnsen (1854) and Brøgger (1872) from the Oslofjord, Lovén (1846), M. Sars (1851), Danielssen (1861), G.O. Sars (1878), Sparre-Schneider (1885)

and Krause (1895) from northern Norway, and M. Sars (1829, 1835), Friele & Hansen (1876), Grieg (1897, 1898, 1914a) and Norman (1879) from western Norway. In addition scientific reports resulting from expeditions and projects also reported nudibranchs, usually more specifically: Friele & Grieg (1901) from the “The Norwegian North-Atlantic Expedition 1876-1878”, Bergh (1886, 1900) from the cruises of the “Willem Barents” and from the Danish “Ingolf Expedition”, Norman (1893, 1902) and Dons (1942a, 1942b, 1942c) from Central Norway, and Friele (1902) and Grieg (1913) from the North Sea cruises of the research vessel “Michael Sars”.

Comprehensive knowledge of Norwegian nudibranchs emerged with the works of Paul Løyning and Mia Larsen, who specifically investigated the nudibranch fauna of Drøbak in the Oslofjord (Løyning 1922, Larsen 1925). About 30 species were treated, where Løyning treated the cladobranch taxa and Larsen the anthobranch taxa. An extensive review of the nudibranch

taxa along the whole Norwegian coast came with Swedish naturalist Nils Hjalmar Odhner, who investigated the opisthobranch collections in Stockholm, Oslo, Trondheim and Tromsø. Publications concerning records from several locations in Norway are found in Odhner (1907), the Oslofjord and adjacent areas (Odhner 1922), western and northern coasts of Norway (Odhner 1926, 1929, 1939). In recent years compilations including the distribution of nudibranchs can be found in Platts (1985), Høisæter (1986) and Høisæter et al. (1997). The list presented by Platts (1985) was given as an appendix in Just & Edmunds (1985), who published colour paintings prepared by Henning Lemche of nudibranchs from, mainly, Scandinavian waters. Even though an extensive primary literature exists, no comprehensive investigations on the distribution of nudibranchs along

the Norwegian coast have been conducted since the works of Nils Hjalmar Odhner and Carl Dons more than 60 years ago.

Intended as a resource in biodiversity, distribution and management of marine habitats, Brattegard & Holthe (1997) published a large volume presenting the benthic macro-organisms along the Norwegian coast. The coast was divided in 26 different sectors from south to north (Figure 1). This publication is increasingly being used when treating different groups of benthic organisms, and we have relied on the part that includes heterobranchs (Høisæter et al. 1997). In our review of records of species from the literature, this list is extensively used in the taxa section below and summarised overall to present a revised distribution of nudibranchs along the Norwegian coast (see Table 1).

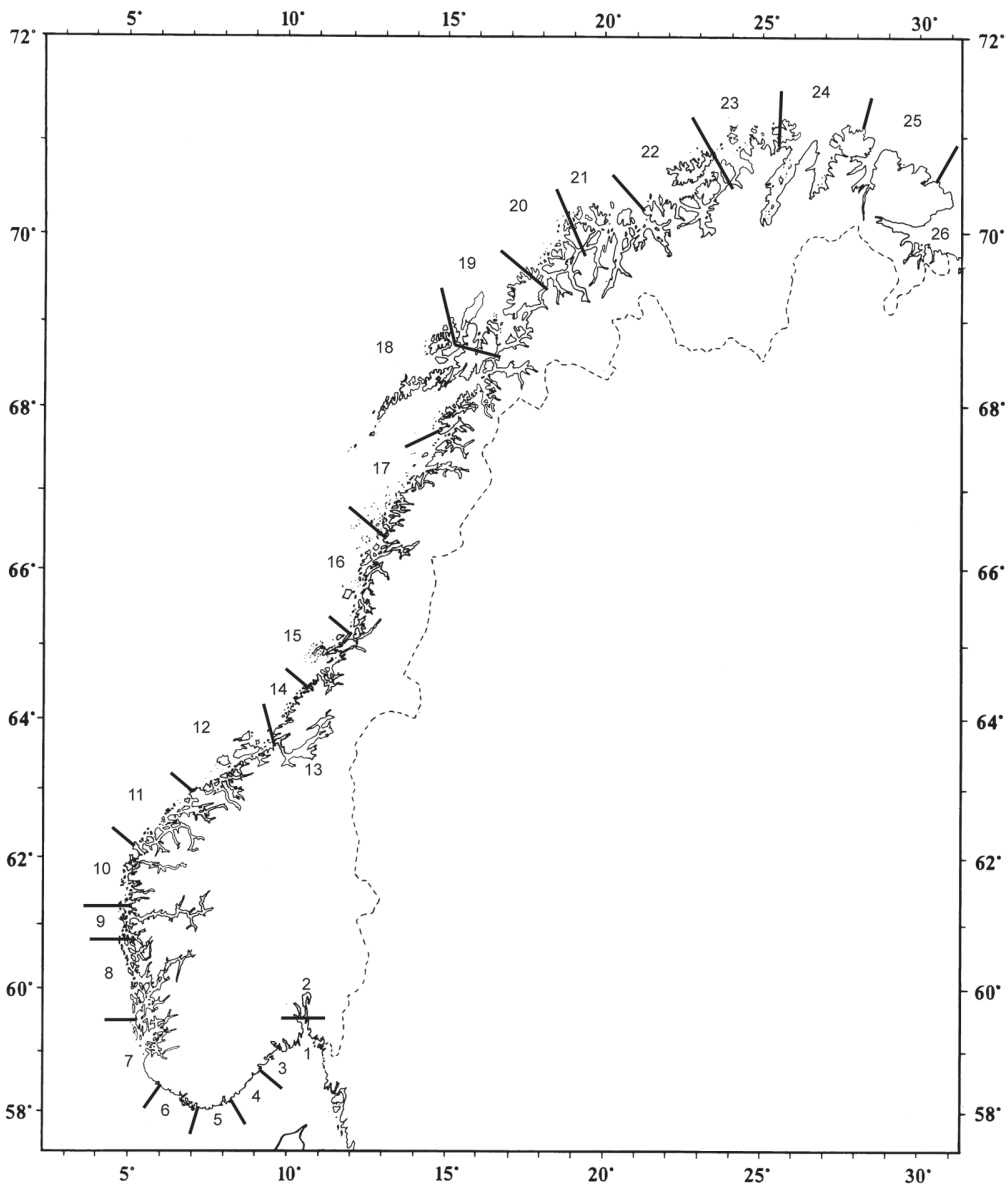


Figure 1. Designed to be a tool to record biodiversity information of marine benthic macro-organisms along the Norwegian coast, Brattegard & Holthe (1997) partitioned the coastline in 26 sectors from south to north.

Table 1. Distribution of nudibranch taxa along the Norwegian coast is based on an exhaustive literature review, data collected from field-work, and some additions based on museum material from the Museum of Natural History and Archaeology, Norwegian University of Science and Technology. This represents a revision of Hoiseater et al. (1997). Records added as emendations from the present study are indicated in bold. For detailed information for each taxon see text. Our own registrations are mainly from sectors 11-15. Symbols for distribution are according to Brattegard & Holthe (1997), S - a taxon with a southern distribution with its northern border along the Norwegian coast; N - a taxon with a northern distribution with its southern border along the Norwegian coast; X - a taxon with a pansectoral distribution; R - rare species.

Sector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
<i>Acanthodoris pilosa</i> (Abildgaard, 1789)	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Adalaria loveni</i> (Alder & Hancock, 1862)	S	S				S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Adalaria proxima</i> (Alder & Hancock, 1862)	S	S				S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Aegires punctilucens</i> (Orbigny, 1837)	S	S				S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Aeolidia papillosa</i> (L., 1761)	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Aeolidiella glauca</i> (Alder & Hancock, 1845)	S	S				S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Aldisa zetlandica</i> (Alder & Hancock, 1845)	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Ancula gibbosa</i> (Risso, 1818)	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Armina loveni</i> (Bergh, 1861)	S	S				S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Berghia norvegica</i> Odhner, 1939	R	R				R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
<i>Cadlina glabra</i> (Friele & Hansen, 1876)	R	R				R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
<i>Cadlina laevis</i> (L., 1767)	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Calma glaucooides</i> (Alder & Hancock, 1854)	S	S				S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Colga pacifica</i> Bergh, 1880	N	N				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
<i>Cumanotus beaumonti</i> (Eliot, 1906)	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Cuthona caerulea</i> (Montagu, 1804)	S	S				S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Cuthona concinna</i> (Alder & Hancock, 1843)	S	S				S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Cuthona distans</i> (Odhner, 1922)	R	R				R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
<i>Cuthona foliata</i> (Forbes & Goodsir, 1839)	S	S				S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Cuthona gymnota</i> (Couthouy, 1838)	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Cuthona nana</i> (Alder & Hancock, 1842)	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Cuthona norvegica</i> (Odhner, 1929)	R	R				R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
<i>Cuthona pustulata</i> (Alder & Hancock, 1854)	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Cuthona rubescens</i> Picton & Brown, 1978	S	S				S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Cuthona viridis</i> (Forbes, 1840)	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Dendronotus frondosus</i> (Ascanius, 1774)	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Dendronotus robustus</i> Verrill, 1870	N	N				N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
<i>Doridunculus echinulatus</i> G. O. Sars, 1878	R	R				R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
<i>Doris nobilis</i> Odhner, 1907	R	R				R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
<i>Doris pseudoargus</i> (Rapp, 1827)	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Doto coronata</i> (Gmelin, 1791)	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Doto crassicornis</i> (M. Sars, 1870)	S	S				S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Doto cuspidata</i> Alder & Hancock, 1862	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

cont. next page

Table 1. Continued

Sector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
<i>Doto fragilis</i> (Forbes, 1838)	S		S	S						S	S	S															
<i>Doto koeneckeri</i> Lemche, 1976	R																										
<i>Embletonia pulchra</i> (Alder & Hancock, 1844)	S									S																	
<i>Eubranchius exiguus</i> (Alder & Hancock, 1848)	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Eubranchius farrani</i> (Alder & Hancock, 1844)	S									S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Eubranchius pallidus</i> (Alder & Hancock, 1842)	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Eubranchius tricolor</i> Forbes, 1838	X																										
<i>Eubranchius vittatus</i> (Alder & Hancock, 1842)	S		S							S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Facelina bostoniensis</i> (Couthouy, 1838)	S																										
<i>Facelina coronata</i> (Forbes & Goodsir, 1839)	S									S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Favorinus bianus</i> Lemche & Thompson, 1974	S																										
<i>Favorinus branchialis</i> (Rathke, 1806)	S		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Flabellina borealis</i> Odhner, 1922	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Flabellina gracilis</i> Alder & Hancock, 1844	S																										
<i>Flabellina lineata</i> (Lovén, 1846)	S																										
<i>Flabellina nobilis</i> Verrill, 1880	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Flabellina pedata</i> (Montagu, 1815)	S																										
<i>Flabellina pellucida</i> (Alder & Hancock, 1843)	S		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Flabellina salmonacea</i> Couthouy, 1838	S																										
<i>Flabellina verrucosa</i> (M. Sars, 1829)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Geitodoris planata</i> (Alder & Hancock, 1846)	S																										
<i>Gontioleis typica</i> M. Sars, 1861	S																										
<i>Gontiodoris nodosa</i> (Montagu, 1808)	X																										
<i>Hero formosa</i> (Lovén, 1841)	S		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Heterodoris robusta</i> Verrill & Emerton, 1882	S																										
<i>Janolus cristata</i> (delle Chiaje, 1841)	S																										
<i>Jorunna tomentosa</i> (Cuvier, 1804)	S		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Limacia clavigera</i> (Müller, 1776)	S		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Lophodoris danielsseni</i> (Friele & Hansen, 1876)	N																										
<i>Okenia pulchella</i> (Alder & Hancock, 1854)	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Onchidoris bilamellata</i> (L., 1767)	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Onchidoris depressa</i> (Alder & Hancock, 1842)	S																										
<i>Onchidoris inconspicua</i> (Alder & Hancock, 1851)	S																										
<i>Onchidoris luteocincta</i> (M. Sars, 1870)	S		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Onchidoris muricata</i> (Müller, 1776)	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Onchidoris pusilla</i> (Alder & Hancock, 1845)	S																										
<i>Patio dubia</i> (M. Sars, 1829)	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Table 1. Continued

Sector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
<i>Palto nolhus</i> (Johnston, 1838)								X			X															
<i>Polycera fueroensis</i> Lenche, 1929								S			S															
<i>Polycera quadrilineata</i> (Müller, 1776)		S						S		S	S	S	S	S	S	S										
<i>Rostanga rubra</i> (Risso, 1818)					S			S			S															
<i>Rostanga seidens</i> (Odhner, 1939)	R							S																		
<i>Tenellia adpersa</i> (Nordmann, 1845)	S							S																		
<i>Tergipes tergipes</i> (Forskål, 1775)	X							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<i>Triopella incisa</i> (G. O. Sars, 1872)	X	X						X																		
<i>Tritonia griegi</i> Odhner, 1922	S							S																		
<i>Tritonia hombergi</i> Cuvier, 1803	S							S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
<i>Tritonia lineata</i> Alder & Hancock, 1848	S							S		S																
<i>Tritonia plebeia</i> Johnston, 1828	S							S		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S

During the last 150 years, the Trondheimsfjord and adjacent coastal areas in Central Norway have had a special position concerning marine benthic diversity, beginning with bishop Gunnerus who in 1760 started investigations of the fjord, as a part of his nature studies and correspondence with Carl von Linné. But it was not until the works of Storm (1879a, 1879b), Norman (1893), Odhner (1926, 1939) and Dons (1942a, 1942b, 1942c) that nudibranchs were thoroughly investigated for this area. Recently, intensive investigations on the nudibranch fauna have been conducted by Evertsen (2001) and Evertsen & Bakken (2001), with preliminary investigations also from northern Norway (Evertsen & Bakken 2002). Our investigations are the first field-based studies on nudibranchs in Norway since the work of Carl Dons. The investigations started in September 1997 with the research project, "Nudibranchs in Central Norway". In order to compare our observations with literature data, an extensive literature survey was necessary, hence all detailed references to previously known records in the taxonomy section below. Literature studies quickly revealed that the taxonomy and distribution of many nudibranch taxa known from the Norwegian coast was differing from the information provided in Høisæter et al. (1997). During the project records of taxonomy, reproduction and feeding biology, as well as abundance and distribution have been recorded (Evertsen 2001). Here we present important data collected from this project regarding taxonomy and distribution, as a contribution to the knowledge of the biodiversity of this group for the Norwegian coast. Emphasis is given on material collected and observed based on field-work over a seven-year period, supplemented by museum material from the same area.

The main aims of this paper are: 1) exhaustive literature review relating to distribution of taxa along the Norwegian coast; 2) present data from field-work, mainly from Central Norway over a seven-year period; 3) complement data from field-work with museum material from the same area; 4) point out taxa in need of taxonomic revisions or further research; 5) present a revised distribution list of nudibranchs recorded along the Norwegian coast based on 1-3.

MATERIAL AND METHODS

Material and sampling

The present study is based on the following sources of material; 1) material collected during field-work in Central Norway (see study area below) in the period September 1997 through September 2005, 2) material collected during field-work in northern Norway in 2002 (Evertsen & Bakken 2002), 3) material collected during field-work in southern Norway in July 2005 this study, and 4) material from the collections of the Museum of Natural History and Archaeology, Norwegian University of Science and Technology (VM NTNU). All material present

at the VM collections have been examined and presented for each taxon by their collection reference numbers. Earlier revisions of the collections have been conducted by Odhner (1939) and Henning Lemche (unpublished). Specimens previously published by Odhner (1939) and Dons (1942a, 1942b, 1942c) have not been listed in the material examined sections below. Specimens sampled during our project have been deposited in the VM collections. The nudibranch collection at VM in September 2005 totals to 1630 records of 3624 specimens representing 73 species level taxa.

Field-work in Central Norway from 1997 to 2005 covers sampling in 93 different stations (Figure 2) and represents 496 SCUBA dives. Collection was done by SCUBA diving, and nudibranchs were handpicked into 500 ml plastic jars. Documentation was conducted with the aid of underwater photography in the field and in the laboratory with Nikonos V underwater cameras (with flashlights and extension tubes for macro photography). Specimens were anaesthetised in 7% MgCl₂ mixed 1:1 with sea water, preserved in a 4% formaldehyde solution in seawater, and later rinsed in distilled water and preserved in 75% ethanol.

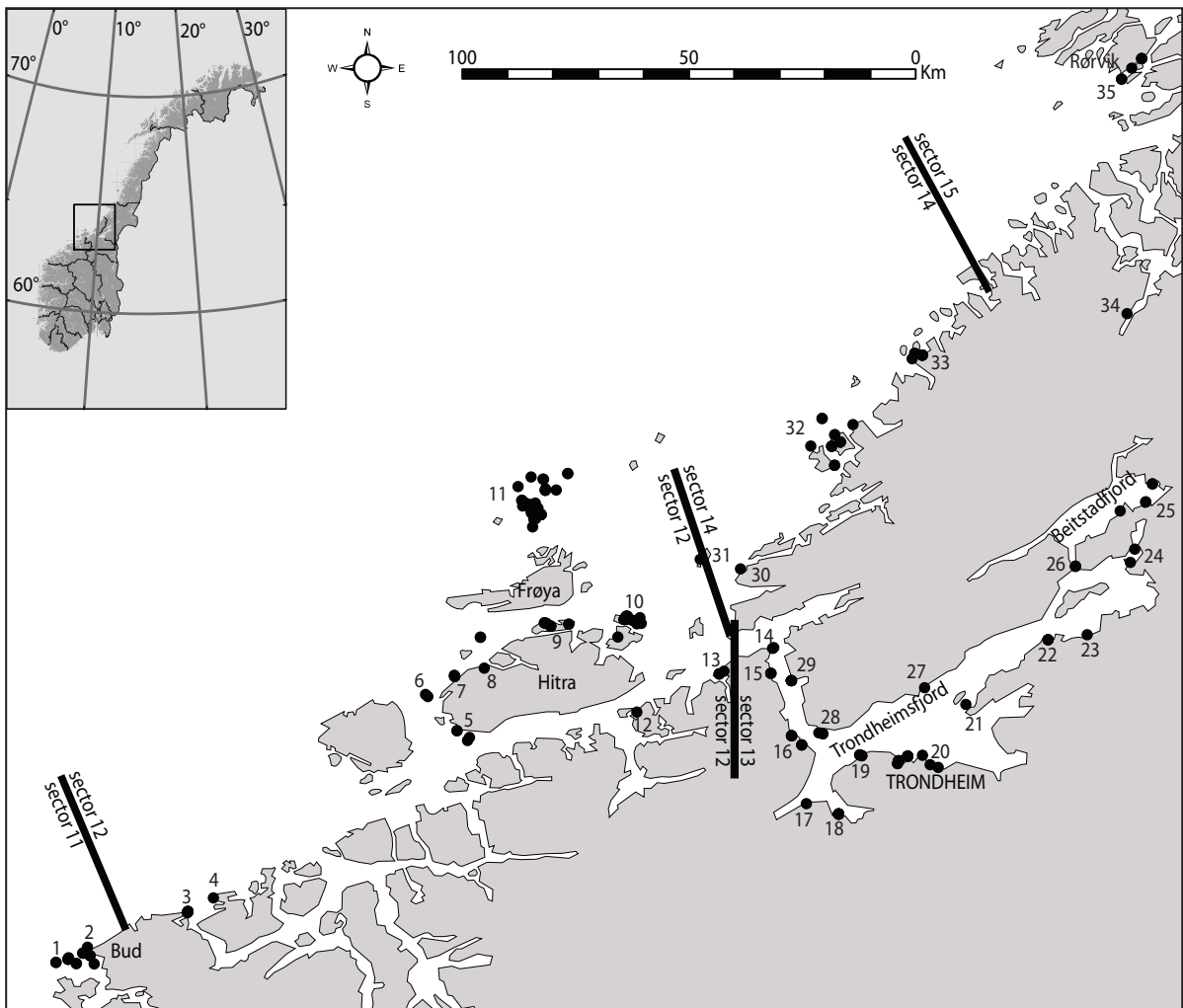


Figure 2. Coastal and fjord areas of Central Norway were study area for the project "Nudibranchs of Central Norway". The study area comprises sectors 11-15 (see Figure 1). All stations where samples and information was collected are plotted. Only unique stations are plotted, implying if a station is visited several times only a single plot is included. One plot may represent several closely spaced stations. Numbers represent localities visited, which are referred to in the "Material examined" for each species. Localities: 1, Bjørnsund; 2, Bud; 3, Straumsholmen; 4, Averøya; 5, Forsnes; 6, Sæbuøya; 7, Kvenvær; 8, Grefsnsvågen; 9, Dolmøya; 10, Ulvøya; 11, Mausund; 12, Sunde; 13, Sletvik; 14, Agdenes; 15, Kalurdalen; 16, Sållåtneset; 17, Tråsåvika; 18, Svalnestangen; 19, Flakk; 20, Trondheim: Trondhjem Biological Station, Munkholmen; 21, Tautra; 22, Ekne; 23, Skogn; 24, Rolsøya; Bossnesgrunnane; 25, Beitstadfjord: Kalven, Åbergholmen, Hemreskjæra; 26, Skarnsundet; 27, Hindrem; 28, Røberg; 29, Galgeneset; 30, Djupfest; 31, Tarva; 32, Stokkøya; 33, Bessaker; 34, Altbukta, Lygnin; 35, Rørvik, Nærøysund.

Specimens have also been obtained from benthic cruises in the Trondheimsfjord with the research vessel "Harry Borthen I". Intertidal collecting, including from floating stages and piers, has also occasionally been undertaken.

Collecting was always conducted within a conservation framework. Only specimens that were not possible to identified *in situ*, or species not documented from a specific area were collected. Common or easily identifiable specimens were not collected, but presence, abundance and biological data obtained *in situ*. This implies that not all the species observed and referred to in the text were preserved, and hence cannot be found in the material presented. Species that represent a new record, but which are not found in the collections, are referred to as observations only.

In the taxonomic section material sampled is given for each taxon. Number of specimens is given in brackets after the museum registration number. Abbreviations used are: D = dive, T = triangular dredge, G = Van Veen grab (0.1 m²), HP = collected by hand (littoral and piers); TBS = Trondhjem Biological Station in Trondheim; VM = Museum of Natural History and Archaeology, Norwegian University of Science and Technology.

Study area

The coast of Central Norway defined as our study area covers the area from Bud in Møre & Romsdal County (62° 55'N) to Rørvik in Nord-Trøndelag County (65° 10'N), representing sectors 11-15 in Brattegard & Holthe (1997). Bud and Bjørnsund that were visited by us several times are located immediately south of the border area between sectors 11 and 12, and registrations from sector 11 are therefore not representative for the whole sector. A plot of all stations covered by the project showing the study area is presented in Figure 2.

Most habitat types are represented within the study area. The coast of Central Norway is widely known for presence of large and productive kelp forests (Sjötun et al. 1995), dominated by *Laminaria hyperborea*. Bedrock and areas with boulders is found in the kelp forests and in littoral areas. Sand and muddy areas are widespread in small bays and in fjord areas, where the large Trondheimsfjord (135 km in length) is the largest within the area (Bakken 2000).

Taxonomy and records of distribution

Identifications are based on original descriptions and contemporary keys and identification literature. In the "Remarks" section for each species notes on taxonomy is given when necessary, including references to descriptions, primary literature and other relevant data relating to taxonomy, nomenclature and

geographic distribution. A list of synonymies is given for each species, listing the senior and junior synonyms used for a species from Norwegian waters, and references to identification literature are also listed.

As mentioned above primary literature has been consulted for data on distribution to make the distribution record for each taxon as complete as possible. Emendations to present knowledge by Høisæter et al. (1997) are recorded in "New records", meaning that new information is added to this list (Høisæter et al. 1997). It should be mentioned that a new edition of Brattegard & Holthe (1997) was published as an online edition in 2001 by the Directorate for Nature Management (<http://www.dirnat.no>). We have chosen to use the original edition as this is a printed edition available as a solid reference and, most important, it has been possible to keep track of most entries from the primary literature. Brattegard & Holthe (1997) gave each species a code defining: species with a southern distribution along the Norwegian coast (S) with a distribution limit along the coast, species having a northern distribution (N) with a distribution limit along the coast, or species with a pansectoral distribution (X) along the coast. Rare species are denoted with a R. Upon emendations of these codes based on new data presented here, this is accordingly mentioned under "Remarks".

RESULTS AND DISCUSSION OF TAXA

In total 81 species of nudibranchs are recorded from the coast of Norway. Results from our field-work in sectors 11 to 15 represent a total of 62 species recorded from 1997 to 2005, and covers sampling in 93 different stations (Figure 2) mainly through 496 SCUBA dives. Below we present not only the 62 species recorded by us but also all the 81 Norwegian species. All our results from field-work, with additional data from museum specimens at VM, along with corrections from the literature review are also presented in Table 1. Records in different sectors in the original list (Høisæter et al. 1997) that could not be accounted for in the literature are removed. New records and information published with geographical references after Høisæter et al. (1997) are included for each relevant taxon. Distribution of nudibranch species given in Table 1 is therefore a revision of Høisæter et al. (1997) based on the sources of material included here. Information on material not available through publications was not included. It is expected that more information is found in previously collected but not published material deposited in other museums.

An easily observed result obtained from field-work in the study area (sectors 11-15) is the many new records (Table 1). This signifies the importance of diving as a suitable method to study and collect nudibranchs in their environment.

In all the results sums up to represent 81 species reported from Norwegian waters, of which four species are added as new to the Norwegian fauna (*Cuthona rubescens*, *Polycera faeroensis*, *Eubranchus vittatus* and *Onchidoris depressa*), and the presence of two species that have previously been reported but not verified are confirmed (*Cuthona caerulea* and *Geitodoris planata*). From previously reported species we regard six as insufficiently supported or due to misidentifications (*Onchidoris aspersa*, *Onchidoris oblonga*, *Onchidoris sparsa*, *Thecacera virescens*, *Doto tuberculata* and *Flabellina browni*), which are consequently not verified as a part of the Norwegian fauna, and accordingly removed from Table 1.

ANTHOBRANCHIA

Aegiretidae P. Fischer, 1883

Aegires punctilucens (d'Orbigny, 1837)

Aegires punctilucens G.O. Sars 1878: 364.– Grieg 1897: 25.

Aegires punctilucens Friele & Grieg 1901: 117.

Aegires punctilucens Odhner 1922: 23.– Odhner 1939: 37.– Dons 1932: 17.– 1942a: 167.

Material examined: VM 11095 (1), Mausund, Aursøya (lykt), 63°52'21N 08°38'30'E, 17 April 2003, kelp forest, bedrock, 2 m, D. – VM 11097 (1), Mausund, Bukkholman, 63°52'28'N 08°37'17'E, 15 April 2003, kelp forest, bedrock, 16 m, D. – VM 11096 (1), Mausund, Aursøya (brygga), 63°52'18N 08°38'21E, 14 April 2003, bedrock, sand, 16 m, D. – VM 598 (1), Kvenvær, 63°31'55N 08°21'26E, 30 April 2001, kelp forest, bedrock, 7 m, D. – VM 48852 (1), Sæbuøya Hitra, 30 April 2005, stn 08-05, 12 m, D.

New records: Sectors 6 and 7 (Odhner 1922).

Remarks: Most records of this species from Norwegian waters are from the littoral zone (Odhner 1907; Dons 1932; 1942a). Our records are from the sublittoral zone, although shallow from 2 m to 16 m depth.

Triopella incisa (G.O. Sars 1872 (M. Sars MS))

Triopa incisa M. Sars in G.O. Sars 1872b: 35.

Triopella incisa G.O. Sars 1878: 310, tab. 27, fig. 3a-d, tab. XIV, fig. 9.– Norman 1893: 350.– Odhner 1922: 23.

Material examined: VM 1785 (1), the Trondheimsfjord, Agdeneståa, 63°38'44N 09°45'07E, 13 June 2001, coral (*Lophelia*) rubble, 200 m, T.

New records: Sector 2 (Odhner 1922), 12 (G.O. Sars 1878).

Remarks: In the publication of his father's manuscripts Sars (G.O. Sars 1872b) presented a short description of this species under the name *Triopa*. A few years later he emended the description and erected the new genus *Triopella* (G.O. Sars 1878). The emended description was far more detailed including details of the radula.

Triopella incisa is endemic to Norwegian waters and is recorded along the coast from the Oslofjord to Hammerfest (Odhner 1922) as single observations. Hence it is noted as pan-sectoral along the Norwegian coast (Table 1). A record from sector 1 (Høisæter et al. 1997) is not accounted for. Only a single specimen has been found in this study, on rubble of the scleractinian coral *Lophelia pertusa*.

Goniodorididae H. & A. Adams, 1854

Ancula gibbosa (Risso, 1818)

Ancula cristata Friele & Hansen 1876: 73.– G.O. Sars 1878: 364, tab. XIV, fig. 11.– Kükenthal & Weissenborn 1886: 786.– Odhner 1907: 77.– Grieg 1914b: 13.– Odhner 1922: 28.– Larsen 1925: 35, fig. 27-29, pl. 1, fig. 8.– Odhner 1939: 41.– Dons 1942b: 186.

Material examined: VM 10957 (1), Mausund, Aursøya (brygga), 63°52'18N 08°38'21E, 14 April 2003, bedrock, sand, 12 m, D. – VM 625 (1), Vingleia fyr, Borholman, 63°57'14N 08°46'06E, 20 August 1999, bedrock, 11 m, D. – VM 624 (1), Trondheimsfjorden, Borgenfjorden, 63°52'27N 11°18'04'E, 01 July 1974, sand, 7 m, D. – VM 33049 (2), Mausund Ellingholman, 63°53.15N 08°36.75E, 05 April 2004, St. 08-06, 15-25 m, D. – VM 33050 (2), Mausund Bukkholman, 63°52.71N 08°37.35E, 04 April 2004, St. 07-04, 5-20 m, D. – VM 33051 (1), Bud Rundholmen, 62°54.04N 06°54.65E, 20 May 2004, 10-25 m, D. – VM 33052 (1), Bud Frettaskjæret (Fretten), 62°54.23N 06°52.64E, 22 May 2004, 25 m, D. – VM 48019 (2), Bukkholman, Mausund, 63° 52.727N 8°37.172E, 20 March 2005, 20 m, D.

New records: Sector 8 (Friele & Hansen 1876; Kükenthal & Weissenborn 1886; Grieg 1914b), 13 (Odhner 1939; Dons 1942b).

Remarks: Illustrations of radula was presented by G.O. Sars (1878) that completed earlier descriptions by Alder & Hancock (1847). It is also well described from the Oslofjord (Drøbaksundet) by Larsen (1925). Records from sector 1 (Høisæter et al. 1997) are not accounted for, and the records from Havøysund (Odhner 1939, Dons 1942b) is corrected from sector 22 to sector 23 (Table 1).

Goniodoris nodosa (Montagu, 1808)

Goniodoris nodosa G.O. Sars 1878: 364, tab. XIV, fig. 6.– Grieg 1913: 6.– Odhner 1922: 25.– Larsen 1925: 34, fig. 25 and 26.– Odhner 1939: 41.– Dons 1942b: 186.– Evertsen & Bakken 2002: 20.

Lomanotus marmoratus G.O. Sars 1878: ann.

Material examined: VM 10952 (2), Mausund, Oljørnsabåan, 63°52'46N 08°39'03E, 13 April 2003, kelp forest, bedrock, 20 m, D. – VM 1537 (2), Trondheimsfjorden, Ekne, 63°41'57N 11°00'13E, 01 August 1999, bedrock, 0-31 m, D. – VM 1544 (1),

Stokkøya, Flesa, 64°06'25N 09°53'22E, 24 April 1999, bedrock, 11 m, D. – VM 1541 (1), Grefsnsvågen, Torsoya, 63°36'51N 08°27'08E, 11 February 1999, bedrock, 0-20 m, D. – VM 1538 (2), Vikna, Rørvik, 64°51'43N 11°14'15E, 01 October 1998, bedrock, 10-20 m, D. – VM 1545, Ulvøya, Ellesvikholmen, 63°40'41N 09°05'52E, 09 August 1998, kelp forest, 10-17 m, D. – VM 1540 (1), Mausund, Laksholman, 63°52'08N 08°37'22E, 04 April 1998, bedrock, sand, 0-21 m, D. – VM 1542 (2), Eide, Straumholmen, 63°00'39N 07°18'29E, 13 February 1998, cliff, 18 m, D. – VM 1539 (1), Ulvøya, Hjertøyskjera, 63°40'35N 09°07'21E, 02 January 1998, bedrock, 10-14 m, D. – VM 1543 (2), Kvenvær, Sæbuøya, 63°29'25N 08°14'14E, 29 September 1997, bedrock, 15 m, D. – VM 33021 (2), Mausund Bukkholman, 63°52.71'N 08°37.35'E, stn 07-04, bedrock, 04 April 2004, 5-20 m, D. – VM 33022 (2), Bud Frettaskjæret (Fretten), 62°54.23'N 06°52.64'E, 22 May 2004, 25 m, D.
New records: Sector 7 (Odhner 1922), 8 (Grieg 1913), 10 (Odhner 1922), 13 (VM 1537), 15 (VM 1538).

Remarks: *Goniodoris nodosa* was recorded (as *Lomanotus marmoratus*) from the Norwegian coast by G.O. Sars (1878) in his distribution table, but was corrected to *Goniodoris nodosa* in the annotations. It is not possible to account for records in sectors 1 and 16.

***Lophodoris danielsseni* Friele & Hansen, 1876**

Goniodoris danielsseni Friele & Hansen 1876: 72.

Lophodoris danielsseni G.O. Sars 1878: tab. XIV, fig. 7.–Odhner 1922: 25, fig. 9.–Just & Edmunds 1985: 62, pl. 27, fig. A-E.

Material examined: VM 51735 (1), Trondheimsfjorden TBS, 4 June 2005, stn 17-05, 22 m, D.

New records: Sector 11 and 14 (Odhner 1922).

Remarks: This is a rare species previously only recorded from Greenland (Just & Edmunds 1985) and Norway. As it appears from where this species is recorded it has a northern distribution, and the distribution annotation is changed accordingly (Table 1). The original description in Friele & Hansen (1876: 72) is short but informative. Illustrations of the radula were given in G.O. Sars (1878) and supplementary descriptions were given in Odhner (1922). Just & Edmunds (1985) presented colour plates made by Henning Lemche of this species.

***Okenia aspersa* (Alder & Hancock, 1845)**

Remarks: See Remarks for *Okenia pulchella*.

***Okenia pulchella* (Alder & Hancock, 1854)**

Idalia cirrigera G.O. Sars 1872a:100.

Idalia pulchella G.O. Sars 1878: 313.–Krause 1895: 96.–Odhner 1922: 28.–Odhner 1939: 41.

Idalia pulchella var. *fusca* Odhner 1907: 76.

Idalia aspersa Friele & Grieg 1901: 117.

Material examined: VM 33066 (1), Bud, 14 July 1931, shell sand, 20 m. – VM 51738 (1), Brattøra Research Centre Trondheim, 5 May 2005, coll. D. Altin.

New records: Sectors 2 and 14 (Odhner 1922), 18 (G.O. Sars 1878), 22 (Friele & Grieg 1901).

Remarks: This species has a complicated taxonomic history as several early authors have used different names and synonyms. Three species were described at the same time: *Idalia aspersa* Alder & Hancock, 1845, *Idalia cirrigera* Philippi, 1844 and *Idalia caudata* Örstedt, 1844. Lovén (1846) synonymised *I. aspersa* and *Idalia caudata* with *Idalia cirrigera*. Odhner (1907) later discovered that Alder & Hancock (1854) had described *Idalia pulchella*, a species he at first considered being similar to *I. cirrigera* but then found distinguishing characteristics and described a new subspecies (as *Idalia pulchella* var. *fusca*). He retained *I. aspersa* as a separate species (Odhner 1907). Thompson & Brown (1984) lists Odhner's species among the synonymies of *O. pulchella*.

Okenia pulchella was recorded from Hammerfest (Northern Norway) as *Idalia aspersa* Alder & Hancock, 1845 and *Idalia cirrigera* Philippi, 1844 by Friele & Grieg (1901). Friele & Grieg (1901) also referred to G.O. Sars (1872a), who reported *Idalia cirrigera* from Ålesund, but who later corrected this to *Okenia pulchella* (G.O. Sars 1878).

It is very likely that different authors referring to *O. aspersa* (and *I. cirrigera*) have encountered specimens of *O. pulchella*. Hence *O. aspersa* when given as a valid species (Thompson & Brown 1984), is not recorded from Norwegian waters. In the distribution list (Table 1) *O. aspersa* is removed and the references to records given above are accordingly referred to *O. pulchella*.

A single specimen was found in water tanks at Brattøra Research Centre in Trondheim in June 2005. The Centre takes water from the fjord at 40 m depth, which must have been the only way the specimen reported here could have entered the tanks. It has not been possible to verify previous records of this species from sector 13, but the single specimen found in this study verifies the presence in the Trondheimsfjord (Table 1).

Onchidorididae Gray, 1854

***Acanthodoris pilosa* (O.F. Müller, 1788)**

Doris fusca Müller 1776: 229 (partim).–Asbjørnsen 1854: 336.

Doris pilosa Müller 1789: 7.–M. Sars 1851: 195.–M. Sars 1855: 68.–Danielssen 1861: 37.–Brögger 1872: 124.

Acanthodoris pilosa Friele & Hansen 1876: 71.–G.O. Sars 1878: 308, tab. XIV, fig. 4.–Bergh 1880: 91.–Aurivillius 1886: 37.–Krause 1895: 96.–Grieg 1897: 22.–1898: 23.–Nordgaard 1907: 33.–Odhner 1907: 71.–1922: 24.–1926: 25.–1939: 39.–Larsen 1925: 28, fig. 20-21, pl. I, fig. 4a-b.–Dons 1942b: 185.–Evertsen & Bakken 2002: 17.

Material examined: VM 543 (1), Agdenes Sletvik, 63°35'11N 09°31.29'E, 19 June 2002, littoral, HP. – VM 570 (1), Beitstadvfjorden Kalven, 63°59'10N 11°22'26E, 26 May 2001, boulders, sand, 16 m, D. – VM 572 (1), Kvenvær, 63°31'55N 08°21'26E, 30 April 2001, kelp forest, bedrock, 0-20 m, D. – VM 571 (1), Vingleia fyr Svarten, 63°55'09N 08°40'32E, 16 August 1999, bedrock, 15 m, D. – VM 573 (1), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 09 April 1998, cliff, 30 m, D. – VM 491 (1), Romahelmsfjorden Mofjorden, 60°46'51N 05°45'19E, 13 September 1905. – VM 511 (3), VM 560 (1), Lebesby Laksefjorden Torskfjorden, 70°41'02N 27°03'19E, 07 September 1932. – VM 531 (3), Lebesby Laksefjorden Godvika, 70°49'28N 26°42'14E, 06 September 1932, littoral, HP. – VM 33059, Øygarden, Pollane, Skogsøy, 16 September 1936, littoral. – VM 33054 (1), Bud Bolungskjæra, 62°53.14N 06°55.95E, 22 May 2004, 15-18 m, D. – VM 33055 (1), Hitra Ulvøya Seibalen, 63°41.047N 09°05.692E, 08 August 2003, 22 m, D.

New records: Sectors 6 (Odhner 1922), 9 (Grieg 1897, VM 491), 21 (Aurivillius 1886, Krause 1895, Odhner 1939), 24 (Dons 1942b, Odhner 1939, this study: VM 511, VM 560, VM 531).

Remarks: There has been confusion about this species in the literature. The description of *Doris pilosa* in Müller (1781 and 1789) is the only one that convincingly represents this taxon, as the illustration of this species is not correct (Lovén 1846, Alder & Hancock 1851). In the same publications by Müller the illustration of his *Doris fusca* fits the description of *D. pilosa* (Friele & Hansen 1876, G.O. Sars 1878, Larsen 1925). It seems as if the illustrations have been misplaced (Alder & Hancock 1851). *D. fusca* was already described by Müller (1776) but this description refers to *Doris bilamellata* Linnaeus, 1767 (= *Onchidoris bilamellata*). This means that earlier references in the literature of the two species *O. fusca* and *O. bilamellata* should be examined carefully as they may have been mixed up.

Contemporary literature described this species thoroughly (e.g. Thompson & Brown 1984; Thompson 1988), and it is not easily confused with others when encountered. Our observations are numerous. Searches in the literature give no proof of records from the sectors 1 and 7 (Table 1).

***Adalaria loveni* (Alder & Hancock, 1862)**

Doris muricata M. Sars 1829: 15, taf. 2, fig. 7-8. – Lovén 1846: 137. – M. Sars 1851: 194.

Doris muricata var. Sars Brøgger 1872: 124.

Lamellidoris loveni Grieg 1897: 25. – Grieg 1898: 23. – Friele & Hansen 1876: 71. – G.O. Sars 1878: 364 tab. XIV, fig. 1.

Adalaria loveni Bergh 1880: 85. – Grieg 1914: 91. – Larsen 1925: 30. – Odhner 1922: 24. – Odhner 1926: 26. – Odhner 1939: 40. – Løyning 1927: 250. – Dons 1942b: 186. – Just & Edmunds 1985: 78.

Material examined: VM 5505 (4), Agdenes Kalurdalen, 63°35'46N 09°45'10E, 20 May 2002, bedrock, 15 m, D. – VM 10956 (1), Bjørnsund, 62°53'18N 06°49'03E, 17 August 2001, kelp forest, bedrocks, sand, 5 m, D. – VM 575 (5), Hitra Grefsnesvågen, 63°33'15N 08°29'01E, 11 February 1999, bedrock, 0-20 m, D. – VM 584 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 14 December 1998, bedrock, 31 m, D. – VM 577 (1), Bessaker, 64°14'50N 10°19'16E, 26 November 1998, cliff, 5-20 m, D. – VM 578 (4), Bessaker, 64°14'50N 10°19'16E, 26 November 1998, cliff, 5-18 m, D. – VM 579 (9), Bessaker, 64°14'50N 10°19'16E, 26 December 1998, bedrock, sand, 0-20 m, D. – VM 574 (5), Vikna Nærøysundet, 64°49'09N 11°08'59E, 01 October 1998, bedrock, 5-21 m, D. – VM 583 (2), Vikna Rørvik, 64°51'43N 11°14'15E, 08 September 1998, kelp forest, 5-15 m, D. – VM 581 (3), Bjørnsund, 62°53'18N 06°49'03E, 18 August 1998, kelp forest, 18 m, D. – VM 585 (5), Ulvøya, 63°40'38N 09°04'54E, 07 August 1998, kelp forest, 0-10 m, D. – VM 576 (2), Eide Straumsholmen, 63°00'39N 07°18'29E, 14 February 1998, bedrock, 18 m, D. – VM 580 (2), Kvenvær Sæbuøya, 63°29'12N 08°14'53E, 29 September 1997, kelp forest, 15 m, D. – VM 33065 (6), Florø, 02 April 1934, littoral.

New records: Sectors 6 (Odhner 1922), 15 this study VM574, VM583.

Remarks: Described as *Doris muricata*, M. Sars (1829) presented a good description of this species. Illustrations of the radula were later given by G.O. Sars (1878).

***Adalaria proxima* (Alder & Hancock, 1852)**

Doris proxima Alder & Hancock, 1852: part VI, fam. 1, pl. 9, fig. 10-16.

Lamellidoris proxima G.O. Sars 1878: 309.

Adalaria proxima Odhner 1907: 73. – Odhner 1922: 24. – 1926: 25. – 1939: 39. – Dons 1942b: 186.

Material examined: VM 594 (1), Eide Straumsholmen, 63°00'39N 07°18'29E, 29 February 2000, bedrock, 5-10 m, D. – VM 597 (1), Eide Straumsholmen, 63°00'39N 07°18'29E, 24 February 2000, bedrock, 5-10 m, D. – VM 595 (1), Trondheimsfjorden Sällåtneset, 63°27'35N 09°54'56E, 23 February 1999, sand, 2-10 m, D. – VM 596 (2), Bjørnsund Trollholman, 62°52'54N 06°51'19E, 19 August 1998, kelp forest, 7 m, D. – VM 593 (2), Dolmøya, 63°39'00N 08°45'31E, 28 March 1998, kelp forest, 0-21 m, D.

New records: Sector 11 this study VM596.

Remarks. This species may easily be mixed up with *O. muricata*, but Thompson (1958) gave good descriptions to separate the *A. proxima* from *O. muricata*. It has been common to refer to this species as described by Alder & Hancock in 1854, but it was described and illustrated in their publication from 1852.

Records from sectors 1 and 8 (Høisæter et al. 1997) are not accounted for (Table 1).

***Doridunculus echinulatus* G.O. Sars, 1878**

Doridunculus echinulatus G.O. Sars 1878: 309, tab. 27, fig. 2 a-d, tab. XIV, fig. 5.–Odhner 1907: 100, pl. I, fig. 22-23.–1922: 24.–1926: 25.–1939: 39.

Remarks: This rare deep water species is endemic to Scandinavian waters. It was originally described from Risvær, Lofoten (G.O. Sars 1878), and has been recorded from Træna and the Trondheimsfjord (Odhner 1922, 1926). It has also been recorded from Skagerrak when Odhner (1907) described *D. pentabranhus*, but which he later referred to as a larger specimen of *D. echinulatus* (Odhner 1926).

The erroneous records in Høysæter et al. (1997) has been corrected to a record at Galgenes in the Trondheimsfjord in sector 13 (Odhner 1926), Selsøyvik near Træna south in sector 17 (Odhner 1922) and the type locality at Risvær in Lofoten (sector 18) (Table 1).

***Onchidoris bilamellata* (L., 1767)**

Doris bilamellata Linnaeus 1767: 1083.–M. Sars 1859: 50.

Doris echinata Asbjørnsen 1854: 337.

Doris fusca Müller 1776: 229 (partim).

Doris muricata Sars 1851: 194.

Lamellidoris bilamellata Friele & Hansen 1876: 71.–G.O. Sars 1878: 306.–Krause 1895: 95.–Odhner 1907: 73.–1922: 24.

Onchidoris bilamellatus Odhner 1926: 27.

Onchidoris bilamellata Dons 1942b: 186.–Odhner 1939: 40.–Evertsen & Bakken 2002: 20.

Material examined: VM 1593 (2), Kvenvær, 63°31'55N 08°21'26E, 30 April 2001, kelp forest, bedrock, 0-20 m, D. – VM 1589 (1), Trondheimsfjorden Djupvika, 63°27'25 N 10°27'04E, 30 April 2000, sand, boulders, 4 m, D. – VM 1591 (1), Trondheimsfjorden Ranheimsbukta, 63°26'08N 10°31'27E, 09 May 1999, littoral, HP. – VM 1588 (1), VM 1590 (1), VM 1594 (1), VM 1598 (9), Trondheimsfjorden Skarnsundet, 63°51'02N 11°04'32E, 17 April 1999, bedrock, 8 m, D. – VM 1587 (1), Hitra Grefsnsvågen Torsøya, 63°36'51N 08°27'08E, 11 February 1999, bedrock, 0-20 m, D. – VM 1597 (1), Hitra Ulvøya Seibalen, 63°41'01N 09°05'25E, 30 May 1998, bedrock, 13 m, D. – VM 1595 (1), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 09 April 1998, cliff, 8 m, D. – VM 1592 (1), Mausund Bukkholman, 63°52'28N 08°37'17E, 05 April 1998, bedrock, 5 m, D. – VM 33069 (6), Frøya Sistranda, 25 March 1943, coll. C. Dons, littoral.

New records: Sector 10 (Odhner 1922), 19 (Odhner 1939), 21 (Krause 1895), 26 (Norman 1902).

Remarks: This species has been mixed up with *Acanthodoris pilosa* in the literature, see remarks for this species for further details. As a result some records may have been mixed, and records in sectors 1 and 9 could not be accounted for (Table 1).

***Onchidoris depressa* (Alder & Hancock, 1842)**

Material examined: VM 20195 (1), Trondheimsfjorden Rødberg, 12 May 1936, coll. C. Dons, 200 m, T.

Remarks: This species has not earlier been reported from Norwegian waters even if found by Dons in 1936. According to a label in the vial containing the single specimen it had been identified by Odhner, but was obviously not published in his paper treating material from the same collection (Odhner 1939). It confirms well with the description in Thompson and Brown (1984). The specimen is intact but fragile.

***Onchidoris inconspicua* (Alder & Hancock, 1851)**

Onchidoris inconspicua Alder & Hancock 1851: part V, fam. 1, pl. 12, fig. 9-16.–Moen & Svendsen 1999: 292.

New records: Sector 6 (Moen & Svendsen 1999).

Remarks: This species was recently recorded for the first time from Norwegian waters (Moen & Svendsen 1999), the occurrence in sector 6 is so far the only known record.

***Onchidoris luteocincta* (M.Sars, 1870)**

Doris luteocincta M. Sars, 1870: 189.

Lamellidoris luteocincta Odhner 1922: 25.–Larsen 1925: 51.

Diaphorodoris luteocincta Moen & Svendsen 1999: 294.

Onchidoris luteocincta G.O. Sars 1878: 364, tab. XIV, fig. 3.

Material examined: VM 11103 (1), Bud Rundholmen, 62°54'02N 06°54'33E, 18 May 2003, bedrock, 10-20 m, D. – VM 33016 (2), Bud Rundholmen, 20 May 2004, 10-25 m, D. – VM 33017 (1), Bud Frettaskjæret (Fretten), 62°54.23'N 06°52.64'E, 22 May 2004, 25 m, D. – VM 11102 (3), Mausund Aursøya (brygga), 63°52'18N 08°38'21E, 14 April 2003, sand, boulders, 22-26 m, D. – VM 11104 (1), Bjørnsund, 62°53'18N 06°49'03E, 17 August 2001, kelp forest, bedrock, sand, 5 m, D. – VM 1580 (3), Hitra Forsnes, 63°25'32N 08°23'31E, 14 July 2000, kelp forest, sand, 10-20 m, D. – VM 1581 (2), Mausund Bukkholman, 63°52'28N 08°37'17E, 15 April 2000, kelp forest, bedrock, 10-20 m, D. – VM 50526 (2), Knubben, Kragerø. 58° 49.068'N 09° 28.046'E, 27 May 2005, 15 m, D. – VM 50558 (1), Bremerodden, Farsund, 58° 03.559'N 06° 52.389'E, 28 July 2005, 3 m, D.

New records: Sector 6, 11, 12 (this study).

Remarks. We have often found this species in open coastal areas, and when encountered it has been found in large numbers. The original description by M. Sars (1870) was later enhanced with illustrations of the radula by G.O. Sars (1878). Colour plates of the species were given in Just & Edmunds (1985). It has not been possible to verify records from sectors 1 and 9 (Table 1).

***Onchidoris muricata* (Müller, 1776)**

Doris aspera Kükenthal & Weissenborn 1886: 786.

Doris muricata M. Sars 1839: 156.– 1855: 68.– Asbjørnsen 1854: 336.– Danielssen 1861: 37.– Brøgger 1872: 124.

Lamellidoris muricata Friele & Hansen 1876: 71.– G.O. Sars 1878: 307.– Bergh 1880: 72.– Aurivillius 1886: 37.– Krause 1895: 95.– Grieg 1897: 22.– 1914a: 91.– Friele & Grieg 1901: 116.– Odhner 1907: 74.– 1922: 25.– Larsen 1925: 31.– Behrentz 1931.

Onchidoris muricatus Odhner 1926: 26.– Løyning 1927: 251.

Onchidoris muricata Løyning 1927: 251.– Odhner 1939: 40.– Dons 1942b: 186.– Evertsen & Bakken 2002: 20.

Material examined: VM 10955 (1), Mausund Vassøya, 63°51'25N 08°38'12E, 18 April 2003, kelp forest, bedrock, sand, 8 m, D. – VM 5522 (1), Trondheimsfjorden Kalurdalen, 63°35'46N 09°45'10E, 20 May 2002, bedrock, 10 m, D. – VM 1654, Trondheimsfjorden Beitstadjfjorden Kalven, 63°59'10N 11°22'26E, 26 May 2001, boulders, sand, 5 m, D. – VM 1618 (1), Stokkøya Storskjæret, 64°03'02N 09°50'56E, 05 October 2000, kelp forest, boulders, 5 m, D. – VM 1621 (4), Stokkøya Flesa, 64°06'25N 09°53'22E, 03 October 2000, kelp forest, bedrock, 7 m, D. – VM 1622 (3), VM 1650 (1), Eide Straumsholmen, 63°00'39N 07°18'29E, 24 February 2000, bedrock, 0-10 m, D. – VM 1624(1), Dolmøya Vadholmen, 63°39'19N 08°43'49E, 28 September 1999, bedrock, 18 m, D. – VM 1620 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 22 February 1999, bedrock, 0-5 m, D. – VM 1657 (1), Trondheimsfjorden Svalnestangen, 15 December 1998, bedrock, 25 m, D. – VM 1656 (5), Stokkøya Maltsekken, 64°01'00N 09°57'45E, 06 February 1999, kelp forest, 7 m, D. – VM 1625 (1), Grefsnsvågen Torsøya, 63°36'51N 08°27'08E, 04 February 1999, bedrock, 0-20 m, D. – VM 1632 (1), Bessaker Bonvika, 64°15'00N 10°17'07E, 29 November 1998, kelp forest, 8 m, D. – VM 1623 (1), VM 1652 (1), Bessaker, 64°14'50N 10°19'16E, 26 November 1998, boulder, sand, 5-20 m, D. – VM 1651 (2), Vikna Nærøysundet ved fyret, 64°50'31N 11°11'37E, 01 October 1998, bedrock, 5-21 m, D. – VM 1626 (50), Ulvøya, 63°40'38N 09°04'54E, 07 August 1998, kelp forest, 0-10 m, D. – VM 1655 (1), Ulvøya, 31 May 1998, kelp forest, 5 m, D. – VM 1653 (4), Trondheimsfjorden Beitstadjfjorden, 63°51'02N 11°04'32E, 10 April 1998, boulders, mud, 5 m, D. – VM 1619 (4), Mausund, 63°52'04N 08°40'02E, 04 April 1998, bedrock, 5 m, D. – VM 1617 (1), Eide Straumsholmen, 63°00'39N 07°18'29E, 14 February 1998, bedrock, 5 m, D. – VM 1631 (2), Ulvøya Seibalen, 63°41'01N 09°05'25E, 30 May 1998, bedrock, 8 m, D. – VM 1697 (3), Rødøyfjorden Rødøy, 66°39'44N 13°04'41E, 29 June 1934, littoral, HP. – VM 1661 (1), Stabbfjorden Helløya, 66°54'26N 13°24'22E, 25 July 1933, littoral, HP. – VM 33060 (1), Trondheimsfjorden TBS, littoral. – VM 33019 (1); Bud Frettaskjæret (Fretten), 62°54.23'N 06°52.64'E, 22 May 2004, 25 m, D. – VM 33020 (5), Mausund Bukkholman, 63°52.71'N 08°37.35'E, st. 07-04, hardbunn, 04 April 2004, 5-20 m, D. – VM 50529 (1), Knubben, Kragerø, 58° 48.986'N 09° 28.274'E,

24 July 2005, 10-20 m, D. – VM 50555 (1), Rødskjæra, Kragerø, 58° 49.537'N 09° 29.096'E, 24 July 2005, 10-17 m, D.

New records: Sector 9 (Grieg 1897), 17 (Odhner 1939, Dons 1942b, VM 1697, VM 1661), 20 (Krause 1895), 24 (G.O. Sars 1878, Odhner 1939, Dons 1942b).

Remarks: This species was originally described from the Faroe Islands, but the original short description is inadequate making it difficult to judge which species Müller really described (Bergh 1880). *Doris muricata* Sars, 1829 as referred to by Lovén (1849) as *D. muricata* var. b, is *O. muricata*, while *Doris muricata* var. a Lovén, 1849 is *Adalaria loveni* (Bergh 1880). M. Sars (1851) described two varieties of *Doris muricata*, of which the first is *A. loveni*, and where the other is *O. bilamellata* (M. Sars 1859, Larsen 1925). Due to this confusion 19th century records should be treated with caution regarding this species.

***Onchidoris oblonga* (Alder & Hancock, 1845)**

Onchidoris oblonga Thompson & Brown 1984: 59-60, fig. 12c, pl. 15a,b.– Thompson 1988: 188.

Remarks: This species was reported from southern Norway in Thompson & Brown (1984) and Thompson (1988), but with no primary source or indication of material. The reference to this species in Høisæter (1986) and Høisæter et al. (1997) from sector 6, and from sector 8 as a doubtful record, was most likely based on Thompson & Brown. As there are no confirmed records of specimens found in Norway we do not regard this species as a part of the Norwegian fauna, and it is removed from Table 1.

***Onchidoris pusilla* (Alder & Hancock, 1845)**

Lamellidoris pusilla G.O. Sars 1878: 364, tab. XIV, fig. 2.– Friele & Grieg 1901: 116.– Larsen 1925: 51.
Onchidoris pusilla Thompson & Brown 1984: 62.

Remarks: This is a southern species known from only a few records in Norwegian waters. Observations with specific interest are Larsen (1925) from the Oslofjord and Friele & Grieg (1901) from the Sognefjord. Records from sectors 5 and 8 (Høisæter et al. 1997) could not be accounted for (Table 1). A detailed description including illustrations of the radula of Norwegian specimens was given by G.O. Sars (1878).

***Onchidoris sparsa* (Alder & Hancock, 1846)**

Remarks: This species was erroneously recorded from Norwegian waters by Høisæter (1986) who referred to Just & Edmunds (1985 = Platts 1985) as source for his information. It was however not mentioned from Norwegian waters in this work and it is omitted in Høisæter et al. (1997). It is therefore not considered to be a part of the Norwegian fauna.

Dorididae Rafinesque, 1815***Doris nobilis* Odhner, 1907**

Doris nobilis Odhner 1907: 99, pl. I, fig. 14-18.– 1926: 20, fig. 14-17.– 1939: 33.

Remarks: This species has only been recorded from the Swedish west coast (Odhner 1907), Hitra (Odhner 1926) (Figure 2) and the Trondheimsfjord (Odhner 1926, 1939) and it is endemic to Scandinavian waters. It is similar to *D. pseudoargus* and should be given a closer study in comparison to *D. pseudoargus* to see if its distribution is wider than previously known, and to describe morphological variations from live specimens.

***Doris pseudoargus* Rapp, 1827**

Doris tuberculata M. Sars 1851: 195.– Asbjørnsen 1854: 336.– M. Sars 1855: 68.– Koren 1857: 93.– M. Sars 1859: 50.– G.O. Sars 1878: 304, tab. XIII, fig. 2.– Grieg 1897: 22.– 1898: 23.– Odhner 1922: 22.– Larsen 1925: 19, fig. 11a,b, pl. I, fig. 3a,b.

Doris areolata Stuwitz 1836: 76.

Archidoris tuberculata Odhner 1926: 23.– 1939: 34.– Løyning 1927: 249.– Dons 1942a: 167.

Archidoris tuberculata var. *flammea* Odhner 1926: 23.

Archidoris pseudoargus Evertsen & Bakken 2002: 17-18.

Material examined: VM 778 (1), Bjørnsund, 62°53'18N 06°49'03E, 02 October 2001, kelp forest, bedrock, sand, 0-30 m, D. – VM 792 (3), Agdenes Sletvik, 63°35'11N 09°31'29E, 21 June 2001, littoral, HP. – VM 779 (1), Kvenvær, 63°31'55N 08°21'26E, 30 April 2001, kelp forest, bedrock, 0-20 m, D. – VM 777 (1), VM 791 (1) Snillfjord Sunde, 63°29'48N 09°10'32E, 04 November 2000, boulders, sand, 6 m, D. – VM 776 (1), Stokkøya Pålodden, 64°05'59N 10°01'51E, 03 October 2000, kelp forest, bedrock, 18 m, D. – VM 782 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 24 February 2000, bedrock, mud, 10-30 m, D. – VM 780 (1), VM 781 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 22 February 2000, bedrock, mud, 0-30 m, D. – VM 775 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 15 December 1999, pier pole, 3 m, D. – VM 784 (5), Dolmøya Vadholmen, 63°39'19N 08°43'49E, 28 September 1999, bedrock, 18 m, D. – VM 774 (1), Stokkøya Maltsekken, 64°01'00N 09°57'45E, 25 April 1999, bedrock, 32 m, D. – VM 768 (1), Stokkøya Svartneset, 64°04'37N 09°57'08E, 23 April 1999, bedrock, 12 m, D. – VM 773 (1), Mausund Tvillingholman, 63°53'12N 08°35'44E, 28 March 1999, bedrock, 15 m, D. – VM 789 (1), Bessaker, 64°14'50N 10°19'16E, 28 November 1998, bedrock, 18 m, D. – VM 788 (3), Vikna Nærøysundet ved fyret, 64°50'31N 11°11'37E, 01 October 1998, kelp forest, 10-20 m, D. – VM 772 (1), Ulvøya Ellesvikholmen, 63°40'41N 09°05'52E, 09 August 1998, kelp forest, 14-17 m, D. – VM 770 (1), Agdenes Sletvik, 63°35'11N 09°31'29E, 10 June 1998, littoral, HP. – VM 790 (3), Ulvøya Sjøbrøyøya, 63°40'14N 09°08'23E, 31 May 1998,

bedrock, 5-15 m, D. – VM 786 (2), Dolmøya Knutøyskjæran, 63°39'25N 08°50'15E, 29 March 1998, bedrock, 6 m, D. – VM 767 (2), Ulvøya Hjertøyskjera, 63°40'35N 09°07'21E, 02 January 1998, bedrock, 14 m, D. – VM 771 (4), Agdenes Sletvik, 63°35'11N 09°31'29E, 01 June 1998, littoral, HP. – VM 769 (1), Agdenes Sletvik, 63°35'11N 09°31'29 E, 11 June 1997, littoral, HP. – VM 758 (2), Vega Rosøya, 65°49'34N 12°19'42E, 26 July 1933, littoral, HP. – VM 33061 (5), Vallahund, Koet, 63°49'18N 09°41'44E, 01 June 1973, bedrock, 30 m, D.

New records: Sectors 3 (Odhner 1922), 11 (Odhner 1939, Dons 1942a), 14 (Odhner 1926, Odhner 1939, Dons 1942a, VM 776, VM 774, VM 768, VM 789), 15 (Odhner 1939, Dons 1942a, VM 788), 16 (Odhner 1939, Dons 1942a, VM 758), 17 and 18 (G.O. Sars 1878, Odhner 1939, Dons 1942a), 22 (M. Sars 1851, Odhner 1922, Odhner 1939, Dons 1942a, Evertsen & Bakken 2002), 23 (M. Sars 1851, G.O. Sars 1878, Odhner 1922, Evertsen & Bakken 2002), 24 (M. Sars 1859, Evertsen & Bakken 2002), 25 (Evertsen & Bakken 2002).

Remarks: Valdés (2002) synonymised *Archidoris* with *Doris* in his phylogenetic analysis of the cryptobranchiate dorids. This species is common and is often encountered. See also remarks to *Geitodoris planata*.

Aldisidae Odhner, 1939***Aldisa zetlandica* (Alder & Hancock, 1854)**

Doris zetlandica Friele & Hansen 1876: 70.– G.O. Sars 1878: 305.– Aurivillius 1886: 37.– Storm 1901: 13.

Aldisa zetlandica Bergh 1879d: 349.– Norman 1893: 350.– Grieg 1913: 5.– Odhner 1907: 67.– 1922: 22.– 1926: 24.– 1939: 30.– Millen & Gosliner 1985: 219, figs. 2, 4A, 6F, 18-19.

Material examined: VM 612 (1), Eide Straumsholmen, 63°00'39N 07°18'29E, 24 February 2000, bedrock, 0-30 m, D. – VM 613 (1), Trondheimsfjorden Rødberneset, 63°29'06N 10°00'17E, 08 February 1999, coral rubble, 250 m, T. – VM 622 (1), Frøyfjorden Ilsøya, 63°39'35N 08°25'52E, 27 June 1912, coral rubble. – VM 48853 (1), Sauøyane Hitra, 29 April 2005, stn 07-05, 22 m, D.

New records: Sector 12 (this study).

Remarks: Millen & Gosliner (1985) compared several species of *Aldisa*, including *A. zetlandica*. It has not been possible to account for the records (Høisæter et al. 1997) in sectors 1, 15 and 26.

Chromodorididae (Alder & Hancock, 1854)***Cadlina glabra* (Friele & Hansen, 1876)**

Doris glabra Friele & Hansen 1876: 70.

Remarks: Friele & Hansen (1876) pointed out that this species could be a deep water variety of *Cadlina laevis*. Odhner (1907)

referred *Doris laevis* Lovén (1846) to *C. glabra*, which in external characters resembles *C. glabra*, but which has radular 30.1.30 teeth (Odhner 1939). *Cadlina glabra* as described in Friele & Hansen (1876) has more than 40.1.40 teeth in a 10 mm specimen, and Odhner (1939) did not find any reason to dismiss the species as distinct, which is also evident in 5 to 15 mm specimens of *C. laevis* having 15-25.1.25-15 teeth (Krause 1895, Odhner 1915). The taxonomic status of *C. glabra* warrant further research.

Cadlina laevis (Linnaeus, 1767)

Doris laevis Linnaeus 1767: 1083.

Doris laevis Gmelin 1791: 3106.

Doris obvelata Müller 1776: 229.– 1781:tab. XVII, fig.1-2.– 1789: 8.– Gmelin 1791: 3106.– Rasch 1836: 319.– M. Sars 1839: 159.– 1851: 196.– 1855: 68.– Lovén 1846: 136.– Asbjørnsen 1854: 336.– Koren 1857: 93.– G.O. Sars 1878: 305.– Aurivillius 1886: 36.– Krause 1895: 94.– Grieg 1897: 22.– Friele & Grieg 1901: 116.– Nordgaard 1907: 33.

Doris repanda Brögger 1872: 124.– Metzger & Meyer 1875: 267.

Cadlina obvelata Nordgaard 1905: 181.– Odhner 1907: 68.– 1922: 23.– Grieg 1913: 5.– Grieg 1914a: 90.– Larsen 1925: 21, fig. 12, 13a,b.

Cadlina repanda Norman 1893: 350.

Cadlina laevis Odhner 1926: 24.– 1939: 29.– Dons 1942a: 166.– Evertsen & Bakken 2002: 18.

Material examined: VM 860 (4), Trondheimsfjorden Borgenfjorden Rolsøya, 63°51'54N 11°19'15E, 27 May 2001, bedrock, mud, 15-20 m, D. – VM 861 (3), Trondheimsfjorden Beitstadfjorden Kalven, 63°59'10N 11°22'26E, 26 May 2001, boulders, sand, 18 m, D. – VM 858 (2), Stokkøya Storskjæret, 64°03'02N 09°50'56E, 05 October 2000, kelp forest, boulders, 22 m, D. – VM 848 (1), Stokkøya Flesa, 64°06'25N 09°53'22E, 03 October 2000, kelp forest, bedrock, 12 m, D. – VM 854 (1), Stokkøya Pålodden, 64°05'59N 10°01'51E, 03 October 2000, kelp forest, bedrock, 16 m, D. – VM 847 (1), Hitra Forsnes Værøyan, 63°24'54N 08°27'00E, 16 July 2000, boulders, 20 m, D. – VM 855 (1), Mausund Aursøya (brygga), 63°52'04N 08°40'02E, 14 April 2000, boulders, sand, 12 m, D. – VM 856 (5), Mausund Aursøya (brygga), 63°52'04N 08°40'02E, 14 April 2000, boulders, sand, 12 m, D. – VM 864 (5), Vingleia fyr Borholman, 63°57'14N 08°46'06E, 20 August 1999, bedrock, 12 m, D. – VM 865 (2), Vingleia fyr Stålskjæran, 63°56'23N 08°36'20E, 16 August 1999, bedrock, 0-29 m, D. – VM 859 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 31 July 1999, bedrock, 10-20 m, D. – VM 824 (1), Ramnfjorden Storsandøya, 63°02'37N 07°24'40 E, 10 July 1999, littoral, HP. – VM 867 (2), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 09 May 1999, bedrock, 18-21 m, D. – VM 868 (2), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 27 April 1999, bedrock, 15 m, D. – VM 866 (2), Stokkøya,

64°03'48N 09°58'49E, 23 April 1999, bedrock, 0-30 m, D. – VM 850 (1), Bessaker Storkvika, 64°14'19N 10°16'34E, 28 November 1998, bedrock, 16 m, D. – VM 870 (1), Kvenvær, 63°31'55N 08°21'26E, 30 September 1998, bedrock, 10 m, D. – VM 853 (2), Vikna Rørvik, 64°51'43N 11°14'15E, 28 September 1998, bedrock, 10-20 m, D. – VM 852 (1), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 09 September 1998, cliff, 30 m, D. – VM 871 (1), Bjørnsund, 62°53'18N 06°49'03E, 18 April 1998, kelp forest, 13 m, D. – VM 851 (2), Bjørnsund Orholmbogane, 62°52'43N 06°46'01E, 17 August 1998, kelp forest, 10-20 m, D. – VM 857 (1), Bjørnsund, 62°53'18N 06°49'03E, 17 August 1998, cliff, 18 m, D. – VM 869 (1), Ulvøya Ellesvikholmen, 63°40'41N 09°05'52E, 09 August 1998, kelp forest, 14-17 m, D. – VM 849 (1), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 09 April 1998, cliff, 18 m, D. – VM 33026 (1), Bud Bolungskjæra, 62°53.14'N 06°55.95'E, 22 May 2004, kelp forest, bedrock, 5-18 m, D. – VM 50530 (1), Knubben, Kragerø, 58° 48.986'N 09° 28.274'E, 24 July 2005, 10-20 m, D. – VM 50553 (3), Rødkjæra, Kragerø, 58° 49.537'N 09° 29.096'E, 24 July 2005, 10-17 m, D. **New records:** Sectors 4 (Odhner 1922), 9 (Grieg 1897, Friele & Grieg 1901), 15 (VM 853), 18 (G.O. Sars 1878), 23 (M. Sars 1851, M. Sars 1859, G.O. Sars 1878), 24 (Dons 1942a).

Remarks: Variations of this widely distributed species is well described in Alder & Hancock (1847), Larsen (1925) and Rudman (1984). A record in sector 16 was removed (Table 1) as it was not possible to verify.

Discodorididae Bergh, 1891

Geitodoris planata (Alder & Hancock, 1846)

Doris planata Alder & Hancock 1847: part III, fam. 1, pl. 8, fig. 1-7.

Discodoris planata Thompson & Brown 1984: 90.– Platts 1985: 158.– Moen & Svendsen 1999: 299.– Cervera et al. 1985:198, fig. 1-8.

Material examined: VM 1530 (5), Trondheimsfjorden Hopavågen, 63°35'33N 09°32'42E, 07 June 2002, littoral, HP. – VM 1531 (1), Trondheimsfjorden Hopavågen, 63°35'33N 09°32'42E, 19 June 2001, littoral, HP. – VM 1527 (1), VM 1528 (1), VM 1529 (1), VM 1526 (1), Snillfjord Sunde, 63°29'48N 09°10'32E, 04 November 2000, boulders, sand, 6 m, D. – VM 1501 (2), Dolmøya Vadholmen, 63°39'19N 08°43'49E, 27 September 1999, bedrock, 0-27 m, D.

Observations. A single specimen was observed but not collected at Bjugnholmen, Bjugn (sector 14) 21 November 2003.

New records: Sector 6 (Moen & Svendsen 1999), 12 (VM-1530, VM-1531, VM-1527, VM-1528, VM-1529, VM-1526, VM-1501), 14 (this study).

Remarks: This species is often referred to as *Discodoris planata* in European waters (Thompson & Brown 1984, Picton & Morrow 1994), but the correct combination should be *Geitodoris planata* (Cervera et al. 1985).

We have found this species several times, which confirms its presence in Norwegian waters. Earlier records can not be verified. Lack of previous records may be due to the similarity to *Doris pseudoargus*. The uncertain record in sector 8 (Høisæter et al. 1997) is most likely based on a misinterpretation of a record from western Norway (Platts 1985) originating from Thompson & Brown (1984) who referred to McKay & Smith (1979) as their source of information. The latter authors did not mention *G. planata* from Norwegian waters. It is however found on the west coast of Sweden (Jaekel 1952). Based on this information we have listed *G. planata* among new species to the Norwegian fauna (Table 1).

Kentrodorididae Bergh, 1892

Jorunna tomentosa (Cuvier, 1804)

Doris tomentosa M. Sars 1851: 380.

Doris johnstoni Alder & Hancock 1845: part I, fam. 1, pl. 5, fig. 1-8.– M'Andrew & Barrett 1856: 381.– Danielssen 1861: 37.– M. Sars 1870: 189.– G.O. Sars 1878: 365.

Jorunna johnstoni Odhner 1907: 67.– 1922: 22.– 1926: 23.– Grieg 1913: 4.

Jorunna tomentosa Odhner 1939: 35.– Dons 1942a: 197.– Thompson & Brown 1984: 91-93.– Evertsen & Bakken 2002: 20.

Material examined: VM 5521 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 19 May 2002, boulders, sand, 28 m, D. – VM 1503 (1), Kvenvær, 63°31'55N 08°21'26E, 30 April 2001, kelp forest, bedrock, 0-20 m, D. – VM 1507 (2), Trondheimsfjorden Kalurdalen, 63°35'46N 09°45'10E, 20 February 2000, bedrock, 0-30 m, D. – VM 1505 (1), VM 1506 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 27 April 1999, bedrock, 16 m, D. – VM 1504 (2), Agdenes Sletvik, 63°35'11N 09°31'29E, 10 June 1998, littoral, HP. – VM 1502 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 03 March 1998, bedrock, mud, 7 m, D. – VM 1509 (1), Eide Straumsholmen, 63°00'39N 07°18'29E, 14 February 1998, bedrock, 18 m, D. – VM 1508 (1), Eide Straumsholmen, 13 February 1998, bedrock, 0-21 m, D.

New records: Sector 3 (M. Sars 1870), 10 (M. Sars 1870, Odhner 1922), 18 (Evertsen & Bakken 2002).

Remarks. This species has a scattered distribution. It was not possible to account for records in sectors 1, 4, 15 and 19 (Table 1).

Rostangidae Pruvot-Fol, 1954

Rostanga setidens (Odhner, 1939)

Boreodoris setidens Odhner 1939: 31-33, figs. 15-17.

Remarks: This species was originally described as *Boreodoris setidens* (Odhner 1939), but was included in the genus *Rostanga* by Valdés & Gosliner (2001) who revised a part of the dorid nudibranchs.

This species is endemic to Norway and the only known record is from the type locality at Nordfolla north of Bodø (sector 17) (Odhner 1939).

Rostanga rubra (Risso, 1818)

Doris coccinea G.O. Sars 1878: 364.– Alder & Hancock 1848: part IV, fam. 1, pl. 7, fig. 1-10.

Rostanga coccinea Løyning 1927: 249.

Material examined: VM 10951 (1), Mausund Aursøya (brygga), 63°52'18N 08°38'21E, 14 April 2003, bedrock, sand, 20 m, D. – VM 1784 (1), Mausund Skogsøya, 63°50'30N 08°38'06E, 14 April 2000, kelp forest, bedrock, 20 m, D. – VM 1783 (2), Kvenvær, 63°31'55N 08°21'26E, 30 April 2001, kelp forest, bedrock, 0-20 m, D.

New records: Sector 12 (VM 10951, VM 1783, VM 1784).

Remarks: This small (15-20 mm long) species with distinguishing morphological characteristics have previously only been recorded from southern parts of Norway. Jaekel (1952) reported findings from Kristiansand to Stavanger, a record misinterpreted as Kristiansund by Thompson & Brown (1984) (Høisæter 1986). G.O. Sars (1878) mentioned the species but gave no description or other information. Our records are scarce with only three records and concentrated to one area at Hitra and Mausund (Figure 2). This species should be referred to as rare in Norwegian waters.

Polyceridae Alder & Hancock, 1845

Colga pacifica Bergh, 1880

Triopa lacer Rathke in Müller 1806: 23.– Lovén 1846: 138.

Triopa lacer M. Sars 1851: 132.– 1859: 50.– Danielssen 1861: 37.– G.O. Sars 1878: 311, tab. 27, fig. 4a-c, tab. XIV, fig. 12a,b.– Krause 1895: 96.

Issa lacera Bergh 1881: 646, taf. XIII, fig. 12-15, taf. XIV, fig. 4-12.– Friele 1902: 7.– Grieg 1913: 5.– Odhner 1907: 70, 22 and 100, pl. 1, fig. 21.– 1922: 23.

Issena pacifica Odhner 1939: 37.

New records: Sector 19 (Odhner 1939), 20 (M. Sars 1851, Odhner 1907, Odhner 1922), 21 (Krause 1895), 24 (M. Sars 1851, Friele 1902), 25 (Grieg 1913).

Remarks: The genus *Colga* was originally described by Bergh (1880), who later (Bergh 1881) changed the genus name to *Issa* as Danielssen & Koren (1879) had described a holothuroid genus named *Kolga*. Iredale & O'Donoghue (1923) changed the genus name to *Issena* as *Issa* was preoccupied for a lepidopteran genus. According to The Code of Zoological Nomenclature article 56.2 (ICZN 1999), any common genus name distinguished by one letter only are not homonymous, and thus the genus *Colga* is available and should be used according to the principle of priority. Colour plates of the species were given in Just & Edmunds (1985).

***Limacia clavigera* (Müller, 1776)**

Doris clavigera Müller 1776: 229.– 1779: 35.– Rasch 1836: 319.
Limacia clavigera Müller 1781: 67.– Evertsen & Bakken 2002: 20.
Triopa claviger Koren 1857: 93.– Metzger & Meyer 1875: 267.– Friele & Hansen 1876: 73.– G.O. Sars 1878: 364.– Storm 1879b: 118.– Grieg 1897: 22.– 1898: 23.
Triopa clavigera Odhner 1907: 69.– 1922: 23.– Grieg 1914a: 91.
Euphurus claviger Odhner 1926: 24.– 1939: 38.– Løyning 1927: 250.– Dons 1942a: 167.

Material examined: VM 5520 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 18 May 2002, boulders, gravel, 5-10 m, D. – VM 1566 (4), Hitra Forsnes, 63°25'32N 08°23'31E, 14 July 2000, kelp forest, sand, 5-15 m, D. – VM 1558, Mausund Bukkholman, 63°52'28N 08°37'17E, 15 April 2000, kelp forest, bedrock, 10 m, D. – VM 1571 (1), Eide Straumsholmen, 63°00'39N 07°18'29E, 29 February 2000, bedrock, 0-20 m, D. – VM 1567 (3), VM 1568 (2), Vingleia fyr, 63°54'59N 08°40'29E, 15 August 1999, bedrock, 0-30 m, D. – VM 1570 (1), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 01 August 1999, cliff, 0-31 m, D. – VM 1579 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 07 July 1999, bedrock, 10-30 m, D. – VM 1562 (1), Trondheimsfjorden Kalurdalen, 63°35'46N 09°45'10E, 29 May 1999, cliff, 10 m, D. – VM 1559 (1), Stokkøya Svartneset, 64°04'37N 09°57'08E, 23 April 1999, kelp forest, 12 m, D. – VM 1577 (3), Mausund Mauøy, 63°52'04N 08°40'02E, 26 March 1999, bedrock, 10-20 m, D. – VM 1555 (3), Bessaker, 64°14'50N 10°19'16E, 26 November 1998, kelp forest, cliff, 15-20 m, D. – 1557 (1), Bessaker, 64°14'50N 10°19'16E, 26 November 1998, bedrock, sand, 5-20 m, D. – VM 1560 (1), Vikna Rørvik, 64°51'43N 11°14'15E, 01 October 1998, bedrock, 15 m, D. – VM 1575 (1), Vikna Rørvik, 64°51'43N 11°14'15E, 28 September 1998, bedrock, 10-20 m, D. – VM 1576 (1), Bjørnsund Orholmogane, 62°52'43N 06°46'01E, 17 August 1998, kelp forest, 10-20 m, D. – 1573 (2), Ulvøya Ellesvikholmen, 63°40'41N 09°05'52E, 09 August 1998, bedrock, 10-17 m, D. – VM 1574 (1), Ulvøya Kobbskjæra, 63°41'00N 09°09'04E, 08 August 1998, bedrock, 15 m, D. – VM 1561 (1), VM 1569 (2), Agenes Sletvik, 63°35'11N 09°31'29E, 10 June 1998, littoral, HP. – VM 1556 (24), Ulvøya Tindholman, 63°40'19N 09°09'33E, 30 May 1998, kelp forest, bedrock, 16 m, D. – VM 1563 (3), Ulvøya, 63°40'38N 09°04'54E, 30 May 1998, kelp forest, 5-15 m, D. – VM 1572 (1), Eide Straumsholmen, 63°00'39N 07°18'29E, 13 February 1998, bedrock, 10-20 m, D. – VM 1564 (1), Ulvøya Hjertøyskjera, 63°40'35N 09°07'21E, 02 January 1998, bedrock, 10-14 m, D. – VM 1578 (1), Kvenvær Helsøya Lille, 63°32'02N 08°21'16E, 29 September 1997, bedrock, 17 m, D. – VM 33015 (5), Bud Rundholmen, 62°54.04'N 06°54.65'E, 20 May 2004, 10-25 m, D. – VM 50531 (1), Knubben, Kragerø, 58° 48.986'N 09° 28.274'E, 24 July 2005, 10-20 m, D. – VM 50556 (1), Rødskjæra, Kragerø, 58° 49.537'N 09° 29.096'E, 24 July 2005, 10-17 m, D.

New records. Sector 3 (this study).

Remarks: This is a very common species we have encountered in all stations with suitable habitat. A record in sector 1 (Høisæter et al. 1997) was removed (Table 1). Abundance is varying due to life history variations, but when present a large number of specimens are always observed.

***Palio dubia* (M. Sars, 1829)**

Polycera dubia M. Sars 1829: 13, tab. 2, fig. 5 and 6.– Lovén, 1846: 138.– Danielssen 1861: 38.– Dons 1942b: 185.
Polycera lessoni G.O. Sars 1878: tab. XIV.– Krause 1895: 96.
Palio lessoni Grieg 1914b: 13.– Odhner 1922: 23.– 1926: 24.
Polycera (Palio) dubia Odhner 1939: 38.
Polycera pudica Lovén, 1846: 138.– M. Sars 1859: 50.– G.O. Sars 1878: 313.
Palio dubia Odhner 1907: 70.– Larsen 1925: 26.– Evertsen & Bakken 2002: 20.

Material examined: VM 10909 (2), Bud Rundholmen, 62°54'02N 06°54'33E, 18 May 2003, bedrock, 10-20 m, D. – VM 1718 (1), Trondheimsfjorden Beitstadfjorden Kalven, 63°59'10N 11°22'26E, 26 May 2001, boulders, sand, 12 m, D. – VM 1715 (1), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 19 May 2001, cliff, 20 m, D. – VM 1714 (8), Trondheimsfjorden Borgenfjorden, 63°52'27N 11°18'04E, 27 May 2001, gravel, mud, 20 m, D. – VM 1717 (6), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 22 November 2000, pier pole, 2-5 m, D. – VM 1716 (1), Ulvøya Ellesvikholmen, 63°40'41N 09°05'52E, 09 August 1998, kelp forest, 14 m, D. – VM 33018 (5), Bud Rundholmen, 62°54.04'N 06°54.65'E, 20 May 2004, coll. M. Ødegården, 5-20 m, D.

New Records: Sectors 8 (M. Sars 1829, Grieg 1914b), 21 (Krause 1895), 22 (Odhner 1922).

Remarks: A species often observed in deep water (usually >20 m) in exposed coastal areas. We have although observed it in the inner parts of the Trondheimsfjord, also in deeper water. When encountered several specimens are usually found in the same area. The original description by M. Sars (1829) is excellent. Records in sector 1 are not accounted for (Table 1).

***Palio nothus* (Johnston, 1838)**

Polycera ocellata Friele & Hansen 1876: 73.– G.O. Sars 1878: tab. XIV.
Palio ocellata Odhner 1907: 70.
Thecacera virescens G.O. Sars 1878: tab. XIV, fig. 17.– Odhner 1907: 70.– 1939: 37.– Grieg 1914a: 91.

Material examined: VM 32989 (1), Mausund Ellingholman, 63°53.15'N 08°36.75'E, stn 08-08, 05 April 2004, coll. A. Kaltenborn, 10 m, D.

New records: Sector 8 (Friele & Hansen 1876), sector 12 (VM 32989).

Remarks: In the list by Høisæter et al. (1997) there are records in sectors 1 and 26, the latter as a doubtful record (noted with a question mark). Both records are not possible to account for in the literature (Høisæter 1986, this study), hence the present records in sectors 8 and 12 are the only positive records from the Norwegian coast (Table 1). According to Thompson & Brown (1984) North Atlantic records of *P. dubia* and *P. nothus* needs confirmation. Based on their information and the revised records along the Norwegian coast, this species' distribution annotation is changed from X to S.

This species as illustrated in G.O. Sars (1878) is *Palio nothus* which is evident in the radula illustrations (G.O. Sars 1878) for his *Polycera ocellata* (= *Palio nothus*). The original description (Forbes & Hanley 1851: 576) is inadequate and not useful for reliable identification (Thompson & Brown 1984, Smith & Heppell 1991). The latter authors also suggested that this species belonged to *Palio nothus*. The only record from Norwegian waters is from the Hardangerfjord (G.O. Sars 1878), all other references refers to Sars. Since Sars' illustration of the radula of *T. virescens* is identical with his own description of the radula of *P. nothus*, and since Sars' radula illustration agrees with the description of the radula of *P. nothus* given in Thompson & Brown (1984:74, fig. 14c), we choose to synonymise *T. virescens* sensu Sars with *P. nothus*, Table 1 is corrected accordingly.

Polycera faeroensis Lemche, 1929

Polycera faeroensis Lemche 1929:12, figs. 1-2.– Lemche & Thompson 1974: 186, figs. 2-4.– Thompson & Brown 1984: 67, fig. 14a, pl. 18e-h.– Just & Edmunds 1985: 58, pl.25.

Material examined: VM 1727 (11) Korsen Borgenfjorden Trondheimsfjord, C. Dons, 6 August 1932; VM 1728 (4), Skogsøy, Hjeltefjord, coll. C. Dons, littoral 16 Sep 1936; VM 1729 (5), Steinsundet Hjeltefjord, 8 January 1908; VM 1730 (4), 16 June 1894; VM 33014 (1), Bud Rundholmen, 62°54.04'N 06°54.65'E, 20 May 2004, 27 m, D.

New records: Sector 8, 10, 11 and 13 (VM collections).

Remarks: Material held in the VM collections has been identified by H. Lemche and is revised here. All specimens were collected before 1936. A single specimen was found at Bud in May 2004 in 27 m depth. It has previously been reported from similar depths in the same area (photo documentation from Kristiansund provided by Nils Aukan) and agrees well with the original description by Lemche (1929).

Polycera quadrilineata (Müller, 1776)

Doris quadrilineata Müller 1776: 18.– Rasch 1836: 319.

Limacia quadrilineata Müller 1781: 68.

Polycera cornuta Koren 1857: 93.– G.O. Sars 1878: 312, tab.

XIV, fig. 14.– Storm 1879b: 118.

Polycera trilineata Storm 1901: 7.

Polycera varians M. Sars 1835.– 1839: 159.

Polycera quadrilineata Brøgger 1872: 143.– Bergh 1879c: 602.– Kükenthal & Weissenborn 1886: 786.– Grieg 1898: 23.– 1913: 6.– 1914a: 91.– Odhner 1907: 71.– 1922: 23.– 1926: 24.– 1939: 38.– Larsen 1925: 24, fig. 14-16, pl. 1, fig. 6a-c.– Løyning 1927: 250.– Dons 1942b: 185.– Evertsen & Bakken 2002: 20.

Material examined: VM 1748 (1), Stokkøya Pålodden, 64°05'59N 10°01'51E, 03 October 2000, kelp forest, bedrock, 10 m, D. – VM 1736 (2), VM 1750 (1), Trondheimsfjorden Kalurdalen, 63°35'46N 09°45'10E, 20 February 2000, cliff, 0-30 m, D. – VM 1782 (1), Trondheimsfjorden Kalurdalen, 29 May 1999, bedrock, 12 m, D. – VM 1741 (1), Dolmøya Vadholmen, 63°39'19N 08°43'49E, 28 September 1999, bedrock, 18 m, D. – VM 1731 (7), Vingleia fyr, 63°54'59N 08°40'29E, 15 August 1999, bedrock, 0-30 m, D. – VM 1752 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 07 July 1999, bedrock, 15 m, D. – VM 1746 (2), Trondheimsfjorden Sällåtneset, 63°27'35N 09°54'56E, 04 April 1999, bedrock, sand, 0-21 m, D. – VM 1747 (1), Mausund Aursøya (bryggja), 63°52'18N 08°38'21E, 28 March 1999, bedrock, sand, 12 m, D. – VM 1749 (1), Grefsnsvågen Torsøya, 63°36'51N 08°27'08E, 11 February 1999, bedrock, 0-20 m, D. – VM 1754 (3), Stokkøya Maltsekken, 64°01'00N 09°57'45E, 06 February 1999, kelp forest, 7 m, D. – VM 1737 (3), VM 1738 (1), Bessaker, 64°14'50N 10°19'16E, 26 November 1998, bedrock, sand, 0-20 m, D. – VM 1734 (2), Vikna Rørvik, 64°51'43N 11°14'15E, 28 September 1998, kelp forest, 10-15 m, D. – VM 1732 (2), Bjørnsund, 62°53'18N 06°49'03E, 17 August 1998, kelp forest, 19 m, D. – VM 1733 (1), Ulvøya, 63°40'38N 09°04'54E, 31 May 1998, kelp forest, 5-10 m, D. – VM 1740 (1), Trondheimsfjorden Beitstadfjorden Lo, 64°01'21N 11°23'58E, 10 April 1998, gravel, mud, 5 m, D. – VM 1735 (1), Mausund Bukkholman, 63°52'28N 08°37'17E, 05 April 1998, kelp forest, 17 m, D. – VM 1742 (1), Dolmøya, 63°39'00N 08°45'31E, 28 March 1998, kelp forest, 10 m, D. – VM 1751, Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 18 March 1998, mud, 5 m, D. – VM 1744 (2), VM 1745 (1), Eide Straumsholmen, 63°00'39N 7°18'29E, 15 February 1998, bedrock, 14 m, D. – VM 1743 (14), Ulvøya, 63°40'38N 09°04'54E, 30 May 1998, kelp forest, bedrock, 5-15 m, D. – VM 1739 (2), Trondheimsfjorden Tråsåvika, 63°N 10°E, 06 December 1997, kelp, 3 m, D. – VM 33013 (1), Bud Frettskjæret (Fretten), 62°54.23'N 06°52.64'E, 22 May 2004, 25 m, D.

New records: Sector 7 (Odhner 1922), 16 (Odhner 1939, Dons 1942b).

Remarks: This is a very common species usually found in kelp forest habitat. When encountered in the kelp forest, usually feeding on encrusting entoprocts on *Laminaria hyperborea*, hundreds of specimens are usually observed within a small area. This species has a southern distribution, with a northernmost record in Lofoten (sector 18), records in sectors 1, 19 and 20 is removed (Table 1) as they can not be accounted for.

CLADOBRANCHIA

Dendronotoidae Gray, 1857

Dendronotus frondosus (Ascanius, 1774)

Amphitrite frondosa Ascanius 1774: 155, pl. 5, fig. 2.

Doris arborescens Müller 1776: 229.

Doris frondosa Müller 1776: 229.

Tethys arborescens Rathke 1779: 90.

Campaspe major Bergh 1886: 21.– Nordgaard 1905: 181.

Tritonia ascanii M. Sars 1839: 144.

Dendronotus arborescens M. Sars 1851: 194.– 1859: 50.– Danielssen 1861: 38.– Friele & Hansen 1876: 73.– G.O. Sars 1878: 315, tab. XV, fig. 3.– Bergh 1886: 25.– Krause 1895: 97.– Storm 1901: 7.– Friele 1902: 7.– Kiær 1904: 23.– Nordgaard 1905: 181.– Odhner 1907: 64.

Dendronotus frondosus Grieg 1897: 30.– 1898: 23.– 1913: 7.– 1914b: 13.– Friele & Grieg 1901: 117.– Odhner 1922: 22.– 1926: 17.– 1939: 45.– Larsen 1925: 38, fig. 30-33, pl. 9, fig. 9.– Løyning 1927: 248.– Dons 1942b: 187.– Evertsen & Bakken 2002: 18-19.

Dendronotus velifer Storm 1879a: 17a; 1901: 7.

Material examined: VM 996 (2), Trondheimsfjorden Stavøy, 63°35'11N 09°31'29E, 06 June 2002, bedrock, 20-80 m, T. – VM 949 (1), Hitra Knarlagsund, 63°38'28N 09°03'41E, 28 October 2001, littoral, HP. – VM 1007 (1), Trondheimsfjorden Beitstadfjorden Kalven, 63°59'10N 11°22'26E, 26 May 2001, boulders, sand, 12 m, D. – VM 979 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 22 November 2000, pier pole, 2-5 m, D. – VM 978 (1), Trondheimsfjorden TBS, 06 November 2000, pier pole, 5 m, D. – VM 999 (1), Trondheimsfjorden TBS, 01 March 2000, pier pole, 5 m, D. – VM 942 (1), Trondheimsfjorden TBS, 15 December 1999, pier pole, 3 m, D. – VM 941 (1), VM 944 (1), Snillfjord Sunde, 63°29'48N 09°10'32E, 04 November 2000, boulders, sand, 6 m, D. – VM 945 (1), VM 946 (1), Stokkøya Hosnavika, 64°03'13N 09°56'35E, 04 October 2000, floating stage, 3 m, HP. – VM 1001 (1), Dolmøya, 63°40'41N 09°05'52E, 27 September 1999, bedrock, 0-1 m, D. – VM 1015 (1), Trondheimsfjorden Rotvoll, 63°26'23N 10°29'18E, 02 May 1999, littoral, HP. – VM 1012 (1), Stokkøya Flesa, 64°06'25N 09°53'22E, 24 April 1999, bedrock, 11 m, D. – VM 1016 (1), VM 1017 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 07 April 1999, boulders, gravel, 10-30 m, D. – VM 992 (1), VM 993 (1), VM 1005 (1), VM 1006 (1), VM 1014 (1), Trondheimsfjorden Sällåtneset, 63°28'34N 09°52'01E, 04 April 1999, bedrock, sand, 0-21 m, D. – VM 1004 (1), Trondheimsfjorden Sällåtneset, 23 February 1999, bedrock, sand, 10 m, D. – VM 1013 (1), Trondheimsfjorden Sällåtneset, 23 February 1999, bedrock, sand, 12 m, D. – VM 947 (2), Mausund Aursøya (brygga), 63°52'18N 08°38'21E, 28 March 1999, bedrock, sand, 12 m, D. – VM 1003 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 15 December 1998, bedrock, mud, 25 m, D. – VM 1008 (1), VM

1009 (1), Vikna Nærøysundet ved fyret, 64°50'31N 11°11'37E, 01 October 1998, bedrock, sand, 10-15 m, D. – VM 950 (3), Vikna Nærøysundet ved fyret, 28 September 1998, bedrock, 0-20 m, D. – VM 1000 (1), Ulvøya Ellesvikholmen, 63°40'41N 09°05'52E, 09 August 1998, kelp forest, bedrock, 10-17 m, D. – VM 937 (2), Trondheimsfjorden Skarnsundet, 63°51'02N 11°04'32E, 13 April 1998, bedrock, 12 m, D. – VM 1002 (1), VM 1011 (1), Eide Straumsholmen, 63°00'39N 07°18'29E, 14 February 1998, bedrock, 15-20 m, D. – VM 1010 (2), Eide Straumsholmen, 14 February 1998, bedrock, 14-18 m, D. – VM 948 (1), Kvenvær, 63°31'55N 08°21'26E, 30 September 1997, kelp forest, bedrock, 13 m, D. – VM 48609 (2), Hamborneset Trondheimsfjord, stn 11-05, 8 May 2005, 27 m, D.

New records: Sector 7 (Ascanius 1774), 9 (Grieg 1897), 19 (Dons 1942b), 21 (Krause 1895, Odhner 1907, Odhner 1939, Dons 1942b), 23 (Krause 1895).

Remarks. This is a common species along the Norwegian coast and large specimens (approximately 100 mm long) are often observed. In literature from the North Atlantic *D. dalli* has sometimes been referred to as a synonym of *D. frondosus* (Odhner 1907, 1939), and then often as “*D. frondosus* including *dalli*”. *Dendronotus dalli* was redescribed by Robilliard (1970) and is a species with an arctic distribution. In this respect close studies of specimens should be of interest when encountering *Dendronotus* specimens in northern areas.

Specimens found and photographed *in situ* in this study have shown a great variation in colour. This is of interest in relation to the discrimination of *D. frondosus* and *D. lacteus*. Thollesson (1998) demonstrated distinct genetic and morphological variation between these two species. Brown coloured specimens of *D. frondosus* are the most frequent observations in our study, but also whole white specimens as well as dark brown specimens with yellow tips are encountered. Observations of copulating and egg laying by both brown and all white specimens suggest that they belong to the same species.

Dendronotus lacteus (Thompson, 1840)

Dendronotus lacteus Thompson 1840: 88, pl. II, fig. 3.– Thollesson 1998: 3, fig. 1-4.

Remarks: Genetic analysis allowed for a rediscovery of this species in Scandinavian waters (Thollesson 1998). *Dendronotus lacteus* has often been synonymised with *D. frondosus* and *D. dalli*. It is so far not recorded from Norway, but Thollesson (1998) used material from the Swedish west coast, so it should be anticipated to have a wider distribution including the Norwegian coast, at least in the southern part.

Dendronotus robustus Verrill, 1870

Dendronotus robustus Verrill, 1870: 405, fig. 1.– Krause 1895: 97.– Friele 1902: 7.– Nordgaard 1905: 181.– Grieg 1913:

7.– Odhner 1907: 64.– 1922: 22.– 1939: 46.

Dendronotus velifer G.O. Sars 1878: 315, tab. 28, fig. 2, tab. XV, fig. 4.

New records: Sectors 18 (G.O. Sars 1878, Odhner 1922), 24 (Friele 1902, Grieg 1913).

Remarks: Records of *D. robustus* from the Trondheimsfjord by Storm (1879a, 1879b, 1901) were revised to be *D. frondosus* by Odhner (1926). This species has a northern distribution (Table 1).

Dotidae Gray, 1853

Doto coronata (Gmelin, 1791)

Doto coronata Rasch 1836: 320.– M. Sars 1851: 194.– 1859: 50.– Asbjørnsen 1854: 337.– Friele & Hansen 1876: 73.– G.O. Sars 1878: 317.– Friele & Grieg 1901: 118.– Grieg 1913: 8.– Odhner 1907: 89.– 1922: 34, 36, fig. 14a.– 1926: 28.– 1939: 46.– Larsen 1925: 43, fig. 34 and 35, pl. 1, fig. 10.– Løyning 1927: 261.– Dons 1942b: 188.– Evertsen & Bakken 2002: 19.

Material examined: VM 10958 (2), Bud Rundholmen, 62°54'02N 06°54'33E, 18 May 2003, bedrock, 20 m, D. – VM 10959 (1), Bjørnsund, 62°53'18N 06°49'03E, 17 August 2001, kelp forest, bedrock, sand, 5 m, D. – VM 1071 (1), Eide Straumholmen, 63°00'39N 07°18'29E, 29 February 2000, bedrock, 0-20 m, D. – VM 1067 (2), Vingleia fyr Borholman, 63°57'14N 08°46'06E, 20 August 1999, bedrock, 27 m, D. – VM 1068 (1), Vingleia fyr Stålskjæran, 63°56'23N 08°36'20E, 16 August 1999, bedrock, 10-30 m, D. – VM 1069 (3), VM 1070 (1) Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 15 December 1998, bedrock, mud, 25 m, D. – VM 1066 (1), Ulvøya Bjørnholmen, 63°40'21N 09°09'10E, 08 August 1998, cliff, 10-17 m, D. – VM 1065 (1), Ulvøya Bjørnholmen, 63°40'21N 09°09'10E, 31 May 1998, bedrock, 9 m, D. – VM 33045 (3), Bud Rundholmen, 62°54.04N 06°54.65E, 21 May 2004, 10-20 m, D. – VM 48607 (2), Hamborneset Trondheimsfjord, stn 11-05, 8 May 2005, 27 m, D. – VM 51734 (1), Hamborneset Trondheimsfjord, 25 July 2005, coll. K. Telnes, 20 m, D.

New records: Sectors 3 (Asbjørnsen 1854), 4, 7, 9 (Odhner 1922), 20 (Odhner 1939, Dons 1942b).

Remarks: *Doto coronata* is believed to be a species complex (Lemche 1976), and two species, *D. sarsiae* and *D. hydrallmaniae* was recently described from this complex from British waters (Morrow et al. 1992). This complex is in need of a taxonomic revision, in which older references will have to be revised. Sector records for sectors 1, 16 and 26 were changed (Table 1).

Doto crassicornis M. Sars, 1870

Doto crassicornis M. Sars 1870: 191.– Brøgger 1872a: 118.– G.O. Sars 1872a: 31.– 1878: 364.– Friele & Hansen 1876:

74.– Storm 1879b: 119.– Odhner 1922: 34, fig. 14d.– 1926: 30.– Just & Edmunds 1985: 20.

Material examined: VM 1078 (1), VM 1079 (1), Mausund Bukkholman, 63°52'28N 08°37'17E, 15 April 2000, kelp forest, bedrock, 20 m, D. – VM 1080 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 22 February 1999, bedrock, 0-28 m, D.

New records: Sector 12 (VM-1078, VM-1079).

Remarks: This species has rarely been found and is only mentioned a few times in the literature, originally described from the Oslofjord (M. Sars 1870). It was later collected in Ålesund (G.O. Sars 1872a), Bergen (Friele & Hansen 1876), and in the Trondheimsfjord (Storm 1879b, Just & Edmunds 1985). It is also known from the Swedish west coast at Bohuslän (Odhner 1907). This species is only known from Scandinavian waters. Colour plates by Lemche of specimens from the Trondheimsfjord were given in Just & Edmunds (1985).

Doto cuspidata Alder & Hancock, 1862

Doto cuspidata Odhner 1926: 29, fig. 18.– Odhner 1939: 47.– Just & Edmunds 1985: 22.

Material examined: VM 5508 (3), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 19 May 2002, bedrock, sand, 22 m, D. – VM 1082 (1), Trondheimsfjorden Rødbergeset, 63°29'06N 10°00'17E, 21 June 2001, bedrock, 25-60 m, T. – VM 1088 (1), Agdenes Sletvik, 63°35'11N 09°31'29E, 21 June 2001, littoral, HP. – VM 1083 (23), Trondheimsfjorden Beitstadfjorden Kalven, 63°59'10N 11°22'26E, 26 May 2001, boulders, sand, 20 m, D. – VM 1081 (1), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 19 May 2001, bedrock, 20 m, D. – VM 1108 (5), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 19 May 2001, cliff, 20 m, D. – VM 1089 (4), Trondheimsfjorden Flakkgalten, 63°26'56N 10°10'26E, 29 July 2000, gravel, sand, 15 m, D. – VM 1086 (4), VM 1103 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 07 July 1999, bedrock, 10-30 m, D. – VM 1087 (2), VM 1102 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 07 July 1999, bedrock, 20 m, D. – VM 1084 (1), VM 1105 (2), VM 1085 (2), VM 1106 (2), VM 1107 (1), Trondheimsfjorden Svalnestangen, 63°19'45 N - 10°06'04 E, 28.02.1999, bedrock, mud, 1 ex, 8 m, D. – VM 1090 (3), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 09 April 1998, cliff, 27 m, D. – VM 33039 (1), Bud Rundholmen, 62°54.04N 06°54.65E, 20 May 2004, 10-25 m, D. – VM 33040 (1), Mausund Knubbskjæret, 63°52.866N 08°34.856E, 07 April 2004, St. 13-04, 27 m, D.

New records: Sector 12 (Odhner 1926, VM-1088).

Remarks: Records in sectors 1 and 8 has not been accounted for (Table 1). In Norway this species has only been found in Central and northern Norway. Colour plates by Lemche of specimens from the Trondheimsfjord were given in Just & Edmunds (1985).

***Doto fragilis* (Forbes, 1838)**

Doto fragilis M. Sars 1870: 192.– Grieg 1913: 8.– Larsen 1925: 43.– Odhner 1922: 34.– 1922: 36, fig. 14b-c.– 1926: 30.– 1939: 47.– Dons 1942b: 188.

Material examined: VM 1109 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 09 May 1999, bedrock, 18-21 m, D. – VM 1110 (1), Trondheimsfjorden Sällåtneset, 63°28'34N 09°52'01E, 04 April 1999, bedrock, sand, 0-21 m, D. – VM 33046 (1), Bud Rundholmen, 62°54.04'N 06°54.65'E, 20 May 2004, 10-25 m, D.

New records: Sector 3 and 11 (Odhner 1922).

Remarks: Thompson & Brown (1984) indicated that *D. fragilis* could be a synonym of *D. crassicornis*. Specimens recorded in this study have been identified using illustrations by Alder & Hancock (1851:part V, fam. 3, pl. 5, fig. 1-6), Odhner (1922: 36, fig. 14b and c), Larsen (1925: 45), and Thompson & Brown (1984: 31, fig. 5b, pl. 7 a-c).

***Doto koenneckeri* Lemche, 1976**

Doto koenneckeri Lemche, 1976: 702.

Remarks: This species was described based on specimens collected from the Hjeltefjorden near Bergen (sector 8) and Ireland (Lemche 1976). The original description is the only record from Norwegian waters. Colour plates of the species were given in Just & Edmunds (1985).

***Doto tuberculata* Lemche, 1976**

Doto tuberculata Lemche, 1976: 697, pl. 2, fig. A and B.– Thompson & Brown 1984: 35, pl. 8, fig. e-h.

Remarks: Thompson & Brown (1984) mentioned a record of this species from southern Norway, and there is a record with a question mark in sector 8 in Høisæter et al. (1997). This cannot be accounted for. Lemche (1976) stated it had not yet been found along the Scandinavian coasts. This species is so far not a part of the Norwegian fauna, hence it is omitted in Table 1.

Tritoniidae Lamarck, 1809***Tritonia griegi* Odhner, 1922**

Tritonia hombergi Storm 1879a: 17.

Tritonia (Candiella) plebeia var. Grieg 1897: 27.

Tritonia griegi Odhner 1922: 6, fig. 1.– 1939: 44.

Duvaucelia (Tritonidoxa) griegi Odhner 1926: 15, fig. 9-11.

Material examined: VM 1787 (1), Trondheimsfjorden Agdenesflua, 63°38'50N 09°45'22E, 12 June 1999, *Lophelia* rubble, 100-300 m, T. – VM 1786, Trondheimsfjorden Rødbergeset, 63°29'10N 09°59'12E, 08 February 1999, *Lophelia* rubble,

250 m, T. – VM 33063 (2), Linesøya Storskjæret, 12 August 1926, clay with gravel and sponges, 300 m. – VM 33064 (2), Trondheimsfjorden Rødberg.

New records: Sectors 9 (Odhner 1922), 14 (Odhner 1926).

Remarks: This species must be regarded as rare as it is only known from a few records. It has a scattered distribution along the Norwegian coast with only single records between the Sognefjord (Grieg 1897) and Sørvær in Northern Norway (Odhner 1939). The northernmost record from Høisæter et al. (1997) is not accounted for and removed from Table 1.

The vertical distribution ranges from 70 to 400 m depth. It was only known from Norwegian waters until Bouchet (1977) reported three specimens from two locations in the Bay of Biscay, from depths between 820 and 1080 m. The Norwegian records are mainly from rubble of the scleractinian coral *Lophelia pertusa* (Odhner 1939), and it has been suggested that it is associated with the paragorgian *Paramuricea placomus* (L., 1758) (Grieg 1897). Although under the name *T. hombergi*, Grieg (1897) gave a thorough description, later supplemented by Odhner (1922) and given the name *T. griegi*.

***Tritonia hombergi* Cuvier, 1803**

Tritonia hombergi Grieg 1914a: 92.– Grieg 1914b: 12.– Odhner 1922: 6.– 1939: 44.– Dons 1942b: 186.

Tritonia alba Larsen 1925: 16.

Tritonia hombergii Asbjørnsen 1854: 337.– Kükenthal & Weissenborn 1886: 786.– Grieg 1897: 26.– Larsen 1925: 12.

Duvaucelia (Sphaerostoma) hombergi Odhner 1926: 14.

Material examined: VM 1811 (1), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 19 May 2001, cliff, 20 m, D. – VM 1815 (1), Stokkøya Svartneset, 64°04'37N 09°57'08E, 04 October 2000, kelp forest, bedrock, 18 m, D. – VM 1804 (1), Trondheimsfjorden Kalurdalen, 63°35'46N 09°45'10E, 02 April 2000, cliff, 12 m, D. – VM 1818 (1), Trondheimsfjorden Kalurdalen, 29 May 1999, cliff, 12 m, D. – VM 1809 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 24 February 2000, bedrock, mud, 0-30 m, D. – VM 1816 (2), Dolmøya Vadholmen, 63°39'19N 08°43'49E, 28 September 1999, bedrock, 18 m, D. – VM 1808 (1), VM 1810, Vingleia fyr Borholman, 63°57'14N 08°46'06E, 17 August 1999, bedrock, 5-10 m, D. – VM 1813 (1), Mausund Tvinglingholman, 63°53'12N 08°35'44E, 28 March 1999, bedrock, 18 m, D. – VM 1822 (1), Vikna Nærøysundet ved fyret, 64°50'31N 11°11'37E, 01 October 1998, bedrock, 10-20 m, D. – VM 1812 (1), Vikna Nærøysundet ved fyret, 28 September 1998, bedrock, 10-20 m, D. – VM 1806 (13), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 09 September 1998, cliff, 30 m, D. – VM 1805, Bjørnsund Trollholman, 62°52'54N 06°51'19E, 19 August 1998, bedrock, 12 m, D. – VM 1807 (1), Ulvøya Bjørnholmen, 63°40'21N 09°09'10E, 31 May 1998, cliff, 12 m, D. – VM 1819 (1), Mausund Mauøy, 63°52'04N 08°40'02E, 05 April 1998,

bedrock, 10-20 m, D. – VM 1820 (1), Dolmøya Vadholmen, 63°39'19N 08°43'49E, 28 March 1998, bedrock, 16 m, D. – VM 1817 (1), Eide Straumsholmen Vevangstraumen, 63°00'30N 07°18'23E, 14 February 1998, bedrock, 16 m, D. – VM 33062 (1), Bjugn Valsfjorden Koet, 01 June 1973, bedrock, 30 m.

New records: Sectors 3 (Odhner 1922), 7 (Larsen 1925), 9 (Grieg 1897), 14 (Odhner 1926, 1939, Dons 1942b, VM 1815).

Remarks: *Tritonia hombergi* is a common species usually encountered with *Alcyonium digitatum*, which it is feeding on. When *A. digitatum* is found in quantities on steep cliffs and overhang, several specimens of *T. hombergi* is usually observed in different size classes. Table 1 was corrected according to records accounted for from the literature.

Tritonia plebeia Johnston, 1828

Tritonia plebeia Brøgger 1872: 124, 143.–Friele & Hansen 1876: 73.– G.O. Sars 1878: 364, tab. XV, fig. 1.– Odhner 1907: 63.– 1922: 6.–Larsen 1925: 14, fig. 3-4, pl. 1, fig. 1.

Tritonia plebeia Kükenthal & Weissenborn 1886: 786.

Tritonia (Candiella) plebeia Grieg 1914a: 91.

Candiella plebeia Grieg 1914b: 12.

Duvaucelia plebeia Odhner 1939: 45.– Dons 1942b: 187.

Material examined: VM 10954 (1), Bud, 62°54'59N 06°53'39E, 18 May 2003, bedrock, 10-20 m, D. – VM 1803 (1), Agdenes Stavøy, 63°35'11N 09°31'29E, 20 June 2002, bedrock, 150-180 m, T. – VM 5523 (2), Trondheimsfjorden Kalurdalen, 63°35'46N 09°45'10E, 20 May 2002, cliff, 15 m, D. – VM 1797 (1), Mausund Vasskattholman, 63°53'31N 08°34'31E, 17 April 2000, kelp forest, boulders, 10 m, D. – VM 1796 (1), Mausund Tvingholman, 63°53'12N 08°35'44E, 15 April 2000, kelp forest, boulders, sand, 10 m, D. – VM 1795 (1), Mausund Bukkholman, 63°52'28N 08°37'17E, 05 April 1998, bedrock, 13 m, D. – VM 32990 (1), Mausund Aursøya (lykta), 63°52.570'N 08°38.882'E, stn 06-04, 03 April 2004, cliff, 21 m, D. – VM 33011 (3), Bud Rundholmen, 62°54.04'N 06°54.65'E, 20 May 2004, coll. M. Ødegården, 5-20 m, D. – VM 1794, Bessaker, 64°14'50N 10°19'16E, 28 November 1998, cliff, 10 m, D. – VM 1793 (2), Ulvøya Bjørnholmen, 63°40'21N 09°09'10E, 31 May 1998, bedrock, 7 m, D.

New records: Sector 4 (Odhner 1922), 8 (Kükenthal & Weissenborn 1886, Grieg 1914a, 1914b).

Remarks. In Norwegian waters this species has not often been observed, which may be ascribed to its cryptic appearance. Associated with *Alcyonium digitatum* it has been found from the littoral zone (Dons 1942b) to 129 m (Thompson & Brown 1984), but along the Norwegian coast only from scattered observations. Emendations in Table 1 are according to verifiable records.

Tritonia lineata Alder & Hancock, 1848

Tritonia lineata G.O. Sars 1878: 364, 377.

Remarks: The only record of this species is from Florø (sector 10) by G.O. Sars (1878). This is the northernmost record of this species, which is more common further south along the Atlantic east coast (e.g. Thompson & Brown 1984). Løyning's (1927) reference to this species is a reference to Sars' record, and Odhner (1922) examined a single specimen from Florø, which it is reasonable to believe is the same specimen Sars reported.

Arminidae Rafinesque, 1814

Armina loveni (Bergh, 1860)

Diphyllidia lineata Asbjørnsen 1854: 339.

Pleurophyllidea loveni G.O. Sars 1878: 363, tab. XV, fig. 2.

Pleurophyllidia loveni M. Sars 1870: 187.– Grieg 1897: 25.– 1913: 6.– 1914a: 90.– Odhner 1922: 45.– Dons 1933: 183.

Armina loveni Odhner 1939: 49.

New records: Sector 3 (M. Sars 1870, Odhner 1922), 6 (Odhner 1922).

Remarks: Dons (1933) was of the opinion that this species was a recent immigrant to the Trondheimsfjord, with the argument of no previous records after 13 years of dredging in the Trondheim area. It was collected annually from 1933 to 1937 (Odhner 1939), but has not been reported since. We visited Dons' localities in 1999, but dredging did not provide any specimens. It was however observed in the same area by local divers in February 2005 (photo provided by Kåre Telnes). Otherwise the distribution along the coast is scattered. Central Norway is the northern distribution range for this species.

Heterodorididae

Heterodoris robusta Verrill & Emerton, 1882

Heterodoris robusta Odhner 1926: 4, fig. 1-5, pl. 1, fig. 1-3.

Remarks: This deep water species was originally described from the east coast of USA. The second known record along with an additional description was presented by Odhner (1926) based on specimens from the Trondheimsfjord. Platts (1985) and Griffiths (1985) claimed that Odhner had synonymised *H. robusta* with the similar *Athilla ingolfiana* Bergh, 1899. Odhner (1926) had justified the similarity of these two by placing *A. ingolfiana* in the same genus as *H. robusta*, and stated: "The two forms are, however, distinct species, as is proved by their different radulae". This was also substantiated by Bouchet (1977) who found *H. robusta* in the Bay of Biscay, and kept *H. robusta* separate from *H. ingolfiana*. Griffiths (1985), however, suggested keeping *A. ingolfiana* in the original combination, based on the specimens found by Bergh (1899) from Iceland.

Odhner's (1926) specimens are the only record of this species from Norway, the record from sector 8 (Høisæter et al. 1997) is not accounted for (Høisæter 1986) (Table 1).

Heroidae

Hero formosa (Lovén, 1841)

Clœlia trilineata M. Sars 1851: 194.

Hero formosa M. Sars 1870: 193.– Brøgger 1872: 143.– G.O. Sars 1878: 316, tab. 28, fig. 3a-d, tab. XV, fig. 5a-c.– Krause 1895: 98.– Grieg 1897: 22, 31.– 1932:15. Friele & Grieg 1901: 120.– Odhner 1907: 88.– 1922: 34.– Larsen 1925: 42.

Material examined. VM 50706 (1), Bud, Møre og Romsdal, 62° 54.00'N 06° 53.10'E, 24 June 2005, 170 m, ROV.

New records: Sectors 3, 4, 6, 7 (Odhner 1922), 11 (this study), 18 (M. Sars 1851, G.O. Sars 1878).

Remarks. In Norwegian waters this species is only known from the deeper part of the sublittoral from 30 to 270 m depth (M. Sars 1870, Grieg 1897, Friele & Grieg 1901).

Zephyrinidae Iredale & O'Donoghue, 1923

Janolus cristatus (delle Chiaje, 1841)

New records: Sectors 7 (G.O. Sars 1878), 6 (Moen & Svensen 1999).

Remarks. This is a rare species in Norwegian waters and it is only reported two times: from Tananger (G.O. Sars 1878) and Egersund (Moen & Svensen 1999). A record from western Norway (Løyning 1927) is not documented by an exact locality.

Goniaeolididae Odhner, 1907

Goniaeolis typica M. Sars, 1861

Goniœolis typica M. Sars 1861: 244.– G.O. Sars 1872b: 37.

Goniaeolis typica G.O. Sars 1878: 364.– Odhner 1922: 11.– 1939: 49.

Goniaeolis lobata Odhner 1907: 97.

Material examined: VM 33068 (1), Stjørnfjorden Håøy, 11 July 1935, coll. C. Dons, 110 m.

New records: Sector 13 (Odhner 1939).

Remarks: This endemic species is rare and is only found from Skagerrak (Odhner 1907), Kristiansund (M. Sars 1861), the Hardangerfjord (G.O. Sars 1872b), and at the mouth of the Trondheimsfjord (Odhner 1939), a record in sector 6 was erroneously included in Høisæter et al. (1997). Odhner (1907) described a new species (*G. lobata*) from Skagerrak that he later synonymised with *G. typica* (Odhner 1922). The species is only known from deeper waters ranging from 90 to 666 m.

Eubranthidae Odhner, 1934

Eubranthus exiguus (Alder & Hancock, 1848)

Aeolis exigua Metzger & Meyer 1875: 266.

Eolis exigua Friele & Hansen 1876: 77.

Galvina exigua G.O. Sars 1878: 365.– Friele & Grieg 1901: 119.– Løyning 1922: 47.– Odhner 1922: 30.

Eubranthus tricolor var. *exigua* Løyning 1927: 258.

Eubranthus exiguus Odhner 1939: 66.– Dons 1942c: 193.– Evertsen & Bakken 2002: 19.

Tergipes lacinulatus (?) M. Sars 1851: 194.– G.O. Sars 1878: 322.

Material examined: VM 5506 (2), VM 5507 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 18 May 2002, Bedrock, gravel, 15 m, D. – VM 1126 (1), Agdenes Sletvik, 63°35'11N 09°31'29E, 21 June 2001, littoral, HP. – VM 1124 (1), Trondheimsfjorden Beitstadfjorden Kalven, 63°59'10N 11°22'26E, 26 May 2001, boulders, sand, 12 m, D. – VM 1122 (1), VM 1123 (1), Trondheimsfjorden Flakkgalten, 63°26'56N 10°10'26E, 29 July 2000, gravel, sand, 15 m, D. – VM 1121 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 03 November 1998, pier pole, 8 m, D. – VM 1125 (2), Ulvøya Bjørnholmen, 63°40'21N 09°09'10E, 31 May 1998, bedrock, 7 m, D. – VM 33056 (2), Trondheimsfjorden Tautra, 26 June 1928, littoral. – VM 33057 (3), Vikna Rørvik, 15 July 1938, coll. C. Dons, littoral. – VM 33058 (1), Nærøy, Ottersøystrømmen, 15 September 1942, coll. C. Dons, littoral. – VM 33032 (5), Bud Rundholmen, 62°54,04'N 06°54,65'E, 20 May 2004, 10-25 m, D.

New records: Sector 4 (Odhner 1922), sector 8 (M. Sars 1835, Metzger & Meyer 1875, Bergh 1874, Friele & Hansen 1876, Friele & Grieg 1901, Løyning 1927), sector 10 (Friele & Hansen 1876, Odhner 1922), sector 18 (Odhner 1939, Dons 1942c), sector 23 (M. Sars 1851, Odhner 1922).

Remarks: There have been some doubts in Norwegian literature regarding this species. *Tergipes lacinulatus* Gmelin, 1791 as it was used by M. Sars (1851, 1859) and G.O. Sars (1878), represent *E. exiguus* (Løyning 1922, Odhner 1922, 1939). Detailed descriptions of this species were given in Alder & Hancock (1851) and Edmunds & Kress (1969) who also revised the European species of this genus. Records in sectors 1 and 26 can not be accounted for (Table 1).

Eubranthus farrani (Alder & Hancock, 1844)

Eolis tricolor var. *farrani* Friele & Hansen 1876: 77.

Galvina farrani Bergh 1886: 4.– Grieg 1914b: 13.– Odhner 1922: 30.

Eubranthus tricolor var. *farrani* Løyning 1927: 257.

Material examined: VM 1132 (1), Bjørnsund, 62°53'18N 06°49'03E, 17 August 2001, kelp forest, boulders, sand, 5 m, D. – VM 1130 (1), Mausund Vasskattholman, 63°53'31N 08°34'31E, 17 April 2000, kelp forest, boulders, 20 m, D. – VM 1129 (2),

Vingleia fyr Borholman, 63°57'14N 08°46'06E, 20 August 1999, bedrock, 0-30 m, D. – VM 1134 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 07 April 1999, bedrock, 10-30 m, D. – VM 1135 (1), Trondheimsfjorden Sällåtneset, 63°28'34N 09°52'01E, 04 April 1999, bedrock, sand, 0-21 m, D. – VM 1127 (1), Grefsnsvågen Torsøya, 63°36'51N 08°27'08E, 11 February 1999, bedrock, 0-20 m, D. – VM 1131 (1), Bessaker Bonvika, 64°15'00N 10°17'07E, 29 November 1998, cliff, 12 m, D. – VM 1128 (2), Dolmøya Knutshaugskjæran, 63°39'25N 08°50'15E, 27 March 1998, kelp forest, 10 m, D. – VM 1133 (1), Eide Straumsholmen, 63°00'39N 07°18'29E, 14 February 1998, bedrock, 20 m, D. – VM 33041 (5), Bud Rundholmen, 62°54'04N 06°54'65E, 21 May 2004, 10-20 m, D. – VM 48610 (1), Hamborneset Trondheimsfjord, 8 May 2005, stn 11-05, 27 m, D.

New records: Sector 6 (Moen & Svensen 1999), sector 7 (Odhner 1922), sector 8 (Bergh 1877, Grieg 1914b, Løyning 1927), sector 10 (Friele & Hansen 1876, Odhner 1922), sector 11 (Odhner 1922).

Remarks: *Eubranthus farrani* has been mistaken for other *Eubranthus* spp. as intermediate forms have been described (Edmunds & Kress 1969). Detailed descriptions of this species are given in Alder & Hancock (1845) and Edmunds & Kress (1969). Due to many new records from field-work as well as literature studies the distribution of this species along the Norwegian coast has been updated (Table 1).

***Eubranthus pallidus* (Alder & Hancock, 1842)**

Eolis picta Friele & Hansen 1876: 77.

Eolis flavescens Friele & Hansen 1876: 78.

Galvina picta G.O. Sars 1878: 365.– Friele & Grieg 1901: 119.– Løyning 1922: 44.– Odhner 1922: 30.

Eubranthus tricolor var. *picta* Løyning 1927: 257.

Eubranthus tricolor var. *pallida* Løyning 1927: 257.

Eubranthus pallidus Odhner 1939: 66.– Dons 1942c: 193.– Evertsen & Bakken 2002: 19.

Material examined: VM 1137 (1), Bjørnsund, 62°53'18N 06°49'03E, 02 October 2001, kelp forest, boulders, sand, 0-30 m, D. – VM 1140 (1), Trondheimsfjorden Flakkgalten, 63°26'56N 10°10'26E, 29 July 2000, gravel, sand, 15 m, D. – VM 1138 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 07 April 1999, bedrock, 10-30 m, D. – VM 1139 (1), Bessaker Bonvika, 64°15'00N 10°17'07E, 29 November 1998, cliff, 10 m, D. – VM 1136 (1), Dolmøya Vadholmen, 63°39'19N 08°43'49E, 28 March 1998, kelp forest, 0-21 m, D.

New records: Sector 4 (Odhner 1922), 10 (Friele & Hansen 1876).

Remarks: Friele & Hansen (1876) described *E. flavescens* from western Norway, but this was later synonymised with *E. pallidus* by Løyning (1927) and Odhner (1939). Its distribution along the Norwegian coast was later expanded (Evertsen & Bakken 2002). Detailed descriptions of this species were given

in Alder & Hancock (1847), Løyning (1922) and Edmunds & Kress (1969).

***Eubranthus tricolor* Forbes, 1838**

Eolis tricolor var. *farrani* Friele & Hansen 1876: 77.

Egalvina viridula Odhner 1929: 11.– 1939: 66.– Dons 1942c: 193.

Galvina tricolor Odhner 1922: 30.

Eubranthus tricolor Odhner 1939: 66.

Material examined: VM 1150 (1), Bjørnsund, 62°53'18N 06°49'03E, 02 October 2001, kelp forest, boulders, sand, 0-30 m, D. – VM 1152 (1), Trondheimsfjorden Kalurdalen, 63°35'46N 09°45'10E, 20 February 2000, cliff, 0-30 m, D. – VM 1145 (1), VM 1149 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 07 April 1999, bedrock, gravel, 2-25 m, D. – VM 1146 (1), VM 1147 (1), VM 1148 (1), Trondheimsfjorden Galgenes, 07 April 1999, bedrock, gravel, 1 ex, 10-30 m, D. – VM 1151 (2), Bjørnsund, 62°53'18N 06°49'03E, 18 August 1998, kelp forest, 14 m, D. – VM 51736 (2), Trondheimsfjorden Hambornes, 25 July 2005, coll. K. Telnes, 20 m, D.

New records: Sector 18 (Odhner 1929).

Remarks: *Eubranthus tricolor* has been treated as a synonym of *E. farrani* (Friele & Hansen 1876; Løyning 1927), and it is not clear which was treated as which species by Odhner (1939). The records presented by Odhner (1939) should therefore be regarded as doubtful. Edmunds & Kress (1969) clarified the status of these species. Due to its distribution south to France it is here considered pan-sectoral along the Norwegian coast, its distribution is emended (Table 1). Detailed descriptions of the species were given in Alder & Hancock (1845) and Edmunds & Kress (1969).

***Eubranthus vittatus* (Alder & Hancock, 1842)**

Material examined. VM 50527 (1), Knubben, Kragerø. 58° 48.986'N 09° 28.274'E, 24 July 2005, 10-20 m, D. VM 51737 (5), Trondheimsfjorden Hambornes, 25 July 2005, coll. K. Telnes, 20 m, D.

New records. Sector 3 (this study), 13 (this study).

Remarks. This species is new to the Norwegian fauna, with two records from Kragerø and the Trondheimsfjord (Table 1).

Cumanotidae

***Cumanotus beaumonti* (Eliot, 1906)**

Cumanotus laticeps Odhner 1907:80.

Cumanotus beaumonti Evertsen & Bakken 2002: 18.

New records: Sector 16 (Evertsen & Bakken 2002).

Remarks: A single specimen was found in northern Norway

(Evertsen & Bakken 2002), which was the second confirmed record from Norwegian waters, the first was from Sørvær in Finnmark by Odhner (1907) (sector 22 erroneously entered as sector 24 in Høisæter et al. 1997). Odhner's specimens were commented on by Eliot (1910) who referred them to *C. beaumonti*. The only other records are from the British Isles (Picton 1991). Due to this, distribution is changed to pan-sectoral (x) (Table 1).

Embletonidae

Embletonia pulchra Alder & Hancock, 1851

Embletonia pulchra Løyning 1927: 254, fig. 1-2.– Odhner 1939: 75.– Dons 1942c: 194.

Remarks: This rare species in Norwegian waters has only been recorded from Bergen (Løyning 1927) and Ålesund (Odhner 1939, Dons 1942c). Detailed descriptions were also given in Alder & Hancock (1851).

Tergipedidae

Tergipedidae is the valid name for this group of nudibranchs, since Tergipeninae is available, and Cuthonidae as proposed by Williams & Gosliner (1979) is not (Brown 1980). The Tergipedidae comprise a lot of different names on the generic level, of which only *Cuthona*, *Tergipes* and *Tenellia* are accepted today (Brown 1980, Thompson & Brown 1984).

Cuthona caerulea (Montagu, 1804)

Cuthona caerulea Brown 1980: 243, fig. 3F, 5C.– Thompson & Brown 1984: 120.– Platts 1985: 161.– Thompson 1988: 266.– Moen & Svensen 1999: 308.

Material examined: VM 10908 (1), Bud Rundholmen, 62°54'02N 06°54'33E, 18 May 2003, kelp forest, 10-20 m, D. – VM 796 (1), Eide Straumsholmen, 63°00'39N 07°18'29E, 24 February 2000, kelp forest, 0-20 m, D. – VM 33042 (1), Bud Rundholmen, 62°54.04N 06°54.65E, 20 May 2004, 10-25 m, D. – VM 33043 (1), Bud Frettaskjæret (Fretten), 62°54.23N 06°52.64E, 22 May 2004, 25 m, D. – VM 48608 (1), Hamborneset Trondheimsfjord, 8 May 2005, stn 11-05, 27 m, D. – VM 51733 (1), Kalurdalen Trondheimsfjord, 12 June 2005, 18 m, D.

Added distribution: Sectors 7 (Moen & Svensen 1999), 11, 12, 13 (this study).

Remarks: The first confirmed records of this species from Norwegian waters are those presented by Moen & Svensen (1999) and our own records from Bud (sector 11), Strømsholmen (sector 12) and the Trondheimsfjord (sector 13). Previous records from Norwegian waters (sector 8) referred to by Thompson & Brown (1984) can not be accounted for.

Cuthona concinna (Alder & Hancock, 1843)

Aeolis concinna Asbjørnsen 1854: 331, 339.– Brøgger 1872: 124.

Eolis concinna M. Sars 1870: 189.– Brøgger 1872: 110.– Friele 1876.

Cratena concinna Friele & Grieg 1901: 118.– Odhner 1907: 79.

Cuthona concinna Odhner 1922: 30.

New records: Sector 3 (Asbjørnsen 1854).

Remarks: This species has only been found north to Solund in Hordaland County (Odhner 1922).

Cuthona distans Odhner, 1922

Cuthona distans Odhner 1922: 29, fig. 11-12.

Remarks: This endemic species has not been recorded since it was described from preserved specimens collected at Vadsø in the Varangerfjord (Odhner 1922). As it was described from preserved specimens information on colouration and biology is not known. Its distribution is changed to restricted (r) in Table 1.

Cuthona foliata (Forbes & Goodsir, 1839)

Cratena olivacea G.O. Sars 1878: 364.– Grieg 1913: 13.

Cuthona olivacea G.O. Sars 1878: tab. XVI.– Odhner 1922: 29.

Eolis olivacea Friele & Hansen 1876: 76.

Amphorina olivacea Løyning 1922: 61.

Cratena foliata Odhner 1939: 74.– Dons 1942c: 193.

Cuthona foliata Santhakumaran 1984: 15.

New records: Sector 8 (Friele & Hansen 1876), 13 (Santhakumaran 1984).

Remarks: Only scattered records from Drøbak (the Oslofjord, sector 2) to Bodø are known (Løyning 1922, Odhner 1922, 1939, Dons 1942c), hence records from sector 1 is not accounted for (Table 1). Detailed descriptions were given in Alder & Hancock (1845) and Brown (1980).

Cuthona gymnota (Couthouy, 1838)

Cuthona aurantiaca G.O. Sars 1878: 321.– Friele & Grieg 1901: 118.– Odhner 1907: 78.– 1922: 28.– 1929: 19.

Amphorina aurantiaca Løyning 1922: 57.

Cratena aurantia Løyning 1927: 252.– Odhner 1939: 74.– Dons 1942c: 193.

Material examined: VM 806 (1), Mausund Aursøya (brygga), 63°52'04N 08°40'02E, 16 April 2000, boulders, sand, 27 m, D. – VM 10907 (4), Vingleia fyr, 63°54'59N 08°40'29E, 20 August 1999, kelp forest, 0-30 m, D. – VM 807 (3), Vingleia fyr, 15 August 1999, kelp forest, 0-10 m, D. – VM 809 (1), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 01 August 1999, cliff, 0-31 m, D. – VM 803 (2), Trondheimsfjorden

Munkholmen, 63°27'12N 10°23'12E, 31 July 1999, bedrock, 10-20 m, D. – VM 808 (4), Trondheimsfjorden TBS, 63°26'15N 10°20'38E, 21 July 1999, mud, 0-20 m, D. – VM 802 (1), Ulvøya Bjørnholmen, 63°40'21N 09°09'10E, 31 May 1998, bedrock, 7 m, D. – VM 48851 (1), Sæbuøya Hitra, 30 April 2005, stn 08-05, 12 m, D.

New records: Sector 7 (Odhner 1922), 17 (Odhner 1922, Odhner 1929, Dons 1942c), 20 (Odhner 1922).

Remarks: Detailed descriptions were given by Alder & Hancock (1851 (as *Eolis aurantiaca*)) and Brown (1980). A record in sector 1 is not possible to verify in the literature (Table 1).

Cuthona nana (Alder & Hancock, 1842)

Cratena nana G.O. Sars 1878: anm.

Eolis nana Alder & Hancock 1848: fam. 3, pl. 25, fig. 1-4.

Eolis peachi Alder & Hancock (1852: fam. 3, pl. 10, fig. 1-4.

Precuthona peachi Odhner 1929: 16.– 1939: 70.– Dons 1942c: 193.

Cuthona nana Odhner 1922: 28.– 1939: 72.– Dons 1942c: 193.

Material examined. Dolmøya Hitra October 2004.

New records: Sector 7 (Odhner 1922), sector 11 (G.O. Sars 1878), sector 12 (this study), sectors 20 and 22 (Dons 1942c).

Remarks: This species has been taxonomically confused but was revised by Brown (1980). The specimens reported here were found among unidentified hydroids, on overgrown bedrock at about 15 m depth.

Cuthona norvegica (Odhner, 1929)

Cuthonella norvegica Odhner, 1929:13

Remarks: Originally described from Evenskjær by Odhner (1929) this species has never been recorded since. Høisæter et al. (1997) cited it from sectors 18 and 19, probably because the type locality is in the borderline between the sectors. Its distribution is changed to restricted (r) (Table 1). This species was originally described within the genus *Cuthonella* Bergh, 1884, but Millen (1986) synonymised *Cuthonella* with *Cuthona*.

Cuthona pustulata (Alder & Hancock, 1854)

Cuthona pustulata Odhner 1929: 20.– 1939: 72.– Dons 1942c: 193.– Evertsen & Bakken 2002: 18.

Material examined: VM 814 (1), Ulvøya Bjørnholmen, 63°40'21N 09°09'10E, 30 May 1998, bedrock, 11 m, D.

New records: Sector 12 (VM 814), sector 25 (Evertsen & Bakken 2002).

Remarks. This species have a pan-sectoral distribution (Evertsen & Bakken 2002). Detailed information was given by Odhner (1929) and Brown (1980).

Cuthona rubescens Picton & Brown, 1978

Cuthona rubescens Picton & Brown, 1978: 345, fig. 1.

Material examined. VM 50388 (1), Sauøy Hitra, 29 April 2005, stn 07-05, 6 m, D.

Observation: Station 37-99, Trondheimsfjorden Kalurdalen, one specimen were lost before fixation.

New records: Sector 6 (Moen & Svensen 2003), 12, 13 (this study).

Remarks. This species is new to the Norwegian fauna, previously not recorded outside the British Isles. The single specimen collected in May 1999 in the outer part of the Trondheimsfjord was 7 mm long, but was unfortunately lost from the aquarium in the lab before it could be preserved. As the species is recently described (Picton & Brown 1978) the knowledge about this species is still limited.

Cuthona viridis (Forbes, 1840)

Cratena viridis Friele & Grieg 1901: 118.– Løyning 1927: 253.– Odhner 1926: 28.– 1939: 72.– Dons 1942c: 193.

Cuthona viridis Brown 1980: 241, fig. 3I-K and 5D.– Evertsen & Bakken 2002: 18.

Material examined: VM 799 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 23 February 2000, bedrock, gravel, 0-30 m, D.

New records: Sector 8 (Friele 1876, Løyning 1927), sector 12 (Odhner 1926).

Remarks. This is a northern distributed species (Brown 1980), which in Norwegian waters is only found north of Bergen. Its distribution along the Norwegian coast was changed to pan-sectoral (Evertsen & Bakken 2002). The locality in Odhner (1926) Ramsøy - Galten is at Forsnes, Hitra (not Ramsøy, Osen), hence in sector 12, and the record in sector 14 is removed (Table 1).

Tergipes tergipes (Forskål, 1775)

Eolis despecta Friele & Hansen 1876: 78.

?*Tergipes lacinulatus* M. Sars 1850: 194.

Tergipes despectus Friele & Grieg 1901: 118.– Løyning 1927: 256.

Tergipes tergipes Brown 1980: 250, fig. 6F-I and 7A.– Evertsen & Bakken 2002: 20.

Material examined: VM 33012 (5), Bud Rundholmen, 62°54.04'N 06°54.65'E, 20 May 2004, 10-25 m, D. – VM 5524 (2), Galgenes Trondheimsfjord, 18 May 2002, 30 m. – VM 50557 (1), Bremerodden, Farsund, 58° 03.559'N 06° 52.389'E, 28 July 2005, 3 m, D.

New records: Sector 6 (this study), 10 (Friele & Hansen 1876), sector 11 (this study), sectors 18 and 25 (Evertsen & Bakken 2002).

Remarks: This species' small size (usually 5 to 8 mm long)

makes it easily overlooked. Recent records in the study area and in northern Norway (Evertsen & Bakken 2002) indicate this.

Tenellia adspersa (Nordmann, 1845)

Embletonia pallida Metzger & Meyer 1875: 266.– Sars 1878: anm.– Løyning 1922: 65, fig. 13, 44–50.

Added distribution: Sector 8 (Metzger & Meyer 1875).

Remarks: The only Norwegian records are from the Oslofjord (Løyning 1922), Bergen (Metzger & Meyer 1875) and Lofoten (G.O. Sars 1878) (Table 1). New records of this species from the Baltic have recently been reported (Evertsen et al. 2004) with references to previous records and descriptions.

“Flabellinidae”

Remarks: Flabellinids comprise a widely divergent assemblage of species (Hirano & Kuzirian 1991). Phylogenetic analyses by Wägele & Willan (2000) proved that the flabellinids could not be recognised as a natural group, neither at what has traditionally been recognised as the family-level nor at genus-level. Earlier cladistic analyses have shown that *Flabellina* and *Coryphella* cannot be maintained separate without regarding *Coryphella* as paraphyletic (Gosliner & Kuzirian 1990), and yet other analyses have shown that *Flabellina* as a sole genus for all described species would include a group of very heterogeneous taxa (Hirano & Kuzirian 1991). Based on these results the term “Flabellinidae” was recommended (Wägele & Willan 2000). Prior to the analyses by Wägele & Willan (2000) it has been common throughout the literature to place flabellinid species in either of the two genera *Flabellina* Voigt, 1834 as proposed by Gosliner & Griffiths (1981), or *Coryphella* Gray, 1850 (e.g. Thompson & Brown 1984; Thompson 1988; Picton & Morrow 1994). *Flabellina* is the older name and has priority, it is therefore used here.

“Flabellinidae” is represented with eight species in Norwegian waters. Two other species are known from adjacent areas; *Flabellina islandica* Odhner, 1938 (described from Iceland) and *Flabellina parva* Hadfield, 1963 (described from Öresund in Denmark) either never recorded since their original description.

Flabellina borealis (Odhner, 1922)

Coryphella salmonacea GO. Sars 1872a: 30.– 1878: 319, tab. 28, fig. 4, tab. 16, fig. 3.

Coryphella borealis Odhner 1922: 31, fig. 13a.– 1926: 28.– 1939: 57, fig. 19.

Flabellina borealis Evertsen & Bakken 2002: 19, fig. 2.

Material examined: VM 11092 (3), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 28 July 1999, gravel, sand,

0–22 m, D. – VM 11091 (2), Trondheimsfjorden Kalurdalen, 63°35'46N 09°45'10E, 28 May 1999, cliff, 18 m, D. – VM 11050, Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 17 February 1999, pier pole, 3 m, D.

New records: Sector 11 (G.O. Sars 1872), 17 (Odhner 1922).

Remarks: Odhner (1939) supplemented his original description (Odhner 1922) with more characters based on additional material. Originally he had material available from the entire Norwegian coast as well as the Swedish west coast when he described *F. borealis* from a quantity of material previously identified to *Coryphella salmonacea* collected by G.O. Sars (1878). It must be noted that Lemche (1936) attempted to compare *F. borealis* with *Coryphella bostoniensis* sensu Bergh (1864) and *Coryphella gracilis* (Alder & Hancock, 1844), but that he in Lemche (1941a, 1941b) changed all his identifications to *Coryphella verrucosa*. Kuzirian (1979) confirmed Lemche's identifications by stating that *Aeolis bostoniensis* Mörch, 1857 and *C. gracilis* var. *bostoniensis* are synonymous with *C. verrucosa*. *Eolis bostoniensis* Couthouy, 1838 on the other hand is no other than *Facelina bostoniensis* (Brown 1981). *F. borealis* has not been recorded since Odhner (1939) and Lemche (1941), until Evertsen & Bakken (2002) reported specimens from Northern Norway, and several more accounts is reported from this present study. Records in sector 1 are not accounted for (Table 1). Light microscope photographs of the radula (Evertsen & Bakken 2002) are in well accordance with illustrations in Odhner (1939).

This species is only known from the Norwegian coast and the Swedish west coast. In our studies this species has been found several times and must be considered common in Central Norway although not abundant.

Flabellina browni (Picton, 1980)

Remarks. *Flabellina browni* was recently described from the British Isles (Picton 1980). It was included in Høisæter et al. (1997) but with no records, and no confirmed records based on collected specimens have been reported from Norwegian waters (Høisæter 1986), including our own studies. This species is omitted in Table 1.

Flabellina gracilis (Alder & Hancock, 1844)

Coryphella gracilis Grieg 1913: 9.– Kuzirian 1979: 241–244, fig. 1–4.

Coryphella rufibranchialis var. *clavigera* Odhner 1929: 10.

Material examined: VM 1297 (1), Bjørnsund, 62°53'18N 06°49'03E, 02 October 2001, kelp forest, boulders, sand, 0–30 m, D. – VM 1243 (1), Trondheimsfjorden Beitstadfjorden Kalven, 63°59'10N 11°22'26E, 26 May 2001, boulders, sand, 15 m, D. – VM 1244 (1), Trondheimsfjorden Beitstadfjorden

Kalven, 63°59'10N 11°22'26E, 26 May 2001, boulders, sand, 12 m, D. – VM 1247 (1), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 19 May 2001, cliff, 20 m, D. – VM 1267 (4), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 19 May 2001, cliff, 20 m, D. – VM 1266 (1), Kvenvær, 63°31'55N 08°21'26E, 30 April 2001, kelp forest, bedrock, 0-20 m, D. – VM 1239 (1), VM 1240 (1), VM 1241 (1), Trondheimsfjorden Sällåneset, 63°28'34N 09°52'01E, 10 September 2000, bedrock, sand, 0-18 m, D. – VM 1248 (1), VM 1249 (1), VM 1250 (1), VM 1251 (1), VM 1257 (1), VM 1258 (1), VM 1259 (2), VM 1260 (1), VM 1261 (3), VM 1262 (1), VM 1263 (1), VM 1264 (1), VM 1265 (1), VM 1494 (1), VM 11109 (1), Trondheimsfjorden Flakkgalten, 63°26'56N 10°10'26E, 29 July 2000, bedrock, gravel, 15 m, D. – VM 1254 (1), Mausund Bukkholman, 63°52'28N 08°37'17E, 15 April 2000, kelp forest, bedrock, 10-20 m, D. – VM 1253 (1), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 01 August 1999, cliff, 0-31 m, D. – VM 1256 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 31 July 1999, bedrock, sand, 10-20 m, D. – VM 1245 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 07 April 1999, boulders, gravel, 5-25 m, D. – VM 1242 (1), Grefsnesvågen Torsøya, 63°36'51N 08°27'08E, 11 February 1999, bedrock, 0-20 m, D. – VM 1255 (1), Bessaker, 64°14'50N 10°19'16E, 26 November 1998, bedrock, sand, 5-20 m, D. – VM 1246 (1), Bjørnsund Hammarøy Ø., 62°53'28N 06°49'09E, 18 August 1998, kelp forest, 14 m, D. – VM 1252 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 02 April 1998, pier pole, 1 ex, 8 m, D. – VM 33038 (1), Bud Rundholmen, 62°54.04'N 06°54.65'E, 20 May 2004, 10-25 m, D. – VM 48854 (1), Sæbuøya Hitra, 30 April 2005, stn 08-05, 10 m, D.

New records: Sector 11 (Grieg 1913), 19 (Odhner 1929).

Remarks: Høisæter et al. (1997) recorded this species from sector 1, 8 and 10, and a doubtful record from sector 26. These records are not accounted for in the literature (Kuzirian 1979, Høisæter 1986), the only records from the literature are from Ålesund (sector 11) (Grieg 1913) and Bjarkøy (sector 19) (Odhner 1929). Table 1 is changed according to the records discussed here. This species has a southern distribution.

Flabellina gracilis has often been confused with other species in the literature (Kuzirian 1979).

***Flabellina lineata* (Lovén, 1846)**

Aeolis lineata Metzger & Meyer 1875: 266.– Kükenthal & Weissenborn 1876: 786.

Flabellina lineata Moen & Svensen 1999: 305.– Evertsen & Bakken 2002: 19.

Coryphella lineata G.O. Sars 1878: anm.– Krause 1895: 99.– Friele & Grieg 1901: 120.– Grieg 1913: 9.– Løyning 1922: 32.– 1927: 260.– Odhner 1907: 84.– 1922: 30.– 1939: 59.

Coryphella rufibranchialis Odhner 1926: 27 (partim).

Material examined: VM 5509 (2), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 19 May 2002, bedrock,

sand, 25 m, D. – VM 1292 (1), Trondheimsfjorden Beitstadfjorden Kalven, 63°59'10N 11°22'26E, 26 May 2001, boulders, sand, 12 m, D. – VM 1294 (1), Kvenvær, 63°31'55N 08°21'26E, 30 April 2001, kelp forest, bedrock, 0-20 m, D. – VM 1277 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 14 September 2000, bedrock, mud, 0-18 m, D. – VM 1280 (1), VM 1295 (1), VM 1296 (1), Trondheimsfjorden Flakkgalten, 63°26'56N 10°10'26E, 29 July 2000, gravel, sand, 15 m, D. – VM 1281 (1), Mausund Bukkholman, 63°52'28N 08°37'17 E, 15 April 2000, kelp forest, boulders, 20-30 m, D. – VM 1289 (1), Eide Straumsholmen, 63°00'39N 07°18'29E, 24 February 2000, bedrock, 0-20 m, D. – VM 1285 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 07 September 1999, bedrock, gravel, 10-30 m, D. – VM 1293 (1), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 01 August 1999, cliff, 0-31 m, D. – VM 1283 (4), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 31 July 1999, bedrock, sand, 10-20 m, D. – VM 1291 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 24 July 1999, mud, 0-20 m, D. – VM 1282 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 09 May 1999, bedrock, sand, 4-18 m, D. – VM 1286 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 28 February 1999, bedrock, mud, 8 m, D. – VM 1284 (1), Trondheimsfjorden Sällåneset, 63°27'35N 09°54'56E, 23 February 1999, bedrock, mud, 22 m, D. – VM 1278 (1), VM 1288 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 22 February 1999, bedrock, mud, 20-28 m, D. – VM 1287 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 22 February 1999, bedrock, mud, 10-20 m, D. – VM 1279 (2), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 15 December 1998, bedrock, mud, 25 m, D. – VM 1290 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 02 November 1998, pier pole, 8 m, D. – VM 33036 (2), Mausund Bukkholman, 63°52.71'N 08°37.35'E, st. 07-04, 04 April 2004, 5-20 m, D. – VM 33037 (1); Bud Rundholmen, 62°54.04'N 06°54.65'E, 20 May 2004, 10-25 m, D.

New records: Sectors 4 and 6 (Odhner 1922), 16 (Evertsen & Bakken 2002), 18 (G.O. Sars 1878), 20 (Sparre-Schneider 1885, Krause 1895), 22 (Odhner 1907, 1922), 24 (Odhner 1907), 26 (Bergh 1886 as *F. pedata*, Odhner 1939).

Remarks: This species has in earlier literature been treated as a synonym of *F. verrucosa* (e.g. Odhner 1926), but later Odhner (1939) followed Løyning (1922) in that it was a separate species. Although it is recorded from the entire Norwegian coast it is not often encountered, judged from the literature and our own observations. No records in sectors 1, 3 and 17 have been verified from the literature. Due to new records the distribution is changed to pan-sectoral (Table 1).

***Flabellina nobilis* (Verrill, 1880)**

Coryphella rufibranchialis Odhner 1926:27 (partim).

Coryphella sarsi Friele 1902: 12.– Grieg 1913: 9.– Odhner 1929: 4.– 1939: 56.

Coryphella sp. Bergh 1900: 29.

Coryphella sp. Bergh 1900: 30.

Flabellina nobilis Evertsen & Bakken 2002: 19-20.

Material examined: VM 5513 (2), VM 5514 (3), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 19 May 2002, bedrock, sand, 26 m, D. – VM 5515 (2), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 18 May 2002, bedrock, gravel, 30 m, D. – VM 1311 (1), Trondheimsfjorden Beitstadjfjorden Ålbergholmen, 63°57'56N 11°15'42E, 26 May 2001, boulders and gravel, 14 m, D. – VM 1312 (5), Trondheimsfjorden Beitstadjfjorden Kalven, 63°59'10N 11°22'26E, 26 May 2001, bedrock, sand, 12-20 m, D. – VM 1306 (2), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 19 May 2001, cliff, 20 m, D. – VM 1323 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 14 September 2000, bedrock, mud, 0-18 m, D. – VM 1326 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 27 February 2000, bedrock, mud, 0-20 m, D. – VM 1327(1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 27 February 2000, bedrock, mud, 12 m, D. – VM 1325 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 24 February 2000, bedrock, mud, 0-30 m, D. – VM 1334 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 24 February 2000, bedrock, mud, 10-30 m, D. – VM 1329 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 23 February 2000, bedrock, gravel, 0-30 m, D. – VM 1298 (1), VM 1335 (1), Vingleia fyr Borholman, 63°57'14N 08°46'06E, 17 August 1999, bedrock, 27-30 m, D. – VM 1309 (2), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 01 August 1999, cliff, 0-31 m, D. – VM 1340 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 28 July 1999, bedrock, gravel, 22 m, D. – VM 1307 (1), VM 1314 (2), VM 1315 (1), VM 1319 (1), VM 1332 (1), VM 1333 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 07 July 1999, bedrock, sand, 10-30 m, D. – VM 1308 (2), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12 E, 07 July 1999, bedrock, sand, 19 m, D. – VM 1313 (1), Trondheimsfjorden Sällåtneset, 63°27'35N 09°54'56E, 05 July 1999, bedrock, sand, 0-30 m, D. – VM 1299 (2), VM 1300 (2), VM 1301 (1), VM 1338 (2), VM 1336 (4), VM 1337 (3), Trondheimsfjorden Kalurdalen, 63°35'46N 09°45'10E, 29 May 1999, bedrock, mud, 20 m, D. – VM 1316 (4), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 09 May 1999, bedrock, sand, 18-21 m, D. – VM 1302 (1), VM 1317 (1), VM 1318 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12 E, 27 April 1999, bedrock, sand, 12-15 m, D. – VM 1303 (1), VM 1304 (1), VM 1321 (1), Trondheimsfjorden Skarnsundet, 63°51'02N 11°04'32E, 17 April 1999, bedrock, gravel, 30-38 m, D. VM 1305 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 07 April 1999, boulders, gravel, 6-30 m, D. – VM 1310 (1), Trondheimsfjorden 63°35'06N 09°50'49E, 07 April 1999, bedrock, gravel, 5-25 m, D. – VM 1320 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 07 April 1999, boulders, gravel, 0-30 m, D. – VM 1322 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 02 November

1998, pier pole, 8 m, D. – VM 1324 (1), Vikna Rørvik, 64°51'43N 11°14'15E, 01 October 1998, kelp forest, 10-20 m, D. – VM 1330 (1), Trondheimsfjorden Hindrem Skålvika, 63°35'27N 10°26'23E, 16 May 1998, boulders, sand, 20 m, D. – VM 1328 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 08 April 1998, bedrock, mud, 25 m, D. – VM 11107 (1), Trondheimsfjorden Skogn Fiborgtangen, 63°43'00N 11°08'48E, 11 February 1998, mud, 4.5 m, D. – VM 1331 (4), Trondheimsfjorden Flakkgalten, 63°26'56N 10°10'26E, 01 July 1998, gravel, sand, 0-16 m, D. – VM 33031 (1), Mausund Ellingsholman, 63°53.15'N 08°36.75'E, st. 08-04, 05 April 2004, 15-25 m, D.

New Records: Sectors 12 (VM 1298, VM 1335), 15 (VM 1324), 16 and 19 (Evertsen & Bakken 2002), 20 and 21 (Odhner 1929), 24 (Friele 1902).

Remarks: *Flabellina nobilis* was redescribed and the literature relating to it revised by Kuzirian (1977). Through our investigations it is revealed that this species is common and abundant within the study area.

Flabellina pedata (Montagu, 1815)

Eolis landsburgii Friele & Hansen 1876: 75.

Coryphella landsburgii Bergh 1886: 8.– Grieg 1897: 31.

Flabellina pedata Moen & Svensen 1999: 306.

Coryphella pedata Løyning 1922: 35, tab. II, fig. 6.– Odhner 1939: 61.– Dons 1942c: 193.

Material examined: VM 5510 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 19 May 2002, bedrock, sand, 22 m, D. – VM 1342 (1), Hitra Forsnes Værøyan (flytesøyle), 63°24'31N 08°26'34E, 16 July 2000, bedrock, boulders, 20 m, D. – VM 1349 (2), Mausund Vasskattholman, 63°53'31N 08°34'31E, 17 April 2000, kelp forest, boulders, 20 m, D. – VM 1350 (1), Mausund Bukkholman, 63°52'28N 08°37'17E, 15 April 2000, kelp forest, boulders, 10-20 m, D. – VM 1344 (1), VM 1345 (2), Trondheimsfjorden Kalurdalen, 63°35'46N 09°45'10E, 02 April 2000, cliff, 17 m, D. – VM 1346 (1), Stokkøya, 64°03'48N 09°58'49E, 23 September 1999, bedrock, 12 m, D. – VM 1343 (1), Trondheimsfjorden Kalurdalen, 63°35'46N 09°45'10E, 29 May 1999, cliff, 7 m, D. – VM 1347 (1), Stokkøya, 64°03'48N 09°58'49E, 23 April 1999, bedrock, 20 m, D. – VM 1351 (3), Mausund Mauøy, 63°52'04N 08°40'02E, 26 March 1999, kelp forest, 10-15 m, D. – VM 1348 (2), VM 1352 (1), Hitra Dolmøya, 63°39'00N 08°45'31E, 27 March 1998, bedrock, 10-20 m, D. – VM 33023 (2), Bud Rundholmen, 62°54.04'N 06°54.65'E, 20 May 2004, 5-20 m, D. – VM 33024 (1), Mausund Ellingsholman, 63°53.15'N 08°36.75'E, stn 08-04, 05 April 2004, 15-25 m, D.

New records: Sector 6 and 7 (Moen & Svensen 1999), 8 (Grieg 1897), 10 (Friele & Hansen 1876), 13 (VM 5510), 14 (VM 1347).

Remarks: Bergh (1886) reported hesitantly two specimens from Vardø, which later Odhner (1939) corrected to represent

F. lineata. Other records from the literature are included as given above (Table 1), except from sectors 1 and 9 which is not accounted for.

This species has proved to be common in our study area, but only in coastal waters. It is only rarely recorded in sheltered areas.

***Flabellina pellucida* (Alder & Hancock, 1843)**

Doris Bodoensis Rasch 1836: 287.

Aeolis pellucida Asbjørnsen 1854: 331, 338.

Eolis pellucida M. Sars 1870: 189.

Coryphella pellucida Brøgger 1872: 124.– G.O. Sars 1878: tab. XIV.– Friele & Grieg 1901: 119.– Løyning 1922: 38.– 1927: 260.– Odhner 1922: 30.– 1939: 60, fig. 24-25.– Dons 1942c: 193.– Kuzirian 1979: 244-247, fig. 5-7.

Material examined: VM 5511 (1), VM 5512 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 18 May 2002, bedrock, gravel, 20 m, D. – VM 1378 (2), Bjørnsund, 62°53'18N 06°49'03E, 17 August 2001, kelp forest, boulders, sand, 5 m, D. – VM 1381 (1), Trondheimsfjorden Borgenfjorden Rolsøya, 63°51'54N 11°19'15E, 27 May 2001, bedrock, mud, 12 m, D. – VM 1384 (2), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 19 May 2001, cliff, 20 m, D. – VM 1380 (1), VM 1385 (1), Hitra Kvenvær, 63°31'55N 08°21'26E, 30 April 2001, kelp forest, bedrock, 0-20 m, D. – VM 1366 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 24 November 2000, pier pole, 5 m, D. – VM 1364 (3), VM 1365 (4), Snillfjord Sunde, 63°29'48N 09°10'32E, 04 November 2000, boulders, sand, 6 m, D. – VM 1362 (1), Stokkøya Storskjæret, 64°03'02N 09°50'56E, 05 October 2000, kelp forest, boulders, 16 m, D. – VM 1363 (1), Stokkøya Pålodden, 64°05'59N 10°01'51E, 03 October 2000, kelp forest, bedrock, 12 m, D. – VM 1358 (1), VM 1360 (1), VM 1361 (1), VM 11093 (5), Trondheimsfjorden Sällåtneset, 63°28'34N 09°52'01E, 10 September 2000, bedrock, sand, 0-18 m, D. – VM 1359 (1), Trondheimsfjorden Sällåtneset, 10 September 2000, bedrock, sand, 3 m, 0-18 m, D. – VM 1370 (2), Trondheimsfjorden Sällåtneset, 10 September 2000, bedrock, sand, 0-10 m, D. – VM 1339 (6), Trondheimsfjorden Kalurdalen, 63°35'46N 09°45'10E, 02 April 2000, cliff, 18 m, D. – VM 1369 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53 E, 01 March 2000, pier pole, 5 m, D. – VM 1371 (1), VM 1372 (1), VM 1373 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 23 February 2000, bedrock, gravel, 0-30 m, D. – VM 1368 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 21 February 2000, pier pole, 0-28 m, D. – VM 1375 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 16 February 2000, mud, 5 m, D. – VM 1374(2), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 15 December 1999, pier pole, 3-5 m, D. – VM 11094 (6), Vingleia fyr, 63°54'59N 08°40'29E, 15 August 1999, kelp forest, bedrock, 0-30 m, D. – VM 1377 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 07 July 1999, bedrock,

sand, 10-30 m, D. – VM 1383 (1), Stokkøya, 64°03'48N 09°58'49E, 23 April 1999, bedrock, 17 m, D. – VM 1355 (1), VM 1356 (1), VM 1357 (1), VM 1386 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 07 April 1999, boulders, gravel, 10-30 m, D. – VM 1379 (1), Mausund Aursøya (brygga), 63°52'18N 08°38'21E, 27 March 1999, bedrock, sand, 4 m, D. – VM 1376 (1), Mausund Tarbuskjær, 63°55'05N 08°33'05E, 26 March 1999, kelp forest, sand, 15 m, D. – VM 1341 (3), Bjugn Vettaoen, 63°47'50N 09°34'46E, 07 February 1999, bedrock, sand, 12 m, D. – VM 1367 (1), VM 1382 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 02 November 1998, pier pole, 8 m, D. – VM 33025 (1); Mausund Ellingsholman; 05 April 2004, 63°53.15'N 08°36.75'E, st. 08-08, 15-25 m, D.

New records: Sector 3 (Asbjørnsen 1854), 4 (Rasch 1836, Odhner 1922), 12 (this study), 13 (Odhner 1922, Evertsen & Bakken 2001, this study), 14 (this study).

Remarks: Detailed recent information was given by Kuzirian (1979). No records from sector 1 (Høisæter et al. 1997) was verified.

***Flabellina salmonacea* (Couthouy, 1838)**

Coryphella salmonacea Krause 1895: 98.– Bergh 1900: 31.– Friele & Grieg 1901: 119.– Grieg 1913: 9.– Odhner 1907: 85.– 1922: 31.– Kuzirian 1979: 247-251, fig. 8-11.

Flabellina salmonacea Evertsen & Bakken 2002: 20.

New records: Sectors 19 (Evertsen & Bakken 2002), 20 (Krause 1895), 22 (Krause 1895, Friele & Grieg 1901), 24 (Grieg 1913).

Remarks: Records of this species by G.O. Sars (1878) and Bergh (1886) were revised to be *F. borealis* and *F. verrucosa* respectively (Odhner 1922).

This northern distributed species has so far not been recorded in our study area, the southernmost record along the Norwegian coast is the one reported by Evertsen & Bakken (2002). Only a few records are reported from Norwegian waters. Detailed descriptions are given in Kuzirian (1979).

***Flabellina verrucosa* (M. Sars, 1829)**

Eolidia verrucosa M. Sars 1829: 9.– Rasch 1836: 319.

Eolis branchialis (= *E. rufibranchialis*) Danielssen 1861: 38.

Æolis branchialis M. Sars 1851: 131.

Aeolis branchialis Lovén 1846: 140.– Asbjørnsen 1854: 339.– Brøgger 1872: 124.

Aeolis rufibranchialis Metzger & Meyer 1875: 266.

Coryphella bostoniensis Bergh 1864: 241 (ann.).– Bergh 1879b: 563.– Odhner 1915: 236.

Coryphella rufibranchialis Friele & Hansen 1876: 75.– G.O. Sars 1878: 319-320, tab. 28, fig. 5, tab. XVI, fig. 1.– Krause 1895: 98.– Grieg 1897: 22.– 1898: 23.– Friele & Grieg 1901: 119.– 1914: 93.– 1914b: 13.– Nordgaard 1905: 182.– 1907: 33.– Løyning 1922: 24, 28, fig. 3-9, pl. I, fig. 1-4.– 1927:

259.– Odhner 1922: 30.– 1929: 7.– Kuzirian 1979: 25, fig. 12-14.

Coryphella rufibranchialis Odhner 1926: 27 (partim).

Coryphella salmonacea Bergh 1886: 7.

Coryphella verrucosa Friele & Hansen 1876: 75.– G.O. Sars 1878: 320.– Løyning 1922: 28.– Odhner 1922: 33.– Dons 1942c: 192.

Coryphella verrucosa rufibranchialis Odhner 1939: 58.

Coryphella verrucosa verrucosa Odhner 1939: 58.

Flabellina verrucosa Evertsen & Bakken 2002: 20.

Material examined: VM 5516 (1), VM 5517 (3), Trondheimsfjorden Kalurdalen, 63°35'46N 09°45'10E, 20 May 2002, cliff, 15 m, D. VM 10965 (2), Trondheimsfjorden Kalurdalen, 29 May 1999, cliff, 18 m, D. – VM 1471 (3), Trondheimsfjorden Kalurdalen, 02 April 2000, cliff, 16 m, D. – VM 5518 (1), Trondheimsfjorden Galgenes, 63°35'06N 09°50'49E, 18 May 2002, bedrock, gravel, 12 m, D. – VM 1393 (1), VM 1428 (1), VM 1429 (2), VM 1430 (1), VM 1469 (1), VM 1470 (1), Trondheimsfjorden Galgenes, 07 April 1999, boulders, gravel, 0-30 m, D. – VM 1400 (1), Agdenes Sletvik, 63°35'11N 09°31'29E, 21 June 2001, littoral, HP. – VM 1397 (4), VM 1398 (1), VM 1399 (6), Trondheimsfjorden Borgenfjorden Rolsøya, 63°51'54N 11°19'15E, 27 May 2001, bedrock, mud, 12-19 m, D. – VM 1394 (1), Trondheimsfjorden Beitstadfjorden Kalven, 63°59'10N 11°22'26E, 26 May 2001, boulders, sand, 20 m, D. – VM 1431 (1), VM 1433 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 24 November 2000, pier pole, 5 m, D. – VM 1432 (1), Trondheimsfjorden TBS, 4 November 2000, pier pole, 5 m, D. – VM 10962 (15), Trondheimsfjorden TBS, 06 November 2000, pier pole, 5 m, D. – VM 1451 (1), VM 1453 (1), Trondheimsfjorden TBS, 21 February 2000, pier pole, 0-28 m, D. – VM 1452 (1), Trondheimsfjorden TBS, 21 February 2000, pier pole, 5 m, D. – VM 1450 (2), Trondheimsfjorden TBS, 21 July 1999, mud, 0-20 m, D. – VM 1443 (1), Trondheimsfjorden TBS, 17 February 1999, mud, 3 m, D. – VM 1444 (1), VM 1445 (1), VM 1459 (3), Trondheimsfjorden TBS, 02 November 1998, pier pole, 8 m, D. – VM 1446 (1), VM 1474 (1), Trondheimsfjorden TBS, 02 November 1998, pier pole, 7 m, D. – VM 1438 (1), VM 1439 (3), Stokkøya Hosnavika, 64°03'13N 09°56'35E, 04 October 2000, floating stage, 2 m, D. – VM 1424 (2), VM 1425 (1), VM 1426 (2), VM 1427 (2), VM 1434 (1), VM 1435 (1), VM 1436 (1), VM 1437 (2), VM 11031 (2), VM 11093 (2), Trondheimsfjorden Sällåtneset, 63°28'34N 09°52'01E, 10 September 2000, bedrock, sand, 0-18 m, D. – VM 1449 (1), Trondheimsfjorden Sällåtneset, 23 February 1999, bedrock, gravel, 20-25 m, D. – VM 1491 (1), VM 1492 (1), VM 1493 (1), VM 1494 (1), VM 1495 (1), VM 10963 (1), Trondheimsfjorden Flakkgalten, 63°26'56N 10°10'26E, 29 July 2000, gravel, sand, 15 m, D. – VM 1473 (2), Mausund Vasskattholman, 63°53'31N 08°34'31E, 17 April 2000, kelp forest, boulders, 15-20 m, D. – VM 1472 (1), Mausund Tvillingholman, 63°53'12N 08°35'44E, 15 April 2000, kelp forest, bedrock, sand, 18 m, D. – VM 10969 (1), Hitra Dolmøya Torskjæra, 63°39'18N 08°44'18E, 27

September 1999, bedrock, 27 m, D. – VM 1476 (1), Vingleia fyr Borholman, 63°57'14N 08°46'06E, 20 August 1999, kelp forest, 5-15 m, D. – VM 1490, Vingleia fyr Borholman, 18 August 1999, kelp forest, sand, 28-30 m, D. – VM 1458 (7), Trondheimsfjorden Ekne, 63°41'57N 11°00'13E, 01 August 1999, cliff, 0-31 m, D. – VM 1392 (1), Trondheimsfjorden Munkholmen, 63°27'12N 10°23'12E, 07 July 1999, bedrock, sand, 10-30 m, D. – VM 1468 (1), Trondheimsfjorden Munkholmen, 07 July 1999, bedrock, sand, 20 m, D. – VM 1395 (1), VM 1396 (1), Trondheimsfjorden Tautrasvaet, 63°33'50N 10°37'40E, 19 May 1999, sand, 10-20 m, G. – VM 1475 (4), Stokkøya, 64°03'48N 09°58'49E, 23 April 1999, kelp forest, bedrock, 10-20 m, D. – VM 1422 (1), VM 1423 (1), Trondheimsfjorden Skarnsundet, 63°51'02N 11°04'32E, 17 April 1999, bedrock, 30-38 m, D. VM 1442 (2), VM 1460 (1), VM 1461 (2), Trondheimsfjorden Skarnsundet, 13 April 1998, bedrock, 3-5 m, D. – VM 1454 (1), VM 1455 (1), Trondheimsfjorden Svalnestangen, 63°19'45N 10°06'04E, 28 February 1999, bedrock, mud, 8 m, D. – VM 10960 (4), Bessaker, 64°14'50N 10°19'16E, 27 November 1998, cliff, 0-15 m, D. – VM 10961 (8), Bessaker, 26 November 1998, bedrock, sand, 5-20 m, D. – VM 1441 (1), VM 1467 (1), Vikna Rørvik, 64°51'43N 11°14'15E, 28 September 1998, kelp forest, 10-20 m, D. – VM 1456 (3), Hitra Ulvøya Bjørnholmen, 63°40'21N 09°09'10E, 30 May 1998, bedrock, 7 m, D. – VM 1465 (1), VM 1466 (1), Trondheimsfjorden Hindrem Skålvika, 63°35'27N 10°26'23E, 16 May 1998, bedrock, sand, 15 m, D. – VM 10966 (1), Mausund Mauøy, 63°52'04N 08°40'02E, 05 April 1998, bedrock, sand, 10-15 m, D. – VM 1457 (1), Mausund Mauøy, 03 April 1998, bedrock, sand, 10-15 m, D. – VM 10970 (2), Mausund Bukkholman, 63°52'28N 08°37'17E, 05 April 1998, kelp forest, 10-15 m, D. – VM 1462 (1), Hitra Dolmøya Knutsøyskjæran, 63°39'25N 08°50'15E, 29 March 1998, kelp forest, 12 m, D. – VM 1447 (1), Hitra Dolmøya Vadholmen, 63°39'19N 08°43'49E, 28 March 1998, kelp forest, 10-21 m, D. – VM 1448 (1), Hitra Dolmøya Vadholmen, 28 March 1998, kelp forest, 16 m, D. – VM 1464 (1), Hitra Dolmøya, 63°39'00N 08°45'31E, 28 March 1998, kelp forest, 10-28 m, D. – VM 1463 (1), Hitra Dolmøya, 27 March 1998, kelp forest, 15 m, D. – VM 10964 (2), Trondheimsfjorden Flakk, 63°26'52N 10°11'02E, 21 March 1998, bedrock, gravel, 19 m, D. – VM 10968 (1), Averøy Straumsholmen, 63°00'39N 07°18'29E, 13 February 1998, bedrock, 10 m, D. – VM 33027 (3), Bud Rundholmen, 62°54.04'N 06°54.65'E, 20 May 2004, 10-25 m, D. – VM 33028 (1), VM 33029 (5), Mausund Bukkholman, 63°52.71'N 08°37.35'E, 04 April 2004, stn 07-04, bedrock, 5-20 m, D. – VM 33030(2), Mausund Ellingholman, 63°53.15'N 08°36.75'E, stn 08-04, 04 April 2004, 15-25 m, D. – VM 30416 (3), coll. J.-A. Sneli, stn 72043.

New records: Sectors 3 (Asbjørnsen 1864), 5 (Metzger & Meyer 1875), 7 (Odhner 1922), 9 (Grieg 1897, Odhner 1922), 24 (Nordgaard 1905, Evertsen & Bakken 2002).

Remarks: The taxonomic history of *F. verrucosa* is complicated and was treated in detail by Kuzirian (1979). Our understanding of *F. verrucosa* is in accordance with the original description by

M. Sars (1829) and with the revision by Kuzirian (1979). Due to a close look at literature references records of this species have been emended (Table 1).

Aeolididae

Aeolidia papillosa (Linnaeus, 1767)

Limax papillosus Linnaeus 1767: 1082.

Doris Bodöensis Gunnerus 1770: 170.

Doris papillosa Müller 1776: 229.– Gmelin 1791: 3104.

Eolidia bodöensis M. Sars 1839: 155.

Eolis papillosa Danielssen 1861: 38.– Friele & Hansen 1876: 74.

Eolis papillosa M. Sars 1851: 193.– Storm 1879b: 118.– Krause 1895: 98.

Aeolis papillosa G.O. Sars 1878: 318, tab. XV, fig. 8.– Odhner 1907: 77.– 1922: 28.

Aeolidia papillosa Grieg 1914b: 14.– Løyning 1922: 70, fig. 51-54, pl. IV, fig. 14-15.– Odhner 1926: 28.– 1939: 84.– Dons 1942c: 194.

Material examined: VM 654 (1), Trondheimsfjorden Hopavågen, 63°35'33N 09°32'42E, 07 June 2002, littoral, HP. – VM 658 (1), Hitra Kvenvær, 63°31'55N 08°21'26E, 30 April 2001, kelp forest, boulders, 0-20 m, D. – VM 653 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 22 November 2000, pier pole, 2-5 m, D. – VM 655 (2), Agdenes Sletvik, 63°35'11N 09°31'29E, 11 June 1999, littoral, HP. – VM 651 (1), Trondheimsfjorden Skarnsundet, 63°51'02N 11°04'32E, 17 April 1999, bedrock, 8 m, D. – VM 11098 (1) Bessaker, 64°14'50N 10°19'16E, 29 November 1998, cliff, 0-5 m, D. – VM 660 (1), Bessaker, 64°14'50N 10°19'16E, 28 November 1998, cliff, 12 m, D. – VM 661 (1), Bessaker, 64°14'50 N - 10°19'16 E, 28 November 1998, cliff, 16 m, D. – VM 662 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 03 November 1998, gravel, 12 m, D. – VM 657 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 02 November 1998, gravel, 10 m, D. – VM 659 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 02 November 1998, pier pole, 10 m, D. – VM 656 (1), Agdenes Sletvik, 63°35'11N 09°31'29E, 01 June 1998, littoral, HP. – VM 648 (1), Mausund Vassøysundet, 63°51'32N 08°38'42E, 04 April 1998, floating stage, 0-1 m, D. – VM 652 (1), Mausund Aursøya (brygga), 63°52'18N 8°38'21E, 04 April 1998, floating stage, 0-1 m, D. – VM 650 (1), Mausund Vassøya, 63°51'25N 08°38'12E, 24 March 1997, floating stage, 0-5 m, D. – VM 33053 (1), Bud Rundholmen, 62°54.04N 06°54.65E, 20 May 2004, 20-25 m, D.

New records: Sector 4 (Odhner 1922), 18 (Odhner 1922), 21 (Odhner 1907, Dons 1942c), 24 (Odhner 1939, Dons 1942c).

Remarks. Records in sectors 1, 3, 23 and 25 could not be found in the primary literature (Table 1).

Aeolidiella glauca (Alder & Hancock, 1845)

Aeolidiella glauca Løyning 1922: 75, fig. 55-61.– Odhner 1939: 84.– Dons 1942c: 194.

Material examined. VM 50552 (1), Rødskjæra, Kragerø 58° 49.537'N 09° 29.096'E, 24 July 2005, 10-17 m, D.

New records: Sector 3 (this study), 12 (Dons 1942).

Remarks: Only found in the Oslofjord (Løyning 1922), Ålesund, Tarva and the Trondheimsfjord (Odhner 1939, Dons 1942c) (Table 1). Colour plates were given in Just & Edmunds (1985).

Berghia norvegica Odhner, 1939

Berghia norvegica Odhner, 1939: 85, fig. 52-59.

Remarks: This endemic species was described by Odhner (1939) based on specimens from Frøya and Håøya, Stjørnfjord in the Trondheimsfjord, sectors 12 and 13 respectively. It has never been found since, and is endemic to Norwegian waters. A record from the Bergen area was included by Høisæter et al. (1997), but has previously not been reported from other than the original localities (Høisæter 1986). The distribution for this species is changed to “restricted” (r) in the list (Table 1).

Calmidae

Calma glaucoides Alder & Hancock, 1852

Eolis albicans Friele & Hansen 1876: 78, tab. 2, fig. XIV.

Calma glaucoides Odhner 1939: 76.– Dons 1942c: 194.

Remarks: Recorded by Friele & Hansen (1876) as *Eolis albicans*, but later synonymised with the given species (Odhner 1939). These two records (Friele & Hansen 1876 (sector 10), Odhner 1939 (sector 17)) are the only reported specimens found in Norwegian waters. The specimen reported by Odhner (Odhner 1939, Dons 1942c) is deposited in the VM collections (VM 33067). This species is referred to as described by Alder & Hancock in 1855 (Thompson & Brown 1984), but it is clearly described by them already in 1852 (Fam. 3, pl. 22, fig. 1-4) as *Eolis glaucoides*. The year of original reference is thus changed accordingly.

Facelinidae

Remarks: There have been taxonomic problems concerning the two species representing Facelinidae in Norwegian waters. This relates to use of the names *F. auriculata*, *F. coronata* and *F. bostoniensis*. Due to a long lasting problem and confusion Brown (1981) presented a redescription of this group and presented descriptions of *F. coronata* and *F. bostoniensis*. There are, however, nomenclatorial problems still relating to these

names if older accounts are considered (e.g. O.F Müller 1776, 1806), but this has to be solved through a taxonomic revision. Due to these nomenclatorial problems it is difficult to review older records from the literature. We have followed Brown (1981) and used the names he concluded should be used. For material that has been to our disposal specimens are revised as indicated below.

***Facelina bostoniensis* (Couthouy, 1838)**

Aeolis drummondi Metzger & Meyer 1875: 266.

Eolis auriculata Friele & Hansen 1876: 74.

Facelina auriculata Løyning 1927: 262.– Odhner 1939: 80 (partim).

Facelina auriculata Dons 1942c: 194.

Facelina drummondi G.O. Sars 1878: tab. XV.– Friele & Grieg 1901: 120.– Grieg 1914a: 93 (ann.)– 1914b: 14.– 1932: 15.– Odhner 1907: 87.– 1922: 33.– 1926: 28. Løyning 1922: 52, fig. 24-29, pl. 2, fig. 10.

Facelina bostoniensis Evertsen & Bakken 1999: 33.

Material examined: VM 1227 (1), 1217 (1), Averøy Straumsholmen, 63°00'39N 07°18'29E, 24 February 2000, sand, 0-15 m, D. – VM 1228 (2), Trondheimsfjorden Borgenfjorden, 63°52'27N 11°18'04E, 27 May 2001, bedrock, mud, 20 m, D. – VM 1222 (2), VM 1226 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 08 May 2001, mud, 12 m, D. – VM 1219 (1), Trondheimsfjorden TBS, 16 February 2000, mud, 12 m, D. – VM 1223 (1), VM 1224 (1), VM 1225 (4), Trondheimsfjorden TBS, 15 December 1999, mud, 12-26 m, D. – VM 1218 (1), Trondheimsfjorden TBS, 01 March 1999, mud, 12 m, D. – VM 1216 (1), VM 1220 (1), Trondheimsfjorden TBS, 17 February 1999, mud, 20 m, D. – VM 1221 (1), Trondheimsfjorden TBS, 17 February 1999, mud, 17 m, D.

Confirmed records: Sectors 2 (Odhner 1907, Odhner 1922, Løyning 1922), 6 (Odhner 1922), 7 (Odhner 1907), 8 (Metzger & Meyer 1875, Friele & Hansen 1876, Grieg 1914b), 17 (Friele & Grieg 1901).

Remarks: Odhner (1939) and Dons (1942c) used *F. auriculata* (= *drummondi* and *coronata*) without further separation of the species. These records are therefore re-examined from their material in the VM collections. Confirmed records from the literature are listed above and entered in Table 1.

***Facelina coronata* (Forbes & Goodsir, 1839)**

Doris auriculata Müller 1776: 228.

Doris auriculata Rathke in Müller 1806: fig.1, pl. 138.

Eolis coronata Friele & Hansen 1876: 75.

Eolis peregrina M. Sars 1855: 68.

Facelina auriculata Grieg 1914b: 14.– Odhner 1939: 80.

Facelina coronata Odhner 1922: 34.– Evertsen & Bakken 2002: 19.

Material examined: VM 1198 (1), Bjørnsund, 62°53'18N 06°49'03E, 02 October 2001, kelp forest, boulders, sand, 0-30 m, D. – VM 1191 (1), VM 1192 (1), Grefsnsvågen Torsøya, 63°36'51N 08°27'08E, 11 February 1999, kelp forest, bedrock, 0-20 m, D. – VM 1189 (3), Bessaker, 64°14'50N 10°19'16E, 29 November 1998, floating stage, 0-2 m, D. – VM 1190 (1), Trondheimsfjorden TBS, 63°26'34N 10°20'53E, 02 November 1998, pier pole, 8 m, D. – VM 1199 (1), Agdenes Sletvik, 63°35'11N 09°31'29E, 01 June 1998, littoral, HP. – VM 1193 (2), Hitra Ulvøya Bjørnholmen, 63°40'21N 09°09'10E, 31 May 1998, kelp forest, 9 m, D. – VM 1195 (1), Hitra Ulvøya Sjøbryøya, 63°40'14N 09°08'23E, 31 May 1998, kelp forest, 5-15 m, D. – VM 1197 (4), Mausund Bukkholman, 63°52'28N 08°37'17E, 03 April 1998, kelp forest, 10-15 m, D. – VM 1196 (1), Hitra Ulvøya Seibalen, 63°41'01N 09°05'25E, 30 May 1998, kelp forest, 16 m, D. – VM 1200 (1), Agdenes Sletvik, 63°35'11N 09°31'29E, 01 June 1998, littoral, HP. – VM 1201 (2), Agdenes Sletvik, 63°35'11N 09°31'29E, 11 June 1997, littoral, HP. – VM 33033 (2), Bud Rundholmen, 62°54,04'N 06°54,65'E, 20 May 2004, 10-25 m, D. – VM 33034 (1), Mausund Knubbskjæret, 63°52,866'N 08°34,856'E, stn 13-04, 07 April 2004, 5 m, D. – VM 33035 (1), Mausund Ellingholman, 63°53,15'N 08°36,75'E, stn 08-07, 05 April 2004, 15-25 m, D.

Confirmed records: Sectors 8 (Grieg 1914b), 10 (Friele & Hansen 1876, Odhner 1922), 11-15 and 23 (Odhner 1939, Dons 1942c).

Remarks: Records from Odhner (1939) and Dons (1942c) are re-examined from specimens he identified as *F. coronata*. Confirmed records from the literature are listed above and entered in Table 1.

Rathke in Müller (1806) published an illustration of *Doris auriculata*. Thompson & Brown (1984) argued that the illustration could refer to either *F. bostoniensis* or *F. coronata* and so was unidentifiable. Picton & Morrow (1994) used *F. auriculata* on the basis of that Müller's painting clearly shows the separated ceratal clusters, which distinguish *F. auriculata* (and *F. coronata*) from *F. bostoniensis*.

Favorinidae

***Favorinus blianus* Lemche & Thompson, 1974**

Favorinus blianus Lemche & Thompson, 1974: 190, fig. 5a-c.

Material examined: VM 10906 (1), Mausund Seibaltaren, 63°53'22N 08°38'11E, 06 April 2003, kelp forest, bedrock, 15 m, D. – VM 1153 (1), Mausund Vasskattholman, 63°53'31N 08°34'31E, 17 April 2000, kelp forest, boulders, 20 m, D.

New records: Sector 12 (this study).

Remarks: Apart from the original record and description by Lemche & Thompson (1974), this species is only previously found from the Atlantic coast of Spain and the British Isles (Thompson & Brown 1984). Høisæter et al. (1997) did also

record this species from sectors 1 and 16, these cannot be accounted for (Table 1). The type locality for this species is Bliå, near Bergen (Lemche & Thompson 1974). Colour plates by Lemche were given in Just & Edmunds (1985).

***Favorinus branchialis* (Rathke in Müller, 1806)**

Doris branchialis Rathke in Müller 1806: 33, pl. 149, fig. 5-7.

Eolis (Cratena) branchialis Friele & Hansen 1876: 75.

Aeolis alba Metzger & Meyer 1875: 266.

Favorinus albus G.O. Sars 1878: 364, Tab. XVI, fig. 10.–

Løyning 1922: 81, fig. 62-69, pl. IV, fig. 16-18.– Odhner 1922: 33.– Løyning 1927: 253.

Favorinus branchialis Odhner 1939: 81.– Dons 1942c: 194.

Material examined: VM 33047 (2), Bud Frettaskjæret (Fretten), 62°54.23'N 06°52.64'E, 22 May 2004, 25 m, D.– VM 33048 (1), Mausund Aursøya (brygga), 63°52.643'N 08°38.962'E, stn 12-04, 07 April 2004, 24 m, D.– VM 36605 (1), Altbukta, Lygnin, Nord-Trøndelag. 64° 21.717'N 11° 14.917'E, depth 0.5 m, 5 Sep 2004. – VM 48021 (1), Mausund, Aursøy stn 5-05, 7 m, 22 March 2005.

Observations: Hitra Dolmøya, 63°39'00N 08°45'31E, 28 August 1999, floating stage, 1 specimen, 3 m, D (specimen lost).

New records: Sector 1, 6, 7 and 18 (Odhner 1922), 3, 4 (Rathke in Müller 1806).

Remarks: This species was originally described from the southern coast of Norway, at Kragerø and Arendal (type locality) (Rathke in Müller 1806). Additional good descriptions are given in Alder & Hancock (1845), descriptions of the radula were given by G.O. Sars (1878) and further by Løyning (1922). Løyning (1922) was of the opinion that references to *Eolis branchialis* by Asbjørnsen (1854), Brøgger (1872) and M. Sars (1851) should be referred to *Flabellina verrucosa*.

SAMMENDRAG

Diversiteten av nakensnegler (Gastropoda, Heterobranchia) langs norskekysten

Nakensnegler (Gastropoda, Heterobranchia, Nudibranchia) er en gruppe som tidligere var forholdsvis godt studert i Norge. Dette baserte seg på funn fra undersøkelser i fjæra, og materiale som var innsamlet fra forskningsfartøy. De første rapportene i litteraturen er gjort fra forskere som Gunnerus, Michael og G.O. Sars, Asbjørnsen og Storm som studerte faunaen i deler av Norge. Spesielt er det to personer som har bidratt med mye kunnskap om denne gruppen i Norge, Carl Dons og Nils Hjalmar Odhner. Etter at Dons publiserte sine siste arbeider om nakensnegler i 1942 er det ingen nye data som er kommet frem, annet enn sammenstillinger av opplysninger fra litteraturen. I 1997 startet forfatterne et prosjekt der denne dyregruppen har vært studert ved bruk av dykking

som metode. Studieområdet har vært Midt-Norge (sektorene 11-15), men data fra enkelte andre lokaliteter i Norge samt materiale fra NTNU Vitenskapsmuseet er inkludert. Studiet har frembrakt en stor mengde ny kunnskap om norske arters utbredelse, klargjøring av arters identitet, det er pekt på taksonomiske problemer og det er tatt fotografier av et stort antall arter. Totalt er det gjort innsamlinger på 93 stasjoner, og det er gjennomført 496 enkeltdykk. I alt er det funnet 62 arter hvorav fire er nye for Norge (*Cuthona rubescens*, *Polycera faeroensis*, *Eubranchnus vittatus* and *Onchidoris depressa*), to arter som tidligere er nevnt fra norsk fauna men ikke dokumentert, er funnet (*Cuthona caerulea* and *Geitodoris planata*). Seks arter er endemiske for Norge (*Triopella incisa*, *Cadlina glabra*, *Rostanga setidens*, *Cuthona distans*, *Cuthona norvegica*, *Berghia norvegica*) og ytterligere fire er endemiske for Skandinavia (*Doridunculus echinulatus*, *Doris nobilis*, *Doto crassicornis*, *Goniaeolis typica*). På bakgrunn av egne felldata, sammenstilt med museumsmateriale fra Vitenskapsmuseet, og en fullstendig gjennomgang av den vitenskapelige litteraturen er det gjort rede for 81 arter nakensnegler i norsk fauna. En revisjon av tidligere publiserte oversikter er gjengitt. På bakgrunn av denne revisjonen er seks arter tidligere nevnt i litteraturen ikke kunnet gjort rede for, de er ikke å betrakte som en del av norsk fauna, og er tatt ut av listen (*Onchidoris aspersa*, *Onchidoris oblonga*, *Onchidoris sparsa*, *Thecacera virescens*, *Doto tuberculata* og *Flabellina browni*).

ACKNOWLEDGEMENTS

This work would not have been possible without the diving club DykkerGruppa NTNU, providing us with logistics and gear, and the opportunity to get under water. Members of DykkerGruppa are thanked for company and help under water as well as top side. Nils Aukan and Kåre Telnes are thanked for providing valuable field data. A part of this study was given financial support from The Royal Society of Science and Letters (DKNVS). Professor Jon-Arne Sneli is thanked for encouragement, help with literature, working facilities and supervision during initial stages of this study. The following persons have been helpful with advice on literature and taxonomic discussions: Dr Alan Kuzirian, Dr Sandra Millen, Dr Bernard Picton, Dr Elisabeth Platts, and Dr Irina Roginskaya. Anita Kaltenborn, Karstein Hårsaker and Marc Daverdin provided help and expertise with collections and databases at VM. Professors Tore Høisæter and Jon-Arne Sneli are thanked for their comments on an earlier draft of the manuscript.

REFERENCES

Alder, J. & Hancock, A. 1845. A monograph of the British nudibranchiate Mollusca: with figures of all the species. Part I. Ray Society, London.

- Alder, J. & Hancock, A. 1846. A monograph of the British nudibranchiate Mollusca: with figures of all the species. Part II. Ray Society, London.
- Alder, J. & Hancock, A. 1847. A monograph of the British nudibranchiate Mollusca: with figures of all the species. Part III. Ray Society, London.
- Alder, J. & Hancock, A. 1848. A monograph of the British nudibranchiate Mollusca: with figures of all the species. Part IV. Ray Society, London.
- Alder, J. & Hancock, A. 1851. A monograph of the British nudibranchiate Mollusca: with figures of all the species. Part V. Ray Society, London.
- Alder, J. & Hancock, A. 1852. A monograph of the British nudibranchiate Mollusca: with figures of all the species. Part VI. Ray Society, London.
- Alder, J. & Hancock, A. 1854. Notice of some new species of British Nudibranchiata. *Ann. Mag. Nat. Hist.* series 2, 14:102-105.
- Alder, J. & Hancock, A. 1855. A monograph of the British nudibranchiate Mollusca: with figures of all the species. Part VII:1-54, Appendix:i-xl. Ray Society London.
- Asbjørnsen, P.C. 1854. Bidrag til Christianiafjorden Litoralfauna. - *Nyt Mag. Naturvid.* 7: 307-366.
- Ascanius, P. 1774. Beskrivelse over en Norske sneppe og et sødyr. - *K. Norske Vidensk. Selsk. Skr.* 5: 153-158.
- Aurivillius, C.W.S. 1886. Hafsevertebrater från nordligaste Tromsö amt och vestfinnmarken. - *K. svenska Vetensk.-Akad. Hand.* 11: 1-37.
- Bakken, T. 2000. Topografien i Trondheimsfjorden. - Pp.12-18 i Sakshaug, E. & Snelli, J.-A. (red.): *Trondheimsfjorden*. Tapir forlag, Trondheim.
- Behrentz, A. 1931. Trekk av *Lamellidoris muricata*'s biologi og av dens generasjonsorganers bygning. - *Nyt Mag. Naturvid.* 70: 1-26.
- Bergh, L.S.R. 1864. Anatomiske Bidrag til kundskab om aeolidierne. - *Kgl. Danske Vidensk. Selsk. Skrift. Naturvid. og Math.* 7: 139-316.
- Bergh, L.S.R. 1874. Malacologiske Untersuchungen. 2(7): 287-314.
- Bergh, L.S.R. 1877. Malacologiske Untersuchungen. 2(11): 429-494.
- Bergh, L.S.R. 1879a. On the nudibranchiate gasteropod Mollusca of the North Pacific Ocean, with special reference to those of Alaska. Part I. - *Proc. Acad. Nat. Sci. Philad.* 127-188.
- Bergh, L.S.R. 1879b. Beiträge zur Kenntniss der Aeolidiaden. VI. - *Verhandl. k. k. zool.-bot. Gesell. Wien*, 28: 553- 584.
- Bergh, L.S.R. 1879c. Beiträge zu einer Monographie der Polyceraden, I. - *Verhandl. k. k. zool.-bot. Gesell. Wien*, 29: 599- 652.
- Bergh, L.S.R. 1879d. Gattungen nordischer Doriden. - *Arch. f. Naturg.* 45(1): 340-369.
- Bergh, L.S.R. 1880. On the nudibranchiate gasteropod Mollusca of the North Pacific Ocean, with special reference to those of Alaska. Part II. - *Proc. Acad. Nat. Sci. Philad.* 40-127.
- Bergh, L.S.R. 1881. Beiträge zu einer Monographie der Polyceraden, II. - *Verhandl. k. k. zool.-bot. Gesell. Wien*, 30:629- 668.
- Bergh, L.S.R. 1886. Die Nudibranchien gesammelt während der Fahrten des "Willem Barents" in das Nördliche Eismeer. - *Bijd. tot de Dierkunde* 13:1-37.
- Bergh, L.S.R. 1899. Nudibranches et Marsenia provenant des campagnes de la Princesse-Alice, (1891-97). Resultats des Campagnes Scientifiques accomplies sur son yacht (Hirondelle) par Albert Ier prince souverain de Monaco 14: 1-46.
- Bergh, L.S.R. 1900. Nudibranchiate Gasteropoda. The Danish Ingolf-Expedition 2(3): 1-49.
- Bouquet, P. 1977. Opisthobranches de profondeur de l'océan atlantique: II. Notaspidea et Nudibranchiata. - *J. Moll. Stud.* 43(1):28-66.
- Brattegard, T. & Holte, T (eds.). 1997. Distribution of marine, benthic macro-organisms in Norway. Research Report for DN 1997-1. Directorate for Nature Management, 409 pp.
- Brown, G.H. 1980. The British species of the aeolidacean family Tergipedidae (Gastropoda: Opisthobranchia) with a discussion of the genera. - *Zool. J. Linn. Soc.* 69(3): 225-255.
- Brown, G.H. 1981. The taxonomy of British species of the genus *Facelina* Alder & Hancock (Opisthobranchia: Nudibranchia). - *J. Moll. Stud.* 47(3): 334-336.
- Brøgger, W.C. 1872. Bidrag til Kristianiafjordens Molluskfauna. Indberetning om en i sommeren 1871 foretagen reise. - *Nyt Mag. Naturvid.* 19: 101-144.
- Cervera, J.L., Garcia Gomez, J.C. & Garcia, F.J. 1985. Redescription of *Geitodoris planata* (Alder & Hancock, 1846) (Gastropoda: Nudibranchia). - *J. Moll. Stud.* 51(2): 198-204.
- Danielssen, D.C. 1861. Beretning om en zoologisk Reise foretagen i Sommeren 1857. - *Nyt Mag. Naturvid.* 11: 1-39.
- Danielssen, D.C. & Koren, J. 1879. Fra den norske Nordhavsexpeditionen. Echinodermer (3). - *Nyt Mag. Naturvid.* 25: 83-140.
- Dons, C. 1932. Zoologische Notizen XVI. *Ægires punctilucens* i Norge. - *K. Norske Vidensk. Selsk. Forh.* 5: 17-18.
- Dons, C. 1933. Zoologische Notizen XXIV. Über die Verbreitung der *Pleurophyllidia Lovéni*. - *K. Norske Vidensk. Selsk. Forh.* 6: 183-184.
- Dons, C. 1942a. Norges strandfauna XXVII. Bakgjellesnegler 1. - *K. Norske Vidensk. Selsk. Forh.* 14: 165-168.
- Dons, C. 1942b. Norges strandfauna XXVIII. Bakgjellesnegler 2. - *K. Norske Vidensk. Selsk. Forh.* 14: 185-188.
- Dons, C. 1942c. Norges strandfauna XXIX. Bakgjellesnegler 3. - *K. Norske Vidensk. Selsk. Forh.* 14: 192-194.
- Edmunds, M. & Kress, A. 1969. On the European species of *Eubbranchus* (Mollusca Opisthobranchia). - *J. Mar. Biol. Ass. U.K.* 49(4): 879-912.
- Eliot, C.N.E. 1910. A monograph of the British nudibranchiate Mollusca: with figures of the species. Part VIII (supplementary). Figures by the late Joshua Alder and the late Albany Hancock, and others. Ray Society, London.
- Evertsen, J. 2001. Nakensneglfaunaen i Trondheimsfjorden og i Isfjorden på Svalbard - systematikk og økologi. Hovedfagsoppgave i marin biologi til graden Candidatus scientiarum. Norges teknisk-naturvitenskapelig universitet. In Norwegian.
- Evertsen, J. & Bakken, T. 1999. Additional data on the food-preferences of the nudibranch *Facelina bostoniensis* (Couthouy, 1838) (Aeolidoidea: Facelinidae). - *Opisthobranchs Newsletter*, 25(11): 33-34.
- Evertsen, J. & Bakken, T. 2001. Nakensnegler (Mollusca, Nudibranchia) i indre deler av Trondheimsfjorden. - *NTNU Vitenskapsmuseet Rapp. mari. ser.* 2001-1: 1-9.
- Evertsen, J. & Bakken, T. 2002. Heterobranchia (Mollusca, Gastropoda) from northern Norway, with notes on ecology and distribution. - *Fauna Norv.* 22: 15-22.
- Evertsen J., Bakken, T. & Green, S. 2004. Rediscovery of *Tenellia adspersa* (Nudibranchia) from the Finnish archipelago. - *Sarsia* 89: 362-365.

- Forbes, E. & Hanley, S.C.T. 1850-51. A history of the British Mollusca, and their shells, vol. III. Including the families of Gastropoda from Neritidae to Elysiadae.
- Friele, H. 1902. Mollusken der ersten Nordmeerfahrt des Fischereidampfers "Michael Sars" 1900 unter Leitung von Herrn Dr. Johan Hjort. - Bergens Museums Aarbog, 3: 1-19.
- Friele, H. & Grieg, J.A. 1901. Nudibranchiata. Zoologi. Mollusca. - Den Norske Nordhavs-Expedition, 1876-1878, 16: 1-129.
- Friele, H. & Hansen, A. 1876. Bidrag til Kundskaben om de norske Nudibranchier. - Forhandlinger i Videnskabs-Selskabet i Christiania 1875: 69-80.
- Gmelin, J.F. 1791. In: C. Linné (ed.). Systema Naturae, 3, 1(6):3103-3107; 3147-3148.
- Gosliner, T.M. & Griffiths, R.J. 1981. Description and revision of some South African aeolidacean Nudibranchia (Mollusca, Gastropoda). - Ann. S. Afr. Mus. 84(2): 105-150.
- Gosliner, T.M. & Kuzirian, A.M. 1990. Two new species of Flabellinidae (Opisthobranchia: Aeolidacea) from Baja California. - Proc. Cal. Acad. Sci. 47(1): 1-15.
- Grieg, J.A. 1897. Bidrag til Kundskaben om Vestlandets mollusker. - Bergens Museums Aarbog, 1896: 1-32.
- Grieg, J.A. 1898. Skrabninger i Vaagsfjorden og Ulvesund, ytre Nordfjord. - Bergens Museums Aarbog, 1897: 1-27.
- Grieg, J.A. 1913. Nudibranchiate mollusker indsamlede av den norske fiskeridampner "Michael Sars". - K. Norske Vidensk. Selsk. Skr. 1912: 1-13.
- Grieg, J.A. 1914a. Bidrag til kundskaben om Hardangerfjordens fauna. - Bergens Museums Aarbok, 1913: 1-147.
- Grieg, J.A. 1914b. Malacologiske notiser. I. Nudibranchiater fra Bergens biologiske stations akvarier. - Nyt Mag. Naturvid. 52: 11-15.
- Grieg, J.A. 1932. Brachiopoda, scaphopoda, gastropoda and lamelibranchiata from the "Michael Sars" north Atlantic deep-sea expedition 1910. Report on the scientific results of the "Michael Sars" north Atlantic deep-sea expedition 1910 carried out under the auspices of the Norwegian government and the superintendence of Sir John Murray, K. C. B. and Dr Johan Hjort. Bergen Museum, Bergen 1-16.
- Griffiths, R.J. 1985. Description of a new South African arminacean and the proposed re-instatement of the genus *Athila* Bergh (Mollusca, Opisthobranchia). - Ann. S. Afr. Mus. 95(7): 269-280.
- Gunnerus, J.E. 1770. Nogle smaa rare og meestendeelen nye norske søedyr. Skrifter som udi det Kiøbenhavnske Selskab af Lærdom og Videnskabers Elskere ere fremlagte og oplæste i Aarene 1765. 1766. 1767. 1768. og 1769. 10:166-176.
- Hirano, Y.J. & Kuzirian, A.M. 1991. A new species of *Flabellina* (Nudibranchia: Aeolidacea) from Oshoro Bay, Japan. - Veliger, 34(1): 48-55.
- Høisæter, T. 1986. An annotated check-list of marine molluscs of the Norwegian coast and adjacent waters. - Sarsia, 71(2): 73-175.
- Høisæter, T., Brattegard, T. & Snell, J.-A. 1997. Heterobranchia. - Pp. 247-258 in Brattegard, T. & Holte, T. (eds.). Distribution of marine, benthic macro-organisms in Norway. Research Report for DN 1997-1. Directorate for Nature Management.
- International Commission on Zoological Nomenclature. 1999. International code of zoological nomenclature, Fourth Edition. The International Trust for Zoological Nomenclature. London.
- Iredale, T. & O'Donoghue, C.H. 1923. List of British nudibranchiate Mollusca. - Proc. Malac. Soc. Lond. 15(4): 201-233.
- Jaekel, S. Jr. 1952. Zur Verbreitung und Lebensweise der Opisthobranchier in der Nordsee. - Kieler Meer. forsc. 8(2): 249-259.
- Just, H. & Edmunds, M. 1985. North Atlantic nudibranchs (Mollusca) seen by Henning Lemche, with additional species from the Mediterranean and the northeast Pacific. - Ophelia suppl. 2: 1-170.
- Kiær, H. 1904. Dyrelivet i Drøbaksund. - Meddelelser fra den biologiske station ved Drøbak 8: 1-31.
- Koren, J. 1857. Indberetning til Collegium academicum over en paa offentlig Bekostning foretagen zoologisk Reise i Sommeren 1850. - Nyt Mag. Naturvid. 19: 89-96.
- Krause, A. 1895. Nudibranchiaten von Tromsø. - Tromsø Museums Aarshefter, 18: 94-100.
- Kükenthal, W. & Weissenborn, B. 1886. Ergebnisse eines zoologischen Ausfluges an die Westküste Norwegens. - Jen. Zeit. Naturwis. 19: 776-789.
- Kuzirian, A.M. 1977. The rediscovery and biology of *Coryphella nobilis* Verrill, 1880 in New England (Gastropoda: Opisthobranchia). - J. Moll. Stud. 43(3): 230-240.
- Kuzirian, A.M. 1979. Taxonomy and biology of four New England, coryphellid nudibranchs (Gastropoda: Opisthobranchia). - J. Moll. Stud. 45(3): 239-261.
- Larsen, M. 1925. Nudibranchfaunaen i Drøbaksundet. II: Holo- cladohepatica. - Videnskapselskapets Skr. Math.-Naturv. Kl. 1925: 1-60.
- Lemche, H.M. 1929. Gastropoda Opisthobranchiata. - The Zoology of the Faroes 3(1): 1-35.
- Lemche, H.M. 1941a. The zoology of east Greenland. Gastropoda Opisthobranchiata. - Meddelelser om Grønland, 121(7): 1-50.
- Lemche, H.M. 1941b. The Godthaab Expedition 1928, leader: Eigil Riis-Carstensen. Gastropoda Opisthobranchiata (excl. Pteropoda). - Meddelelser om Grønland, 80(7): 1-65.
- Lemche, H.M. 1976. New British species of *Doto* Oken, 1815 (Mollusca: Opisthobranchia). - J. Mar. Biol. Ass. U.K. 56(3): 691-706.
- Lemche, H.M. & Thompson, T.E. 1974. Three opisthobranch gastropods new to the British fauna. - Proc. Malac. Soc. Lond. 41: 185-193.
- Linnaeus, C von. 1767. Systema Naturae per regna tria naturae. Editio duodecima, reformata. Vol. 1, Regnum animale. Pt. 2:533-1327.
- Lövén, S.L. 1846. Index molluscorum. Litera Scandinavia occidentalia habitantium. Fauna prodromum. - Öfvers. K. Svenska Vetensk-Akad. Förh. (1845): 1-150.
- Løyning, P. 1922. Nudibranchfaunaen i Drøbaksundet. I: Fam. Aeolididae. - Videnskapselskapets Skr. Math.-Naturv. Kl. 1922: 1-103.
- Løyning, P. 1927. Nudibranchs from Bergen, collected in the neighbourhood of the Biological Station at Herdla. - Nyt Mag. Naturvid. 65: 243-264.
- M'Andrew, R. & Barrett, L. 1856. List of the Mollusca observed between Drontheim and the North Cape. - Ann. Mag. Nat. Hist. 17: 378-386.
- McKay, D.W. & Smith, S.M. 1979. Marine Mollusca of east Scotland. Royal Scottish Museum. Edinburgh.
- Metzger, D. & Meyer, H.A. 1875. Die Expedition zur physicalisch-chemischen und biologischen Untersuchung der Nordsee im Somer 1872. VIII. Mollusca. - Pp. 229-268 in Meyer, H.A.;

- Möbius, K. & Karsten, G. (eds). Jahresbericht der Commission zur wissenschaftlichen Untersuchung der deutschen Meere in Kiel für die Jahre 1872, 1873. Wiegandt, Hempel & Parey, Berlin.
- Millen, S. V. 1986. Northern, primitive tergipedid nudibranchs, with a description of a new species from the Canadian Pacific. *Can. J. Zool.* 64(6):1356-1362.
- Millen, S.V. & Gosliner, T.M. 1985. Four new species of dorid nudibranchs belonging to the genus *Aldisa* (Mollusca: Opisthobranchia), with a revision of the genus. - *Zool. J. Linn. Soc.* 84(3): 195-233.
- Moen, F.E. & Svensen, E. 1999. Dyreliv i hav. Håndbok i norsk marin fauna. Kom Forlag.
- Morrow, C.C., Thorpe, J.P. & Picton, B.E. 1992. Genetic divergence and cryptic speciation in two morphs of the common subtidal nudibranch *Doto coronata* (Opisthobranchia, Dendronotacea, Dotoidae) from the northern Irish Sea. - *Mar. Ecol. Prog. Ser.* 84(1): 53-61.
- Müller, O.F. 1776. *Zoologiae Danicae*. Prodomus seu animalium Daniae et Norvegiae ingenarum characteres, nomina, et synonyma imprimis popularium, xxxii:282 pp.
- Müller, O.F. 1778. Molluscorum marinorum Norvegiae. Verh. Kaiser. Leop.-Carol. Deutsch. - Akad. Naturf. 6: 48-54.
- Müller, O.F. 1781. *Zoologia Danica*, eller Danmarks og Norges sieldne og ubekjendte dyrs historie. Bind I. Kiøbenhavn.
- Müller, O.F. 1789. *Zoologica Danica* sev animalium Daniae et Norvegiae rariorum ac minus notorum descriptiones et historia, ed. 3, vol. 2, 56 pp.
- Nordgaard, O. 1905. Hydrographical and biological investigations in Norwegian fiords. III. Bottom-life. - *Bergens Museums Skrifter*, 7: 155-194.
- Nordgaard, O. 1907. Mofjordens naturforhold. - *Kgl. Norske Vidensk. Selsk. Skrift.* 1906: 1-40.
- Norman, A.M. 1879. The mollusca of the fiords near Bergen, Norway. - *J. Conch.* 2: 8-77.
- Norman, A.M. 1893. A Month on the Trondhjem Fiord. - *Ann. Mag. Nat. Hist.* 6: 341-354.
- Norman, A.M. 1902. Notes on the natural history of East Finmark. - *Ann. Mag. Nat. Hist.* 10: 341-361.
- Odhner, N.H. 1907. Northern and arctic invertebrates in the collection of the swedish state museum (riksmuseum). III. Opisthobranchia and pteropoda. - *K. svenska Vetensk.-Akad. Hand.* 41: 1-118.
- Odhner, N.H. 1915. Die Molluskenfauna des Eisfjordes. - *K. svenska Vetensk.-Akad. Hand.* 54(1): 1-274.
- Odhner, N.H. 1922. Norwegian Opisthobranchiate Mollusca in the collection of the Zoological Museum of Kristiania. - *Nyt Mag. Naturvid.* 60: 1-47.
- Odhner, N.H. 1926. Nudibranchs and lamellarids from the Trondhjem fjord. - *Kgl. Norske Vidensk. Selsk. Skrift.* 1926: 1-36.
- Odhner, N.H. 1929. Aeolidiiden aus dem nördlichen Norwegen. - *Tromsø Museums Aarshefter*, 1927, 50: 1-22.
- Odhner, N.H. 1939. Opisthobranchiate mollusca from the western and northern coasts of Norway. - *Kgl. Norske Vidensk. Selsk. Skrift.* 1939: 1-92.
- Picton, B.E. 1980. A new species of *Coryphella* (Gastropoda: Opisthobranchia) from the British Isles. - *Ir. Nat. J.* 20(1): 15-19.
- Picton, B.E. 1991. *Cumanotus beaumonti* (Eliot, 1906), a nudibranch adapted for life in a shallow sandy habitat. - *Malacologia*, 32(2): 219-221.
- Picton, B.E. & Brown, G.H. 1978. A new species of *Cuthona* (Gastropoda: Opisthobranchia) from the British Isles. - *J. Conch.* 29(6): 345-348.
- Picton, B.E. & Morrow, C.C. 1994. A field guide to the nudibranchs of the British Isles. Immel Publishing.
- Platts, E. 1985. Appendix: An annotated list of the North Atlantic Opisthobranchia. In Just, H. & Edmunds, M. 1985. North Atlantic nudibranchs (Mollusca) seen by Henning Lemche, with additional species from the Mediterranean and the north east Pacific. - *Ophelia suppl.* 2: 1-170.
- Rasch, H. 1836. Naturhistoriske notiser. Fra en Reise, foretagen i Sommeren 1833. - *Mag. Natur-Vid.* 2: 285-326.
- Rathke, J. 1799. Iagttagelser henhørende til indvoldeormenes og Bløddyrenes Naturhistorie. - *Skrifter af Naturhistorie Selskabet* 5(1): 61-148.
- Rathke, J. 1806. In O.F. Müller. *Zoologie Danica*, sev Animalium Daniae et Norvegiae rariorum ac minus notorum descriptiones et historia. ed. 3, 4:1-46.
- Robilliard, G.A. 1970. The systematics and some aspects of the ecology of the genus *Dendronotus*. - *Veliger* 12(4): 433-479.
- Rudman, W.B. 1984. The Chromodorididae (Opisthobranchia: Mollusca) of the Indo-West Pacific: a review of the genera. - *Zool. J. Linn. Soc.* 81(2-3): 115-273.
- Santhakumaran, L.N. 1984. Vertical distribution of fouling and woodboring organisms in Trondheimsfjorden (Western Norway). - *Gunneria*, 47: 1-30.
- Sars, G.O. 1872a. Bidrag til Kundskaben om Dyrelivet paa vore Havbanker. - *Videnskab-Selskabets Forhandling*, 1-49.
- Sars, G.O. 1872b. On some remarkable forms of animal life from the great deeps off the Norwegian coast. I. University-Program for the 1st half-year 1869. Brøgger & Christie, Christiania, 1-74.
- Sars, G.O. 1878. Bidrag til Kundskaben om Norges arktiske Fauna. I. Mollusca Regionis Arcticae Norvegiae. Oversigt over de i Norges arktiske Region forekommende Bløddyr. Universitetsprogram for første halvår 1878, Christiania: Brøgger, s. 1-466.
- Sars, M. 1829. Bidrag til Södyrenes Naturhistorie. Chr. Dahl, Bergen.
- Sars, M. 1839. Undersøgelser over nogle lavere Dyrs Udvikling. - *Nyt Mag. Naturvid.* 2: 139-166.
- Sars, M. 1851. Beretning om en i Sommeren 1849 foretagen zoologisk Reise i Lofoten og Fimarken. - *Nyt Mag. Naturvid.* 6: 121-211.
- Sars, M. 1855. Beskrivelser og Iagttagelser over nogle mærkelige eller nye i Havet ved den Bergenske Kyst levende dyr af Polyppernes, Acalephernes, Radiaternes, Annelidernes og Molluskernes Classer, med en kort Oversigt over de hidtil af Forfatteren sammesteds fundne Arter og deres Forekommen. Chr. Dahl, Bergen.
- Sars, M. 1859. Bidrag til en Skildring af den arktiske Molluskfauna ved Norges nordlige Kyst. - *Forhandling*, Videnskabs-Selskabet i Christiania, 1858: 35-87.
- Sars, M. 1861. Beretning om en i Sommeren 1859 foretagen zoologisk Reise ved Kysten af Romsdals Amt. - *Nyt Mag. Naturvid.* 11: 241-263.
- Sars, M. 1870. Bidrag til Kundskab om Christianiafjordens Fauna. II. - *Nyt Mag. Naturvid.* 17: 113-232.
- Sjøtun K., Fredriksen S., Rueness J. and Lein T.E. 1995. Ecological studies of the kelp *Laminaria hyperborea* (Gunnerus) Foslie in Norway. Pp 525-536 in Skjoldal H.R., Hopkins C., Erikstad

- K.E. & Leinaas H.P (eds.). Ecology of fjords and coastal waters. Elsevier Science.
- Smith, S.S. & Heppel, D. 1991. Checklist of British Marine Mollusca. National Museums of Scotland Information Series No 11, 94 pp.
- Sparre-Schneider, J. 1885. Undersøgelser af dyrelivet i de arktiske fjorde. III. Tromsø sundets Molluskfauna. - Tromsø Museums Aarshefter VIII: 45-112.
- Storm, V. 1879a. Bidrag til Kundskab om Thronhjemsfjordens Fauna. - Kgl. Norske Vidensk. Selsk. Skrift. 1878: 9-36.
- Storm, V. 1879b. Bidrag til Kundskab om Thronhjemsfjordens Fauna. II. - Kgl. Norske Vidensk. Selsk. Skrift. 1878: 109-125.
- Storm, V. 1901. Oversigt over Thronhjemsfjordens Fauna. Trondhjems Biologiske Stasjons Meddelelser fra Stationsanlæggets Arbejdskomite, 1901: 1-20.
- Stuwitz, P. 1836. *Doris areolata* nov. spec. - Nyt Mag. Naturvid. 12: 76-79.
- Thollesson, M. 1998. Discrimination of two *Dendronotus* species by allozyme electrophoresis and the reinstatement of *Dendronotus lacteus* (Thompson, 1840) (Nudibranchia, Dendronotoidea). - Zool. Scr. 27: 189-195.
- Thompson, T.E. 1958. Observations on the radula of *Adalaria proxima* (A. & H.) (Gastropoda Opisthobranchia). - Proc. Malac. Soc. Lond. 33: 49-56.
- Thompson, T.E. 1988. Molluscs: benthic opisthobranchs (Mollusca: Gastropoda) keys and notes for the identification of the species. 2nd edition. - Synopses of the British fauna (New Series) 8: 1356.
- Thompson, T.E. & Brown, G.H. 1984. Biology of opisthobranch molluscs, vol. 2 no. 156. Ray Society. London.
- Thompson, W. 1840. Contributions towards a knowledge of the Mollusca Nudibranchia and Mollusca Tunicata of Ireland, with descriptions of some apparently new species of Invertebrata. - Ann. Mag. Nat. Hist. 5(29): 84-102.
- Valdés, A. 2002. A phylogenetic analysis and systematic revision of the cryptobranch dorids (Mollusca, Nudibranchia, Anthobranchia). - Zool. J. Linn. Soc. 136(4): 535-636.
- Valdés, A. & Gosliner, T. M. 2001. Systematics and phylogeny of the caryophyllidia-bearing dorids (Mollusca, Nudibranchia), with descriptions of a new genus and four new species from Indo-Pacific deep waters. - Zool. J. Linn. Soc. 133(2): 103-198.
- Verrill, A.E. 1870. Contributions to zoology from the Museum of Yale College. No.8. Descriptions of some New England Nudibranchiata. - Am. J. Sci. Art., series 2, 50(150): 405-408.
- Williams, G.C. & Gosliner, T.M. 1979. Two new species of nudibranchiate molluscs from the west coast of North America, with a revision of the family Cuthonidae. - Zool. J. Linn. Soc. 67: 203-223.
- Wägele, H. & Willan, R.C. 2000. Phylogeny of the Nudibranchia. - Zool. J. Linn. Soc. 130: 83-181.