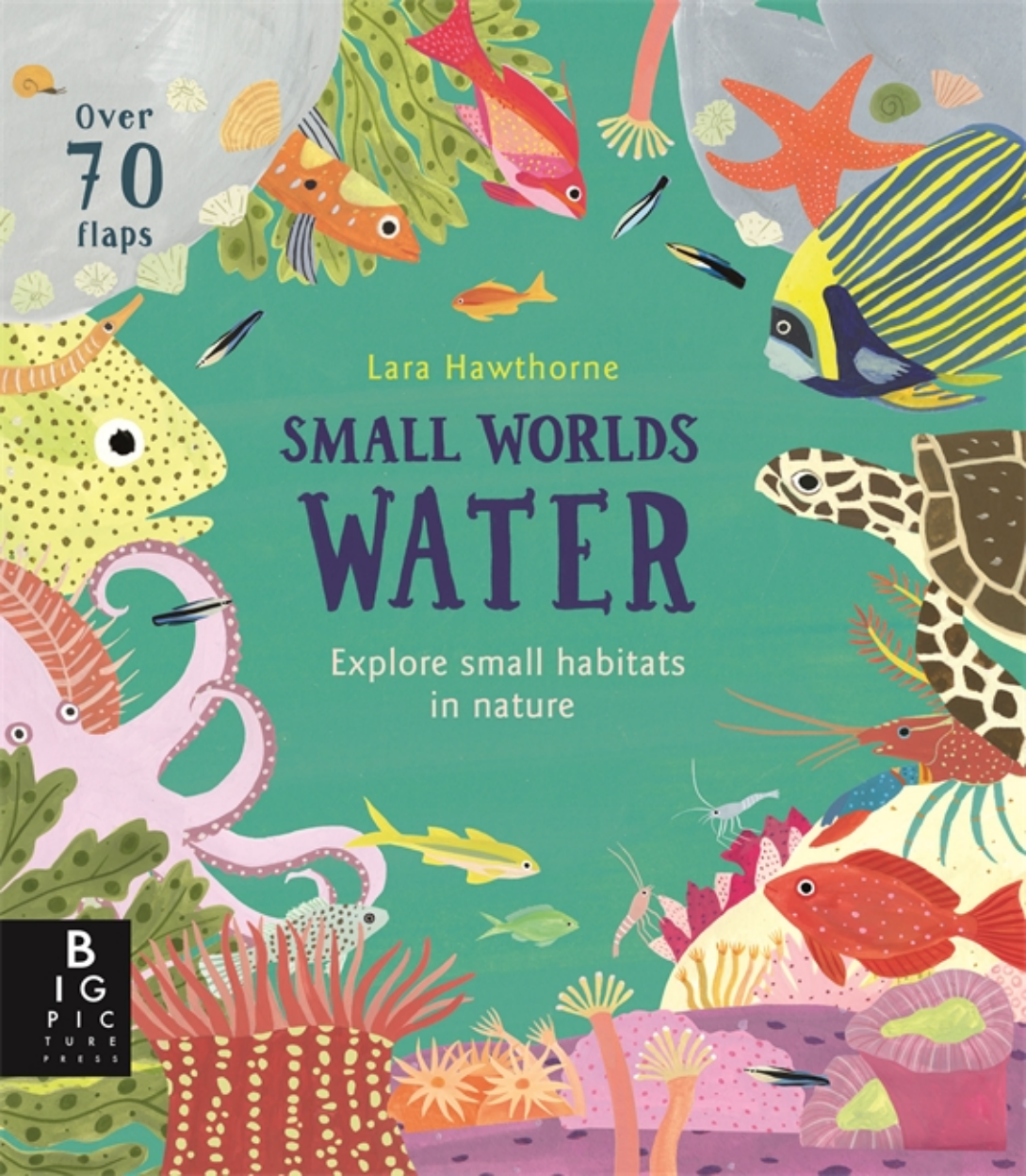

Over
70
flaps
Lara Hawthorne
SMALL WORLDS
WATER
Explore small habitats
in nature
BIG
PICTURE
PRESS

SMALL WORLDS

Have you ever peered into rock pools to watch creatures moving in the water? Have you explored the wild wetlands and their reedy ponds, or wondered what life might be like in a freshwater cave?

Nature is full of small worlds. In these magical environments plants and animals work together in wonderful ways in order to survive. And although these worlds may be small, they are complex habitats which are, quite literally, swimming with life. Look closely and you'll find crabs in a pool high above the tree tops, fishes in the tangled roots of a mangrove and ghostly creatures at the bottom of the ocean.

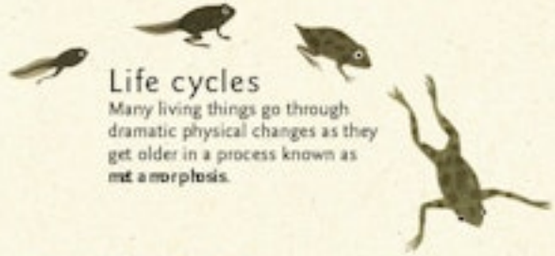
In this book you will find eight very different small and watery worlds, from desert waterholes to coral reefs and hydrothermal vents. Are you ready? Take a deep breath and dive in.

What will you discover?

Look out for:

Predators

These creatures prey on other animals for food.



Life cycles

Many living things go through dramatic physical changes as they get older in a process known as **metamorphosis**.

Decomposers

A plant, fungus or bug that breaks down organic material like dead plants and animals

Animal homes

Animals find many ways to shelter from predators and raise their babies.

Relationships

Sometimes different life forms behave in ways that help each other. These are called **symbiotic relationships**. Can you find any in the book?

ROCK POOL

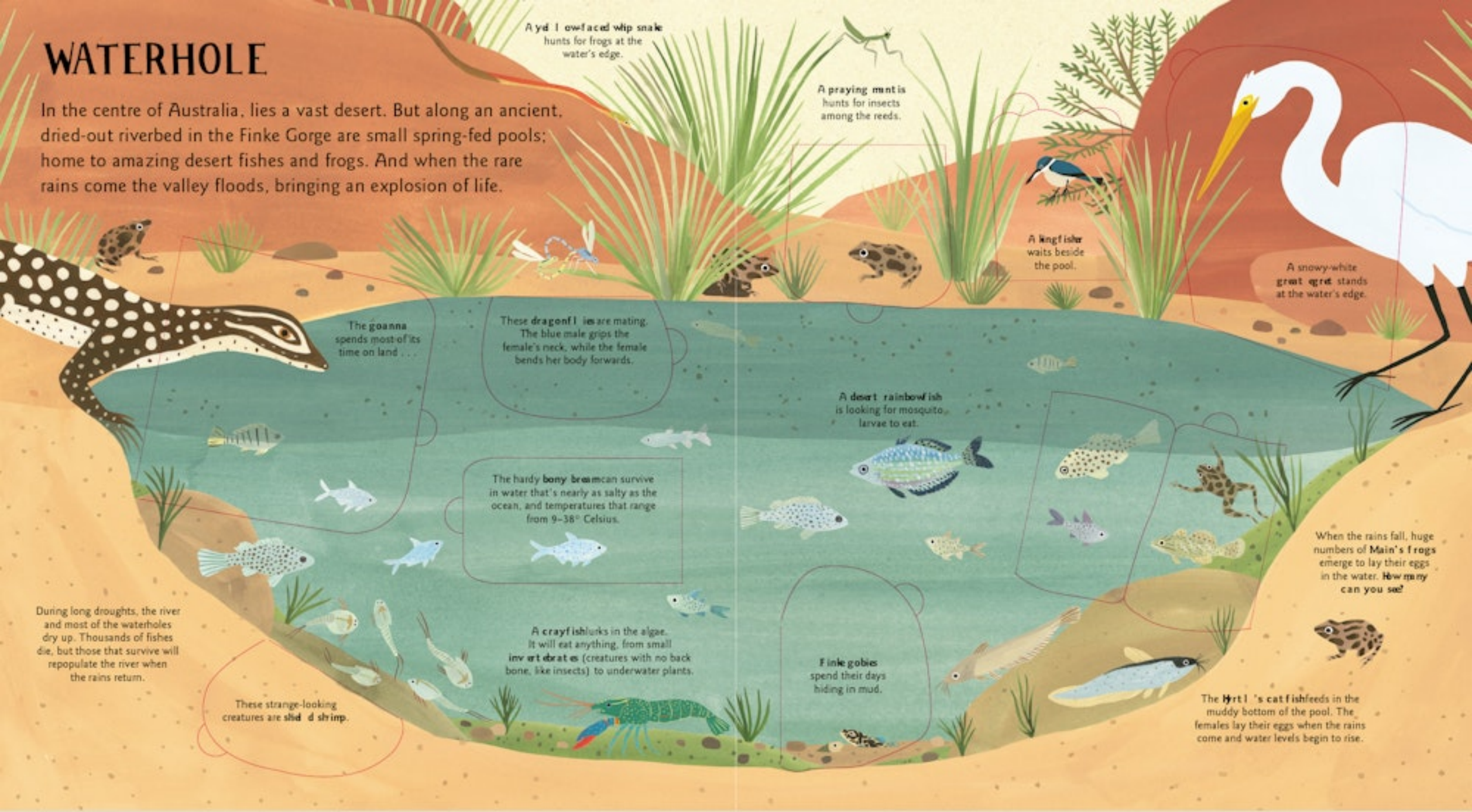
As the tide goes out, it leaves behind pools of sea water trapped in gaps between the rocks. Each rock pool has its own unique treasure trove of plants and animals.

MANGROVE TREE

Mangrove trees and shrubs are found along tropical coasts. The warm, salty water they live in would quickly kill most plants, but mangroves are tough survivors. They also create incredible habitats. In Florida, USA, the mangrove swamps are home to more than 1,300 animal species, including birds, fishes and amphibians.

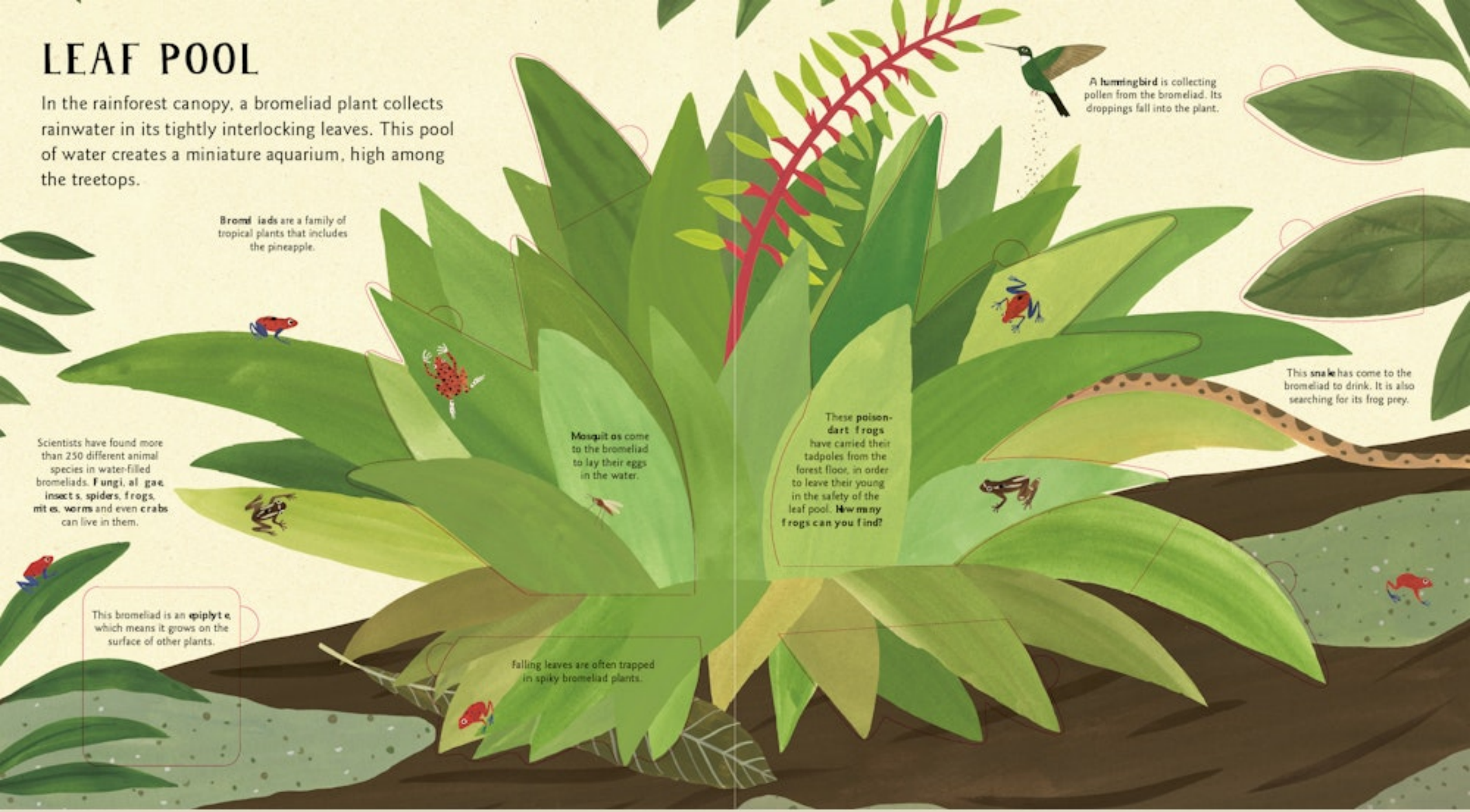
WATERHOLE

In the centre of Australia, lies a vast desert. But along an ancient, dried-out riverbed in the Finke Gorge are small spring-fed pools; home to amazing desert fishes and frogs. And when the rare rains come the valley floods, bringing an explosion of life.



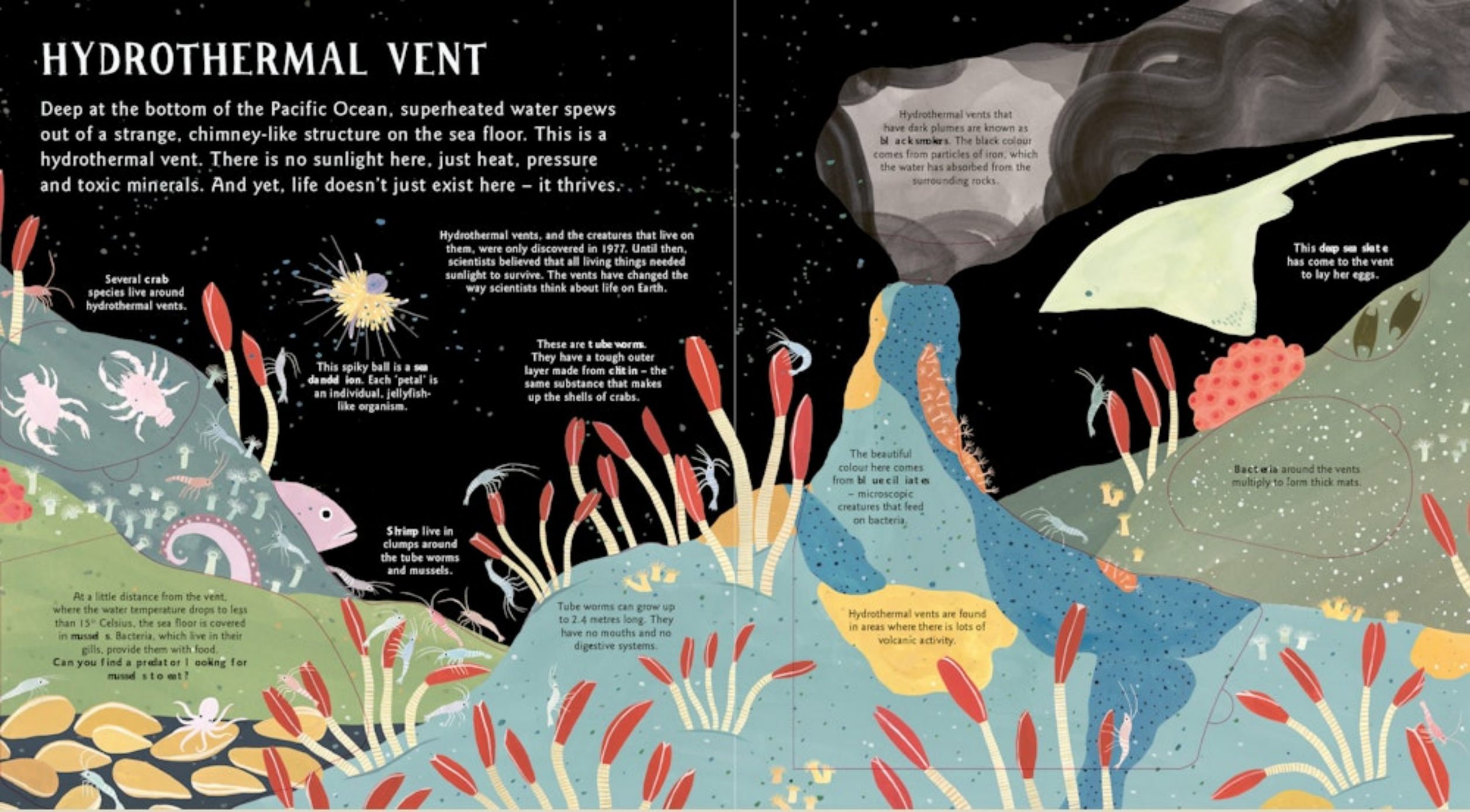
LEAF POOL

In the rainforest canopy, a bromeliad plant collects rainwater in its tightly interlocking leaves. This pool of water creates a miniature aquarium, high among the treetops.



HYDROTHERMAL VENT

Deep at the bottom of the Pacific Ocean, superheated water spews out of a strange, chimney-like structure on the sea floor. This is a hydrothermal vent. There is no sunlight here, just heat, pressure and toxic minerals. And yet, life doesn't just exist here – it thrives.



IRISH PEAT BOG

On the Irish moors are wetlands, known as bogs. They are made of a dark, damp soil called peat, formed over thousands of years. Dotted with rainwater pools, the bogs teem with life.

UNDERWATER CAVE

Along the coast of Mexico, on the Yucatán Peninsula, is a vast underwater cave system. It is fed by fresh water from falling rain and salt water that flows through underground caverns from the sea. Inside these caves you will find unique creatures, many of which are completely blind.

Less is known about underwater caves than the ocean floor. The caves along the Yucatán Peninsula were first explored in the 1980s, and many of them have yet to be studied by scientists. One thing we do know is that a chemical called **methane** is vital to life in these caves.

As water drips through cracks in the limestone, it leaves behind minerals. These build up slowly over time to form icicle-like **stalactites**.

These water-filled caves are known as **cenotes**.

The Mexican blind cavefish is a scavenger feeding on almost anything it can find.

Blind **swamp eels** swim through the darkness in the depths of the cave, searching for cave shrimps.

In some caves, divers have found fossils of extinct animals. This is the skull of an extinct type of **short-faced bear. Can you find another fossil in the cave wall?**

This **cave shrimp** is a highly aggressive hunter.

Yucatán tetras swim into the cave in search of blind crustaceans and other fish to prey on.

These small, eyeless creatures are **isopods**, a type of crustacean.

A remipede is a centipede-like crustacean. It is the only crustacean in the world known to have venom.

The **tulumella** is a tiny, blind, shrimp-like crustacean, which grows up to 3 millimetres long.

CORAL REEF CLEANING STATION

Each morning, at an eye-catching spot on a reef in the Red Sea, special cleaner fishes and shrimp gather at a place known as a cleaning station. Their customers come from all over the reef, and range from fishes and eels to turtles and rays.