

AN ACCOUNT OF THE MARINE FAUNA OF PAG ISLAND (ADRIATIC SEA, CROATIA)

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In the Pag Island marine environments 552 benthic and pelagic taxa have been compiled from literature sources and our own field research. Some typical offshore pelagic fish and mammals also were recorded in the island's shallow neritic area. Local protection for the bittersweet shellfish (genus *Glycimeris*) is proposed.

Key words: marine fauna, Pag Island, Adriatic Sea

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Prema navodima objavljenih izvora i rezultata naših istraživanja na području otoka Paga zabilježene su 552 svoje bentoske i pelagičke faune mora. Uz obale Paga su nađene i neke vrste riba i sisavaca stanovnika otvorenog mora. Preporuča se lokalna zaštita konjina, tj. školjkaša iz roda *Glycimeris*.

Ključne riječi: morska fauna, otok Pag, Jadransko more

INTRODUCTION

Pag is one of the largest islands in the north-eastern part of the Adriatic Sea. It is about 52 km long, a maximum of 7 km wide, with a land area of about 285 km². The southern and south-western landscape of the coast is gently sloping while at

the north-east it is characterised by steep rocks and vertical cliffs fifty metres or more high. The maximal sea depth in the area (101 m) was measured in the Velebit Channel. The island is built of Cretaceous limestone marked by karst phenomena (SCHUBERT, 1909; MAMUŽIĆ & SOKAČ, 1973; SOKAČ *et al.*, 1976). It is hilly and the highest peaks are 348 and 799 m. The seabed consists of bedrock and sandy and silty deposits which in some sites are rich in organogenic detritus (ALFIREVIĆ, 1968; JURAIĆ *et al.*, 1999).

The area has a typical Mediterranean climatic regime but it is handicapped by a strong north-eastern wind (in Croatian »bura«), gusts of which can reach 43 m/sec (OPPITZ, 1963; ANONYMOUS, 1971). Under storm conditions, aerosol salt can rise to high ground about 100 m high. Comprehensive information on the land flora and vegetation was provided by HORVATIĆ (1934, 1963).

Pag Island has been inhabited continuously since the Early Stone Age (SUIĆ, 1953). Currently it is home to about 9000 inhabitants living in the small towns Pag and Novalja, and the numerous villages and hamlets dispersed all round. Their main occupation is agriculture, sheep-breeding, fisheries, and tourism (OPPITZ, 1963; BASIOLI, 1984). Sea salt harvesting has been maintained continuously since 1215 (OPPITZ, 1963).

In old past the island's marine environments were poorly known. Only papers by BRUSINA (1865, 1866, 1907) and ILIJANIĆ & STOŠIĆ (1972) indicate successful malacological research at that time. On the other hand, in papers by HELLER (1864), STOSSICH (1880–1885), FABER (1883), BABIĆ (1898, 1902, 1910), and others, for a few species only the names of Pag Island, and Pag town were noted as collection sites. An important contribution to the marine fauna was provided by CAR & HADŽI (1914a,b), reporting on seasonal surveys of the school boat »Vila Velebita« in 1913–1914 under the auspices of the former Yugoslav Academy of Sciences and Arts. A few years later BABIĆ (1921) reported on sponges collected in the Ljubač strait by the Hungarian 'Najade' voyages performed just before the beginning of the First World War (LEIDENFROST, 1914; STILLER-RÜDIGER & ZAVODNIK, 1990).

In the 1930s, the Oceanographic Institute in Split organized ichthyological surveys in the Croatian Littoral. Valuable data on fish assemblages at seven bottom trawl stations located in the environs of Pag Island were presented by KOTTHAUS & ZEI (1938). Three decades later CRNKOVIĆ (1970) studied fish assemblages in the Velebit channel: three bottom trawl stations were located in the vicinity of Pag Island. The Institute continued research during the Norway lobster (*Nephrops norvegicus*) project (ALFIREVIĆ, 1968, 1980; ALFIREVIĆ *et al.*, 1969; GAMULIN-BRIDA *et al.*, 1971). Bottom trawl catches were analysed by CRNKOVIĆ (unpublished field data). The invertebrate material collected by bottom trawl and grab was only partly studied. Results from stations located in the Pag Island sea were published elsewhere (LEGAC, 1974b; ZAVODNIK & MURINA, 1975; BELLAN, 1976; ZAVODNIK, 1980, 1994; LEGAC & HRS-BRENKO, 1982; MURINA & ZAVODNIK, 1985/86; CAROZZA, 1987; ŠTEVČIĆ, 1998). Incidentally, ZAVODNIK *et al.* (1991) and LEGAC & FABIJANIĆ (1994) reported on some shellfish species from Pag Bay. PETRICIOLI (1983) collected echinoderms while diving along the Pag Island southern coast.

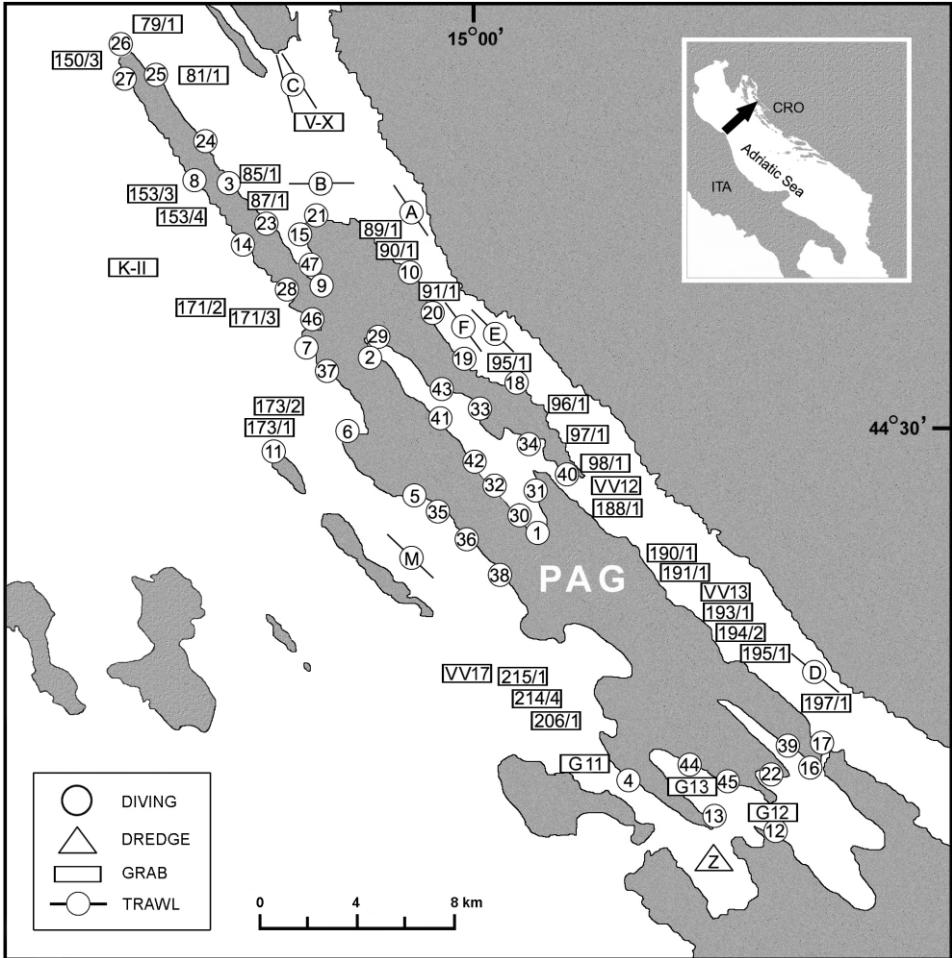


Fig. 1. Study area and benthic stations surveyed. Acronyms: CRO = Croatia, ITA = Italy.

In 1973–74, the Center for Marine Research, Rovinj and Zagreb, of the 'Ruder Bošković' Institute, undertook jubilee seasonal voyages of the RV Vila Velebita tracking the route and seasonal time from 60 years ago (ZAVODNIK, 1979a). Most of biological results were presented in the journal *Thalassia Jugoslavica*, vol. 15 (1979), in papers provided by AMOUREUX, BENOVIĆ, HURE, KATAVIĆ, KRŠINIĆ, MURINA, SCHMIDT, SKARAMUCA, SOKAČ, ŠTEVČIĆ, and ZAVODNIK (see References Chapter).

Consequently, records on the occurrence in the Pag Island area of particular marine taxa appeared in the literature occasionally because, at the most, taxonomic research was not focused on the island's coastal sea, and the results were not compiled so as to present an overview. Furthermore, many records noted in scientists' notebooks have never been published, or have become available only by recent

studies of museum and institute collections (PALLAORO & JARDAS, 1996; KOVAČIĆ, 1998). Rarely have the name of Pag Island and particular record sites appeared in monographic works and manuals (CARUS, 1885; MURINA, 1977; ANDRIĆ, 1999).

The current needs for the protection and sustainable management of marine environments in Croatia induced us to collect and summarize the data available on marine fauna of the Pag Island coastal sea, and to compare them with nearby areas studied previously (LEGAC, 1974a; ZAVODNIK, 1977; ZAVODNIK *et al.*, 2005).

METHODS

Previous literature records were critically consulted and adjusted to modern scientific nomenclature. Records of expert divers and local fishermen were also evaluated. The field diaries of the late D. CRNKOVIĆ have been consulted.

Coastal research was undertaken from time to time between 1972 and 2005. In total, 96 sites were surveyed (Fig. 1, Tab. 1). Most information on shallow water fauna was collected by skin diving. At a few localities only, the authors had the opportunity to practice SCUBA research methods. At some sites (Fig. 2, Tab. 2) small scale fishery gear was used, *i.e.* fishing spear, crab pot, beach seine, and troll. Catches of local fishermen were also considered.

Two of the authors (M.L. and D.Z.) took part in seasonal cruises of the research vessels Bios and Vila Velebita, in 1968–1972 and 1973–1974, respectively (ALFIREVIĆ, 1968, 1980; ZAVODNIK, 1979a). At sites surveyed (Fig. 2), plankton was collected by means of an Indian Ocean Standard Net, 113 cm in diameter and 250 μm mesh netting. Two vertical hauls per station were made (SCHMIDT & BENOVIĆ, 1979). The material was fixed in a 2.5 % buffered formaldehyde solution. Plankton was studied at the Biological Institute Dubrovnik and the Institute of Oceanography and Fisheries Split.

Fish and large invertebrates were collected by a commercial bottom trawl at a 1.5 Nm/hour speed (Figs 1, 2). At station Z a dredge of the »mušular« type was applied. For deposit sampling bottom grabs Petersen 0.2 m², or Van Veen 0.1 m² were used. Three to five hauls per station were made. Organisms were processed through 2 mm mesh sieves and preserved in 80 % alcohol, or 4.5 % buffered formaldehyde solution. Laboratory treatment and identifications were performed at the Center for Marine Research, Rovinj, and the Natural History Museum Rijeka. Reference specimens are deposited in the study collections of both Institutions, *i.e.* CMRR and NHMR. Deposit samples for sediment living ostracods were preserved entirely and processed at the Faculty of Mining, Geology and Petroleum Engineering, Zagreb University (SOKAČ, 1979).

In the present paper the scientific nomenclature of taxa follows that proposed by ERMS (COSTELLO *et al.*, 2001) or else different suggestions by taxonomy experts (*e.g.* FISCHER-PIETTE & MÉTIVIER, 1971; SABELLI *et al.*, 1990; ŠTEVČIĆ, 1990; JARDAS, 1996; HAYWARD & MCKINNEY, 2002; H. H. DIJKSTRA, personal comm.). Within higher systematic units, families, genera, and species were ordered alphabetically.

Tab. 1. Coastal collection sites. Bottom type codes: G – gravel, pebbles; L – loose stones, cobbles; R – rock; S – sand.

Station	Locality	Energy range	Site orientation	Bottom type	Depth (m)
1	Pag port	low	NW	S	
2	Zrće beach	low	NE	GRS	0-5
3	Trimalj	high	NE	LR	0-3
4	Prutna	moderate	SW	LR	0-8
5	Šimuni	low	E	GLRS	0-6
6	Slatina	low	W	RS	0-4
7	Straško	low	SW	LRS	0-6
8	Jakišnica	low	W	RS	0-15
9	Stara Novalja	low	N	GLS	0-3
10	Žigljen	high	NE	LR	0-10
11	Sadina (Škrda Island)	high	NE-NW	GRS	0-35
12	Zečevo	high	NE	RS	2-11
13	Prutna Cape	high	NE	LRS	1-21
14	Dubac	low	SW	GRS	0-5
15	Stara Novalja port	low	W	RS	0-5
16	Fortica W	high	SW	R	0-5
17	Ljubačka vrata	high	S	R	10-16
18	Tri brata	high	NE	R	3-12
19	Veliko Lukovišće	high	NE	R	12-15
20	Gešća	high	NE	R	3-15
21	Triget Rock	high	N	R	14-23
22	Vlašić	low	SW	RS	0-10
23	Vidonjica	high	NE	R	7-12
24	Konobe	high	NE	R	8-15
25	Gižnjak	high	NE	R	7
26	Lun	high	N	RS	4-12
27	Tovarnele	moderate	W	R	4-10
28	Mihovilje	low	W	S	1-11
29	Caska beach	low	S	RS	0-4
30	Pag Bay	high	NE	RS	0-6
31	Veli bok	low	W	RS	0-4
32	Bašana	high	NE	RS	0-5
33	Metajna	low	W	R	1
34	Slana	low	SW	S	1-4
35	Zamorašnji bok	low	SW	S	6-12
36	Tri boka	high-low	SW	S	4-7
37	Rogoza	low	SW	S	2
38	Dumboka	low	SW	S	6
39	Dinjiška	low	SW	R	2-4
40	Pag Bay (Slana)	moderate	SW	R	0-5
41	Pag Bay	high	NE	S	2-3
42	Pag Bay	high	NE	S	8-10
43	Pag Bay (Dražica)	low	S	S	9-10
44	Jezerine	low	S	S	1-12
45	Smokvica	low	S	R	6-10
46	Novalja	low	W	RS	0-5
47	Stara Novalja Bay	low	-	RS	2-14

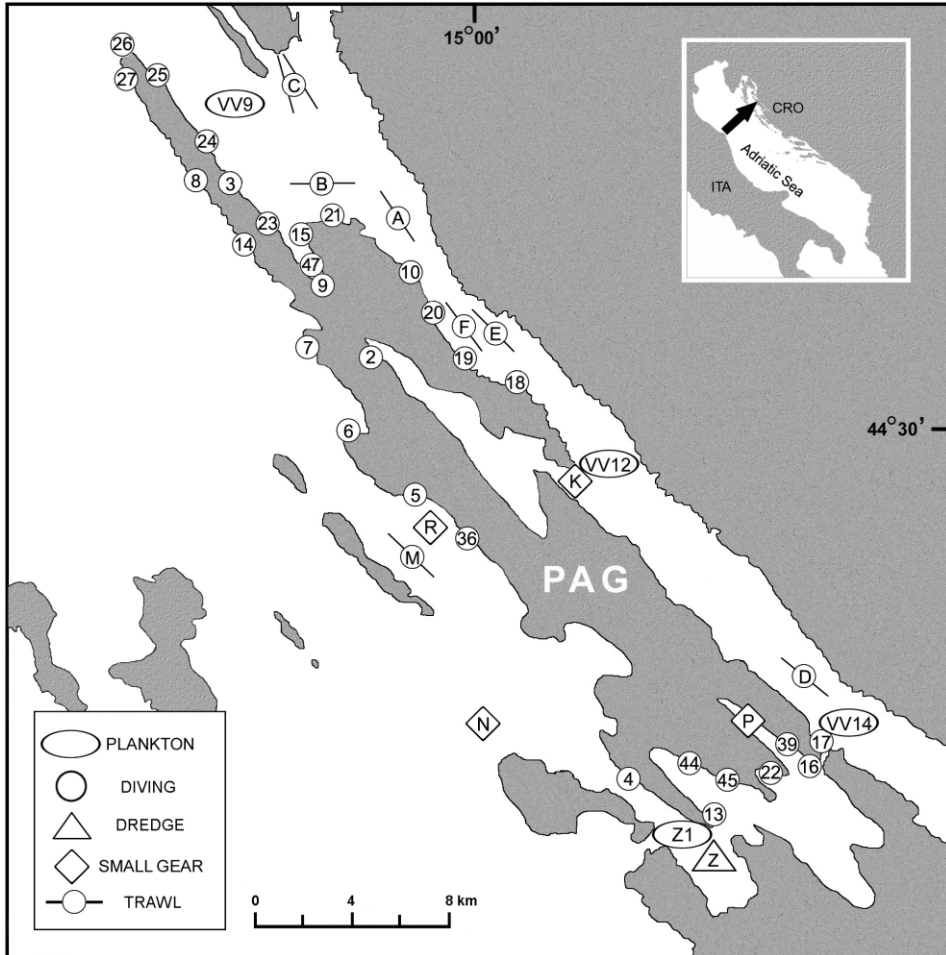


Fig. 2. Plankton and ichthyological stations surveyed. Acronyms: see Fig. 1.

RESULTS AND DISCUSSION

In the course of our field benthic surveys 326 invertebrate and 88 fish species were identified. Laboratory studies of plankton and benthic collections added many meiofaunal taxa to the list. After a critical evaluation of records published previously, a total of 552 taxa were recorded in the coastal sea off Pag Island. 245 species had not been noted hitherto in the area of interest. With regard to their habitat and behaviour, 476 taxa occurred in benthic environments (106 sessile), 60 were planktonic creatures, and 16 were typical pelagic species (11 fish, 3 cephalopods, and 2 mammals). However, most of the benthic fish recorded have a hyperbenthic, or epibenthic mode of life (M. KOVAČIĆ, personal comm.).

The review of our taxonomic list presented in the Addendum indicate that in the area of interest many taxocoenes were surveyed only occasionally, or they were not studied at all. Evident examples are microfauna and meiofauna inhabiting sandy and silty deposits and phytal environments, sponges, turbellarians, nemerteans, hydrozoans, tiny gastropods, many crustaceans (Copepoda Harpacticoida, Amphipoda, Isopoda, etc.), and ascidians. Unfortunately, data on Hydromedusae and planktonic Chaetognatha were mislaid and are no longer available (A. BENOVIĆ, personal comm.). One can assume that, from the biogeographical point of view, this part of the Adriatic Sea will remain a white spot for many taxa until targeted taxonomical studies become feasible in the future. The situation with respect to marine flora is quite similar (VOUK, 1914a,b; ERCEGOVIĆ, 1952; ŠPAN, 2005).

Some of the records noted refer to guest species which occurred exceptionally or rarely in Pag Island waters: the fish *Lophotes lacepedei* and *Mola mola*, the loggerhead turtle (*Caretta caretta*), and the fin whale (*Balaenoptera physalus*). One should note that the environ of Novalja is the type locality of the bivalve *Nuculana illirica* described by CAROZZA (1987).

Most taxa identified belong to stocks of the Mediterranean and Atlantic-Mediterranean biogeographical province. No species of marine fauna endemic to the Adriatic Sea was recorded. However, some species rarely noticed previously in the northern Adriatic were collected, such as the decapod crustacean *Anapagurus brevicarpus* and the fish *Callionymus pusillus*. According to information provided by J. DULČIĆ the *Lophotes lacepedei* specimen he has collected was the second one noticed in the Adriatic Sea.

A rare species in the area is perhaps the giant tun (*Tonna galea*) protected by law. Its presence in the area was established only by two empty but fresh shells collected by I. LEGAC. The first one, 170 mm long, was collected near Stara Poveljana at the locality named Jezerine, at 12 m depth. The second, slightly damaged, shell is 230 mm long and was collected at Lun Cape, at 8 m depth.

It seems strange that no notice has previously appeared in the scientific literature on the presence in the Pag area of the loggerhead turtle (*Caretta caretta*)

Tab. 2. Fishing gear stations.

Station	Fishing gear	Bottom type	Depth (m)
A	Bottom trawl	silty sand	80–90
B	Bottom trawl	sandy silt	61–78
C	Bottom trawl	silty sand	78–102
D	Bottom trawl	clayey silt	61–68
E	Bottom trawl	clayey silt	70–74
F	Bottom trawl	clayey sand	68–74
K	Various	rock, clayey sand	60
M	Bottom trawl	clayey sand	90
N	Troll	—	?
P	Beach seine	gravel-sandy mud	2
R	Crab pot	rock	30–45

Tab. 3. Basic data on the bottom grab, dredge and plankton stations surveyed.

Station	Distance from the Pag Island coast (m)	Depth (m)	Sediment
79/1	1800	94	sand
81/1	1800	87	sand
85/1	500	79	clayey silt
87/1	500	50	sand
89/1	500	79	clayey silt
90/1	500	72	sand
91/1	500	76	sandy silt
95/1	900	72	sand
96/1	900	72	sandy silt
97/1	900	72	sandy silt
98/1	900	72	sandy silt
150/3	1800	91	sand
153/3	1600	85	clayey silt
153/4	1000	81	clayey silt
171/2	1800	87	sandy silt
171/3	1200	72	sand
173/1	1800	78	clayey silt
173/2	1800	81	clayey silt
188/1	900	67	clayey silt
190/1	500	69	clayey silt
191/1	500	69	clayey silt
193/1	900	69	clayey silt
194/1	500	69	clayey silt
194/2	900	61	clayey silt
195/1	200	65	clayey silt
197/1	500	60	clayey silt
206/1	1300	65	sand
206/2	600	67	clayey silt
214/4	1600	72	clayey silt
215/1	900	72	clayey silt
G11	500	30	detrital sand
G12	800	40	clayey silt
G13	850	26	detrital sand
K-II	2200	80	sandy silt
V-X	1500	91	sandy silt
VV9	2850	94	silty sand
VV12	1600	68	sandy silt
VV13	1600	67	clayey silt
VV14	1600	60	clayey silt
VV17	5000	67	clayey silt
Z	1600	12	detrital sand
Z1	1300	13	clayey silt

(LAZAR & TVRTKOVIĆ, 1995; LAZAR *et al.*, 2004). In 1975, in Pag Bay an unnamed local fisherman caught one turtle specimen with a fishing spear. The second specimen was found last winter while stranded frozen in ice at Bašana beach (VULETA, 2005).

In the collection of the Natural History Museum Zagreb two specimens of the fin whale (*Balaenoptera physalis*) are deposited which were forwarded from Pag Island. The skeleton of the first specimen is dated 1892 (V. ŠTAMOL, personal comm.). The second one was a 12 m long female caught on 23 Jan. 1953 (ANON. P., 1953). Its skeleton and skin were stuffed (MAGERLE, 1969). In 1889 Brusina noticed a fin whale he had seen at Pag in 1862. Recently, one fin whale was seen around Pag Bridge and in Ljubač Bay (H. GOMERČIĆ, personal comm.).

There are also records of the presence of the Mediterranean monk seal (*Monachus monachus*) in the Karin Sea *i.e.* at the nearby inlet south of Pag Island (BRUSINA, 1889), and in Ljubač Bay and Povljana passage on the south and south-western shore but it has not been seen here since 1992 (GOMERČIĆ, 1998; GOMERČIĆ *et al.*, 2004).

Besides the turtle and all the mammals, the only marine species strongly protected by Croatian law in the area studied are the giant tun (*Tonna galea*) and the pen shell (*Pinna nobilis*). It seems that the fate of *Pinna* is similar here to that in other parts of the Adriatic Sea. Yet twenty years ago the pen shell was a common species all over the eastern Adriatic shallow littoral (ZAVODNIK *et al.*, 1991). Since then shellfish populations have continuously declined because of tourism. Amateur divers and bathers harvest pen shell specimens of all sizes for souvenir purposes thus eliminating mainly the reproductive specimens. The phenomenon is also observed in Pag Bay where *Pinna nobilis* previously was abundant in the wide meadows of the seagrass *Cymodocea nodosa*.

In the same area SCUBA divers have reduced stocks of the thorny oyster (*Spondylus gaederopus*) appreciated by many. Other shellfish menaced by fishermen's dredging and skin- and SCUBA-divers collecting are the bittersweet (*Glycymeris bimaculata*), brown venus (*Callista chione*), and warty venus (*Venus verrucosa*), all inhabiting shallow sandy deposits.

The first records in the area of *Glycymeris* were provided by DANILO & SANDRI (1855) and BRUSINA (1866, 1891). A few years later BRUSINA (1907) suggested that the northern part of Pag Bay was the *locus classicus* of glycymerid shells. A rather complicated identification of shells led to an enduring confusion of glycymerid records in the northeastern part of the Adriatic Sea (LEGAC & HRS-BRENKO, 1999). Morphologic studies by one of the authors (M.L.) of many shells collected in the Pag Bay and in the environs of Šimuni village resulted in the identification of three *Glycymeris* species in the area studied, *i.e.* *G. bimaculata*, *G. glycymeris* (syn. *G. pilosa*) and *G. violascens* (syn. *G. insubrica*) (LEGAC & FABIJANIĆ, 1994). Let us quote a curious note by BRUSINA (1866: 102): »...I was told that in Kolan (village, our note) the *Axinea* (= *Glycymeris*) shells are used to pave house entrances... the shellfish is consumed too«. This practice has continued.

Perhaps the most appreciated shellfish along the Croatian littoral is the date shell (*Lithophaga lithophaga*). Due to the great demand for it, it is often run as

contraband. Because the harvesting of date shell-inhabiting rocks inevitably results in the total devastation of indigenous communities, Croatian laws prohibited commercial treatment and forbade this shellfish to be offered in restaurants (HRS-BRENKO *et al.*, 1991). Due to these acts of prevention, the date shell is theoretically also a protected species, in spite of the counter practice in reality. Let us note that in the Pag Bay date shell populations were recorded in limestone and sandy silt stone rocks (Č. BENAC, personal comm.).

In Pag Island, in addition to fish and squids, about 40 edible invertebrates were consumed in the past (PAX, 1962; BAKIĆ, 1967; GRUBIŠIĆ, 1982; BAKIĆ & POPOVIĆ, 1983; MILIŠIĆ, 1991; ZAVODNIK, 1997). Nowadays, however, only about ten molluscs and four crustaceans are appreciated by local people. Only a few species are commercially valued, such as the European and spiny lobster (*Homarus gammarus* and *Palinurus elephas*), Norway lobster (*Nephrops norvegicus*), octopus (*Octopus vulgaris*), and cuttlefish (*Sepia officinalis*).

In 1891 efforts were undertaken to promote oyster rearing in Dinjiška cove located at the south western part of Pag Island (*i.e.* in the environs of our station Nr. 39, Fig. 1) (Basioli, 1968). Unfortunately, the enterprise failed. The rearing was re-established in 1932 without success again. Yet more than half a century ago, new efforts were made to rear oysters (*Ostrea edulis*) and mussels (*Mytilus galloprovincialis*) in Dinjiška Bay but this endeavour also failed. In present times Pag inhabitants are not engaged in rearing shellfish (BASIOLI, 1984).

CONCLUSIONS

1. The compilation of published records from about 150 years ago until the present and our data resulted in a total of 552 taxa: 438 benthic and pelagic invertebrates, 110 fish, one turtle and three mammals. A few of them were casual guests in the Pag Island sea. In the area studied, 245 marine taxa were found that had not been recorded previously.

2. For reasons beyond our influence some taxocoenes were insufficiently studied or were not studied at all. Complementary taxonomic and ecological research is indispensable.

3. In general, the Pag Island marine fauna conforms to the fauna of other northern Adriatic islands and mainland coast.

4. Local protection for the bittersweet shellfish, *i.e.* the genus *Glycymeris* (Croatian: konjina), is proposed.

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SAŽETAK

Prikaz morske faune otoka Paga (Jadransko more, Hrvatska)

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Stariji literaturni podaci dopunjeni su rezultatima naših povremenih istraživanja tijekom protekla tri desetljeća na 96 postaja u akvatoriju otoka Paga. Biološki materijal je uzorkovan ronjenjem, grabilom, planktonskim mrežama i raznim ribolovnim alatima. Zabilježeni su nalazi 552 svoje morske makrofaune, od toga 438 planktonskih i bentoskih beskralježnjaka, 110 vrsta riba, jedne morske kornjače i tri vrste sisavaca. Pretežito se radi o stanovnicima obalnog mora. Nalazi tipičnih vrsta pučine su vrlo rijetki, posebno nekih riba i morskih sisavaca. U sakupljenom materijalu je nađeno i nekoliko vrsta koje se općenito drže rijetkima u sjevernom Jadranu kao, na primjer, *Anapagurus brevicarpus* i *Callionymus pusillus*.

Rezultati istraživanja upućuju na visoku biološku raznolikost i primjernu očuvanost morskih staništa toga područja. Ipak smatramo svrsishodnim poduzimanje lokalnih mjera zaštite školjkaša konjina (rod *Glycimeris*).

A D D E N D U M

Checklist of species recorded in the Pag Island area.

CODES. Lit: Previous records (for No. see REFERENCES). Stn(s):
Present paper station(s) of records.

P O R I F E R A

CALCISPONGIAE

Homocoelida

CLATHRINIDAE

Clathrina clathrus (O. Schmidt, 1864). Lit: 5.

DEMOSPONGIAE

Astrophorida

CHONDROSIIDAE

Chondrilla nucula O. Schmidt, 1862. Stns: 11,12.

GEODIIDAE

Geodia cydonium (Jameson, 1811). Lit: 100. Stns: 12,C,Z.

THENEIDAE

Thenea muricata (Bowerbank, 1858). Lit: 31,38. Stns: C,F.

Hadromerida

CLIONIDAE

Cliona celata (Grant, 1826). Stns: 2,5,6,11.

Cliona viridis (O. Schmidt, 1862). Stns: 2,6,8,9,10,11.

SUBERITIDAE

Suberites domuncula (Olivi, 1792). Lit: 31,38,100. Stns: 12,Z.

TETHYIDAE

Tethya aurantium (Pallas, 1766). Lit: 31,100. Stns: 12,Z.

TIMEIDAE

Timea sp. Lit: 100.

Axinellida

AXINELLIDAE

Acanthella acuta O. Schmidt, 1862. Lit: 5. Stn: 11.

Axinella cannabina (Esper, 1794). Lit: 38. Stn: 11.

Axinella damicornis (Esper, 1794). Stn: 11

Poecilosclerida

HYMEDESMIIDAE

Hemimycale columella (Bowerbank, 1866). Lit: 5. Stn: 4.

Hymedesmia simillima Lundbeck, 1910. Lit: 12.

MYCALIDAE

Mycale contarenii (Martens, 1824). Lit: 12.

Haplosclerida

PETROSIIDAE

Petrosia ficiformis (Poiret, 1798). Stn: 4.

Dictyoceratida

DYSIDEIDAE

Dysidea tupha (Martens, 1824). Stns: 5,12.

SPONGIIDAE

Ircinia sp. Stn: 7.

Spongia officinalis Linnaeus, 1759. Stn: 8.

Verongida

APLYSINIDAE

Aplysina aerophoba Nardo, 1843. Lit: 100. Stns: 3,5,6,8,9,10,11–16,Z.

Aplysina cavernicola (Vacelet, 1959). Stn: 11.

C N I D A R I A**HYDROZOA****H y d r o i d a**

AEQUORIDAE

Aequorea aequorea (Forskål, 1775). Lit: 25.

BOUGAINVILLIDAE

Bougainvillia muscus (Allman, 1863). Lit:10.

CAMPANULARIIDAE

Clytia johnstoni (Alder, 1856). Lit:10.

Laomedea angulata (Hincks, 1859). Lit:10.

Obelia dichotoma (Linnaeus, 1758). Lit:10.

PLUMULARIIDAE

Aglaophenia sp. (erron. *pluma* /Linnaeus, 1758). Lit:10.

Nemertesia antennina (Linnaeus, 1758). Stns: 79/1, 91/1, 195/1.

ANTHOZOA**Hexacorallia****Ceriantharia**

CERIANTHIDAE

Cerianthus membranaceus (Spallanzani, 1784). Stns: 8,12,13.

Actiniaria

ACTINIDAE

Actinia cari Delle Chiaje, 1825. Lit: 77.

Actinia equina (Linnaeus, 1766). Stn: 10,46.

Anemonia viridis (Forskål, 1775). Stns: 2,3,5,6,8,9,15,16,46.

AIPTASIIDAE

Aiptasia mutabilis (Gravenhorst, 1831). Stns: 5,6,8,9,10.

EDWARDSIIDAE

Edwardsia claparedei Panceri, 1869. Stn: VV13.

HORMATHIIDAE

Adamsia palliata (Bohadsch, 1761). Lit: 77.

Calliactis parasitica (Couch, 1838). Lit: 77,100. Stns: 12,Z.

SAGARTIIDAE

Cereus pedunculatus (Pennant, 1777). Stn: 12.

Scleractinia

CARYOPHYLLIDAE

Caryophyllia smithi Stokes & Broderip, 1828. Stn: 87/1.

Cladocora caespitosa (Linnaeus, 1767). Stns: 11,12.

DENDROPHYLLIDAE

Balanophyllia europaea (Risso, 1826). Stns: 4,12.

Octocorallia**Alcyonacea**

ALCYONIIDAE

Alcyonium coralloides (Pallas, 1766). Stn: 11.

Alcyonium palmatum Pallas, 1766. Lit: 31.

Gorgonacea

GORGONIIDAE

Eunicella cavolinii (Koch, 1887). Stn: 11.

Eunicella singularis (Esper, 1794). Lit: 100. Stns: 13,21.

PLEXAURIDAE

Paramuricea clavata (Risso, 1826). Stn: 13.

Pennatulacea

FUNICULINIDAE

Funiculina quadrangularis (Pallas, 1766). Lit: 77.

SCYPHOZOA**Semaeostomae**

PELAGIIDAE

Chrysaora hysoscella Linnaeus, 1767. Lit:11,26.

Pelagia noctiluca (Forskål, 1775). Lit: 102. Stn: 11

Rhizostomae

RHIZOSTOMATIDAE

Cotylorhiza tuberculata (Macri, 1778). Lit: 11.

Rhizostoma pulmo (Macri, 1778). Lit: 25. Stn: 10.

C T E N O P H O R A**Lobata**

BOLINOPSIDAE

Leucothea multicornis (Quoy & Gaimard, 1824). Lit: 26.

K A M P T O Z O A**Solitaria**

LOXOSOMATIDAE

Loxosomella atkinsae Bobin & Prenant, 1953. Stn: G12.

M O L L U S C A**POLYPLACOPHORA****Neoloricata**

CHITONIDAE

Chiton olivaceus Spengler, 1797. Lit: 34. Stn: 2.

GASTROPODA**Docoglossa**

PATELLIDAE

Patella caerulea Linnaeus, 1758. Stns: 2,4,5,6,7,8,10,11,14.

Patella rustica Linnaeus, 1758. Stn: 4.

Patella ulysiponensis Gmelin, 1791. Stns: 2,5,7,10,14.

Vestigastropoda

FISSURELLIDAE

Diodora graeca (Linnaeus, 1758). Stn: 8.

Diodora italica (DeFrance, 1820). Lit: 100. Stn: 13.

HALIOTIDAE

Haliotis tuberculata lamellosa Lamarck, 1822. Stns: 2,4,11,15,47.

TROCHIDAE

Gibbula albida (Gmelin, 1791). Stns: 5,7.

Monodonta articulata Lamarck, 1822. Stns: 2,5,6.

Monodonta tuberculata (v. Born, 1778). Stns: 2,5,6,8,10,14.

TURBINIDAE

Bolma rugosa (Linnaeus, 1767). Stns: 2,7,8.

Neotaenioglossa

APORRHAIIDAE

Aporrhais pespelecani (Linnaeus, 1758). Lit: 100. Stns: 22,42,44,M,Z1.

CASSIDAE

Galeodea echinophora (Linnaeus, 1758). Stns: K,M.

CERITHIIDAE

Bittium reticulatum (Da Costa, 1778). Stns: 4,5,6,7,8,9,10,46.

Cerithium rupestre Risso, 1826. Stns: 2,6,7,29.

Cerithium vulgatum Bruguière, 1792. Stns: 5,6,7,9,10,29.

LITTORINIDAE

Melaraphe neritoides (Linnaeus, 1758). Stns: 2,6,7,10,16,46.

NATICIDAE

Euspira guillemini (Payraudeau, 1826). Stn: 7,G11.

Natica hebraea (Martyn, 1784). Stn: 29.

OVULIDAE

Aperiovula adriatica (G.B. Sowerby I, 1828). Lit: 31.

RISSOIDAE

Alvania cimex (Linnaeus, 1758). Stn: 7.

Pusilina parva (Da Costa, 1778). Stn: 7.

Rissoa guerinii Récluz, 1843. Stns: 6,7.

Rissoina bruguieri (Payraudeau, 1826). Stn: 7.

Rudolphosetia fusca (Philippi, 1841). Lit: 22.

TONNIDAE

Tonna galea (Linnaeus, 1758). Lit: 31. Stns: 26,44.

TURRITELLIDAE

Turritella communis Risso, 1826. Lit: 31,100. Stns: 12,199/1,G12.

Turritella turbona Monterosato, 1877. Stn: G11.

VERMETIDAE

Serpulorbis arenaria (Linnaeus, 1767). Stn: 8.

Vermetus triquetrus Bivona Ant., 1832. Stns: 5,6,7,9,10.

Neogastropoda**COLUMBELLIDAE**

Columbella rustica (Linnaeus, 1758). Stns: 6,9.

Mitrella gervillei (Payraudeau, 1826). Stn: 5.

CONIDAE

Conus mediterraneus Hwass in Bruguière, 1792. Stns: 2,6.

COSTELLARIIDAE

Vexillum ebenus (Lamarck, 1811). Lit: 100. Stn: VV17.

Vexillum tricolor (Gmelin, 1790). Stns: 5,6.

MURICIDAE

Bolinus brandaris (Linnaeus, 1758). Lit: 31,100. Stns: 6,29,Z1.

Hexaplex trunculus (Linnaeus, 1758). Lit: 100. Stns: 5,9,46,Z1.

Muricopsis cristata (Brocchi, 1814). Stns: 5,6,7,9,10.

Nassarius incrassatus (Ström, 1768). Stns: 6,10.

Pisania striata (Gmelin, 1791). Stns: 6,9,10.

SCAPHOPODA**Dentaliida****DENTALIIDAE**

Dentalium panormum Chenu, 1858. Stn: 87/1.

BIVALVIA**Nuculoida****NUCULIDAE**

Nucula nitidosa Winckworth, 1930. Stn: G12.

Nucula nucleus (Linnaeus, 1758). Lit: 48. Stn: 191/1.

Nucula sulcata Bronn, 1831. Lit: 65,100. Stns: VV13,VV17.

NUCULANIDAE

Nuculana comutata (Philippi, 1844). Lit: 48, 65. Stn: 206/1.

Nuculana illirica Carozza, 1987. Lit: 27.

Arcoida**ARCIDAE**

Arca noae Linnaeus, 1758. Lit: 26,49,100. Stns: 5,9,13,15,16,31,39,46,Z.

Arca tetragona Poli, 1795. Lit: 49.

Barbatia barbata (Linnaeus, 1758). Lit: 49.

GLYCIMERIDAE

Glycimeris bimaculata (Poli, 1795). Lit: 64. Stns: 5,30,34,35,40,41.

Glycimeris glycimeris (Linnaeus, 1758). Stns: 2,5.

Glycimeris violascens (Lamarck, 1819). Stns: 2,5.

Mytiloida**MYTILIDAE**

Lithophaga lithophaga (Linnaeus, 1758). Stns: 5,6,8,9,10,32.

Modiolus adriaticus (Lamarck, 1819). Stn: 9.

Modiolus barbatus (Linnaeus, 1758). Lit: 100. Stn: Z.

Musculus costulatus (Risso, 1826). Stn: 6.

Mytilaster minimus (Poli, 1795). Stns: 2,5,10.

Mytilus galloprovincialis Lamarck, 1819. Stns: 2,10,14,30,40,46.

PINNIDAE

Pinna nobilis Linnaeus, 1758. Stns: 6,14,40,42,43,44.

Pterioida**ANOMIIDAE**

Anomia ephippium Linnaeus, 1758. Lit: 65. Stn: F.

LIMIDAE

Lima lima (Linnaeus, 1758). Stn: 9.

Mantellum inflatum (Chemnitz, 1784). Stn: Z.

PECTINIDAE

Aequipecten opercularis (Linnaeus, 1758). Lit: 65. Stns: 6,87/1.

Chlamys glabra (Linnaeus, 1758). Stns: 9,30.

Chlamys varia (Linnaeus, 1758). Lit: 65. Stns: 2,5,F.

Pecten jacobaeus (Linnaeus, 1758). Lit: 31. Stns: 14,28,32,40,87/1.

SPONDYLIDAE

Spondylus gaederopus Linnaeus, 1758. Stns: 9,11,40.

Ostreoida**OSTREIDAE**

Ostrea edulis Linnaeus, 1758. Lit: 16. Stns: 5,8,9,33.

Veneroida**CARDIIDAE**

Acanthocardia aculeata (Linnaeus, 1758). Stns: 35,36,38.

Acanthocardia echinata (Linnaeus, 1758). Lit: 65. Stns: 11,B,G11.

Acanthocardia paucicostata Sowerby G.B.II, 1841. Lit: 100. Stn: Z.

Acanthocardia tuberculata (Linnaeus, 1758). Stns: 2,3,7,28,29,34,87/1.

Laevicardium oblongum (Gmelin, 1791). Stns: 6,29.

Parvicardium minimum (Philippi, 1836). Stn: 36.

Plagiocardium papillosum (Poli, 1795). Lit: 65. Stns: 9,87/1.

CHAMIDAE

Chama gryphoides Linnaeus, 1758. Stns: 8,9.

DONACIDAE

Donax venustus Poli, 1795. Stn: 7.

GLOSSIDAE

Glossus humanus (Linnaeus, 1758). Lit: 31,65. Stns: B,M.

LUCINIDAE

Loripes lacteus (Linnaeus, 1758). Stn: 7.

MESODESMATIDAE

Donacilla cornea (Poli, 1795). Stn: 29.

PSAMMOBIIDAE

Gari depressa (Pennant, 1777). Stns: 7,9.

PHARELLIDAE

Ensis ensis (Linnaeus, 1758). Stns: 6,29.

Phaxas pellucidus (Pennant, 1777). Lit: 65,100. Stns: 190/1,VV13,VV17.

SOLENIDAE

Solen marginatus Pulteney, 1799. Stn: 22.

SOLECURTIDAE

Solecortus strigillatus (Scacchi, 1834). Stns: 6,7,8,31,37.

VENERIDAE

Callista chione (Linnaeus, 1758). Stns: 6,7,10,14,28,29,32,46.

Chamelea gallina (Linnaeus, 1758). Stn: 7.

Clausinella fasciata (da Costa, 1778). Lit: 65. Stn: 87/1.

Dosinia lupinus (Linnaeus, 1758). Stn: 7.

Pitar rudis (Poli, 1795). Lit: 65,100. Stns: 87/1,VV17.

Tapes decussata (Linnaeus, 1758). Stns: 28,29.

Timoclea ovata (Pennant, 1777). Stn: 7.

Venerupis aurea Gmelin, 1791. Stn: 9.

Venus verrucosa Linnaeus, 1758. Lit: 24,65. Stns: 1,7,9,22, 31,32,44,46,87/1,Z.

TELLINIDAE

Tellina distorta Poli, 1791. Lit: 65. Stn: 87/1.

Tellina serrata Brocchi, 1814. Lit: 65. Stn: G11.

Myoida

CORBULIDAE

Corbula gibba (Olivi, 1792). Lit: 65. Stns: G11,G12,Z.

GASTROCHAENIDAE

Gastrochaena dubia (Pennant, 1777). Stns: 2,5,6,8,9,10,11,12.

HIATELLIDAE

Hiatella arctica (Linnaeus, 1767). Stn: 5.

CEPHALOPODA**Sepioidea**

SEPIIDAE

Sepia elegans de Blainville, 1827. Lit: 31,63.

Sepia officinalis Linnaeus, 1758. Lit: 29,31. Stns: 6 (ova),9,24.

SEPIOLIDAE

Sepiola rondeleti Leach, 1817. Lit: 31,63.

Teuthoidea

LOLIGINIDAE

Alloteuthis medius (Linnaeus, 1758). Lit: 31,63.

Loligo vulgaris Lamarck, 1798. Lit: 31,63.

OMMASTREPHIDAE

Illex coindetii (Vérany, 1839). Lit: 63.

Octopoda

OCTOPODIDAE

Eledone moschata (Lamarck, 1798). Lit: 31,63.

Octopus vulgaris Cuvier, 1797. Stns: 7,14,18,20,24,28,45.

S I P U N C U L A**SIPUNCULIDEA****Sipunculiformes**

GOLFINGIIDAE

Golfingia elongata Keferstein, 1863. Lit: 73.

PHASCOLIONIDAE

Phascolion strombus (Montagu, 1804). Lit: 72,73,100. Stn: VV13.

PHASCOLOSOMATIDEA**Phascolosomatiformes**

PHASCOLOSOMATIDAE

Phascolosoma granulatum Leuckart, 1828. Stns: 5,6,7.

Aspidosiphoniformes

ASPIDOSIPHONIDAE

Aspidosiphon muelleri kovalevskii Diesing, 1851. Lit: 72,100. Stns: 87/1,199/1,G12,VV13, VV17.

E C H I U R A

BONELLIDAE

Bonellia viridis Rolando, 1821. Lit: 103. Stn: 11.

A N N E L I D A

POLYCHAETA

AMPHARETIDAE

Melinna palmata Grube, 1870. Lit: 4,100. Stns: VV13,VV17.

APHRODITIDAE

Aphrodita aculeata Linnaeus, 1761. Lit: 26,31,100. Stn: Z.

Harmothoe imbricata (Linnaeus, 1767). Stn: 5.

Hermonia hystrix (Savigny, 1820). Lit: 100. Stns: 87/1,Z.

CAPITELLIDAE

Notomastus latericeus Sars, 1851. Lit: 4,100. Stns: 150/3,194/1,VV13,VV17.

CIRRATULIDAE

Dodecaceria concharum Ørsted, 1843. Lit: 4,100. Stn: VV12.

EUNICIDAE

Lysidice ninetta Audouin & H.Milne-Edwards, 1833. Stns: 5,6,8.

Marphysa kinbergi McIntosh, 1910. Lit: 4,100. Stns: 188/1,190/1,191/1,194/1,194/2, 195/1, 197/1,215/1,VV13,VV17.

GLYCERIDAE

Glycera rouxi Audouin & H.Milne-Edwards, 1833. Lit: 4,100. Stns:150/3,188/1,191/1, 197/1, 206/1,215/1,VV13,VV17.

GONIADIDAE

Glycinde nordmanni (Malmgren, 1866). Stn: 90/1.

Goniada norvegica Ørsted, 1844. Stn: 98/1.

HESIONIDAE

Ophiodromus flexuosus (Delle Chiaje, 1825). Lit: 4,100. Stns: VV13,VV17.

LUMBRINERIDAE

Lumbrineris latreillei (Audouin & H.Milne-Edwards, 1834). Stns: 91/1,95/1.

Lumbrineris sp. Stns: 96/1,97/1.

Ninoe armoricana Glémarec, 1968. Lit: 4,100. Stns: VV13,VV17.

Scoletoma impatiens (Claparède, 1868). Stn: 214/4.

MALDANIDAE

Maldane glebifex Grube, 1860. Lit: 4, 100. Stn: Z.

MYZOSTOMIDAE

Myzostoma glabrum Leuckart, 1827. Stn: 12.

NEPHTYIDAE

Nephtys hystricis McIntosh, 1900. Lit: 4,100. Stns: 206/1,VV13,VV17.

Nephtys incisa Malmgren, 1865. Stn: 153/4.

NEREIDAE

Ceratonereis costae (Grube, 1860). Stn: 8.

Eunereis longissima (Johnston, 1840). Stn: 98/1.

Nereis rava Ehlers, 1868. Stn: 5.

ONUPHIDAE

Hyalinoecia tubicola (O.F.Müller, 1776). Stn: 87/1.

Paradiopatra lepta Chamberlin, 1919. Lit: 4,100. Stns: K-II,VV13.

OPHELIIDAE

Ophelina aulogaster (Rathke, 1843). Lit: 4,100. Stns: 153/4,VV17.

ORBINIIDAE

Phylo grubei (McIntosh, 1910). Lit: 4,100. Stn: VV17.

POECILOCHAETIDAE

Poecilochaetes serpens Allen, 1904. Lit: 4,100. Stn: VV17.

PHYLLODOCIDAE

Eulalia sp. Lit: 100. Stn: VV13.

SABELLIDAE

Bispira mariae Lo Bianco, 1893. Stn: 5.

Myxicola infundibulum (Renier, 1804). Stns: 2,3,7,9.

Sabella pavonina (Savigny, 1820). Stns: 5,7,9.

Sabella spallanzanii (Gmelin, 1791). Stns: 6,7,8,9,10,12.

SCALIBREGMIDAE

Scalibregma inflatum Rathke, 1843. Lit: 4,100. Stns: VV12,VV13.

SERPULIDAE

Ditrupa arietina (O.F.Müller, 1776). Lit: 38. Stn: 90/1.

Pomatoceros triqueter (Linnaeus, 1767). Stns: 2,4,5,9,11.

Protula tubularia (Montagu, 1803). Stns: 8,10,16.

Serpula vermicularis Linnaeus, 1767. Lit: 31.

SIGALIONIDAE

Labioleanira yhleni (Malmgren, 1867). Lit: 4,100. Stns: VV13,VV17.

SPIONIDAE

Laonice cirrata (M.Sars, 1851). Stn: 190/1.

Spiophanes kroyeri reyssi Laubier, 1964. Lit: 4,100. Stn: VV13.

STERNASPIDAE

Sternaspis scutata (Ranzani, 1817). Lit: 4,100. Stn: VV17.

TEREBELLIDAE

Eupolymnia nebulosa (Montagu, 1818). Stns: 6,7,8.

TRICHOBRANCHIDAE

Terebellides stroemi Sars, 1835. Lit: 4,100. Stns: 206/1, VV17, Z.

A R T H R O P O D A**ARACHNIDA****Acarina**

HALACARIDAE

Copidognathus magnipalpus magnipalpus (Police, 1909). Stn: V–X.

PONTARACHNIDAE

Litarachna communis Walter, 1925. Stn: V–X.

CRUSTACEA**O s t r a c o d a****Myodocopida**

POLYCOPIDAE

Polycope reticulata G.W.Müller, 1894. Lit: 84. Stn: VV10.

Polycope strongila Barbeito-González, 1971. Lit: 84. Stn: VV10.

Platycopida

CYTHERELLIDAE

Cytherella alvearium Bonaduce, Ciampio & Masoli, 1975. Lit: 84. Stn: VV10.

Cytherella vulgata Ruggieri, 1962. Lit: 84. Stns: VV10, VV12, VV14.

Podocopida

BAIRDIIDAE

Bairdia conformis (Terquem, 1878). Lit: 84. Stn: VV12.

BYTHOCYTHERIDAE

Bythocythere turgida Sars, 1866. Lit: 84. Stns: VV10, VV14.

CUNEOCYTHERIDAE

Cuneocythere semipunctata (Brady, 1868). Lit: 84. Stn: VV12.

CYTHERIDEIDAE

Cytheridea neapolitana Kollman, 1960. Lit: 84. Stns: VV12, VV14, Z1.

CYTHERURIDAE

Cytheropteron alatum Sars, 1866. Lit: 84. Stns: VV10, VV12, VV14.

Cytheropteron monoceros Bonaduce, Ciampio & Masoli, 1975. Lit: 84. Stn: VV10.

Cytheropteron rotundatum (G.W.Müller, 1894). Lit: 84. Stns: VV10, VV14.

Cytheropteron ruggierii Pucci, 1955. Lit: 84. Stn: VV10.

Eucytherura mistrettai Sissingh, 1972. Lit: 84. Stns: VV10, VV12.

Pseudocytherura calcarata (Seguenza, 1880). Lit: 84. Stn: VV10.

Semicytherura acuticostata ventricosa (G.W.Müller, 1894). Lit: 84. Stns: VV10, VV12.

Semicytherura diafora Barbeito-González, 1971. Lit: 84. Stn: VV12.

Semicytherura paradoxa (G.W.Müller, 1894). Lit: 84. Stn: VV10.

Semicytherura ruggierii (Pucci, 1955). Lit: 84. Stns: VV10,VV12.

EUCYTHERIDAE

Eucythere curta Ruggieri, 1975. Lit: 84. Stns: VV10,VV14.

HEMICYTHERIDAE

Aurila convexa (Baird, 1850). Lit: 84. Strn: Z1.

KRITHIDAE

Krithe praetexta (Sars, 1866). Lit: 84. Stns: VV12,VV14.

LEPTOCYTHERIDAE

Callistocythere adriatica Masoli, 1968. Lit: 84. Stns: VV10,VV12,VV14.

Leptocythere bacescoi (Rome, 1942). Lit: 84. Stns: VV10,Z1.

Leptocythere ramosa (Rome, 1942). Lit: 84. Stns: VV12,VV14,Z1.

LOXOCOONCHIDAE

Loxocauda decipiens (G.W.Müller, 1894). Strn: V–X.

Loxococoncha agilis Ruggieri, 1967. Lit: 84. Stns: VV10,VV14,Z1.

Palmococoncha turbida (G.W.Müller, 1894). Lit: 84. Strn: Z1.

Sagmatocythere versicolor (G.W.Müller, 1894). Lit: 84. Stns: VV10,VV12,VV14.

PONTOCYPRIDIDAE

Propontocypris setosa (G.W.Müller, 1894). Lit: 84. Stns: VV10,VV12.

TRACHYLEBERIDIDAE

Bosquetina dentata (G.W.Müller, 1894). Lit: 84. Stns: VV10,VV12,VV14,Z1.

Buntonia sublatissima (Neviani, 1906). Lit: 84. Stns: VV10,VV12,VV14.

Carinocythereis antiquata (Baird, 1850). Lit: 84. Stns: VV10,VV14,Z1.

Carinocythereis antiquata bairdi (Uliczny, 1969). Lit: 84. Stns: VV12,Z1.

Carinocythereis aff. *cnistum* Uliczny, 1969. Lit: 84. Strn: Z1.

Costa edwardsii (Roemer, 1838). Lit: 84. Stns: VV10,VV14.

Henryhowella sarsi (G.W.Müller, 1894). Lit: 84. Stns: VV10,VV12,VV14.

Hiltermannicythere turbida (G.W.Müller, 1894). Lit: 84. Stns: VV12,VV14,Z1.

Pterygocythereis ceratoptera (Bosquet, 1852). Lit: 84. Stns: VV12,VV14.

Pterygocythereis jonesi (Baird, 1850). Lit: 84. Stns: V–X,VV10,VV12,VV14.

XESTOLEBERIDIDAE

Xestoleberis communis G.W.Müller, 1894. Lit: 84. Stns: VV12,Z1.

Xestoleberis dispar G.W.Müller, 1894. Lit: 84. Stns: VV14,Z1.

C o p e p o d a

Calanoida

ACARTIIDAE

Acartia clausi Giesbrecht, 1889. Lit: 51. Stns: VV9,VV12,VV14,Z1.

CALANIDAE

Calanus helgolandicus Claus, 1863. Lit: 51. Stns: VV9,VV12,VV14,Z1.

Mesocalanus tenuicornis (Dana, 1849). Lit: 51. Stns: VV9,VV12,VV14.

Nannocalanus minor (Claus, 1863). Lit: 51. Stns: VV9,VV12.

CANDACIIDAE

Candacia armata Boeck, 1873. Lit: 51. Stns: VV9, VV12, VV14.

CENTROPAGIDAE

Centropages kroeyeri Giesbrecht, 1892. Lit: 51. Stns: VV12, VV14, Z1.

Centropages typicus Krøyer, 1849. Lit: 51. Stns: VV9, VV12, VV14, Z1.

Centropages violaceus (Claus, 1863). Lit: 51. Stn: VV9.

Isias clavipes Boeck, 1865. Lit: 51. Stns: VV9, VV14, Z1.

CLAUSOCALANIDAE

Clausocalanus arcuicornis (Dana, 1849). Lit: 51. Stns: VV9, VV12, VV14, Z1.

Clausocalanus furcatus (Brady, 1883). Lit: 51. Stns: VV9, VV12, VV14, Z1.

Clausocalanus jobei Frost & Fleminger, 1968. Lit: 51. Stns: VV9, VV12, VV14, Z1.

Clausocalanus paululus Farran, 1926. Lit: 51. Stn: VV9.

Clausocalanus pergens Farran, 1926. Lit: 51. Stns: VV9, VV12, VV14.

Ctenocalanus vanus Giesbrecht, 1888. Lit: 51. Stns: VV9, VV12, VV14, Z1.

Pseudocalanus elongatus (Boeck, 1865). Lit: 51. Stns: VV9, VV12, VV14, Z1.

DIAIXIDAE

Diaixis pigmaea (T. Scott, 1899). Lit: 51. Stns: VV9, VV12, VV14, Z1.

EUCHAETIDAE

Pareuchaeta hebes (Giesbrecht, 1888). Lit: 51. Stn: VV12.

LUCICUTIIDAE

Lucicutia flavicornis (Claus, 1863). Lit: 51. Stns: VV9, VV12.

MECYNOCERIDAE

Mecynocera clausi I.C.Thompson, 1888. Lit: 51. Stns: VV9, VV12, Z1.

PONTELLIDAE

Labidocera wollastoni (Lubbock, 1857). Lit: 51. Stns: VV9, VV12, VV14, Z1.

Pontella mediterranea (Claus, 1863). Lit: 51. Stn: Z1.

TEMORIDAE

Temora longicornis (O. F. Müller, 1792). Lit: 51. Stns: VV9, VV12, VV14, Z1.

Temora stylifera (Dana, 1849). Lit: 51. Stns: VV9, VV12, VV14, Z1.

Harpacticoida

AMEIRIDAE

Pseudameira mixta ssp. *mixta* Sars, 1920. Stn: K-II.

CERVINIIDAE

Cerviniopsis cf. *langi* Soyer, 1970. Stn: K-II.

DIOSACCIDAE

Metamphiascopsis hirsutus Thompson & A.Scott, 1903. Stn: V-X.

EUTERPINIDAE

Euterpina acutifons (Dana, 1847). Lit: 51. Stn: Z1.

PELTIDIIDAE

Alteutha interrupta (Goodsir, 1845). Stn: K-II.

Cyclopoida

OITHONIDAE

Oithona helgolandica Claus, 1863. Lit: 51. Stns: VV9,VV12,VV14,Z1.

Oithona nana Giesbrecht, 1892. Lit: 51. Stns: VV9,VV12,VV14,Z1.

Oithona plumifera Baird, 1843. Lit: 51. Stns: VV9,VV12,VV14,Z1.

Poecilostomatoida

ONCAEIDAE

Oncaea media Giesbrecht, 1891. Lit: 51. Stn: Z1.

Oncaea mediterranea (Claus, 1863). Lit.: 51. Stns: VV9,VV12,VV14.

Oncaea subtilis Giesbrecht, 1892. Lit.: 51. Stn: VV17.

Triconia dentipes Giesbrecht, 1891. Lit: 51. Stn: Z1.

CORYCAEIDAE

Agetus flaccus (Giesbrecht, 1891). Lit: 51. Stn: VV9.

Agetus typicus (Krøyer, 1849). Lit: 51. Stns: VV9,VV12.

Corycaeus clausi (F. Dahl, 1894). Lit: 51. Stns: VV9,VV12,Z1.

Ditrichocorycaeus brehmi (Steuer, 1910). Lit: 51. Stns:VV9,VV12,VV14,Z1.

Farranula rostrata (Claus, 1863). Lit: 51. Stns: VV9,VV12,VV14,Z1.

Onychocorycaeus giesbrechti (F.Dahl, 1894). Lit: 51. Stns: VV9,VV12,VV14,Z1.

SAPPHIRINIDAE

Sapphirina nigromaculata Claus, 1863. Lit: 51. Stns: VV9,VV12,Z1.

C i r r i p e d i a**Sessilia**

CHTHAMALIDAE

Chthamalus montagui Southward, 1976. Stns: 1,14,16,46.

Chthamalus stellatus (Poli, 1791). Stns: 2,4,5,6,7,8,10,11,14,16,22,46.

Euraphia depressa (Poli, 1791). Stns: 4,10.

BALANIDAE

Balanus perforatus Bruguière, 1789. Stns: 4,7,8.

Akentronida

SACCULINIDAE indet. Lit: 100. Stn: Z.

M a l a c o s t r a c a**Decapoda**

ALPHEIDAE

Alpheus dentipes Guérin-Méneville, 1832. Stns: 5,6,8.

CALLIANASSIDAE

Callianassa subterranea (Montagu, 1808). Lit: 90,92,100. Stns: 12,79/1,84/1,85/1,91/1,98/1,153/3,153/4,172/1,188/1,190/1,191/1,193/1,194/1,195/1,197/1,206/1,214/1, G12, VV9, VV13, VV17.

CALOCARIDIDAE

Calocaris macandreae Bell, 1846. Lit: 90,92,100. Stns: 172/1, VV13, VV17.

CRANGONIDAE

Pontophilus spinosus (Leach, 1815). Lit: 92. Stns: C,D.

DIOGENIDAE

Clibanarius erythropus (Latreille, 1818). Stns: 6,9,10.

Paguristes eremita (Linnaeus, 1767). Lit: 90,92,100. Stns: 12,Z.

DORIPPIDAE

Ethusa mascarone (Herbst, 1785). Lit: 90,100. Stn: Z.

ERIPHIDAE

Eriphia verrucosa (Forskål, 1775). Stns: 6,8,10,11.

GALATHEIDAE

Galathea bolivari Zariquiey Alvarez, 1950. Stns: 5,8.

Galathea intermedia Lilljeborg, 1851. Lit: 90,100. Stns: G11, Z.

Galathea strigosa (Linnaeus, 1761). Lit: 92. Stn: 13.

Munida rugosa (Fabricius, 1775). Lit: 31,92.

GRAPSIDAE

Pachygrapsus marmoratus (Fabricius, 1787). Stns: 4,5,7,14,22,46.

LAOMEDIIDAE

Jaxea nocturna Nardo, 1847. Lit: 90,92,100. Stns: 191/1,197/1,215/1, VV17.

LEUCOSIIDAE

Ebalia cranchi Leach, 1818. Lit: 90,100. Stn: VV17.

MAJIDAE

Acanthonyx lunulatus (Risso, 1816). Stn: 7.

Eurynome aspera (Pennant, 1777). Lit: 90,100. Stn: Z.

Inachus comunissimus Rizza, 1839. Lit: 90,100. Stns: 7,Z.

Lissa chiragra (Fabricius, 1775). Lit: 90,100. Stn: Z.

Macropodia longipes (A.Milne Edwards & Bouvier, 1899). Lit: 92. Stn: C.

Macropodia longirostris (Fabricius, 1775). Lit: 92. Stn: D.

Macropodia rostrata (Linnaeus, 1761). Lit: 90,100. Stns: 6,7,Z.

Maja crispata Risso, 1827. Stns: 5,6,8.

Maja squinado (Herbst, 1788). Stns: 10,16,22,F.

Pisa tetraodon (Pennant, 1777). Stns: 7,8.

NEPHROPSIDAE

Homarus gammarus (Linnaeus, 1758). Fishermen' records. Stns: 14,26,35,K,R.

Nephrops norvegicus (Linnaeus, 1758). Lit: 31,38,90,92,100. Stns: C,D,F.

PALINURIDAE

Palinurus elephas (Fabricius, 1787). Fishermen' records.

PAGURIDAE

Anapagurus brevicarpus A.Milne Edwards & Bouvier, 1892. Lit: 90,100. Stns: G11,Z.

Cestopagurus timidus (Roux, 1830). Stns: 6,7.

Pagurus alatus Fabricius, 1775. Lit: 92. Stn: C.

Pagurus anachoretus Risso, 1827. Stns: 5,7.

Pagurus prideaux Leach, 1815. Stns: 12,13.

PALAEEMONIDAE

Palaemon elegans Rathke, 1837. Stn: 6.

PENAEIDAE

Parapenaeus longirostris (H. Lucas, 1846). Lit: 31,92. Stn: C.

PILUMNIDAE

Pilumnus spinifer H. Milne Edwards, 1834. Lit: 90,100. Stns: 6,7,8,Z.

PORCELLANIDAE

Pisidia longimana (Risso, 1816). Lit: 90,100. Stns: 6,9,Z.

Porcellana platycheles (Pennant, 1777). Stns: 5,6.

PORTUNIDAE

Liocarcinus depurator (Linnaeus, 1758). Lit: 31,78. Stns: 87/1, D.

Liocarcinus maculatus (Risso, 1827). Lit: 100. Stn: Z.

PROCESSIDAE

Processa noveli Al-Adhub & Williamson, 1975. Lit: 90,100. Stn: VV17.

SOLENOCERIDAE

Solenocera membranacea (Risso, 1816). Lit: 90, 100. Stn: VV17.

UPOGEBIIDAE

Upogebia deltaura (Leach, 1815). Lit: 92. Stns: 81/1,95/1,97/1,150/3,171/3.

XANTHIDAE

Xantho poressa (Olivi, 1792). Stns: 5,6,9.

Isopoda

LIGIIDAE

Ligia italica Fabricius, 1798. Stns: 4,7,10,14,22,46.

Amphipoda

HYALIDAE

Hyale camptonyx (Heller, 1866). Precise location not noted.

MELITIDAE

Elasmopus pocillimanus (Bate, 1862). Stns: 5,6,7,8.

B R Y O Z O A

GYMNOLAEMATA

Ctenostomata

VESICULARIIDAE

Amathia lendigera (Linnaeus, 1758). Stns: 6,14.

Cheilostomata

ADEONIDAE

Reptadeonella violacea (Johnston, 1847). Stns: 1,2,4,9,16.

AETEIDAE

Aetea longicollis (Jullien, 1903). Stn: 3.

Aetea sica (Couch, 1844). Stns: 5,7,10,14,15,16.

Aetea truncata (Landsborough, 1852). Stns: 3,5,6,15,16.

BEANIIDAE

Beania cylindrica (Hincks, 1886). Stn: 5.

Beania hirtissima (Heller, 1867). Stn: 3.

Beania mirabilis Johnston, 1840. Stn: 15.

BITECTIPORIDAE

Metroperiella lepralioides (Calvet, 1903). Stns: 5,16.

Schizomavella rudis (Manzoni, 1869). Stn: 16.

CALLOPORIDAE

Copidozoum tenuirostre (Hincks, 1880). Stn: 3.

CANDIDAE

Scrupocellaria bertholleti (Audouin, 1826). Stns: 3,14,15.

Scrupocellaria delilii (Audouin, 1826). Stn: 3.

Scrupocellaria scruposa (Linnaeus, 1758). Stn: 14.

CELLEPORIDAE

Celleporina caminata (Waters, 1879). Stns: 10,16.

CHORIZOPORIDAE

Chorizopora brongniartii (Audouin, 1826). Stns: 3,5,10,14,15,16.

CRIBRILINIDAE

Collarina balzaci (Audouin, 1826). Stns: 5,6,7,8,9,10,14,15,16.

CRYPTOSULIDAE

Cryptosula pallasiana (Moll, 1803). Stns: 2,5,7,15.

ELECTRIDAE

Electra posidoniae Gautier, 1954. Stns: 7,14.

HIPPOPORIDRIDAE

Hagiosynodos kirchenpaueri ssp. *tregoubovii* Gautier, 1962. Stn: 3.

MICROPORELLIDAE

Microporella ciliata (Pallas, 1766). Stn: 3.

MICROPORIDAE

Mollia circumcincta (Heller, 1867). Stn: 3.

MYRIAPORIDAE

Myriapora truncata (Pallas, 1766). Stn: 11.

PHIDOLOPORIDAE

Rhynchozoon bispinosum (Johnston, 1847). Stns: 1,8,14.

SAVIGNYELLIDAE

Savignyella lafontii (Audouin, 1826). Stn: 15.

SCHIZOPORELLIDAE

Schizobrachiella sanguinea (Norman, 1868). Stns: 1,2,3,5,6,7,9,10,14,15,16.

Schizoporella dunkeri (Reuss, 1848). Stns: 1,2,3,5,10,14,15,16.

Schizoporella errata (Waters, 1878). Stn: 15.

Schizoporella cf. *tetragona* (Reuss, 1848). Stn: 1.

Schizoporella unicornis (Johnston in Wood, 1844). Stn: 15.

SMITTINIDAE

Smittina cervicornis (Pallas, 1766). Stn: 11.

UMBONULIDAE

Umbonula oviceolata Hastings, 1944. Stn: 16.

STENOLAEMATA**Cyclostomata****CRISIIDAE**

Crisia ramosa Harmer, 1891. Stns: 10,14.

Filicrisia geniculata (H.Milne Edwards, 1838). Stn: 14.

HORNERIDAE

Hornera frondiculata Lamouroux, 1821. Stn: 91/1.

LICHENOPORIDAE

Patinella radiata (Audouin, 1826). Stns: 3,14,16.

TUBULIPORIDAE

Tubulipora liliacea (Pallas, 1766). Stn: 14.

E C H I N O D E R M A T A**CRINOIDEA****Comatulida****ANTEDONIDAE**

Antedon mediterranea (Lamarck, 1816). Lit: 25,31,99,100,101. Stns: 12,13,Z.

HOLOTHUROIDEA**Aspidochirotida****HOLOTHURIIDAE**

Holothuria forskali Delle Chiaje, 1823. Lit: 99,100,101. Stns: 5,12,13,87/1,Z1,A,B,C,D,E,F.

Holothuria polii Delle Chiaje, 1823. Lit: 101. Stns: 5,6.

Holothuria stellati Delle Chiaje, 1823. Stn: 6.

Holothuria tubulosa Gmelin, 1788. Lit: 99,100,101. Stns: 1,3,5,6,7,8,9,10,11,12,13,14,15,16,46.

STICHOPODIDAE

Eostichopus regalis Cuvier, 1817. Lit: 31,101. Stns: A,B,C,D,E,F.

Dendrochirotida

CUCUMARIIDAE

Leptopentacta elongata (Düben & Koren, 1844). Stns: 11,95/1,G11.

Leptopentacta tergestina (M.Sars, 1857). Lit : 99,100. Stns: 12,13,D,G12,Z.

Ocnus planci (Brandt, 1835). Lit: 99,100,101. Stns: 13,D,Z.

Apodida

SYNAPTIDAE

Labidoplax digitata (Montagu, 1815). Lit: 99,100,101. Stns: 12,89/1,191/1,215/1,G12,VV17.

ASTEROIDEA**Paxillosida**

ASTROPECTENIDAE

Astropecten aranciacus (Linnaeus, 1758). Lit: 31,99,100,101. Stns: 12,13,F, Z.

Astropecten bispinosus (Otto, 1823). Lit: 99,100. Stns: 2,13,Z.

Astropecten irregularis pentacanthus (Delle Chiaje, 1825). Lit: 99,100,101. Stns:12,13, A,B,C,D,E,F,Z.

Astropecten platyacanthus (Philippi, 1837). Stn: 2.

Valvatida

ASTERINIDAE

Anseropoda placenta (Pennant, 1777). Lit: 31, 101. Stns: E,F.

Spinulosida

ECHINASTERIDAE

Echinaster sepositus (Retzius, 1783). Lit: 31,99,100,101. Stns: 3,8,13,A.

Forcipulatida

ASTERIIDAE

Coscinasterias tenuispina (Lamarck, 1816). Stn: 10.

Marthasterias glacialis (Linnaeus, 1758). Lit: 31,101. Stns: 5,10,12,15,16,46,A,C,D,E,F.

OPHIUROIDEA**Ophiurae**

AMPHIURIDAE

Amphiura chiajei Forbes, 1843. Lit: 99,100,101. Stns: 11,87/1,G11,Z.

Amphiura filiformis (O.F.Müller, 1776). Lit: 99,100,101. Stns: 12,VV9,VV13,VV17.

Amphiura mediterranea Lyman, 1882. Stn: 33.

Amphipholis squamata (Delle Chiaje, 1828). Stns: 5,11,G11.

OPHIODERMATIDAE

Ophioderma longicaudum (Retzius, 1805). Lit: 99,100,101. Stns: 4,12,13,16.

OPHIOMYXIDAE

Ophiomyxa pentagona (Lamarck, 1816). Lit: 99,100. Stn: Z.

OPHIOTHRICIDAE

Ophiothrix fragilis (Abildgaard in O.F. Müller, 1789). Lit:99,100,101. Stns:2,3,6,7,9,10,11, Z.

Ophiothrix fragilis quinquemaculata (Delle Chiaje, 1828). Lit: 38,99,100,101. Stns: 12,13, A,D,E,F.

OPHIURIDAE

Ophiura albida Forbes, 1839. Lit: 99,100,101. Stns: 13,G11,Z.

Ophiura grubei Heller, 1863. Lit: 99,101. Stn: G11.

Ophiura ophiura (Linnaeus, 1758). Lit: 99,100,101. Stns: 12,13,G11,Z.

ECHINOIDEA**Diadematoida****ARBACIIDAE**

Arbacia lixula (Linnaeus, 1758). Lit: 101. Stns: 3,10,16.

ECHINIDAE

Echinus acutus Lamarck, 1816. Lit: 99,100,101. Stns: 9,13,B,C,F.

Echinus melo Lamarck, 1816. Lit: 31.

Psammechinus microtuberculatus (Blainville, 1815). Lit: 25,99,100,101. Stns: 8,12,13, G11, Z.

Paracentrotus lividus (Lamarck, 1816). Lit: 99,100,101. Stns: 1,2,3,4,9,10,11,12,13,15,46,Z.

Spatangoida**BRISSIDAE**

Brissopsis lyrifera Forbes, 1841. Lit: 99,100,101. Stns: 79/1,193/1,A,C,D,E,VV13,VV14, VV17.

LOVENIIDAE

Echinocardium fenauxi Péquignat, 1963. Stns: 2,8,27,29,33,39.

Echinocardium mediterraneum (Forbes, 1844). Lit: 101. Stn: 22.

SCHIZASTERIDAE

Schizaster canaliferus (Lamarck, 1816). Lit: 101. Stn: 45.

T U N I C A T A**APPENDICULARIA****FRITILLARIIDAE**

Appendicularia sicula Fol, 1874. Lit: 83. Stn: VV9.

Fritillaria borealis Lohmann, 1896. Lit: 83. Stns: VV9,VV12,VV14,Z1.

Fritillaria formica Fol, 1872. Lit: 83. Stn: VV14.

Fritillaria haplostoma Fol, 1872. Lit: 83. Stns: VV9,VV12,VV14.

Fritillaria pellucida (Busch, 1851). Lit: 83. Stns: VV9,VV12,VV14,Z1.

OIKOPLEURIDAE

Oikopleura dioica Fol, 1872. Lit: 83. Stns: VV9,VV12,VV14,Z1.

Oikopleura graciloides Lohmann & Bückmann, 1924. Lit: 83. Stns: VV9,VV12,VV14,Z1.

Oikopleura longicauda (Vogt, 1854). Lit: 83. Stns: VV9,VV12,VV14,Z1.

THALIACEA**Doliolida****DOLIOLIDAE**

Doliolina muelleri Krohn, 1853. Lit: 56. Stns: VV9,VV12,VV14,Z1.

Doliolina nationalis Borgert, 1894. Lit: 56. Stns: VV9,VV12,VV14,Z1.

ASCIDIACEA**Aplousobranchia****DIDEMNIDAE**

Didemnum maculosum (H.Milne Edwards, 1841). Stn: A.

Didemnum spongiforme (Giard, 1872). Stn: E.

Phlebobranchia**ASCIDIIDAE**

Ascidia conchilega (O.F.Müller, 1776). Stn: 9.

Ascidia mentula O.F.Müller, 1774. Lit: 38. Stns: C,E.

Ascidia obliqua Alder, 1863. Stns: 87/1,A,E,F.

Ascidia virginea O.F.Müller, 1776. Lit: 31. Stns: A,B,F.

Asciadiella aspersa (O.F.Müller, 1776). Lit: 100. Stns: A,E,D,F,Z.

Asciadiella scabra (O.F.Müller, 1776). Stn: E.

Phallusia mammillata (Cuvier, 1815). Lit: 31, 100. Stns: 12,C,E,Z.

CORELLIDAE

Corella parallelograma (O.F.Müller, 1776). Stns: E,F.

Stolidobranchia**MOLGULIDAE**

Molgula sp. Stn: 87/1.

PYURIDAE

Halocynthia papillosa (Linnaeus, 1767). Stns: 3,5.

Microcosmus claudicans (Savigny, 1816). Stn: 87/1.

Microcosmus sabatieri Roule, 1885. Stn: 12.

Microcosmus sp. Lit: 31 (sub *M. sulcatus*).

STYELIDAE

Botryllus leachi (Savignyi, 1816). Stn: B.

Botryllus schlosseri Pallas, 1766. Lit: 31,38,100. Stns: A,B,C,E,F,Z.

Polycarpa pomaria (Savignyi, 1816). Stn: E.

V E R T E B R A T A

SELACHII (CHONDRYCHTHYES)

Pleurotremata (Squaliformes)

SCYLIORHINIDAE

Scyliorhinus canicula (Linnaeus, 1758). Lit: 31,53,57. Stns: A,E,F.

Scyliorhinus stellaris (Linnaeus, 1758). Lit: 57,31.

TRIAKIDAE

Mustelus asterias Cloquet, 1821. Lit: 31. Stn: F.

Mustelus mustelus (Linnaeus, 1758). Lit: 31,57.

SQUALIDAE

Squalus acanthias Linnaeus, 1758. Lit: 31,53,57. Stn: F.

Hypotremata (Rajiformes)

RAJIDAE

Raja asterias Delaroche, 1809. Lit: 57.

Raja clavata Linnaeus, 1758. Lit: 31,53,57. Stn: A.

Raja miraletus Linnaeus, 1758. Lit: 31,53,57. Stn: F.

Dipterus batis Linnaeus, 1758. Lit: 31. Stn: F.

Dipterus oxyrinchus Linnaeus, 1758. Lit: 31,53.

OSTEICHTHYES

Isospondyli (Clupeiformes)

ARGENTINIDAE

Argentina sphyraena Linnaeus, 1758. Lit: 31. Stns: A,E,F.

CLUPEIDAE

Sardina pilchardus (Walbaum, 1792). Lit: 15,17,26.

Sprattus sprattus phalericus (Linnaeus, 1758). Lit: 31. Stns: A,E,F.

ENGRAULIDAE

Engraulis encrasicolus (Linnaeus, 1758). Lit: 15.

Apodes (Anguilliformes)

ANGUILLIDAE

Anguilla anguilla (Linnaeus, 1758). Lit: 15.

CONGRIDAE

Conger conger (/Artedi, 1738/ Linnaeus, 1758). Stns: 14,25,26.

Synentognathi (Beloniformes)

BELONIDAE

Belone belone (Linnaeus, 1758). Stn: N.

Solenichthyes (Syngnathiformes)

SYNGNATHIDAE

Hippocampus ramulosus Leach, 1814. Lit: 58.

Allotrignathi (Lampriformes)

LOPHOTIDAE

Lophotes lacepedei Giorna, 1809. Proboj cove (J. Dulčić, personal comm.).

Anacanthini (Gadiformes)

GADIDAE

Merlangius merlangus euxinus (Nordmann, 1840). Lit: 31,57.

Micromesistius poutassou (Risso, 1826). Lit: 31.

Trisopterus minutus capelanus (Lacepède, 1800). Lit: 31,57. Stns:A,E,F.

LOTIDAE

Molva macrophthalma (Rafinesque, 1810). Stn: A.

MERLUCCIIDAE

Merluccius merluccius (Linnaeus, 1758). Lit: 31,57. Stns: A,E,F.

Zeomorphi (Zeiformes)

ZEIDAE

Zeus faber Linnaeus, 1758. Lit: 31. Stn: F.

Percomorphi (Perciformes)

BLENNIIDAE

Aidablennius sphynx (Valenciennes, 1836). Stns: 6,9,10.

Blennius ocellaris Linnaeus, 1758. Lit: 31. Stns: A,F.

Coryphoblennius galerita (Linnaeus, 1758). Stn: 8.

Knipowitschia caucasica (Kawrajski in Berg, 1916). Stn: P.

Lipophrys canevae (Vinciguerra, 1880). Stn: 10.

Lipophrys dalmatinus (Steindachner & Kolombatović, 1883). Stns: 7,10.

Lipophrys nigriceps nigriceps (Vinciguerra, 1883). Stns: 7,10.

Lipophrys pavo (Risso, 1810). Stns: 5,7.

Parablennius gattorugine (Brünnich, 1768). Stns: 2,3,9.

Parablennius rouxi (Cocco, 1833). Stns: 4,8,14.

Parablennius sanguinolentus (Pallas, 1811). Stns: 6,7,46.

Parablennius tentacularis (Brünnich, 1768). Lit: 75.

Parablennius zvonimiri (Kolombatović, 1892). Stn: 7.

CALLIONYMIDAE

Callionymus maculatus Rafinesque, 1810. Lit: 31. Stns: A,E,F.

Callionymus pusillus Delaroche, 1809. Stn: 7.

CARANGIDAE

Seriola dumerili (Risso, 1810). Stn: N.

Trachurus mediterraneus (Steindachner, 1868). Lit: 31. Stn: N.

Trachurus trachurus (Linnaeus, 1758). Lit: 17,57. Stn: N.

CENTRACANTHIDAE

Spicara maena (Linnaeus, 1758). Lit: 29,31,57.

Spicara flexuosa (Rafinesque, 1810). Lit: 31.

Spicara smaris (Linnaeus, 1758). Lit: 57. Stns: A,E,F.

CEPOLIDAE

Cepola rubescens Linnaeus, 1766. Lit: 31. Stns: A,E,F.

GOBIIDAE

Crystallogobius linearis (v. Düben, 1845). Stn: F.

Gobius buccichi Steindachner, 1870. Stns: 2,3,5,7.

Gobius cobitis Pallas, 1811. Stns: 2,3,5,8,10.

Gobius cruentatus Gmelin, 1789. Stn: 8.

Gobius paganellus Linnaeus, 1758. Lit: 57.

Gobius roulei de Buen, 1928. Lit: 75.

Lesueurigobius suerii (Risso, 1810). Lit: 31. Stns: A,E,F.

Pomatoschistus marmoratus (Risso, 1810). Stn: P.

Zosterisessor ophiocephalus (Pallas, 1814). Stn: P.

LABRIDAE

Acantholabrus palloni (Risso, 1810). Lit: 31,75. Stns: A,E.

Coris julis (Linnaeus, 1758). Stns: 3,5,6,7,8,9,10,14,15,26.

Labrus bimaculatus Linnaeus, 1758. Stn: 26.

Labrus merula Linnaeus, 1758. Stns: 2,7,14,17,19,20,26,45.

Symphodus cinereus (Bonnaterre, 1788). Stns: 2,5,6,7,8,9.

Symphodus doderleini Jordan, 1891. Stns: 5,6,7,8,9.

Symphodus roissali (Risso, 1810). Stns: 6,7,8,9,10.

Symphodus rostratus (Bloch, 1797). Stn: 8.

Symphodus tinca (Linnaeus, 1758). Stns: 8,26.

MUGILIDAE

Liza ramada (Risso, 1826). Stns: 22,39.

Liza saliens (Risso, 1810). Stns: 21,22,26,27,36,39.

MULLIDAE

Mullus barbatus Linnaeus, 1758. Lit: 31,57. Stns: 13,A,E,F.

Mullus surmuletus Linnaeus, 1758. Lit: 57. Stns: 7,9.

POLYPRIONIDAE

Polyprion americanus (Bloch & Schneider, 1801). Stn: 15.

POMACENTRIDAE

Chromis chromis (Linnaeus, 1758). Stns: 3,14.

SCIAENIDAE

Sciaena umbra Linnaeus, 1758. Stns: 10,15,17,18,19,21,23,47.

SCOMBRIDAE

Scomber japonicus Hottuyn, 1782. Lit: 15. Stn: N.

Scomber scombrus Linnaeus, 1758. Lit: 15,17,31.

Thunnus thynnus (Linnaeus, 1758). Lit: 15.

SERRANIDAE

Dicentrarchus labrax (Linnaeus, 1758). Lit: 29. Stns: 21,22,26,27,36,39,45.

Serranus cabrilla (Linnaeus, 1758). Stn: 8.

Serranus hepatus (Linnaeus, 1758). Lit: 31,57. Stns: 8,13,A,E,F.

Serranus scriba (Linnaeus, 1758). Stns: 3,8,10,14,16,26.

SPARIDAE

Boops boops (Linnaeus, 1758). Lit: 29,31. Stns: E,P.

Dentex dentex (Linnaeus, 1758). Lit: 29. Stns: 10,15,17,18,20,21,27,47.

Diplodus annularis (Linnaeus, 1758). Lit: 29. Stns: 2,3,4,5,6,8,9,10,14,26.

Diplodus puntazzo (Cetti, 1777). Lit: 29. Stns: 10,15,20,26,45,P.

Diplodus sargus sargus (Linnaeus, 1758). Stns: 9,10,15,17,18,19,21,23,24,47.

Diplodus vulgaris (E.Geoffroy Saint-Hilaire, 1817). Lit: 29. Stns: 4,5,6,7,8,9,10,14,15, 17,19,24,26,27,45,46,47.

Lithognathus mormyrus (Linnaeus, 1758). Lit: 29. Stn: 36.

Oblada melanura (Linnaeus, 1758). Lit: 29. Stns: 5,6,8,9,10,15,19,26,27,46.

Pagellus acarne (Risso, 1826). Stn: F.

Pagellus erythrinus (Linnaeus, 1758). Lit: 29,31,57. Stn: A.

Sarpa salpa (Linnaeus, 1758). Lit: 29. Stns: 5,6,9,10,36.

Sparus aurata (Linnaeus, 1758). Lit: 29. Stns: 15,21,22,39,44,45,47.

Spondyllosoma cantharus (Linnaeus, 1758). Lit: 29. Stn: 21.

TRACHINIDAE

Trachinus draco Linnaeus, 1758. Lit: 31,57. Stn: F.

TRIPTERYGIIDAE

Tripterygion tripteronotus (Risso, 1810). Stns: 5,6,9.

URANOSCOPIDAE

Uranoscopus scaber Linnaeus, 1758. Lit: 57.

Atheriniformes

ATHERINIIDAE

Atherina (Hepsetia) boyeri Risso, 1810. Stns: 8,9,46.

Cyprinodontiformes

CYPRINODONTIDAE

Aphanius fasciatus Nardo, 1827. Lit: 75.

Scleroparei (Scorpaeniformes)

SCORPAENIDAE

Scorpaena notata Rafinesque, 1810. Lit: 31.

Scorpaena porcus Linnaeus, 1758. Stns: 6,9.

Scorpaena scrofa Linnaeus, 1758. Stn: 3.

TRIGLIDAE

Eutrigla gurnardus (Linnaeus, 1758). Lit: 31, 57. Stns: A,E,F.

Lepidotrigla cavillone (Lacepède, 1801). Lit: 31. Stns: A,E,F.

Trigla lyra Linnaeus, 1758. Lit: 57.

Trigloporus lastovitzza (Brünnich, 1768). Lit: 31. Stn: E.

Heterosomata (Pleuronectiformes)

BOTHIDAE

Arnoglossus laterna (Walbaum, 1792). Lit: 31,57,100. Stns: A,E,F,Z.

SOLEIDAE

Solea solea Quensel, 1806. Lit: 31,57.

Plectognathi (Tetraodontiformes)

BALISTIDAE

Balistes carolinensis Gmelin, 1879. Stn: K.

MOLIDAE

Mola mola (Linnaeus, 1758). Stn: K.

Pediculati (Lophiiformes)

LOPHIIDAE

Lophius budegassa Spinola, 1807. Lit: 31,57. Stns: A,E.

Lophius piscatorius Linnaeus, 1758. Stn: F.

REPTILIA

Testudines

CHELONIIDAE

Caretta caretta Linnaeus, 1758. Lit: 95. Stns: 31,32.

MAMMALIA

Cetacea

BALAENOPTERIDAE

Balaenoptera physalus (Linnaeus, 1758). Lit: 7,22,68.

DELPHINIDAE

Tursiops truncatus (Montagu, 1821). Lit: 40,41.

Carnivora

PHOCIDAE

Monachus monachus (Hermann, 1779). Lit: 39,42.

