

Tagging News

News from the ORI Cooperative Fish Tagging Project

•Number 31 •Published November 2018 •Results from 2017



INCORPORATING



Helping people to care for our ocean



From the Tagging Officer...

Gareth Jordaan

After seven years of serving as the ORI Tagging Officer we said goodbye to Stuart Dunlop when he embarked on a new adventure. We would like to thank Stuart for the knowledge he shared, his passion for angling, and for always encouraging sustainable fishing. He took the ORI Cooperative Fish Tagging Project (ORI-CFTP) to new heights! This leaves me, Gareth Jordaan, with the opportunity to introduce myself as your new Tagging Officer. My experience in the pelagic longline fishery means that I am new to the game of recreational angling. However, this provides me with the perfect opportunity to learn whilst getting to know you, my fellow anglers, who are part of the ORI-CFTP. I hope to provide you with the highest level of service, so that we will work together to continually encourage others to fish sustainably, practice good fish handling, and continue contributing towards this incredible citizen science project.

That said, welcome to the 31st edition of the Tagging News. The Tagging News has been communicating the results of the cooperative efforts between fishery scientists and anglers for more than three decades, and has successfully promoted ethical angling while tracking the growth and movement patterns of common linefish species caught along the southern African coast.

Some new and exciting features have been introduced to the ORI-CFTP, notably our new website and database. This new website has features such as: providing members with the ability to enter their own tag release and recapture data; the opportunity to upload a picture of their catch; an interactive map feature allowing members to pinpoint the location of their tag release or recapture; an up-to-date ranking of top taggers and latest recaptures; and a means for allowing new members to register online. Please note that the new website does not allow you to enter tag releases for tags that have not been issued to you. Therefore, please only use tags that are yours. Recently we increased the length of our A-Tags by about 2 cm as they were too short for tagging large fish and sharks. We will begin issuing this new stock of A-tags to taggers over the coming months.

Twelve of our 461 active tagging members tagged more than 100 fish, with our top tagger, Kobus Niehaus, tagging a remarkable 458 fish, followed by Donovan Cole who tagged 160 (see table on page 5). However, more important are the number of fish recaptured. In 2017 Kobus Niehaus had 21 of the fish he has tagged recaptured. Similarly, Piet Oosthuizen and Mathew Weedman had 19 and 18 of the fish they tagged recaptured respectively. Remember, it's not always about the number of fish you tag but rather about the way in which you tag them! For those members wanting to brush up on their tagging technique, please email the Tagging Officer (oritag@ori.org.za) who will gladly assist you with an explanation and a short video. Please also remember to always clean your tagging applicators by rinsing them in disinfectant or alcohol.

The number of fish tagged during 2017 (10 039) dropped

compared to previous years and was substantially lower than the number tagged in 2016 (12 039; see map on page 4). While such a result may be disappointing, annual fluctuations in the number of fish tagged can be expected with natural fluctuations in fish populations and available tagging opportunities. In early 2016 funding ceased for one of our long-term fish monitoring and tagging projects in the Pondoland Marine Protected Area (MPA), which could explain why the overall number of fish tagged in 2017 was lower. Fortunately this project has started again so it will continue to contribute to the number of fish tagged in 2018. Importantly, there was an increase in the number of new members from 84 in 2016 to 137 in 2017. We are expecting a further increase in membership in 2018 with our greater presence on social media (follow us on Facebook @ ORI TAG) and the introduction of the new tagging website (www.oritag.org.za). The average number of fish tagged per member dropped slightly from 25 fish in 2016, to 21 fish in 2017, but is still amongst the top 10 highest averages in the project's history. **The total number of fish tagged on the project to date is 320 594, a truly remarkable achievement!** Such successful long-term citizen science projects are few and far between and we hope to keep this exciting project going for as long as possible.

Although the number of reported recaptures (892 or 9% of those tagged in 2017) was the sixth highest in the Tagging Project's history, it was the lowest since 2010. Again the lower numbers can be attributed to the discontinuation of the Pondoland MPA monitoring project in 2016, which accounted for about 100 recaptures each year. If you do hear of any fellow anglers catching a tagged fish, please offer to assist them in reporting the right information timeously to ORI ([contact details on page 12](#)).

South Africa's national fish, the galjoen, remained the top species tagged in 2017 and overall. The giant guitarfish/sandshark ended its short innings of one year (2016) in the top 10 this year with only 172 being tagged compared to last year's 238. Furthermore, another resident reef fish species, the bronze bream, was more actively tagged in 2017, finally making it into the top 10. The tag and release of more resident reef species is very positive considering many of them have life-history strategies (i.e. slow growing, late maturing, sex changing, etc.) that make them vulnerable to exploitation.

We sincerely hope that you enjoy this exciting issue of the Tagging News. We would like to say a big THANK YOU to all of our tagging members for their ongoing support as well as to the numerous anglers who have provided information on tag recaptures. The long-term success of this project is entirely thanks to your on-going contributions towards the wise use and conservation of our marine linefish species. Please feel free to distribute the Tagging News to your fellow anglers. For the latest tagging information and other interesting updates please visit our new website and follow us on Facebook @ORI TAG.

We wish you tight lines and happy tagging.

Keeping them wet!

In past editions of the Tagging News we have frequently published tips on how to handle fish correctly to ensure their maximum chance of survival. We also continually stress these points in our tagging manual and tagging DVD that are issued to our new members. However, there is an ever increasing amount of research being done on the subject of fish survival after catch and release and it is critically important that we incorporate what the science is telling us into practice. Of all the impacts that a fish endures when it is caught on a line, the most important factor which affects its likelihood of survival is the amount of time it spends out of the water. Research has shown in a range of different species that anything over 30 seconds out of water will result in serious damage to the fish which will greatly reduce its chances of survival. I tell my fellow anglers on fishing trips that it is like running a 400m sprint and then having someone push your head underwater so that you cannot breathe! When a fish is caught on a line, it is fighting for its life. Its heart rate and respiration rate are greatly increased, as too are the levels of stress hormones such as cortisol, which stimulates the release of glucose. The exertion uses up the oxygen in the blood, and fish, like humans, switch to anaerobic respiration, and produce lactate. All runners will know, a build-up of lactate often results in cramps and reduces mobility. With all of these negative effects already taking place, removing a fish from the water and subjecting it to an extended period of hypoxia (oxygen deprivation) is paramount to a death sentence. Even if the fish seems to swim off strongly, the combination of exhaustion and physiological stress renders them highly susceptible to predators. When one also considers that fish tend to excrete more urea and ammonia after a catch and release event and that these substances are important prey detection cues for sharks, it really highlights how much care we have to take when practising catch and release. Pioneering work done by Warren and Amber Potts and their team of students from Rhodes University working with members of the Rock and Surf Super Pro League (RASSPL) has shown that one of the best ways to overcome the problem of rapid hypoxia and increased stress is to have a bucket filled with fresh seawater close at hand. When a fish that is caught in the surf is going to be released, the first thing to do once it is landed, is to place it head first into the bucket so that it can keep breathing. The fish is unhooked in the bucket and once you have your camera and necessary equipment ready, the fish can be removed from the bucket, placed on a wet stretcher or landing mat with a wet cloth over its eyes to calm it down and then be measured and tagged. Once this is done the fish is immediately placed head first back into the bucket and the relevant information can then be recorded. The fish can then be carried in the bucket back to the sea for release. Obviously if you don't have a suitable bucket with you and you are fishing off the rocks, a rock pool filled with fresh seawater (not one with warm, stagnant water or a large octopus) will do just as well. Similarly, if you are fishing off a boat and you don't have a bucket, the live bait well may suffice. Clearly with very big fish the bucket idea won't work so well but it is incumbent on the angler if he/she wishes to tag and release the fish to make sure that the fish stays in the water as much as possible.



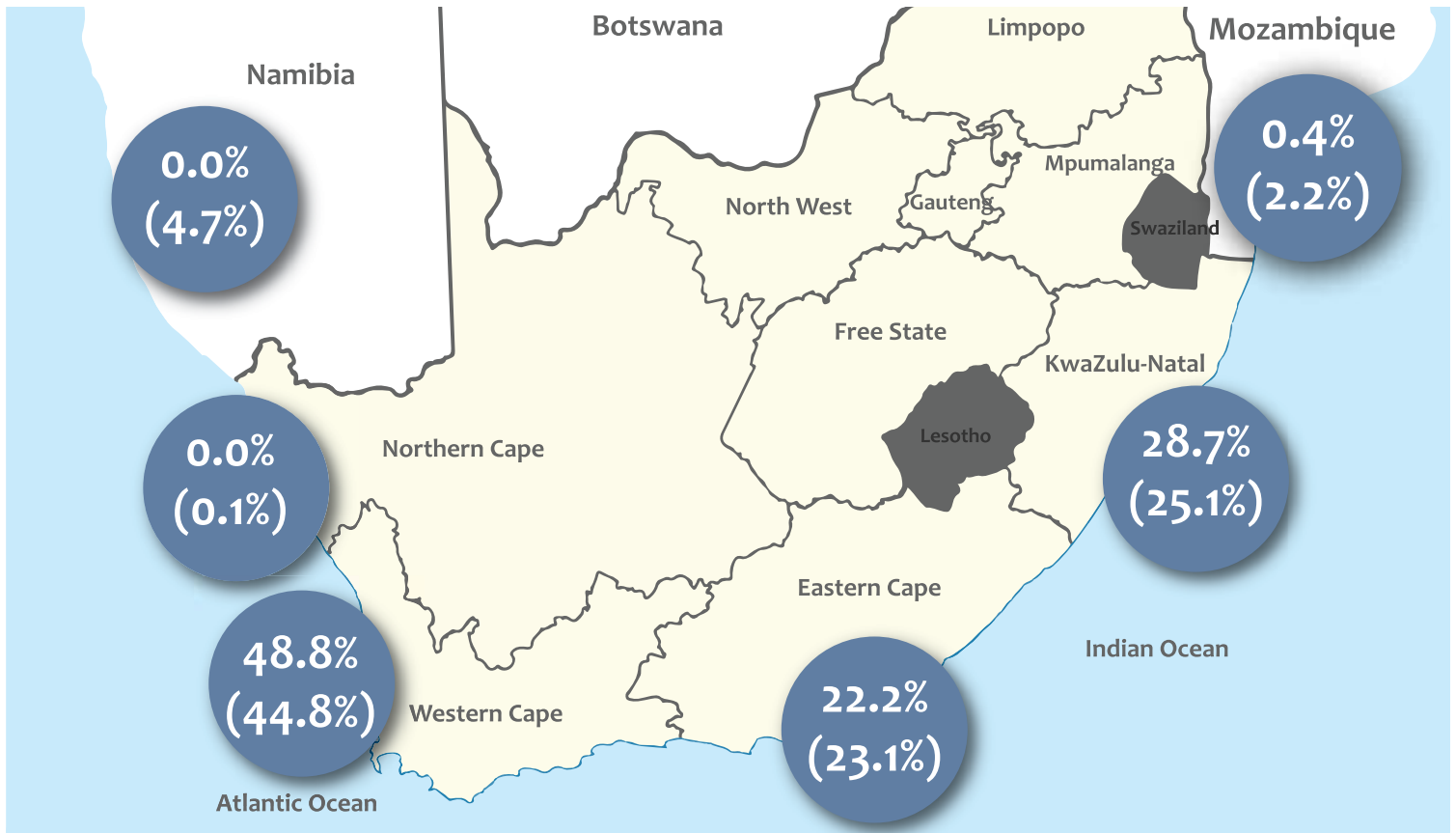
Freshly caught speckled snapper in a bucket

As a reminder, other general tips on handling fish correctly include:

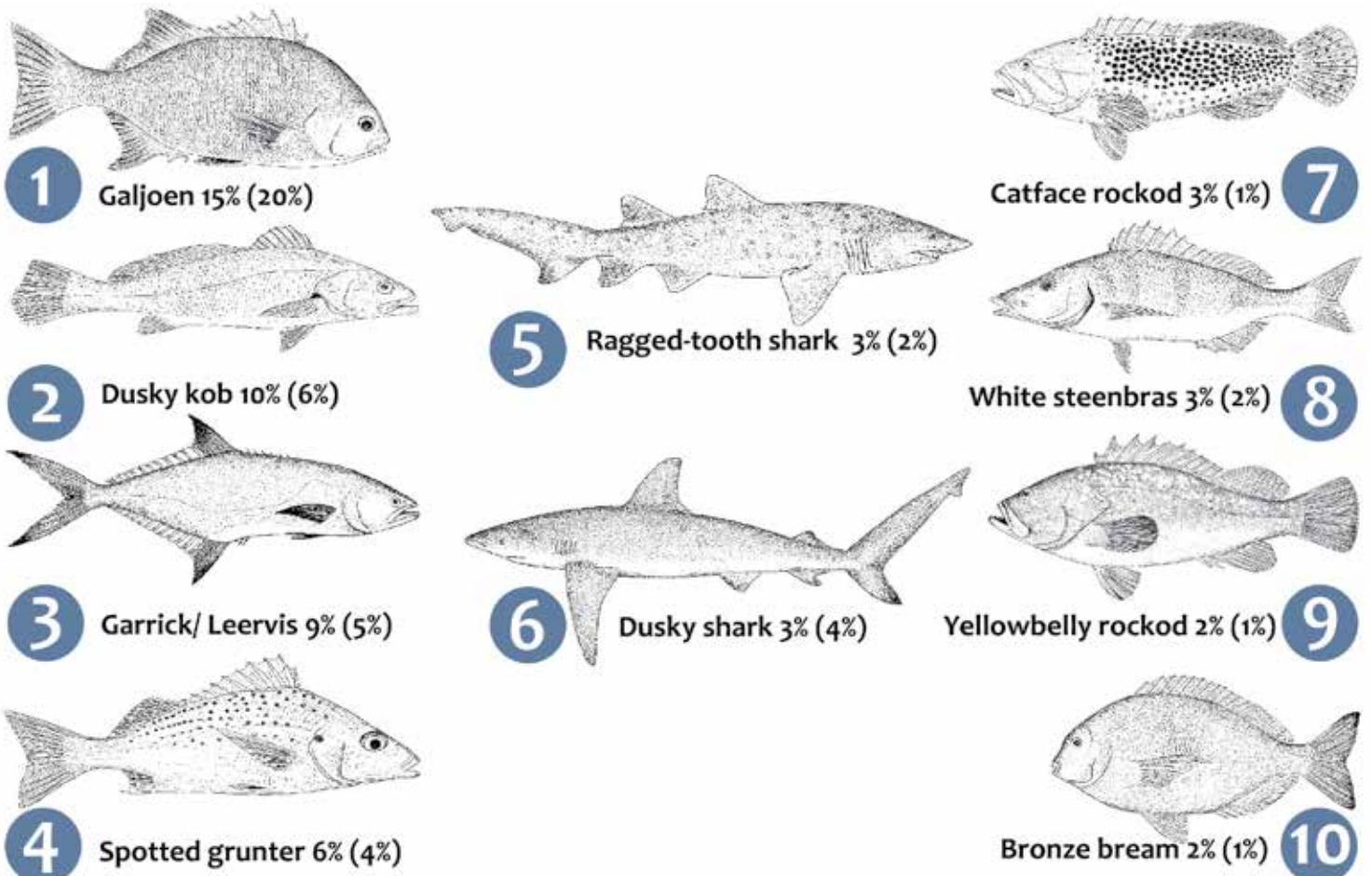
1. Be organised and have your equipment ready before you start fishing (i.e. bucket filled, tag inserted into applicator, tag card and pencil close at hand, measuring stretcher or tape ready with wet cloth, camera close by, etc.).
2. Use good strong tackle and well serviced reels to ensure fight time is minimised.
3. Crimp the barbs on your hook/s and preferably use single hooks rather than trebles and circle hooks rather than J-hooks.
4. Land your fish carefully and avoid gaffing. Preferably use a custom made stretcher or a soft knotless landing net to land your fish. If these are not available, keep your hands wet and use a soft, wet cloth to hold the fish.
5. Don't drag the fish over the beach or rocks and support it carefully with one hand under the head and one under the abdomen in a horizontal position if you pick it up.
6. Once you have landed a fish, keep it wet and follow the protocol discussed above to ensure that the fish is breathing in water as much of the time as possible.
7. Remove the hook from the fish's mouth, if the hook is swallowed don't try to remove it but rather simply cut it off close to the eye of the hook.
8. Work quickly and efficiently, measure your fish accurately and tag it correctly. Don't stand and lift your fish to take a photo, rather kneel down and pose with it in the water or on the stretcher.
9. Carry your fish back to the sea in the bucket (or in the stretcher if it is too big). Release your fish in water deep enough so that it is not stranded after the next wave. If the fish is weak, take time to hold the fish upright gently in the water with its head facing into the current and allow it to recover.
10. Obviously when dealing with potentially dangerous fish such as sharks and stingrays, great care must be taken by the angler to avoid injury.

By following the 10 points mentioned above you can ensure that the fish you have tagged and released has a much better chance of survival so that it can continue to grow and breed and perhaps give someone else the pleasure of being caught again in the future!

Percentage of fish tagged along the Southern African coast in 2017 (percentages in brackets indicate overall distribution of tagging since 1984)



Top 10 species tagged in 2017 (percentages in brackets indicate overall composition of tagging since 1984)



Top Taggers: 10 or more fish tagged in 2017

Member Name	2017	Total tags	Recaps. In 2017	Total Recaps.	% Recapt.
KOBUS NIEHAUS	458	1486	21	58	3.90
DONAVAN COLE	160	605	4	10	1.65
KEVIN HUMPHREYS	153	1473	4	82	5.57
CHARLES LILFORD	140	2669	6	121	4.53
ROBERT KYLE	120	1655	9	187	11.30
MARK GALPIN	109	141	2	6	4.26
JUSTIN MCCARTHY	106	376	11	31	8.24
JACQUES-PIERRE GELDENHUYS	99	375	6	20	5.33
GORDON MARCHAND	94	738	7	59	7.99
JOHAN DE JAGER	89	415	9	52	12.53
DONOVAN MARX	86	146	3	7	4.79
MATHEW WEEDMAN	84	346	18	35	10.12
EWAN KYLE	83	1776	5	298	16.78
POENA BRUWER	80	80	0	0	0.00
LOUIS ALLISON	78	426	9	35	8.22
PIET OOSTHUIZEN	76	468	19	93	19.87
RYAN TAYLOR	76	328	11	34	10.37
SHAWN MEY	76	960	17	51	5.31
WILLIAM FERREIRA	70	70	3	3	4.29
NIC DE KOCK	69	1787	6	112	6.27
MAARTEN MOLENAAR	68	592	2	28	4.73
WILLA BOTHMA	67	93	6	7	7.53
RUAN VAN DER WALT	57	127	3	5	3.94
BRAD CARR	55	886	8	68	7.67
JUNAID ISMAIL	55	142	10	22	15.49
BRADLEY SPARG	52	2194	8	120	5.47
ROUX SWART	52	205	4	19	9.27
CRAIG NELSON	51	598	6	37	6.19
KEVIN RUDOLPH	51	77	5	9	11.69
JACQUES DE LA HARPE	50	1031	5	74	7.18
JEFF ASHERWOOD	50	448	4	19	4.24
PIERRE STEYN	50	66	0	0	0.00
BERRIE FERREIRA	47	607	2	15	2.47
GARETH SHOUGH	47	141	6	6	4.26
RICHARD HARTWELL	45	104	3	3	2.88
STEVEN HUMPHREYS	45	262	3	5	1.91
VAUGHN REILLY	45	159	6	23	14.47
DIRK HERTZOG	44	102	1	4	3.92
BOB SHEPHERD	43	620	0	23	3.71
STUART DUNLOP	43	299	3	26	8.70
GERRIE GROBLER	42	521	1	30	5.76
JOHN LUEF	40	415	1	50	12.05
STEFAN VAN HUYSTEEN	40	104	2	3	2.88
LYLE TAYLOR	38	227	0	5	2.20
GORDON SAVILLE	37	1039	2	53	5.10
SIMON WALKER	37	5085	8	387	7.61
WERNER COETZEE	37	712	9	40	5.62
GRAHAM HEIM	36	146	1	3	2.05
JOSHUA TIMM	36	40	0	1	2.50
JULIAN PYBUS	36	533	2	22	4.13
PIETER MULLER	35	633	3	26	4.11
CORNELIS REIMAN	34	460	2	19	4.13
JONATHAN SCOTT	34	507	0	22	4.34
PIETER TERBLANCHE	34	154	0	2	1.30
RUSSEL BERMAN	34	120	2	5	4.17
URSULA OTTO	34	51	0	0	0.00
WERNER POTGIETER	34	76	0	0	0.00
BYRON MADDISON	33	33	1	1	3.03
DONOVAN SOLOMON	31	174	6	44	25.29
ROB SCOTT	31	49	2	3	6.12
CHRIS MULLER	30	370	1	17	4.59
MAXINE GROENEWELD	30	46	1	2	4.35
PIETER DU TOIT	30	62	1	4	6.45
DAVE IRVINE	29	386	10	57	14.77
GUSTAV SCHLECHTER	29	89	1	9	10.11
BRENDAN O'CONNELL	28	366	5	55	15.03
CLIFFORD HART	28	2555	2	170	6.65
ARMAND VAN DER WALT	27	154	0	3	1.95
LEIGHTEN GELDENHUYS	27	36	2	3	8.33
DANIEL LA GRANGE	26	121	1	4	3.31
DION GOVINDER	26	254	4	34	13.39
KEOLIN MOODLEY	26	26	0	0	0.00
SIMON BRILL	26	102	5	9	8.82
WALTER MATHEE	26	246	0	11	4.47
BARRY TEDDER	25	161	1	4	2.48
KYLE HANSEN	25	338	2	16	4.73
MATTHEW MCIVER	25	74	0	1	1.35
PAUL CURRIE	25	104	5	5	4.81
SHAUN VAN ZYL	25	258	1	8	3.10
CHARLES DE LA HARPE	24	354	0	45	12.71
RIEKERT VAN HEERDEN	24	443	1	17	3.84
CRAIG CARRUTHERS	23	68	1	3	4.41
GARETH BEAUMONT	23	309	1	7	2.27
KIRK WEBBER	23	264	4	14	5.30
BRETT HARRIS	22	75	1	3	4.00

Member Name	2017	Total tags	Recaps. In 2017	Total Recaps.	% Recapt.
EDUARD STEYLS	22	120	1	3	2.50
EUGENE OWEN	22	75	0	4	5.33
RAYMOND CAMPBELL	22	110	7	9	8.18
RIAZ LUTCHMAN	22	22	2	2	9.09
RUAN BURGER	22	233	0	7	3.00
SHAUN HORSFIELD	22	29	0	0	0.00
LAWRENCE SMITH	21	426	1	21	4.93
MARK BROWN	21	39	0	1	2.56
CASPER DE CLERCQ	20	517	2	22	4.26
J.J. STRYDOM	20	20	0	0	0.00
KENNETH STACEY	20	47	0	1	2.13
SIAN PRETORIUS	20	20	1	1	5.00
COENRAAD BEZUIDENHOUT	19	67	1	2	2.99
TREVOR BROWNE	19	32	0	0	0.00
GARETH GOUGH	18	385	2	24	6.23
GUS KALTENBRUN	18	43	0	0	0.00
JASON BRINK	18	237	2	6	2.53
JOSHUA DANE STAUDE	18	83	0	6	7.23
ROY CHINNASAMI	18	31	1	1	3.23
WADE BARFOOT	18	61	0	4	6.56
CORNE ERASMUS	17	116	1	6	5.17
FRANCOIS KEMP	17	22	0	0	0.00
GRANT MARSHBANK	17	543	5	54	9.94
KABOUS VRYENHOEK	17	113	0	9	7.96
MICHAEL WHITE	17	621	4	44	7.09
RON MAGGS	17	95	0	4	4.21
BLAYNE WAREHAM	16	56	1	2	3.57
GREGORY MULLER	16	138	1	4	2.90
GUY NICHOLSON	16	41	1	1	2.44
MURRAY BASSET	16	29	1	1	3.45
NIEL MALAN	16	173	0	5	2.89
TYLER OCONNOR	16	26	2	2	7.69
CLINTON WOODLEY	15	51	0	1	1.96
ORION FARAH	15	15	1	1	6.67
RAY THOMPSON	15	646	1	41	6.35
ASHLEY CAMPHER	14	124	0	1	0.81
BRIAN FUCHS	14	123	2	5	4.07
CORNILES VEUGELERS	14	164	1	12	7.32
DEAN HART	14	22	0	0	0.00
JACQUES MATTHYSEN	14	22	0	0	0.00
JAMES TURNER	14	24	3	4	16.67
KARLIEN SCOTT	14	115	0	9	7.83
SHALVIN NASREN NAIDOO	14	58	0	1	1.72
CHRISTOPHER PIKE	13	172	0	13	7.56
DAYLE MACK	13	27	0	0	0.00
DONOVAN GOVENDER	13	13	1	1	7.69
JUSTIN VAN BONDE	13	136	0	1	0.74
KOOS SMITH	13	747	3	29	3.88
MICKEY FAUEL	13	41	0	3	7.32
CHRISTOPHER LIEBENBERG	12	91	3	4	4.40
DYLLAN KLEINGELD	12	17	1	1	5.88
GLEN WARNER	12	158	4	11	6.96
JOHAN CLOETE	12	31	1	3	9.68
JONATHAN TIMM	12	62	0	6	9.68
LUKE MCKENZIE	12	138	1	9	6.52
MICHAEL VLCEK	12	162	6	21	12.96
MIKE DOHLHOFF	12	347	7	20	5.76
PIETER VAN DER WESTHUIZEN	12	131	0	12	9.16
RYAN KOEKEMOER	12	175	1	19	10.86
STUART HAYNES	12	17	0	1	5.88
WALTER BRIAN MULLINS	12	84	1	4	4.76
ALAN DU PLESSIS	11	209	0	3	1.44
BRADLEY BARTLETT	11	20	0	0	0.00
BRIAN LANGE	11	377	2	59	15.65
CHARL MARAIS	11	757	4	51	6.74
CHRIS WILKINSON	11	182	1	8	4.40
DYLAN DE LANGE	11	11	0	0	0.00
JANNIE VAN BLERK	11	52	0	2	3.85
JULES KUN	11	355	2	22	6.20
KIRSTY KYLE	11	249	4	24	9.64
LISTON DAVIDOWITZ	11	215	3	10	4.65
MARK KAPLEN	11	41	1	1	2.44
MATTHEW NOTHARD	11	12	0	0	0.00
PETER LEHMAN	11	44	0	0	0.00
RALDU POTGIETER	11	518	2	24	4.63
RAVEEN SINGH	11	135	3	17	12.59
RAYNARD STAMMER	11	11	0	0	0.00
RUSSELL HAND	11	700	0	84	12.00
THYS KEMP	11	51	0	1	1.96
CARLO VAN TONDER	10	68	0	2	2.94
CHRIS DEDEKIND	10	19	0	0	0.00
ISAIAH VARATHAN	10	18	0	1	5.56
PATRICK MORRIS	10	820	1	51	6.22
RENALDO OLIVIER	10	10	0	0	0.00





Main fish species tagged up to 31 December 2017

Species	No. Tagged since 1984	Recaptured since 1984		Km travelled		Days free	
		No.	%	Avg.	Max.	Avg.	Max.
Galjoen	64586	4796	7.4	40	1892	424	5815
Dusky kob	19932	1386	7.0	27	1625	313	4370
Garrick/leervis	15878	1107	7.0	215	1670	304	3208
Dusky shark	14259	1325	9.3	104	1792	166	5457
Spotted grunter	12675	351	2.8	13	823	241	2950
Copper/bronze shark	9641	387	4.0	161	1790	409	4222
Spotted gulleyshark	9170	719	7.8	34	2630	539	6332
Blacktail	8988	222	2.5	3	358	213	2715
Shad/Elf	8786	352	4.0	255	1676	150	1106
White steenbras	7403	382	5.2	42	804	304	2538
Blackspot smoothhound	7036	273	3.9	51	1404	551	7318
Lesser guitarfish/sandshark	6560	174	2.7	39	988	604	5119
Spotted ragged-tooth shark	6139	869	14.2	208	2966	659	8256
Slinger	5048	207	4.1	53	1110	244	2814
Roman	4911	315	6.4	6	294	332	3549
Giant guitarfish/sandshark	4875	377	7.7	35	1210	336	4485
Largespot pompano	3893	82	2.1	14	270	169	1372
Black musselcracker/poenskop	3672	289	7.9	14	528	401	6809
Sevengill cow shark	3669	237	6.5	88	597	493	5297
Diamond ray	3582	30	0.8	74	1756	186	2184
Sailfish	3569	32	0.9	35	1060	66	727
Giant kingfish	3457	139	4.0	15	419	297	2226
Bronze bream	3355	121	3.6	24	799	149	1465
Blue stingray	3275	16	0.5	11	234	117	1498
Zebra	3218	78	2.4	12	1075	271	8670
Yellowbelly rockcod	3157	578	18.3	5	355	274	2674
Catface rockcod	3116	709	22.8	5	525	177	2867
White musselcracker	2688	81	3.0	41	843	364	2313
Carpenter	2598	25	1.0	17	201	512	4766
Speckled snapper	2318	917	39.6	1	200	175	2376
Baardman/tasselfish/belman	2205	30	1.4	1	17	115	679
Santer/soldier	2143	156	7.3	14	490	231	1683
Sharpnose stingray	1864	7	0.4	2	24	36	465
Unidentified hammerhead sharks	1683	22	1.3	38	975	68	1288
Ladyfish/springer/skipjack	1678	33	2.0	13	412	186	1426
Smooth hammerhead shark	1642	37	2.3	114	1153	319	3075
Natal stumpnose	1625	48	3.0	9	230	131	698
Red steenbras	1624	154	9.5	153	923	815	8080
Striped catshark	1538	138	9.0	18	381	399	3074
Perch/riverbream	1536	217	14.1	1	325	306	1583
Albacore/longfin tuna	1511	37	2.4	102	1008	249	2585
River snapper	1444	291	20.2	5	391	252	2403
King mackerel/couta	1377	60	4.4	187	1552	361	2604
Westcoast steenbras	1302	82	6.3	34	280	138	1449
Dageraad	1287	88	6.8	11	592	200	1568
Brassy kingfish	1284	83	6.5	1	13	157	1441
Grey grunter	1244	79	6.4	0	15	84	1099
Cape stumpnose	1190	9	0.8	2	56	51	732
Cavebass	1136	188	16.5	4	514	189	2284
Duckbill ray	1130	11	1.0	5	123	186	1427
Soupfin shark	1056	36	3.4	79	1034	427	3604
Blacktip shark	1041	53	5.1	69	1288	217	1846
Skipjack tuna	1032	1	0.1	38	1061	17	464
Scotsman	1028	300	29.2	14	1211	238	2839
Yellowfin tuna	985	14	1.4	250	5645	65	697
Scalloped hammerhead shark	975	21	2.2	77	1029	282	3051
Milkshark	938	31	3.3	41	977	111	3575
Cape/giant yellowtail	925	39	4.2	125	1746	133	1287
Stonebream/stinker bream	902	9	1.0	20	524	54	563
Silver kob	901	28	3.1	11	241	93	839
Geelbek	878	10	1.1	33	904	90	2569
Black marlin	837	2	0.2	15	504	7	159
Blacktip kingfish	800	26	3.3	3	54	79	545
Squaretail kob	791	48	6.1	10	266	119	2043
Honeycomb stingray	775	19	2.5	0	8	91	2543
Bigeye kingfish	766	38	5.0	14	163	176	2751
Leopard catshark	735	101	13.7	10	722	403	4431
Spinner shark	677	27	4.0	42	1055	144	1411
Seventy-four	668	25	3.7	36	521	237	2845
Eagle ray	663	5	0.8	2	49	79	1582
Natal seacatfish	595	214	36.0	0	3	227	2586
Hardnose smoothhound shark	588	13	2.2	19	340	91	870
Striped marlin	562	2	0.4	49	848	12	379
Tiger shark	535	25	4.7	74	4067	117	1186
Janbruin/John Brown	529	15	2.8	0	12	41	279
Potato bass	508	27	5.3	1	22	147	2639
Great white shark	507	18	3.6	106	1543	99	940
Zambezi shark	478	33	6.9	52	539	180	2599
Queen mackerel	461	3	0.7	0	12	21	1044
Bonfish	453	3	0.7	0	6	4	75
Halfmoon rockcod	429	83	19.3	1	49	241	2511
Southern pompano	417	27	6.5	24	464	87	848
Blue marlin	416	0	0.0	0	0	0	0
Pickhandle barracuda	377	60	15.9	6	1113	233	1856

Species	No. Tagged since 1984	Recaptured since 1984		Km travelled		Days free	
		No.	%	Avg.	Max.	Avg.	Max.
White stumpnose	377	5	1.3	0	7	36	463
Hottentot	356	15	4.2	0	10	93	1078
Largemouth queenfish	354	16	4.5	0	10	34	630
Red stumpnose	353	8	2.3	4	107	144	1998
Sandbar shark	329	6	1.8	35	345	58	536
Brown shyshark	320	15	4.7	1	12	171	997
Eastern little tuna	317	0	0.0	0	0	0	0
Flapnose houndshark	314	40	12.7	1	43	279	2776
Puffadder shyshark	314	32	10.2	0	20	73	741
Lemonfish	312	14	4.5	0	2	88	749
Dark shyshark/catshark	307	100	32.6	0	15	98	1097
Banded galjoen	291	7	2.4	17	562	44	507
Bartail flathead	291	7	2.4	0	18	41	796
Blackspot shark	276	12	4.3	22	360	59	708
Bluntnose spiny dogfish	274	5	1.8	45	669	253	1984
Bluefin kingfish	267	10	3.7	2	94	35	260
Spearnose skate	266	10	3.8	0	3	44	462
Elephantfish/St Joseph	264	2	0.8	41	1342	9	218
Blue hottentot	233	6	2.6	0	0	17	199
Snapper kob/salmon	225	10	4.4	4	132	38	378
Blue emperor	221	14	6.3	19	307	118	539
Malabar rockcod	213	33	15.5	1	8	152	1540
White seacatfish	203	4	2.0	2	21	103	1895
Whitespotted smoothhound shark	195	6	3.1	4	210	61	1627
Greyspot guitarfish/sandshark	182	4	2.2	3	42	36	738
Snoek (Cape)	181	1	0.6	8	136	27	491
Javelin grunter	160	16	10.0	5	70	220	2940
Dorado/dolphinfish	156	1	0.6	3	64	3	66
Englishman	152	4	2.6	0	6	48	554
Spotted eagle ray	148	2	1.4	1	15	28	850
Striped threadfin	135	2	1.5	1	9	9	63
Smallspotted pompano	129	3	2.3	1	13	45	220
Green jobfish	125	6	4.8	0	0	25	373
Short-tail stingray	125	3	2.4	9	231	100	2412
Cock grunter	111	5	4.5	2	65	16	490
Great barracuda	104	23	22.1	0	1	61	467
Flathead mullet	102	1	1.0	43	738	43	738
Russell snapper	100	3	3.0	0	1	45	896
Moustache rockcod	98	33	33.7	21	1200	354	2990
Eeltail catfish	96	2	2.1	0	10	20	453
Tomato rockcod	95	17	17.9	0	11	79	537
Thorntail stingray	91	2	2.2	0	0	25	357
Cape gurnard	89	3	3.4	0	0	139	1947
Atlantic bonito	88	0	0.0	0	0	0	0
Maasbanker	88	0	0.0	0	0	0	0
Sliteye/tope shark	88	6	6.8	31	565	222	2652
Spotted spiny dogfish	82	2	2.4	21	219	127	1401
Oxeye tarpon	80	0	0.0	0	0	0	0
Swordfish	78	1	1.3	1	9	158	1263
Whitebarred rubberlip	73	1	1.4	0	1	9	176
Blackfin reef shark	72	1	1.4	0	0	39	697
Banded catshark	68	9	13.2	3	55	56	1155
Longfin/tropical yellowtail	67	0	0.0	0	0	0	0
Striped mullet	66	1	1.5	0	1	11	230
Bigeye stumpnose	65	2	3.1	0	3	3	38
Longfin kingfish	65	1	1.5	1	12	19	453
Java shark	61	3	4.9	3	58	64	1589
Sailfin rubberlip	59	0	0.0	0	0	0	0
Yellowspotted kingfish	59	0	0.0	0	0	0	0
Blue/ferdy kingfish	58	0	0.0	0	0	0	0
Cape moony	55	0	0.0	0	0	0	0
Doublespotted queenfish	55	0	0.0	0	0	0	0
Needlescaled queenfish	55	1	1.8	0	0	11	227
Greater yellowtail/amberjack	53	1	1.9	15	77	5	27
Sand steenbras	53	1	1.9	0	0	3	79
Round ribbon tail ray	52	2	3.8	0	8	5	74
Yellowtail scad	51	0	0.0	0	0	0	0
Thintail thresher shark	47	0	0.0	0	0	0	0
Concertina fish	46	0	0.0	0	0	0	0
Marbled electric ray	46	0	0.0	0	0	0	0
Panga	45	0	0.0	0	0	0	0
Shortfin mako shark	45	5	11.1	6	69	63	786
Prodigal son	45	1	2.2	2	36	22	479
Dusky rubberlip	41	2	4.9	14	183	230	2345
Spadefish	41	1	2.4	6	118	130	2724
Shortbill spearfish	39	0	0.0	0	0	0	0
Wreckfish	39	2	5.1	0	7	17	388
Yellowfin emperor	39	4	10.3	0	0	72	1187
Blue shark	38	0	0.0	0	0	0	0
False thornback skate	38	2	5.3	0	0	19	340
Minstrel	38	1	2.6	4	37	68	679
Steentjie	37	0	0.0	0	0	0	0
Koester	36	1	2.8	0	0	56	1176
Bludger	34	0	0.0	0	0	0	0
Milkfish	31	0	0.0	0	0	0	0

Priority species for tagging are highlighted in blue

Why do we need a “Priority Species” list?

Some of our taggers are disappointed when we tell them that they can only tag fish species on our priority species list and not just any old fish they catch. There are a number of important reasons for this.

Firstly because we import our tags from Hallprint© in Australia, tags now costs about R12 each and we want those tags to be used on important species that we need information on and not wasted on species which are of relatively little scientific interest.

Secondly, there are a number of fish species which research has shown simply do not hold tags well or are very susceptible to injury and exhibit low survival following a tag and release event. Good examples would be blacktail and slinger. Many thousands of blacktail were historically tagged in the De Hoop and Tsitsikamma tagging projects and results showed that apart from them generally being relatively small fish (with few of them being greater than the minimum tagging size of 30 cm fork length), most blacktail would shed their tags very quickly (with evidence of tag scars on recaptured individuals) and were thus not ideal species for a tag and release study using dart tags. Similarly, past research on slinger has shown that this species is extremely susceptible to the effects of barotrauma (trauma caused as a result of pressure reduction when brought up from deep water) and thus do not survive well when tagged and released by members of the public.

A third reason is that in the case of some commonly caught species such as lesser sandsharks, diamond rays and blue rays, many thousands have been tagged but we have had remarkably few recaptures suggesting that either the fish themselves are succumbing to predation after tag and release or the tags themselves

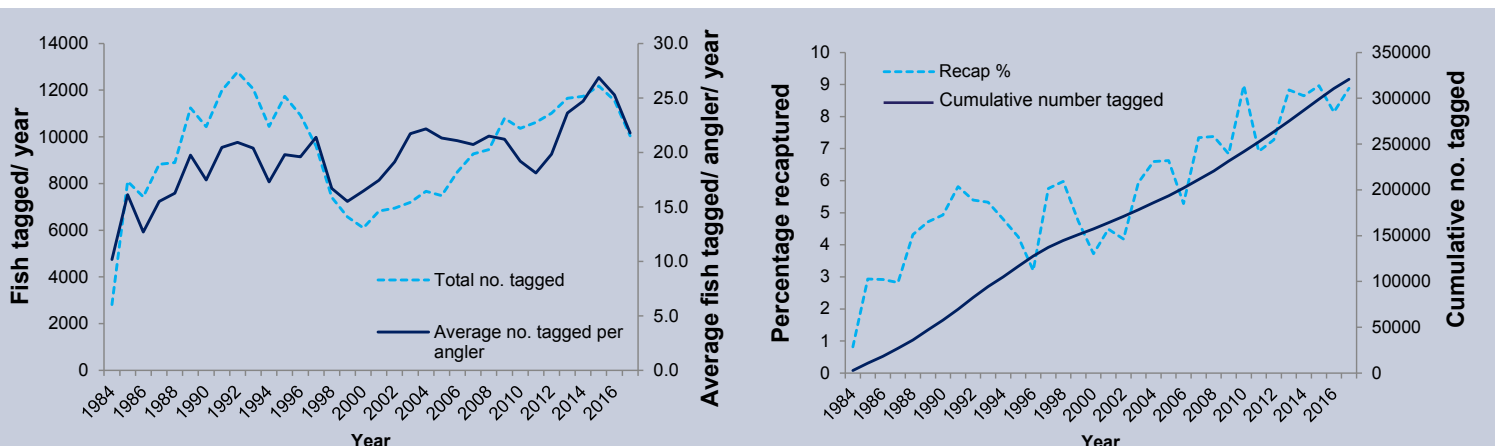
are being shed. Either way, future focused tagging on these species using dart tags, is unlikely to produce meaningful results. There are also certain species which it is now illegal to tag such as great white sharks. Other species such as West Coast steenbras which are mainly caught in Namibian waters and are thus outside the jurisdiction of the ORI-CFTP. Other species are generally too small (e.g. Cape stumpnose and steentjie), very susceptible to handling injury (e.g. bonefish and dorado) or simply so abundant that efforts to tag them have largely proved unsuccessful in terms of getting a useful number of recaptures (e.g. Cape snoek and panga).

Because of the above mentioned reasons ORI scientists periodically evaluate the species on our priority tagging list and we ask our taggers to try and focus their efforts on these target species (see priority species highlighted in blue for tagging in the “Main fish species tagged up until December 2017” table on opposite page).



Michael White and son with a tagged leerie

ORI Cooperative Fish Tagging Project Statistics



Top 10 most exciting recaptures from 2017

Species	Tag Date	Tag Locality	Tag Size	Tagger	Recap. Date	Recap. locality	Re-cap. Size	Recapturer	Dist. (km)	Km Per Day	Days (Years) free	Growth (mm)	Comments
Black musselcracker	2013/12/18	Jeffrey's Bay	510	Rian Raubenheimer	2017/11/06	Glen Muir / Glen Gariff Bay	730	John Luef	367	0.3	1419 (3.8)	220	Moved north typical of adults of this species.
Ragged-tooth shark	2005/01/16	Great Fish Point / Palmiet	1835	Wesley Rapson	2017/04/27	Mbolompo Point / Mnewasa	1770	Junaid Ismail	256	0.1	4484 (12.2)	-65	Long time at liberty, movement reflects migratory habit.
Scalloped hammerhead	2009/10/25	Splash Rock (Port Edward)	960	Stuart Dunlop	2017/11/15	Winkelspruit	1440	KZN Sharks Board	126	0	2943 (8)	480	Interesting recapture, with good growth and long time at liberty.
Galjoen	2013/05/22	Lekkerwater	412	DEA Scientist	2017/10/16	Koppie Alleen	456	DEA Scientist	11	0	1608 (4.4)	44	Remained resident for some time (one of the stayers).
Galjoen	2009/05/18	Lekkerwater	339	DEA Scientist	2017/11/08	Hole-in-the-Wall	570	Unknown	1005	0.3	3096 (8.4)	231	Large distance moved over a long period (one of the movers).
Cavebass	2010/11/07	St Lucia MPA Sanctuary	350	Mike Tyldesley	2017/02/07	St Lucia MPA Sanctuary	460	ORI Scientist	5	0	2284 (6.2)	110	Resident species with long time at liberty and useful growth information.
Garrick/Leervis	2011/10/15	Knysna Lagoon	520	Bradley Sparg	2017/01/09	Knysna Lagoon	1300	Unknown	0	0	1913 (5.2)	780	Long time at liberty, possibly an adult fish which returned home to its natal estuary.
King mackerel	2016/08/16	Ponta Abril (Santa Maria/Hells Gate)	1180	Graham Pollard	2017/11/22	San Martino (Bilene)	1260	Unknown	218	0.5	463 (1.2)	80	Nice recapture of a species that is not often recaptured.
Red steenbras	2013/10/09	Struisbaai / Oriental Pioneer	690	Daniel La Grange	2017/04/23	East London / Buffalo River	800	Unknown	910	0.7	1292 (3.5)	110	Northward movement typical of adults of this species.
Shad/Elf	2016/05/23	Koppie Alleen	518	DEA Scientist	2017/11/30	Umgeni River / Blue lagoon	600	Wade Barfoot	1352	2.4	556 (1.5)	82	Northward movement reflective of annual spawning migration.

How to be a responsible angler

In an attempt to create greater angler awareness and custodianship of South Africa's marine fish resources, WWF South Africa and their Fish4Life initiative partnered with specialists from the South African Shark Conservancy, South African Institute for Aquatic Biodiversity, Rhodes University and the Oceanographic Research Institute to develop some important points for anglers to consider. This is what they came up with:

“ The responsible angler not only adheres to recreational permit conditions and regulations but also adopts an ethical code of conduct to ensure they are going above and beyond the rules to reduce the impacts of angling.”

A responsible recreational angler:

- 1 Has a valid recreational angling permit and is familiar and compliant with the relevant regulations.
- 2 Seeks information and remains informed about the status of marine resources and the impacts of angling on species and habitats.
- 3 Is adaptable to change and embraces recommendations made by informed researchers and fishery managers.
- 4 Acts responsibly when exposed to activities that will negatively impact on the conservation of marine resources.
- 5 Collects bait with the minimum disturbance to the environment.
- 6 Only keeps fish and bait sufficient for their immediate needs and does not sell fish.
- 7 Quickly and humanely kills fish that are retained to ensure the least amount of suffering.
- 8 Handles all fish that are to be returned to the sea, regardless of species, in a way that ensures their best chance of survival.
- 9 Uses equipment and tackle that minimises stress and injury to fish, especially when practising catch and release.
- 10 Appreciates the environmental and social value of a healthy environment and always disposes of unwanted fishing line and plastics appropriately leaving the fishing area in the same or better condition than when he/she arrived.
- 11 Reports illegal activities including poaching, environmental destruction and pollution events, to the relevant authorities.
- 12 Uses established legal roads and tracks when accessing fishing areas.
- 13 Is considerate of other legitimate marine users and respects their right to access marine resources.
- 14 Educates others, especially children, in sustainable fishing practices.
- 15 Is a role model to other anglers and always leads by example.

As members of the ORI-CFTP it is our hope that you will adopt these 15 points and lead by example!

Research Tagging in Marine Protected Areas

Marine Protected Areas (MPAs)	Period	2017		Overall	
		Total	# Recapt.	Total	# Recapt.
De Hoop Marine Protected Area (Western Cape)	1985 - current	1 537	148	57 559	4 142
Dwesa-Cwebe Marine Protected Area (Eastern Cape)	2009 - current	391	16	2 687	84
Goukamma Marine Protected Area (Western Cape)	2001 - current	48	3	720	25
iSimangaliso Marine Protected Area (KwaZulu-Natal)	2001 - current	797	94	12 261	1 502
Pondoland Marine Protected Area (Eastern Cape)	2006 - current	0	0	4 158	1 080
Tsitsikamma Marine Protected Area (Eastern & Western Cape)	1986 - 2012	0	0	12 217	573

Focus species: Galjoen (*Dichistius capensis*)

Movement:

Resident. However, some individuals (10%) are nomadic meaning that they move throughout their distribution range. This nomadic movement behaviour may be genetically predetermined. See this year's exciting recaptures for some examples.

Total number tagged: 64 586

Number recaptured: 4 796 (7.4%)

Longest time free:

5 815 days or 15.9 years
(1998 to 2014)

Longest distance moved:

1892 km (from Sera se Gat, Namibia to Kogel Bay, WC)

Growth: Relatively slow growth rate, males reach maturity after 4.9 years (31 cm TL), females reach maturity at 5.2 years (34 cm TL)

Max age:

Males 12 years
Females 21 years

Max size:

6.5 kg; 74 cm TL

Breeding location:

Suggested to be throughout their range.

Breeding season:

September – February

Feeding:

They feed in both rocky and sandy surf-zone habitats with 75% of their diet consisting of brown mussels, red bait and barnacles.

Distribution:

Endemic to southern Africa, occurring from southern Angola to Durban. More abundant in cooler waters <21°C.

**The galjoen is
South Africa's national fish!**

Angler: Kyle Hansen

Special thanks

We would like to express our sincere gratitude for the financial support received from the **South African Association for Marine Biological Research (SAAMBR)** and the **KZN Department of Economic Development, Tourism and Environmental Affairs (EDTEA)**, without which we would not have been able to continue this important project. Most of all we would like to thank all of our active tagging members for their on-going contributions towards linefish research and conservation. In particular we would like to acknowledge **DP van der Merwe, Nkwazi Angling Club**, and the **Kathleen Hastie Charitable Trust** for their monetary donations in 2017. **Hallprint@Australia** is thanked for their excellent service and on-going supply of high quality tags and applicators. **Roelf Venter** is thanked for his assistance in fitting handles to the tag applicators. Lastly, we thank all of the other sponsors who have contributed in some way over the past 33 years, there are simply too many to mention.

How to access the new ORI Tag website

- Go to www.oritag.org.za where you will be able to log into your new profile.
- Enter your membership code as your username and use the same password as before.
- The tagging instruction booklet and this edition of the Tagging News are also available on the website.
- Furthermore, the electronic datasheets for tag release and recapture submissions via email/fax are also available for download if you would prefer to continue using these instead of entering your own data online.
- Members who are no longer active are encouraged to consider returning unused tags to ORI so that we can reissue them.

The Tagging News is edited by Gareth Jordaan, Bruce Mann and Colette Bodenstaff

Oceanographic Research Institute (ORI)

Cell: +27 79 529 0711
Tel: +27 31 328 8222
Fax: +27 31328 8188
E-mail: oritag@ori.org.za
Web: www.oritag.org.za
Facebook: @ORITag

Postal address:
PO Box 736
Durban
4000



INCORPORATING



Helping people to care for our ocean