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Species richness and functional attributes of fish assemblages across a large-scale salinity gradient in shallow coastal areas

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Supplementary Material

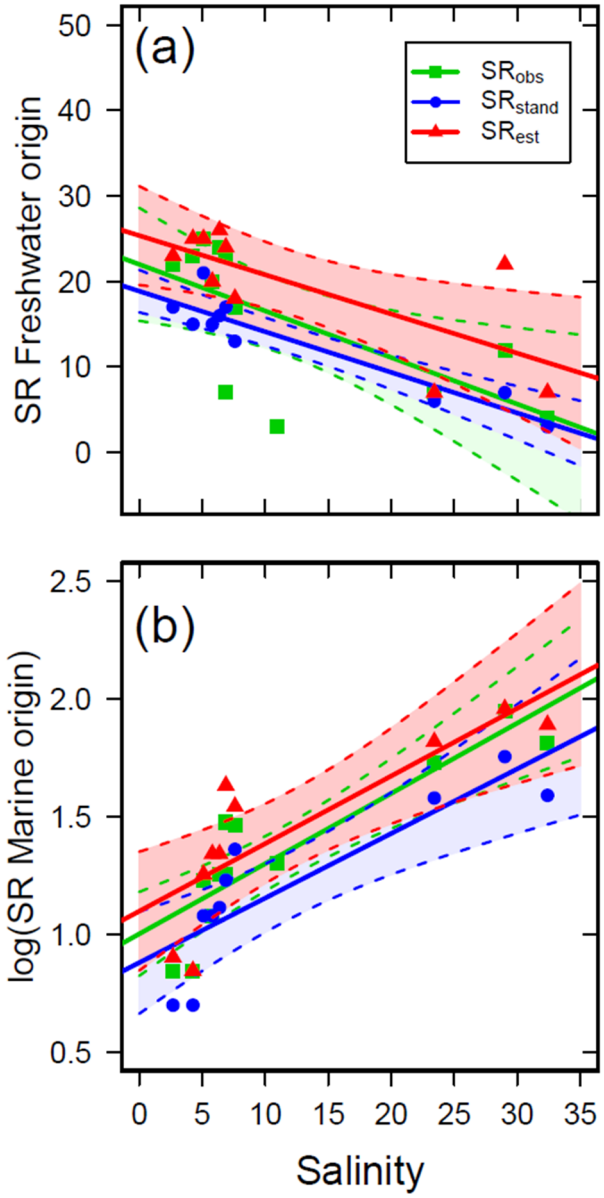

Figure S1. Fish species richness (SR) in relation to salinity in Swedish shallow coastal areas per origin, with (a) freshwater (F) and (b) marine (M, log_{10}-transformed). Each plot shows the observed, standardized and estimated SR, and, when significant (P<0.05), the linear regression lines (solid) and 95%-confidence intervals (shaded areas surrounded by dashed lines). Please note that data points (Table S7), lines and confidence intervals are overlying each other within the panels in some cases. For regression equations and statistics see Table 3.

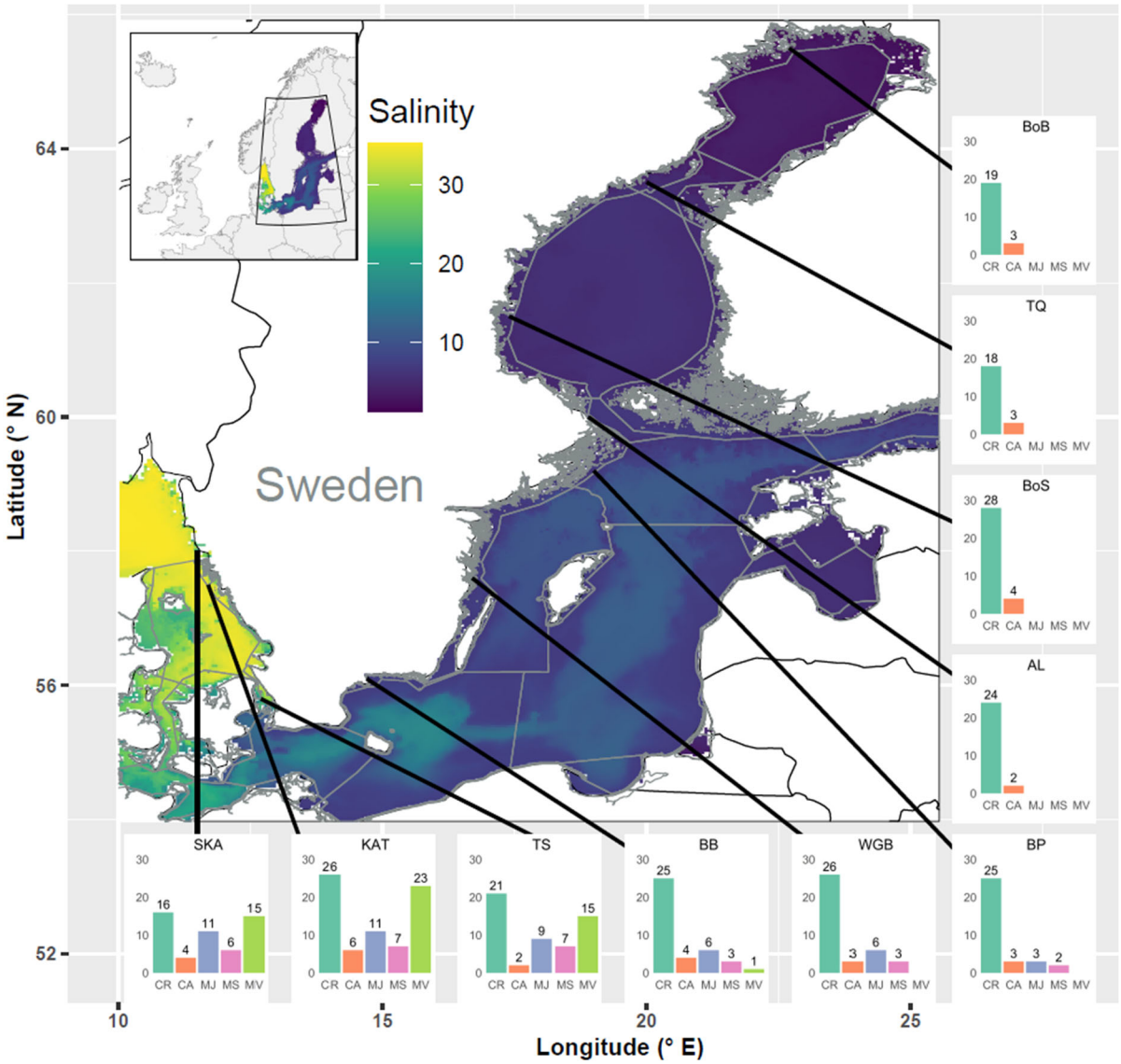

Figure S2. Map of the study area covering the Baltic Sea and the Skagerrak, color-coded by mean salinity. Grey lines delineate sub-basins, and shallow coastal areas. Bar plots show standardized fish species richness for shallow coastal areas in each of the ten analysed sub-basins, separately by habitat preference category, as CR: coastal resident, CA: catadromous or anadromous migrants, MJ: marine juvenile migrants, MS: marine seasonal migrants and MV: marine visitors. SR was standardised across sub-basins to similar sample coverage (Table S5). Black lines indicate the positions of the sub-basins, but the exact sampling sites were spread across the shallow areas of each of the sub-basins. SKA: Skagerrak, KAT: Kattegat, TS: the Sound, BB: Bornholm Basin, WGB: Western Gotland Basin, BP: Northern Baltic Proper, AL: Åland Sea, BoS: Bothnian Sea, TQ: the Quark and BoB: Bothnian Bay.

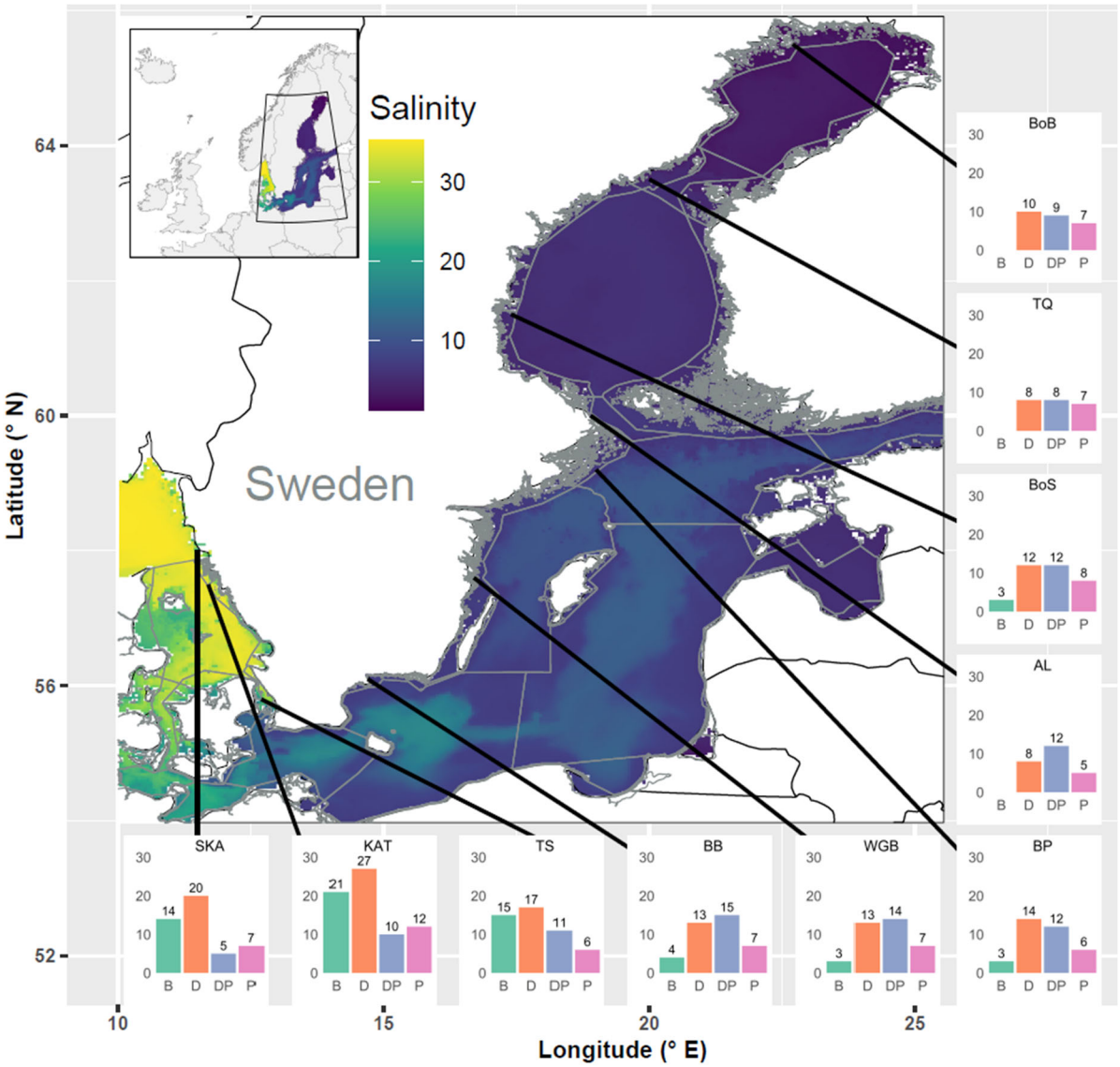

Figure S3. Map of the study area covering the Baltic Sea and the Skagerrak, color-coded by mean salinity. Grey lines delineate sub-basins, and shallow coastal areas. Bar plots show standardized fish species richness for shallow coastal areas in each of the ten analysed sub-basins, separately by vertical distribution category, with B: benthic, D: demersal, DP: demersal-pelagic and P: pelagic fish species. SR was standardised across sub-basins to similar sample coverage (Table S5). Black lines indicate the positions of the sub-basins, but the exact sampling sites were spread across the shallow areas of each of the sub-basins. SKA: Skagerrak, KAT: Kattegat, TS: the Sound, BB: Bornholm Basin, WGB: Western Gotland Basin, BP: Northern Baltic Proper, AL: Åland Sea, BoS: Bothnian Sea, TQ: the Quark and BoB: Bothnian Bay.

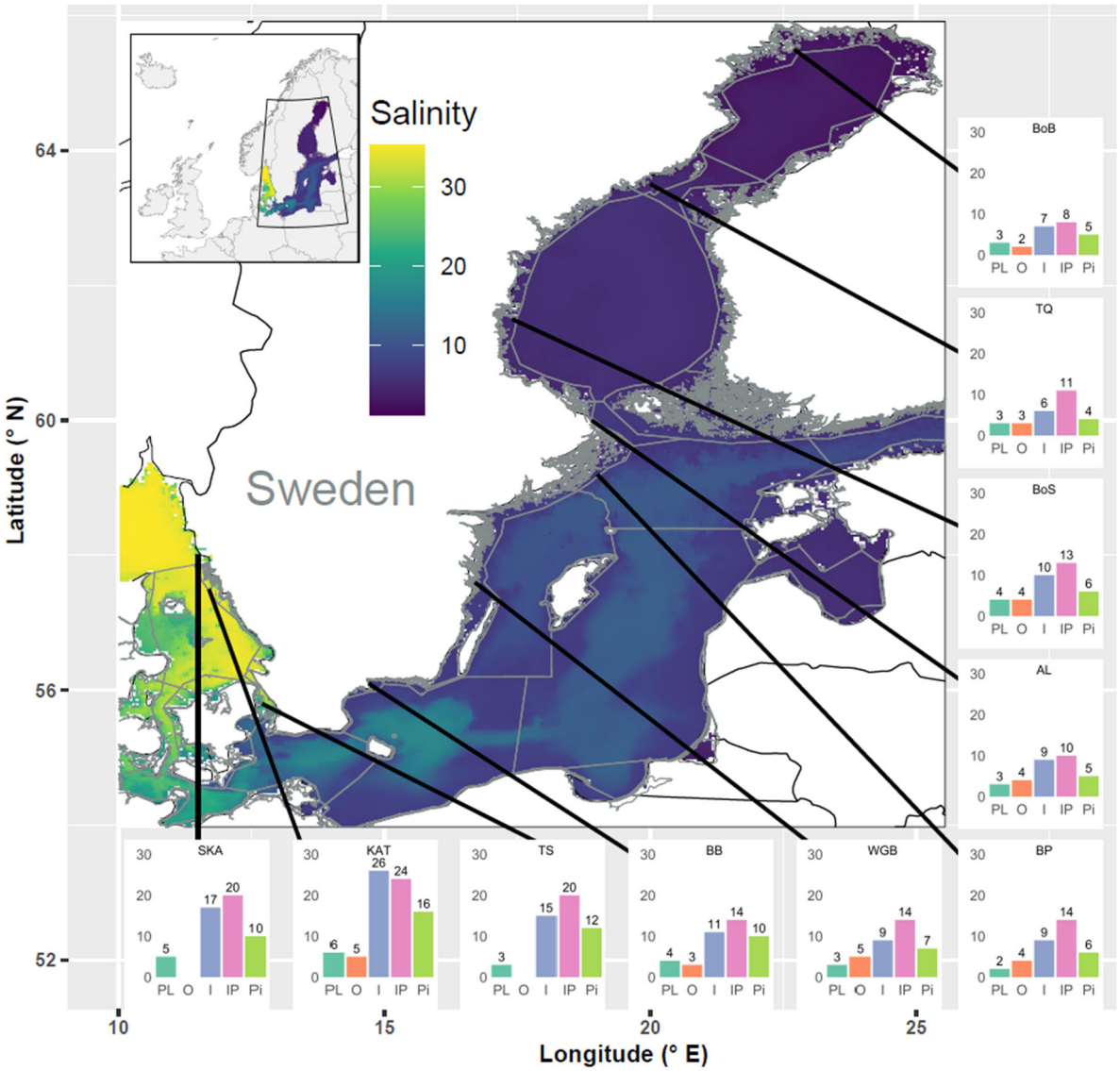

Figure S4. Map of the study area covering the Baltic Sea and the Skagerrak, color-coded by mean salinity. Grey lines delineate sub-basins, and shallow coastal areas. Bar plots show standardized fish species richness for shallow coastal areas in each of the ten analysed sub-basins, separately by feeding category, with trophic level increasing from left to right, and PL: planktivores, O: omnivores, I: invertivores, IP: invertivores and piscivores, and Pi: piscivores. SR was standardised across sub-basins to similar sample coverage (Table S5). Black lines indicate the positions of the sub-basins, but the exact sampling sites were spread across the shallow areas of each of the sub-basins. SKA: Skagerrak, KAT: Kattegat, TS: the Sound, BB: Bornholm Basin, WGB: Western Gotland Basin, BP: Northern Baltic Proper, AL: Åland Sea, BoS: Bothnian Sea, TQ: the Quark and BoB: Bothnian Bay.

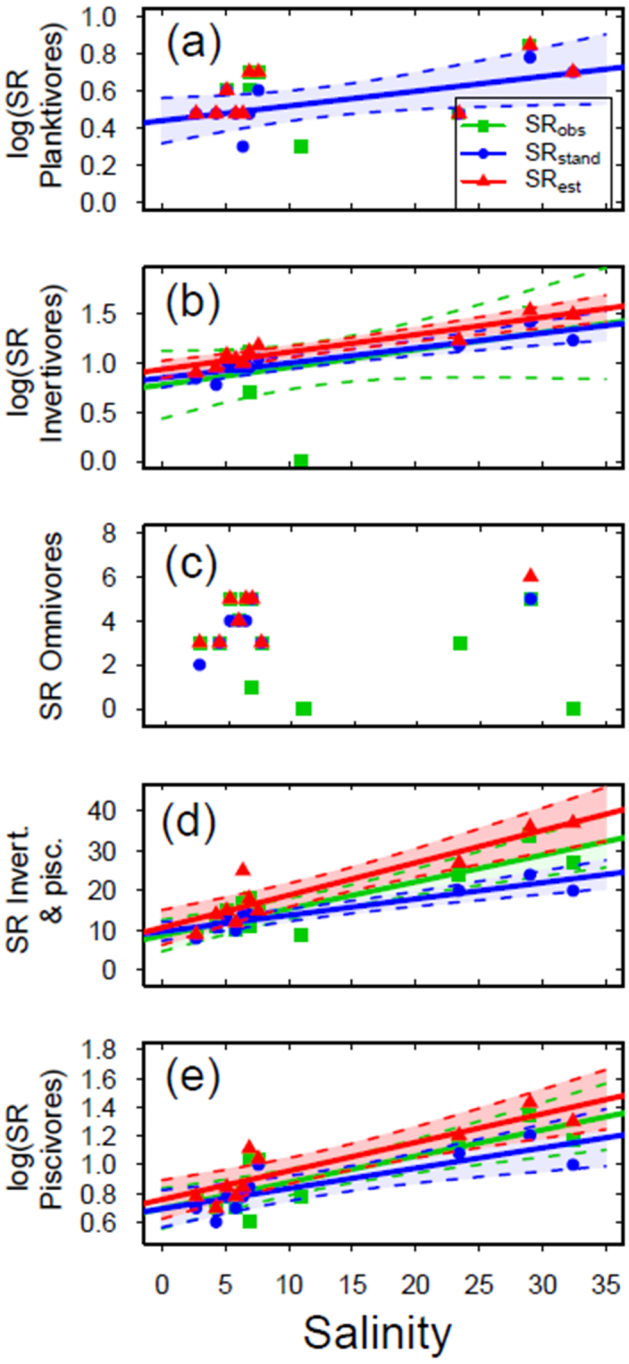

Figure S5. Fish species richness (SR) in relation to salinity in Swedish shallow coastal areas for different feeding habits, with of (a) planktivores (log_{10}-transformed), (b) invertivores (log_{10}-transformed), (c) omnivores, (d) invertivores and piscivores and (e) piscivores (log_{10}-transformed). Each plot shows the observed, standardized and estimated SR, and, when significant ($P<0.05$), the linear regression lines (solid) and 95%-confidence intervals (shaded areas surrounded by dashed lines). Please note that data points (Table S7), lines and confidence intervals are partly overlying each other within the panels in some cases. For regression equations and statistics see Table 3.

Table S1. Number of samples (fishing occasions) per fishing gear type/method in shallow (<30 m depth) coastal areas per sub-basin. NA: not available.

Sub-basin	Gill nets	Trap nets and traps	Trawls	Low impact underwater detonations	Beach seines	NA
Bothnian Bay	37	13	11	3	6	0
The Quark	60	0	0	4	0	7
Bothnian Sea	86	23	0	51	18	16
Åland Sea	21	0	0	6	1	3
N Baltic Proper	45	5	0	23	0	4
E Gotland Basin	10	0	0	0	0	3
W Gotland Basin	240	108	0	47	0	16
Bornholm Basin	40	20	0	8	0	5
Arkona Basin	0	3	0	0	0	4
The Sound	2	58	59	0	0	0
Kattegat	0	120	227	0	0	6
Skagerrak	0	99	140	0	0	0

Table S2. Years per sub-basin for which fish survey data was available in the databases (last access 2021-04-27), with "x" indicating available fishing data. Number of years with available data differed between sub-basins, and due to remodeling of the database the most recent data was not yet included for all sub-basins at the time of last access.

Sub-basin/ Year	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Bothnian Bay																			x	x	x		x	x				x	x	x	x	x	x	x	x	x											
The Quark															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	x	x	x	x	x	x	
Bothnian Sea						x			x	x																		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
Åland Sea																												x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
N Baltic Proper																											x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
E Gotland Basin																								x	x								x	x	x					x	x			x	x		
W Gotland Basin									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	x	x	x	x	x	x	x	x	x	x	x	
Bornholm Basin																											x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
Arkona Basin																																				x	x	x							x			
The Sound														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	x	x	x	x	x	x	
Kattegat	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	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Skagerrak															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	x	x	x	x	x		

Table S3. Observed fish species incidence and assigned functional attributes per sub-basin for Swedish shallow coastal waters (< 30 m), summarized from the incidence dataset compiled for the years 1975-2021 (but differing coverage across years per sub-basin, see Table S2). Please note that the information in this table does not directly correspond to the information in Figures 3 and S2-S4, which show standardised species richness.

Species	Åland Sea	Arkona Basin	Bornholm Basin	Bothnian Bay	Bothnian Sea	E Gotland Basin	Kattegat	N Baltic Proper	Skagerrak	The Quark	The Sound	W Gotland Basin	**Origin**	**Habitat**	**Vertical**	**Feeding**
Abramis brama	24	0	11	19	61	0	0	41	0	1	0	109	F	CR	D	I
Acipenser sturio	0	0	0	1	0	0	0	0	0	0	0	0	F	CA	D	Pi
Agonus cataphractus	0	2	0	0	0	0	114	0	29	0	17	3	M	CR	D	I
Alburnus alburnus	23	0	38	22	150	1	3	67	0	62	0	170	F	CR	P	I
Alosa fallax	0	0	0	0	0	0	1	0	0	0	0	0	F	CA	DP	IP
Amblyraja radiata	0	0	0	0	0	0	6	0	1	0	23	0	M	CR	B	IP
Ammodytes marinus	0	0	1	0	0	0	0	0	0	0	0	0	M	CR	B	PL
Ammodytes tobianus	1	0	13	0	15	1	1	3	1	0	0	6	M	CR	B	PL
Anarhichas lupus	0	0	0	0	0	0	41	0	0	0	0	0	M	MV	D	I
Anguilla anguilla	0	3	24	0	24	0	165	6	99	0	59	119	M	CA	D	IP
Aphia minuta	0	0	0	0	0	0	54	0	0	0	0	0	M	CR	P	PL
Argentina sphyraena	0	0	0	0	0	0	1	0	0	0	0	0	M	MV	D	IP
Arnoglossus laterna	0	0	0	0	0	0	71	0	58	0	12	0	M	MV	B	IP
Atherina presbyter	0	0	0	0	0	0	2	0	0	0	0	0	M	CR	P	IP
Belone belone	0	1	7	0	0	0	4	0	1	0	3	11	M	MS	P	Pi
Blicca bjoerkna	24	0	33	0	80	0	0	58	0	1	1	199	F	CR	DP	IP
Buglossidium luteum	0	0	0	0	0	0	14	0	1	0	0	0	M	MV	B	I
Callionymus lyra	0	0	0	0	0	0	60	0	33	0	4	0	M	MV	B	I
Callionymus maculatus	0	0	0	0	0	0	55	0	10	0	6	0	M	MV	B	I
Callionymus reticulatus	0	0	0	0	0	0	1	0	0	0	0	0	M	CR	B	I
Carassius carassius	2	0	0	1	24	0	0	26	0	4	2	67	F	CR	DP	O
Centrolabrus exoletus	0	0	0	0	0	0	23	0	11	0	3	0	M	CR	D	I
Chelon labrosus	0	0	0	0	0	0	8	0	0	0	2	1	M	MS	DP	O
Chondrostoma nasus	0	0	0	0	0	0	0	1	0	0	0	0	F	CR	D	O
Ciliata mustela	0	0	0	0	0	0	116	0	45	0	1	0	M	MV	D	IP
Cirolophis ascanii	0	0	0	0	0	0	2	0	0	0	0	0	M	CR	D	O
Clupea harengus	29	7	52	48	131	10	212	66	31	69	12	298	M	MJ	P	PL
Coregonus albula	0	0	0	38	10	0	0	0	0	23	0	1	F	CR	P	PL
Coregonus maraena	22	0	26	62	108	1	0	29	1	67	0	225	F	CR	DP	I
Cottus gobio	0	0	1	3	29	0	0	3	0	7	0	5	F	CR	D	I
Cottus poecilopus	1	0	0	7	14	0	0	1	0	3	0	0	F	CR	D	IP

Ctenolabrus rupestris	0	0	0	0	0	0	141	0	97	0	36	0	M	CR	D	I
Cyclopterus lumpus	0	2	8	0	0	2	83	1	10	0	25	10	M	MS	D	IP
Dicentrarchus Labrax	0	0	0	0	0	0	20	0	4	0	0	0	M	MJ	D	Pi
Enchelyopus cimbrius	0	0	0	0	0	0	15	0	2	0	0	0	M	MV	D	I
Engraulis encrasicolus	0	0	0	0	0	0	29	0	3	0	0	0	M	MS	P	PL
Entelurus aequoreus	0	0	0	0	0	0	43	0	6	0	7	0	M	MV	D	IP
Esox lucius	18	0	37	23	92	0	1	64	0	44	2	298	F	CR	D	Pi
Eutrigla gurnardus	0	0	0	0	0	0	105	0	79	0	26	0	M	MS	B	IP
Gadus morhua	0	7	39	0	0	8	316	5	212	0	110	145	M	MJ	DP	Pi
Gasterosteus aculeatus	8	0	15	23	134	5	38	32	8	51	7	121	M	CR	DP	IP
Glyptocephalus cynoglossus	0	0	0	0	0	0	2	0	1	0	1	0	M	MV	B	I
Gobio gobio	0	0	0	0	0	0	1	0	0	0	0	0	F	CR	D	I
Gobius niger	13	4	31	0	58	3	161	38	154	1	38	109	M	CR	D	IP
Gobiusculus flavescens	0	0	3	0	0	1	54	0	3	0	17	9	M	CR	DP	PL
Gymnocephalus cernuus	29	0	27	48	141	0	0	67	0	69	0	263	F	CR	DP	I
Hippoglossoides platessoides	0	0	0	0	0	0	175	0	85	0	46	0	M	MV	B	IP
Hippoglossus hippoglossus	0	0	0	0	0	0	2	0	0	0	0	0	M	MS	DP	Pi
Hyperoplus lanceolatus	1	4	29	0	9	6	24	2	0	0	1	31	M	MV	DP	Pi
Labrus bergylta	0	0	0	0	0	0	70	0	44	0	0	0	M	CR	D	I
Labrus mixtus	0	0	0	0	0	0	7	0	1	0	0	0	M	CR	D	I
Lampetra fluviatilis	0	0	0	0	0	0	18	0	0	0	0	0	F	CA	B	O
Leptoclinus maculatus	0	0	0	0	0	0	0	0	2	0	0	0	M	MJ	D	I
Lesueurigobius Friesii	0	0	0	0	0	0	12	0	0	0	0	0	M	CR	B	I
Leuciscus idus	9	1	31	15	73	1	1	14	0	32	6	154	F	CR	DP	IP
Leuciscus leuciscus	0	0	0	21	7	0	0	0	0	33	0	0	F	CR	DP	O
Limanda limanda	0	2	0	0	0	0	260	0	161	0	83	0	M	MJ	B	IP
Liparis liparis	0	0	1	0	1	0	9	0	0	0	0	0	M	CR	D	I
Liparis montagui	0	0	1	0	0	0	14	0	0	0	4	0	M	MV	D	I
Liza aurata	0	0	0	0	0	0	2	0	0	0	0	0	M	CR	P	I
Lophius piscatorius	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	B	IP
Lota lota	2	0	0	11	13	0	0	2	0	15	0	79	F	CR	D	Pi
Lumpenus lampretaeformis	0	0	0	0	0	0	41	0	3	0	0	0	M	MV	B	I
Lycodes vahlii	0	0	0	0	0	0	1	0	0	0	0	0	M	MV	D	I
Maurolicus muelleri	0	0	0	0	0	0	38	0	0	0	0	0	M	MV	P	PL
Melanogrammus aeglefinus	0	0	0	0	0	0	56	0	59	0	24	0	M	MV	B	Pi
Merlangius merlangus	0	0	8	0	0	0	258	0	210	0	66	1	M	MJ	DP	Pi
Merluccius merluccius	0	0	0	0	0	0	91	0	41	0	9	0	M	MV	D	Pi
Microstomus kitt	0	0	0	0	0	0	47	0	29	0	30	0	M	MV	B	I
Molva molva	0	0	0	0	0	0	7	0	0	0	0	0	M	MV	D	Pi
Mullus surmuletus	0	0	0	0	0	0	11	0	1	0	3	0	M	MV	B	I

Myoxocephalus scorpius	0	7	26	1	7	7	264	6	215	0	56	112	M	CR	D	IP
Myxine glutinosa	0	0	0	0	0	0	4	0	0	0	0	0	M	CR	B	IP
Neogobius melanostomus	0	0	12	0	0	4	2	0	0	0	0	21	M	CR	D	IP
Nerophis lumbriciformis	0	0	0	0	0	0	3	0	0	0	0	0	M	CR	D	IP
Nerophis ophidion	4	0	9	1	38	0	40	9	5	5	7	44	M	CR	D	I
Oncorhynchus mykiss	0	0	0	0	8	0	0	2	0	1	0	9	F	CR	P	IP
Osmerus eperlanus	25	0	2	36	84	0	32	37	1	26	0	149	F	CA	P	IP
Perca fluviatilis	31	0	53	51	167	3	16	74	0	71	31	382	F	CR	DP	Pi
Petromyzon marinus	0	0	0	0	0	0	14	0	0	0	0	0	F	CA	B	O
Pholis gunnellus	0	0	3	0	0	2	96	1	38	0	10	2	M	CR	D	I
Phoxinus phoxinus	3	0	0	4	66	0	0	9	0	2	0	18	F	CR	P	I
Phrynorhombus norvegicus	0	0	0	0	0	0	6	0	0	0	1	0	M	MV	B	I
Platichthys flesus	1	6	49	0	15	11	312	28	218	0	103	310	M	CR	B	IP
Pleuronectes platessa	0	2	11	0	0	0	302	0	224	0	96	3	M	MJ	B	IP
Pollachius pollachius	0	0	0	0	0	0	27	0	38	0	1	0	M	MJ	D	Pi
Pollachius virens	0	4	4	0	0	0	82	0	79	0	22	1	M	MJ	DP	Pi
Pomatoschistus microps	0	0	0	0	0	0	2	0	0	0	0	0	M	CR	B	I
Pomatoschistus minutus	1	0	0	0	17	1	50	0	8	0	2	6	M	CR	B	I
Pomatoschistus pictus	0	0	0	0	0	0	10	0	0	0	0	0	M	CR	D	I
Psetta maxima	0	2	21	0	0	8	88	8	50	0	24	105	M	MJ	B	Pi
Pungitius pungitius	6	0	8	4	68	0	36	20	0	3	1	48	M	CR	DP	IP
Raja clavata	0	0	0	0	0	0	1	0	0	0	0	0	M	MV	B	Pi
Raniceps raninus	0	0	0	0	0	0	29	0	9	0	0	0	M	CR	D	IP
Rutilus rutilus	31	0	53	36	167	0	1	73	0	71	4	283	F	CR	DP	O
Salmo salar	0	1	3	14	17	0	16	0	1	4	0	2	F	CA	P	Pi
Salmo trutta	2	2	9	20	39	2	60	8	62	17	7	48	F	CA	P	IP
Sander lucioperca	24	0	4	5	41	0	0	28	0	2	0	193	F	CR	DP	Pi
Sardina pilchardus	0	0	0	0	0	0	4	0	0	0	0	0	M	MV	P	I
Scardinius erythrophthalmus	3	0	29	0	81	2	0	59	0	0	0	180	F	CR	DP	O
Scomber scombrus	0	1	1	0	0	0	26	0	48	0	1	1	M	MS	P	Pi
Scophthalmus rhombus	0	2	0	0	0	0	133	0	84	0	46	1	M	MJ	B	IP
Solea solea	0	0	0	0	0	0	197	0	130	0	58	0	M	MJ	B	IP
Spinachia spinachia	1	0	7	0	3	0	80	0	26	0	29	18	M	CR	DP	I
Sprattus sprattus	19	1	31	6	44	2	185	32	20	23	10	139	M	MS	P	PL
Squalius cephalus	0	0	0	0	0	0	0	1	0	0	0	0	F	CR	DP	IP
Squalus acanthias	0	0	0	0	0	0	13	0	6	0	0	0	M	MV	DP	Pi
Symphodus melops	0	0	0	0	0	0	148	0	87	0	35	0	M	CR	D	I
Syngnathus acus	0	0	0	0	0	0	81	0	37	0	20	0	M	CR	D	IP
Syngnathus rostellatus	0	0	0	0	0	0	53	0	5	0	8	0	M	CR	D	I
Syngnathus typhle	0	0	8	0	3	1	51	11	31	0	16	31	M	CR	D	IP

Taurulus bubalis	0	1	15	0	1	4	118	1	57	0	34	93	M	CR	D	IP
Thymallus thymallus	0	0	0	3	0	0	0	0	0	3	0	0	F	CR	DP	IP
Tinca tinca	4	0	3	0	36	0	0	56	0	0	0	134	F	CR	DP	O
Trachinus draco	0	0	0	0	0	0	72	0	2	0	3	0	M	MV	B	Pi
Trachurus trachurus	0	1	0	0	0	0	70	0	27	0	5	0	M	MV	P	Pi
Trigla lucerna	0	0	0	0	0	0	10	0	15	0	6	0	M	MS	B	IP
Triglopsis quadricornis	21	0	0	23	37	1	0	24	0	20	0	83	F	CR	D	IP
Trisopterus esmarkii	0	0	0	0	0	0	7	0	1	0	0	0	M	MV	P	IP
Trisopterus luscus	0	0	0	0	0	0	2	0	1	0	0	0	M	MJ	D	IP
Trisopterus minutus	0	0	0	0	0	0	10	0	14	0	0	0	M	MV	D	IP
Vimba vimba	6	0	16	0	47	0	0	6	0	0	0	124	F	CR	D	I
Zeugopterus punctatus	0	0	0	0	0	0	5	0	2	0	0	0	M	MV	B	Pi
Zeus faber	0	0	0	0	0	0	1	0	0	0	0	0	M	MV	D	Pi
Zoarces viviparus	6	4	24	7	62	7	146	27	117	24	51	149	M	CR	D	I

Table S4. Fish species reported to occur in the studied sub-basins and assigned functional attributes, based on Swedish species observation databases (SLU Swedish Species Information Centre and SMHI SharkWeb), from Swedish shallow coastal waters (< 30 m) and extracted for the years 1975-2021, with "1" denoting "reported" and "0" not reported. This data did not include incidence information and was not included in the statistical analyses but only used to complement the SR information.

Species	Åland Sea	Arkona Basin	Bornholm Basin	Bothnian Bay	Bothnian Sea	E Gotland Basin	Kattegat	N Baltic Proper	Skagerrak	The Quark	The Sound	W Gotland Basin	**Origin**	**Habitat**	**Vertical**	**Feeding**
Abramis brama	1	0	1	1	1	0	0	1	0	1	1	1	F	CR	D	I
Acantholabrus palloni	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	P	PL
Acipenser gueldenstaedtii	0	0	1	1	0	0	0	0	0	0	0	0	F	CA	DP	IP
Acipenser oxyrinchus	0	0	1	0	0	0	0	0	0	0	0	0	F	CA	D	IP
Agonus cataphractus	0	0	0	0	0	0	1	0	1	0	0	0	M	CR	D	I
Alburnus Alburnus	1	1	1	1	1	0	1	1	0	0	0	1	F	CR	P	I
Alosa fallax	0	0	0	0	0	0	0	0	1	0	0	0	F	CA	DP	IP
Amblyraja radiata	0	0	0	0	0	0	1	0	1	0	1	0	M	CR	B	IP
Ammodytes marinus	0	0	0	0	0	0	0	0	1	0	1	0	M	CR	B	PL
Ammodytes tobianus	1	1	1	0	1	1	1	1	1	1	1	1	M	CR	B	PL
Anarhichas lupus	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	D	I
Anguilla anguilla	1	1	1	1	1	0	1	1	1	0	1	1	M	CA	D	IP
Aphia minuta	0	0	1	0	0	0	1	0	1	0	0	0	M	CR	P	PL
Argentina silus	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	D	IP
Arnoglossus laterna	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	B	IP
Belone belone	0	1	1	0	0	1	1	1	1	0	1	1	M	MS	P	Pi
Blicca bjoerkna	0	0	0	0	1	0	0	1	0	0	0	1	F	CR	DP	IP
Buglossidium luteum	0	0	0	0	0	0	1	0	0	0	0	0	M	MV	B	I
Callionymus lyra	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	B	I
Callionymus maculatus	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	B	I
Callionymus reticulatus	0	0	0	0	0	0	1	0	1	0	0	0	M	CR	B	I
Carassius auratus	0	0	0	0	0	0	0	0	0	0	1	1	F	CR	DP	O
Carassius carassius	0	0	0	0	1	0	0	1	0	0	0	1	F	CR	DP	O
Centrolabrus exoletus	0	0	0	0	0	0	1	0	1	0	0	0	M	CR	D	I
Cetorhinus maximus	0	0	0	0	0	0	1	0	0	0	0	0	M	MV	P	PL
Chelon labrosus	0	0	1	0	0	0	1	0	0	0	1	1	M	MS	DP	O
Chimaera monstrosa	0	0	0	0	0	0	0	0	1	0	0	0	M	MS	D	I
Ciliata mustela	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	D	IP
Cirolophis ascanii	0	0	0	0	0	0	0	0	1	0	0	0	M	CR	D	O
Clupea harengus	1	1	1	1	1	0	1	1	1	1	1	1	M	MJ	P	PL
Cobitis taenia	0	0	0	0	0	0	0	1	0	0	0	1	F	CR	B	I

Conger conger	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	B	Pi
Coregonus albula	0	0	0	1	0	0	0	1	0	1	0	1	F	CR	P	PL
Coregonus maraena	1	0	1	1	1	0	1	1	0	1	0	1	F	CR	DP	I
Cottus gobio	0	0	1	1	1	0	0	1	1	1	0	1	F	CR	D	I
Cottus poecilopus	0	0	0	0	0	0	0	0	1	1	0	0	F	CR	D	IP
Ctenolabrus rupestris	0	0	0	0	0	0	1	0	1	0	1	0	M	CR	D	I
Ctenopharyngodon idella	0	0	0	0	0	1	0	0	0	0	0	0	F	CR	DP	H
Cyclopterus lumpus	1	0	1	0	0	0	1	1	1	0	0	1	M	MS	D	IP
Dicentrarchus Labrax	0	0	0	0	0	0	1	0	0	0	0	0	M	MJ	D	Pi
Dipturus linteus	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	D	IP
Enchelyopus cimbrius	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	D	I
Engraulis encrasicolus	0	0	0	0	0	0	0	0	1	0	0	0	M	MS	P	PL
Entelurus aequoreus	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	D	IP
Esox lucius	1	0	1	1	1	1	0	1	0	1	0	1	F	CR	D	Pi
Etmopterus spinax	0	0	1	0	0	0	0	0	1	0	0	0	M	MV	D	IP
Eutrigla gurnardus	0	0	0	0	0	0	1	0	1	0	1	0	M	MS	B	IP
Gadus morhua	1	1	1	0	1	1	1	1	1	1	1	1	M	MJ	DP	Pi
Gaidropsarus vulgaris	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	D	IP
Gasterosteus aculeatus	1	1	1	1	1	1	1	1	1	1	1	1	M	CR	DP	IP
Glyptocephalus cynoglossus	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	B	I
Gobius niger	0	0	1	0	1	1	1	1	1	0	0	1	M	CR	D	IP
Gobiusculus flavescens	1	1	1	1	1	1	1	1	1	1	1	1	M	CR	DP	PL
Gymnocephalus cernuus	1	0	1	1	1	0	0	1	0	1	0	1	F	CR	DP	I
Hippoglossoides platessoides	0	0	0	0	0	0	1	0	1	0	1	0	M	MV	B	IP
Hyperoplus lanceolatus	1	0	0	0	0	0	1	0	1	0	1	1	M	MV	DP	Pi
Labrus bergylta	0	0	0	0	0	0	1	0	1	0	0	0	M	CR	D	I
Labrus mixtus	0	0	0	0	0	0	1	0	1	0	1	0	M	CR	D	I
Lamna nasus	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	P	Pi
Lampetra fluviatilis	1	0	1	1	1	1	1	1	0	0	0	1	F	CA	B	O
Lampetra planeri	0	0	0	0	1	0	1	1	0	0	0	1	F	CA	B	PL
Lepidorhombus whiffiagonis	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	B	Pi
Leptoclinus maculatus	0	0	0	0	0	0	0	0	1	0	0	0	M	MJ	D	I
Lesueurigobius Friesii	0	0	0	0	0	0	0	0	1	0	0	0	M	CR	B	I
Leuciscus idus	1	1	1	0	1	1	1	1	0	1	1	1	F	CR	DP	IP
Leuciscus leuciscus	0	0	0	1	1	0	0	0	0	0	0	0	F	CR	DP	O
Limanda limanda	0	1	1	0	0	1	1	1	1	0	1	1	M	MJ	B	IP
Liparis liparis	0	0	0	0	1	0	1	0	0	0	0	0	M	CR	D	I
Liparis montagui	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	D	I
Lophius piscatorius	0	0	0	0	0	0	0	0	1	0	1	0	M	MV	B	IP
Lota lota	1	0	1	0	1	0	0	1	0	1	0	1	F	CR	D	Pi

Lumpenus lampretaeformis	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	B	I
Lycodes vahlii	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	D	I
Maurolicus muelleri	0	0	0	0	0	0	1	0	0	0	0	0	M	MV	P	PL
Melanogrammus aeglefinus	0	0	0	0	0	0	1	0	1	0	1	0	M	MV	B	Pi
Merlangius merlangus	0	0	0	0	0	0	1	0	1	0	1	0	M	MJ	DP	Pi
Merluccius merluccius	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	D	Pi
Microstomus kitt	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	B	I
Mola mola	0	0	0	0	0	0	1	0	1	0	1	0	M	MV	P	IP
Molva molva	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	D	Pi
Mullus surmuletus	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	B	I
Myoxocephalus scorpius	1	0	0	0	1	1	1	1	1	0	1	1	M	CR	D	IP
Myxine glutinosa	0	0	0	0	0	0	0	0	1	0	0	0	M	CR	B	IP
Neogobius melanostomus	1	1	1	0	1	1	1	1	1	0	1	1	M	CR	D	IP
Nerophis ophidion	1	1	1	0	1	1	1	1	1	1	1	1	M	CR	D	I
Oncorhynchus gorbuscha	0	0	0	0	0	0	0	0	1	0	0	0	F	CA	P	Pi
Oncorhynchus mykiss	0	0	1	0	1	1	1	1	1	1	0	1	F	CR	P	IP
Osmerus eperlanus	1	0	0	1	1	0	0	1	0	1	0	1	F	CA	P	IP
Pelecus cultratus	1	0	0	0	0	0	0	1	0	0	0	0	F	CR	P	IP
Perca fluviatilis	1	1	1	1	1	1	0	1	0	1	1	1	F	CR	DP	Pi
Petromyzon marinus	0	0	0	0	0	0	1	0	0	0	0	0	F	CA	B	O
Pholis gunnellus	1	0	1	0	1	0	1	0	1	0	0	1	M	CR	D	I
Phoxinus phoxinus	1	1	0	1	1	1	1	1	0	1	0	1	F	CR	P	I
Phrynorhombus norvegicus	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	B	I
Platichthys flesus	1	1	1	0	1	1	1	1	1	1	1	1	M	CR	B	IP
Pleuronectes platessa	1	1	1	0	1	0	1	1	1	0	1	1	M	MJ	B	IP
Pollachius pollachius	0	0	0	0	0	0	1	0	1	0	0	0	M	MJ	D	Pi
Pollachius virens	0	0	0	0	0	0	1	0	1	0	1	0	M	MJ	DP	Pi
Pomatoschistus microps	1	0	1	0	0	1	1	1	1	0	0	1	M	CR	B	I
Pomatoschistus minutus	0	1	1	1	1	1	1	1	1	1	1	1	M	CR	B	I
Pomatoschistus pictus	0	0	0	0	0	0	1	0	1	0	0	0	M	CR	D	I
Psetta maxima	1	1	1	0	0	1	1	1	1	0	1	1	M	MJ	B	Pi
Pungitius pungitius	1	1	1	1	1	1	1	1	1	1	0	1	M	CR	DP	IP
Raja clavata	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	B	Pi
Raniceps raninus	0	0	0	0	0	0	1	0	1	0	0	0	M	CR	D	IP
Rutilus rutilus	1	0	1	1	1	1	1	1	0	1	0	1	F	CR	DP	O
Salmo salar	0	0	1	1	1	0	1	1	0	1	0	1	F	CA	P	Pi
Salmo trutta	1	1	1	1	1	1	1	1	1	1	1	1	F	CA	P	IP
Sander lucioperca	1	0	0	0	1	0	1	1	0	0	0	1	F	CR	DP	Pi
Sarda sarda	0	0	0	0	0	0	1	0	0	0	0	0	M	CR	P	Pi
Scardinius erythrophthalmus	1	0	1	0	1	1	0	1	0	0	0	1	F	CR	DP	O

Scomber scombrus	0	0	1	0	0	0	1	0	1	0	1	0	M	MS	P	Pi
Scophthalmus rhombus	0	0	0	0	0	0	1	0	1	0	0	0	M	MJ	B	IP
Scyliorhinus canicula	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	D	IP
Sebastes viviparus	0	0	0	0	0	0	1	0	1	0	0	0	M	MJ	D	IP
Silurus glanis	0	0	1	0	0	0	0	0	0	0	0	0	F	CR	D	IP
Solea solea	0	1	0	0	0	0	1	0	1	0	0	0	M	MJ	B	IP
Spinachia spinachia	1	1	1	0	0	1	1	1	1	0	0	1	M	CR	DP	I
Sprattus sprattus	1	0	0	0	0	0	1	0	1	0	0	1	M	MS	P	PL
Squalius cephalus	0	0	0	0	0	0	1	0	0	0	0	0	F	CR	DP	IP
Squalus acanthias	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	DP	Pi
Symphodus melops	0	0	0	0	0	0	1	0	1	0	1	0	M	CR	D	I
Syngnathus acus	0	0	0	0	0	0	1	0	1	0	1	0	M	CR	D	IP
Syngnathus rostellatus	0	1	1	0	0	0	1	0	1	0	0	1	M	CR	D	I
Syngnathus typhle	1	1	1	0	1	0	1	1	1	0	1	1	M	CR	D	IP
Taurulus bubalis	0	0	0	0	0	0	1	1	1	0	0	1	M	CR	D	IP
Thorogobius ephippiatus	0	0	0	0	0	0	1	0	1	0	0	0	M	CR	B	I
Thunnus thynnus	0	0	0	0	0	0	1	0	1	0	1	0	M	MV	P	Pi
Thymallus thymallus	0	0	0	1	1	0	0	0	0	1	0	0	F	CR	DP	IP
Tinca tinca	1	0	1	0	1	0	0	1	0	0	0	1	F	CR	DP	O
Trachinus draco	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	B	Pi
Trachurus trachurus	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	P	Pi
Trigla lucerna	0	0	0	0	0	0	1	0	1	0	0	0	M	MS	B	IP
Triglopsis quadricornis	1	0	0	1	1	0	0	1	1	1	0	1	F	CR	D	IP
Trisopterus esmarkii	0	0	0	0	0	0	0	0	1	0	0	0	M	MV	P	IP
Trisopterus luscus	0	0	0	0	0	0	0	0	1	0	0	0	M	MJ	D	IP
Trisopterus minutus	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	D	IP
Vimba vimba	0	0	1	0	1	0	0	0	0	0	0	1	F	CR	D	I
Zeugopterus punctatus	0	0	0	0	0	0	1	0	1	0	0	0	M	MV	B	Pi
Zoarces viviparus	1	1	1	1	1	1	1	1	1	1	0	1	M	CR	D	I

Table S5. Shannon diversity (ShD) and Simpson diversity (SiD) for Swedish shallow coastal areas. Calculated values are given for all sub-basins, and standardised (std) and estimated (est) values are given for the sub-basins with a sample size > 25 fishings/samplings. ShD gives the effective number of frequent species (the exponential of Shannon's entropy index), and SiD the effective number of highly frequent species (the inverse of Simpson's concentration index) in the assemblage (Chao et al. 2020, Chao et al. 2014). NA: not applicable; n.d.: not determined.

Sub-basin	Shannon diversity			Simpson diversity		
	Calculated ShD	ShD_{std} (with upper and lower confidence limits)	ShD_{est} (± SE)	Calculated SiD	SiD_{std} (with upper and lower confidence limits)	SiD_{est} (± SE)
Bothnian Bay	19	19^{20}_{18}	20 ± 1	16	16^{17}_{15}	16 ± 1
The Quark[a]	18	18^{18}_{17}	18 ± 1	15	15^{16}_{14}	15 ± 0.3
Bothnian Sea	28	27^{28}_{26}	28 ± 0.4	23	23^{23}_{22}	23 ± 0.4
Åland Sea	21	22^{22}_{20}	22 ± 1	18	18^{19}_{17}	18 ± 1
N Baltic Proper	26	25^{26}_{24}	26 ± 1	22	22^{22}_{21}	22 ± 0.4
E Gotland Basin	18	n.d.	n.d.	15	n.d.	n.d.
W Gotland Basin	31	29^{30}_{29}	31 ± 0.2	26	25^{26}_{25}	26 ± 0.3
Bornholm Basin	32	31^{32}_{30}	33 ± 1	27	26^{27}_{25}	27 ± 1
Arkona Basin	18	n.d.	n.d.	15	n.d.	n.d.
The Sound	34	33^{34}_{32}	35 ± 1	26	25^{26}_{24}	26 ± 1
Kattegat	51	49^{50}_{48}	51 ± 1	38	37^{38}_{37}	38 ± 0.4
Skagerrak	33	32^{33}_{31}	34 ± 1	25	25^{26}_{24}	25 ± 0.3

Table S6. Linear regressions between fish species richness (SR), Shannon Diversity (ShD) and Simpson Diversity (SiD), and salinity or annual mean water temperature in coastal areas of the studied sub-basins. Analyses were carried out separately for observed (*obs*), standardized (*std*) and estimated (*est*) values in each case. *n*=12 for regression with observed SR, ShD and SiD, and *n*=10 for regressions with respective standardised and estimated values. n.s.=not significant.

Response variable		Salinity			Water temperature		
		Parameters (± SE)	**Adjusted R^2**	***P*-value**	**Parameters (± SE)**	**Adjusted R^2**	***P*-value**
SR	*obs*	$\log_{10}(y)=1.5$ (±0.1) + 0.014 (±0.004)*x	0.55	0.004	$\log_{10}(y)=1.2$ (±0.2) + 0.06 (±0.03)*x	0.21	n.s. (0.078)
	std	$\log_{10}(y)=1.45$ (±0.04) + 0.012 (±0.002)*x	0.70	0.002	$\log_{10}(y)=1.1$ (±0.1) + 0.07 (±0.01)*x	0.77	0.001
	est	$\log_{10}(y)=$ 1.57 (±0.04) + 0.014 (±0.002)*x	0.77	0.001	$\log_{10}(y)=1.2$ (±0.1) + 0.08 (±0.02)*x	0.76	0.001
ShD	*obs*	y=19.3 (±3.2) + 0.7 (±0.2)*x	0.48	0.007	y=5.0 (±10.6) + 3.1 (±1.4)*x	0.25	n.s. (0.055)
	std	y= 21.0 (±2.9) + 0.6 (±0.2)*x	0.54	0.009	y=2.3 (±7.6) + 3.7 (±1.0)*x	0.57	0.007
	est	y=21.7 (±3.1) + 0.7 (±0.2)*x	0.55	0.009	y=1.4 (±7.9) + 4.0 (±1.1)*x	0.58	0.006
SiD	*obs*	y=17.1 (±2.5) + 0.4 (±0.2)*x	0.37	0.022	y=7.8 (±7.8) + 2.0 (±1.0)*x	0.19	n.s. (0.087)
	std	y=18.4 (±2.3) + 0.4 (±0.1)*x	0.41	0.027	y=6.0 (±5.9) + 2.4 (±0.8)*x	0.48	0.016
	est	y=18.7 (±2.5) + 0.4 (±0.2)*x	0.40	0.031	y=5.3 (±6.2) + 2.6 (±0.8)*x	0.48	0.016

Table S7. Coastal fish SR per functional attribute. Numbers give the observed SR, the values in brackets are the standardised SR (first value, with confidence interval), estimated SR (second value, with standard error), and observed SR when additional data sources were included (third value, see Sect. 2.2). Standardisation was conducted across sub-basins to the lowest sample coverage within each functional attribute. Observed values are given for all sub-basins with available data, but standardized and estimated values are only given for sub-basins with sufficient data for statistical analyses (see Sect. 2.2, NA: not available; n.d.: not determined). The sub-basins are sorted according to increasing salinity (see Table 1). *n* = sample size, i.e. number of unique fishing occasions during which fish species incidence with the respective functional attribute was reported. For acronyms see Sect. 2.4.

Sub-basin	Origin		Habitat preference					Vertical distribution				Feeding habit				
	F	M	CR	CA	MJ	MS	MV	B	D	DP	P	PL	O	I	IP	Pi
Bothnian Bay	22 (17^{18}_{16}; 23±2; 24); n=70	7 (5^{6}_{5}; 8±2; 10); n=54	23 (19^{20}_{17}; 26±5; 25); n=70	4 (3^{3}_{3}; 4±1; 7); n=49	1 (n. d.; n.d.; 1); n=48	1 (n. d.; n. d.; 1); n=6	0 (n.d.; n.d.; 0); n=0	0 (n.d.; n.d.; 2); n=0	10 (10^{12}_{8}; 13±4; 11); n=45[a]	11 (9^{10}_{8}; 11±1; 13); n=70	8 (7^{8}_{7}; 8±0.1; 8); n=67	3 (3^{3}_{2}; 3±0.1; 4); n=54	3 (2^{2}_{2}; 3±1; 4); n=39	8 (7^{8}_{6}; 8±1; 9); n=70	9 (8^{9}_{7}; 9±1; 11); n=62	6 (5^{6}_{5}; 6±1; 6); n=63
The Quark	23 (15^{16}_{14}; 25±3; 23); n=71	7 (5^{5}_{4}; 7±1; 12); n=71	25 (18^{19}_{17}; 29±5; 28); n=64	3 (3^{3}_{2}; 3±0.1;3); n=27	1 (n. d.; n.d.;1); n=62	1 (n. d.; n. d.; 1); n=20	0 (n.d.; n.d.; 0); n=0	0 (n.d.; n.d.; 2); n=0	9 (8^{9}_{7}; 10±2; 9); n=59	12 (8^{9}_{8}; 13±1;13); n=64	9 (7^{8}_{6}; 10±1; 9); n=63	3 (3^{3}_{3}; 3±<0.1; 5); n=62	3 (3^{3}_{2}; 3±0.1; 3); n=71	8 (6^{7}_{6}; 9±1; 9); n=64	11 (11^{13}_{9}; 14±4; 11); n=54	5 (4^{5}_{4}; 5±0.4; 5); n=64
Bothnian Sea	25 (21^{21}_{20}; 25±0.1; 28); n=194	17 (12^{12}_{11}; 18±2; 22); n=177	35 (28^{28}_{27}; 36±2;38); n=178	4 (4^{4}_{4}; 4±<0.1; 6); n=116	1 (n.d.; n.d.; 3); n=120	1 (n.d.; n.d.; 1); n=42	1 (n.d; n.d.; 1); n=9	3 (3^{3}_{3}; 3±<0.1; 6); n=35	15 (12^{12}_{11}; 16±2; 16); n=151	15 (12^{13}_{12}; 15±0.2; 8); n=178	9 (8^{8}_{7}; 9±0.02; 9); n=169	4 (4^{4}_{4}; 4±<0.1; 6); n=128	5 (4^{5}_{4}; 5±0.03; 6); n=168	12 (10^{10}_{10}; 12±1; 13); n=178	15 (13^{13}_{12}; 15±1; 17); n=177	6 (6^{6}_{5}; 6±0.01; 7); n=164
Åland Sea	20 (15^{16}_{14}; 20±1; 23); n=31	12 (12^{15}_{9}; 22±10; 23); n=30[a]	27 (24^{26}_{22}; 33±7; 33); n=28	2 (2^{2}_{1}; 2±0.3; 4); n=25	1 (n.d.; n. d. ; 4); n=26	1 (n.d. ; n.d.; 2); n=16	1 (n.d.; n. d. ; 1); n=1	3 (n. d. ; n.d.; 7); n=2	9 (8^{9}_{7}; 10±1; 14); n=28	14 (12^{14}_{11}; 16±4; 16); n=28	6 (5^{6}_{5}; 6±0.4; 7); n=28	3 (3^{4}_{2}; 3±1; 4); n=26	4 (4^{5}_{3}; 4±0.4; 5); n=31	10 (9^{11}_{9}; 11±2; 12); n=28	10 (10^{12}_{8}; 12±4;16); n=28	5 (5^{6}_{3}; 6±1; 7); n=28
N Baltic Proper	24 (16^{17}_{16}; 26±3; 30); n=74	18 (13^{14}_{12} ; 22±7; 26); n=75	33 (25^{26}_{24}; 39±8; 41); n=73	3 (3^{3}_{3}; 3±0.1; 6); n=42	3 (3^{3}_{2}; 3±0.1; 5); n=64	2 (2^{3}_{1}; 2±1;3); n=29	1 (n.d.; n. d. ; 1); n=2	3 (3^{3}_{2}; 3±0.2; 9); n=29	17 (14^{16}_{12}; 29±17;18); n=73	15 (12^{13}_{12}; 16±1;17); n=73	7 (6^{6}_{5}; 7±0.3;11); n=71	3 (2^{3}_{2}; 3±0.2; 5); n=64	5 (4^{4}_{4}; 5±1;6); n=73	10 (9^{9}_{8}; 10±1;14); n=73	17 (14^{16}_{13}; 25±12; 21); n=71	7 (6^{7}_{5}; 7±1; 9); n=73
E Gotland Basin	7 (n.d.; n.d.; 13); n=5	18 (n.d.; n.d.; 24); n=13	18 (n. d. ; n. d. ; 27); n=8	1 (n. d. ; n. d. ; 2); n=2	3 (n.d.; n.d.; 4); n=10	2 (n.d.; n.d.; 3); n=3	1 (n.d. ; n.d.; 1); n=4	4 (n.d.; n.d.; 7); n=10	9 (n. d. ; n.d.;11); n=8	8 (n. d. ; n.d.;12); n=8	4 (n. d. ; n.d.; 7); n=8	4 (n.d.; n.d.; 4); n=7	1 (n.d.; n.d.; 3); n=2	5 (n.d.; n.d.; 9); n=7	11 (n. d. ; n.d.;14); n=8	4 (n.d.; n.d.;6); n=10

W Gotland Basin	23 (17^{17}_{16}; 24±1;28); n=395	30 (17^{17}_{16}; 43±17; 33); n=390	36 (26^{27}_{26}; 37±1; 39); n=389	4 (3^{3}_{3}; 4±0.3;7); n=259	6 (3^{3}_{3}; 7±2;7); n=303	5 (3^{4}_{3}; 6±2; 5); n=149	1 (n.d. ; n.d.; 1); n=28	6 (3^{3}_{3}; 6 ±1; 11); n=306	17 (13^{13}_{13}; 17±0.4; 17); n=379	18 (14^{14}_{14}; 19±2; 19); n=378	11 (7^{7}_{6}; 13±4; 11); n=336	5 (3^{3}_{3}; 5±1; 6); n=289	5 (5^{5}_{4}; 5±1; 8); n=284	13 (9^{10}_{9}; 13±0.4; 15); n=360	18 (14^{15}_{14}; 18±1; 19); n=375	11 (7^{7}_{7}; 13±4; 11); n=380
Bornholm Basin	17 (13^{13}_{12}; 18±1;23); n=57	29 (23^{24}_{22}; 35±7; 36); n=72	30 (25^{26}_{24}; 33±5;34); n=56	4 (4^{5}_{3}; 4±0.4;7); n=31	6 (5^{6}_{5}; 6±0.1;7); n=50	4 (3^{4}_{3}; 4±1;4); n=36	2 (1^{2}_{1}; 2±1; 2); n=27	5 (4^{4}_{4}; 5±1; 9); n=44	16 (13^{14}_{13}; 19±5; 18); n=67	17 (15^{16}_{14}; 17±0.4; 17); n=56	8 (7^{8}_{6}; 9±1;9); n=54	5 (4^{5}_{4}; 5±1; 5); n=50	3 (3^{3}_{2}; 3±0.2; 5); n=53	12 (11^{12}_{9}; 15±4; 4); n=54	15 (14^{15}_{14}; 15±0.3; 19); n=67	11 (10^{11}_{9}; 11±1; 11); n=56
Arkona Basin	3 (n. d. ; n.d.; 6); n=3	20 (n.d.; n.d.; 31); n=7	4 (n.d.; n. d. ; 17); n=3	3 (n. d. ; n. d. ; 3); n4	7 (n.d.; n.d.; 7); n=3	3 (n. d. ; n. d. ; 3); n=2	1 (n.d.; n.d.; 1); n=1	5 (n. d. ; n. d. ; 7); n=3	5 (n. d. ; n.d.; 8); n=3	2 (n. d. ; n.d.; 8); n=3	6 (n. d. ; n. d. ; 8); n=3	2 (n.d.; n.d.; 4); n=3	0 (n.d.; n.d.; 0); n=0	1 (n.d. ; n.d.;6); n=1	9 (n.d.; n.d.; 14); n=3	6 (n.d.; n.d.; 7); n=3
The Sound	7 (6^{8}_{5}; 7±1; 9); n=36	54 (38^{40}_{37}; 66±13; 62); n=119	26 (21^{22}_{20}; 27±1;28); n=93	2 (2^{2}_{2}; 2±0.03; 2); n=59	10 (8^{9}_{8}; 10±1;10); n=94	7 (7^{8}_{5}; 8±1;7); n=48	15 (15^{19}_{11}; 23±11;17); n=53[a]	19 (15^{16}_{14}; 21±4; 21); n=95	21 (17^{19}_{16}; 22±2; 21); n=79	14 (11^{12}_{9}; 16±3;15); n=95	6 (6^{8}_{4}; 7±1;7); n=25	3 (3^{3}_{3}; 3±<0.1; 4); n=29	3 (n.d.; n.d.; 4); n=7	16 (15^{16}_{13}; 17±2; 16); n=81	24 (20^{21}_{19}; 27±5; 26); n=101	14 (12^{14}_{10}; 16±3; 14); n=95
Kattegat	12 (7^{8}_{6}; 22±10; 19); n=109	89 (57^{58}_{56}; 91±3; 96); n=354	42 (26^{27}_{25}; 45±3; 49); n=312	7 (6^{6}_{5}; 7±1;8); n=171	12 (10^{10}_{9}; 12±0.3;13); n=323	9 (7^{7}_{6}; 9±0.4;9); n=230	31 (23^{24}_{22}; 39±12;34); n=299	31 (21^{22}_{20}; 33±4; 33); n=320	39 (27^{28}_{26}; 43±5; 40); n=302	15 (10^{10}_{9}; 20±7; 18); n=322	16 (12^{12}_{11}; 16±1; 22); n=251	7 (6^{6}_{6}; 7±1; 9); n=222	5 (5^{7}_{3}; 6±1;5); n=36[a]	33 (26^{27}_{25}; 34±2; 36); n=241	34 (24^{24}_{23}; 36±2; 38); n=332	22 (16^{17}_{16}; 27±7; 25); n=319
Skagerrak	4 (3^{5}_{2}; 7±4;10); n=64	65 (39^{40}_{38}; 78±11; 96); n=239	24 (16^{17}_{16}; 30±7; 39); n=217	4 (4^{4}_{3}; 5±2; 6); n=103	13 (9^{10}_{9}; 14±2; 14); n=217	7 (6^{6}_{5}; 7±1; 8); n=106	21 (15^{16}_{14}; 27±7; 39); n=170	24 (14^{15}_{14}; 36±13; 34); n=217	27 (20^{21}_{19}; 32±7; 44); n=225	8 (5^{5}_{5}; 8±1;11); n=212	10 (7^{8}_{6}; 16±7; 17); n=131	5 (5^{6}_{4}; 5±1; 8); n=45	0 (n.d.; n.d.; 1); n=0	22 (17^{18}_{15}; 31±10; 33); n=164	27 (20^{20}_{19}; 37±10; 41); n=230	15 (10^{11}_{10}; 20±7; 23); n=213

[a]Standardisation of the SR of this functional attribute was conducted to the sample coverage of this sub-basin.