



CHUMBE ISLAND  
CORAL PARK

25 Years

1998 - 2023

© 2024

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Chumbe Island Coral Park - Underwater Photo-Guide - Volume 6: Invertebrates - Edition 2024

Underwater  
Photo-Guide



CHUMBE ISLAND  
CORAL PARK

Volume 6:  
Invertebrates Edition 2024



## Foreword

Dear visitors!

Chumbe Island Coral Park (CHICOP) was established in 1992 as the world's first private Marine Protected Area (MPA) and believe it or not, it is still the only privately managed MPA in East Africa! As we are celebrating our 25th ecotourism anniversary on Chumbe Island, we proudly look back at two and a half decades of running extensive conservation programmes, alongside a large-scale environmental education programme, all made possible thanks to the revenues generated through our ecotourism activities. We have received many international awards and recognitions over the years and are particularly proud of the special mention by the UN Secretary General in his report to the General Assembly in 2011 on the protection of coral reefs for sustainable livelihoods and development, highlighting the sustainable management and protection of the Chumbe Reef Sanctuary, as well receiving the "Oscar for Marine Conservation", the "Global Ocean Refuge Award for Most Effective Conservation of Marine Life". We are very thankful to you, our guests, who make all our work possible.

What is special about Chumbe Reef Sanctuary?

Despite its relatively small size (55 ha), the Chumbe Reef Sanctuary is a significant and well enforced no-take area that has effectively been managed for nearly 30 years. Famous for its incredible biodiversity, the marine environment is teeming with life. Nearly 60 hard coral genera act like trees in a forest: they provide home, shelter and food for an impressive number of over 400 identified fish species and more than 235 recorded invertebrate species up to now.

What is special about these guide books?

These guide books were developed by a family that has been returning to Chumbe Island for 21 years! Countless hours' snorkelling in the Chumbe Reef Sanctuary, subsequent identification with the Chumbe Conservation Team and tireless editing back home in Germany resulted in Chumbe's first and unique underwater photo-guide in 2011. From there, the project has further developed into this edition 2024 which has grown into 6 book volumes.

We are especially honoured to have returning guests such as the Leyendecker family, and what an impressive work they have done with these guide books which have become the most popular and valued marine reference books on Chumbe Island. What an amazing achievement!

Happy species identification!



Ulli Kloiber  
Marine Biologist, Scientific adviser  
Chumbe Island Coral Park



## How to you use this photo-guide?

Let the mission start and find out more about invertebrates!

### What are invertebrates?

Invertebrates are animals that do not have backbones, also called vertebrae or spinal bones. Mammals, amphibians, reptiles, fish, and birds all have vertebrae. This might seem like a lot of the animals you know, but all these animals make up less than 4% of the total animals species. This means that over 96% of all the animal species on Earth are invertebrates.

There is a wide variety of interesting ocean animals that are invertebrates.

These include:

**Molluscs:** have a soft body that is covered by an outer layer called a mantle. Many mollusks live inside a shell, but not all of them. Some examples of mollusks include squid, snails, slugs, octopuses, and oysters.

**Crustaceans:** are types of arthropods, meaning that they have jointed legs. They also have an exoskeleton (their bones are on the outside like a shell). Some examples of crustaceans are crabs, lobster, shrimp, and barnacles.

**Echinoderms:** means "spiny-skinned" and includes animals that have a five-fold body symmetry (having arms or rays in multiples of five). They are slow moving creatures which have a hard endoskeleton made of interlocking calcium carbonate plates and spines and a water-vascular system (water-filled channels that go through the body).



## Dear visitors of Chumbe Island!

Thank you for your attention to this underwater photo guide which not only aims at showing you the beauty and diversity in the Chumbe Reef – its goal is also to inspire you to tell your family and friends about this special place, as visitors like us, who decide to stay on Chumbe Island, are the sustainable funding mechanism of this very unique conservation project.

Our photo guide, edition 2024 is a collection of six volumes. Volume 1 to 4 focus on fish species and also include the common sea turtle species, while volumes 5 and 6 take a look at the high diversity of colorful invertebrate species found in the Chumbe reef.

The following pages of volume 6 include 112 identified species which we have discovered during our numerous snorkeling trips. However, this is only the tip of the iceberg, as an even higher diversity still lies hidden under the water surface, waiting to be discovered.

If you have taken a great photograph in the reef and you would like to contribute your image to our gallery, please send a high resolution copy to the Chumbe office: [conservation@chumbeisland.com](mailto:conservation@chumbeisland.com)

Enjoy!



## Dear experts!

We need your help and assistance to further develop our photo guide.

It is our goal, to create a photo guide that holds accurate and scientifically correct information about the marine species found in the marine protected area.

We know, that this is not an easy task, given the fact that we are using only photographic evidence for species identification. However, together with your knowledge and experience, we will be able to increase the quality of scientific information presented in this guide book.

If you find any incorrect information in this guide, please inform the Chumbe management ([conservation@chumbeisland.com](mailto:conservation@chumbeisland.com)) and help us to make the next edition an even better one!

Thank you for your support!

October 2024  
 Obertshausen, Germany  
 Dr. Hans-Wilhelm Leyendecker, Editor

# Content

Guide-  
Page

Reef squids.....	8
Octopusses.....	10
Cuttlefish.....	12
Flatworms.....	14
Sea stars.....	38
Sea urchins.....	58
Featherstars.....	72
Sea cucumbers.....	74
Sea pens.....	118
Worms.....	121

# Loliginidae

# Reef squids



Sepioteutis lessoniana  
Photos: Martin Leyendecker

Großflossen-Kalmar

Bigfin reef squid  
2013 Chumbe Island, Zanzibar

# Loliginidae

# Reef squids



Sepioteutis lessoniana  
Photo: Martin Leyendecker

Großflossen-Kalmar

Bigfin reef squid  
2016 Chumbe Island, Zanzibar



Eigelege

Egg clutch

Octopodidae

Octopuses



Callistoctopus ornatus      Weißgestreifter Krake      White striped octopus  
2013 Chumbe Island, Zanzibar



Photo: Dr. Martin Leyendecker      2022 Chumbe Island, Zanzibar

Octopodidae

Octopuses



Octopus cyanea      Marmorierter Krake      Marbled octopus  
2007 Chumbe Island, Zanzibar



Sepiidae

Cuttlefish



Sepia officinalis      Gewöhnlicher Tintenfisch      Common Cuttlefish  
2010 Chumbe Island, Zanzibar



at night

Sepiidae

Cuttlefish



Sepia pharaonis      Pharao-Tintenfisch      Pharaoh cuttlefish  
2012 Chumbe Island, Zanzibar



at night

### Diposthidae

### Flatworms



*Pericelis tectivorum* Leoparden-Strudelwurm Reticulated flatworm  
Photo: Dr. H.-W. Leyendecker 2013 Chumbe Island, Zanzibar

### Pseudocerotidae

### Flatworms



*Pseudoceros* sp. Strudelwurm Flatworm mimikry of a *Glossodoris*  
Photos: Martin Leyendecker 2016 Chumbe Island, Zanzibar

### Leptoplanidae

### Flatworms



*Leptoplana brunnea* Strudelwurm Flatworm  
Photo: Dr. Martin Leyendecker 2022 Chumbe Island, Zanzibar



**Pseudocerotidae**

**Flatworms**



*Pseudoceros liparus*  
Photos: Martin Leyendecker

Rennstreifen-Strudelwurm

Bifurcated flatworm  
2012 Chumbe Island, Zanzibar

**Pseudocerotidae**

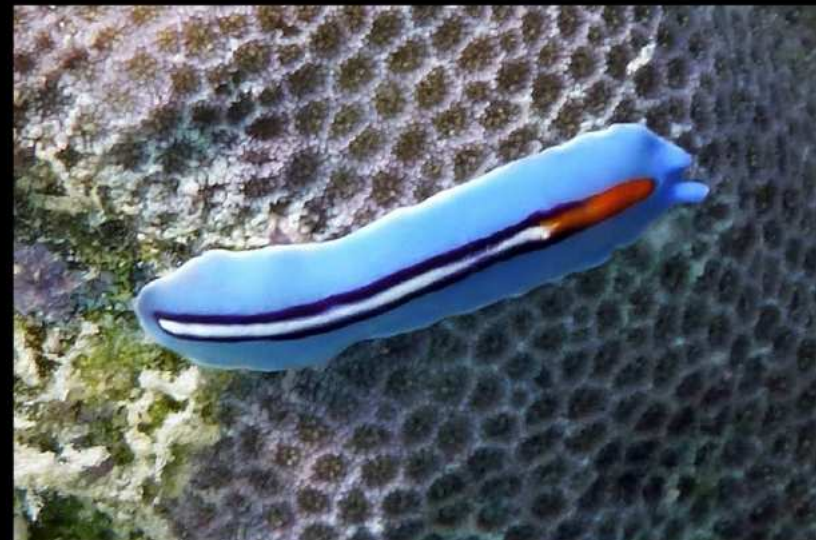
**Flatworms**



*Pseudoceros liparus*  
Photos: Martin Leyendecker

Rennstreifen-Strudelwurm

Bifurcated flatworm  
2016 Chumbe Island, Zanzibar



Pseudocerotidae

Flatworms



*Pseudoceros dimidiatus*  
Photo: Ulli Kloiber

Plattwurm

Divided flatworm  
2014 Chumbe Island, Zanzibar



Photo: Ulli Kloiber

Pseudocerotidae

Flatworms



*Pseudobiceros damawan*  
Photo: Dr. M. Leyendecker

Strudelwurm

Flatworm  
2023 Chumbe Island, Zanzibar



*Pseudobiceros damawan*  
Photo: Dr. Valentina Herbring

Strudelwurm

Flatworm  
2023 Chumbe Island, Zanzibar

Pseudocerotidae

Flatworms



Pseudobiceros gloriosus  
Photo: Dr. M. Leyendecker

Prächtiger Strudelwurm

Glorious flatworm  
2023 Chumbe Island, Zanzibar

Pseudocerotidae

Flatworms



Pseudobiceros hancockanus

Hancocks Plattwurm

Hancock's flatworm  
Black frilled flatworm  
2011 Chumbe Island, Zanzibar



Pseudobiceros gloriosus  
Photo: Dr. Valentina Herbring

Prächtiger Strudelwurm

Glorious flatworm  
2023 Chumbe Island, Zanzibar

### Pseudocerotidae

### Flatworms



22 *Pseudobiceros* sp. 10  
Photo: Dr. M. Leyendecker  
Strudelwurm  
Flatworm  
2023 Chumbe Island, Zanzibar

### Pseudocerotidae

### Flatworms



*Pseudoceros duplicinctus*  
Photo: Dr. Valentina Herbring  
Strudelwurm  
Flatworm  
2023 Chumbe Island, Zanzibar



*Pseudoceros zebra*  
Photo: Dr. Valentina Herbring  
Strudelwurm  
Flatworm  
2023 Chumbe Island, Zanzibar 23

Pseudocerotidae

Flatworms



Pseudoceros laingensis  
Photo: Martin Leyendecker

Plattwurm

Bluespot flatworm  
2010 Chumbe Island, Zanzibar



Pseudoceros laingensis  
Photo: Dr. M. Leyendecker

Plattwurm

Bluespot flatworm  
2023 Chumbe Island, Zanzibar

Pseudocerotidae

Flatworms



Pseudoceros laingensis  
Photo: Kerstin Erler

Plattwurm

Bluespot flatworm  
2017 Chumbe Island, Zanzibar

Pseudocerotidae

Flatworms



Pseudoceros lindae  
Photo: Martin Leyendecker

Lindas Plattwurm

Linda's flatworm  
2013 Chumbe Island, Zanzibar

Pseudocerotidae

Flatworms



Pseudoceros lindae  
Photo: Martin Leyendecker

Lindas Plattwurm

Linda's flatworm  
2010 Chumbe Island, Zanzibar

Pseudocerotidae

Flatworms



Pseudoceros monostichos  
Photo: Martin Leyendecker

Plattwurm

Flatworm  
2018 Chumbe Island, Zanzibar

Pseudocerotidae

Flatworms



Pseudoceros sp. 09  
Photo: Martin Leyendecker

Plattwurm

Flatworm  
2015 Chumbe Island, Zanzibar

Pseudocerotidae

Flatworms



Pseudoceros sp. 09  
Photos: Martin Leyendecker

Plattwurm

Flatworm  
2015 Chumbe Island, Zanzibar



Pseudocerotidae

Flatworms



*Pseudobiceros cf. sapphirinus*  
Photos: Kerstin Erler

Plattwurm

Flatworm  
2017 Chumbe Island, Zanzibar

Pseudocerotidae

Flatworms



*Pseudobiceros cf. sapphirinus*  
Photos: Martin Leyendecker

Plattwurm

Flatworm  
2017 Chumbe Island, Zanzibar



Pseudocerotidae

Flatworms



Pseudoceros velutinus  
Photos: Martin Leyendecker

Plattwurm

Flatworm  
2015 Chumbe Island, Zanzibar



Pseudocerotidae

Flatworms



Pseudoceros velutinus  
Photos: Martin Leyendecker

Plattwurm

Flatworm  
2015 Chumbe Island, Zanzibar



Pseudocerotidae

Flatworms



Thysanozoon nigropapillosum  
Photos: Martin Leyendecker

Gelbpunkt-Plattwurm

Yellowspot flatworm  
2015 Chumbe Island, Zanzibar

Pseudocerotidae

Flatworms



Thysanozoon nigropapillosum  
Photos: Martin Leyendecker

Gelbpunkt-Plattwurm

Yellowspot flatworm  
2014 Chumbe Island, Zanzibar



Photo: Martin Leyendecker 2016



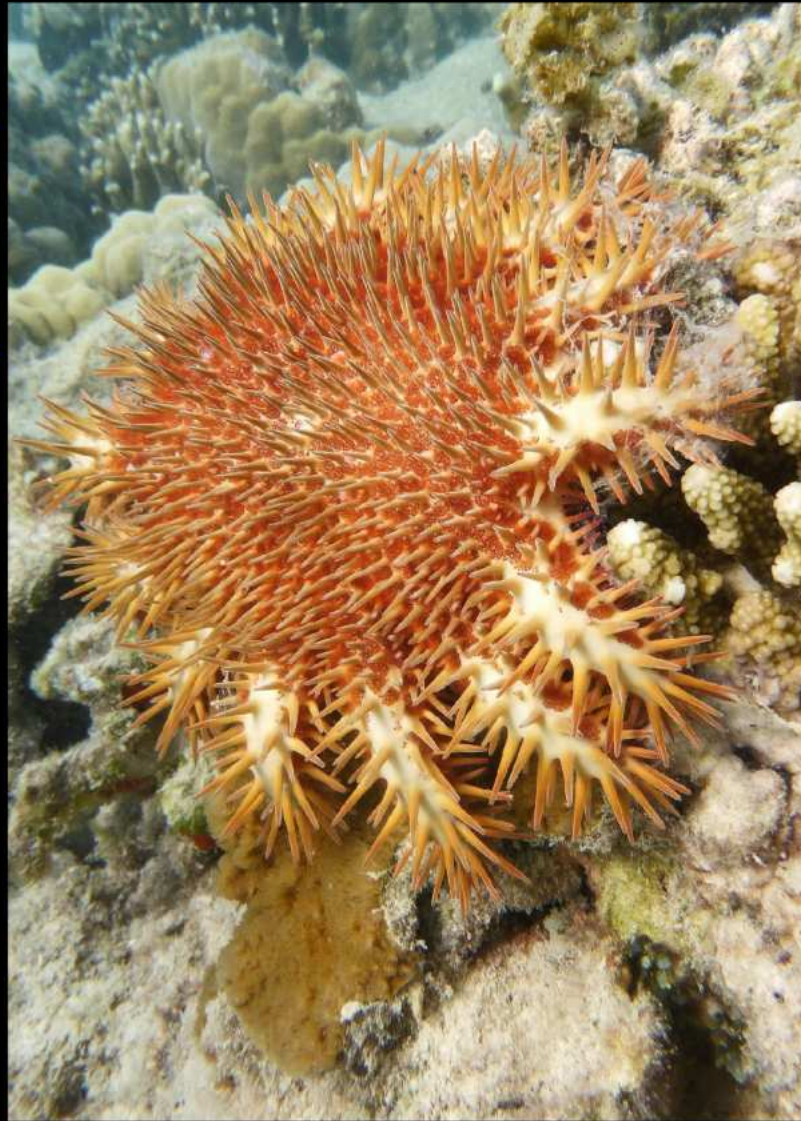
Thysanozoon nigropapillosum  
Photos: Dr. M. Leyendecker

Gelbpunkt-Plattwurm

Yellowspot flatworm  
2023 Chumbe Island, Zanzibar

### Acanthasteridae

### Starfish



Acanthaster planci      Domenkronenseestern      Crown-of-thorns  
2006 Chumbe Island, Zanzibar

### Acanthasteridae

### Starfish



Acanthaster planci      Domenkronenseestern      Crown-of-thorns  
2010 Chumbe Island, Zanzibar



### Asteropseidae

### Sea stars



*Asteropsis carinifera*  
Photos: Martin Leyendecker

Domenseestern

Sheriff-badge star  
2015 Chumbe Island, Zanzibar



### Mithrodiidae

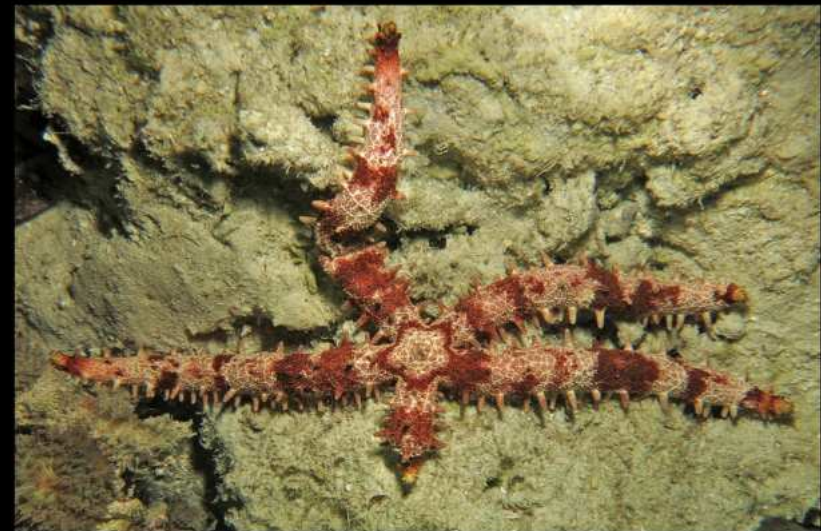
### Sea stars



*Mithrodia clavigera*  
Photo: Martin Leyendecker

Nagel-Seestern

Nail sea star  
2015 Chumbe Island, Zanzibar



*Mithrodia clavigera*  
Photo: Kerstin Erler

Nagel-Seestern

Nail sea star  
2017 Chumbe Island, Zanzibar

### Goniasteridae

### Sea stars



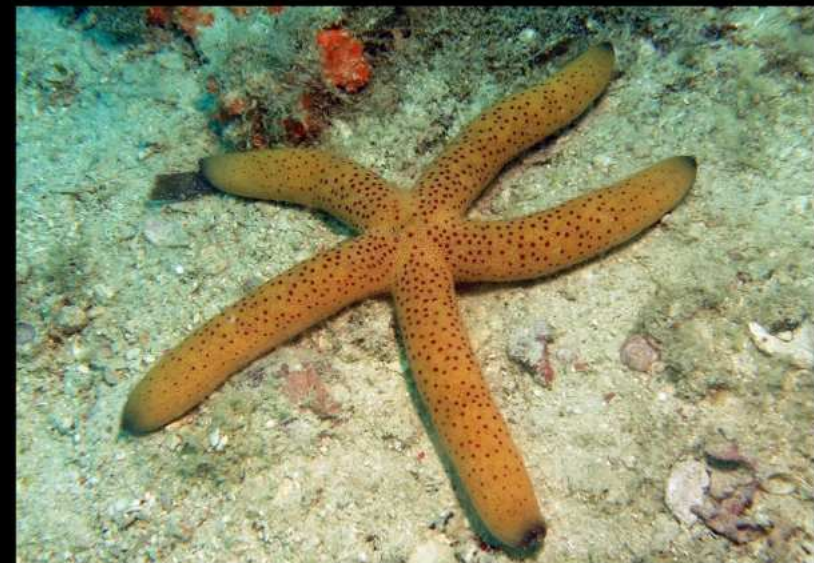
*Fromia milleporella* Tausendpunkt-Seestern Porous sea star  
Photo: Martin Leyendecker 2013 Chumbe Island, Zanzibar

### Goniasteridae

### Sea stars



*Fromia polypora* Seestern Sea star  
Photos: Kerstin Erler 2017 Chumbe Island, Zanzibar



### Gorgonocephalidae

### Sea stars



Astrophyton muricatum      Gorgonenhaupt      Giant basket star  
Great basket star  
Photo: Dr. Valentina Herbring      2022 Chumbe Island, Zanzibar

### Gorgonocephalidae

### Sea stars



Astrophyton muricatum, grey      Gorgonenhaupt      Giant basket star  
Photo: Dr. M. Leyendecker      2023 Chumbe Island, Zanzibar



Astrophyton muricatum, black      Gorgonenhaupt      Giant basket star  
Photo: Dr. H.-W. Leyendecker      2023 Chumbe Island, Zanzibar

Ophidiasteridae

Sea stars



*Leiaster coriaceus*

Picasso-Seestern

Starfish  
2012 Chumbe Island, Zanzibar

Ophidiasteridae

Sea stars



*Linckia multifora*

Löchriger Seestern oder Kometenseestern

Starfish  
2013 Chumbe Island, Zanzibar

Ophidiasteridae

Sea stars



*Linckia laevigata*

Blauer Seestern

Blue sea star

2003 Chumbe Island, Zanzibar

Ophidiasteridae

Sea stars



*Nardoa galathea*

Galatheas Seestern

Brown meah sea star

2013 Chumbe Island, Zanzibar



*Nardoa novaecaledoniae*

Seestern

Starfish

2014 Chumbe Island, Zanzibar

### Ophiocomidae

### Brittle stars



*Breviturma paucigranulata* Schlangen-Seestern Spiny brittle star  
Photo: Dr. H.-W. Leyendecker 2020 Chumbe Island, Zanzibar



Photo: Dr. H.-W. Leyendecker 2005 Chumbe Island, Zanzibar

### Ophiocomidae

### Brittle stars



*Ophiomastix annulosa* Schlangen-Seestern Brittle star  
2010 Chumbe Island, Zanzibar

### Ophiotrichidae

### Brittle stars



Ophiothrix fragilis  
Photo: Kerstin Erler  
Schlangen-Seestern  
2019 Chumbe Island, Zanzibar  
Brittle star

### Ophiotrichidae

### Brittle stars



Ophiothrix sp.  
Photos: Martin Leyendecker  
Schlangensterm  
2017 Chumbe Island, Zanzibar  
Brittle star



Ophiothrix spp.  
Photo: Dr. Valentina Herbring  
Weißer Schlangensterm  
2022 Chumbe Island, Zanzibar  
White brittle star



**Oreasteridae**

**Sea stars**



*Culcita schmideliana*      Indischer Kissen-Seestern      Indian cushion sea star  
2013 Chumbe Island, Zanzibar

**Oreasteridae**

**Sea stars**



*Pentaceraster mammillatus*      Noppen-Seestern      Knobby sea star  
2006 Chumbe Island, Zanzibar



Oreasteridae

Sea stars



Protoreaster lincki

Lincks Walzen-Seestern

Red-knobbed starfish  
2008 Chumbe Island, Zanzibar

Oreasteridae

Sea stars



Pentaceraster tuberculatus

Noppen-Seestern

Tubercul starfish  
2015 Chumbe Island, Zanzibar



Pentaceraster cumingi

Panamischer Noppen-Seestern

Panamic cushion sea star

Photo: Dr. Valentina Herbring

2022 Chumbe Island, Zanzibar



Photo: Chumbe office



**Arbaciidae**

**Sea urchins**



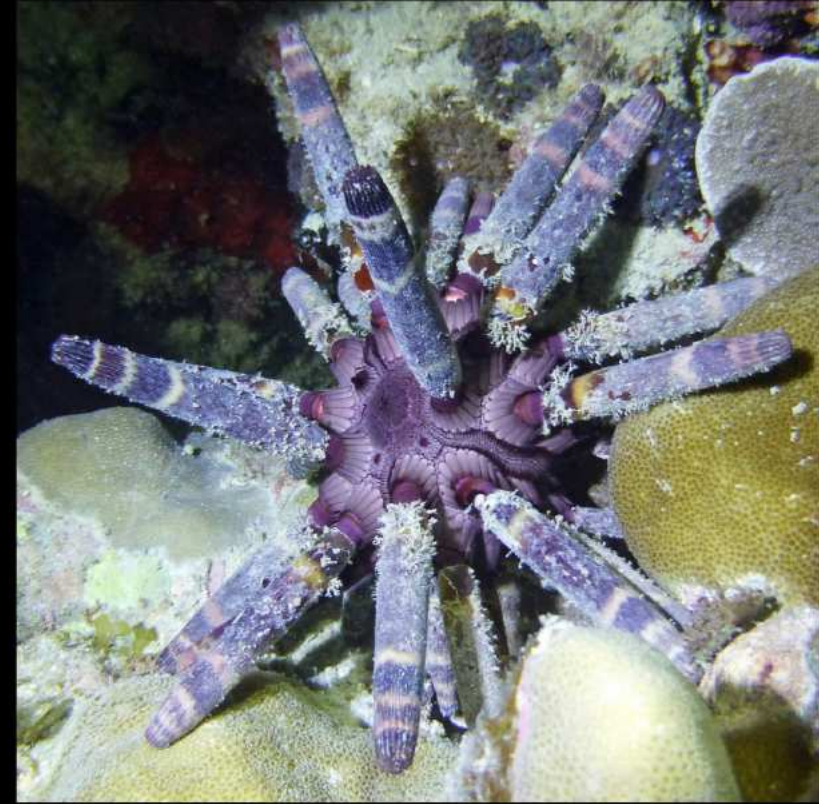
*Arbacia lixula africana*

Schwarzer Seeigel

Black sea urchin  
2013 Chumbe Island, Zanzibar

**Cidaridae**

**Sea urchins**



*Phyllacanthus imperialis*  
Photo: Martin Leyendecker

Lanzenseeigel

Pencil urchin  
2015 Chumbe Island, Zanzibar

### Cidaridae

### Sea urchins



*Prionocidaris baculosa* Bleistift-Seeigel Tapered pencil  
2005 Chumbe Island, Zanzibar



*Pseudoboletia indiana* Indischer Seeigel Indian urchin  
2005 Chumbe Island, Zanzibar

### Diadematidae

### Sea urchins



*Astropyga radiata* Roter Diademseeigel Red sea urchin, Radiant sea urchin  
Photo: Dr. Valentina Herbring 2022 Chumbe Island, Zanzibar



*Astropyga radiata* Roter Diademseeigel Red sea urchin, Radiant sea urchin  
Photo: Dr. M. Leyendecker juvenile 2023 Chumbe Island, Zanzibar

Diadematidae

Sea urchins



Diadema setosum      Diadem-Seeigel      Needle-spined urchin  
2006 Chumbe Island, Zanzibar

Diadematidae

Sea urchins



Diadema setosum      Diadem-Seeigel juvenile      Needle-spined urchin  
2010 Chumbe Island, Zanzibar



Photo: Leyendecker 2016

### Diadematidae

### Sea urchins



Echinothrix calamaris      Bleistift-Diademseeigel      Banded urchin  
2015 Chumbe Island, Zanzibar

### Diadematidae

### Sea urchins



Echinothrix calamaris      Bleistift-Diademseeigel      Banded urchin  
2015 Chumbe Island, Zanzibar



**Diadematidae**

**Sea urchins**



*Echinothrix diadema*

Schwarzer Diademseeigel

Black diadema sea urchin  
2011 Chumbe Island, Zanzibar

**Loveniidae**

**Sea urchins**



*Lovenia elongata*  
Photo: Valentina Herbring

Herzseeigel

*Lovenia heart urchin*  
2018 Chumbe Island, Zanzibar

**Strongylocentrotidae**

**Sea urchins**



*Strongylocentrotus purpuratus*

Purpur-Seeigel

Purple sea urchin  
2013 Chumbe Island, Zanzibar

**Toxopneustidae**

**Sea urchins**



*Nudechinus verruculatus*

Seeigel

Sea urchin  
2015 Chumbe Island, Zanzibar

**Toxopneustidae**

**Sea urchins**



*Tripneustes gratilla* Pfaffenhut-Seeigel Priest-hat urchin  
2013 Chumbe Island, Zanzibar



70 2017 Chumbe Islandsd, Zanzibar

**Toxopneustidae**

**Sea urchins**



*Toxopneustes pileolus* Rosen-Seeigel Flower urchin  
Photo: Martin Leyendecker 2017 Chumbe Island, Zanzibar



*Toxopneustes pileolus* Rosen-Seeigel Flower urchin  
Photo: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar

Comatulidae

Feather stars



Comaster nobilis

Edel-Haarstern

Black feather star  
2008 Chumbe Island, Zanzibar

Comatulidae

Feather stars



Comaster spp.

Brauner Haarstern

Brown feather star  
2009 Chumbe Island, Zanzibar



## Holothuriidae

## Sea cucumber



*Actinopyga capillata*

Seewalze

Sea cucumber  
2013 Chumbe Island, Zanzibar

## Holothuriidae

## Sea cucumber



*Actinopyga capillata*

Seewalze

Sea cucumber  
2013 Chumbe Island, Zanzibar

**This sea cucumber is listed  
in the IUCN-Red-List:**

**Category: Vulnerable**



## Holothuriidae

## Sea cucumber



Actinopyga echinites

Seewalze

Deep water redfish  
2015 Chumbe Island, Zanzibar

## Holothuriidae

## Sea cucumber



Actinopyga echinites

Seewalze

Deep water redfish  
2013 Chumbe Island, Zanzibar

**This sea cucumber is listed  
in the IUCN-Red-List:**

**Category: Vulnerable**

The **International Union for Conservation of Nature (IUCN)** is an international organization dedicated to finding "pragmatic solutions to our most pressing environment and development challenges". The organization publishes the **IUCN Red List of Threatened Species**, which assesses the conservation status of species.

## Holothuriidae

## Sea cucumber



*Actinopyga miliaris*

Seewalze

Sea cucumber  
2013 Chumbe Island, Zanzibar

## Holothuriidae

## Sea cucumber



*Actinopyga miliaris*

Seewalze

Sea cucumber  
2013 Chumbe Island, Zanzibar

**This sea cucumber is listed  
in the IUCN-Red-List:**

**Category: Vulnerable**

### Holothuriidae

### Sea cucumber



Actinopyga palauensis    Seewalze    Deep water blackfish, Panning blackfish  
2005 Chumbe Island, Zanzibar

### Holothuriidae

### Sea cucumber



Actinopyga palauensis    Seewalze    Deep water blackfish, Panning blackfish  
2013 Chumbe Island, Zanzibar

**This sea cucumber is listed  
in the IUCN-List:**

**Category: Least Concern**



**Holothuriidae**

**Sea cucumber**



Bohadschia atra      Seewalze      Leopard sea cucumber  
2013 Chumbe Island, Zanzibar

**Holothuriidae**

**Sea cucumber**



Bohadschia atra      Seewalze      Leopard sea cucumber  
2015 Chumbe Island, Zanzibar

**This sea cucumber is listed  
in the IUCN-List:**

**Category: Least Concern**



Holothuriidae

Sea cucumber



Bohadschia subruba      Seewalze      Leopardfish  
2013 Chumbe Island, Zanzibar

Holothuriidae

Sea cucumber



Bohadschia subruba      Seewalze      Leopardfish  
2013 Chumbe Island, Zanzibar



**Holothuriidae**

**Sea cucumber**



*Bohadschia koellikeri*  
Photo: Leyendecker

Weisse Seewalze

Sea cucumber  
2018 Chumbe Island, Zanzibar

**Holothuriidae**

**Sea cucumber**



*Holothuria (Metriatyla) aculeata*

Seewalze

Sea cucumber  
2015 Chumbe Island, Zanzibar



*Bohadschia vitiensis*  
Photo: Leyendecker

Seewalze

Brownspeckled sandfish  
2016 Chumbe Island, Zanzibar



*Holothuria (Thymiosycia) impatiens*

Seewalze

Bottleneck sea cucumber  
2015 Chumbe Island, Zanzibar

### Holothuriidae

### Sea cucumber



Holothuria (Halodeima) atra

Seewalze

Lollyfish

2005 Chumbe Island, Zanzibar

### Holothuriidae

### Sea cucumber



Holothuria (Halodeima) atra

Seewalze

Lollyfish

2005 Chumbe Island, Zanzibar

**This sea cucumber is listed  
in the IUCN-List:**

**Category: Least Concern**



**Holothuriidae**

**Sea cucumber**



*Holothuria (Stauropora) fuscocinerea*

Seewalze  
2013 Chumbe Island, Zanzibar

Sea cucumber

**Holothuriidae**

**Sea cucumber**



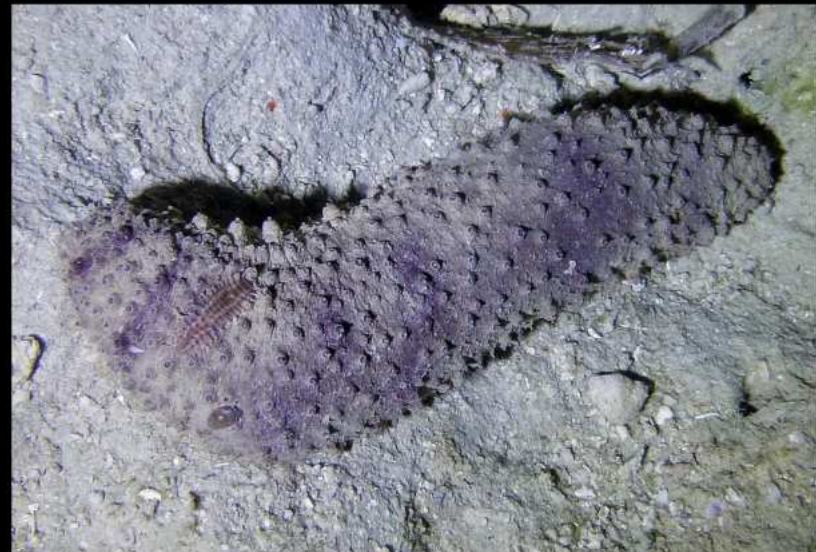
*Holothuria (Stauropora) fuscocinerea*

Seewalze  
2013 Chumbe Island, Zanzibar

Sea cucumber

**This sea cucumber is listed  
in the IUCN-List:**

**Category: Least Concern**



**Holothuriidae**

**Sea cucumber**



*Holothuria (Microthele) fuscopunctata*

2013 Chumbe Island, Zanzibar

**Holothuriidae**

**Sea cucumber**



*Holothuria (Microthele) fuscopunctata*

2013 Chumbe Island, Zanzibar

**This sea cucumber is listed  
in the IUCN-List:**

**Category: Least Concern**



### Holothuriidae

### Sea cucumber



*Holothuria (Microthele) fuscogilva*  
Photo: Dr. Martin Leyendecker

White teatfish  
2022 Chumbe Island, Zanzibar

### Holothuriidae

### Sea cucumber



*Holothuria (Mertensiothuria) hilla*

2012 Chumbe Island, Zanzibar



*Holothuria (Theelothuria) sqamifera*  
Photo: Dr. Valentina Herbring

2022 Chumbe Island, Zanzibar

**This sea cucumber is listed  
in the IUCN-List:  
  
Category: Least Concern**

### Holothuriidae

### Sea cucumber



*Holothuria (Mertensiothuria) leucospilota*

Black long sea cucumber  
2013 Chumbe Island, Zanzibar

### Holothuriidae

### Sea cucumber



*Holothuria (Mertensiothuria) leucospilota*

Black long sea cucumber  
2013 Chumbe Island, Zanzibar

This sea cucumber is listed  
in the IUCN-List:

Category: Least Concern



## Holothuriidae

## Sea cucumber



*Holothuria (Microthele) nobilis*

White teeth or Black teatfish  
 2013 Chumbe Island, Zanzibar

## Holothuriidae

## Sea cucumber



*Holothuria (Microthele) nobilis*

White teeth or Black teatfish  
 2019 Chumbe Island, Zanzibar

**This sea cucumber is listed  
 in the IUCN-Red-List:  
 Category: Endangered**



### Holothuriidae

### Sea cucumber



Pearsonothuria graeffei      Graeffes Seegurke      Graeffe's sea cucumber  
2014 Chumbe Island, Zanzibar

### Holothuriidae

### Sea cucumber



Pearsonothuria graeffei      Graeffes Seegurke      Graeffe's sea cucumber  
Photos: Valentina Herbring      2018 Chumbe Island, Zanzibar

**This sea cucumber is listed  
in the IUCN-List:**

**Category: Least Concern**



### Stichopodidae

### Sea cucumber



Stichopus chloronotus      Grünliche Seegurke      Greenish sea cucumber  
2009 Chumbe Island, Zanzibar

### Stichopodidae

### Sea cucumber



Stichopus chloronotus      Grünliche Seegurke      Greenish sea cucumber  
2013 Chumbe Island, Zanzibar

**This sea cucumber is listed  
in the IUCN-List:  
Category: Least Concern**



## Stichopodidae

## Sea cucumber



Stichopus hermanni

Curryfish  
2013 Chumbe Island, Zanzibar

## Stichopodidae

## Sea cucumber



Stichopus hermanni

Curryfish  
2013 Chumbe Island, Zanzibar

**This sea cucumber is listed  
in the IUCN-Red-List:**

**Category: Vulnerable**



Stichopodidae

Sea cucumber



Stichopus horrens

Seneca's sea cucumber  
2013 Chumbe Island, Zanzibar

Stichopodidae

Sea cucumber



Stichopus horrens

Seneca's sea cucumber  
2015 Chumbe Island, Zanzibar



Stichopus horrens  
cucumber  
Photo: Dr. M. Leyendecker

Selenka's sea  
cucumber  
2023 Chumbe Island, Zanzibar



Stichopus horrens  
Photo: Dr. Valentina Herbring

Selenka's sea cucumber  
2022 Chumbe Island, Zanzibar

## Stichopodidae

## Sea cucumber



*Stichopus ocellatus*

Ocellated sea cucumber  
2013 Chumbe Island, Zanzibar

## Stichopodidae

## Sea cucumber



*Thelenota ananas*  
Photo: Dr. Martin Leyendecker

Pineapple sea cucumber  
2022 Chumbe Island, Zanzibar

**This sea cucumber is listed  
in the IUCN-Red-List:  
Category: Endangered**

Phyllophoridae

Sea cucumber



Massinium magnum  
Photo: Dr. Valentina Herbring

Seewalze

Large borrowing sea cucumber  
2023 Chumbe Island, Zanzibar



110 Massinium magnum  
Photo: Dr. Valentina Herbring

Seewalze

Large borrowing sea cucumber  
2023 Chumbe Island, Zanzibar

Phyllophoridae

Sea cucumber



Massinium magnum

Seewalze

Large borrowing sea cucumber  
2009 Chumbe Island, Zanzibar

Synaptidae

Worm sea cucumber



Euapta godeffroyi Godeffroys Seegurke Godeffroy's sea cucumber  
2013 Chumbe Island, Zanzibar



Synaptidae

Worm sea cucumber



Euapta godeffroyi Godeffroys Seegurke Godeffroy's sea cucumber  
2013 Chumbe Island, Zanzibar



# Synaptidae Worm sea cucumbers



Opheodesoma serpentina  
Photo: Dr. M. Leyendecker

Wurmseewalze

Worm sea cucumber  
2023 Chumbe Island, Zanzibar

# Synaptidae Worm sea cucumbers



Synapta maculata  
Photo: Valentina Herbring

Gefleckte Wurmseewalze

Snake sea cucumber  
2018 Chumbe Island, Zanzibar



Synapta maculata  
Photo: Valentina Herbring

Gefleckte Wurmseewalze

Snake sea cucumber  
2018 Chumbe Island, Zanzibar

# Synaptidae

# Sea cucumbers



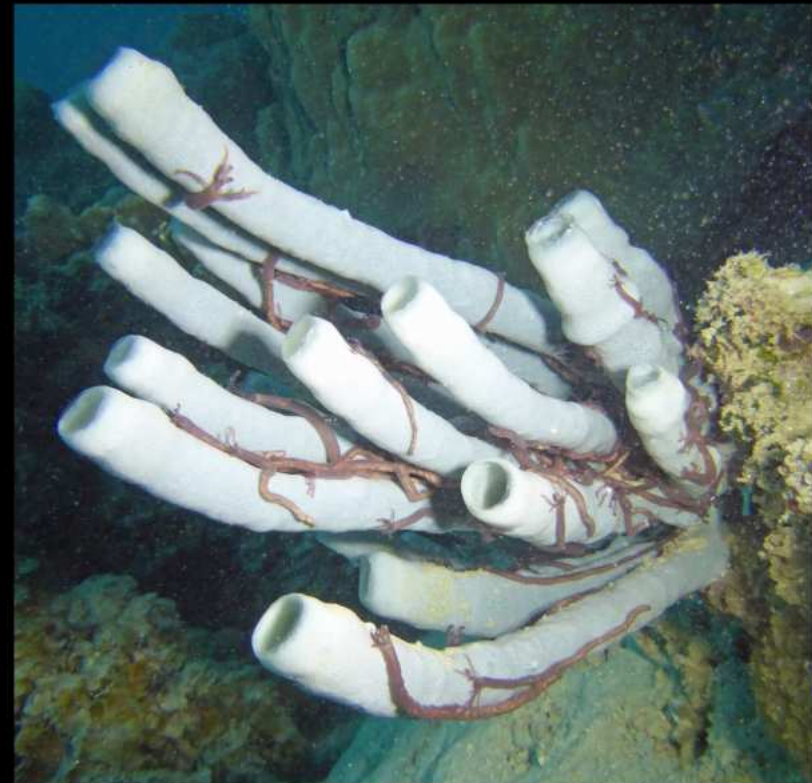
Synaptula media      Wurmseewalze      Worm sea cucumber  
Photo: Valentina Herbring      2018 Chumbe Island, Zanzibar



116      Synaptula media      Wurmseewalze      Worm sea cucumber  
Photo: Martin Leyendecker      2018 Chumbe Island, Zanzibar

# Synaptidae

# Sea cucumbers



Synaptula media      Gefleckte Wurmseewalze      Snake sea cucumber  
Photo: Dr. Valentina Herbring      2023 Chumbe Island, Zanzibar

### Pennatulacea

### Sea pens



Pennatulacea sp. 2

Seefeder

Sea pen  
2015 Chumbe Island, Zanzibar



### Virgulariidae

### Sea pens



Virgularia gustaviana  
Photo: Martin Leyendecker

Blaue Seefeder

Short-quill sea pen  
2018 Chumbe Island, Zanzibar

### Virgulariidae

### Sea pens



Virgularia sp. 4  
Photos: Martin Leyendecker  
Zanzibar

Sternchen Seefeder

Stary sea pen  
2018 Chumbe Island,  
Zanzibar



### Amphinomidae

### Worms



Eurythoe complanata  
Photo: Dr. H.-W. Leyendecker

Feuenwurm

Fire worm  
2015 Chumbe Island, Zanzibar



Eurythoe Sp. 01

Borstenwurm

Bobbit worm  
2012 Chumbe Island, Zanzibar

### Bonelliidae

### Worms



*Bonellia viridis*      Grüner Igelwurm, Grüne Borelli      Green spoon worm  
2015 Chumbe Island, Zanzibar



### Nereididae

### Worms



*Perinereis nuntia*      Borstenwurm      Bristle worm  
Photos: Kerstin Erler      2019 Chumbe Island, Zanzibar



Polynoidae

Worms



Gastrolepidia davigera  
Photo: Martin Leyendecker

Seewalzenwurm  
juvenile

Scale worm  
2017 Chumbe Island, Zanzibar

Polynoidae

Worms



Gastrolepidia davigera  
Photo: Kerstin Erler

Seewalzenwurm

Scale worm  
2017 Chumbe Island, Zanzibar

### Nemertea

### Worms



Genus Nermertini  
Zanzibar

2013 Chumbe Island,

### Sabellidae

### Feather duster



*Myxicola infundibulum*

Schlicksabelle

Slime fan worm  
2012 Chumbe Island, Zanzibar

### Sabellidae

### Feather duster



Sabellastarte sanctijosephi

Schraubensabelle

Featherduster worm  
2009 Chumbe Island, Zanzibar

### Sabellidae

### Feather duster



Sabellastarte sanctijosephi

Schraubensabelle

Featherduster worm  
2009 Chumbe Island, Zanzibar

Sabellidae

Feather duster



Sabellastarte spectabilis      Indo-Pazifischer Röhrenwurm      Tube worm  
2006 Chumbe Island, Zanzibar

Sabellidae

Feather duster



Sabellastarte spectabilis      Indo-Pazifischer Röhrenwurm      Tube worm  
2014 Chumbe Island, Zanzibar



130 Sabellastarte spectabilis      Indo-Pazifischer Röhrenwurm      Tube worm  
Photo: Dr. Valentina Herbring      2023 Chumbe Island, Zanzibar



### Sabellidae

### Feather duster



*Spirobranchus giganteus*      Weihnachtsbaumwurm      Christmas tree worm  
2013 Chumbe Island, Zanzibar

### Sabellidae

### Feather duster



*Spirobranchus giganteus*      Weihnachtsbaumwurm      Christmas tree worm  
2014 Chumbe Island, Zanzibar



*Phoronis australis*  
Photo: Dr. Martin Leyendecker

Anemone horseshoe worm, Southern horseshoe  
2022 Chumbe Island, Zanzibar

### Corymorphidae

### Hydrozoa



*Corymorpha tropica*  
Photo: Dr. Valentina Herbring

Tropischer Kōlbchenpolyp

Tropic hydroid  
2023 Chumbe Island, Zanzibar

### Beroidea

### Comb jellyfish



*Beroe cucumis*  
Photo: Martin Leyendecker

Mützenqualle

Pink slipper comb jelly  
2013 Chumbe Island, Zanzibar



*Beroe cucumis*  
Photo: Martin Leyendecker

Mützenqualle

Pink slipper comb jelly  
2018 Chumbe Island, Zanzibar

### Cassiopeidae

### Jellyfish



*Cassiopea andromeda*  
Photo: Martin Leyendecker

Mangrovenqualle

Upside-down jellyfish  
2018 Chumbe Island, Zanzibar

### Cyaneidae

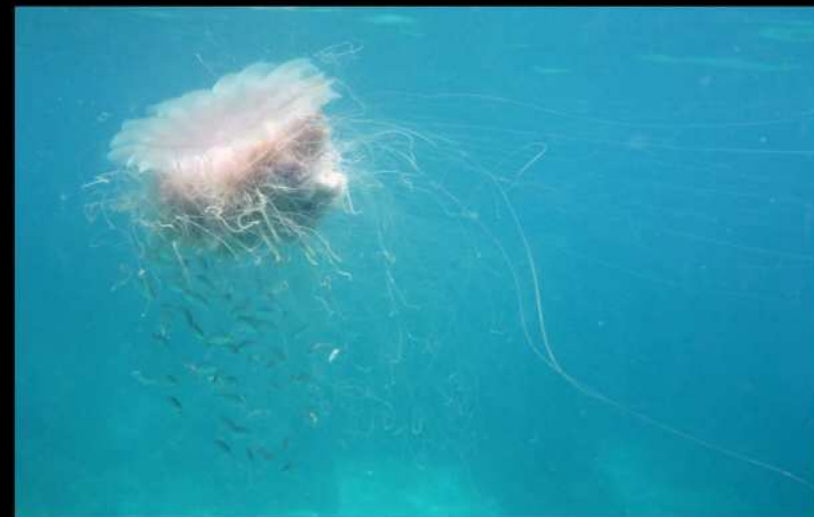
### Jellyfish



*Cyanea capillata*  
Photo: Dr. H.-W. Leyendecker

Gelbe Haarqualle

Lions mane jellyfish  
2020 Chumbe Island, Zanzibar



*Cyanea capillata*  
Photo: Dr. H.-W. Leyendecker

Gelbe Haarqualle

Lions mane jellyfish  
2020 Chumbe Island, Zanzibar

### Mastigiidae

### Jellyfish



Mastigias papua  
Photos: Martin Leyendecker

Schirmqualle

Spotted lagoon jellyfish  
2018 Chumbe Island, Zanzibar



### Rhizostomatidae

### Jellyfish



Rhopilema nomadica  
Photo: Dr. H.W. Leyendecker

Nomadenqualle

Giant nomad jellyfish  
2019 Chumbe Island, Zanzibar

### Pelagiidae

### Jellyfish



*Pelagia panopyra*  
Photos: Markus Meissl

Qualle

Purple striped jellyfish  
2013 Chumbe Island, Zanzibar

### Ulmaridae

### Jellyfish



*Aurelia aurita*  
Photo: Martin Leyendecker

Ohrenqualle

Common jellyfish  
2016 Chumbe Island, Zanzibar



Photo: Valentina Herbring

2018 Chumbe Island, Zanzibar

Tridacnidae

Giant clams



Tridacna maxima

Mördermuschel

Blue maxima clam  
2012 Chumbe Island, Zanzibar

Tridacnidae

Giant clams



Tridacna maxima

Mördermuschel

Blue maxima clam  
2008 Chumbe Island, Zanzibar



Tridacnidae

Giant clams



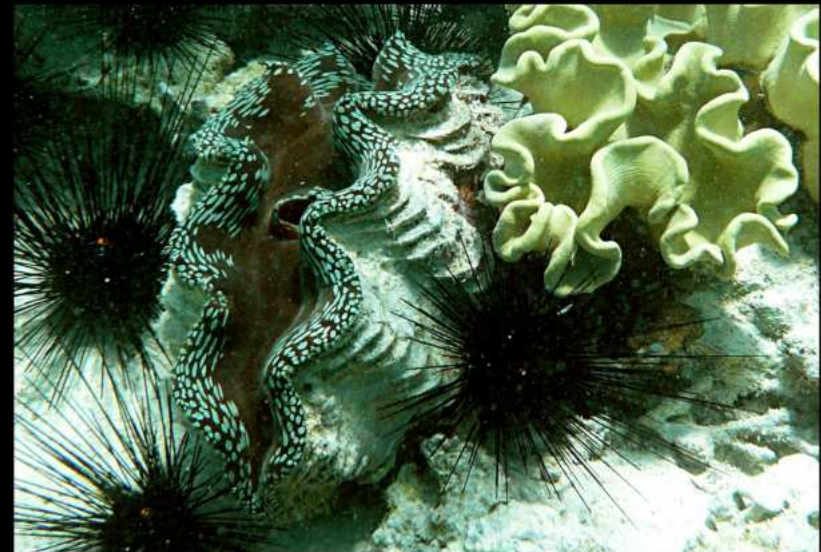
Tridacna squamosa Schuppige Riesenmuschel Squamosa clam  
2008 Chumbe Island, Zanzibar

Tridacnidae

Giant clams



Tridacna squamosa Schuppige Riesenmuschel Squamosa clam  
2008 Chumbe Island, Zanzibar



### Gryphaeidae

### Oysters



*Hytissa hyotis*

Zickzack-Auster

Zigzag clam  
2004 Chumbe Island, Zanzibar

### Margaritidae

### Oysters



*Pinctada margaritifera*

Perlonauster

Perl oyster  
2020 Chumbe Island, Zanzibar

Ostreidae

Oysters



*Saccostrea glomerata*

Felsenauster

Rock oyster  
2011 Chumbe Island, Zanzibar

Pectinidae

Clams



*Pedum spondyloideum*

Irisierende Kammuschel

Coral clam  
2015 Chumbe Island, Zanzibar

Pinnidae

Clams



*Atrina vexillum*

Steckmuschel

Flag pen shell  
2013 Chumbe Island, Zanzibar

Pinnidae

Clams



*Pinna bicolor*

Steckmuschel

Common razor clam  
2003 Chumbe Island, Zanzibar



Welcome back  
again to  
Chumbe Island

## Quickfinder

### Family names

	GUIDE- Page
Clams.....	142
Cuttlefish.....	12
Featherstars.....	72
Flatworms.....	14
Jellyfish.....	135
Octopusses.....	10
Reef squids.....	8
Sea cucumbers.....	74
Sea pens.....	118
Sea stars.....	38
Sea urchins.....	58
Worms.....	121

## Acknowledgements

I would like to thank all the people who are working with Chumbe Island Coral Park Ltd. They are all doing a great job protecting the unique coral reef on the west coast of Chumbe Island. Their enthusiasm and commitment over many years has inspired me to create this photo guide which presents species that are found in the Chumbe Reef Sanctuary.

The majority of the photos were taken by my son Martin Leyendecker. During our annual visits over the last 21 years to Chumbe Island, Martin has taken every opportunity to snorkel on the reef and captured photos of the diverse reef inhabitants. During these many reef visits we were safely guided by the experienced and knowledgeable rangers of Chumbe Island. It was the enthusiasm and expertise of Head Ranger Omari Nyange, Environmental Educator Khamis Khalfan, Guiding Rangers Juma Salum, Ali Chaga and Ali Harun and the Marine Biologist Ulli Kloiber assisted by the Ramadan rangers 2016 Aaron Critchley and Jorge Santamaria Perez, as well as the marine biologist Sander den Haring and Dr. Renato Morais that enabled me to identify the species photographed for this guide.

Chumbe's scientific adviser, Ulli Kloiber helped with identification and wrote the introduction on how to use this photo guide for the readers. I would like to thank her for her untiring support.

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I would also like to thank all of the fellow guests to Chumbe Island, who through their visit support not only the protection and conservation of the island and the diverse coral reef but also Chumbe's unique Environmental Education (EE) programme. The EE programme brings local community members and Zanzibari students of all ages to Chumbe Island and enables them to snorkel over the healthy coral reef, discover the spectacular wildlife underwater and learn more about environmental sustainability and ecotourism.

Last but not least I would like to thank Ms. Sibylle Riedmiller, who is the Founder and Director of Chumbe Island Coral Park (CHICOP), the first privately established and managed Marine Protected Area (MPA) in the world. She implemented the idea for private conservation in the early 1990's and today Chumbe Island is a world famous showcase! Without her unrelenting devotion to the Chumbe project this book would likely not have been realized.

October 2024  
Obertshausen, Germany  
Dr. Hans-Wilhelm Leyendecker, Editor

