



- 25a The Lion Lights
- 25b Chilly Dog!
- 25c Heroes of the Wilderness
- 25d The Great Christmas
Island Red Crab Migration
- 25e Birds and Pterosaurs



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Birds and Pterosaurs



Written by Greg Pyers

Word Count	750
Text Type	Information Report
High-Frequency Word Focus	even
Content Words	bones, feathers, fossils, hatchlings, membrane, meteorite, reptiles, species, teeth, vertebrates, wings, wingspan
Language Features and Text Structure (specific text features, sentences, punctuation, vocabulary, sound and letter knowledge)	paragraphs; topic words; subject of a sentence; root words; suffixes

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Front cover photographs: a pterosaur soaring over snow covered mountain peaks (right), shutterstock.com/Aaron Rutten; a red kite in flight above the hills of Dumfriesshire, Scotland (left), shutterstock.com/Targn Pleiades; background, courtesy of CGtextures.

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GETTING STARTED

Activating prior knowledge: Ask students what they know about prehistoric reptiles that could fly. Have them compare and contrast these reptiles with birds.

Book introduction and prediction: Using the interactive digital book or the printed version, read the title to students. Discuss the flying creatures on the cover. Ask students to flick through the book or the screens, looking at the photographs, pictures, diagrams, and layout. Have them use the graphics and structure to suggest the text type and to predict what the book may be about. Read the entries on the contents page to confirm their predictions. Identify and discuss any words or features that may cause concern.

Outlining focuses: Explain to students that as well as reading about pterosaurs, they will talk about the structural and language features of an informative text, paragraphs, topic words, subject of a sentence, root words, and suffixes.

DURING THE READING SESSION

■ Literacy

Modelling: Depending on what is appropriate to the group, you can remind students of, and model, specific reading strategies, such as how to approach unfamiliar words and identify signal words.

Guiding: Ask students to read their books independently. As you move about the group, use your knowledge of each student's ability to help you decide when to intervene or assist. For example, if a student cannot read a word, or can read it but appears not to understand it, give prompts or clues to assist. Suggest strategies, such as using picture cues and knowledge of letter/sound patterns.

Interacting, interpreting, analysing and evaluating: At appropriate intervals, and/or at the conclusion of reading, ensure that students make meaning from the text by asking questions and encouraging discussions. What have people learned from pterosaur and bird

fossils? How does an albatross compare to the biggest pterosaur? How do reptiles today differ from pterosaurs? Why are there no pterosaurs on Earth today? Have students discuss whether this is an imaginative, informative, or persuasive text and the audience to which they think the author was directing the book.

■ Literature

Responding and examining: Ask students if they prefer to read this type of text about dinosaurs or fictional texts about dinosaurs. Encourage them to give reasons for their preferences.

■ Language

If you are using the digital book, invite students to take turns to operate it for the following activities.

Text structure and organisation: Ask students why the contents, glossary, and index pages are important features of informative texts. Use page 2 to discuss how longer texts are organized into paragraphs, each beginning with a topic sentence that is elaborated by ensuing details. Use pages 4 and 5 and then pages 6 and 7 to reinforce this.

Expressing and developing ideas: Use the text on page 10 to revise the use of verbs in locating the subject of a sentence. Draw attention to the words *bigger*, *biggest*, *smaller*, and *smallest* on pages 6 and 7. Have students identify the root word and explain the effect of the suffixes *er* and *est*. Repeat with the words *hatched* and *hatchlings* on page 18. Have students identify the root word and explain the effect of the suffixes *ed* and *ings*. Focusing on the glossary, have students give their own definitions of the topic words *extinct*, *fossils*, *species*, and *wingspan*.

PUTTING THE LEARNING INTO PRACTICE

Small group/independent activities: Have students reread the text independently, then proceed to the activities listed in the Teacher Guide.



Birds and Pterosaurs

For teachers'
inspection ONLY

Contents

Introduction	2
Fossils	4
Size	6
Body Covering	10
Wings	12
On the Ground	14
Flight	16
Reproduction	18
Food	20
Extinction	22
Glossary	23
Index	24

Written by Greg Pyers

Introduction

There were no birds in the sky 200 million years ago. Instead, there were flying reptiles. They are called pterosaurs. The word *pterosaur* means *winged lizard*.

Today, there are more than 9,000 kinds of related animals with similar features, or **species**, of birds. However, there are no pterosaurs. Pterosaurs died out, or became **extinct**, millions of years ago. This book compares these two kinds of flying animals.

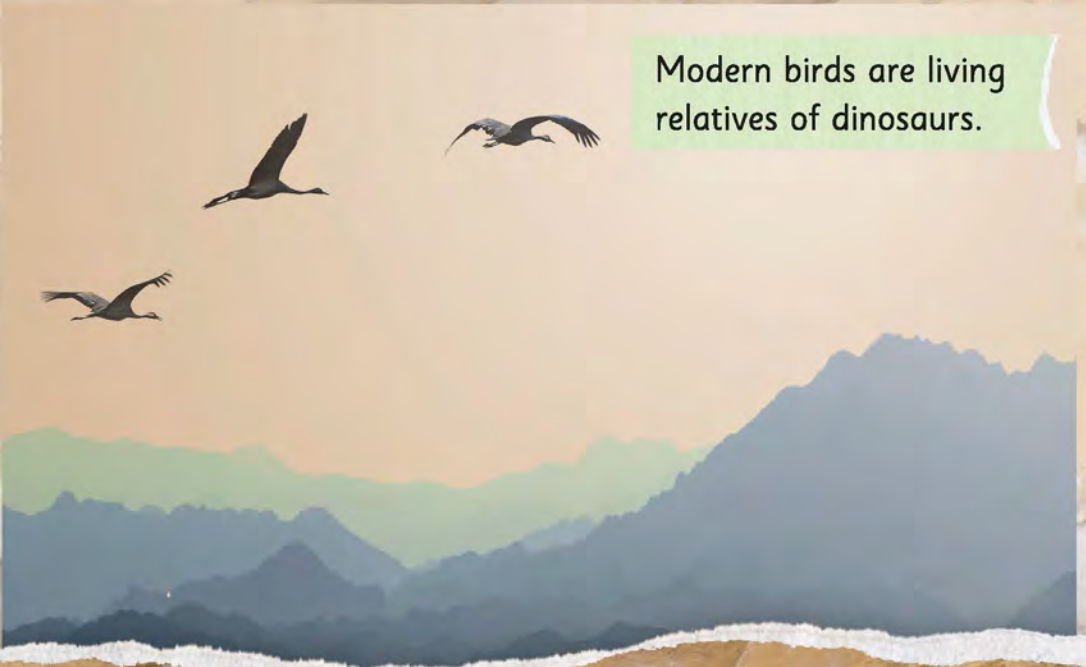
The birds of today and the extinct pterosaurs of the past are similar in some ways. In many ways, they are different.

For teachers' inspection ONLY



Pterosaurs were cousins of dinosaurs.

Modern birds are living relatives of dinosaurs.



Fossils

For teachers' inspection ONLY

We can identify pterosaurs from animal remains that have changed into rock over a very long time, or **fossils**. The fossils are trapped in sand or mud that buried the remains and turned into rock. The oldest pterosaur fossils are about 220 million years old.



This pterosaur fossil is about 220 million years old.

There are fossils of birds, too. The oldest bird fossil is about 150 million years old. Fossils tell us that in the past, there were even more pterosaur species than bird species.



This bird fossil is about 150 million years old.

Size

For teachers' inspection ONLY

Today, the wandering albatross is one of the biggest flying birds on Earth. The length from one of its wingtips to the other, or **wingspan**, is about 3.5 m. The biggest pterosaur was even bigger. It is called *Quetzalcoatlus*. Its wingspan was about 10 m. It was the biggest flying animal that ever lived.

Two scientists measure an albatross's wingspan.



The smallest pterosaur had a wingspan of about 25 cm. It was about the size of a sparrow. Today, the smallest bird is even smaller. The bee hummingbird's wingspan is about 3.25 cm. It is a little bigger than a big bumblebee.



A scale model of a Quetzalcoatlus skeleton