Supplementary Information

Contrasting patterns in the abundance of fish communities targeted by fishermen on two coral reefs in southern Mozambique

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African Journal of Marine Science 2020, 42(1): 95–105
https://doi.org/10.2989/1814232X.2020.1731597

Table S1: List of all deployments of baited remote underwater video stations (BRUVS) at Lighthouse Reef (21°31′00″ S, 35°30′14″ E) and San Sebastian Reef (22°09′45″ S, 35°33′76″ E), southern Mozambique, conducted during a 2-week period in August 2016

Deployment	Date	Latitude (ºS)	Longitude (ºE)	Depth (m)	Soak time (min)	Reef
CMBAZ_037	12-08-2016	–21.543613	35.497866	9.1	64	Lighthouse
CMBAZ_038	12-08-2016	–21.537923	35.497562	8.9	64	Lighthouse
CMBAZ_039	12-08-2016	–21.531871	35.496314	9	62	Lighthouse
CMBAZ_040	12-08-2016	–21.526161	35.497324	11.4	61	Lighthouse
CMBAZ_041	12-08-2016	–21.520927	35.497491	8.7	63	Lighthouse
CMBAZ_042	12-08-2016	–21.5167	35.495038	12.2	61	Lighthouse
CMBAZ_043	12-08-2016	–21.513809	35.490626	15.7	63	Lighthouse
CMBAZ_044	12-08-2016	–21.511632	35.485889	9.4	65	Lighthouse
CMBAZ_045	12-08-2016	–21.511643	35.479827	4.2	65	Lighthouse
CMBAZ_046	12-08-2016	–21.509738	35.474485	5.1	67	Lighthouse
CMBAZ_047	12-08-2016	–21.50772	35.469592	4.3	67	Lighthouse
CMBAZ_048	12-08-2016	35.464442	-21.506327	5.8	67	Lighthouse
CMBAZ_049	12-08-2016	–21.503732	35.456768	5.8	69	Lighthouse
CMBAZ_050	12-08-2016	35.463431	-21.505907	5.9	66	Lighthouse
CMBAZ_051	12-08-2016	–21.503619	35.46931	21	66	Lighthouse
CMBAZ_052	12-08-2016	–21.508848	35.48576	25	60	Lighthouse
CMBAZ_053	12-08-2016	–21.511495	35.490411	14.6	70	Lighthouse
CMBAZ_054	12-08-2016	–21.51617	35.49327	13.7	57	Lighthouse
CMBAZ_055	12-08-2016	–21.543781	35.497515	9.8	60	Lighthouse
CMBAZ_056	12-08-2016	–21.538299	35.497525	9.2	62	Lighthouse
CMBAZ_057	12-08-2016	–21.533159	35.495939	7	63	Lighthouse
CMBAZ_058	12-08-2016	35.496427	-21.527914	5.7	62	Lighthouse
CMBAZ_059	12-08-2016	–21.522838	35.497534	8.7	62	Lighthouse
CMBAZ_060	12-08-2016	–21.517732	35.496564	10.1	62	Lighthouse
CMBAZ_061	13-08-2016	–21.525113	35.50705	30.8	67	Lighthouse
CMBAZ_062	13-08-2016	–21.521549	35.502966	27.9	67	Lighthouse
CMBAZ_063	13-08-2016	–21.517941	35.498976	15.3	64	Lighthouse
CMBAZ_064	13-08-2016	–21.51316	35.499162	24.6	69	Lighthouse
CMBAZ_065	13-08-2016	–21.50957	35.494884	35.7	69	Lighthouse
CMBAZ_066	13-08-2016	–21.506307	35.490353	33.1	72	Lighthouse

CMBAZ_067	13-08-2016	–21.544535	35.497224	9.8	84	Lighthouse
CMBAZ_068	13-08-2016	–21.54934	35.499673	14.1	86	Lighthouse
CMBAZ_069	13-08-2016	–21.555157	35.499679	11.8	87	Lighthouse
CMLHR_085	15-08-2016	–22.262801	35.534222	8.9	72	San Sebastian
CMLHR_086	15-08-2016	–22.264943	35.539756	13.2	68	San Sebastian
CMLHR_087	15-08-2016	–22.270402	35.538763	10.8	66	San Sebastian
CMLHR_088	15-08-2016	–22.275284	35.538027	8.4	64	San Sebastian
CMLHR_089	15-08-2016	–22.280338	35.537885	8.5	64	San Sebastian
CMLHR_090	15-08-2016	–22.285354	35.538455	8.5	63	San Sebastian
CMLHR_091	15-08-2016	–22.290424	35.539797	10.3	61	San Sebastian
CMLHR_092	15-08-2016	–22.295514	35.540386	11.3	64	San Sebastian
CMLHR_093	15-08-2016	–22.300414	35.541788	10.4	64	San Sebastian
CMLHR_094	15-08-2016	–22.301438	35.54745	9.9	63	San Sebastian
CMLHR_095	15-08-2016	–22.303363	35.552102	11.8	64	San Sebastian
CMLHR_096	15-08-2016	–22.307897	35.55012	6.7	67	San Sebastian
CMLHR_097	15-08-2016	–22.326697	35.546211	7.2	62	San Sebastian
CMLHR_098	15-08-2016	–22.321433	35.54566	6.7	62	San Sebastian
CMLHR_099	15-08-2016	–22.317545	35.548227	9.4	64	San Sebastian
CMLHR_100	15-08-2016	–22.312746	35.546194	8.8	67	San Sebastian
CMLHR_101	15-08-2016	–22.309045	35.545577	9.8	66	San Sebastian
CMLHR_102	15-08-2016	–22.303983	35.547463	9.5	66	San Sebastian
CMLHR_103	15-08-2016	–22.244527	35.539859	17.1	66	San Sebastian
CMLHR_104	15-08-2016	–22.252933	35.532477	10.5	67	San Sebastian
CMLHR_105	15-08-2016	–22.260094	35.535833	11.1	66	San Sebastian
CMLHR_106	15-08-2016	–22.266386	35.540508	15.2	63	San Sebastian
CMLHR_107	15-08-2016	–22.272334	35.538457	11.2	60	San Sebastian
CMLHR_108	15-08-2016	–22.278166	35.537386	8.6	60	San Sebastian
CMLHR_122	19-08-2016	–22.253062	35.533501	8.8	65	San Sebastian
CMLHR_123	19-08-2016	–22.255887	35.537599	11.3	65	San Sebastian
CMLHR_124	19-08-2016	–22.262139	35.53829	10.4	66	San Sebastian
CMLHR_125	19-08-2016	–22.267276	35.538181	9.7	66	San Sebastian
CMLHR_126	19-08-2016	–22.272065	35.53831	9.1	61	San Sebastian
CMLHR_127	19-08-2016	–22.276431	35.53837	10.3	66	San Sebastian
CMLHR_128	19-08-2016	–22.282278	35.538283	7.4	60	San Sebastian
CMLHR_129	19-08-2016	–22.289479	35.539114	8.6	61	San Sebastian
CMLHR_130	19-08-2016	–22.294898	35.540105	10.3	62	San Sebastian
CMLHR_131	19-08-2016	–22.296379	35.547619	10.4	62	San Sebastian
CMLHR_132	19-08-2016	–22.301537	35.547651	6.8	62	San Sebastian
CMLHR_133	19-08-2016	35.550743	-22.306796	8.2	58	San Sebastian
CMLHR_134	19-08-2016	35.549456	-22.311136	7.3	60	San Sebastian
CMLHR_135	19-08-2016	35.548494	-22.316135	9.4	60	San Sebastian
CMLHR_136	19-08-2016	–22.321193	35.546931	10.7	61	San Sebastian
CMLHR_137	19-08-2016	–22.325398	35.545687	4.8	60	San Sebastian
CMLHR_138	19-08-2016	–22.330622	35.546321	7.2	61	San Sebastian
CMLHR_139	19-08-2016	–22.337616	35.546014	7.6	62	San Sebastian

CMLHR_142	20-08-2016	–22.29778	35.55336	15	82	San Sebastian
CMLHR_143	20-08-2016	–22.301957	35.554236	17.8	74	San Sebastian
CMLHR_144	20-08-2016	–22.294463	35.566941	25	72	San Sebastian
CMLHR_145	20-08-2016	–22.300117	35.568934	28.5	71	San Sebastian
CMLHR_146	20-08-2016	35.564765	-22.305804	22.4	69	San Sebastian
CMLHR_147	20-08-2016	–22.31246	35.561234	21.9	63	San Sebastian

Table S2: Functional categories, targeting status (T = targeted) and relative abundance of reef fish species observed using baited remote underwater video stations (BRUVS) at Lighthouse Reef and San Sebastian Reef, southern Mozambique. Functional categories: BSI = browser of sessile invertebrates; DC = diurnal carnivore; DP = diurnal planktivore; H = herbivore; NC = nocturnal carnivore; NP = nocturnal planktivore; O = omnivore; PI = piscivore

Taxon			Relative abundance			
	Functional category	Targeting status	Lighthouse mean	Lighthouse SE	San Sebastian mean	San Sebastian SE
ACANTHURIDAE						
Acanthurus dussumieri	H		1.67	0.82	3.66	0.54
Acanthurus leucocheilus	H		1.83	1.24	1.59	0.51
Acanthurus leucosternon	H		0.07	0.07	0.57	0.21
Acanthurus mata	DP		1.6	0.82	2.05	0.72
Acanthurus tennenti	H	T	2.43	0.73	1.68	0.42
Acanthurus thompsoni	H		0.43	0.21	0.07	0.04
Acanthurus triostegus	H		1.77	1.2	0.07	0.07
Acanthurus xanthopterus	DP		0.17	0.14	1.02	0.43
Ctenochaetus striatus	H		5.13	1.1	4.41	0.86
Ctenochaetus truncatus	H		0	0	0.02	0.02
Naso brachycentron	H		0.43	0.25	0.34	0.11
Naso brevirostris	H		0.5	0.23	1.39	0.61
Naso elegans	H		0.17	0.08	0.77	0.22
Naso hexacanthus	H		0.13	0.09	0	0
Naso tonganus	H		0.07	0.05	0.02	0.02
Naso unicornis	H		1.97	0.7	1.64	0.6
Zebrasoma scopas	H		0.1	0.06	0	0
ANTENNARIIDAE						
Antennarius nummifer	PI		0.03	0.03	0	0
APOGONIDAE						
Apogon aureus	DC		0.23	0.23	2.91	2.91
AULOSTOMIDAE						
Aulostomus chinensis	PI		0.03	0.03	0.02	0.02
BALISTIDAE						
Abalistes stellatus	DC		0.03	0.03	0	0
Balistapus undulatus	DC		0.1	0.06	0.41	0.11
Balistoides conspicillum	DC		0.07	0.07	0.34	0.09
Balistoides viridescens	DC		0.3	0.15	0.3	0.08
Melichthys indicus	O		0.2	0.09	0.07	0.05
Odonus niger	DP		1.77	1.43	3.11	1.86
Pseudobalistes flavimarginatus	DC		0.07	0.05	0.18	0.07
Pseudobalistes fuscus	DC		0	0	0.05	0.05
Sufflamen chrysopterus	DC		1.37	0.26	1.41	0.14
Sufflamen fraenatum	DC		0.33	0.12	0.84	0.16
BLENNIIDAE						
Ecsenius midas	H		0	0	0.02	0.02

Ecsenius nalolo	H		0.13	0.1	0	0
Plagiotremus rhinorhynchos	NP		0	0	0.02	0.02
Plagiotremus tapeinosoma	O		0	0	0.16	0.07
CAESIONIDAE						
Caesio caerulaurea	DP		6.73	6.73	2.34	2.08
Caesio lunaris	DP		2.87	2.21	10.18	4.73
Caesio striata	DP		0.67	0.67	4.95	2.2
Caesio xanthonota	DP		3.17	3.1	3.41	1.82
Pterocaesio marri	DP		0.07	0.07	0	0
CARANGIDAE						
Carangoides ferdau	DC	T	0.03	0.03	0.02	0.02
Carangoides fulvoguttatus	DC	T	0.03	0.03	0	0
Carangoides gymnostethus	DC	T	0.93	0.32	1.52	1.45
Caranx heberi	DC	T	0	0	1.91	1.23
Caranx melampygus	DC	T	0.5	0.23	1.45	0.4
Caranx sexfasciatus	PI	T	0.1	0.1	0	0
Decapterus macarellus	DP	T	0.1	0.1	0.05	0.03
Gnathanodon speciosus	DC	T	0	0	0.45	0.45
Scomberoides lysan	PI	T	0.13	0.06	0.02	0.02
Seriolina nigrofasciata	DC	T	0	0	0.09	0.07
CARCHARHINIDAE						
Carcharhinus amblyrhynchos	PI	T	0.23	0.09	0.14	0.06
Carcharhinus leucas	PI	T	0.03	0.03	0.07	0.04
Carcharhinus melanopterus	PI	T	0.07	0.05	0	0
Triaenodon obesus	DC		0	0	0.16	0.06
CHAETODONTIDAE						
Chaetodon auriga	BSI		0.87	0.18	1.05	0.15
Chaetodon bennetti	BSI		0.07	0.07	0	0
Chaetodon blackburnii	BSI		0.13	0.09	0.18	0.07
Chaetodon falcula	BSI		0.13	0.09	0.02	0.02
Chaetodon guttatissimus	BSI		0.43	0.17	0.98	0.18
Chaetodon interruptus	BSI		0	0	0.36	0.13
Chaetodon kleinii	BSI		0.87	0.26	1.95	0.33
Chaetodon lineolatus	BSI		0.07	0.07	0	0
Chaetodon lunula	BSI		0.17	0.08	0.82	0.19
Chaetodon madagaskariensis	BSI		0.73	0.22	1.14	0.14
Chaetodon melannotus	BSI		0.03	0.03	0	0
Chaetodon meyeri	BSI		0.2	0.09	0.41	0.11
Chaetodon oxycephalus	BSI		0	0	0.02	0.02
Chaetodon trifascialis	BSI		0.23	0.1	0.07	0.04
Chaetodon trifasciatus	BSI		0.33	0.14	0.09	0.06
Chaetodon vagabundus	BSI		0.23	0.11	0.75	0.15
Chaetodon xanthocephalus	BSI		0.03	0.03	0	0
Chaetodon zanzibarensis	BSI		0.07	0.07	0.02	0.02
Forcipiger flavissimus	BSI		0.1	0.07	0.57	0.15
Hemitaurichthys zoster	DP		0	0	0.07	0.05
Heniochus acuminatus	BSI		0.9	0.29	0.48	0.15
Heniochus monoceros	BSI		0	0	0.14	0.07
CIRRHITIDAE						

Cirrhitichthys oxycephalus	DC		0.17	0.11	0.48	0.13
Paracirrhites arcatus	DC		0.1	0.07	0.16	0.06
Paracirrhites forsteri	DC		0.07	0.07	0.09	0.04
DASYATIDAE						
Himantura fai	NC	T	0	0	0.05	0.03
Himantura jenkinsii	NC	T	0.03	0.03	0	0
Himantura uarnak	NC	T	0	0	0.02	0.02
DIODONTIDAE						
Diodon hystrix	NC		0	0	0.11	0.05
ECHENEIDAE						
Echeneis naucrates	NC		0.27	0.08	0.45	0.11
EPHIPPIDAE						
Platax orbicularis	O	T	0.1	0.06	0	0
Tripterodon orbis	DC	T	0	0	0.09	0.09
FISTULARIIDAE						
Fistularia commersonii	PI		0.17	0.07	0.07	0.04
HAEMULIDAE						
Plectorhinchus flavomaculatus	NC	T	0.47	0.18	0.57	0.11
Plectorhinchus gaterinus	NC	T	0.07	0.07	0	0
Plectorhinchus plagiodesmus	NC	T	0.17	0.14	0.07	0.05
Plectorhinchus playfairi	DC	T	0.27	0.17	0.52	0.11
Plectorhinchus schotaf	NC	T				
HOLOCENTRIDAE						
Myripristis murdjan	NP		0.17	0.17	0.05	0.05
Sargocentron caudimaculatum	NC		0.2	0.1	0.05	0.03
Sargocentron diadema	NC		0.03	0.03	0.41	0.21
KYPHOSIDAE						
Kyphosus cinerascens	H		0.83	0.83	0.66	0.27
LABRIDAE						
Anampses caeruleopunctatus	DC		0.03	0.03	0.09	0.04
Anampses meleagrides	DC		0.1	0.06	0.09	0.04
Bodianus anthioides	DC		0	0	0.02	0.02
Bodianus axillaris	DC		0.17	0.11	0.16	0.06
Bodianus bilunulatus	DC		0.17	0.08	0.52	0.11
Bodianus diana	DC		0.53	0.17	0.66	0.13
Bodianus perditio	DC		0	0	0.07	0.05
Cheilinus trilobatus	DC		0.2	0.07	0.05	0.03
Cheilio inermis	DC		0.27	0.13	0.16	0.06
Cirrhilabrus exquisitus	DC		0	0	0.14	0.06
Coris aygula	DC		0	0	0.23	0.08
Coris caudimacula	DC		0.47	0.19	0.82	0.17
Coris cuvieri	DC		0.07	0.05	0.02	0.02
Coris formosa	DC					
Gomphosus caeruleus	DC		0.5	0.13	0.59	0.13
Halichoeres cosmetus	DC		0	0	0.43	0.1

Halichoeres hortulanus	DC		0.73	0.17	1.11	0.17
Halichoeres iridis	DC		0.17	0.17	0.05	0.05
Halichoeres nebulosus	DC		0.13	0.13	0.39	0.12
Halichoeres scapularis	DC		0	0	0.16	0.16
Hemigymnus fasciatus	DC		0.2	0.09	0.32	0.1
Hologymnosus annulatus	DC		0.13	0.06	0.2	0.06
Hologymnosus doliatus	DC		0.03	0.03	0.07	0.04
Iniistius pavo	DC		0	0	0.02	0.02
Iniistius pentadactylus	DC		0.23	0.12	0.02	0.02
Labroides bicolor	DC		0.3	0.15	0.3	0.09
Labroides dimidiatus	DC		0.87	0.25	1.34	0.29
Macropharyngodon bipartitus	DC		0	0	0.02	0.02
Novaculichthys taeniourus	DC		0	0	0.02	0.02
Pseudodax moluccanus	O		0.03	0.03	0.45	0.11
Stethojulis albovittata	DC		0.4	0.15	0.27	0.08
Thalassoma amblycephalum	DC		0.83	0.34	5.57	1.68
Thalassoma hebraicum	DC	T	1.8	0.36	3.98	0.62
Thalassoma lunare	DC	T	1	0.27	4.57	0.93
LETHRINIDAE						
Lethrinus crocineus	NC	T	1	0.31	0.59	0.16
Lethrinus harak	NC	T	1.1	0.42	0.41	0.11
Lethrinus microdon	NC	T	0.1	0.07	0.91	0.27
Monotaxis grandoculis	NC	T	0.3	0.12	0.64	0.35
LUTJANIDAE						
Aphareus furca	PI	T	0.1	0.06	0.11	0.06
Aprion virescens	PI	T	1	0.2	1.75	0.33
Lutjanus bengalensis	NC	T	0	0	0.61	0.5
Lutjanus bohar	NC	T	0.37	0.16	0.93	0.19
Lutjanus ehrenbergii	NC	T	0.07	0.07	0	0
Lutjanus fulviflamma	NC	T	0.53	0.5	2.66	1.72
Lutjanus gibbus	NC	T	1.67	0.61	4.16	1.08
Lutjanus kasmira	NC	T	2.6	1.58	9.61	3.63
Lutjanus lutjanus	NC	T	9.9	6.81	29.07	12.54
Lutjanus rivulatus	NC	T	0	0	0.14	0.1
Macolor niger	NC	T	0.2	0.15	0.11	0.06
MALACANTHIDAE						
Malacanthus brevirostris	DC		0	0	0.02	0.02
Malacanthus latovittatus	NC		0.27	0.16	0.27	0.09
MICRODESMIDAE						
Gunnellichthys monostigma	DP		0.6	0.6	0	0
MOBULIDAE						
Manta birostris	DP	T	0	0	0.05	0.03
MONACANTHIDAE						
Aluterus scriptus	O		0.07	0.07	0.05	0.03
Cantherhines dumerilii	BSI		0	0	0.02	0.02
Cantherhines pardalis	BSI		0.33	0.1	0.32	0.07
MONODACTYLIDAE						

Monodactylus argenteus	DP		0	0	3.18	3.18
MULLIDAE						
Mulloidichthys flavolineatus	NC		0.13	0.08	3.43	1.23
Mulloidichthys vanicolensis	NC		0.73	0.73	0.05	0.03
Parupeneus barberinus	DC		0.43	0.14	0.41	0.23
Parupeneus cyclostomus	PI		0.63	0.18	0.61	0.12
Parupeneus indicus	DC		0.17	0.08	0.45	0.14
Parupeneus macronema	DC		1.87	0.44	2.52	0.37
Parupeneus pleurostigma	DC		0.43	0.31	0.23	0.14
Parupeneus rubescens	DC		0.13	0.08	0.2	0.12
Parupeneus trifasciatus	DC		0.43	0.13	0.34	0.1
MURAENIDAE						
Gymnothorax favagineus	NC		0	0	0.2	0.06
Gymnothorax flavimarginatus	NC		0	0	0.32	0.09
Gymnothorax javanicus	NC		0	0	0.02	0.02
MYLIOBATIDAE						
Aetobatus narinari	DC	T	0.03	0.03	0.02	0.02
NEMIPTERIDAE						
Scolopsis bimaculata	DC		0.07	0.05	0.5	0.25
Scolopsis ghanam	DC		2.2	1.55	0.16	0.08
OPLEGNATHIDAE						
Oplegnathus robinsoni	O		0	0	0.05	0.03
OSTRACIIDAE						
Ostracion cubicus	BSI		0.07	0.05	0.36	0.07
Ostracion meleagris	BSI		0.13	0.06	0.02	0.02
PEMPHERIDAE						
Parapricanthus ransonneti	NP		0.03	0.03	29.3	23.51
Pempheris adusta	NP		0	0	0.02	0.02
PINGUIPEDIDAE						
Parapercis clathrata	DC		0	0	0.02	0.02
Parapercis hexophtalma	DC		0.13	0.09	0.05	0.03
POMACANTHIDAE						
Apolemichthys trimaculatus	O		0	0	0.18	0.1
Centropyge multispinis	O		0.23	0.08	0.43	0.11
Pomacanthus imperator	BSI		0.47	0.09	0.89	0.1
Pomacanthus rhomboides	DC		0	0	0.05	0.03
Pomacanthus semicirculatus	BSI		0.37	0.12	0.89	0.13
POMACENTRIDAE						
Abudefduf sparoides	O		0.03	0.03	0	0
Abudefduf vaigiensis	O		0.17	0.12	5.86	1.54
Amphiprion allardi	O		0	0	0.16	0.08
Chromis fieldi	O		1.3	0.53	2.77	0.69
Chromis weberi	DP		2.77	1.41	8.55	3.44
Dascyllus trimaculatus	O		0.6	0.41	1.41	0.33

Neopomacentrus cyanomos	O		0	0	0.61	0.35
Pomacentrus caeruleus	O		0.23	0.12	0.86	0.39
PRIACANTHIDAE						
Priacanthus hamrur	NC		0	0	1.48	0.91
PTEROIDAE						
Pterois miles	PI		0	0	0.02	0.02
RHINOBATIDAE						
Rhynchobatus djiddensis	NC	T	0	0	0.02	0.02
SCARIDAE						
Calotomus carolinus	H	T	0.07	0.07	0.14	0.08
Chlororus sordidus	H	T	0.17	0.08	0.48	0.2
Scarus caudofasciatus	H	T	0.03	0.03	0.02	0.02
Scarus frenatus	H	T	0.03	0.03	0	0
Scarus ghobban	H	T	0.3	0.13	0.66	0.19
Scarus persicus	H	T	0.03	0.03	0.09	0.05
Scarus rubroviolaceus	H	T	2.23	0.75	1.3	0.18
Scarus tricolor	H	T	0	0	0.02	0.02
SCOMBRIDAE						
Scomberomorus commerson	PI	T	0.2	0.09	0.09	0.04
SERRANIDAE						
Aethaloperca rogaa	NC	T	0.03	0.03	0.25	0.07
Cephalopholis argus	PI	T	0.4	0.15	0.07	0.04
Cephalopholis miniata	NC	T	0.17	0.1	0.36	0.12
Cephalopholis nigripinnis	NC	T	0.13	0.08	0.02	0.02
Epinephelus coeruleopunctatus	PI		0	0	0.05	0.05
Epinephelus fasciatus	NC	T	0.07	0.05	0.43	0.15
Epinephelus lanceolatus	NC	T	0.03	0.03	0.16	0.06
Epinephelus macrospilos	DC	T	0.03	0.03	0.02	0.02
Epinephelus malabaricus	NC	T	0.33	0.11	0.3	0.09
Epinephelus multinotatus	PI	T	0	0	0.02	0.02
Epinephelus tukula	NC	T	0	0	0.14	0.05
Pseudanthias squamipinnis	DP		2.2	1.32	4.23	1.93
Variola louti	PI	T	0	0	0.14	0.05
SIGANIDAE						
Siganus luridus	H		0.03	0.03	0.11	0.07
Siganus sutor	H	T	1.67	0.45	6.66	2.27
SPARIDAE						
Rhabdosargus sarba	DC	T	0	0	0.02	0.02
SPHYRAENIDAE						
Sphyraena barracuda	DC	T	0.03	0.03	0	0
Sphyraena putnamae	NC	T	0	0	7.41	7.41
TETRAODONTIDAE						
Arothron hispidus	NC		0	0	0.07	0.04
Arothron mappa	NC		0.03	0.03	0.02	0.02

Arothron nigropunctatus	NC	0	0	0.07	0.04
Canthigaster bennetti	O	0.5	0.16	0.14	0.05
Canthigaster valentini	O	0.1	0.07	0.25	0.08
ZANCLIDAE					
Zanclus cornutus	BSI	5.33	4.1	1.61	0.27

Table S3: Functional structure of fish communities on reefs of the southwest Indian Ocean (see map in Supplementary Figure S4), expressed as percentages of total numbers of species (species richness). In the previous studies data were collected on the outer reef slope using underwater visual census (UVC), whereas the present study in southern Mozambique used baited remote underwater video stations (BRUVS)

Site	Study	Technique	Carnivores	Omnivores	Herbivores	No. species
Tofo/Barra	Fordyce (2016)	UVC	80%	8%	9%	324
Ponta Malongane	Floros et al. (2012)	UVC	78%	11%	11%	284
Andavadoaka	Gillibrand et al. (2007)	UVC	76%	11%	13%	334
Bazaruto Archipelago	Maggs et al. (2010)	UVC	76%	12%	12%	249
Tuléar	Harmelin-Vivien (1979)	UVC	74%	13.5%	12.5%	323
Juan de Nova	Chabanet-Durville (2005)	UVC	73%	11%	16%	299
Glorieuses	Durvile et al. (2003)	UVC	73%	12%	15%	332
Mayotte	Chabanet (2002)	UVC	69%	12.5%	18.5%	225
Geyser et Zélée	Chabanet et al. (2002)	UVC	69%	16%	15%	294
Réunion	Chabanet (1994)	UVC	51%	24%	25%	257
Lighthouse Reef	Present study	BRUVS	80%	7%	13%	189
San Sebastian Reef	Present study	BRUVS	81%	8%	11%	195

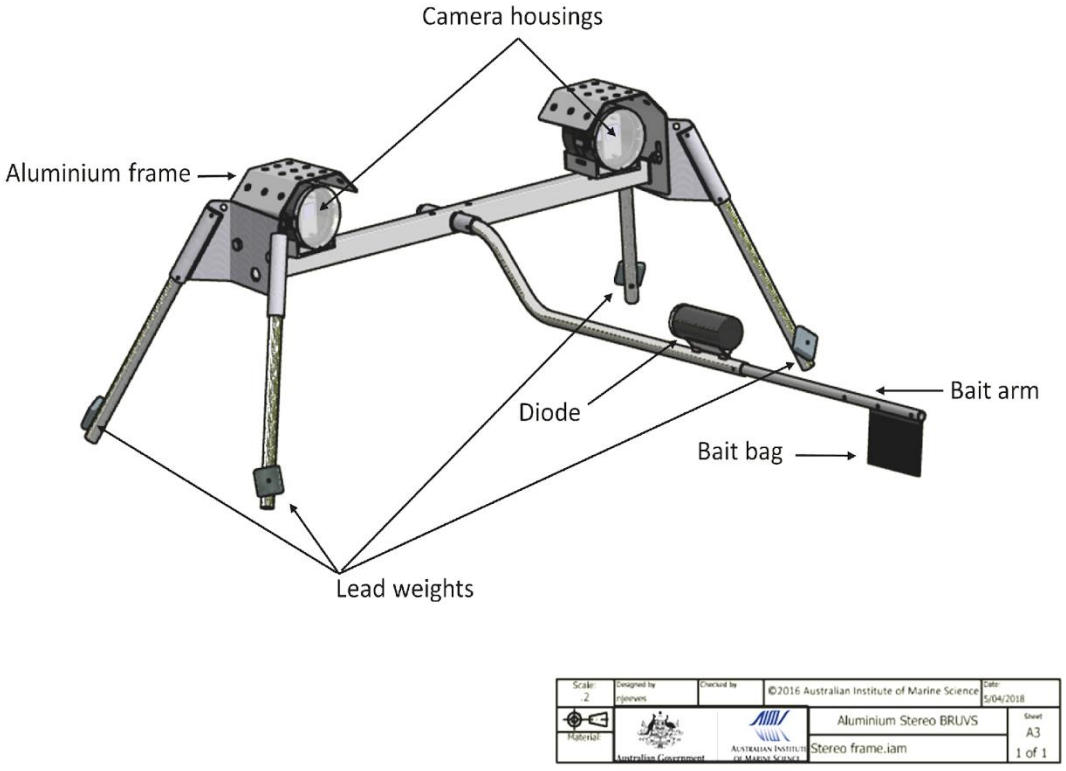

Figure S1: Schematic of a lightweight, aluminium baited remote underwater video station (BRUVS) (AIMS Engineering Workshops©) used during deployments in southern Mozambique, showing the frame, underwater camera housings, and bait arm with bait bag attached

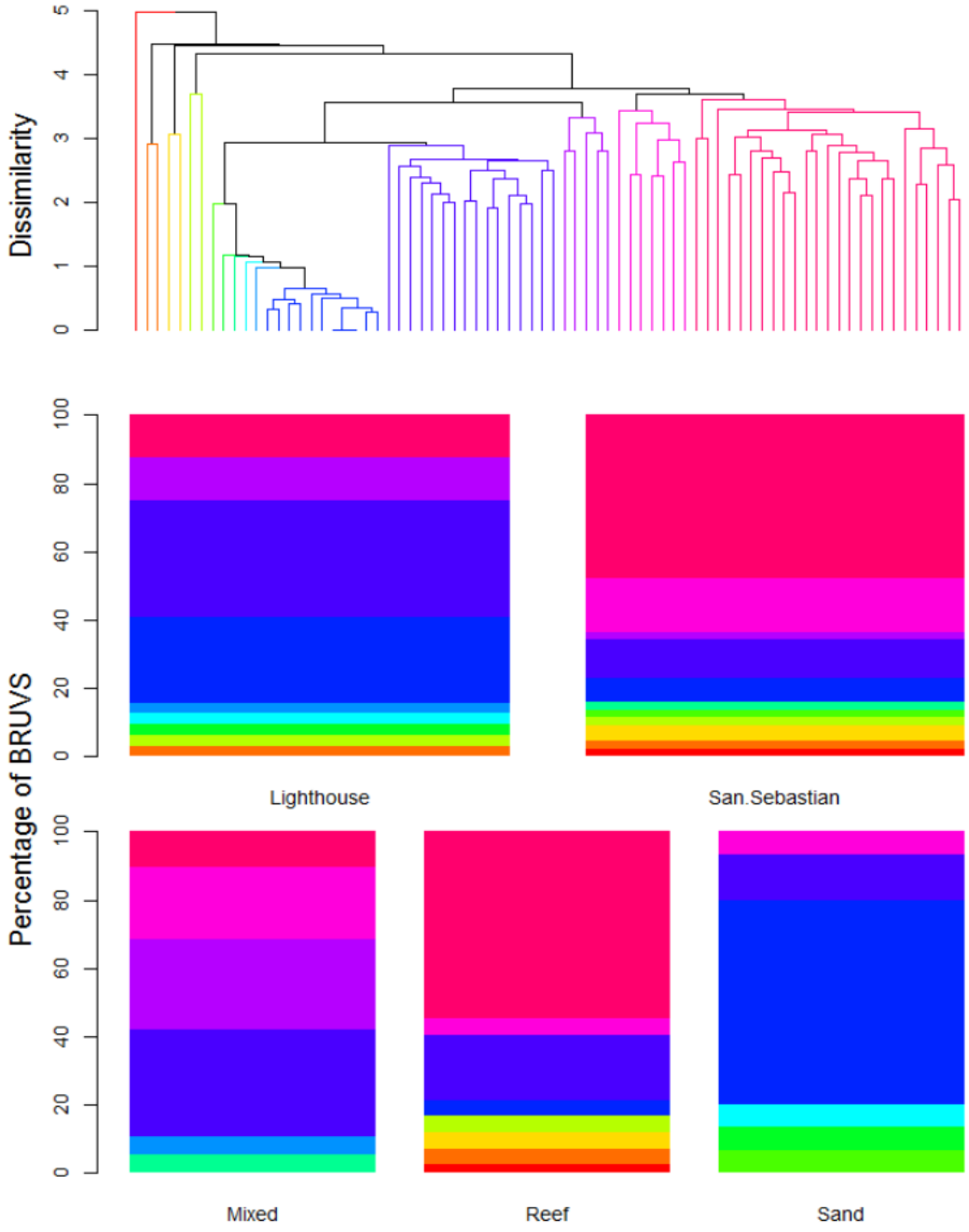

Figure S2: Variance partitioning of explanatory variables in the top-ranked model (negative binomial generalised linear model) of target fish abundance (MaxN) in southern Mozambique

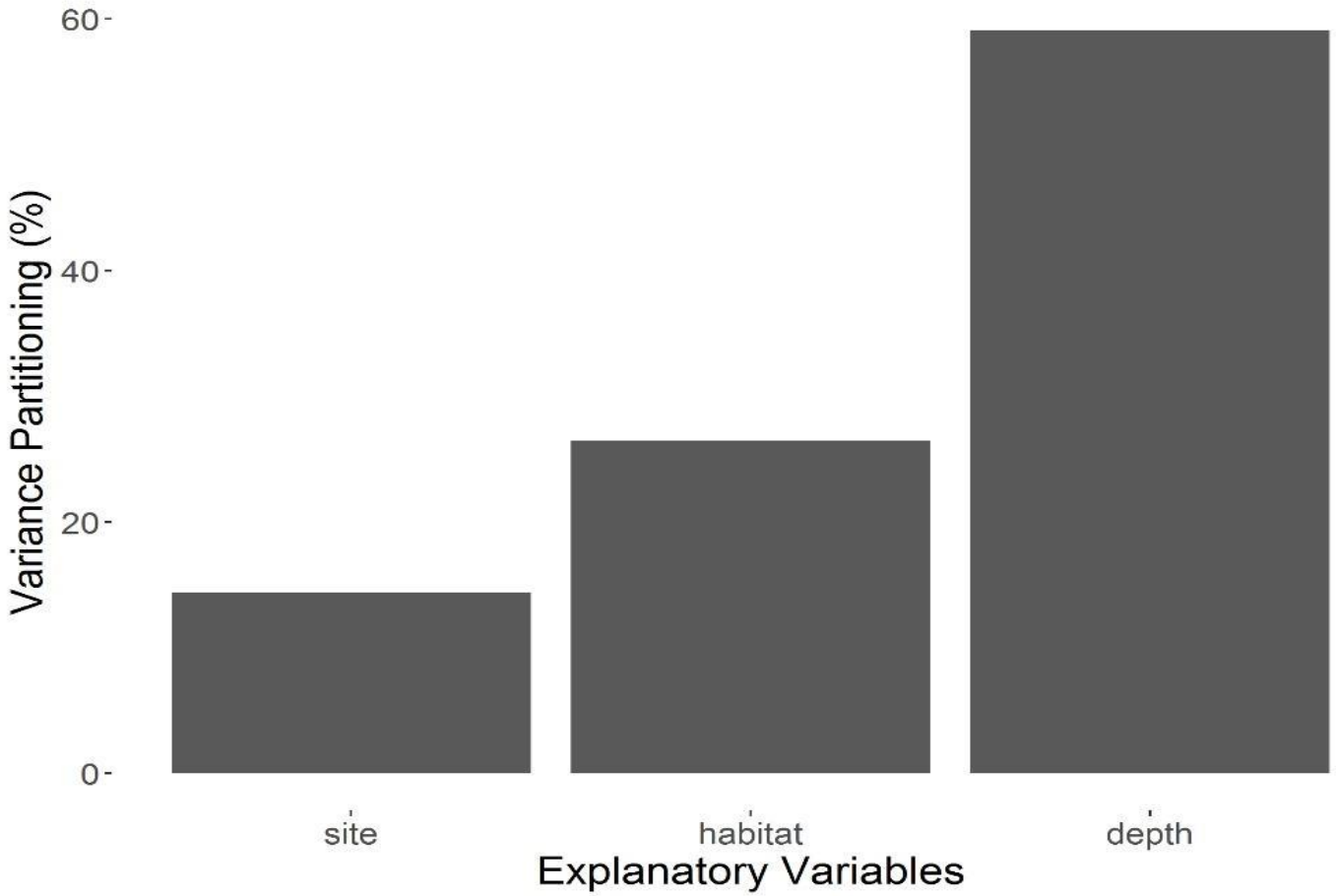

Figure S3: Cluster analysis, using the similarity profile routine (SIMPROF), of the compositions by genera of reef-fish communities at Lighthouse Reef and San Sebastian Reefs, southern Mozambique, in 2016. The different shades indicate groups that SIMPROF determined were significantly different. The percentage of baited remote underwater video stations (BRUVS) occurring in each significant cluster are shown for the two sites (San Sebastian and Lighthouse: middle graph) and for the three major habitats (lower graph)

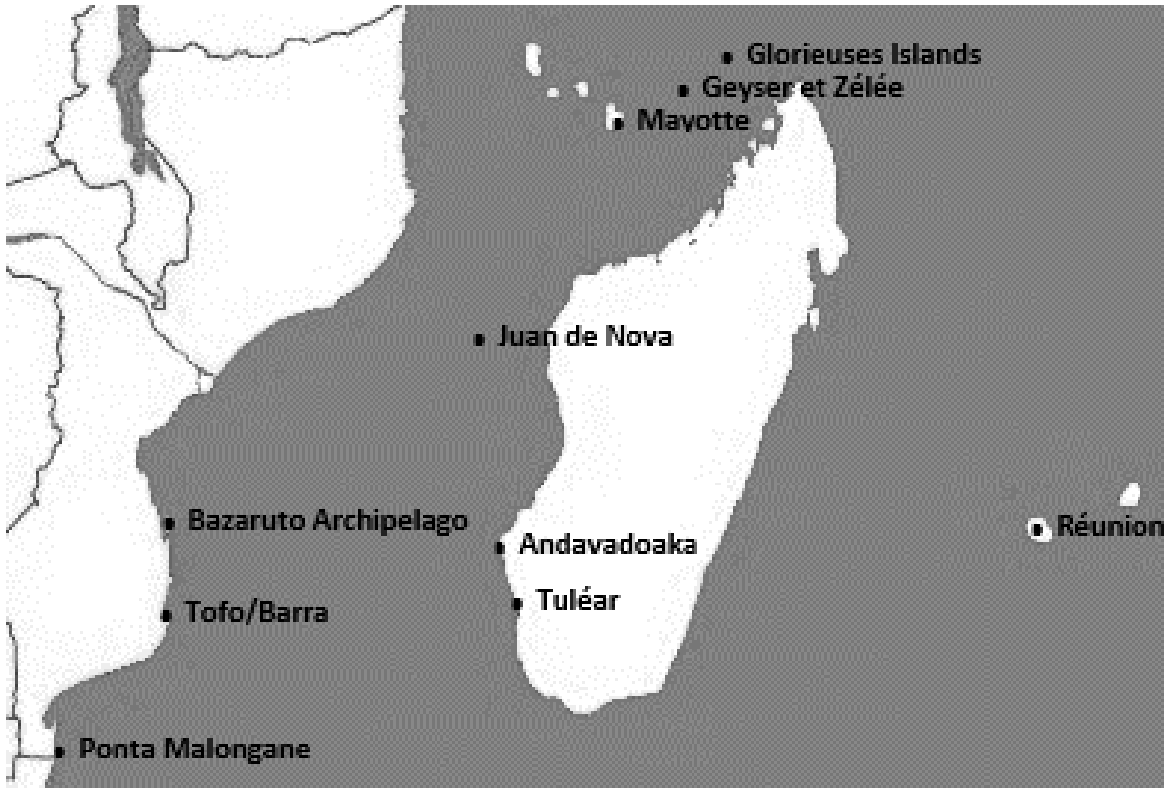

Figure S4: Map of the regional study sites listed in Supplementary Table S3