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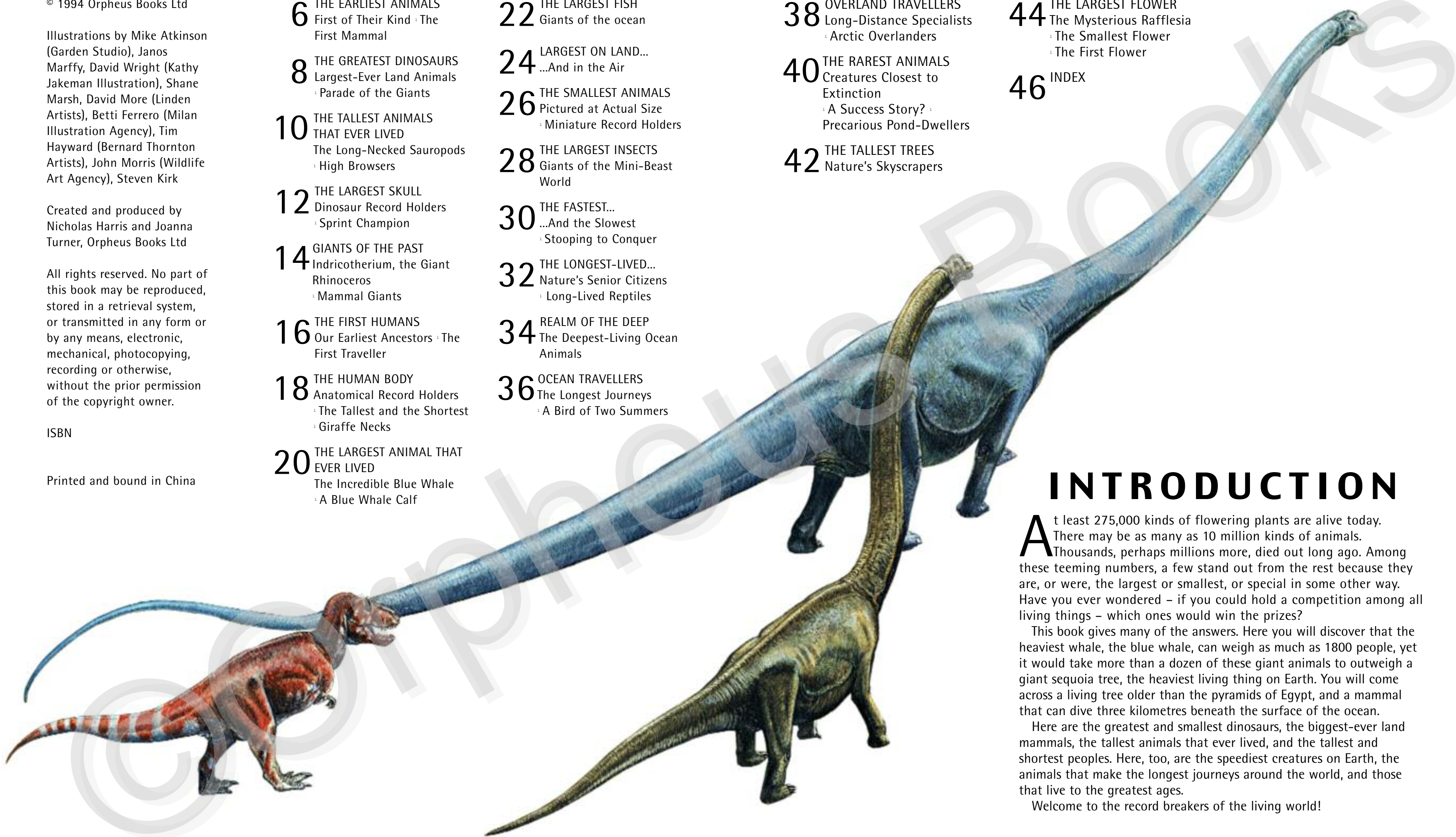
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## INTRODUCTION

At least 275,000 kinds of flowering plants are alive today. There may be as many as 10 million kinds of animals. Thousands, perhaps millions more, died out long ago. Among these teeming numbers, a few stand out from the rest because they are, or were, the largest or smallest, or special in some other way. Have you ever wondered – if you could hold a competition among all living things – which ones would win the prizes?

This book gives many of the answers. Here you will discover that the heaviest whale, the blue whale, can weigh as much as 1800 people, yet it would take more than a dozen of these giant animals to outweigh a giant sequoia tree, the heaviest living thing on Earth. You will come across a living tree older than the pyramids of Egypt, and a mammal that can dive three kilometres beneath the surface of the ocean.

Here are the greatest and smallest dinosaurs, the biggest-ever land mammals, the tallest animals that ever lived, and the tallest and shortest peoples. Here, too, are the speediest creatures on Earth, the animals that make the longest journeys around the world, and those that live to the greatest ages.

Welcome to the record breakers of the living world!



The longest stick insect (*right*) is as thick as a human finger and longer than a man's foot.

The largest living dragonfly (*below*) measures 19 cm across its wings. The largest-ever dragonfly had a wingspan more than three times that size.

The largest flea, the beaver flea is tiny, but even smaller fleas jump 33 cm, equivalent to humans leaping 210 m.

The world's heaviest insects are the goliath beetles from West Africa (*right*). One big male goliath beetle is as heavy as 50 pygmy shrews, the lightest land mammals (*see page 69*). Elephant beetles from Central America are bigger than goliaths but weigh less.

The insects are pictured at actual size

There are more different kinds of insect than any other animal. Insects come in a huge variety of sizes: some are bigger than some small mammals (*see page 69*) while some are so tiny it is impossible to see them without a magnifying glass. The biggest butterfly is 1000 times larger than the smallest fairy fly.

Most insects are small, partly because of the way they breathe. Unlike humans, they do not have lungs to force air in and out. Instead, air drifts in and out of their bodies through little tubes in their sides. This simple breathing system would not let enough fresh air reach deep inside the body of too large an animal.

Some insects must be light enough to fly. An insect lives inside a hard outer skeleton, like a suit of armour. As the insect grows, this armour must split open and fall off to allow a bigger suit to grow in its place. If beetles or butterflies grew as large and plump as pigeons their armour would have to be so heavy that they could not fly. Some prehistoric insects were much bigger (although no heavier) than the largest insects now alive. One prehistoric dragonfly even had the wingspan of a crow!

The male Queen Alexandra's birdwing (*below*) is smaller than the female. His bright colours warn hungry birds that he is poisonous to eat.

The world's largest butterfly, the Queen Alexandra's birdwing, is also probably the rarest. Females (*above*) can grow to 28 cm across the wings. They fly so high they are difficult to net. The first specimen collected was shot down instead!

The largest cockroach (*left*) has a body nearly 10 cm long. Its antennae (feelers) are even longer.