

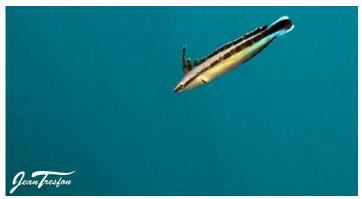
## SeaFishAtlas Newsletter

Welcome to the first Sea Fish Atlas newsletter for 2016. I hope the year is treating you well and you are getting time to get outdoors for some great diving, fishing trips and exploration. Once again thanks to you all for your contributions to the Sea Fish Atlas, we really appreciate it and it's always exciting to log on and see what new fish you have photographed for us. Please continue to submit your photos, remember you can also post them to our Facebook page <u>Sea Fish Atlas</u> or email them to me at <u>r.thornycroft@sanbi.org.za</u>. If you have a large database of images, please drop me an email and I will organise to get them from you. In this newsletter we look at some potential range extensions, some rarely seen klipfish from False Bay and get a first look at some of the deep water fish photographed off the West Coast of South Africa, I hope you enjoy!

### Potential range extensions

#### Mimic blenny

Jean Tresfon photographed this little fish in while diving on the eastern side of St Croix Island in Algoa Bay, it followed him up from the bottom of the bay and while he was waiting for his dive boat. Although this fish resembles the bluestreak cleaner wrasse, *Labroides dimidiatus*, it is actually a



A juvenile mimic blenny, Aspidontus tractus, by Jean Tresfon.

juvenile threadfin sabretooth (or mimic) blenny, *Aspidontus tractus*. This species mimics the cleaner wrasse, not only in appearance but also in swim pattern allowing them to approach unsuspecting fish, or in this case Jean, and take a bite out of them. Adults of this species also feed on fish eggs and invertebrates but juveniles such as this one, only feed as a mimic. On first glance, adults of these two species are very difficult to tell apart but the blenny has an underslung mouth below its projecting snout, whereas the cleaner wrasse has a terminal mouth on front of its snout. Only the juvenile mimic blenny has the extended dorsal ray after which they are commonly called. Both adults and juveniles have an impressive pair of large canines in their lower jaw, hence "sabretooth!".

The mimic blennie has only been recorded as far South as Aliwal Shoal so this sighting in Algoa Bay is a substantial range extension. However, juvenile tropical species often turn up as vagrants in the bays along the Cape so it will be interesting to see if more are seen in this area.

#### **Doublespotted queenfish**

Bruce Mann from the ORI Fish Tagging Project submitted the picture opposite. It is a doublespotted queenfish, *Scomberoides Iysan*, caught by Charles Touzel on fly, in the Umngazi estuary (just South of Port St. Johns). Bruce confirmed this ID and also noted that this could be a southern range extension for this species and they are usually only found North of Durban. The ORI tagging project is an extremely successful initiative that has been run by Bruce for just over 30 years so it is fantastic to have him contributing to the Sea Fish Atlas. You can find out more about the tagging project and how to participate on their website <a href="https://www.oritag.org.za">www.oritag.org.za</a>.



The doublespotted queenfish, *Scomberoides lysan*, caught by Charles Touzel in the Umngazi estuary.























## Two rarely seen klipfish spotted in False Bay

#### **Onrust klipfish**

Carel van der Colff took this lovely head shot (left) of the onrust klipfish, *Clinus berrisfordi*, diving on a 5 m outcrop at Castor Rock. This klipfish is endemic to South Africa and is found from False Bay to Port Elizabeth although it is very seldom seen by divers. It is even more unusual to spot one on the Cape Town side of False Bay, right on the southern end of its distribution range.



The onrust klipfish, Clinus berrisfordi, by Georgina Jones.



The onrust klipfish, Clinus berrisfordi.

Onrust klipfish are reddish orange or yellow in colour, with about 7 broad darker crossbars. They have two darker lines from eye to cheek as you can see from the photographs. Another distinguishing feature which can be seen in the photograph on the left, is a dark ocellus on the shoulder visible when the fish leaves its shelter. They are usually spotted in algal pools and in shallow tidal pools where they feed on small crustaceans.

#### Snaky klipfish

Georgina Jones captured these photographs of the snaky klipfish, *Blennophis anguillaris*, at Boat Rock on a 20 m dive. This species of klipfish is very rarely seen and it is especially unusual to see them that far off shore, and at that depth. They are usually only seen on rocky reefs shallower than 10 m. According to Guido Zsilavecz from <u>SURG</u>, the snaky klipfish is extremely shy and is usually only spotted on night dives due to its habit of keeping well hidden during the day.



The snaky klipfish, *Blennophis anguillaris*, by Georgina Jones, showing the distinctive white nose-stripe of this species.



The snaky klipfish, *Blennophis anguillaris*, by Georgina Jones.

The name "snaky" refers to the elongate body of this species, as does "anguillaris" meaning "eel-like". They have been known to grow to 30 cm in length. They are usually red or dark maroon in colour with dark shoulder blotch just below the start of the dorsal fin as you can see in the photo above. Adults, like the one in the photographs, usually have a distinctive white nose-stripe.

The snaky klipfish can be confused with the barbelled klipfish, *Cirrhibarbis capensis*, which is a similar shape and found in the same areas. However, the barbelled klipfish, as indicated by its name, has a number of short barbels on its chin which the snaky klipfish lacks.



# In-situ photographs at 500 m depth off South Africa's West Coast

In January this year a team of scientists on board the South African research ship, Ellen Khuzwayo headed out to conduct a survey of a trawling ground about 100 miles west of Honderklip Bay (West Coast of SA). They captured some amazing images and footage including some of the first in-situ photographs of the benthic communities found at around 500 m deep. Fantastic photos of several important commercial trawl species suck as kingklip, hake and jacopever live in their natural environment were also shot using a "SkiMonkey". This is basically a camera mounted on a heavy sled which is towed along the sea floor. There is no way to direct the camera or go back and re-look at an area, the camera can only move forwards with the ship, so getting decent photos can be hit and miss and is accompanied by much excitement from the team. It is especially hard to watch an "interesting" subject skitter out the frame before it can be identified!

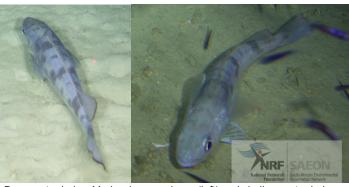


Kingclip, *Genypterus capensis*, from the trawl grounds west of Honderklip Bay. Pic SAEON

This year marks the third survey of a series which will hopefully continue into 2018. This project came about when the South African Deep Sea Trawling Industry Association (SADSTIA) agreed to participate in an experiment to



Jacopever, *Helicolenus dactylopterus*, photographed at 500 m depth in the trawl grounds west of Honderklip bay. Pic SAEON



Deep water hake, *Merluccius paradoxus* (left) and shallow-water hake, *Merluccius capensis* (right). Pics SAEON.

monitor the recovery of sea-life in fallow trawl lanes. Three lanes in the area have been closed to trawling since 2014 as a result of a successful collaboration between SAD-STIA, the Department of Agriculture, Forestry and Fisheries (DAFF) and a number of universities and marine research agencies. These include the University of Cape Town (UCT), the South African Environmental Observation Network (SAEON) and the South African National Biodiversity Institute (SANBI).



Fish species filmed in the trawl grounds; (top left) Monkfinsh, *Lophius vo-merinus*, (top right) an unidentified conger eel species, (bottom left) rattail, *Coelorinchus* spp and (bottom right) spiny eels, *Notacanthus sexspinus*.

Pics SAEON.

During the three surveys that have been done for this experiment so far, 20 fish species have been identified from the video and photos captured in the trawl grounds and some distribution patters of these fish are already evident. Monkfish, *Lophius vomerinus*, are usually observed in the relatively shallower regions (365 m) as was an unidentified conger eel species which closely resembles one of the *Bassanago* sp. but has dark tail edging. Various species of rattail are seen in all depths in the trawl lanes. In the deepest lane (511 m) aggregations of spiny eels, *Notacanthus sexspinus*, are often observed. Most of these fish are usually only seen when they are brought up in trawls so to get photos of these deep water species in their natural habitat is fantastic.



#### Exploratory dive to over 600 m

While in the trawl grounds, the team sent the Ski-Monkey on a deep, exploratory dive to 650 m, this is the deepest underwater footage ever captured off South Africa. The water temperature is only 5 °C at this depth. The spiny eels that had been commonly seen in the 500 m zone were notably absent at this depth. However several species of rat tail including were seen. A skate, *Rajella* sp. and a cusk eel were also filmed. Unfortunately it is difficult to put species names to some of fish just from photos but it is amazing to get a glimpse of them in their natural habitat.

#### Child's Bank and Benguela Bank

The team also did Ski-Monkey surveys of Child's Bank and the Benguela Bank. Both of these areas have sections that make up two of the recently proposed Marine Protected Areas (MPAs) under Operation Phakisa. Child's Bank lies close to main trawl lanes and as such has been trawled to some extent however, the Benguela Bank has seen much less trawl pressure. Child's Bank hosts a high diversity of marine life as can be seen from the photo below. In fact, a small dredge (see photo) was pulled for just 20 m along the sea floor and captured over 30 species of invertebrates and one fish, a longsnout bellowsfish, Notopogon macrosolen. Although it is unfortunate that samples such as this have to be removed from the ocean, having specimens in hand allows accurate identification and species descriptions, which then allow better IDs to be made from future video transects.



The rich diversity on the seabed at Child's Bank (top left), the dredge used to obtain specimens from this area (top right) and a rattail in the untrawled soft sediment habitat of the Benguela Bank (pics: SAEON).



A Rajella skate with a species of cusk eel (top right) and a rat tail, Lucigadus ori (insert). All photographed at ~ 600m depth. Pics: SAEON.



The longsnout bellowsfish, *Notopogon macrosolen*, is found off the West Coast from Southern Africa from Namibia to Saldanha Bay, usually between 200 and 500 m deep. Pic: Kerry Sink.

On an area of soft sediment on Child's Bank a beautiful yellow spotted catshark, *Scyliorhinus capensis*, was caught on camera at 370 m depth. This species is endemic to Southern Africa and is listed as Near Threatened by the IUCN because they are often caught as bycatch in trawls. Their presence on Child's Banks means that if the MPA is confirmed, they will have a refuge area from trawling.

Another survey is planned for next year so it will be exciting to see what future surveys of these areas reveal and if any recovery from trawling pressure is evident.



The yellow spotted catshark, *Scyliorhinus capensis*, is listed as near Threatened by the IUCN. Pic SAEON.







