



SeaFishAtlas Newsletter

Welcome to the first Sea Fish Atlas Newsletter! The newsletters will keep you up to date on project news as well as keeping you abreast of some of the interesting discoveries made by citizen scientists contributing to the Sea Fish Atlas. This first newsletter will focus on the photographs taken by Peter Timm and his group of Trimix divers while documenting the deep reefs and canyons off Sodwana Bay earlier this year.

Thank you all for your participation and support for the project. The Sea Fish Atlas was launched as part of the SeaKeys project in March 2014 and since then you have managed to reach almost 2000 observations (made up of 292 fish species) on iSpot. We are hoping to reach 2500 observations in early 2015 and it is thanks to all of you that we are well on our way to achieving this. Feel free to contact us if you have any queries or suggestions, contact details are at the end of the newsletter. Please continue to upload your amazing images and spread the word, together we can make a difference.

SeaKeys Launch

The SeaKeys project was launched in the Whale Well of the Iziko South Africa Museum on 18 March 2014. The ultimate aim of the SeaKeys project is to increase our information on South Africa's incredible biodiversity with the goal of making the results more accessible to the South African public. There are over 17 different organisations with re-



searchers, post-graduate students, citizen scientists, marine managers and decision makers involved in the SeaKeys project. One component of the overall project is a marine atlas (or mapping) section which is where the Sea Fish Atlas fits in together with the [Sea Slug Atlas](#) and the [Sea Coral Atlas](#). With information sent in by you, our citizen scientists, we hope to produce detailed maps of the distribution of marine organisms in South African oceans. These maps will help contribute to IUCN assessments, especially for species with restricted ranges or that may fall on the endangered or critically endangered IUCN lists.

Peter Southwood: over 1180 iSpot fish observations

Peter Southwood was one of the first people to get involved in the Sea Fish Atlas and his enthusiasm has not dimmed. He has added fish from various locations from Cape Town all the way up to Sodwana Bay and is an active participant on iSpot offering valuable identifications and tips for new users. Peter is part of the Southern Underwater Research Group ([SURG](#)) and is in the process of doing reef surveys with the goal of mapping the dive sites of the Cape Peninsula and False Bay and recording the species at each site. He has also been a valuable contributor to the Sea Slug Atlas and the Sea Coral Atlas and is the first person to reach the coveted "5 fish" reputation on the fish section of iSpot. Thanks for your valued support Peter and we look forward to many more of your photographs.



Top: Caroline's parrotfish (*Calotomus carolinus*), bottom left: Paperfish (*Taenianotus triacanthus*) and bottom right: Speckled klipfish (*Clinus venustis*), just some of Peter's contributions to the Sea Fish Atlas.



Peter Timm's Sea Fish Atlas legacy

Peter Timm is best known for leading the team that discovered the population of coelacanths in the canyons off Sodwana bay in 2000. In March 2014 Peter led a trimix expedition team that included 16 divers from the Alternative Dive Group and Triton Lodge staff. They completed a total of 22 dives during which the deep reef systems at 69m as well as the coelacanth habitat down to 115m in Jesser canyon were surveyed. The images and video clips were given to SANBI (South African National Biodiversity Institute) to facilitate research of deep marine habitats and species distribution data.

A total of 147 observations were uploaded onto iSpot as a result of this expedition as part of the Sea Keys and Sea Fish Atlas launch. Amongst these photographs were several rare and elusive species, new species records for South Africa and even new undescribed species. The highlights of this expeditions are covered below and represent only a small part of Peter's contributions to marine science. Peter died tragically while diving in June, but left an amazing legacy of discovery and conservation for us to remember him by.

Pastel tilefish

This particular fish proved to be very elusive: Peter Timm first spotted the large rubble mounds that the fish create 5 years ago in Sodwana Bay. He was intrigued by these mounds and after finding out that it was the pastel tilefish that built them, made it his mission to photograph and film these fish in action. However it was not until this year that he finally managed to capture these amazing images on a deep reef (70 m) off Sodwana Bay during the trimix expedition. He always joked that this was the one fish that seemed harder to photograph than the coelacanth! His contributions represent the best ever recorded images and footage of this species documenting their unique ecology.



The pastel tilefish builds mounds out of ocean rubble, mainly old shells. It was these mounds that first alerted Peter to the presence of this fish on a deep reef in Sodwana Bay.



The pastel tilefish (*Hoplolatilus fronticinctus*) photographed by Peter Timm in Sodwana Bay in 2014.

Pastel tilefish (*Hoplolatilus fronticinctus*) are a rare species that are usually found in sandy areas at bases of reefs at depths of 40-70 m. They construct mounds out of rubble from the sea floor which can measure up to 5.5 m long, 3 m wide over 1 m high! Very impressive given that this tilefish only grows to 20 cm. They are usually spotted singly or in pairs hovering over their mounds. They are tropical species found from Sodwana bay in South Africa and in the Solomon Islands, north to the Philippines, Palau, and the Marshall Islands.

Deepwater firefish from Sodwana Bay

The deepwater firefish (*Pterois mombasae*) is a rare species that is found on deeper reefs along the continental shelf of the Indo-West Pacific, Durban, Sri Lanka, India, New Guinea and the Solomon Islands. They are usually found on soft bottomed areas with rich invertebrate growth, especially sponges. It is characterised by its large wing-like pectoral fins and a dark spot on its cheek (not visible in this picture).

Peter Photographed this specimen at 69m in during the trimix expedition on a deep reef in Sodwana bay. While there have been specimens collected from throughout its distribution range this beautiful photograph is the first in-situ picture of this rare species from South Africa.



The rare deepwater firefish (*Pterois mombasae*) photographed by Peter Timm in Sodwana Bay on a deep reef at 69m.

Suezichthys: new species record

Peter Timm took a beautiful set of photographs of this wrasse on a deep reef (70 m) off Sodwana Bay during the 2014 trimix expedition. He had observed this species before in this area but was not sure what species it was. Three days later while diving in Jesser canyon at 110 m he saw it again, the first time it had been observed on the actual canyons themselves. He also managed to capture a picture of the terminal (adult) phase of the wrasse.



The terminal phase of the male *Suezichthys* seen at 100m in Jesser Canyon, Sodwana Bay.



The initial (juvenile) phase of this *Suezichthys* species. Photographed by Peter Timm from the deep reef and canyons off Sodwana Bay.

The photos were sent to Elaine Heemstra at SAIAB who recognised them as a species of *Suezichthys* and sent them onto an expert who confirmed this. It is thought that they could be *Suezichthys russelli* which is only known from Red Sea, Somalia and Kenya. These photos thus represent the first records of this species from the southern Hemisphere.

New species of sea pen goby

During the trimix expedition Peter photographed a goby sitting on a sea pen. While the seawhip goby (*Bryaninops yongei*) is well known from the area, he had not seen a species sitting on a seapen before.



The new species of *Bryaninops* on a seapen photographed by Peter Timm on a deep reef off Sodwana Bay.

The photographs were again sent to Elaine Heemstra from SAIAB who confirmed that it was indeed a *Bryaninops* and sent it onto a goby expert for confirmation. Peter's seapen goby closely resembles a new species of *Bryaninops* has just been described from the East Indies by Suzuki and Randall although the markings are clearly different. This East Indies species, *B. earlei*, is the only species known to sit on seapens, probably darting off when the sea pen retracts into the sand. The seapen goby photographed by Peter could be new species for the Western Indian Ocean which has yet to be described!



Easy to miss! The goby *Bryaninops*, it is just visible near the top of the seapen. Photographed by Peter Timm.

New undescribed species of waspfish

Peter photographed this beautiful specimen in the marine canyons off Sodwana Bay in 2013. A similar fish was seen from the submersible JAGO in the same area in 2003 but it was only after seeing this beautiful high-res image that the connection was made. You can see the original JAGO photograph on iSpot [here](#). This fish is a new and undescribed scorpion fish species from the family Tetrarogidae or “waspfish” which are a family of benthic scorpaeniform fish that are native to the Indian Ocean and the West Pacific. They were originally included in the same family as scorpionfish, and although closely related, have been classified as a separate family. They are highly venomous and have been found at depths of up to 300 m.



A new, undescribed species of Tetrarogidae or waspfish photographed by Peter Timm in the marine canyons of Sodwana Bay.

New species records for South Africa - Goldies

Goldies form part of the family Serranidae and are often found in large shoals over reefs. The males keep a harem and are much more brightly coloured than their females. If the male of the shoal dies, the most dominant female changes sex and takes control of the harem. Goldies are common residents of most reefs and in the canyons off Sodwana bay. During the 2014 trimix expedition Peter managed to capture, amongst other species of goldies, images of two species that had not yet been recorded in South Africa, the lunate goldie (*Pseudanthias lunulatus*) and the swallowtail goldie (*P. bimarginatus*).

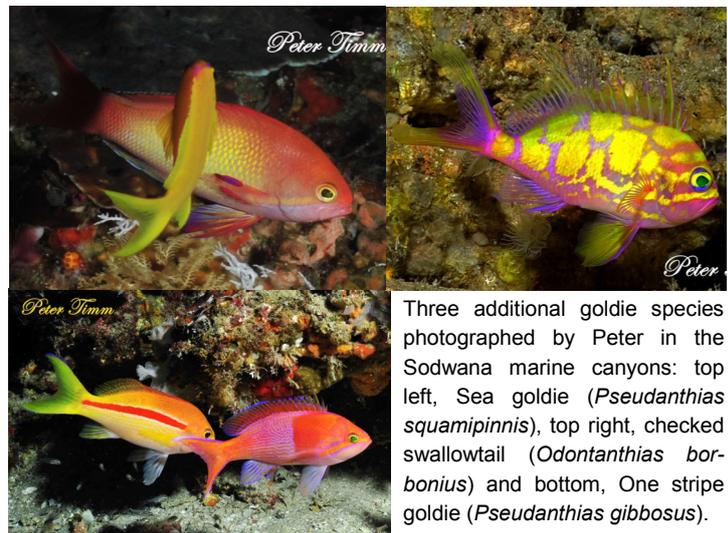


The lunate goldie (*Pseudanthias lunulatus*) photographed by Peter Timm in Sodwana Bay in is a new record for South Africa.

The swallowtail goldie was first described by Randall in 2011. It is named for the conspicuous broad, lavender-blue, upper and lower margins of the male's tail. It was previously only known from Maldives, Indonesia and Mozambique. The lunate goldie was previously only known from the Red Sea, Somalia, Mauritius, Maldives and Bali (Indonesia). Peter's photographs represent the first records of both these species for South Africa.



The swallowtail or margined goldie (*Pseudanthias bimarginatus*). Male (bottom) and female (top) photographed by Peter Timm.



Three additional goldie species photographed by Peter in the Sodwana marine canyons: top left, Sea goldie (*Pseudanthias squamipinnis*), top right, checked swallowtail (*Odontanthias borbonius*) and bottom, One stripe goldie (*Pseudanthias gibbosus*).

iSpot made easy

Hopefully you are enjoying iSpot and starting to get to know your way around! It can be tricky at first but once you get into it can be quite addictive, (I speak from experience!). But in the meantime here are some tips that will hopefully make your experience more enjoyable. For more information have a look at the iSpot [help](#) tab or [email](#) us and we will try to help you out.

My Spot: this section of your iSpot profile contains links to any observations that you have contributed to or added to in any way that has changed recently. For example, if a user has identified one of your fish, agreed with your identification or added a comment it will show up here. The link to “My Spot” can be found under your username once you have logged in.

“Fish” system or reputation: Your “reputation” is shown by the number of fish icons appearing next to your username and is improved by contributing correct identifications, either to your own observations or to other people's. You also gain points when other people say “I agree!” to one of your identifications. The higher the reputation of the person who agrees with your identification, the more your reputation increases. Your reputation also influences the “weight” of your identifications. An identification provid-

ed by a person with the higher reputation will be weighted as the “likely ID”.

Knowledgeable and Expert users: You may have noticed that as well as the little “reputation fish” after their username, some users have a silver or gold circled fish as well. The gold fish represents an “expert” and the silver represents a “knowledgeable” user. These are the users that verify your identifications. If you feel you deserve this status please contact us, however, to gain expert status you have to be a published fish taxonomist.

Tags: Tagging an observation links that observation to all other observations with the same tag. For example you can see all of the observation on iSpot tagged with “Sea Fish Atlas” [here](#). To add a tag just go to the “descriptive tags” section when uploading a new image and type in the specified tags, separated by a comma.

Badges:   iSpot badges represent societies, institutions or projects that you represent or are contributing to on iSpot and appear next to your username. They usually contain a link to more information on what they represent. For the Sea Fish Atlas, once you have uploaded 10 observations and tagged them with “SeaKeys” and “Sea Fish Atlas” you can request our badges (as seen above).

Thanks for your uploads and see you on iSpot!

Experts' wish list

Please keep a look out for these species of interest!

Bigscale scorpionfish (*Scorpaena scrofa*)

Bigscale scorpionfish were previously thought to be the same species as the tasselled scorpionfish (*Scorpaenopsis oxycephala*). According to literature they are found from Algoa Bay to Natal, but they have been trawled in depths of around 100m off Cape Town, and are now being seen in False Bay in depths of 15 to 35m. The Southern Underwater Research Group, [SURG](#), is trying to establish how common this fish is and its distribution within False Bay. If you are diving in this area please keep your eyes open for this species.



Bigscale scorpionfish (*Scorpaena scrofa*) photographed by Peter Southwood in False Bay.

Klipfish (*Clinidae*)

There are at least 42 species of klipfish known from southern Africa all of which are endemic, making this the largest single group of marine fishes in our region. The highfin clinid, *Clinus superciliosus* was separated out into 6 different species (see [Holleman et al. 2012](#)), including two new species *C. exasperatus* and *C. musaicus*. Only one specimen of *C. exasperatus* has ever been recorded and more information is needed on the distribution of all of the different species. Please keep a look out for any species from this complex while diving. They are all recognisable by definite separation between the first 3 dorsal spines and the rest of the dorsal fin forming a crest.



Three species of Klipfish from the *Clinus superciliosus* complex. Clockwise from top: mosaic klipfish (*C. musaicus*), highfin klipfish (*C. superciliosus*) and ornate klipfish (*C. ornatus*). Photographs: Peter Southwood.

Contact us:

