



CHUMBE ISLAND
CORAL PARK

25 Years

1998 - 2023

© 2024

Dr. Hans-Wilhelm Leyendecker
 Ludwigstraße 36 F
 D-63179 Obertshausen
 Germany
w.leyendecker@t-online.de

Chumbe Island Coral Park - Underwater Photo-Guide - Volume 5: Invertebrates - Edition 2024

Underwater
Photo-Guide



Volume 5:
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
Scientific adviser, Marine Biologist
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 5 include 138 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.

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) 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

Crabs.....	9
Shrimps.....	46
Lobsters.....	66
Mantis shrimps.....	74
Sea snails.....	82
Nudibranches.....	120

Calappidae

Crabs



Calappa flammea
Photo: Dr. H.-W. Leyendecker

Flammen-Schamkrabbe

Calappa flammea
2007 Chumbe Island, Zanzibar



Calappa flammea
Photo: Dr. M. Leyendecker

Flammen-Schamkrabbe

Calappa flammea
2023 Chumbe Island, Zanzibar

Carpiliidae

Shore crabs



Carpilius convexus Doppelpunkt-Steinkrabbe Variable coral crab
Photo: Dr. H.-W. Leyendecker 2015 Chumbe Island, Zanzibar



10 Carpilius convexus Doppelpunkt-Steinkrabbe Variable coral crab
Photo: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar

Carpiliidae

Shore crabs



Carpilius maculatus Gepunktete Riffrabbe Spotted reef crab
Photo: Dr. H.-W. Leyendecker 2015 Chumbe Island, Zanzibar

Diogenidae

Hermit crabs



Calcinus latens Blausocken-Einsiedlerkrebs Blue sock hermit crab
Photo: Martin Leyendecker 2016 Chumbe Island, Zanzibar



Diogenidae

Hermit crabs



Calcinus minutus Einsiedlerkrebs Flame tip hermit crab
Photo: Kerstin Erler 2017 Chumbe Island, Zanzibar

Diogenidae

Hermit crabs



Ciliopagurus strigatus Ringelsocken-Einsiedlerkrebs Striped hermit crab
Photo: Kerstin Erier 2017 Chumbe Island, Zanzibar

Diogenidae

Hermit crabs



Dardanus guttatus Blauknie-Krabbe Blue-knee hermit crab
Photo: Dr. H.-W. Leyendecker 2013 Chumbe Island, Zanzibar



14 *Dardanus arrosor* Großer Einsiedlerkrebs Striated hermit crab
Photo: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar



Photo: Kerstin Erier 2017 Chumbe Island, Zanzibar

Diogenidae

Hermit crabs



Dardanus cf. lagopodes im Gehäuse einer Turbo petholatus
Photo: Kerstin Erler 2017 Chumbe Island, Zanzibar

Diogenidae

Hermit crabs



Dardanus logopedes
Photos: Kerstin Erler
Einsiedlerkrebs Hairy red hermit crab
2017 Chumbe Island, Zanzibar



16 Dardanus cf. lagopodes
Photo: Dr. Valentina Herbring
Einsiedlerkrebs Hairy red hermit crab
2023 Chumbe Island, Zanzibar



Diogenidae

Hermit crabs



Dardanus megistos Weißpunkt-Einsiedler White spotted hermit crab
2015 Chumbe Island, Zanzibar

Diogenidae

Hermit crabs



Dardanus megistos Weißpunkt-Einsiedler hite spotted hermit crab
2015 Chumbe Island, Zanzibar



Diogenidae

Hermit crabs



Dardanus tinctor Anemonenträger Anemone carrier
2015 Chumbe Island, Zanzibar

Diogenidae

Hermit crabs



Dardanus tinctor Anemonenträger Anemone carrier
2015 Chumbe Island, Zanzibar



Photo: Martin Leyendecker 2016 Chumbe Island, Zanzibar



Dromiidae

Crabs



Tumidodromia dormia Gemeine Schwammkrabbe Common sponge crab
2015 Chumbe Island, Zanzibar

Dromiidae

Crabs



Tumidodromia dormia Gemeine Schwammkrabbe Common sponge crab
2015 Chumbe Island, Zanzibar



Epialtidae

Crabs



Hyastenus whitei
Photo: Dr. M. Leyendecker

Spinnenkrabbe

Spider crab
2023 Chumbe Island, Zanzibar

Eriphiidae

Shore crabs



Eriphia scabricula
Photo: Dr. H.-W. Leyendecker

Gezeitenkrabbe

Hairy banded crab, Warthy crab
2004 Chumbe Island, Zanzibar



Photo: Dr. H.-W. Leyendecker 2016

juvenile

Eriphiidae

Shore crabs



Eriphia sebana
Photo: Dr. M. Leyendecker

Glatte Rotaugenkrabbe

Smooth redeye crab
2023 Chumbe Island, Zanzibar

Eriphiidae

Shore crabs



Eriphia smithii
Photo: Dr. H.-W. Leyendecker

Rotaugenkrabbe

Rough red-eyed crab
2019 Chumbe Island, Zanzibar



Photo: Dr. H.-W. Leyendecker, 2009

Grapsidae

Rock crabs



Geograpsus crinipes

Felsenkrabbe

Rock crab
2008 Chumbe Island, Zanzibar



Photo: Ulli Klöiber 2016

Grapsidae

Rock crabs



Grapsus tenuicrustatus

Brandungs-Felsenkrabbe

Surf rock crab
2007 Chumbe Island, Zanzibar



Grapsidae

Rock crabs



Grapsus tenuicrustatus Brandungs-Felsenkrabbe Surf rock crab
Colour variant 2010 Chumbe Island, Zanzibar



Inachidae

Crabs

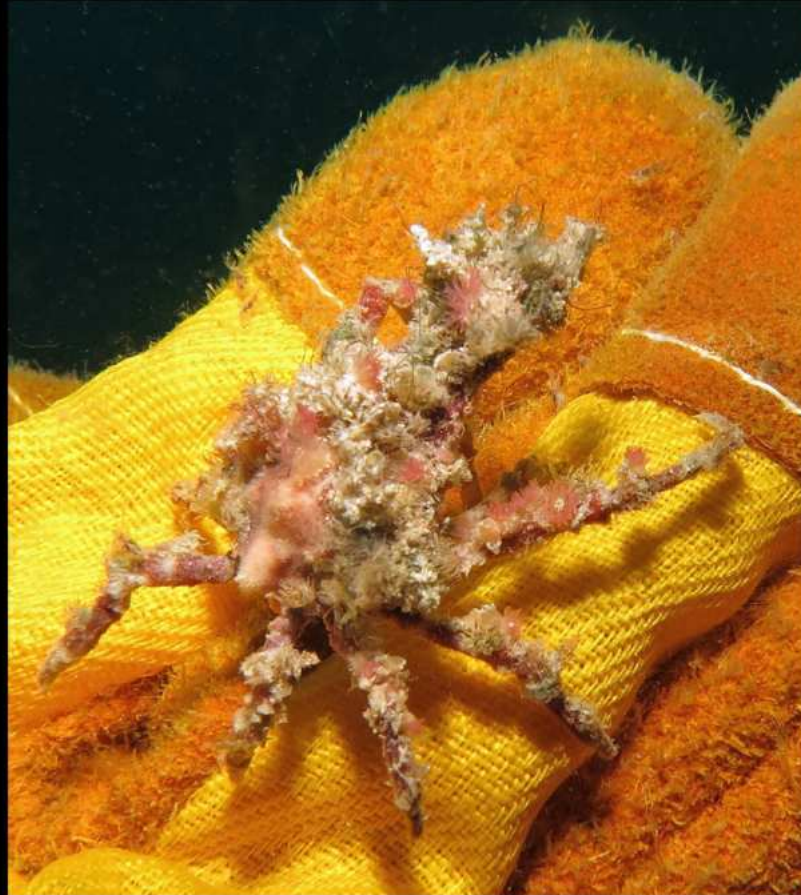


Camposcia retusa Dekorateurkrabbe Spider decorator crab
Photos: Dr. Valentina Herbring 2022 Chumbe Island, Zanzibar



Inachidae

Crabs



Camposcia retusa
Photo: Kerstin Eler

Dekorateurkrabbe

Spider decorator crab
2017 Chumbe Island, Zanzibar

Leucosiidae

Crabs



Ilia nucleus
Photos: Kerstin Eler

Kugelkrabbe

Nut-crab
2017 Chumbe Island, Zanzibar



Ocipodidae

Shore crabs



Ocypode ceratophthalmus
Photos: Dr. H.-W. Leyendecker

Geisterkrabbe

Common ghost crab
2011 Chumbe Island, Zanzibar



Percnidae

Shore crabs



Percnon gibbesi
Photo: Martin Leyendecker

Algenfressende Krabbe

Sally lightfoot crab
2017 Chumbe Island, Zanzibar



Pilumnidae

Shore crabs



Pilumnus vespertilio

Borstenkrabbe

Hairy crab
2013 Chumbe Island, Zanzibar

Polybiidae

Crabs



Liocarcinus sp.

Schwimmkrabbe

Swimming crab
2015 Chumbe Island, Zanzibar



Porcellanidae

Porcelain crabs



Petrolisthes virgatus
Photo: Martin Leyendecker

Squat lobster
2014 Chumbe Island, Zanzibar

Porcellanidae

Porcelain crabs



Neopetrolisthes maculatus Fleckentupfen-Anemonenkrabbe Spotted porcelain crab
Photo: Markus Meissl 2013 Chumbe Island, Zanzibar



Porcellanidae

Porcelain crabs



Neopetrolisthes maculatus Fleckentupfen-Anemonenkrabbe Spotted porcelain crab
Photo: Leyendecker 2016 Chumbe Island, Zanzibar



Photo: Valentina Herbring

2018 Chumbe Island, Zanzibar

Portunidae

Crabs



Lissocarcinus laevis Zylinderrosen-Schwimmkrabbe Harlequin swimmer crab
Photo: Valentina Herbring 2018 Chumbe Island, Zanzibar



Lissocarcinus laevis Zylinderrosen-Schwimmkrabbe Harlequin swimmer crab
Photo: Martin Leyendecker 2018 Chumbe Island, Zanzibar

Portunidae

Crabs



Lissocarcinus orbicularis Seewalzenkrabbe Sea cucumber crab
Photos: Kerstin Erler or Little harlequin swimmer crab
2019 Chumbe Island, Zanzibar



Photo: Valentina Herbring 2018 Chumbe Island, Zanzibar

Portunidae

Crabs



Charybdis (Charybdis) natador
Photo: Dr. M. Leyendecker

Schwimmkrabbe

Ridged swimming crab
2023 Chumbe Island, Zanzibar

Portunidae

Crabs



Thranita crenata
Photo: Kerstin Erler

Schwimmkrabbe

Swimming crab
2017 Chumbe Island, Zanzibar



Charybdis (Charybdis) natador
Photo: Dr. Valentina Herbring

Schwimmkrabbe

Ridged swimming crab
2023 Chumbe Island, Zanzibar



Thranita prymna
Photo: Kerstin Erler

Schwimmkrabbe

Swimming crab
2017 Chumbe Island, Zanzibar

Trapeziidae

Crabs



Trapezia rufopunctata Rot gepunktete Korallenkrabbe Red spotted coral crab
Photo: Dr. Valentina Herbring 2023 Chumbe Island, Zanzibar



44 *Trapezia rufopunctata* Rot gepunktete Korallenkrabbe Red spotted coral crab
Photo: Dr. Valentina Herbring 2023 Chumbe Island, Zanzibar

Xanthidae

Shore crabs



Actaeodes tomentosus Rundkrabbe Mud crab
2013 Chumbe Island, Zanzibar

Xanthidae

Shore crabs



Ectisus splendidus

Glanz-Rundkrabbe

Splendid pebble crab
2015 Chumbe Island, Zanzibar



Alpheidae

Snapping shrimps



Alpheus djiboutensis (below)

Knallkrebs (unten)

Snapping shrimp (below)
2013 Chumbe Island, Zanzibar



Alpheus djiboutensis (left)
Photo: Dr. M. Leyendecker

Knallkrebs (links)

Snapping shrimp (left)
2023 Chumbe Island, Zanzibar

Hippolytidae

Shrimps



Saron marmoratus

Marmorgamele

Marbled shrimp
2013 Chumbe Island, Zanzibar

Hippolytidae

Shrimps



Hippolyte prideauxiana
Photos: Kerstin Erler

Federstem-Partnergamele

Featherstar partner shrimp
2017 Chumbe Island, Zanzibar



Hippolyte prideauxiana
Photos: Kerstin Erler

Federstem-Partnergamele

Featherstar partner shrimp
2017 Chumbe Island, Zanzibar

Hippolytidae

Shrimps



Saron marmoratus sp. Gewöhnliche Marmorgarnele Common marble shrimp
2015 Chumbe Island, Zanzibar



Hippolytidae

Shrimps



Saron marmoratus Sp. 2 Gewöhnliche Marmorgarnele Common marble shrimp
Photos: Martin Leyendecker 2016 Chumbe Island, Zanzibar



Hippolytidae

Shrimps



Saron Sp 7

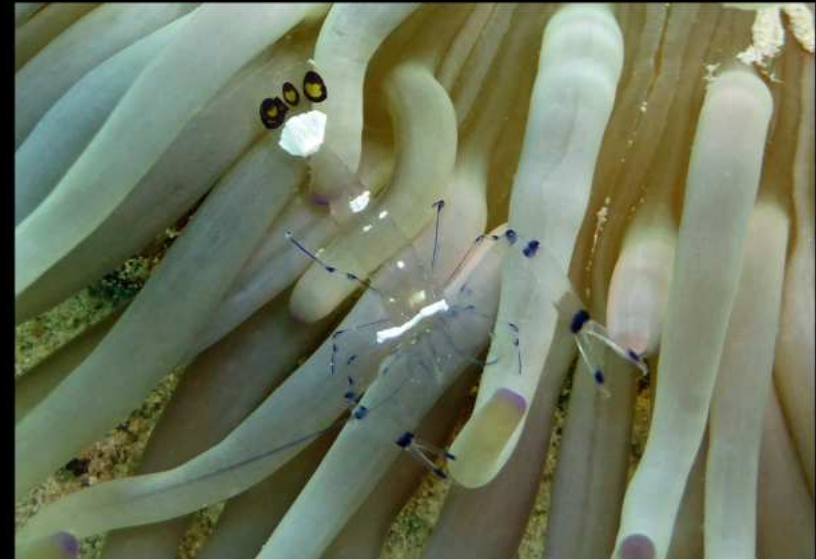
Marmorgamele

Marbled shrimp
2010 Chumbe Island, Zanzibar



Palaemonidae

Shrimps



Ancylocaris brevicarpalis
Photo: Valentina Herbring

Anemonengamele
male

Partner shrimp
2018 Chumbe Island, Zanzibar



Ancylocaris brevicarpalis
Photo: Dr. M. Leyendecker

Anemonengamele
female

Partnershrimp
2023 Chumbe Island, Zanzibar

Palaemonidae

Shrimps



Cristimenes commensalis Haarstem-Partnergamele Commensal crinoid shrimp
Photos: Kerstin Erler 2017 Chumbe Island, Zanzibar



Palaemonidae

Shrimps



Urocaridella antonbruunii Bruun's Partnergamele Clear Cleaner Shrimp
Photo: Valentina Herbring 2018 Chumbe Island, Zanzibar

Palaemonidae

Shrimps



Hymenocera picta
Photo: Dr. Valentina Herbring

Harlekingarnele

Harlequin shrimp
2022 Chumbe Island, Zanzibar

Palaemonidae

Shrimps



Hymenocera picta
Photo: Valentina Herbring

Harlekingarnele

Harlequin shrimp
2018 Chumbe Island, Zanzibar

Palaemonidae

Shrimps



Palaemonella orientalis
Photo: Kerstin Erler

Blasenkorallengamele

Bubble coral shrimp
2017 Chumbe Island, Zanzibar

Palaemonidae

Shrimps



Palaemonella orientalis
Photos: Martin Leyendecker

Blasenkorallengamele

Bubble coral shrimp
2017 Chumbe Island, Zanzibar



Palaemonidae

Partnershrimps



Zenopontonia rex

Imperator-Garnele

Imperator shrimp
2015 Chumbe Island, Zanzibar

Palaemonidae

Partnershrimps



Zenopontonia soror
Photo: Martin Leyendecker

Seesterngarnele

Sea star shrimp
2017 Chumbe Island, Zanzibar



Thoridae

Shrimps



Thor amboinensis
Photo: Kerstin Erler

Hohlkreuz-Garnele

Squat anemone shrimp
2017 Chumbe Island, Zanzibar

Thoridae

Shrimps



Thor amboinensis
Photo: Kerstin Erler

Hohlkreuz-Garnele

Squat anemone shrimp
2017 Chumbe Island, Zanzibar

Palinuridae

Lobsters



Panulirus longipes Langbein-Languste Longlegged spiny lobster
2015 Chumbe Island, Zanzibar

Palinuridae

Lobsters



Panulirus longipes Langbein-Languste Longlegged spiny lobster
2015 Chumbe Island, Zanzibar



Palinuridae

Lobsters



Panulirus versicolor

Gestreifte Languste

Painted spiny lobster
2010 Chumbe Island, Zanzibar



Galatheidae

Squat lobsters



Allogalatea elegans
Photos: Kerstin Eler

Federstern-Springkrebs

Feather star squat lobster
2017 Chumbe Island, Zanzibar



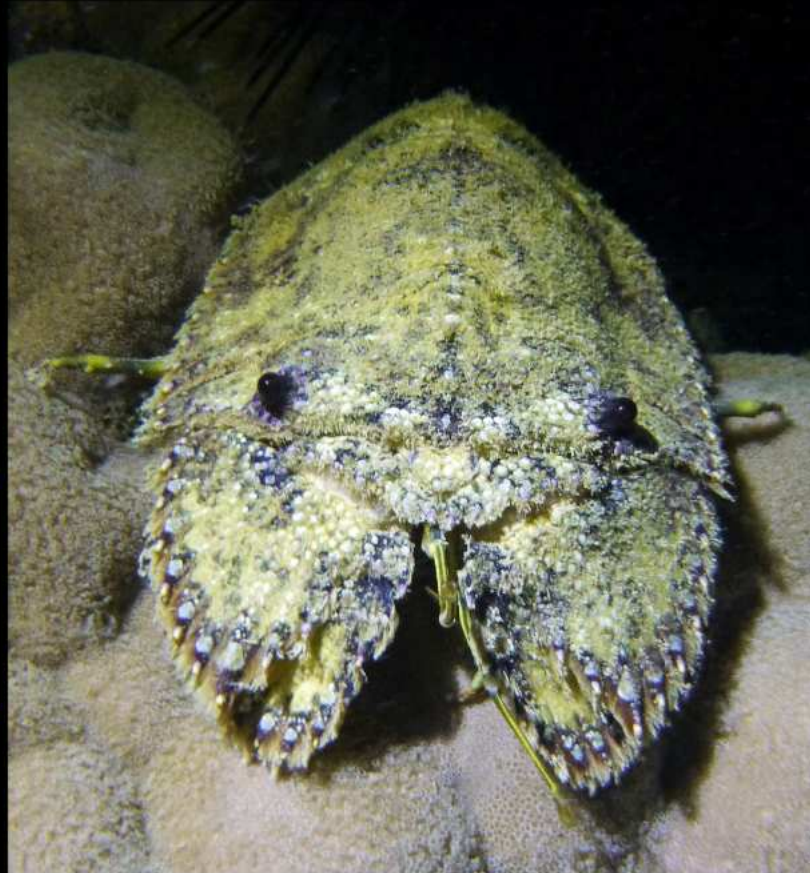
Allogalatea elegans
Photos: Dr. Valentina Herbring

Federstern-Springkrebs

Feather star squat lobster
2023 Chumbe Island, Zanzibar

Scyllaridae

Lobsters



Parribacus antarcticus Bärenkrebs Sculptured slipper lobster
2015 Chumbe Island, Zanzibar

Scyllaridae

Lobsters



Parribacus antarcticus Bärenkrebs Sculptured slipper lobster
2015 Chumbe Island,



Scyllaridae

Lobsters



Thenus orientalis Breitkopf-Bärenkrebs Slipper lobster, Flathead lobster
2008 Chumbe Island, Zanzibar

Scyllaridae

Lobster



Thenus unimaculatus Bärenkrebs Shovel-nosed lobster
Photos: Valentina Herbring 2018 Chumbe Island, Zanzibar



Gonodactylidae

Mantis shrimps



Gonodactylus smithii
Photo: Markus Meissl

Fangschreckenkrebs

Stomatopod smasher
2015 Chumbe Island, Zanzibar



Gonodactylus viridis
Photo: Dr. M. Leyendecker

Grüner Fangschreckenkrebs

Green mantis shrimp
2023 Chumbe Island, Zanzibar

Gonodactylidae

Mantis shrimps



Neogonodactylus oerstedii
Photo: Dr. H.-W. Leyendecker

Fangschreckenkrebs

Pink tail mantis shrimp
2016 Chumbe Island, Zanzibar

Lysiosquillidae

Mantis shrimps



Lysiosquilla maculata
Photos: Ulli Kloiber

Speer-Fangschreckenkrebs

Mantis shrimp
2015 Chumbe Island, Zanzibar

Lysiosquillidae

Mantis shrimps



Lysiosquilla maculata
Photos: Ulli Kloiber

Speer-Fangschreckenkrebs

Mantis shrimp
2015 Chumbe Island, Zanzibar



Lysiosquillidae

Mantis shrimps



Lysiosquilla lisa
Photo: Martin Leyendecker

Fangschreckenkrebs

Lysiosquillina lisa
2017 Chumbe Island, Zanzibar

Lysiosquillidae

Mantis shrimps



Lysiosquilloides mapia
Photo: Kerstin Erler

Fangschreckenkrebs

Golden mantis shrimp
2017 Chumbe Island, Zanzibar



Lysiosquilloida mapia
Photo: Martin Leyendecker

Fangschreckenkrebs

Golden mantis shrimp
2017 Chumbe Island, Zanzibar

Odontodactylidae

Mantis shrimps



Odontodactylus scyllarus Bunter Fangschreckenkrebs Peacock mantis shrimp
Photo: Martin Leyendecker 2010 Chumbe Island, Zanzibar

Odontodactylidae

Mantis shrimps



Odontodactylus scyllarus Bunter Fangschreckenkrebs Peacock mantis shrimp
Photos: Martin Leyendecker 2017 Chumbe Island, Zanzibar



Photo: Dr. Martin Leyendecker 2022 Chumbe Island, Zanzibar



Bursidae

Sea snails



Tutufa bubo
Photos: Martin Leyendecker

Riesenfroschschnecke

Giant frogshell
2018 Chumbe Island, Zanzibar

Bursidae

Sea snails



Tutufa bubo
Photos: Martin Leyendecker

Riesenfroschschnecke

Giant frogshell
2018 Chumbe Island, Zanzibar



Egg ribbon of a Tutufa bubo

Cassidae

Sea snails



Casmaria ponderosa
Photo: Valentina Herbring

Helmschnecke

Heavy bonnet
2018 Chumbe Island, Zanzibar

Cassidae

Sea snails



Cypraeacassis rufa
Photo: Leyendecker
Zanzibar

Rote Helmschnecke
Bullenmaul

Bull mouth helmet
2016 Chumbe Island,

Cerithiidae

Sea snails



Rhinoclavis aspera
 Photo: Dr. H.-W. Leyendecker

Sandschnecke

Rough creeper
 2018 Chumbe Island, Zanzibar

Charoniidae

Sea snails



Charonia lampas
 Photo: Martin Leyendecker

Knotentragendes Tritonshorn

Knobbed triton
 2018 Chumbe Island, Zanzibar

Charoniidae

Sea snails



Charonia tritonis

Tritonschnecke

Giant triton
2010 Chumbe Island, Zanzibar

Charoniidae

Sea snails



Giant triton eating an Indian cushion sea star



Cypraeidae

Sea snails



Mauritia arabica asiatica
Photo: Kerstin Erler

Porzellanschnecke

Arabic cowrie
2017 Chumbe Island, Zanzibar

Cypraeidae

Sea snails



Mauritia arabica immanis
Photo: Kerstin Erler

Porzellanschnecke

Arabic cowrie
2017 Chumbe Island, Zanzibar

Cypraeidae

Sea snails



Monetaria caputserpentis

Kaurischnecke

Serpent's-head cowry
2015 Chumbe Island, Zanzibar

Cypraeidae

Sea snails



Cypraea tigris

Tiger-Kauri-Schnecke

Tiger cowrie
2013 Chumbe Island, Zanzibar



Conidae

Cone shells



Conus geographus
Photo: Leyendecker

Kegelschnecke

Cone shell
2016 Chumbe Island, Zanzibar

Conidae

Cone shells



Conus geographus
Photos: Leyendecker

Kegelschnecke

Cone shell
2016 Chumbe Island, Zanzibar



Conidae

Cone shells



Conus textile

Weberkegel

Textile cone shell
2005 Chumbe Island, Zanzibar

Conidae

Cone shells



Conus vexillum
Photo: Dr. H.-W. Leyendecker

Fahnenkegel

Vexillum cone shell
2019 Chumbe Island, Zanzibar

Fascioliariidae

Sea snails



Filifusus filamentosus
Photo: Kerstin Erler

Spindelschnecke

Filamentous horse conch
2017 Chumbe Island, Zanzibar

Fascioliariidae

Sea snails



Marmorofusus nicobaricus

Spindelschnecke

Nicobar spindle
2003 Chumbe Island, Zanzibar

Fasciolariidae

Sea snails



Pleuroploca trapezium
Photo: Dr. Valentina Herbring

Trapezbandschnecke

Trapezium horse conch
2023 Chumbe Island, Zanzibar



Pleuroploca trapezium
Photo: Dr. Valentina Herbring

Trapezbandschnecke

Trapezium horse conch
2023 Chumbe Island, Zanzibar

Chitonidae

Chitons



Acanthopleura gemmata
Photo: Dr. H.-W. Leyendecker

Käferschnecke

West-Indian fuzzy chiton
2012 Chumbe Island, Zanzibar



Acanthopleura testudo
Photo: Dr. Martin Leyendecker

Käferschnecke

Chiton
2022 Chumbe Island, Zanzibar

Fissurellidae

Sea snails



Fissurella fascicularis
Photos: Dr. H.-W. Leyendecker

Schlüssellochschnecke
Keyhole limpet
2015 Chumbe Island, Zanzibar



Harpidae

Sea snails



Harpa cabriti
Photo: Dr. Valentina Herbring

Harfenschnecke
Ventral harp
2023 Chumbe Island, Zanzibar



Harpa cabriti
Photo: Chumbe office

Harfenschnecke
Ventral harp
2016 Chumbe Island, Zanzibar

Muricidae

Sea snails



Chicoreus ramosus Verzweigte Stachelschnecke Ramose murex
2003 Chumbe Island, Zanzibar



Chicoreus ramosus Verzweigte Stachelschnecke Ramose murex
Photo: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar

Nassariidae

Sea snails



Nassarius papillosus Schnecke Pimpled basket shell
Photos: Martin Leyendecker 2017 Chumbe Island, Zanzibar



Neritidae

Sea snails



Nerita plicata

Nixenschnecke

Nerita plicata
2010 Chumbe Island, Zanzibar

Neritidae

Sea snails



Nerita plicata
Photo: Dr. H.-W. Leyendecker

Nixenschnecke

Nerita plicata
2023 Chumbe Island, Zanzibar



Nerita plicata
Photo: Dr. H.-W. Leyendecker

Nixenschnecke

Nerita plicata
2023 Chumbe Island, Zanzibar

Naticidae

Sea snails



Naticarius onca
Photos: Martin Leyendecker

Mondschncke

Moon snail
2017 Chumbe Island, Zanzibar



Egg mass

Ovulidae

Sea snails



Diminovula nielseni
Photo: Valentina Herbring

Nielsens Eischnecke

Nielsens cone
2018 Chumbe Island, Zanzibar

Ovulidae

Sea snails



Ovula ovum Große Eischnecke Common egg cowrie
Photo: Dr. H.-W. Leyendecker 2023 Chumbe Island, Zanzibar

Ovulidae

Sea snails



Ovula ovum Große Eischnecke Common egg cowrie
Photo: Dr. Valentina Herbring 2022 Chumbe Island, Zanzibar



110 Ovula ovum Große Eischnecke Common egg cowrie
Photo: Dr. Valentina Herbring 2023 Chumbe Island, Zanzibar



Ovula ovum Große Eischnecke Common egg cowrie
Photo: Dr. Martin Leyendecker 2022 Chumbe Island, Zanzibar

Strombidae

Sea snails



Lambis scorpius

Spinnenschnecke

Spider conch
2012 Chumbe Island, Zanzibar

Strombidae

Sea snails



Lambis millepeda

Spinnenschnecke

Spider conch
2012 Chumbe Island, Zanzibar



Lambis scorpius

Spinnenschnecke

Spider conch
2023 Mnemba, Zanzibar



Strombidae

Sea snails



Lambis millepeda Spinnenschnecke Spider conch
2012 Chumbe Island, Zanzibar

Strombidae

Sea snails



Lambis lambis Spinnenschnecke Spider conch
2012 Chumbe Island, Zanzibar



Strombidae

Sea snails



Thetystrombus latus Fechterschnecke Bubonian conch
Photos: Dr. H.-W. Leyendecker 2016 Chumbe Island, Zanzibar



Tegulidae

Sea snails



Tectus mauritianus Kegelschnecke Mauritius top shell
2015 Chumbe Island, Zanzibar

Terebridae

Sea snails



Myurella affinis
Photo: Valentina Herbring

Mitraschnecke

Related auger
2018 Chumbe Island, Zanzibar

Velutinidae

Sea snails



Coriocella nigra
Photos: Leyendecker

Schildkrötenrücken

Network lamellaria
2016 Chumbe Island, Zanzibar



Oxymeris cerithina
Photo: Kerstin Erier

Schraubenschnecke

Cerithlike auger
2017 Chumbe Island, Zanzibar



Aglajidae

Sea slugs



Chelinodura electra Brilliant-Kopfschildschnecke Brilliant headshield slug
Photo: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar



120 *Chelinodura electra* Brilliant-Kopfschildschnecke Brilliant headshield slug
Photo: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar

Aglajidae

Sea slugs



Chelinodura varianz Samtblaue Kopfschildschnecke Blue velvet headshield slug
Photo: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar



Chelinodura varianz Samtblaue Kopfschildschnecke Blue velvet headshield slug
Photo: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar

Aglajidae

Sea slugs



Chelinodura punctata

Kopfschildschnecke

Headshield slug
2012 Chumbe Island, Zanzibar



Aglajidae

Sea slugs



Tubulophilinopsis pilsbryi Pilsbrys Kopfschildschnecke Brown-ringed slug
Photos: Martin Leyendecker 2017 Chumbe Island, Zanzibar

Aglajidae

Sea slugs



Tubulophilinopsis pilsbryi Pilsbrys Kopfschildschnecke Brown-ringed slug
Photos: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar



Aplysiidae

Sea slugs



Aplysia oculifera
Photo: Dr. Valentina Herbring

Seehase

Spotted sea hare
2022 Chumbe Island, Zanzibar

Aplysiidae

Sea slugs



Aplysia oculifera
Photos: Dr. Valentina Herbring

Seehase

Spotted sea hare
2022 Chumbe Island, Zanzibar



Aplysiidae

Sea slugs



Dolabella auricularia Seehase Sea hare
2015 Chumbe Island, Zanzibar

Aplysiidae

Sea slugs



Dolabella auricularia Seehase Sea hare
2013 Chumbe Island, Zanzibar



Aplysiidae

Sea slugs



Dolabrifera dolabrifera

Seehase

Sea hare
2013 Chumbe Island, Zanzibar

Aplysiidae

Sea slugs



Stylocheilus longicauda

Nacktschnecke

Long-tailed sea hare
2013 Chumbe Island, Zanzibar



Aplysiidae

Sea slugs



Stylocheilus striatus
Photo: Martin Leyendecker

Langschwanz-Seehase
juvenile

Long-tailed sea hare
2017 Chumbe Island, Zanzibar

Chromodorididae

Sea slugs



Cadlinella ornatisissima
Photos: Martin Leyendecker

Nacktschnecke

Nudibranch
2017 Chumbe Island, Zanzibar



Chromodorididae

Sea slugs



Ceratosoma tenue Lila-Rand-Prachtspemsncke Kangaroo nudibranch
Photo: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar

Chromodorididae

Sea slugs



Ceratosoma tenue Lila-Rand-Prachtspemsncke Kangaroo nudibranch
Photo: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar



134 *Ceratosoma tenue* Lila-Rand-Prachtspemsncke Kangaroo nudibranch
Photo: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar



Ceratosoma tenue Lila-Rand-Prachtspemsncke Kangaroo nudibranch
Photo: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar 135

Chromodorididae

Sea slugs



Chromodoris africana Prachtsternschnecke Nudibranch
2015 Chumbe Island, Zanzibar

Chromodorididae

Sea slugs



Chromodoris africana Prachtsternschnecke Nudibranch
2013 Chumbe Island, Zanzibar



Juvenile



Chromodorididae

Sea slugs



Chromodoris lochi
Photo: Kerstin Eler

Nacktschnecke

Nudibranch
2017 Chumbe Island, Zanzibar

Chromodorididae

Sea slugs



Chromodoris lochi
Photos: Martin Leyendecker

Nacktschnecke

Nudibranch
2017 Chumbe Island, Zanzibar



Chromodoris lochi
Photos: Dr. M. Leyendecker

Nacktschnecke

Nudibranch
2023 Chumbe Island, Zanzibar

Chromodorididae

Sea slugs



Chromodoris elisabethina Prachtsternschnecke Loch's magnificent slug
2010 Chumbe Island, Zanzibar



Chromodorididae

Sea slugs



Goniobranchus gleniei Prachtsternschnecke Nudibranch
Photo: Ulli Kloiber 2016 Chumbe Island, Zanzibar



Photo: Martin Leyendecker

2017 Chumbe Island, Zanzibar

Chromodorididae

Sea slugs



Chromodoris hamiltoni Prachtsternschnecke Nudibranch
2014 Chumbe Island, Zanzibar

Chromodorididae

Sea slugs



Chromodoris hamiltoni Prachtsternschnecke
Colour variant Nudibranch
2015 Chumbe Island, Zanzibar



Chromodorididae

Sea slugs



Chromodoris magna
Photo: Kerstin Erler

Nacktschnecke
2017 Chumbe Island, Zanzibar

Nudibranch

Chromodorididae

Sea slugs



Chromodoris magna
Photo: Kerstin Erler

Nacktschnecke

Nudibranch
2017 Chumbe Island, Zanzibar



Photo: Martin Leyendecker

2017 Chumbe Island, Zanzibar

Chromodorididae

Sea slugs



Glossodoris hikuensis
Photos: Leyendecker

Prachtstemschnecke

Nudibranch
2016 Chumbe Island, Zanzibar

Chromodorididae

Sea slugs



Glossodoris rufomarginata
Photos: Dr. M. Leyendecker

Nacktschnecke

Caramel nudibranch
2023 Chumbe Island, Zanzibar



Chromodorididae

Sea slugs



Goniobranchus fidelis
Photos: Martin Leyendecker

Nacktschnecke

Reliable goniobranchus
2017 Chumbe Island, Zanzibar

Chromodorididae

Sea slugs



Goniobranchus geminus
Photos: Martin Leyendecker

Twin-Chromodoris
2023 Chumbe Island, Zanzibar



Chromodorididae

Sea slugs

Chromodorididae

Sea slugs



Hypselodoris infucata
Photo: Kerstin Erler

Feuer-Prachstern

Painted hypselodoris
2017 Chumbe Island, Zanzibar



Photo: Martin Leyendecker

2017 Chumbe Island,

Chromodorididae

Sea slugs



Hypselodoris regina
Photos: Dr. M. Leyendecker

Prachtsternschnecke

Nudibranch
2023 Chumbe Island, Zanzibar

Chromodorididae

Sea slugs



Hypselodoris regina
Photos: Martin Leyendecker

Prachtsternschnecke

Nudibranch
2014 Chumbe Island, Zanzibar



Hypselodoris regina
Photos: Dr. M. Leyendecker

Prachtsternschnecke

Nudibranch
2023 Chumbe Island, Zanzibar



Polyceridae

Sea slugs



Gymnodoris tuberculosa
Photo: Martin Leyendecker

Nacktschnecke

Nudibranch
2018 Chumbe Island, Zanzibar

Dendrodorididae

Sea slugs



Dendrodoris tuberculosa
Photos: Dr. H.-W. Leyendecker

Nacktschnecke

Nudibranch
2017 Chumbe Island, Zanzibar



Discodorididae

Marine slugs



Asteronotus cespitosus Kuhfladen-Höckerschnecke Clumpy nudibranch
2006 Chumbe Island, Zanzibar



Discodorididae

Marine slugs



Atagema intecta Nacktschnecke Nudibranch
2015 Chumbe Island, Zanzibar



Discodorididae

Marine slugs



Halgerda wasinensis Nacktschnecke Nudibranch
2013 Chumbe Island, Zanzibar

Discodorididae

Marine slugs



Halgerda wasinensis Nacktschnecke Nudibranch
2013 Chumbe Island, Zanzibar



Discodorididae

Marine slugs



Jorunna rubescens Nacktschnecke Sea slug
2012 Chumbe Island, Zanzibar

Discodorididae

Marine slugs



Jorunna rubescens Nacktschnecke Sea slug
Photo: Kerstin Erler 2017 Chumbe Island, Zanzibar



160 Jorunna rubescens Nacktschnecke Sea slug
Photo: Dr. M. Leyendecker 2023 Chumbe Island, Zanzibar



Egg ribbon of a Jorunna rubescens

Discodorididae

Sea slugs



Discodorididae

Sea slugs



Platydoris scabra
Photo: Dr. H.-W. Leyendecker

Nacktschnecke

Nudibranch
2016 Chumbe Island, Zanzibar

Hexabranhidae

Nudibranches



Hexabranhus sanguineus Spanische Tänzerin Spanish dancer
2015 Chumbe Island, Zanzibar

Hexabranhidae

Nudibranches



Hexabranhus sanguineus Spanische Tänzerin Spanish dancer
2015 Chumbe Island, Zanzibar



Eiablage Egg ribbon

Janolidae

Nudibranches



Janolus savinkini
Photo: Dr. M. Leyendecker

Savinkins Janolus

Purple tipped janolus
2023 Chumbe Island, Zanzibar



Janolus savinkini
Photo: Dr. Valentina Herbring

Savinkins Janolus

Purple tipped janolus
2023 Chumbe Island, Zanzibar

Phyllidiidae

Wart slugs



Phyllidia ocellata Augenfleck-Warzenschnecke Wartslug sp.
Photo: Dr. H.-W. Leyendecker 2015 Chumbe Island, Zanzibar

Phyllidiidae

Wart slugs



Phyllidia ocellata Augenfleck-Warzenschnecke Wartslug sp.
Photo: Markus Meissl 2013 Chumbe Island, Zanzibar



168 Phyllidia ocellata Augenfleck-Warzenschnecke Wartslug sp.
Photo: Dr. Valentina Herbring 2023 Chumbe Island, Zanzibar



Phyllidiidae

Wart slugs



Phyllidia varicosa Gift-Warzenschnecke Varicose wart slug
2012 Chumbe Island, Zanzibar

Phyllidiidae

Wart slugs



Phyllidiopsis krempfi Krempfs Warzenschnecke Krempf's wart slug
2012 Chumbe Island, Zanzibar



Plakobranchidae

Sea slugs



Elysia marginata
Photo: Dr. M. Leyendecker

Dunkel-Rand Saftsauger

Dark-margined sapsucking slug
2023 Chumbe Island, Zanzibar

Plakobranchidae

Sea slugs



Elysia ornata
Photo: Kerstin Erler

Sackzungenschnecke

Ornate sapsucking slug
2017 Chumbe Island, Zanzibar

Plakobranchidae

Sea slugs



Plakobranchus ocellatus Augenfleck Samtschnecke Sap-sucking slug
Photo: Martin Leyendecker 2018 Chumbe Island, Zanzibar



174 *Plakobranchus ocellatus* Augenfleck Samtschnecke Sap-sucking slug
Photo: Valentina Herbring 2018 Chumbe Island, Zanzibar

Plakobranchidae

Sea slugs



Thuridilla gracilis Saftsauger Sapsucking slug
Photo: Martin Leyendecker 2016 Chumbe Island, Zanzibar

Plakobranchidae

Sea slugs



Thuridilla indopacifica
Photo: Kerstin Erler

Indopazifischer Saftsauger
2017 Chumbe Island, Zanzibar

Plakobranchidae

Sea slugs



Thuridilla indopacifica
Photos: Martin Leyendecker

Indopazifischer Saftsauger

Sap sucking slug
2017 Chumbe Island, Zanzibar



Plakobranchidae

Sea slugs



Thuridilla virgata Indopazifischer Saftsauger Sap sucking slug
Photos: Kerstin Ertler 2017 Chumbe Island, Zanzibar

Plakobranchidae

Sea slugs



Thuridilla virgata Indopazifischer Saftsauger Sap sucking slug
Photos: Martin Leyendecker 2017 Chumbe Island, Zanzibar





Welcome back
again to
Chumbe Island

Quickfinder

Family name

	GUIDE- Page
Crabs.....	9
Lobsters.....	66
Mantis shrimps.....	74
Nudibranches.....	120
Sea snails.....	82
Shrimps.....	46

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.

The photos which were not taken by Martin are credited to the photographer. This edition 2024 was supported by the following photographers: Markus Meissl, Oskar Hendriksson, Elisa Alonso, Frida Landshammar, Olivia McGrath, Elisabeth Tyler, Kim Nesbitt, Aaron Critchley, Jorge Santamaria Perez, Monica Hemming Rorvik, Kerstin Erler, Helen Peeks, Valentina Herbring and Ulli Kloiber. The few images that have been taken outside of the Chumbe reef were selected because of their superior quality.

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

