

# OCEAN *Emporium*

*Written by Susie Brooks  
Illustrated by Dawn Cooper*

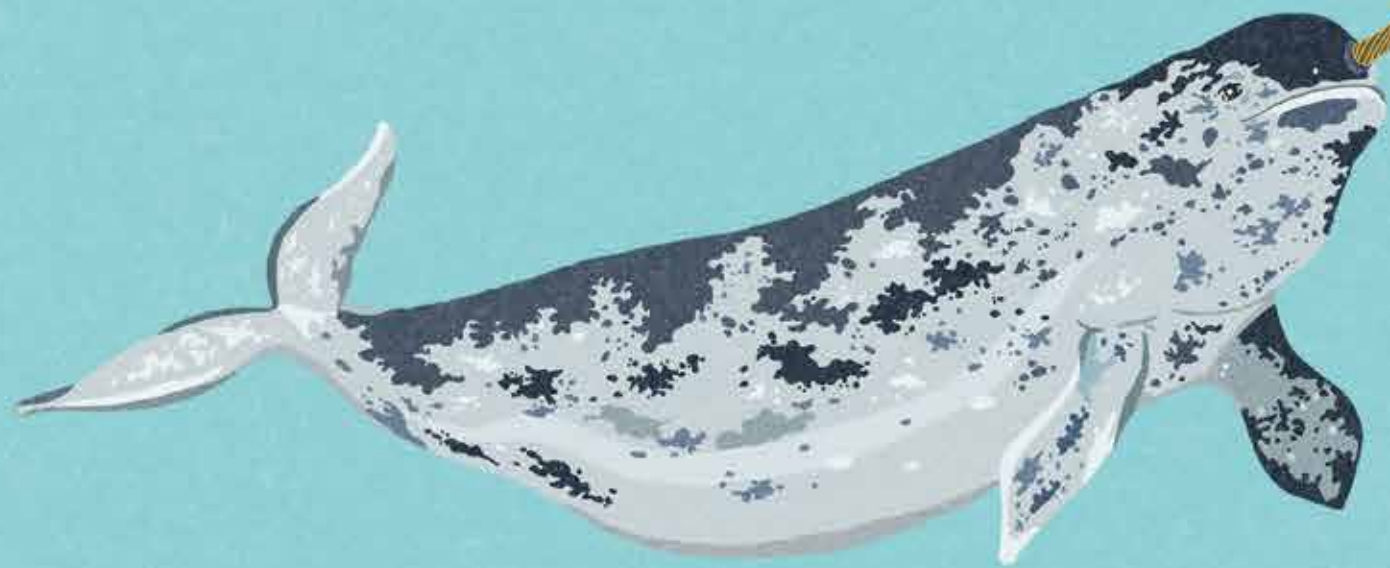
First published in Great Britain 2018 by Red Shed,  
an imprint of Egmont UK Limited  
The Yellow Building, 1 Nicholas Road, London W11 4AN  
[www.egmont.co.uk](http://www.egmont.co.uk)

Text copyright © Egmont UK Limited 2018  
Illustrations copyright © Dawn Cooper 2018  
ISBN 978 1 4052 9097 5

Consultancy by John Woodward.  
A CIP catalogue record for this book is available from the British Library.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher and copyright owner.

Stay safe online. Any website addresses listed in this book are correct at the time of going to print. However, Egmont is not responsible for content hosted by third parties. Please be aware that online content can be subject to change and websites can contain content that is unsuitable for children. We advise that all children are supervised when using the internet.





## Contents

10-11	Welcome to the Emporium	36-37	Pufferfish and porcupinefish
12-13	Crabs	38-39	Swordfish v mackerel
14-15	Hermit crabs	40-41	Sawfish, skates and rays
16-17	Shrimps and lobsters	42-43	Sharks
18-19	Sea stars and sea urchins	44-45	Orca v great white shark
20-21	Coral reef	46-47	Dolphins
22-23	Corals	48-49	Whales
24-25	Jellyfish	50-51	Turtles
26-27	Nudibranchs and sea snails	52-53	Dugongs and sea otters
28-29	Clams and bivalves	54-55	Seals, sealions and walruses
30-31	Indonesian mimic octopus	56-57	Penguins
32-33	Octopuses, squid and cuttlefish	58-59	Creatures of the deep
34-35	Seahorses, seadragons and pipefish	60-61	Glossary and index

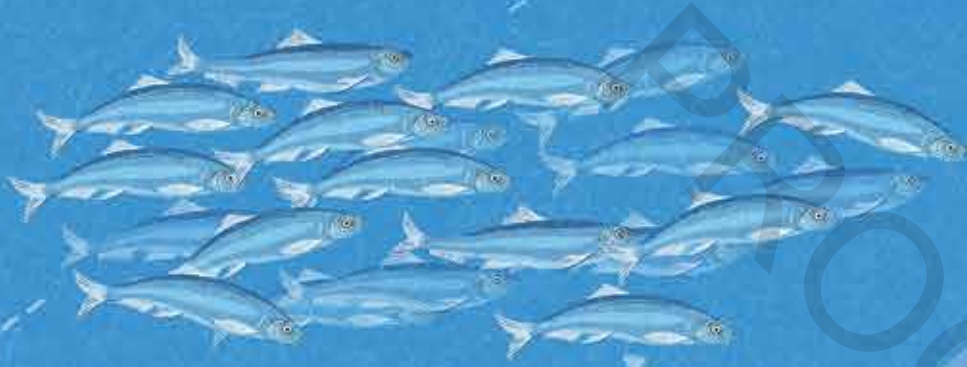


# Welcome to the Emporium

Deep, mysterious oceans sweep across our planet, making up 99 per cent of the living space on Earth. Beneath their rolling waves lies an extraordinary web of life, where colourful creatures great and small depend on each other to survive.

## Small fish

Small fish often strive to protect themselves from predators by swimming in shoals, or schools.



## Octopus

An octopus is an adept hunter, able to break into shells for food or paralyse fish prey with its toxic saliva.



## Shellfish

Many marine molluscs live in shells, and feed by sifting plankton from the water.



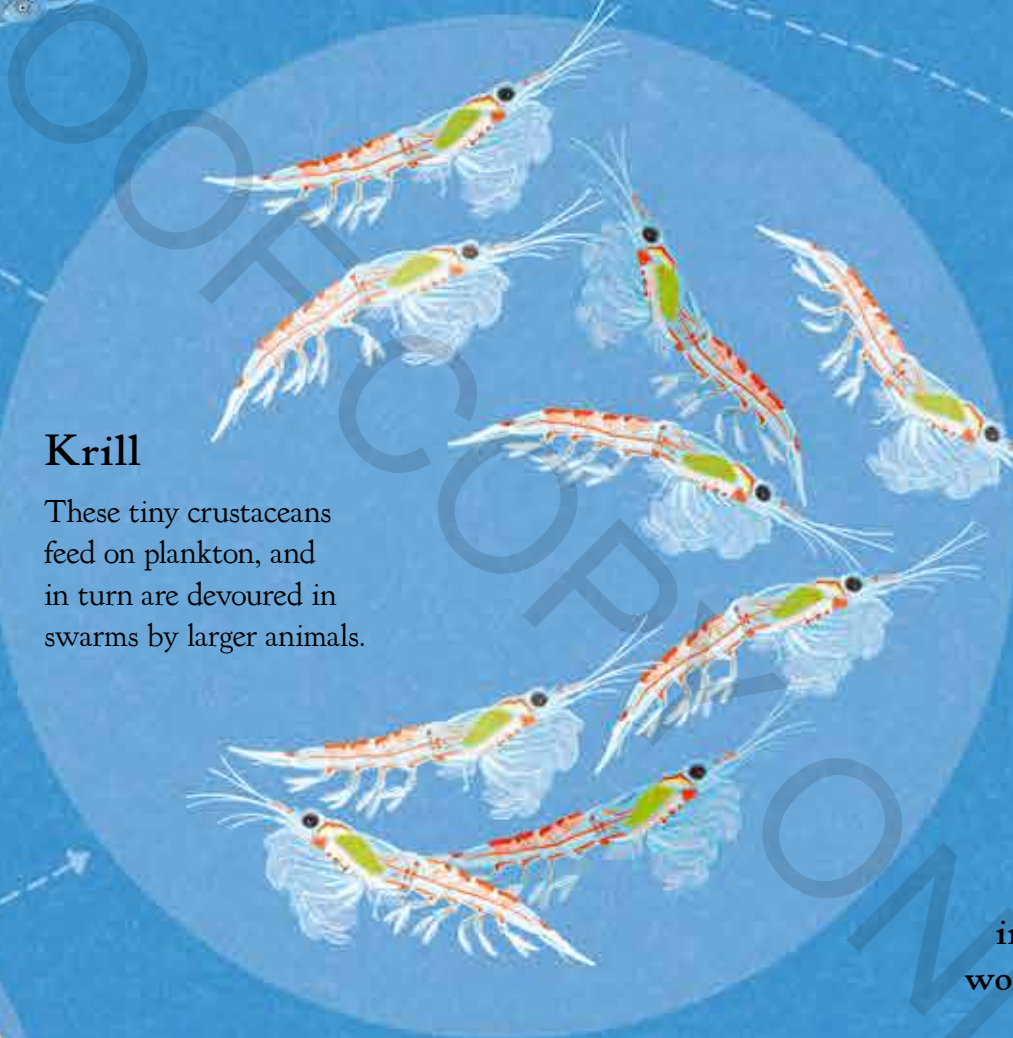
## Plankton

Most marine life depends on these tiny plants and animals, which drift on ocean currents as they cannot swim.



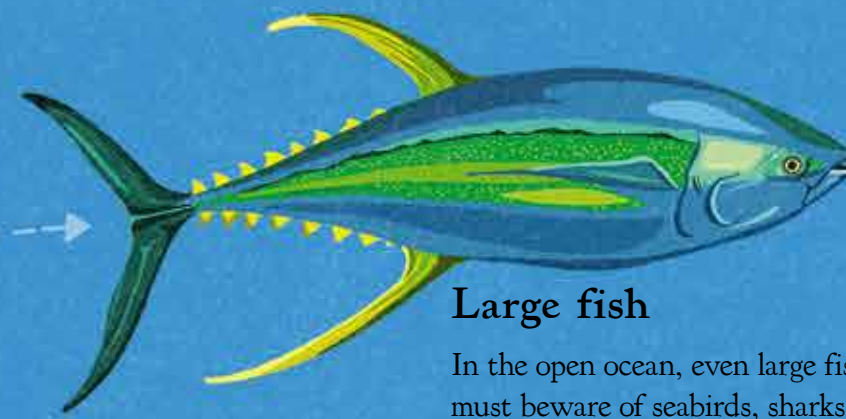
## Krill

These tiny crustaceans feed on plankton, and in turn are devoured in swarms by larger animals.



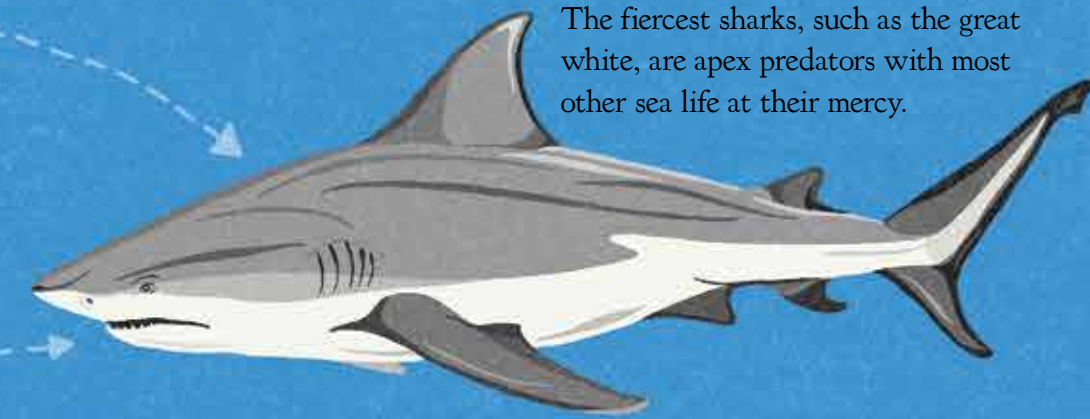
## Large fish

In the open ocean, even large fish must beware of seabirds, sharks, toothed whales and other predators.



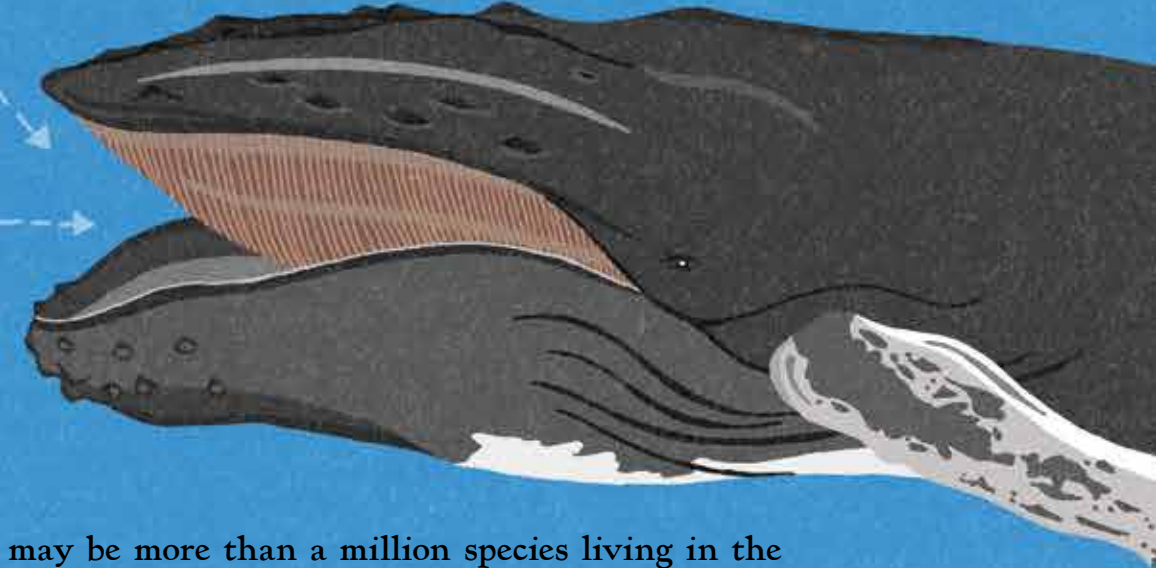
## Sharks

The fiercest sharks, such as the great white, are apex predators with most other sea life at their mercy.



## Whales

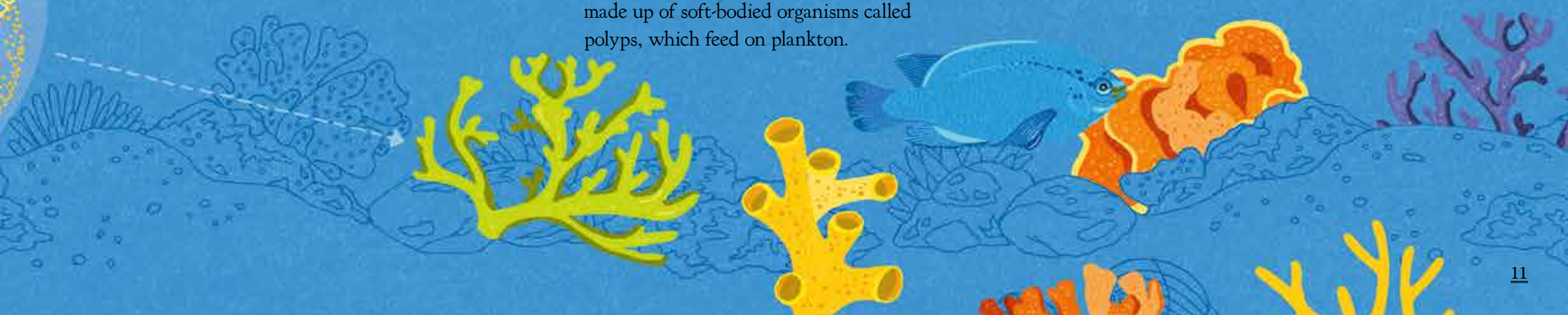
Amazingly, vast humpbacks and other baleen whales survive primarily on feasts of tiny krill.



There may be more than a million species living in the world's oceans. They vary incredibly, from the largest animal that ever existed to creatures too small for the human eye to see. While some duck and dive in sunlit surface waters, others lurk thousands of metres below in the pitch-black abyss. Prepare to discover their amazing world as you plunge into the Ocean Emporium!

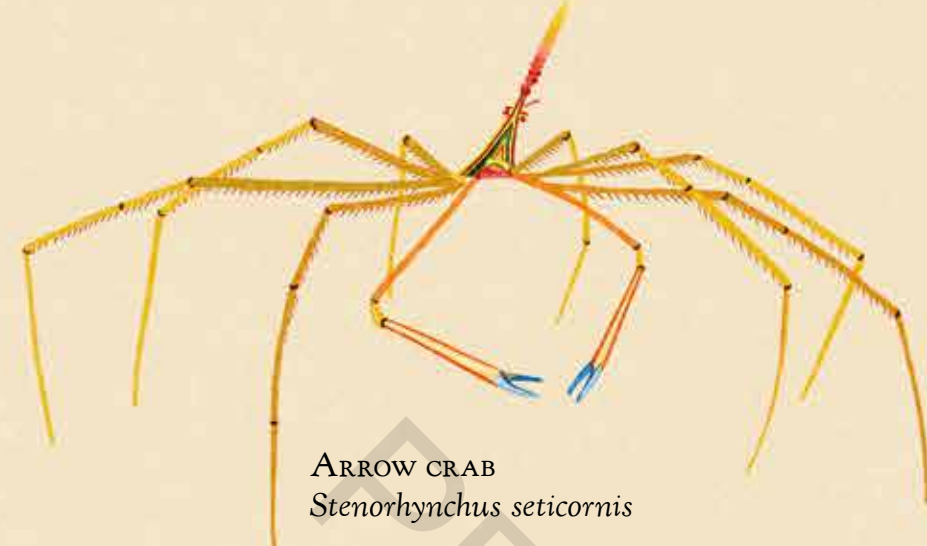
## Corals

Corals are very much alive. They are made up of soft-bodied organisms called polyps, which feed on plankton.



# Crabs

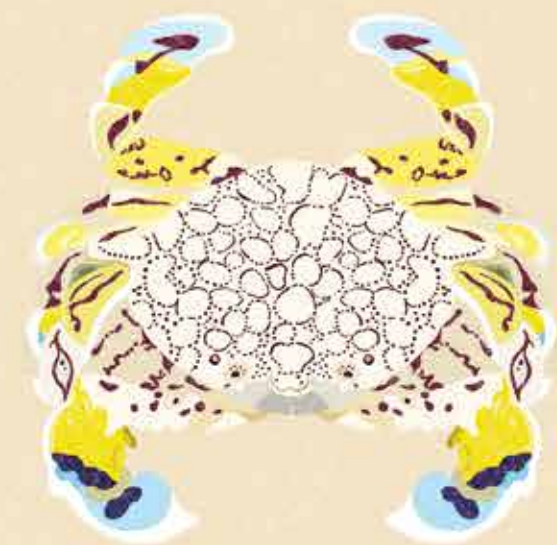
These active animals scuttle sideways under helmet-style shells, fighting over hiding holes or mates. They can communicate by drumming or flapping their pincers, which also serve to seize prey and dig.



ARROW CRAB  
*Stenorhynchus seticornis*



FIDDLER CRAB  
*Uca tetragonon*



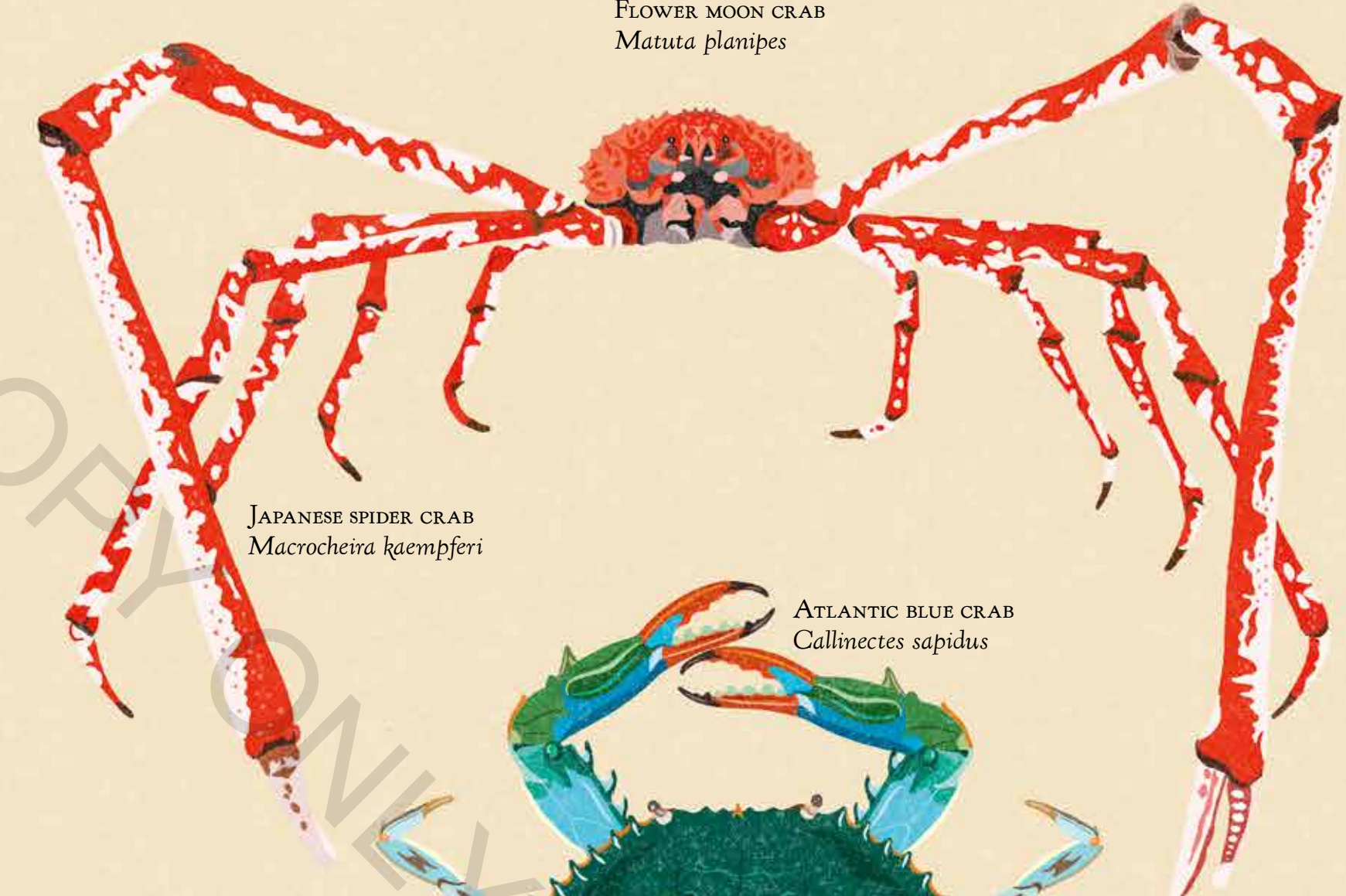
FLOWER MOON CRAB  
*Matuta planipes*



ZEBRA CRAB  
*Zebrida adamsii*



COMMON EDIBLE CRAB  
*Cancer pagurus*



JAPANESE SPIDER CRAB  
*Macrocheira kaempferi*



CORRUGATED CRAB  
*Liomera rugata*



GAUDY CLOWN CRAB  
*Platypodiella spectabilis*



ATLANTIC BLUE CRAB  
*Callinectes sapidus*



COMMON HAIRY CRAB  
*Pilumnus vespertilio*



CANDY CRAB  
*Hoplophrys oatesii*

# Hermit crabs

There are more than 1,000 species of these remarkable soft-bellied relatives of lobsters. They live in colonies on tropical shorelines and in shallow coral reefs, as well as on cooler coasts and in the deep sea. They work together to trade homes or find food, and can be found piled up on top of one another when they sleep.

## A new home

It is a constant house search for a hermit crab. At any given time, 30 per cent of them are living in shells that are simply too small for them. They are always on the lookout for a larger home, combing the beaches and shallows for suitable 'properties' to move into.



COMMON HERMIT CRAB  
*Pagurus bernhardus*

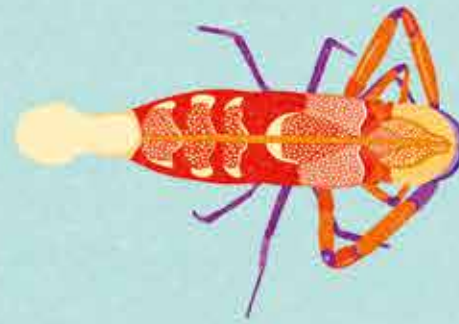
Sea anemones are useful bodyguards for hermit crabs, warding off predators with their stinging tentacles. Often the crabs attach anemones to their shells and carefully move them to any new shell that they adopt.

BLUEBERRY HERMIT CRAB  
*Coenobita purpureus*





HARLEQUIN SHRIMP  
*Hymenocera picta*

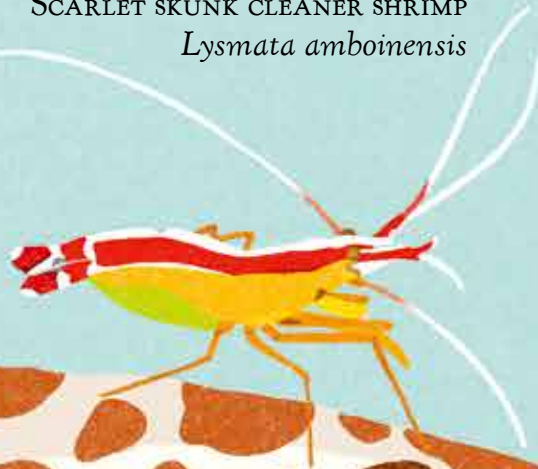


EMPEROR SHRIMP  
*Periclimenes imperator*



TIGER PISTOL SHRIMP  
*Alpheus bellulus*

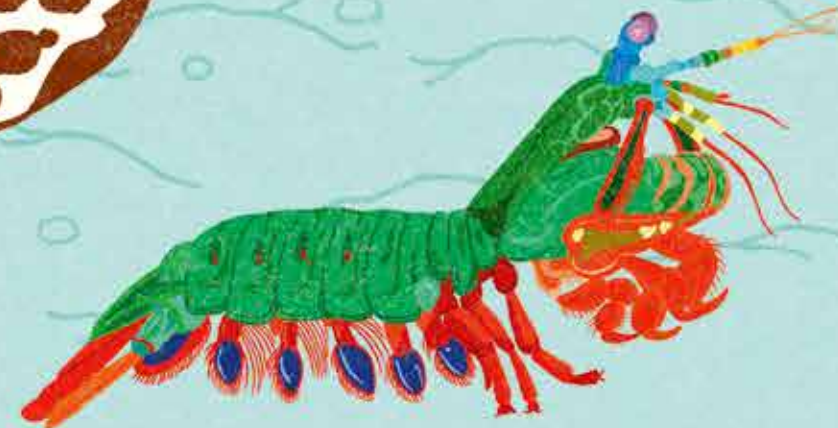
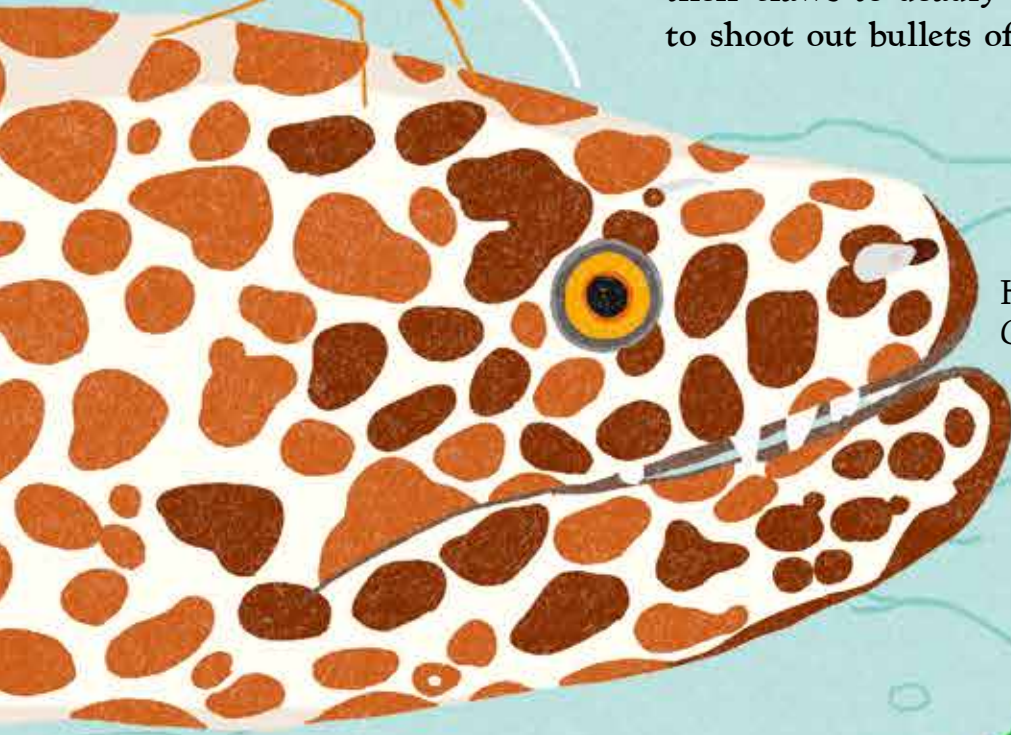
SCARLET SKUNK CLEANER SHRIMP  
*Lysmata amboinensis*



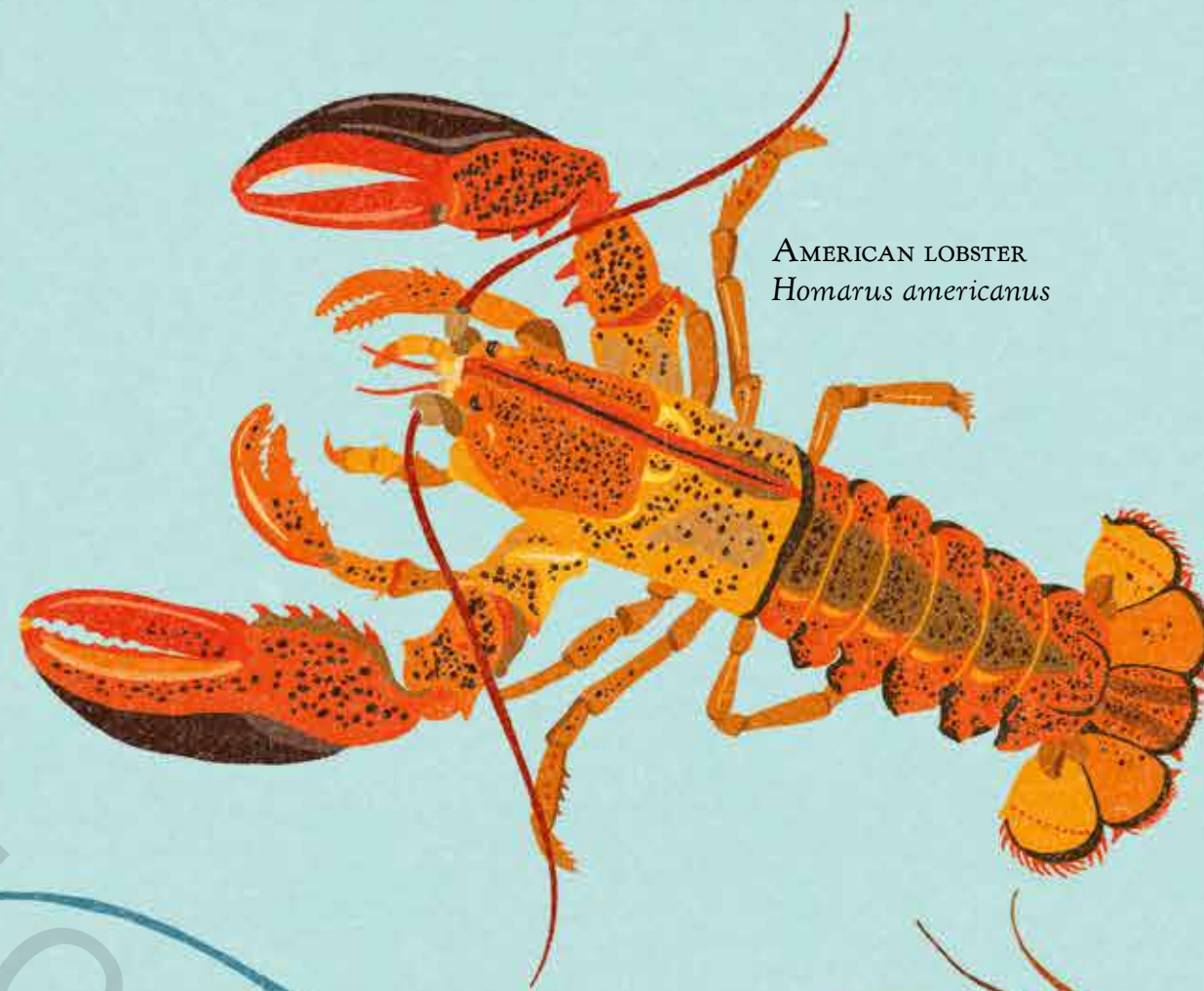
## Shrimps and lobsters

Feeling their way with alien-like antennae, shrimps swim while lobsters mainly crawl or walk. These colourful crustaceans are related to crabs but are longer and more streamlined. Many use their claws to deadly effect – in the case of the pistol shrimp, to shoot out bullets of bubbles that stun its prey.

HONEYCOMB MORAY EEL  
*Gymnothorax favigneus*



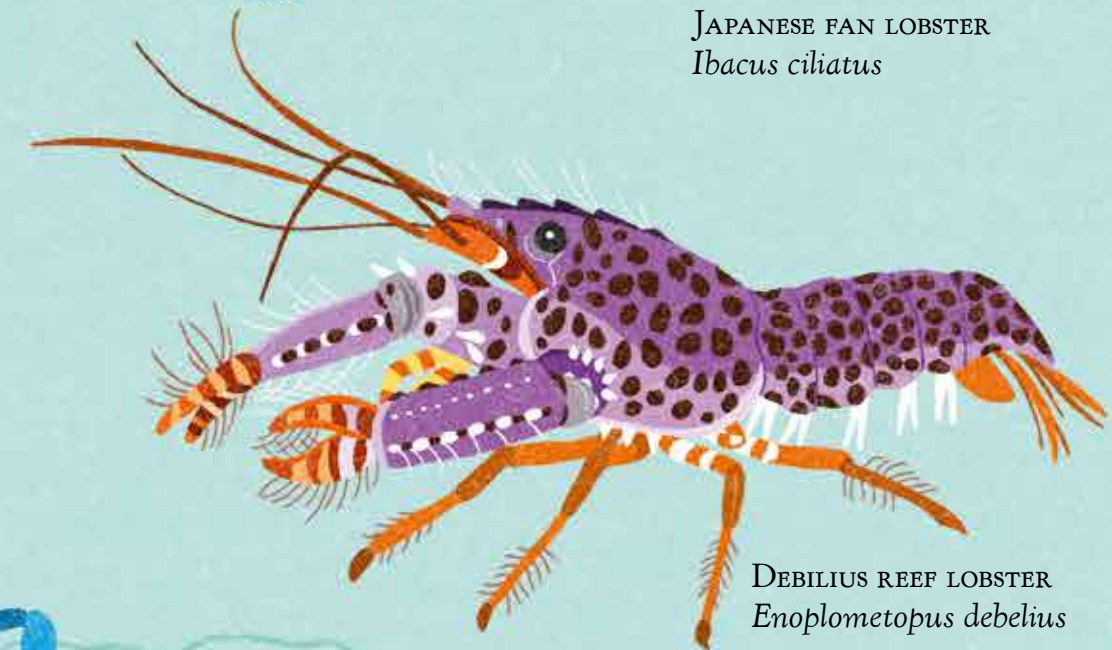
PEACOCK MANTIS SHRIMP  
*Odontodactylus scyllarus*



AMERICAN LOBSTER  
*Homarus americanus*



JAPANESE FAN LOBSTER  
*Ibacus ciliatus*



DEBILIUS REEF LOBSTER  
*Enoplometopus debilius*



COMMON EUROPEAN LOBSTER  
*Homarus gammarus*

Lobsters are loners, usually living in dark cracks or burrows on the sea floor. They are slow on their feet, but able to flee danger by curling and uncurling their abdomen to soar backwards in a reverse kind of butterfly stroke.

The honeycomb moray eel and the cleaner shrimp have a great relationship. The tiny shrimp feeds on the parasites that could harm the larger animal. The shrimp searches all over, even inside the eel's mouth.