

APPENDIX 3**Invertebrate sampling in ecosystem survey 2014***Prepared by P. Lubin*

Scientific vessels: HH-Helmer Hanssen, VL-Vilnyus

Phylum	Class	Order	Family	Species	HH	VL	Total
Porifera				Porifera g. sp.	39	44	83
	Calcarea	Calcarea	Grantiidae	Grantia sp.	1		1
			Sycettidae	Sycon sp.	2		2
		Clathrinida	Clathrinidae	Brattgardia nansenii	1		1
	Demospongiae	Astrophorida		Astrophorida g. sp.	2		2
			Geodiidae	Geodia barretti	4		4
				Geodia macandrewii	2		2
				Geodia sp.	11		11
			Pachastrellidae	Thenea muricata	3	5	8
			Stelletidae	Stryphnus ponderosus	1		1
			Tetillidae	Tetilla cranium	8		8
				Tetilla polyura		9	9
		Axinellida	Axinellidae	Axinella sp.	11		11
				Phakellia bowerbanki		1	1
				Phakellia sp.	11	5	16
		Hadromerida	Polymastiidae	Polymastia sp.	6	3	9
				Polymastia uberrima	8	6	14
				Radiella grimaldi		27	27
				Radiella hemisphaericum	1	1	2
				Tentorium semisuberites	8	2	10
				Tentorium sp.	6		6
			Stylocordylidae	Stylocordyla borealis	3	1	4
			Suberitidae	Suberites ficus		21	21
			Tethyidae	Tethya citrina	2		2
				Tethya norvegica	8		8
				Tethya sp.	1		1
		Haplosclerida	Haliclonidae	Haliclona sp.	5	13	18
				Haliclona ventilabrum		1	1
		Poecilosclerida		Antho sp.	1		1
			Cladorhizidae	Asbestopluma sp.	5		5
				Chondrocladia gigantea	2		2
				Chondrocladia sp.	2		2
				Cladorhiza abyssicola	2		2
				Cladoriza sp.	2		2
			Myxillidae	Forcepia sp.	1		1
				Forcepia thielei	5		5
				Myxilla incrustans		10	10
	Hexactinellida			Hexactinellida g. sp.	5		5
		Hexasterophora	Rossellidae	Schaudinna rosea	1		1
		Lyssacinosa	Rossellidae	Asconema sp.	1		1
Cnidaria	Anthozoa			Anthozoa g. sp.	1		1

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				Hexacorallia sp.		1	1
		Actiniaria		Actiniaria g. sp.	4	15	19
			Actiniidae	Bolocera tuediae	6	11	17
			Actinostolidae	Actinostola callosa	13	3	16
			Hormathiidae	Hormathia digitata	14	73	87
			Liponematidae	Liponema multicornis	2	4	6
			Metridiidae	Metridium senile		1	1
		Alcyonacea	Isididae	Keratoisis sp.	1		1
			Nephtheidae	Drifa glomerata	19	39	58
				Duva florida	7	14	21
				Gersemia fruticosa		18	18
				Gersemia rubiformis		4	4
				Gersemia sp.	17	27	44
		Pennatulacea	Umbellulidae	Umbellula encrinus	4		4
		Zoanthacea	Epizoanthidae	Epizoanthidae g. sp.	3		3
				Epizoanthus sp.		1	1
	Hydrozoa			Hydroidea g. sp.	5	5	10
				Hydrozoa g. sp.	26		26
		Thecaphora	Haleciidae	Halecium muricatum		7	7
			Lafoeidae	Lafoea fruticosa		4	4
			Sertulariidae	Abietinaria abietina		5	5
				Thuiaria lonchitis		3	3
				Thuiaria thuja		2	2
	Scyphozoa	Semaeostomeae	Cyaneidae	Cyanea capillata	1		1
Nemertini	Nemertini			Nemertini g. sp.	1	8	9
Cephalo- rhynga	Priapulida	Priapulomorpha	Priapulidae	Priapulidae g. sp.		2	2
				Priapulopsis bicaudatus	3		3
				Priapululus caudatus		1	1
Sipuncula	Sipunculidea			Sipunculidea g. sp.	7	5	12
		Golfingiiformes	Golfingiidae	Golfingia sp.	3	2	5
				Golfingiidae g. sp.		2	2
			Phascolionidae	Phascolion sp.		2	2
Echiura	Echiurida	Echiuroinea	Bonelliidae	Hamingia arctica	3	6	9
			Echiuridae	Echiurus echiurus echiurus		1	1
Annelida	Polychaeta			Polychaeta g. sp.	2	23	25
		Capitellida	Maldanidae	Maldane sarsi	3		3
				Maldane sp.	1		1
		Chaetopterida	Chaetopteridae	Spiochaetopterus typicus	3		3
		Eunicida	Onuphidae	Nothria sp.	8		8
		Flabelligerida	Flabelligeridae	Brada granulata	4	8	12
				Brada granulosa	1		1
				Brada inhabilis	4	13	17
				Brada sp.	4		4
				Pherusa plumosa		2	2
		Opheliida	Scalibregmidae	Scalibregmidae g. sp.		1	1
		Phyllodocida	Aphroditidae	Aphrodita sp.	5		5
			Nephtyidae	Nephtyidae g. sp.	4	2	6

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				Nephtys sp.	3	2	5
			Nereididae	Nereis sp.		3	3
				Nereis zonata		5	5
			Polynoidae	Harmothoe sp.	22	55	77
				Polynoidae g. sp.	2		2
		Sabellida	Sabellidae	Sabellidae g. sp.	1	1	2
			Serpulidae	Filograna implexa		1	1
				Protula tubularia		1	1
			Spirorbidae	Spirorbidae g. sp.	3		3
		Terebellida	Ampharetidae	Ampharete sp.	2		2
			Pectinariidae	Pectinaria hyperborea	3	1	4
				Pectinaria sp.		1	1
			Terebellidae	Pista maculata		3	3
				Terebellidae g. sp.	2		2
				Terebellinae g. sp.	1		1
Arthropoda	Cirripedia	Thoracica	Balanomorpha	Balanus balanus		18	18
				Balanus crenatus		3	3
			Scalpellidae	Scalpellum sp.	1		1
	Malacostraca	Amphipoda		Amphipoda g. sp.	3		3
			Aoridae	Arctolembos arcticus		1	1
			Calliopiidae	Cleippides quadricuspis	7		7
			Epimeriidae	Epimeria loricata	26	15	41
				Paramphithoe hystrix	13	1	14
			Eusiridae	Rhachotropis aculeata	2	3	5
			Gammaridae	Gammarus wilkitzkii	2		2
			Hyperiididae	Themisto libellula	1		1
			Liljeborgiidae	Lilljeborgia fissicornis	11		11
			Lysianassidae	Anonyx nugax		1	1
				Anonyx sp.	14	4	18
				Eurythenes gryllus	6		6
				Socarnes bidenticulatus		2	2
			Oedicerotidae	Acanthostepheia malmgreni	12	17	29
			Stegocephalidae	Stegocephalus inflatus	9	12	21
				Stegocephalus sp.		1	1
		Cumacea	Diastylidae	Diastylidae g. sp.	1		1
		Decapoda	Crangonidae	Pontophilus norvegicus	5		5
				Sabinea sarsi	12		12
				Sabinea septemcarinata	21	117	138
				Sclerocrangon boreas	1	16	17
				Sclerocrangon ferox	7	26	33
			Galatheidae	Munida bamffica	2		2
			Hippolytidae	Bythocaris payeri	3		3
				Bythocaris sp.	1		1
				Eualus gaimardi	1	41	42
				Lebbeus polaris	13	2	15
				Spirontocaris sp.	3		3
				Spirontocaris spinus	3	22	25

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			Lithodidae	Paralithodes camtschaticus		11	11
			Majidae	Chionoecetes opilio		78	78
				Hyas araneus	11	43	54
				Hyas coarctatus	1	6	7
				Hyas sp.	3	2	5
			Paguridae	Pagurus bernhardus		1	1
				Pagurus pubescens	18	49	67
				Pagurus sp.	2		2
			Pandalidae	Pandalus montagui		9	9
			Pasiphaeidae	Pasiphaea multidentata	2		2
				Pasiphaea sivado	3		3
		Euphausiacea	Euphausiidae	Euphausiidae g. sp.		2	2
				Meganyctiphanes norvegica	6		6
		Isopoda		Isopoda g. sp.		1	1
			Aegidae	Aega sp.	2	1	3
			Gnathiidae	Gnathia sp.	1		1
			Idotheidae	Saduria sabini		12	12
	Pycnogonida	Pantopoda		Pycnogonida g. sp.	1		1
			Colossendeidae	Colossendeis angusta	8	16	24
				Colossendeis proboscidea	7	13	20
				Colossendeis sp.	1		1
			Nymphonidae	Boreonymphon abyssorum		12	12
				Boreonymphon robustum	11		11
				Boreonymphon sp.		2	2
				Nymphon hirtum		22	22
				Nymphon serratum	2		2
				Nymphon sp.	9	2	11
				Nymphon spinosum	16		16
				Nymphon stroemi stroemi	23		23
			Pycnogonidae	Pycnogonum litorale		3	3
Mollusca	Bivalvia	Cardiiformes	Cardiidae	Cardiidae g. sp.		1	1
				Clinocardium ciliatum	5	31	36
				Serripes groenlandicus		3	3
			Myidae	Mya truncata	2	1	3
			Tellinidae	Macoma calcarea		6	6
				Macoma sp.		4	4
		Cuspidariiformes	Cuspidariidae	Cuspidaria arctica	2	6	8
		Luciniformes	Astartidae	Astarte borealis		3	3
				Astarte crenata	10	33	43
			Hiatellidae	Hiatella arctica		15	15
				Panomys arctica		1	1
		Mytiliformes	Arcidae	Bathyarca glacialis	9	25	34
				Bathyarca sp.		1	1
			Mytilidae	Modiolus modiolus	3		3
				Musculus niger		2	2
				Musculus sp.		1	1
				Mytilus edulis		1	1

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		Nuculiformes	Nuculidae	Leionucula tenuis		1	1
			Yoldiidae	Yoldia hyperborea	3		3
		Pectiniformes	Pectinidae	Chlamys islandica	18	50	68
				Chlamys sp.	1		1
				Chlamys sulcata		3	3
			Propeamussiidae	Arctinula greenlandica	10	17	27
		Pholadomyiformes	Pandoridae	Pandora glacialis		3	3
	Caudofoveata			Caudofoveata g. sp.	4		4
	Cephalopoda			Ommatostrephidae g. sp.	1		1
		Octopoda	Bathypolypodinae	Bathypolypus arcticus	29	2	31
				Benthoctopus sp.	5		5
			Cirroteuthidae	Cirroteuthis muelleri	1		1
		Sepiida	Sepiolidae	Rossia palpebrosa	10	20	30
				Rossia sp.	1	1	2
		Teuthida	Gonatidae	Gonatus fabricii	9	1	10
			Ommastrephidae	Todarodes sagittatus		1	1
	Gastropoda			Gastropoda g. sp.		3	3
		Bucciniformes	Beringiidae	Beringius ossiani	3	5	8
				Beringius turtoni	2		2
			Buccinidae	Buccinidae g. sp.		7	7
				Buccinum angulosum		2	2
				Buccinum belcheri		2	2
				Buccinum ciliatum ciliatum		1	1
				Buccinum elatior		24	24
				Buccinum finmarchianum	13	4	17
				Buccinum fragile		7	7
				Buccinum glaciale		3	3
				Buccinum hydrophanum	4	5	9
				Buccinum micropoma	1	2	3
				Buccinum nivale	1	1	2
				Buccinum sp.	2	2	4
				Buccinum undatum		4	4
				Colus altus	3	2	5
				Colus holboelli	4		4
				Colus islandicus	9	8	17
				Colus kroyeri		1	1
				Colus moebii		2	2
				Colus pubescens	1		1
				Colus sabini	6	37	43
				Colus sp.		2	2
				Colus turgidulus	2	8	10
				Eggs Buccinidae g. sp.	1		1
				Neptunea communis		8	8
				Neptunea denselirata	1	5	6
				Neptunea despecta	6	4	10
				Neptunea ventricosa		6	6

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				<i>Pyrulofusus deformis</i>		1	1
				<i>Turrisipho lachesis</i>	6	2	8
				<i>Turrisipho voeringi</i>	1	2	3
				<i>Volutopsis norvegicus</i>	4	2	6
		Cephalaspidea	Philinidae	<i>Philine finmarchica</i>	5		5
				Philinidae g. sp.		2	2
			Scaphandridae	<i>Scaphander punctostriatus</i>	1	8	9
		Cerithiiformes	Naticidae	<i>Bulbus smithi</i>	3	10	13
				<i>Cryptonatica affinis</i>	6	14	20
				<i>Lunatia pallida</i>	5	15	20
				Naticidae g. sp.		9	9
			Trichotropidae	<i>Torellia delicata</i>	1		1
			Velutinidae	<i>Limneria undata</i>	3	7	10
				<i>Onchidiopsis glacialis</i>	1		1
				<i>Onchidiopsis</i> sp.		1	1
				<i>Velutina velutina</i>		1	1
		Epitoniiformes	Epitoniidae	<i>Boreoscala groenlandica</i>	3	1	4
		Nudibranchia		<i>Nudibranchia</i> g. sp.	14	9	23
			Aeolidiidae	<i>Aeolidia papillosa</i>		1	1
			Dendronotidae	<i>Dendronotus frondosus</i>		3	3
				<i>Dendronotus robustus</i>		1	1
				<i>Dendronotus</i> sp.		10	10
			Onchidorididae	<i>Onchidoridae</i> g. sp.	4		4
		Patelliformes	Tecturidae	<i>Capulacmaea radiata</i>	1	1	2
				<i>Tectura virginea</i>		1	1
		Trochiformes	Trochidae	<i>Margarites costalis</i>	1	6	7
				<i>Margarites groenlandicus groenlandicus</i>		4	4
				<i>Margarites groenlandicus umbilicalis</i>	3		3
				<i>Margarites</i> sp.		4	4
	Polyplacophora			<i>Polyplacophora</i> g. sp.	3		3
Echinodermata	Asteroidea			<i>Asteroidea</i> g. sp.		3	3
		Forcipulatidae	Asteriidae	<i>Asterias rubens</i>		2	2
				Asteriidae g. sp.	1	1	2
				<i>Icasterias panopla</i>	11	44	55
				<i>Leptasterias</i> af. <i>groenlandica</i>		3	3
				<i>Leptasterias groenlandica</i>		7	7
				<i>Leptasterias muelleri</i>	3	3	6
				<i>Leptasterias</i> sp.	8	4	12
				<i>Urasterias linckii</i>	1	62	63
		Notomyotida	Benthopectinidae	<i>Pontaster tenuispinus</i>	7	51	58
		Paxillosida	Astropectinidae	<i>Bathybiaster vexillifer</i>	4		4
				<i>Leptychaster arcticus</i>	8		8
				<i>Psilaster andromeda</i>		2	2
			Ctenodiscidae	<i>Ctenodiscus crispatus</i>	15	99	114
		Spinulosida	Echinasteridae	<i>Henricia</i> sp.	30	41	71

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		Valvatida	Asterinidae	Tremaster mirabilis	1		1
			Goniasteridae	Ceramaster granularis granularis	12		12
				Hippasteria phrygiana phrygiana	6	10	16
			Poraniidae	Poraniomorpha hispida	1		1
				Poraniomorpha tumida	8	23	31
				Tylaster willei	1		1
		Velatida	Pterasteridae	Hymenaster pellucidus	11	3	14
				Pteraster militaris	22	9	31
				Pteraster obscurus	13	3	16
				Pteraster pulvillus	22		22
			Solasteridae	Crossaster papposus	33	36	69
				Lophaster furcifer	7	4	11
				Solaster endeca		32	32
				Solaster sp.	8	1	9
				Solaster syrtensis		10	10
	Crinoidea	Comatulida	Antedonidae	Heliometra glacialis		21	21
				Heliometra sp.		1	1
				Poliometra proluxa	13		13
	Echinoidea	Echinoida	Strongylocentrotidae	Strongylocentrotus droebachiensis		4	4
				Strongylocentrotus pallidus	33	84	117
		Spatangoida	Spatangidae	Brisaster fragilis		5	5
	Holothuroidea			Holothuroidea g. sp.	1	4	5
		Dendrochirotida	Cucumariidae	Cucumaria frondosa	1	9	10
				Thyonidium drummondi		2	2
				Thyonidium sp.	2		2
			Phylloporidae	Phylloporidae g. sp.		4	4
			Psolidae	Psolus phantapus	3	20	23
				Psolus sp.	3		3
		Molpadiida	Molpadiidae	Molpadia arctica		15	15
				Molpadia borealis	5	26	31
				Molpadiidae g. sp.		1	1
	Ophiuroidea	Euryalida	Gorgonocephalidae	Gorgonocephalus arcticus	4	25	29
				Gorgonocephalus eucnemis	8	9	17
				Gorgonocephalus lamarcki	3		3
				Gorgonocephalus sp.	4	18	22
		Ophiurida	Ophiacanthidae	Ophiacantha bidentata	15	45	60
				Ophiacantha sp.	4		4
			Ophiactidae	Ophiopholis aculeata	36	39	75
			Ophiomyxidae	Ophioscolex glacialis	10	25	35
			Ophiuridae	Ophiocten gracilis	1		1
				Ophiocten sericeum	9	12	21
				Ophiopleura borealis	2	29	31
				Ophiura sarsi	32	54	86
				Ophiura sp.		1	1
Brachiopo-	Rhynchonellata	Rhynchonellida	Hemithyrididae	Hemithyris psittacea	4	14	18

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		Terebratulida	Cancellothyrididae	Terebratulina retusa	23	2	25
Bryozoa	Gymnolaemata			Bryozoa g. sp.	11	9	20
		Cheilostomida	Bugulidae	Dendrobeania sp.	1	4	5
			Flustridae	Flustra sp.	4	10	14
			Myriaporidae	Leieschara sp.		1	1
				Myriapora coarctata	12		12
				Myriapora sp.	2		2
			Phidoloporidae	Reteporella sp.	1		1
			Reteporidae	Sertella septentrionalis	18	3	21
			Smittinidae	Parasmittina jeffreysii		2	2
				Porella sp.		1	1
		Ctenostomata	Alcyonidiidae	Alcyonidium disciforme		4	4
				Alcyonidium gelatinosum	3	6	9
				Alcyonidium sp.	2		2
		Cyclostomata	Corymboporidae	Defrancia lucernaria	2		2
			Diastoporidae	Diplosolen intricarius		2	2
			Horneridae	Stegohornera lichenoides	13	2	15
Chordata	Ascidiacea			Ascidiacea g. sp.	20	10	30
		Aplousobranchia	Didemnidae	Didemnum sp.	2		2
			Polycitoridae	Eudistoma vitreum	16		16
			Polyclinidae	Polyclinidae g. sp.	1		1
		Enterogona	Ascidiidae	Ascidiidae g. sp.	1		1
		Phlebobranchia	Ascidiidae	Ascidia prunum	3		3
				Ascidia virginea	1		1
			Cionidae	Ciona intestinalis		11	11
				Ciona sp.		3	3
		Stolidobranchia	Molgulidae	Molgula sp.		19	19
			Pyuridae	Boltenia echinata		2	2
			Styelidae	Dendrodoa sp.	1		1
				Styela rustica		2	2
				Styela sp.	4		4
Total					1507	2643	4150