Tagging News

News from the ORI Cooperative Fish Tagging Project

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From the Tagging Officer...

Gareth Jordaan



Welcome to the 35th edition of the Tagging News. For nearly four decades the Tagging News has been communicating the results of the ORI Cooperative Fish Tagging Project (ORI-CFTP) to our members and has successfully promoted ethical angling while tracking the growth rates and movement patterns of many common linefish species caught along the southern African coast.

Over the past couple of years there have been several studies

looking at the role that projects like the ORI-CFTP play in influencing angler behaviour and conservation awareness. In 2021, ORI conducted a survey of ORI-CFTP members with the aim to critically assess the contribution that the project has had on the marine recreational angling community in South Africa. Not surprisingly, the survey found that the ORI-CFTP has indeed made a considerable contribution towards improving the conservation awareness and behaviour of marine recreational anglers (Mann-Lang et al. Submitted). Furthermore, a study by Potts et al. (2021) identified the ORI-CFTP as being one of the longest ongoing operational citizen science projects of its kind in Africa. The large number of anglers that have joined the project have not only learnt about tag and release, but also about the importance of correct fish capture and handling procedures to ensure their greatest chance of survival after release. The members of the ORI-CFTP have also had the chance to gain a better understanding of the movement patterns and growth rates of many linefish species, and this information has contributed towards the improved conservation and management of these species. Ultimately this amazing project would not be possible with the ongoing support and dedication of our tagging members, and we are extremely grateful for all your efforts!

The year 2021 was a special year for the ORI-CFTP as we saw the highest number of new members join the project (n = 351) since 1985. We also had a new record for the number of fish tagged in a single year (n = 13347) with an associated high recapture rate of 7.9%! With the decreased lockdown regulations, increased angler enthusiasm to get out and fish again, as well as several new MPA monitoring projects starting up (**See table on page 12**), it is understandable why we saw these high numbers of fish tagged in 2021. Overall, the total number of fish tagged (n = 364089) and recaptured (n = 22619) since the inception of the ORI-CFTP is a truly exceptional effort!

In 2021, our top tagger was Francois van Zyl with 335 tag

releases followed by, for the second year in a row, Mark Galpin with 290 fish tagged. Mark also had a remarkable 36 of his tagged fish recaptured in 2021 (see page 6-7). However, we would like to stress that the number of fish you tag is not a competition. Rather the way you catch, handle, tag and release your fish is far more important. Ensuring that your tagging data is accurately recorded and sent back to the Tagging Officer is equally important. Yet again galjoen was the top species tagged in 2021 with 1719 tag releases (nearly 500 more than last year), followed by dusky kob with 1 351 tag releases. Shad/elf managed to sneak back into the top 10 in 2021, with spotted gullysharks making a surprise reappearance beating bronze whaler/copper sharks (page 5).

In this year's Tagging News you can look forward to reading some great articles on uncovering the movement mysteries of giant kingfish (page 3) and finding out about the interesting work that is being done by the Dwesa-Cwebe Marine Protected Area Monitoring Project (page 16). We have also included a short article on the controversial 'drone fishing issue' and the stance that the ORI-CFTP has towards this (page 4), as well as an interesting article on garrick recaptures in the Zandvlei Estuary (page 22). Our focus species for this year is the whitespotted wedgefish (better known in South Africa as the giant sandshark). The ORI team published two papers on the movement patterns, growth rates and local population status of this species in 2021 (page 23), which we are sure you will find very interesting.

For those of you on social media, please remember to give the ORITag FB page a like, and share it with your angling friends. We also encourage those of you who have not yet seen our Instructional tagging videos to give them a watch and encourage other anglers to watch them, especially those who may need a bit of extra hands-on advice. Finally, a big THANK YOU to all our tagging members for the fantastic job and continued support you have given the ORI-CFTP over the years! We sincerely hope that you enjoy this online version of the Tagging News. Tight-lines and happy tagging!

Acknowledgements: Financial and administrative support from the South African Association for Marine Biological Research and the KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs is gratefully acknowledged. We also thank Hallprint© Australia for their excellent service and on-going supply of high-quality tags and applicators. Neels Koekemoer is thanked for his assistance in fitting handles to the tag applicators in 2021. A special thanks to Marius Els, Derrick Khumalo and Xolani Mselegu for their efforts in capturing and validating the tagging data, as well as for attaching the thousands of tags to tag cards.

Uncovering giant kingfish movement

By Russell Dixon, Rhodes University

Giant kingfish, also known as giant trevally (GTs), are globally iconic apex marine predators. They are important role-players in several ecosystems and fisheries around the world. Locally, they are highly prized by recreational anglers. If you have ever been lucky enough to hook into one of these magnificent gamefish, then you will know exactly why...

However, these incredible fish are potentially vulnerable to overfishing. They are known to gather in their thousands at specific locations at predictable times. The world's largest recorded GT aggregation occurs seasonally off Ponta do Ouro in southern Mozambique, where the population spawns. Previously, some individuals were recorded returning into South African waters, indicating that the aggregating fish are a shared stock.

In light of this information, we wanted to find out as much as we could about the movement patterns of GTs from southern Africa. We started by analysing the available records from the ORI-CFTP, comprising 3 729 tagged GTs and 144 recaptures over 36 years. This produced some valuable information, so if you have ever tagged a GT or reported a recapture, we say a big thank you! Surprisingly, 74% of recaptures were recorded moving less than 1 km from their tagging location. This high percentage showed us that they either remain in the same locations for many years (i.e. residency), or that they return to the same locations (their home) after migrations (i.e. site fidelity). Overall, the average fish moved 15 km before recapture, and some long-distance movements were also recorded (i.e. up to 419 km - the greatest distance recorded from a GT recapture worldwide!). Adults moved significantly greater distances than juveniles. There were also seasonal trends, including evidence of a northward summer migration. However, no movements across the SA-Mozambique border were

recorded. This warranted closer investigation.

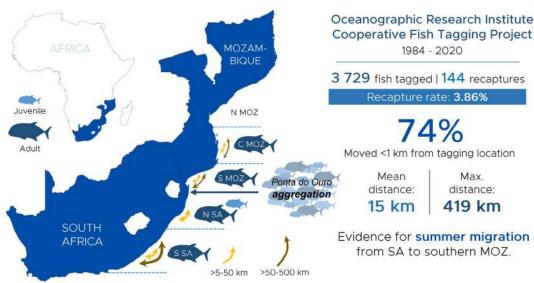
Therefore, 43 GTs were fitted with acoustic tags. These fish were monitored along the east coast for over five years with the Acoustic Tracking Array Platform's (ATAP) acoustic receivers. These receivers (there were over 100 of them) were able to detect the presence of an acoustically tagged fish if it swam within a few hundred metres of them, giving us some detailed movement information.

The results were startlingly clear. ALL adult GTs migrated to the Ponta do Ouro aggregation site in southern Mozambique basically EVERY year on record. Some individuals swam over 630 km to get there - a distance that they covered in just one week! The peak of the spawning season is November – January, and they spawn on the full moons around these months. After spawning, they return to their individual home ranges, year after year. For example, some fish live in the iSimangaliso Marine Protected Area, while others live down near Port St. Johns in the Eastern Cape, and others live somewhere in between. So, the results from acoustic telemetry agreed with the ORI-CFTP tag-recapture information, and also helped to fill in many of the finer details.

Another largescale gathering of GTs happens in the northeastern corner of the Eastern Cape, but this time in a river system! Far upstream in the Mtentu Estuary, many hundreds of GTs can sometimes be seen gently circling together near the water's surface during the spring-summer period. This strange behaviour has attracted global attention and invited much speculation as to why they do this.

Ten of these fish (some more than 100 cm FL) were fitted with acoustic tags, from which distinct and fascinating movement patterns were detected by three acoustic receivers placed at strategic points in the estuary. Almost every day that the tagged fish were present in the estuary,





they were detected near the mouth before dawn, after which they swam far (regularly 4 km) upstream to spend the daylight hours, before returning to the mouth or sea in the evenings. However, there were also days in between when almost all of them stayed at sea and did not enter the estuary at all. Some statistical modelling work soon showed that sea temperature was the main environmental variable linked with their daily presence/absence. When

the sea was warm, this tropical species was absent from the estuary, but when coastal upwelling due to the NE wind caused sea temperatures to plummet, the GTs escaped to the estuary using it as a thermal refuge. We now also think that this is why they can be seen on the surface of the Mtentu – utilising the warm surface freshwater layer that sits on top of the bottom cold saltwater layer.

Protecting these vulnerable aggregations is of the utmost importance for the future of this species in southern Africa. This broad body of GT research has already helped spur on improved management of the southern Mozambique aggregation site which falls within the Ponto do Ouro Partial Marine Reserve.

This is great news! More good news is that the Mtentu Estuary aggregation falls within a no-take protected area (i.e. no fishing allowed) within the Pondoland Marine Protected Area. However, it is ultimately up to all of us to make sure that we protect them and can look forward to plenty more tight lines with these majestic giants in the future!



Harry Fuchs with a GT he caught and tagged in Mozambique.

The ORI-CFTP's standpoint on drone fishing

By Bruce Mann, Oceanographic Research Institute

There has been a lot of debate around the drone fishing issue on social media and we believe it is important for us to set the record straight regarding how the ORI-CFTP has dealt with this issue. From the outset when drone fishing first started in South Africa (~2015), it was our understanding that drone fishing was illegal, both in terms of the Marine Living Resources Act (MLRA, No 18 of 1998) and in terms of the Civil Aviation legislation. We therefore refused to grant membership to new taggers who indicated that they fished with drones on their application forms. However, we are aware that some of our existing members started fishing with drones and were tagging fish that they caught using this method. As there was no clarity about the legality of drone fishing at that time, we were not able to stop our members who were fishing with drones.

The Department of Forestry, Fisheries and the Environment (DFFE) has released a notice which makes it clear that the

use of drones for the purposes of recreational fishing is illegal in terms of the MLRA. This notice was upheld in a recent court challenge by the drone fishing industry. The ORI-CFTP supports and abides by the relevant legislation.

For more information on this issue please see the SAAMBR/ ORI statement on drone fishing: SAAMBR Statement on the regulation of recreational fishing with drones - SAAMBR

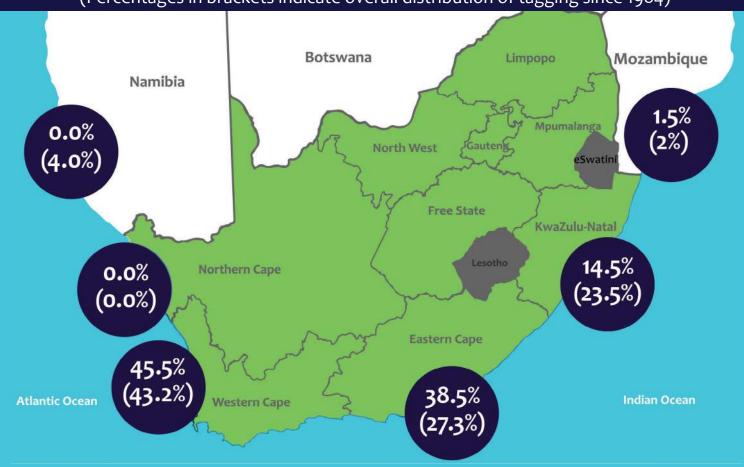
If you are interested in a global perspective of drone fishing, please see the following publication: Winkler AC, Butler ED, Attwood CG, Mann BQ, Potts WM. 2021. The emergence of marine recreational drone fishing: regional trends and emerging concerns. *Ambio* 51(3): 638-651.

https://doi.org/10.1007/s13280-021-01578-y



Percentage of fish tagged along the Southern African coast in 2021

(Percentages in brackets indicate overall distribution of tagging since 1984)



Top 10 species tagged in 2021

(percentages in brackets indicate overall composition of tagging since 1984)



Top Taggers: 15 or more fish tagged in 2021

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Member name	2021 tag releases	Total taggings	2021 tag recap- tures	Total tag recap- tures	% Recapt.
FRANCOIS VAN ZYL	335	698	8	31	4%
MARK GALPIN	290	1 057	36	101	10%
VIVIENNE DAMES	272	272	7	7	3%
CHARLES LILFORD	233	3 326	10	144	4%
JOHN LUEF	161	815	14	82	10%
DONAVAN COLE	160	1 143	6	31	3%
SHAWN MEY	148	1 558	9	76	5%
JACQUES DE LA HARPE	137	1 362	4	94	7%
DWAYNE BOSHOFF	136	251	6	8	3%
NIEL MALAN	130	581	5	32	6%
CHENELLE MORAN	125	172	6	10	6%
DIVAN COETZER	116	178	6	7	4%
NIC DE KOCK	112	2 163	14	146	7%
JEFF ASHERWOOD	112	747	12	59	8%
BRADLEY SPARG	105	2 600	10	153	6%
BERRIE FERREIRA	102	883	-	29	3%
RUAN VAN DER WALT	95	353	7	20	6%
STEFAN OOSTHUIZEN	94	525	8	42	8%
CRAIG NELSON	91	775	-	47	6%
KEVIN HUMPHREYS	89	2 463	4	117	5%
GRAHAM POLLARD	84	406	1	12	3%
LYLE TAYLOR	84	354	9	22	6%
ANDRE JOHAN MAC DONALD	81	91	1	1	1%
DYLAN LEES	81	121	4	4	3%
DUVAN VAN BREDA	81	103	3	3	3%
JAYSON JOOSTE	80	137	2	3	2%
MARCO WILDE- MANN	78	214	2	5	2%
TARRECK BYRNE	73	83	1	1	1%
GERRIE GROBLER	69	762	2	34	4%
NIKOS NICOLAIDIS	67	105	6	8	8%
GARETH GOUGH	66	617	12	53	9%
JUANDRÉ GELDENHUYS	62	124	2	4	3%
NOAH KLOPPER	60	81	1	1	1%
SHAUN VAN ZYL	59	383	2	14	4%
BOB SHEPHERD	59	780	3	28	4%
BRETT HARRIS	57	239	3	7	3%

Member name	2021 tag releases	Total taggings	2021 tag recap- tures	Total tag recap- tures	% Recapt.
MELISSA LUCAS	57	99	4	6	6%
STRINIVASEN ROLAND NAICKER	56	315	6	16	5%
MAARTEN MOLEN- AAR	56	730	4	43	6%
JACQUES H MATTHYSEN	55	147	2	12	8%
EDUARD STEYLS	55	265	1	7	3%
JACQUES MALHERBE	54	166	1	10	6%
CHARL MARAIS	53	833	2	53	6%
BRAD CARR	51	1 025	1	75	7%
JUSTIN VON BONDE	51	227	2	4	2%
FRED CLARKE	48	121	9	10	8%
STEPHAN MARX	48	128	6	9	7%
FRANCOIS KEMP	46	181	3	12	7%
RUSSEL BERMAN	45	246	4	11	4%
STEPHAN OLIVIER	45	109	3	4	4%
CORNE ERASMUS	44	209	1	10	5%
NIKKI-LOUISE SMIT	44	44	3	3	7%
ROGER DAVISON	42	262	4	27	10%
CHRISTIAN JACOBY	41	61	2	5	8%
ANDRE BRINK	41	41	1	1	2%
PIETER MULLER	40	793	5	36	5%
LOUIS BREDELL	40	46	1	4	9%
RYAN TAYLOR	39	470	1	47	10%
JJ STRYDOM	39	227	3	12	5%
YUSUF DHALECH	37	55	6	6	11%
PHILLIP BOSHOFF	36	36	-	-	-
VICTOR HOGAN	36	100	1	5	5%
CHARLES DE LA HARPE	36	521	8	60	12%
BRENDAN O'CONNELL	35	490	4	77	16%
PETER SCHEIFLINGER	35	124	2	5	4%
JUAN JOOSTE	35	79	-	2	3%
WILLEM SCHOONBEE	34	34	3	3	9%
FRANCOIS KLEYN	34	68	5	5	7%
SHALVIN NAIDOO	34	178	7	15	8%
RUAN VAN DEN HEEVER	33	55	-	-	-
JANNIE VAN BLERK	33	121	-	2	2%
KEOLIN MOODLEY	32	133	2	6	5%

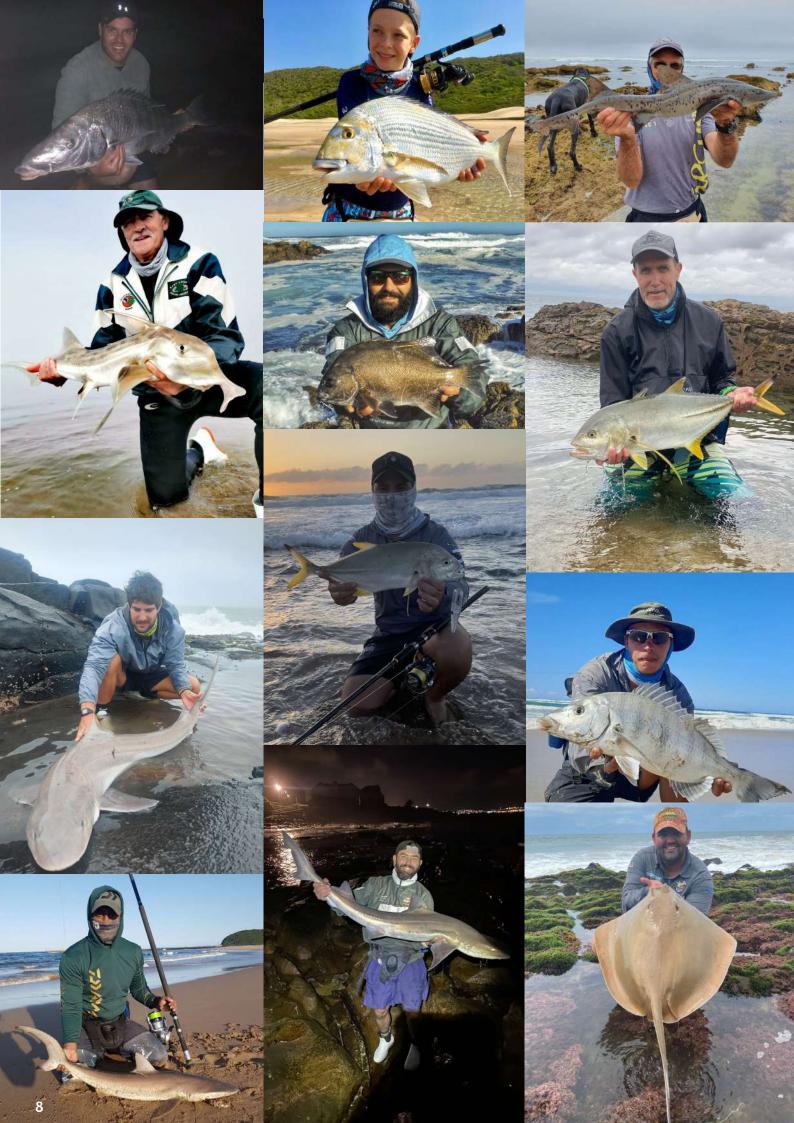
Top Taggers: 15 or more fish tagged in 2021

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Member name	2021 tag releases	Total taggings	2021 tag recap- tures	Total tag recap- tures	% Recapt.
JACQUES-PIERRE GELDENHUYS	31	491	6	39	8%
LIONEL KORTE	31	62	-	-	-
LIONEL WEICH	30	38	3	3	8%
MATTHEW NOTHARD	30	137	-	-	-
PIETER DU TOIT	29	236	3	10	4%
GUY NICHOLSON	29	115	2	4	3%
ROBERT KYLE	29	1 808	-	200	11%
ROBERT WELSH	29	29	-	-	-
ANDRE VAN NIEKERK	29	42	-	-	-
ERIC MOREY	28	28	1	1	4%
HERMI VAN ZYL	27	27	-	-	-
BRYSON CHUNDER	27	72	3	11	15%
JOHANNES ENGELBRECHT	27	34	2	2	6%
WALTER MATHEE	26	300	1	13	4%
GERHARD BRUWER	26	73	-	4	5%
RUSSELL HAND	25	787	3	94	12%
DEON VAN EM- MENIS	25	105	1	4	4%
NELIUS SPIES	25	25	1	1	4%
WILLIAM FERREIRA	24	417	7	29	7%
WAYNE GERBER	24	29	-	-	-
CHRIS VAN DER WALT	24	39	-	1	3%
ILHAAM ABRAHAMS	24	24	-	-	-
SCOTT LOWRY	24	25	-	-	-
GREGORY MULLER	24	187	1	6	3%
DION GOVINDER	23	467	2	63	13%
POENA BRUWER	23	212	1	10	5%
MICHAEL PARRIS	23	105	-	5	5%
JEANNE CONRADIE	23	28	-	-	-
RICHARD BOUCHER	23	58	1	1	2%
MATHEW WEEDMAN	23	584	3	83	14%
RUDI NIEUWOUDT	22	47	-	1	2%
RENALDO OLIVIER	22	44	-	-	-
WIHAN DE JAGER	22	61	1	1	2%
PATRICK MORRIS	22	909	6	63	7%
ALBERTUS NIEUWOUDT	21	21	1	1	5%
RIEKERT VAN HEER- DEN	21	585	1	20	3%
WALDO KLEYN	21	25	1	1	4%

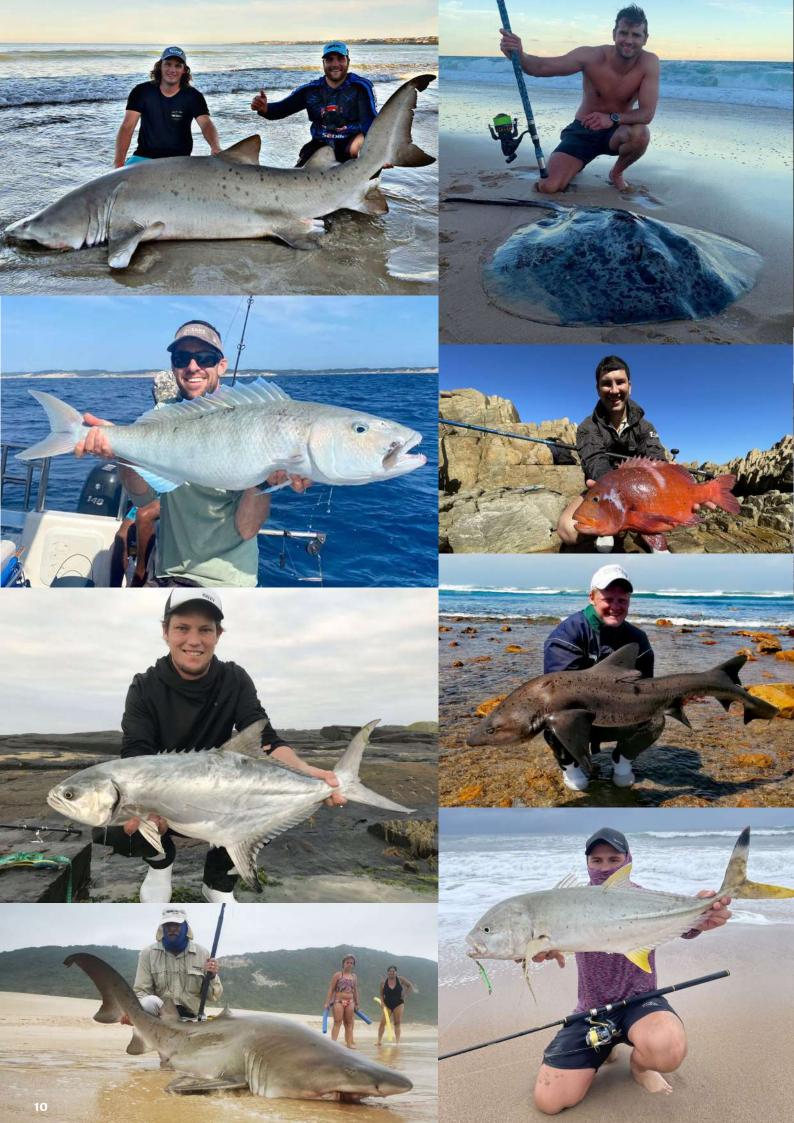
Member name	2021 tag releases	Total taggings	2021 tag recap- tures	Total tag recap- tures	% Recapt.
DANIEL LA GRANGE	21	174	1	10	6%
KIRK WEBBER	20	380	2	21	6%
ANTHONY NEL	20	20	-	-	-
LLOYD KRIGE	20	20	2	2	10%
JAN ADRIAAN VENTER	20	24	1	1	4%
REINER VON DER MARWITZ	20	105	-	5	5%
DEVAN LAGENDYK	20	90	1	5	6%
URSULA OTTO	19	150	1	5	3%
GEORGE HAY	19	19	-	-	-
STIAAN WASSERMAN	19	19	-	-	-
ANTONY SCHEEPERS	19	24	-	-	-
VAUGHN REILLY	19	243	1	29	12%
STUART HAYNES	18	82	2	9	11%
ROBERT PACE	18	76	2	6	8%
SIMON WALKER	18	5 176	2	395	8%
RICHARD HARTWELL	18	154	-	6	4%
RICHARD MULLER	17	281	-	5	2%
DEON VAN DYK	17	17	-	-	-
CHRISTIAN HEMPEL	17	17	-	-	-
RICHARD COOK	17	129	2	24	19%
ROBERT TUZZA	16	16	-	-	-
MATTHEW MCIVER	16	159	1	14	9%
ASHRAF ISAACS	16	21	-	-	-
CHRIS OVENS	16	20	-	-	-
PIETER TERBLANCHE	16	195	2	5	3%
BENNIE DE REUCK	15	15	1	1	7%
DONOVAN SO- LOMON	15	286	1	53	19%
BRIERS VAN RENSBURG	15	15	-	-	-
JUNAID ISMAIL	15	295	5	47	16%
GARETH HARTLEY	15	15	1	1	7%
WILLEM WESSELS	15	25	1	1	4%

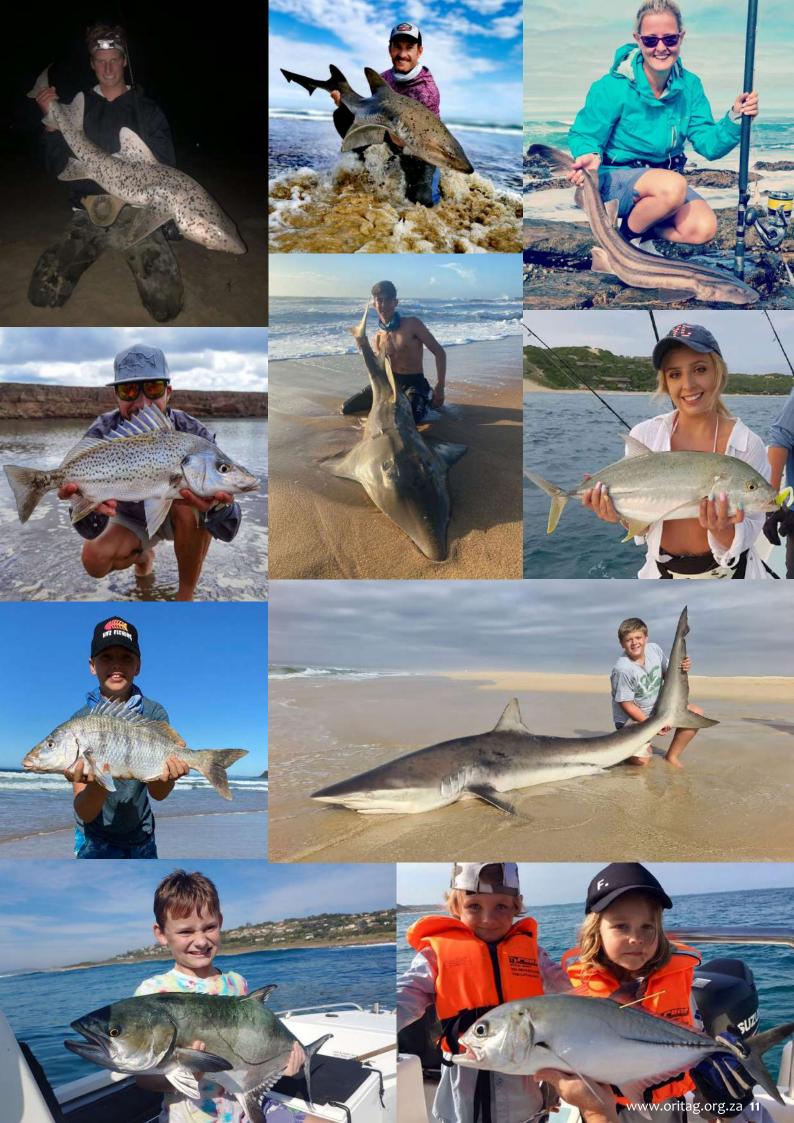
Well done to our top taggers. If you would like to view this year's leaderboard so far, please follow this link:

www.oritag.org.za/Leaderboard



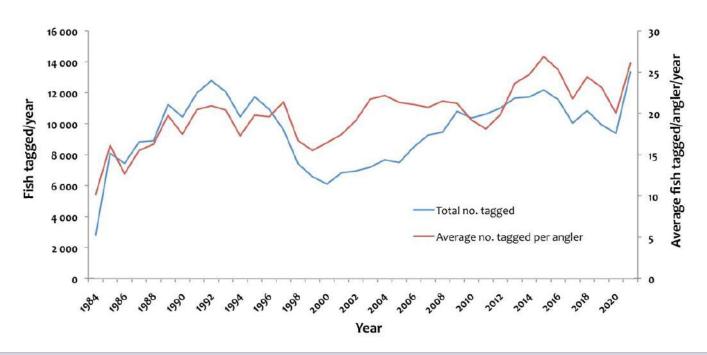




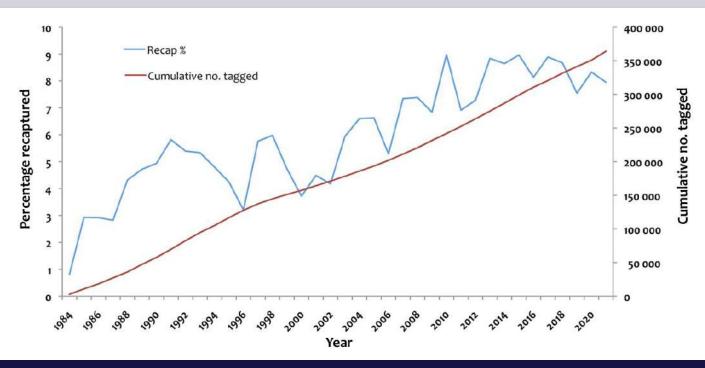


ORI Cooperative Fish Tagging Project Statistics

Fish tagged per year and per angler



% fish recaptured per year and cumulative number of fish tagged



Research Tagging in Marine Protected Areas

Marine Protected Areas (MPAs)	Period	2	2021	Overall		
manne i rotestea / neas (mi ris)	i ciriou	Total	# Recapt.	Total	# Recapt.	
De Hoop Marine Protected Area (Western Cape)	1985 - current	1 670	184	63 136	4 720	
Dwesa-Cwebe Marine Protected Area (Eastern Cape)	2009 - current	581	23	4 952	166	
Goukamma Marine Protected Area (Western Cape)	2001 - current	137	4	1 111	38	
iSimangaliso Marine Protected Area (KwaZulu-Natal)	2001 - current	534	34	11 321	1 422	
Pondoland Marine Protected Area (Eastern Cape)	2006 - current	182	47	5 184	1 332	
Helderberg Marine Protected Area (Western Cape)	2021 - current	395	6	395	6	

Get the NEW Fish App for Anglers!

Bruce Mann

In October 2020, the long-awaited ORI Fish App (Marine Fish Guide for Southern Africa) became available for download on cell phone (both Android and iPhone). This app was produced specifically for marine recreational anglers to help improve fish identification and to increase awareness about South Africa's marine linefish species.



All profits from the sale of the App are split between the app developer (PDA Solutions) and ORI. Importantly, funds received by ORI go directly into helping to finance the ORI-**Cooperative Fish Tagging Project** (ORI-CFTP).

The basic structure of the Fish App includes a detailed fish guide (photographs and text), a distribution map for each species, a fish identification tool (smart search), identification guide using fish families, a length/weight calculator, the current fishing regulations for each species and a personal catch log.

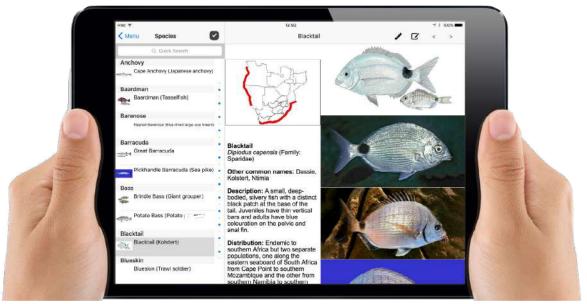
The app contains detailed species profiles for 249 common linefish species from 77 families caught in South African waters, using simple, easy to understand text. The app is very simple and intuitive to use. Excellent colour images for each species have been obtained from a wide range of sources. A useful compare function in the app allows you to compare photos (or text) of similar species. Generalised line drawings of fish families can be used to identify fish in that family. Simple maps are available for the southern African distribution of each

species. The fish identification

smart search is simple to use and works well at narrowing down the species you are looking for. The length/weight calculator was compiled for each species using the most accurate information available and is very quick and easy to use. This is useful when you measure and release your fish but want to know what its weight was. The linefish regulations have been summarised for each individual species based on the current gazetted legislation and can be quickly located at the touch of a button. Finally, there is a useful catch log where you can log your own catches and other interesting observations.

Although initial sales have been slow, we hope that the Fish App will become increasingly popular as anglers discover its usefulness and spread the word. The app will be regularly updated to include any changes in the fishing regulations and to incorporate any new information on the individual species (updates take place automatically on your phone with no added cost).

To purchase the ORI Fish App, please go to Google Play Store (Android phones) or App Store (iPhones) and search for "Marine Fish Guide for Southern Africa". The app only costs R200 to download (less than you spend when you go to the tackle store) so please get yourself a copy now, enjoy it and tell others about it!



Main fish species tagged up to 31 December 2021

			Priority species for tagging are highlighted in blue												
Species	No. Tagged since 1984		otured 1984	Km tr	avelled	Days		Species	No. Tagged since 1984	1984 since 1984		Km travelled			
Galjoen	70 076	No. 4 884	% 7%	Avg. 42	Max. 1 892	Avg. 439	7 356	Dageraad	1 465	No. 115	% 8%	Avg. 23	Max. 592	Avg. 387	Max. 1 968
Dusky kob	24 242	1 718	7%	27	1 625	344	5 997	King mackerel / Cuda	1 419	61	4%	366	1 552	534	2 604
Leervis / Garrick	19 044	1 375	7%	220	2 060	324	3 208	Grey grunter	1 410	83	6%	1	21	244	1 292
Dusky shark	15 986	1 429	9%	59	1 374	107	2 928	Cape stumpnose	1 356	8	1%	9	56	188	732
Spotted grunter	15 979	422	3%	13	823	290	2 950	Westcoast steenbras	1 311	78	6%	61	280	253	1 449
Copper / Bronze whaler	10 854	350	3%	163	1 790	437	3 981	Duckbill ray	1 253	12	1%	15	123	575	1 427
shark Spotted gullyshark	10 234	719	7%	30	911	553	6 332	Soupfin shark / Vaalhaai	1 185	29	2%	127	1 034	737	3 586
Elf / Shad	9 845	380	4%	280	1 676	175	1 437	Blacktip shark	1 179	42	4%	86	1 288	206	1 148
Blacktail / Dassie	9 300	223	2%	6	358	279	2 715	·							
·						281	2 262	Leopard catshark	1 146	175	15%	9	722	336	4 431
White steenbras Blackspotted	9 058	446	5%	35	804			Scalloped hammerhead	1 133	18	2%	121	629	329	2 943
smoothhound shark	8 069	233	3%	43	582	575	4 405	Dark shyshark	1 077	203	19%	3	86	131	1 097
Raggedtooth shark Lesser guitarfish /	7 105	1 095	15%	191	2 966	743	8 256	Stonebream	1 067	9	1%	75	524	242	563
Sandshark Giant guitarfish /	6 618	76	1%	42	726	331	2 572	Giant / Cape yellowtail	1 051	45	4%	170	1 746	319	1 380
Sandshark	5 572	443	8%	33	360	378	2 639	Skipjack tuna	1 042	1	0%	1 061	1 061	464	464
Roman	5 419	354	7%	4	294	388	7 301	Yellowfin tuna	1 007	14	1%	804	5 645	319	1 314
Bronze bream	5 299	159	3%	19	799	198	1 465	Milkshark	965	25	3%	90	363	187	772
Slinger Black musselcracker /	5 252	209	4%	36	1 110	221	2 814	Squaretail kob	941	67	7%	9	266	149	2 043
Poenskop	4 486	329	7%	30	791	591	6 809	Bigeye kingfish	921	39	4%	12	163	246	2 751
Largespotted pompano	4 369	78	2%	12	270	246	1 372	Geelbek / Cape salmon	914	11	1%	105	904	335	2 569
Yellowbelly rockcod	4 298	722	17%	7	425	376	3 309	Honeycomb stingray	893	18	2%	1	8	313	2 543
Giant kingfish	4 050	160	4%	16	419	360	2 226	Blacktip kingfish	892	29	3%	4	54	147	545
Diamond / Butterfly ray Broadnose sevengill	3 986	34	1%	174	1 756	445	2 184	Black marlin	852	3	0%	1 382	3 633	163	240
shark	3 914	254	6%	65	597	493	4 332	Eagleray	781	8	1%	8	49	442	1 582
Catface rockcod	3 890	912	23%	6	525	172	2 867	Spinner / Longnosed blacktip shark	742	25	3%	90	1 055	189	1 295
Sailfish	3 591	29	1%	61	1 060	150	727	Seventy-four	720	25	3%	51	521	489	2 845
Blue stingray	3 562	13	0%	30	234	362	1 217	Potato bass	624	30	5%	2	22	329	2 639
Zebra / Wildeperd White musselcracker/	3 523	78	2%	2	52	243	1 399	Tiger shark	610	29	5%	267	4 067	379	1 823
brusher Baardman / Belman /	3 135	92	3%	59	843	562	3 499	Hardnosed smooth- hound	606	9	1%	87	340	344	870
Tasslefish	2 728	43	2%	2	17	420	4 870	Natal seacatfish	597	233	39%	0	22	378	2 586
Speckled snapper	2 711	998	37%	3	200	290	2 662	Janbruin / John Brown	587	16	3%	1	12	97	279
Carpenter / Silverfish	2 602	24	1%	46	290	932	4 766	Striped marlin	564	2	0%	805	848	202	379
Santer / Soldier Striped catshark	2 439 2 172	175 184	7% 8%	17 9	490 630	236 362	2 597	Halfmoon rockcod	554	100	18%	1	49	513	3 189
Red / Copper steenbras	1 966	200	10%	117	923	815	8 080	Bonefish	550	4	1%	10	34	122	354
Sharpnose stingray	1 949	6	0%	6	24	198	465	Bull / Zambezi shark	515	32	6%	76	539	328	2 599
Smooth hammerhead	1 817	22	1%	133	384	555	3 075	Great white shark	514	17	3%	290	1 543	346	959
Ladyfish / Springer	1809	34	2%	22	412	337	1 426	Queen mackerel / Natal snoek	462	3	1%	4	12	376	1 044
Natal stumpnose /	1 793	52	3%	13	230	237	1 451	Brown shyshark	460	43	9%	9	102	231	997
Yellowfin bream Perch / River bream	1 653	232	14%	1	42	355	1 583	Blue marlin	453	0	0%	0	0	0	0
Albacore / Longfin tuna	1 561	36	2%	304	1 008	412	2 585	Southern pompano	437	26	6%	62	464	151	848
Cavebass / Lampfish	1 557	227	15%	9	514	328	2 284	Red stumpnose	423	10	2%	12	107	923	1 998
River snapper / Rock	1 540	288	19%	3	391	315	2 403	Puffadder shyshark	413	40	10%	1	20	237	1 363
Scotsman	1 488	403	27%	25	1 211	467	2 839	Lemonfish	405	17	4%	4	64	230	749
Silver kob	1 485	64	4%	45	548	279	839	Pickhandle barracuda	404	57	14%	2	44	273	1 856
Brassy kingfish	1 475	79	5%	11	757	290	1 441	Talang / Largemouth queenfish	398	16	4%	1	10	193	630

Main fish species tagged up to 31 December 2021 Priority species for tagging are highlighted in blue

		Priority species for tagging are highlighted in										
Species	No. Tagged since 1984	since	tured 1984		avelled	Days		Species	No.			
White stumpnose	392	No. 5	% 1%	Avg.	Max.	Avg. 245	Max. 463	Maasbanker				
Hottentot	392	15	4%	1	10	267	1 078					
								Oxeye tarpon				
Flapnose houndshark	349	50	14%	1	43	747	3 013	Spotted spiny dogfish				
Sandbar shark	336	6	2%	166	345	250	536	Bigeye stumpnose				
Banded galjoen	336	8	2%	70	562	232	507	Swordfish				
Bluefin kingfish	336	11	3%	15	94	131	260	Longfin kingfish				
Bartail flathead	336	9	3%	2	18	449	1 947	Round ribbontailray				
Eastern little tuna / Kawakawa	324	0	0%	0	0	0	0	Banded catshark				
Blackspot shark	303	8	3%	34	192	331	945	Java shark				
Spearnose skate	298	11	4%	0	3	223	553	Striped mullet				
St. Joseph / Elephant fish	287	1	0%	1 342	1 342	218	218	Blue kingfish				
Blue emperor	279	19	7%	30	307	325	975	Sand steenbras				
Bluntnose spiny dogfish	274	4	1%	189	669	615	1 476	Sailfin rubberlip				
Snapper kob	265	10	4%	20	132	170	378	Cape moony				
Blue hottentot	249	7	3%	0	0	108	199	Dusky rubberlip				
Malabar rockcod	242	32	13%	1	8	213	1 540	, ,				
	237	9	4%	1	6	281	640	Minstrel rubberlip Doublespotted queen-				
Englishman								fish				
White seacatfish	207	4	2%	14	21	595	1 895	Needlescaled queenfish				
Whitespotted smooth- hound	203	5	2%	6	15	678	1 627	Prodigal son / Cobia				
Green jobfish	202	7	3%	0	0	209	373	Spadefish Yellowtail scad				
Greyspot guitarfish / Sandshark	188	1	1%	6	6	51	51	Shortfin mako				
Snoek	181	1	1%	136	136	491	491	Marbled electric ray				
Javelin grunter	178	16	9%	9	70	378	2 940	Concertina-fish				
Shorttail stingray	173	5	3%	48	231	508	2 412	Thintail thresher				
Dorado / Dolphinfish	163	2	1%	55	64	39	66	False thornback skate				
Spotted eagleray	153	3	2%	205	597	518	850	Panga				
Striped threadfin	145	2	1%	5	9	51	63	German				
Smallspotted pompano	129	4	3%	3	13	211	439	Yellowfin emperor				
Tomato rockcod	129			2	22		574	Swallowtail rockcod				
		20	16%			200		Shortbill spearfish				
Grey reef shark	121	2	4%	0	0	357	697	Koester				
Moustache rockcod	118	38	32%	34	1 200	437	2 990	Wreckfish				
Cock grunter	116	5	4%	14	65	144	490	Blue shark				
Thorntail stingray	110	2	2%	0	0	295	357	Indian goatfish				
Greater yellowtail / Amberjack	108	2	2%	39	77	18	27	Bludger kingfish				
Great barracuda	106	23	22%	0	1	170	467	Steentjie Captain Fine / Whites-				
Russell's snapper	105	3	3%	0	1	328	896	potted rockcod				
Whitebarred rubberlip	104	1	1%	1	1	176	176	Manta				
Flathead mullet	103	1	1%	738	738	738	738	Surge wrasse Threadfin mirrorfish				
Longfin / Tropical	103	1	1%	0	0	161	161	Tripletail				
yellowtail Atlantic bonito	103	0	0%	0	0	0	0	Wahoo				
								Twinspot snapper				
Eel catfish	97	1	1%	1	1	47	47	Milkfish				
Cape gurnard	97	3	3%	0	0	456	953	Mackerel				
Yellowspotted kingfish	96	0	0%	0	0	0	0	L				
Sliteye shark	88	2	2%	291	565	1 334	2 652					

g are highlighte	a in blue								
Species	No. Tagged since 1984		tured 1984	Km travelled		Days free			
		No.	%	Avg.	Max.	Avg.	Max.		
Maasbanker	88	0	0%	0	0	0	0		
Oxeye tarpon	83	0	0%	0	0	0	0		
Spotted spiny dogfish	82	1	1%	36	36	120	120		
Bigeye stumpnose	81	3	4%	8	21	42	59		
Swordfish	79	1	1%	9	9	1 263	1 263		
Longfin kingfish	77	1	1%	12	12	453	453		
Round ribbontailray	70	2	3%	4	8	45	74		
Banded catshark	68	8	12%	16	55	423	1 155		
Java shark	67	2	3%	14	18	67	76		
Striped mullet	66	1	2%	1	1	230	230		
Blue kingfish	66	0	0%	0	0	0	0		
Sand steenbras	59	2	3%	0	0	40	79		
Sailfin rubberlip	59	0	0%	0	0	0	0		
Cape moony	58	0	0%	0	0	0	0		
Dusky rubberlip	57	2	4%	92	183	1 495	2 345		
Minstrel rubberlip	57	2	4%	19	37	484	679		
Doublespotted queen- fish	56	0	0%	0	0	0	0		
Needlescaled queenfish	55	1	2%	0	0	227	227		
Prodigal son / Cobia	52	1	2%	36	36	479	479		
Spadefish	51	1	2%	118	118	2 724	2 724		
Yellowtail scad	51	0	0%	0	0	0	0		
Shortfin mako	48	5	10%	24	69	253	786		
Marbled electric ray	48	0	0%	0	0	0	0		
Concertina-fish	48	0	0%	0	0	0	0		
Thintail thresher	48	0	0%	0	0	0	0		
False thornback skate	47	2	4%	0	0	194	340		
Panga	45	0	0%	0	0	0	0		
German	45	0	0%	0	0	0	0		
Yellowfin emperor	44	4	9%	0	0	441	1 187		
Swallowtail rockcod	44	4	9%	0	0	7	11		
Shortbill spearfish	42	0	0%	0	0	0	0		
Koester	41	2	2%	0	7	1 176	1 176		
Wreckfish Blue shark	39	0	5% 0%	0	0	231	388		
Indian goatfish	38	0	0%	0	0	0	0		
Bludger kingfish	37	0	0%	0	0	0	0		
Steentjie	37	0	0%	0	0	0	0		
Captain Fine / Whites-	36	0	0%	0	0	0	0		
potted rockcod Manta	35	1	3%	6	6	39	39		
Surge wrasse	33	1	3%	0	0	34	34		
Threadfin mirrorfish	33	0	0%	0	0	0	0		
Tripletail	33	0	0%	0	0	0	0		
Wahoo	32	1	3%	0	0	18	18		
Twinspot snapper	31	5	16%	2	4	139	363		
Milkfish	31	0	0%	0	0	0	0		
Mackerel	30	0	0%	0	0	0	0		
				<u>)</u>	<u> </u>	<u> </u>			

Dwesa-Cwebe Marine Protected Area Linefish Monitoring Project

By Kerryn Bullock, Eastern Cape Parks and Tourism Agency (ECPTA)

For 24 days a year (pandemic restrictions and natural disasters like flooding aside), research catch, tag and release shore angling take place in Dwesa-Cwebe Marine Protected Area (MPA) along the Transkei Coastline (Figure 1). The Dwesa-Cwebe Linefish Monitoring Project has been run by the ECPTA since 2009. Initially declared in 1991, the MPA has since been re-proclaimed twice under new legislation, the most recent being under the provisions of the National Environmental Management: Protected Areas Act. The most significant change has been the rezoning of the MPA from completely no-take into controlled or partially protected areas (PPAs) and restricted or no-take areas (Figure 1).

The PPAs comprise 64% of the MPA's ~16 km coastline and allows for non-consumptive recreational angling (i.e. catch-and-release angling) and consumptive small-scale fishing and resource use (i.e. fish and invertebrate harvesting). This takes place under the control of a daily permit system and regulations such as bag and size limits and gear-type (e.g. rod and reel or handline only).

Over the years data collection methods have been standardised and now consist of six capable anglers aiming to fish for at least 8 hours a day between sunrise and sunset. Two teams of three anglers spend two days fishing the Cwebe PPA zone, and four days alternating between the Dwesa PPA and no-take zones.

Once landed, all fish are placed in a wet towel, covering the head and as much of the body as possible, to help calm the fish and reduce loss of scales and protective mucous. From 2017 onwards, a large bucket of fresh seawater has been placed next to the measuring sling. A captured fish is first unhooked and then placed into the bucket, allowing the fish a chance to recover before being measured. No attempts are made to remove a swallowed hook; instead, the line is cut close to the eye of the hook. Only singlehook traces are used with the barb flattened to enable easy removal. Emphasis is placed on keeping the fish out of water for as short a time as possible. Once settled, the fish are transferred from the bucket to the sling and again covered with a wet towel (Figure 2). All fish are measured to the nearest millimetre, using either total length (TL) or fork length (FL) depending on the species. Fish that are big enough are then tagged and released,

following strict ORI protocol. A-type or D-type plastic dart tags are used to tag fish >600 mm or 300–599 mm, respectively. If a tagged fish is recaptured, the number on the tag is recorded along with other relevant information (e.g. species, date, length, location etc.).

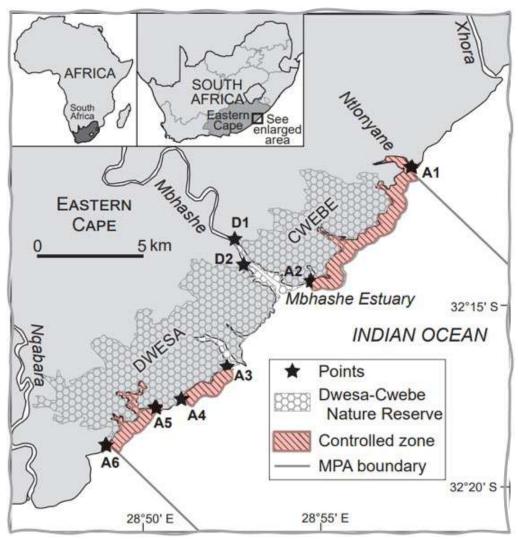


Figure 1: Map of the Dwesa-Cwebe MPA on the east coast of South Africa showing the post-2016 no-take zones and controlled-take zones (referred to in the text as partially protected areas, PPAs). Sections A1–A2, A3–A4 and A5–A6 are the PPAs; sections A2–A3 and A4–A5 (no shading) adjacent to these are no-take areas; D1 and D2 mark the PPA in the Mbhashe Estuary.



Figure 2: ECPTA angling team demonstrating appropriate fish handling methods.

In the 11 years between 2009 - 2019, 3 963 fish have been tagged (Cwebe n = 875: Dwesa n = 3088). A-tags amounted to 733 (Cwebe n = 132: Dwesa n = 601), while 3 230 D-tags have been inserted (Cwebe n = 743: Dwesa n = 2487). Unfortunately, our recapture rate has been surprisingly low (n = 128; 3.8%), which is lower than the average for the ORI-CFTP. The Cwebe section has accounted for 32 of the recaptures (31%), while 71 (69%) of the recaptures have been recorded from the Dwesa area. There have been nine multiple recaptures during the same time frame. Most recaptures (n = 103; 81%) have occurred within the boundaries of the MPA with 74 of these being caught by the ECPTA angling team. Most of the remaining recaptures were caught by recreational anglers (in and out of the MPA) and small-scale fishers within the MPA (Figure 3). Minimal movement has been observed with 61% of recaptures occurring at their original tag site (regardless of species).

The seven most abundant species (n > 200) included (Diplodus capensis), bronze blacktail (Pachymetopon grande), dusky kob (Argyrosomus japonicus), lesser guitarfish (Acroteriobatus annulatus), black musselcracker (Cymatoceps nasutus), yellowbelly rockcod (Epinephelus marginatus) and catface rockcod (Epinephelus andersoni) (Figure 4). The overall average catch per unit effort (CPUE) for the entire MPA, from project inception to 2019, was 0.94 fish per angler hour (Cwebe = 0.63: Dwesa = 1.09). These CPUE levels are substantially higher than those recorded during linefish surveys elsewhere along the coast, demonstrating the effectiveness of the Dwesa-Cwebe MPA, even with zonation that allows for consumptive resource use in the PPAs.

RECAPTURE METHOD

1 Commercial fishers (1%) 11 Subsistence fishers (8%) 41 Recreational fishers (32%) 74 ECPTA Team (58%)

Figure 3: Basic analysis of recapture data.

RECAPTURE LOCATION



Localised differences in species diversity, size frequency and CPUE were detected between the Dwesa and Cwebe sections, and lower average length and CPUE of some species were recorded in the Dwesa PPAs compared to the Dwesa no-take zones. These differences were more prominent in slow-growing, long-lived species with small home ranges, indicating the negative impacts of fishing pressure on vulnerable species found in this MPA and a reduction in benefits that would otherwise be associated with larger no-take areas. The results from this study, one of the first to analyse the impact of controlled-use zones in South African MPAs, suggest that no-take MPAs are superior from a conservation perspective compared to PPAs.

For further reading readers can consult the following publication:

Bullock K, Wood A, Dames VA, Venter JA, Greeff J. 2021. A decade of surf-zone linefish monitoring in the Dwesa-Cwebe Marine Protected Area, with a preliminary assessment of the effects of rezoning and resource use. *African Journal of Marine Science*, 43(3): 309-323. DOI: 10.2989/1814232X.2021.1951353

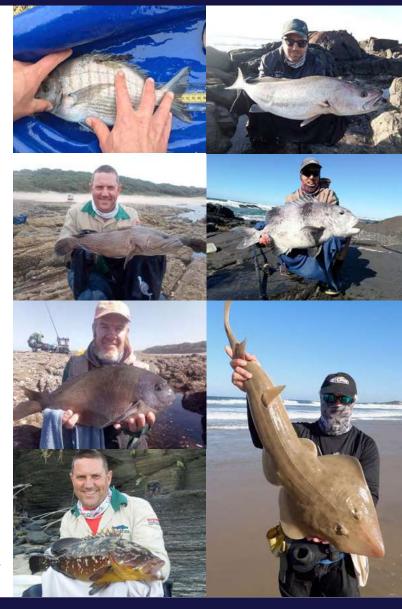


Figure 4: The seven numerically most abundant species.

How to report the recapture of a tagged fish

This video below provides all the information that you need to correctly report tag recapture information. Tag recaptures are one of the most important and exciting aspects of the Oceanographic Research Institute's Cooperative Fish Tagging Project (ORI-CFTP). Recaptured fish allow us to investigate movement patterns, growth rates and population dynamics of the fish species tagged along the southern African coastline and ultimately contribute towards their conservation. What makes the ORI-CFTP so interesting and exciting is seeing where a recaptured fish was originally tagged; how far it has travelled; who originally tagged it and how much it has grown. As anyone who is fishing in the sea stands a chance of catching a tagged fish, it is very important to know exactly what information to record and how to send it to ORI.



Exciting Recaptures From 2021



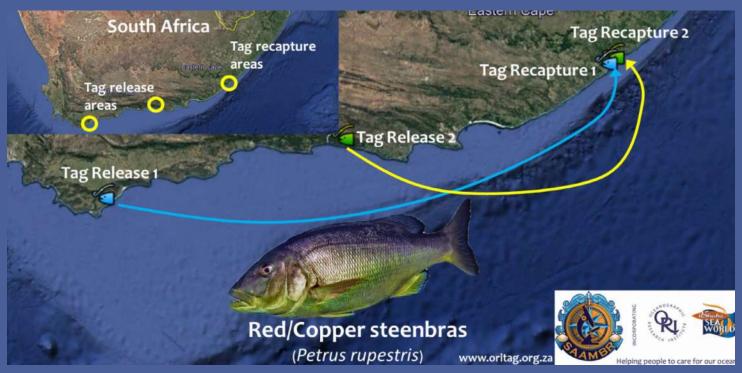
On the 2nd June 2021 we had our 50th silver kob tag recapture for the ORI-CFTP. This kob was originally tagged by Charles de la Harpe at Oubosstrand, Eastern Cape (EC), on the 18th May 2019 measuring 810 mm total length (TL). It was recaptured by Adriaan Nel 218 days later in the same location, and then recaptured for a second time 528 days (1.4 years) later by Attie Groeneveld this time in Stilbaai, Western Cape (WC), having moved 313 km south and having grown 250 mm. Silver kob are often confused with the dusky kob but can be distinguished by a narrower caudal peduncle, slightly longer pectoral fins and the lack of the strong "smell" characteristic of dusky kob. The new Agulhas Bank MPA will hopefully provide important protection for this species.



On the 4th June 2021 we had our 5 093rd galjoen tag recapture for the ORI Cooperative Fish Tagging Project (ORI-CFTP). This recapture is the longest time at liberty for any galjoen recaptured in the 36 years of the ORI-CFTP. This fish was originally tagged by a team of scientists during a tagging field trip near the Bloukrans River mouth, in the Tsitsikamma National Park, on the 21st April 2004 measuring 388 mm Fork Length (FL). It was recaptured by Charles van Rensburg an incredible 6 253 days (17.1 years) later at Klippen Point/Brakkeduiwen measuring 540 mm FL, having grown 152 mm and moved about 82 km eastwards. No-take zones in Marine Protected Areas (MPAs) play a vital role in helping to conserve this species. For example, research in the De Hoop and Tsitsikamma MPAs has shown that galjoen are more than 20 times more abundant within these MPAs compared to adjacent exploited areas.



On the 27th January 2021 we had our 45th Cape/giant yellowtail tag recapture for the ORI-CFTP! This yellowtail was originally tagged by Patrick Morris on the 11th December 2018 off Cape Point, WC, measuring 810 mm FL. It was recaptured 767 days (2.1 years) later by a spearfisherman at Alphards Bank, 45 nautical miles offshore from Struisbaai, WC, measuring 990 mm FL. This yellowtail grew about 180 mm in just over two years and showed an eastward movement of about 381 km. This species can reach a maximum length of about 1 430 mm Total Length, with a relatively fast growth rate (as seen in this recapture). Their fast growth rate and nomadic behaviour have ensured that the yellowtail stock in South African waters is still in a healthy condition.



During 2021 we had some exciting red steenbras tag recaptures in the ORI-CFTP, with two being very notable. The first was originally tagged by Daniel La Grange on the 1st February 2017 measuring 335 mm FL near the Heunings River, WC. It was later recaptured 1 484 days (4.1 years) later by Russel Barclay off the Buffalo River (East London), EC, moving an impressive 897 km north. Unfortunately, no measurement was taken when it was recaptured. The second was tagged by Gordon Marchand on the 19th March 2017 measuring 570 mm FL near Noordhoek, EC. It was recaptured 1 438 days (3.9 years) later by Fred Clarke off Gonubie, EC, measuring 805 mm FL, having moved 293 km north and grown 235 mm. Although highly resident as juveniles, once they reach maturity (~575 mm FL), adults migrate northwards towards deep reefs off the Transkei and southern KwaZulu-Natal (KZN) (as we can see from both these recaptures). MPAs have been shown to play a vital role in protecting this iconic species.



On the 4th February 2021 we had our 380th Scotsman tag recapture for the ORI Cooperative Fish Tagging Project! This Scotsman was originally tagged by a team of scientists from ORI, in the Pondoland Marine MPA, in the EC, on a reef off Mkambati, measuring 555 mm FL. It was recaptured 1 121 days (3.1 years) later by commercial fisherman, Len Harvey, offshore from 9 Mile Beach, Richards Bay, KZN, measuring 705 mm FL. This Scotsman grew about 150 mm in just over three years and showed a northward movement of about 365 km. Juveniles of this species appear to be very resident, with a home range size of a few hundred square metres in extent. However, once reaching maturity several larger individuals have been observed to undertake substantial northward movements greater than 300 km (as we can see with this recapture), probably for breeding purposes. The role of MPAs are vital for the recovery of this species and population numbers within the Pondoland MPA have increased substantially. Similarly, the deep reefs in the uThukela and iSimangaliso MPA provide important protection for breeding adults.



On the 3rd April 2021 we had our 89th white musselcracker/brusher tag recapture for the ORI Cooperative Fish Tagging Project. This fish was originally tagged at Groot River/Oubosstrand, EC, by Charles de la Harpe on the 13th October 2018 measuring 430 mm FL. Charles then later recaptured this fish at the exact same location 903 days (2.5 years) later, now measuring 545 mm FL, having grown 115 mm. Quite amazing! Juveniles and sub-adults (< 60 cm FL) of this species are highly resident in the inshore zone (as we can see from this recapture), while a proportion of the adult population are known to undertake a seasonal eastward spawning migration to the Transkei and southern KZN. Resident populations of juvenile and sub-adult white musselcracker receive valuable protection in no-take MPAs such as the Tsitsikamma and De Hoop MPAs, which provide vital protection for this and other resident species from overfishing.

Triple catch Leervis

By: Russel Berman

Hungry garrick visits the same boat three times!



Above: Russel Berman with his 720 mm FL garrick that he tagged and released.

During the 37 years of the ORI-CFTP we have come across some really incredible recaptures that just seem unfathomable! This story below is one of those where you think to yourself "No, surely not?", and is an example of just how important good fish handling and being a responsible angler is.

On the 6th September 2019 Nick Bode invited Russel Berman to accompany him on his boat for a day on the water targeting garrick/leervis in the Zandvlei Estuary Nature Reserve. Russel caught a beautiful specimen of 720 mm Fork Length (FL) and tagged and released it with tag number D214106.

About 8 months later on the 19th June 2020 Nick was out on his boat with his friend Kurt Hill and his son Finley, again on the Zandvlei Estuary planning to target garrick. After puzzling around for a bit Kurt landed a nice fish, only to find

that it was the same individual that Russel had previously tagged, now measuring 790 mm FL and having grown about 70 mm. This garrick was once again released to fight another day, and "fight another day" it sure did!

The following year on the 6th November 2021, Nick took his boat out for another day of garrick fishing on the Zandvlei Estuary with Dale Harrison. Dale hooked a big fish and after landing the 900 mm FL garrick, they both noticed that it had a tag in it. After reporting the recapture to ORI, they realised that yet again this was the same fish originally tagged by Russel and recaptured by his friends, Kurt and Dale. *Absolutely incredible!*

Below: Dale Harrison and the 900 mm FL garrick, now recaptured for the second time.



Overall, this garrick grew about 110 mm during its 792 days (2.2 years) at liberty and had most likely remained within the estuary the whole time. Adult garrick are known to annually migrate to KwaZulu-Natal during winter where spawning takes place in spring, whereafter they return to Cape waters. With this fish being stuck in Zandvlei, it was unable to spawn and contribute to future generations of garrick. However, what these recaptures tell us is that garrick are thriving in the Zandvlei Estuary Nature Reserve where they are healthy and showing excellent growth. The abundance of garrick in Zandvlei is helped by many anglers' attitudes towards releasing their fish and by the presence of rangers in the reserve, who are helping to protect fish stocks by successfully preventing poaching. Lastly, these recaptures indicate that this fish was handled and tagged correctly which will help to ensure that it remains fit and healthy.

Left: Kurt Hill and his son Finley with the same tagged garrick caught 8 months later.

Focus species Whitespotted wedgefish/ Giant sandshark

(Rhynchobatus djiddensis)

Movement: Juveniles (< 160 cm TL) appear to be fairly resident with adults moving significantly further

distances. Recent studies have shown adults to undertake extensive northward movements during winter towards Mozambique, and move southward down the coast during the summer

months.

Total number tagged: 5 572 **Number recaptured:** 443 (8%)

Longest time free: 2 639 days or 7.2 years (2010 – 2017)

Longest distance moved: 360 km (St Lucia Beach to Southbroom, KZN)

Growth: Smaller individuals have a substantially faster growth rate (±198 mm/year) compared to

larger individuals (±57 mm/year) indicating that this species has a relatively slow growth rate

after reaching maturity.

Max size: 310 cm TL; 124 kg
Max age: At least ~24 years

Breeding season: Summer (December to February)

Breeding location: Inshore waters along the Northern KZN and southern Mozambique coasts.

Feeding: They feed on benthic molluscs, crabs, worms, squid and small fish.

Distribution: Oman to the Eastern Cape, South Africa in coastal and continental shelf waters to depths

of ~70 m

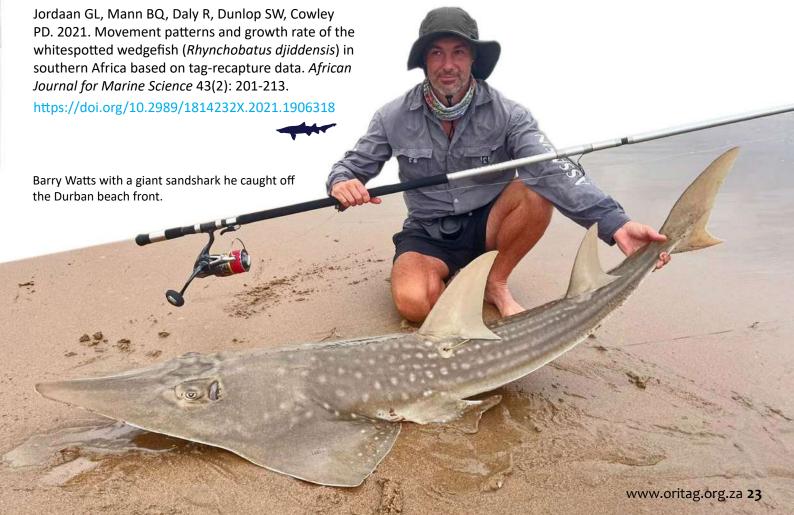
IUCN Red List status: Endangered (South Africa); Critically Endangered (globally)

Recent Publications: Daly R, Parker D, Cliff G, Jordaan GL, Nkabi N, Bennett RH, Mann BQ. 2021. Long-term catch

trends and risk assessment of the critically endangered whitespotted wedgefish

Rhynchobatus djiddensis) from South Africa. Aquatic Conservation: Marine and Freshwater

Ecosystems 31: 777-788. DOI: 10.1002/aqc.3483



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