



**Meet Africa's first pygmy seahorse species: the Sodwana Pygmy Seahorse (*Hippocampus nalu*) from South Africa**

*A team of global seahorse experts, have described a new pygmy seahorse species in Sodwana Bay, South Africa, the first of its kind to be found anywhere in the Indian Ocean.*

The ocean is full of surprises, and even the most well-trodden paths can reveal new treasures. This was the case in Sodwana Bay, one of South Africa's most popular diving destinations, where a local dive instructor, Savanah Olivier, noticed a tiny fish she couldn't identify during one of her dives. This discovery prompted a research expedition which included scientists from across the globe, all fueled by a passion for seahorses.

At less than 2.7 cm, the largest pygmy seahorse is not much bigger than a fingernail: the smallest species is almost half this size again. They are so incredibly tiny and well camouflaged that seven of the eight known species have only been discovered since the turn of this millennium. Consequently, the expedition to search for the elusive seahorse was indeed a search for a needle in a haystack, however, the team were successful and the findings have now been published in the scientific journal ZooKeys; describing the new species as the Sodwana Pygmy Seahorse (*Hippocampus nalu*).

This diminutive fish is the first of its kind to be discovered anywhere in the Indian Ocean, let alone Africa. Its closest relatives live more than 8,000 km away in Southeast Asia. The new species grows to just over 2 cm and has a honey-brown colour, overlaid with a white netted pattern and a pinkish tail. The same team of researchers also described another new addition to the pygmy seahorse family, the "Japanese pygmy seahorse" (*Hippocampus japapigu*), in 2018, but genetic analyses and CT scans showed just how different this African pygmy seahorse is from its Asian relatives. Resulting in the description of a new species. (see photo CT scan below).

Researchers, Drs Louw Claassens and Richard Smith visited Sodwana Bay in search of the fish in October 2018. The reefs of Sodwana Bay are exposed to the powerful swells of the Indian Ocean, very unlike the sheltered coral reefs of Southeast Asia where the other pygmy seahorses are found. A pair of seahorses was finally found along a rocky reef at 15m depth, grasping onto fronds of microscopic algae, amidst raging surge. The divers nearly lost the seahorses when a large oceanic swell almost

buried them underneath a storm of sand. On one dive, they even found a tiny juvenile measuring just a centimeter in length. Two of these, tail to snout, would only just stretch across a US Nickel coin.

The scientific name of the Sodwana pygmy seahorse, *Hippocampus nalu*, means “here it is” in the local Xhosa and Zulu languages to highlight that the species was there all along until its discovery. It hints at the vast number of potential other undiscovered species that live in Africa’s oceans. Additionally, ‘nalu’, also means “surging surf, wave” in Hawaiian, reflecting the habitat it lives in. Finally, the scientific name also refers to the middle name of the person who discovered and first brought the species to the attention of the researchers: Savannah Nalu Olivier.

The recent discovery of such a notable fish in shallow coastal water highlights how little we still know about the marine life around Africa and about the extended seahorse family. The lack of research funding in this biodiverse region means there are many other species yet to be discovered in the western Indian Ocean. Seahorses and their relatives are highly vulnerable to human impacts and overfishing. Without the correct understanding of their conservation status and suitable conservation measures, many species might be lost before they are even discovered.

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**NOTES TO EDITORS:**

Link to original article [here](#).

**Quotes:**

**Dr Louw Claassens** (IUCN Seahorse, Pipefish & Seadragon Specialist Group, Director of Knysna Basin Project):

*“The coastal waters of South Africa have a lot to offer and hopefully this little pygmy is just the start of more amazing seahorse and pipefish discoveries”*

*“This should be a call to action for all divers – new discoveries might just be lurking around the next reef”*

**Dr Richard Smith** (IUCN Seahorse, Pipefish & Seadragon Specialist Group, Pygmy Seahorse Specialist):

*“Finding a pygmy seahorse in South Africa is equivalent to finding a kangaroo in Norway”*

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(further supporting images thumbnailed below)

- Film 'Discovering the South African Pygmy Seahorse' can be found [here](#).

About Knysna Basin Project:

The Knysna Basin Project is an NGO based in Knysna, South Africa, focused on coastal system research – particularly how these systems change over time, what actions can be taken to effectively manage and conserve these systems and how communities can and should live within these systems. The Knysna Basin Project is the only research organization studying seahorses and pipefish in South Africa and over the past few years have developed various research and conservation programs aimed at the successful long-term conservation of this group. To find out more about our syngnathid research check out our website: [knysnabasinproject.co.za](http://knysnabasinproject.co.za)

About IUCN Seahorse, Pipefish & Seadragon Specialist Group:

As the recognized global authority on seahorses, pipefishes, seadragons, and their relatives, the IUCN Seahorse, Pipefish & Seadragon Specialist Group (SPS SG) is dedicated to the conservation of these important fishes.

The Group, comprised of 28 members from 15 countries, provides independent technical and scientific advice to governments and other groups to improve the conservation status of these species. They regularly assess the threat of extinction for these animals, undertake and publish

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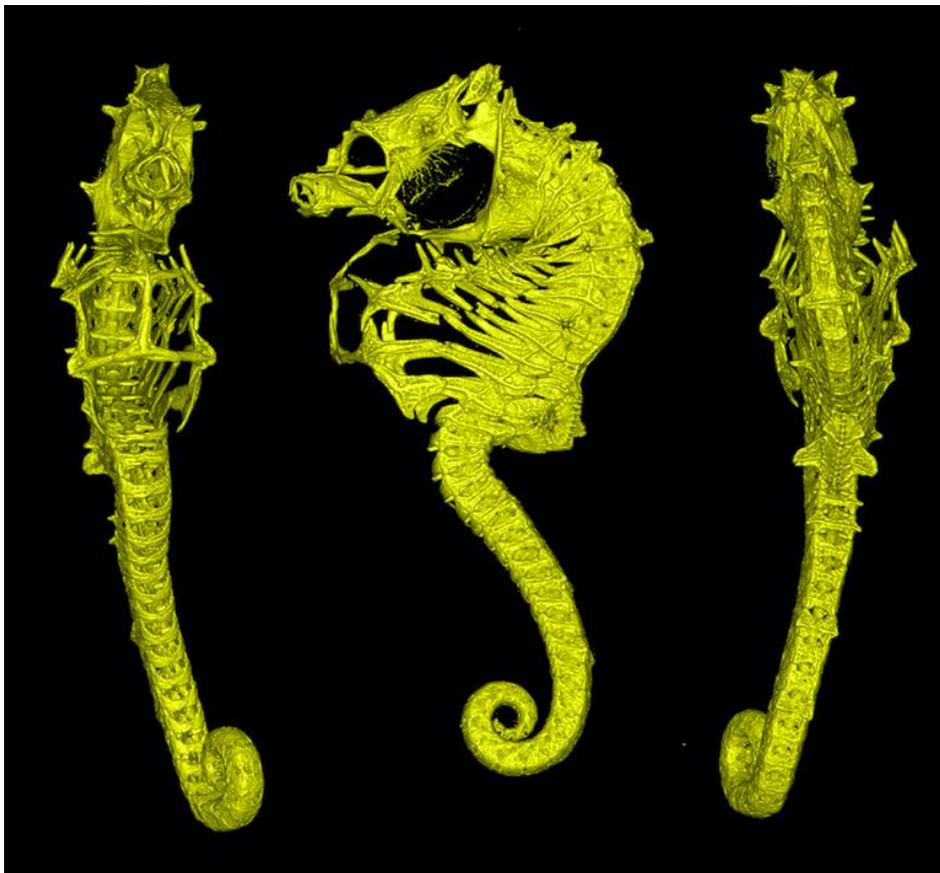
research that supports the survival of wild populations, and develop conservation action plans for threatened species.

The SPS SG is managed by Project Seahorse, a global marine conservation organization with expertise in seahorses and their relatives. [www.iucn-seahorse.org](http://www.iucn-seahorse.org)

Technical information:

The seahorse specimens will be housed at the Iziko South African Museum in Cape Town: [www.iziko.org.za/museums/south-african-museum](http://www.iziko.org.za/museums/south-african-museum)

CT scan of *Hippocampus nalu* (note the large spines behind the head):



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Additional images:

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1. Male Sodwana pygmy seahorse 2 cm long

2. Female Sodwana pygmy seahorse 1.9 cm long



3. Juvenile Sodwana pygmy seahorse with finger for scale.

4. Juvenile Sodwana pygmy seahorse with grains of sand.



5-8. Sodwana pygmy seahorses taken *in situ* South Africa.