

Aldabra Marine Programme

Preliminary Report on Check Lists of Reef Fishes at Aldabra, December 2021

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Introduction

From 9^{th} to 12^{th} December 2021 a series of dives were carried out on the outer reef of Aldabra along the north and west sides of the atoll. The purpose was to identify non-cryptic reef fish species between the approximate depths of 10m and 20m at a series of locations specified by Seychelles Island Foundation (SIF) researchers based at Aldabra. These locations did not necessarily coincide with the permanent survey sites (Sites 1-8) originally established in 1999 by the Aldabra Marine Programme (AMP; Teleki et al. 1999). The identifications were carried out by the senior author who has the experience of carrying out a number of quantitative reef fish surveys at fixed sites on Aldabra's outer reef from 1999 to 2008 (Buckley et al. 2004, 2005; Downing et al. 2003; Stobart et al. 2001, 2002, 2021; Teleki et al. 1999). The data from the December 2021 surveys will allow for a comparison of changes in species composition over two decades, not only with reference to the original AMP work, but also with any similar surveys by other researchers carried out between 2009 and 2021.

Method

Each dive was approximately one hour in duration. At most locations a GPS fix was taken just before entering the water and another on exit. The exit point of Anse Var was just after the AMP Site 6. At the western location, close to the research station, only the area in the immediate vicinity of Site 1 was surveyed and the dive was curtailed to 30 minutes. On all dives fish identification began immediately on entering the water and the survey was considered complete when no more new fish were identified. In every case, with the exception of Site 1 the duration of the dive was sufficient to achieve this. Immediately after the dive the entire list was carefully checked to verify the identifications. Only positive identifications were then listed.

Results

Eight separate locations were surveyed and are detailed in Table 1, including the GPS entry and exit points of each dive. The locations are also shown in Figure 1.

Table 1. List of the locations surveyed with GPS coordinates at point of water entry and water exit

Location	Point of Entry	Point of Exit
W of Passe Houareau	S9° 22.206′ E46° 26.008′	S9° 22.175′ E46° 25.529′
Anse Malabar	S9° 21.841′ E46° 23.248′	S9° 21.907′ E46° 22.995′
Between Sites 2 & 3	S9° 21.990′ E46° 19.928′	S9° 22.034′ E46° 19.738′
Au Parc	S9° 22.006′ E46° 19.054′	S9° 22.024′ E46° 18.835′
Polymnie	S9° 22.001′ E46° 15.260′	S9° 22.062′ E46° 14.878′
Anse Var	S9° 22.339′ E46° 12.680′	After Site 6
NW	S9° 22.552′ E46° 12.470′	S9° 22.403′ E46° 12.727′
Site 1	S9° 24.092′ E 46° 12.061	



Figure 1. Location of fish list survey sites at Aldabra Atoll.

Appendix 1 lists all the species of fish seen on the surveys at each of the locations, grouped alphabetically by family. Appendix 2 lists the fish in order of frequency of occurrence with respect to the number of times each species was seen at a particular location (ubiquitousness).

The number of species counted at each location varied from 99 (Aldabra NW) to 69 (Site 1). Excluding Site 1, whose low count could be attributed to the short dive time, the range was 99 to 84 (Au Parc). The total number of species counted, taking all eight sites into consideration, was 202. Five percent of species counted were seen at all eight locations, while 26% of species counted were seen only at one of the eight locations.

Discussion

A summary of species identified at Aldabra at the eight fixed survey sites by AMP from 1999 to 2008 is shown in Appendix 7 of Stobart et al. (2021). These lists were compiled from both the quantified surveys conducted by two divers along fixed transect lines at two depths (10m and 20m), added to any further species of fish seen in the area of the survey site. From 1999 to 2008 the total count at Aldabra varied from 200 to 228 species. (2004 is excluded from this summary because of incomplete surveys, and because no counts were done of additional species outside of the transect areas). The December 2021 count of 202 species falls within this range. However, this count is likely to be an under-estimate for the following reasons: (1) the number of divers surveying (one versus two); (2) the amount of time spent surveying at each site (typically two dives to complete the quantified surveys and the additional identifications versus one dive per location during this study); and (3) the reduced diversity of locations because no counts were taken at or in the vicinity of Site 5 (extreme east of Aldabra), Site 7 nor Site 8 (south west Aldabra). Finally (4), the quantified AMP 1999 – 2008 surveys also included cryptic species.

Further analysis of the existing data will be reported in due course. However, a more accurate picture of the changes in reef species diversity will require all eight original sites to be resurveyed in the same manner as they were from 1999 to 2008.

References

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Appendix

Appendix 1. Aldabra December 2021 fish species checklist by site sorted by family

Family	Genus	Species	Aldabra (Au Parc)	Aldabra (Anse Malabar)	Aldabra (Anse Var)	Aldabra (between Sites 2&3)	Aldabra (NW)	Aldabra (Polymnie)	Aldabra (Houareau)	Aldabra (Site 1)	Site presence count
Acanthuridae	Acanthurus	leucosternon	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Acanthuridae	Acanthurus	nigricauda	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Acanthuridae	Zebrasoma	scopas	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Acanthuridae	Naso	brevirostris	Χ	Χ	Χ		Χ	Χ	Χ	Χ	7
Acanthuridae	Acanthurus	thompsoni	Χ	Χ		Χ	Χ	Χ	Χ		6
Acanthuridae	Ctenochaetus	truncatus	Χ		Χ	Χ	Χ		Χ	Χ	6
Acanthuridae	Ctenochaetus	binotatus	Χ	Χ	Χ	Χ		Χ			5
Acanthuridae	Ctenochaetus	striatus		Χ				Χ	Χ	Χ	4
Acanthuridae	Naso	elegans			Χ		Χ	Χ		Χ	4
Acanthuridae	Acanthurus	dussumieri			Χ		Χ	Χ			3
Acanthuridae	Acanthurus	xanthopterus			Χ		Χ				2
Acanthuridae	Zebrasoma	desjardinii				Χ	Χ				2
Acanthuridae	Naso	unicornis						Χ			1
Apogonidae	Apogon	apogonoides			Χ		Χ				2
Apogonidae	Cheilodipterus	artus								Χ	1
Balistidae	Melichthys	indicus	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Balistidae	Balistapus	undulatus	Χ		Χ	Χ	Χ	Χ	Χ		6
Balistidae	Sufflamen	bursa		Χ		Χ	Χ	Χ	Χ	Χ	6
Balistidae	Odonus	niger	Χ	Χ				Χ	Χ		4
Balistidae	Balistoides	conspicillum	Χ			Χ				Χ	3
Balistidae	Melichthys	niger	Χ	Χ					Χ		3
Balistidae	Sufflamen	chrysopterum	Χ			Χ			Χ		3

Family	Genus	Species	Aldabra (Au Parc)	Aldabra (Anse Malabar)	Aldabra (Anse Var)	Aldabra (between Sites 2&3)	Aldabra (NW)	Aldabra (Polymnie)	Aldabra (Houareau)	Aldabra (Site 1)	Site presence count
Balistidae	Balistoides	viridescens						Χ			1
Blenniidae	Plagiotremus	rhinorhynchos		Χ	Χ		Χ		Χ		4
Blenniidae	Plagiotremus	tapeinosoma		Χ	Χ	Χ		Χ			4
Blenniidae	Ecsenius	midas			Χ		Χ		Χ		3
Caesionidae	Pterocaesio	tile	Х		Χ	Χ	Χ			Χ	5
Carangidae	Caranx	melampygus	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Carangidae	Caranx	ignobilis		Χ					Χ		2
Carangidae	Gnathanodon	speciosus					Χ		Χ		2
Carangidae	Trachinotus	blochii			Χ						1
Carcharhinidae	Carcharhinus	albimarginatus *					Χ	Χ			2
Carcharhinidae	Carcharhinus	amblyrhynchos		Х							1
Carcharhinidae	Triaenodon	obesus								Χ	1
Chaetodontidae	Chaetodon	auriga	X	Х	Χ	Χ	Х	Х	Χ		7
Chaetodontidae	Chaetodon	kleinii	Х	Х	Χ	Х	Χ	Χ	Χ		7
Chaetodontidae	Chaetodon	lunula	Х	Х		Х	Χ	Χ	Χ	Χ	7
Chaetodontidae	Hemitaurichthys	zoster	Х	Х	Χ	Х	Χ	Χ	Χ		7
Chaetodontidae	Chaetodon	bennetti		Х	Χ	Х	Χ	Χ	Χ		6
Chaetodontidae	Chaetodon	guttatissimus		Х	Χ	Χ	Χ	Х	Χ		6
Chaetodontidae	Chaetodon	meyeri	Х	Χ	Χ		Χ	Х	Х		6
Chaetodontidae	Chaetodon	falcula		Х		Х		Х	Х	Χ	5
Chaetodontidae	Chaetodon	madagaskariensis	Х			Х	Χ	Х	Х		5
Chaetodontidae	Chaetodon	melannotus		Х			Χ	Х	Х	Χ	5
Chaetodontidae	Chaetodon	trifasciatus	Х	Χ	Χ			Χ	Х		5
Chaetodontidae	Forcipiger	flavissimus	Х	Χ	Χ	Χ			Χ		5
Chaetodontidae	Chaetodon	interruptus	Х	Х	Χ		Χ				4
Chaetodontidae	Heniochus	monoceros	Х			Χ	X		Х		4
Chaetodontidae	Chaetodon	oxycephalus			Χ		Χ				2
Chaetodontidae	Chaetodon	xanthocephalus	Х	X							2
Chaetodontidae	Heniochus	acuminatus		Х			Х				2
Chaetodontidae	Chaetodon	lineolatus								X	1
Chaetodontidae	Chaetodon	trifascialis								Χ	1
Chaetodontidae	Chaetodon	zanzibariensis								Χ	1
Chaetodontidae	Heniochus	diphreutes								Χ	1
Cirrhitidae	Paracirrhites	arcatus	Х		Χ	Χ	Χ	Χ			5
Cirrhitidae	Paracirrhites	forsteri	_	Х	Χ		Х	Χ	X		5
Cirrhitidae	Cirrhitichthys	oxycephalus	X						Χ		2
Dasyatidae	Pateobatis	fai *	Χ				• .				1
Ephippidae	Platax	teira					Х		Х		2

Family	Genus	Species	Aldabra (Au Parc)	Aldabra (Anse Malabar)	Aldabra (Anse Var)	Aldabra (between Sites 2&3)	Aldabra (NW)	Aldabra (Polymnie)	Aldabra (Houareau)	Aldabra (Site 1)	Site presence count
Ephippidae	Platax	orbicularis								Χ	1
Ginglymostomatidae	Nebrius	ferrugineus		Χ			Χ				2
Gobiidae	Valenciennea	strigata		Χ			Χ	Χ			3
Gobiidae	Amblyeleotris	periophthalma						Χ			1
Gobiidae	Gnatholepis	anjerensis							Χ		1
Gobiidae	Valenciennea	puellaris								Χ	1
Haemulidae	Plectorhinchus	vittatus		Χ	Χ	Χ	Χ		Χ		5
Haemulidae	Plectorhinchus	plagiodesmus	Χ				Χ	Χ	Χ		4
Holocentridae	Sargocentron	caudimaculatum	Χ	Χ	Χ	Χ	Χ		Χ		6
Holocentridae	Myripristis	berndti	X	Χ		Χ			Χ		4
Holocentridae	Myripristis	vittata	Χ		Χ		Χ		Χ		4
Holocentridae	Sargocentron	spiniferum		Χ		Χ	Χ	Χ			4
Holocentridae	Myripristis	adusta	X							Χ	2
Holocentridae	Myripristis	murdjan				Χ					1
Holocentridae	Sargocentron	diadema								Χ	1
Labridae	Halichoeres	cosmetus	X	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Labridae	Thalassoma	hebraicum	X	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Labridae	Gomphosus	caeruleus	X	Χ	Χ	Χ	Χ	Χ		Χ	7
Labridae	Halichoeres	hortulanus	X	Χ	Χ	Χ	Χ	Χ	Χ		7
Labridae	Pseudodax	moluccanus	X	Χ	Χ	Χ	Χ	Χ	Χ		7
Labridae	Bodianus	axillaris	X	Χ	Χ	Χ		Χ	Χ		6
Labridae	Bodianus	diana	X	Χ		Χ	Χ	Χ	Χ		6
Labridae	Cirrhilabrus	exquisitus	X		Χ	Χ	Χ	Χ	Χ		6
Labridae	Anampses	meleagrides		Χ	Χ	Χ	Χ		Χ		5
Labridae	Coris	caudimacula				Χ	Χ	Χ	Χ	Χ	5
Labridae	Labroides	bicolor		Χ	Χ	Χ		Χ		Χ	5
Labridae	Pseudocheilinus	hexataenia	X			Χ	Χ	Χ	Χ		5
Labridae	Thalassoma	amblycephalum	X		Χ	Χ	Χ		Χ		5
Labridae	Bodianus	anthioides		Χ		Χ	Χ			Χ	4
Labridae	Cheilinus	undulatus	Х		Χ			Χ		Χ	4
Labridae	Epibulus	insidiator	Х			Χ			Χ	Χ	4
Labridae	Hemigymnus	fasciatus	Х			Χ		Χ	Χ		4
Labridae	Hologymnosus	doliatus	Х			Χ	Χ		Χ		4
Labridae	Labroides	dimidiatus	Χ	Χ	Χ		Χ				4
Labridae	Labropsis	xanthonota	Χ		Χ		Χ			Χ	4
Labridae	Pseudocheilinus	evanidus			Χ	Χ	Χ			Χ	4
Labridae	Stethojulis	albovittata		Χ			Χ	Χ		Χ	4
Labridae	Thalassoma	janseni			Χ	Χ	Χ			Χ	4

Family	Genus	Species	Aldabra (Au Parc)	Aldabra (Anse Malabar)	Aldabra (Anse Var)	Aldabra (between Sites 2&3)	Aldabra (NW)	Aldabra (Polymnie)	Aldabra (Houareau)	Aldabra (Site 1)	Site presence count
Labridae	Cheilinus	fasciatus		Χ		Χ			Χ		3
Labridae	Coris	formosa			Χ	Χ		Χ			3
Labridae	Thalassoma	hardwicke	X			Χ		Χ			3
Labridae	Thalassoma	lunare		Χ	Χ	Χ					3
Labridae	Anampses	lineatus					Χ		Χ		2
Labridae	Bodianus	bilunulatus	X							Χ	2
Labridae	Coris	cuvieri		Χ			Χ				2
Labridae	Hologymnosus	annulatus							Χ	Χ	2
Labridae	Pseudocheilinus	octotaenia		Χ						Χ	2
Labridae	Anampses	caeruleopunctatus							Χ		1
Labridae	Anampses	twistii						Χ			1
Labridae	Coris	aygula	X								1
Labridae	Halichoeres	vrolikii								Χ	1
Labridae	Macropharyngodon	bipartitus			Χ						1
Labridae	Pseudocoris	heteroptera								Χ	1
Labridae	Pseudojuloides	kaleidos								Χ	1
Lethrinidae	Monotaxis	grandoculis		Χ	Χ	Χ	Χ	Χ	Χ		6
Lethrinidae	Gnathodentex	aureolineatus		Χ		Χ			Χ		3
Lethrinidae	Lethrinus	obsoletus		Χ					Χ		2
Lethrinidae	Lethrinus	xanthochilus								Χ	1
Lutjanidae	Lutjanus	bohar	Х	Х	Х	Χ	Χ	Χ	Χ		7
Lutjanidae	Aphareus	furca	Х		Χ		Χ	Χ			4
Lutjanidae	Aprion	virescens	Х			Χ			Χ		3
Lutjanidae	Lutjanus	gibbus	Х		Х		Χ				3
Lutjanidae	Lutjanus	kasmira			Χ	Χ	Χ				3
Lutjanidae	Lutjanus	monostigma	Х		Χ		Χ				3
Lutjanidae	Macolor	niger	Х				Χ	Х			3
Lutjanidae	Lutjanus	bengalensis								Χ	1
Mobulidae	Aetobatis	narinari	Χ					Χ			2
Monacanthidae	Cantherhines	pardalis				Χ					1
Mullidae	Parupeneus	macronema	Х	Х	Х	Χ	Χ	Х	Χ	Χ	8
Mullidae	Parupeneus	bifasciatus		Χ	Χ	Χ	Χ	Χ	Χ	Χ	7
Mullidae	Parupeneus	cyclostomus		Χ			Χ		Χ	Χ	4
Mullidae	Mulloidichthys	vanicolensis		Χ		Χ					2
Mullidae	Parupeneus	pleurostigma		Χ				Χ			2
Ostraciidae	Ostracion	meleagris					Χ				1
Pinguipedidae	Parapercis	punctulata				Χ					1
Pomacanthidae	Pomacanthus	imperator	Х	Х	Х	Χ	Х	Х	Χ	Х	8

Family	Genus	Species	Aldabra (Au Parc)	Aldabra (Anse Malabar)	Aldabra (Anse Var)	Aldabra (between Sites 2&3)	Aldabra (NW)	Aldabra (Polymnie)	Aldabra (Houareau)	Aldabra (Site 1)	Site presence count
Pomacanthidae	Centropyge	multispinis	Χ		Χ	Χ	Χ	Χ	Χ	Χ	7
Pomacanthidae	Apolemichthys	trimaculatus	Χ	Χ	Χ	Χ		Χ	Χ		6
Pomacanthidae	Pygoplites	diacanthus		Χ	Χ			Χ	Χ		4
Pomacanthidae	Centropyge	acanthops			Χ		Χ				2
Pomacanthidae	Centropyge	debelius				Χ	Χ				2
Pomacanthidae	Centropyge	bispinosa								Χ	1
Pomacanthidae	Pomacanthus	annularis								Χ	1
Pomacentridae	Chromis	nigrura	X	Χ	Χ	Χ		Χ	Χ		6
Pomacentridae	Chromis	weberi	X	Χ	Χ	Χ	Χ		Χ		6
Pomacentridae	Dascyllus	trimaculatus		Χ	Χ	Χ	Χ	Χ	Χ		6
Pomacentridae	Chromis	dimidiata		Χ	Χ	Χ		Χ	Χ		5
Pomacentridae	Lepidozygus	tapeinosoma			Χ	Χ	Χ	Χ	Χ		5
Pomacentridae	Amphiprion	fuscocaudatus	Χ		Χ	Χ				Χ	4
Pomacentridae	Chromis	ternatensis		Χ	Χ	Χ				Χ	4
Pomacentridae	Pomacentrus	caeruleus	X	Χ		Χ		Χ			4
Pomacentridae	Chromis	opercularis		Χ			Χ		Χ		3
Pomacentridae	Plectroglyphidodon	lacrymatus	Х			Χ			Χ		3
Pomacentridae	Chromis	atripectoralis				Χ	Χ				2
Pomacentridae	Dascyllus	carneus			Χ		Χ				2
Pomacentridae	Plectroglyphidodon	johnstonianus						Χ		Χ	2
Pomacentridae	Amphiprion	akallopisos				Х					1
Pomacentridae	Chromis	viridis		Х							1
Pomacentridae	Chromis	xutha			Χ						1
Ptereleotridae	Nemateleotris	magnifica					Χ	Х	Χ		3
Scaridae	Chlorurus	sordidus	Х	Χ	Х	Х		Х	Χ		6
Scaridae	Scarus	tricolor	Х		Х	Х	Χ	Χ	Χ		6
Scaridae	Chlorurus	strongylocephalus	Х	Х			Х	Χ	Χ		5
Scaridae	Scarus	caudofasciatus	Х				Х				2
Scaridae	Scarus	rubroviolaceus						Х	Χ		2
Scaridae	Bolbometopon	muricatum								Χ	1
Scaridae	Hipposcarus	harid						Χ			1
Scaridae	Scarus	psittacus								Χ	1
Scorpaenidae	Scorpaenopsis	oxycephala								Χ	1
Serranidae	Pseudanthias	squamipinnis	X		X	X	X	X	X	Χ	7
Serranidae	Variola	louti	Χ	X	X	Χ	X	X	X		7
Serranidae	Epinephelus	fasciatus		Х	X		X	X	X		5
Serranidae	Nemanthias	carberryi	X	• .	Х		Х	X	X		5
Serranidae	Cephalopholis	argus	Χ	Х				Х	Х		4

Family	Genus	Species	Aldabra (Au Parc)	Aldabra (Anse Malabar)	Aldabra (Anse Var)	Aldabra (between Sites 2&3)	Aldabra (NW)	Aldabra (Polymnie)	Aldabra (Houareau)	Aldabra (Site 1)	Site presence count
Serranidae	Cephalopholis	miniata	Χ	Χ	Χ		Χ				4
Serranidae	Cephalopholis	nigripinnis		Χ	Χ	Χ			Χ		4
Serranidae	Dermatolepis	striolata	Χ		Χ	Χ			Χ		4
Serranidae	Epinephelus	tukula	Χ	Χ	Χ		Χ				4
Serranidae	Gracila	albomarginata			Χ		Χ		Χ		3
Serranidae	Pseudanthias	evansi	Χ	Χ				Χ			3
Serranidae	Epinephelus	fuscoguttatus						Χ	Χ		2
Serranidae	Pseudanthias	cooperi					Χ			Χ	2
Serranidae	Aethaloperca	rogaa		Χ							1
Serranidae	Cephalopholis	sexmaculata								Χ	1
Serranidae	Epinephelus	lanceolatus								Χ	1
Serranidae	Epinephelus	macrospilos								Χ	1
Serranidae	Epinephelus	spilotoceps							Χ		1
Serranidae	Plectropomus	areolatus								Χ	1
Serranidae	Plectropomus	laevis			Χ						1
Serranidae	Plectropomus	punctatus								Χ	1
Siganidae	Siganus	stellatus	Χ		Χ						2
Siganidae	Siganus	argenteus							Χ		1
Sphyraenidae	Sphyraena	barracuda								Χ	1
Synodontidae	Synodus	jaculum				Χ		Χ			2
Synodontidae	Saurida	gracilis								Χ	1
Synodontidae	Synodus	indicus								Χ	1
Tetraodontidae	Arothron	nigropunctatus	Χ	Χ	Χ	Χ	Χ		Χ		6
Tetraodontidae	Canthigaster	valentini				Χ	Χ				2
Tetraodontidae	Arothron	caeruleopunctatus *							Χ		1
Tetraodontidae	Arothron	meleagris						Χ			1
Tetraodontidae	Canthigaster	coronata								Χ	1
Zanclidae	Zanclus	cornutus	Х	Х	Х		Х	Х	Х		6
Totals			84	85	88	88	99	86	96	69	
Total Species count		202									

Appendix 2. Aldabra December 2021 fish species checklist by site sorted by number ubiquitousness and family.

			(S	abar)	ar)	es 2&3)	_	ie)	an)	•	count
Family	Genus	Species	Aldabra (Au Parc)	Aldabra (Anse Malabar)	Aldabra (Anse Var)	Aldabra (between Sites 2&3)	Aldabra (NW)	Aldabra (Polymnie)	Aldabra (Houareau)	Aldabra (Site 1)	No. Site presence count
Acanthuridae	Acanthurus	leucosternon	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Acanthuridae	Acanthurus	nigricauda	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Acanthuridae	Zebrasoma	scopas	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Balistidae	Melichthys	indicus	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Carangidae	Caranx	melampygus	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Labridae	Halichoeres	cosmetus	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Labridae	Thalassoma	hebraicum	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Mullidae	Parupeneus	macronema	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Pomacanthidae	Pomacanthus	imperator	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	8
Acanthuridae	Naso	brevirostris	Χ	Χ	Χ		Χ	Χ	Χ	Χ	7
Chaetodontidae	Chaetodon	auriga	Χ	Χ	Χ	Χ	Χ	Χ	Χ		7
Chaetodontidae	Chaetodon	kleinii	Χ	Χ	Χ	Χ	Χ	Χ	Χ		7
Chaetodontidae	Chaetodon	lunula	Χ	Χ		Χ	Χ	Χ	Χ	Χ	7
Chaetodontidae	Hemitaurichthys	zoster	Χ	Χ	Χ	Χ	Χ	Χ	Χ		7
Labridae	Gomphosus	caeruleus	Χ	Χ	Χ	Χ	Χ	Χ		Χ	7
Labridae	Halichoeres	hortulanus	Χ	Χ	Χ	Χ	Χ	Χ	Χ		7
Labridae	Pseudodax	moluccanus	Χ	Χ	Χ	Χ	Χ	Χ	Χ		7
Lutjanidae	Lutjanus	bohar	Χ	Χ	Χ	Χ	Χ	Χ	Χ		7
Mullidae	Parupeneus	bifasciatus		Χ	Χ	Χ	Χ	Χ	Χ	Χ	7
Pomacanthidae	Centropyge	multispinis	Χ		Χ	Χ	Χ	Χ	Χ	Χ	7
Serranidae	Pseudanthias	squamipinnis	X		Χ	Χ	Χ	Χ	Χ	Χ	7
Serranidae	Variola	louti	X	Χ	Χ	Χ	Χ	Χ	Χ		7
Acanthuridae	Acanthurus	thompsoni	X	Χ		Χ	Χ	Χ	Χ		6
Acanthuridae	Ctenochaetus	truncatus	X		Χ	Χ	Χ		Χ	Χ	6
Balistidae	Balistapus	undulatus	Х		Χ	Χ	Χ	Χ	Χ		6
Balistidae	Sufflamen	bursa		Χ		Χ	Χ	Χ	Χ	Χ	6
Chaetodontidae	Chaetodon	bennetti		Χ	Χ	Χ	Χ	Χ	Χ		6
Chaetodontidae	Chaetodon	guttatissimus		Χ	Х	Χ	Х	Χ	Χ		6
Chaetodontidae	Chaetodon	meyeri	Х	Χ	Χ		Χ	Χ	Χ		6
Holocentridae	Sargocentron	caudimaculatum	Х	Χ	Х	Χ	Х		Χ		6
Labridae	Bodianus	axillaris	Х	Χ	Х	Х		Χ	Χ		6
Labridae	Bodianus	diana	Х	Χ		Χ	Χ	Χ	Χ		6
Labridae	Cirrhilabrus	exquisitus	Х		Χ	Χ	Χ	Χ	Χ		6
Lethrinidae	Monotaxis	grandoculis		Χ	Χ	Χ	Χ	Χ	Χ		6
Pomacanthidae	<i>Apolemichthys</i>	trimaculatus	Х	Χ	Χ	Χ		Χ	Χ		6
Pomacentridae	Chromis	nigrura	Х	Χ	Χ	Χ		Χ	Χ		6

Family	Genus	Species	Aldabra (Au Parc)	Aldabra (Anse Malabar)	Aldabra (Anse Var)	Aldabra (between Sites 2&3)	Aldabra (NW)	Aldabra (Polymnie)	Aldabra (Houareau)	Aldabra (Site 1)	No. Site presence count
Pomacentridae	Chromis	weberi	Χ	Х	Χ	Χ	Χ		Χ		6
Pomacentridae	Dascyllus	trimaculatus		Χ	Χ	Χ	Χ	Χ	Χ		6
Scaridae	Chlorurus	sordidus	Χ	Χ	Χ	Χ		Χ	Χ		6
Scaridae	Scarus	tricolor	Χ		Χ	Χ	Χ	Χ	Χ		6
Tetraodontidae	Arothron	nigropunctatus	Χ	Χ	Χ	Χ	Χ		Χ		6
Zanclidae	Zanclus	cornutus	Χ	Χ	Χ		Χ	Χ	Χ		6
Acanthuridae	Ctenochaetus	binotatus	Χ	Χ	Χ	Χ		Χ			5
Caesionidae	Pterocaesio	tile	Χ		Χ	Χ	Χ			Χ	5
Chaetodontidae	Chaetodon	falcula		Χ		Χ		Χ	Χ	Χ	5
Chaetodontidae	Chaetodon	madagaskariensis	Χ			Χ	Χ	Χ	Χ		5
Chaetodontidae	Chaetodon	melannotus		Χ			Χ	Χ	Χ	Χ	5
Chaetodontidae	Chaetodon	trifasciatus	Χ	Χ	Χ			Χ	Χ		5
Chaetodontidae	Forcipiger	flavissimus	Χ	Χ	Χ	Χ			Χ		5
Cirrhitidae	Paracirrhites	arcatus	Χ		Χ	Χ	Χ	Χ			5
Cirrhitidae	Paracirrhites	forsteri		Χ	Χ		Χ	Χ	Χ		5
Haemulidae	Plectorhinchus	vittatus		Χ	Χ	Χ	Χ		Χ		5
Labridae	Anampses	meleagrides		Χ	Χ	Χ	Χ		Χ		5
Labridae	Coris	caudimacula				Χ	Χ	Χ	Χ	Χ	5
Labridae	Labroides	bicolor		Χ	Χ	Χ		Χ		Χ	5
Labridae	Pseudocheilinus	hexataenia	X			Χ	Χ	Χ	Χ		5
Labridae	Thalassoma	amblycephalum	Χ		Χ	Χ	Χ		Χ		5
Pomacentridae	Chromis	dimidiata		Χ	Χ	Χ		Χ	Χ		5
Pomacentridae	Lepidozygus	tapeinosoma			Χ	Χ	Χ	Χ	Χ		5
Scaridae	Chlorurus	strongylocephalus	Χ	Χ			Χ	Χ	Χ		5
Serranidae	Epinephelus	fasciatus		Χ	Χ		Χ	Χ	Χ		5
Serranidae	Nemanthias	carberryi	Χ		Χ		Χ	Χ	Χ		5
Acanthuridae	Ctenochaetus	striatus		Χ				Χ	Χ	Χ	4
Acanthuridae	Naso	elegans			Χ		Χ	Χ		Χ	4
Balistidae	Odonus	niger	Χ	Χ				Χ	Χ		4
Blenniidae	Plagiotremus	rhinorhynchos		Χ	Χ		Χ		Χ		4
Blenniidae	Plagiotremus	tapeinosoma		Χ	Χ	Χ		Χ			4
Chaetodontidae	Chaetodon	interruptus	Χ	Χ	Χ		Χ				4
Chaetodontidae	Heniochus	monoceros	X			Χ	Χ		Χ		4
Haemulidae	Plectorhinchus	plagiodesmus	Χ				Χ	Χ	Χ		4
Holocentridae	Myripristis	berndti	Χ	Χ		Χ			Χ		4
Holocentridae	Myripristis	vittata	Χ		Χ		Χ		Χ		4
Holocentridae	Sargocentron	spiniferum		Χ		Χ	Χ	Χ			4
Labridae	Bodianus	anthioides		Χ		Χ	Χ			Χ	4

Family	Genus	Species	Aldabra (Au Parc)	Aldabra (Anse Malabar)	Aldabra (Anse Var)	Aldabra (between Sites 2&3)	Aldabra (NW)	Aldabra (Polymnie)	Aldabra (Houareau)	Aldabra (Site 1)	No. Site presence count
Labridae	Cheilinus	undulatus	Χ		Χ			Χ		Χ	4
Labridae	Epibulus	insidiator	Χ			Χ			Χ	Χ	4
Labridae	Hemigymnus	fasciatus	Χ			Χ		Χ	Χ		4
Labridae	Hologymnosus	doliatus	Χ			Χ	Χ		Χ		4
Labridae	Labroides	dimidiatus	Χ	Χ	Χ		Χ				4
Labridae	Labropsis	xanthonota	Χ		Χ		Χ			Χ	4
Labridae	Pseudocheilinus	evanidus			Χ	Χ	Χ			Χ	4
Labridae	Stethojulis	albovittata		Χ			Χ	Χ		Χ	4
Labridae	Thalassoma	janseni			Χ	Χ	Χ			Χ	4
Lutjanidae	Aphareus	furca	Χ		Χ		Χ	Χ			4
Mullidae	Parupeneus	cyclostomus		Χ			Χ		Χ	Χ	4
Pomacanthidae	Pygoplites	diacanthus		Χ	Χ			Χ	Χ		4
Pomacentridae	Amphiprion	fuscocaudatus	Х		Χ	Χ				Χ	4
Pomacentridae	Chromis	ternatensis		Χ	Х	Χ				Χ	4
Pomacentridae	Pomacentrus	caeruleus	Х	Χ		Χ		Χ			4
Serranidae	Cephalopholis	argus	Х	Χ				Χ	Χ		4
Serranidae	Cephalopholis	miniata	Х	Χ	Х		Χ				4
Serranidae	Cephalopholis	nigripinnis		Χ	Χ	Χ			Χ		4
Serranidae	Dermatolepis	striolata	Х		Χ	Χ			Χ		4
Serranidae	Epinephelus	tukula	Х	Χ	Х		Χ				4
Acanthuridae	Acanthurus	dussumieri			Χ		Χ	Χ			3
Balistidae	Balistoides	conspicillum	Х			Χ				Χ	3
Balistidae	Melichthys	niger	Х	Χ					Χ		3
Balistidae	Sufflamen	chrysopterum	Х			Χ			Χ		3
Blenniidae	Ecsenius	midas			Χ		Χ		Χ		3
Gobiidae	Valenciennea	strigata		Χ			Χ	Χ			3
Labridae	Cheilinus	fasciatus		Х		X			Χ		3
Labridae	Coris	formosa			Х	X		X			3
Labridae	Thalassoma	hardwicke	Х			X		Χ			3
Labridae	Thalassoma	lunare		X	Χ	X					3
Lethrinidae	Gnathodentex	aureolineatus		Χ		X			X		3
Lutjanidae	Aprion	virescens	X			Χ			Χ		3
Lutjanidae	Lutjanus	gibbus	Х		X		X				3
Lutjanidae	Lutjanus	kasmira			X	Χ	X				3
Lutjanidae	Lutjanus	monostigma	X		Х		X				3
Lutjanidae	Macolor	niger	Х	.,			X	Χ	.,		3
Pomacentridae	Chromis	opercularis	.,	Х		v	Х		X		3
Pomacentridae	Plectroglyphidodon	lacrymatus	Х			Х			Χ		3

Family	Genus	Species	Aldabra (Au Parc)	Aldabra (Anse Malabar)	Aldabra (Anse Var)	Aldabra (between Sites 2&3)	Aldabra (NW)	Aldabra (Polymnie)	Aldabra (Houareau)	Aldabra (Site 1)	No. Site presence count
Ptereleotridae	Nemateleotris	magnifica					Χ	Χ	Χ		3
Serranidae	Gracila	albomarginata			Χ		Χ		Χ		3
Serranidae	Pseudanthias	evansi	Χ	Χ				Χ			3
Acanthuridae	Acanthurus	xanthopterus			Χ		Χ				2
Acanthuridae	Zebrasoma	desjardinii				Χ	Χ				2
Apogonidae	Apogon	apogonoides			Χ		Χ				2
Carangidae	Caranx	ignobilis		Χ					Χ		2
Carangidae	Gnathanodon	speciosus					Χ		Χ		2
Carcharhinidae	Carcharhinus	albimarginatus *					Χ	Χ			2
Chaetodontidae	Chaetodon	oxycephalus			Χ		Χ				2
Chaetodontidae	Chaetodon	xanthocephalus	Х	Χ							2
Chaetodontidae	Heniochus	acuminatus		Χ			Χ				2
Cirrhitidae	Cirrhitichthys	oxycephalus	Х						Χ		2
Ephippidae	Platax	teira					Χ		Χ		2
Ginglymostomatidae	Nebrius	ferrugineus		Χ			Х				2
Holocentridae	Myripristis	adusta	Х							Χ	2
Labridae	Anampses	lineatus					Χ		Χ		2
Labridae	Bodianus	bilunulatus	Х							Χ	2
Labridae	Coris	cuvieri		Χ			Х				2
Labridae	Hologymnosus	annulatus							Χ	Χ	2
Labridae	Pseudocheilinus	octotaenia		Χ						Χ	2
Lethrinidae	Lethrinus	obsoletus		Χ					Χ		2
Mobulidae	Aetobatis	narinari	Х					Х			2
Mullidae	Mulloidichthys	vanicolensis		X		Х					2
Mullidae	Parupeneus	pleurostigma		Χ				Х			2
Pomacanthidae	Centropyge	acanthops			Χ		Χ				2
Pomacanthidae	Centropyge	debelius				X	X				2
Pomacentridae	Chromis	atripectoralis				Χ	X				2
Pomacentridae	Dascyllus	carneus			Χ		Χ				2
Pomacentridae	Plectroglyphidodon	johnstonianus						Χ		Х	2
Scaridae	Scarus	caudofasciatus	Х				Χ				2
Scaridae	Scarus	rubroviolaceus						X	X		2
Serranidae	Epinephelus	fuscoguttatus					v	Χ	Χ		2
Serranidae	Pseudanthias	cooperi			V		Х			Х	2
Siganidae	Siganus	stellatus	Х		Х	V		V			2
Synodontidae	Synodus	jaculum				X	V	Х			2
Tetraodontidae	Canthigaster	valentini				Х	Х	V			2
Acanthuridae	Naso	unicornis						Х			1

Family	Genus	Species	Aldabra (Au Parc)	Aldabra (Anse Malabar)	Aldabra (Anse Var)	Aldabra (between Sites 2&3)	Aldabra (NW)	Aldabra (Polymnie)	Aldabra (Houareau)	Aldabra (Site 1)	No. Site presence count
Apogonidae	Cheilodipterus	artus								Χ	1
Balistidae	Balistoides	viridescens						Χ			1
Carangidae	Trachinotus	blochii			Χ						1
Carcharhinidae	Carcharhinus	amblyrhynchos		Χ							1
Carcharhinidae	Triaenodon	obesus								Χ	1
Chaetodontidae	Chaetodon	lineolatus								Χ	1
Chaetodontidae	Chaetodon	trifascialis								Χ	1
Chaetodontidae	Chaetodon	zanzibariensis								Χ	1
Chaetodontidae	Heniochus	diphreutes								Χ	1
Dasyatidae	Pateobatis	fai *	X								1
Ephippidae	Platax	orbicularis								Χ	1
Gobiidae	Amblyeleotris	periophthalma						Χ			1
Gobiidae	Gnatholepis	anjerensis							Χ		1
Gobiidae	Valenciennea	puellaris								Χ	1
Holocentridae	Myripristis	murdjan				Χ					1
Holocentridae	Sargocentron	diadema								Χ	1
Labridae	Anampses	caeruleopunctatus							Χ		1
Labridae	Anampses	twistii						Χ			1
Labridae	Coris	aygula	Х								1
Labridae	Halichoeres	vrolikii								Χ	1
Labridae	Macropharyngodon	bipartitus			Χ						1
Labridae	Pseudocoris	heteroptera								Χ	1
Labridae	Pseudojuloides	kaleidos								Χ	1
Lethrinidae	Lethrinus	xanthochilus								Χ	1
Lutjanidae	Lutjanus	bengalensis								Χ	1
Monacanthidae	Cantherhines	pardalis				Χ					1
Ostraciidae	Ostracion	meleagris					Χ				1
Pinguipedidae	Parapercis	punctulata				Χ					1
Pomacanthidae	Centropyge	bispinosa								Χ	1
Pomacanthidae	Pomacanthus	annularis								Χ	1
Pomacentridae	Amphiprion	akallopisos				Χ					1
Pomacentridae	Chromis	viridis		Χ							1
Pomacentridae	Chromis	xutha			Χ						1
Scaridae	Bolbometopon	muricatum								Х	1
Scaridae	Hipposcarus	harid						Χ			1
Scaridae	Scarus	psittacus								Χ	1
Scorpaenidae	Scorpaenopsis	oxycephala								Χ	1
Serranidae	Aethaloperca	rogaa		Χ							1

Family	Genus	Species	Aldabra (Au Parc)	Aldabra (Anse Malabar)	Aldabra (Anse Var)	Aldabra (between Sites 2&3)	Aldabra (NW)	Aldabra (Polymnie)	Aldabra (Houareau)	Aldabra (Site 1)	No. Site presence count
Serranidae	Cephalopholis	sexmaculata								Χ	1
Serranidae	Epinephelus	lanceolatus								Χ	1
Serranidae	Epinephelus	macrospilos								Χ	1
Serranidae	Epinephelus	spilotoceps							Χ		1
Serranidae	Plectropomus	areolatus								Χ	1
Serranidae	Plectropomus	laevis			Χ						1
Serranidae	Plectropomus	punctatus								Χ	1
Siganidae	Siganus	argenteus							Χ		1
Sphyraenidae	Sphyraena	barracuda								Χ	1
Synodontidae	Saurida	gracilis								Χ	1
Synodontidae	Synodus	indicus								Χ	1
Tetraodontidae	Arothron	caeruleopunctatus *							Χ		1
Tetraodontidae	Arothron	meleagris						Χ			1
Tetraodontidae	Canthigaster	coronata								Х	1
Totals			84	85	88	88	99	86	96	69	
Total Species count	202										