

Name: \_\_\_\_\_

# Feathered, But Not Ready for Takeoff

by Guy Belleranti

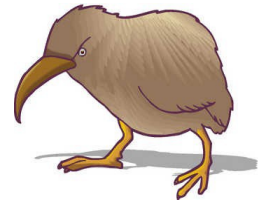
When you hear the word bird I bet one of the first things you think of is flying. But did you know there are almost 40 different birds that can't fly?

Most scientists believe flightless birds had ancestors that did fly. However, over time they developed alternatives to flying. Penguins, with wings more like flippers, are fast swimmers. And long-legged ostriches, are fast runners.

Some birds may have become flightless because they live on islands or other places where they have few predators. New Zealand, for example, has more flightless birds than any other country. Six are different kinds of penguins. New Zealand also is home to the small kiwi, two kinds of non-flying ducks and the heaviest parrot in the world, the endangered kakapo.

Near New Zealand is Australia, a country that has two other famous flightless birds. These are the large and fast running emus and cassowaries.

What is the largest living flightless bird? If you said ostrich, you're right. In fact, the ostrich is the largest living bird, flightless or not. Some even weigh over 300 pounds. But ostriches live in Africa, where lions, leopards, cheetahs and hyenas live, so how do they survive? Well, ostriches can run over 40 miles an hour, faster than any other bird and most other animals, as well. They also have long, sharp claws on feet that kick with tremendous strength.



A kiwi is flightless a bird from New Zealand. It is about the size of a chicken and has hair-like feathers covering its body.



They can't fly, but penguins are perhaps the best swimmers of the bird family. They use their wings as flippers to steer themselves underwater.



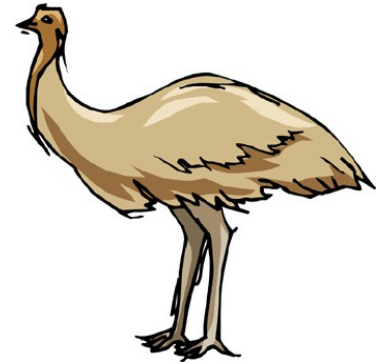
If you were to enter a foot race against an ostrich, you wouldn't win. An ostrich can sprint over 43 miles per hour!

Ostriches are ratites. Ratites are birds with a reduced keel or no keel at all on their breastbone. The keel part of the breastbone is what anchors the muscles needed for wing movement. No keel means no flying. Other large ratites include emus, cassowaries and the rheas of South America. All of them have sharp claws and run at fast speeds. And like many other flightless birds they have solid bones, instead of the lightweight hollow bones of flying birds.

Perhaps one of the more unusual-looking flightless birds was the Dodo bird. The dodo lived on the island of Mauritius, off the coast of Africa. It was discovered in the year 1602. Early settlers found that the Dodo was not afraid of humans, which made it easy to hunt. It wasn't long before all the dodos on the island had been killed by hunters. Unfortunately, by the year 1680 this bird was gone from the world forever.

The largest and heaviest bird of all time is also extinct. The flightless elephant bird of Madagascar. It stood nearly 10 feet tall and weighed as much as three large ostriches. This bird has been extinct since the year 1700.

Even though they cannot fly, all flightless birds do have feathers. In fact, some have feathers all over their body. While other birds soar through the air, flightless birds thrive by walking, running, and even swimming.



They don't grow quite as large as an ostrich, but the emu is the second largest bird species in the world.



The extinct dodo bird could not fly. It searched for seeds and fruits on the forest floor.

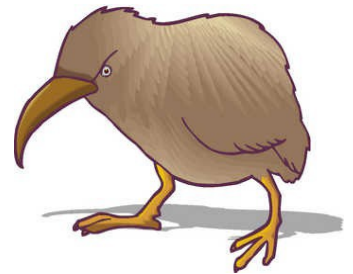
## About the Author

Guy Belleranti works as a docent at Reid Park Zoo in Tucson, Arizona.

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1. Where do emus and cassowaries live?

- a. New Zealand
- b. Africa
- b. Austria
- d. Australia

2. How are an emu's bones different from a seagull's bones?

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3. According to the article, what are two ways an ostrich can protect itself?

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4. About how much would a full-grown elephant bird weigh?

- a. 100 pounds
- b. 900 pounds
- b. 300 pounds
- d. 1,200 pounds

5. How do penguins use their wings?

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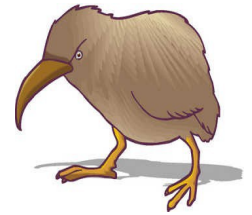
6. About how long ago did the dodo bird become extinct?

- a. 90 years ago
- b. 230 years ago
- b. 130 years ago
- d. 330 years ago

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# Feathered, But Not Ready for Takeoff

## Vocabulary Activity



Fill in the missing letters to create a word from the article.  
Then, write the full word on the line. Be sure you spell each word correctly.

1.    \_\_\_ \_\_\_ n \_\_\_ u \_\_\_ \_\_\_

**clue:** Antarctic bird

1. \_\_\_\_\_

2.    \_\_\_ \_\_\_ d \_\_\_ \_\_\_ \_\_\_ \_\_\_ e d

**clue:** in danger of becoming extinct

2. \_\_\_\_\_

3.    \_\_\_ \_\_\_ \_\_\_ p \_\_\_ \_\_\_ \_\_\_ s

**clue:** paddle-like limbs for swimming

3. \_\_\_\_\_

4.    \_\_\_ l \_\_\_ g \_\_\_ \_\_\_ l \_\_\_ \_\_\_ \_\_\_

**clue:** not able to fly

4. \_\_\_\_\_

5.    \_\_\_ \_\_\_ s \_\_\_ \_\_\_ \_\_\_ \_\_\_ e d

**clue:** found for the first time

5. \_\_\_\_\_

6.    \_\_\_ \_\_\_ c h \_\_\_ r s

**clue:** holds down; secures

6. \_\_\_\_\_

7.    \_\_\_ o \_\_\_ \_\_\_ o \_\_\_

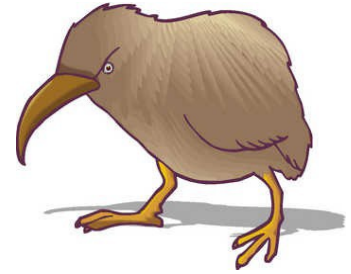
**clue:** unfilled, not solid inside

7. \_\_\_\_\_

## ANSWER KEY

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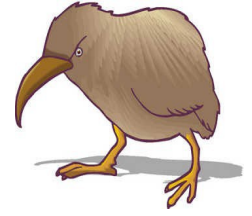


- Where do emus and cassowaries live? **d**
  - New Zealand
  - Africa
  - Austria
  - Australia**
- How are an emu's bones different from a seagull's bones?  
**A seagull's bones are hollow, but an emu's are not.**
- According to the article, what are two ways an ostrich can protect itself?  
**It can run fast and kick with tremendous strength.**
- About how much would a full-grown elephant bird weigh?
  - 100 pounds
  - 900 pounds**
  - 300 pounds
  - 1,200 pounds
- How do penguins use their wings?  
**They use their wings as flippers to steer themselves underwater.**
- About how long ago did the dodo bird become extinct?
  - 90 years ago
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## ANSWER KEY

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### Vocabulary Activity



Fill in the missing letters to create a word from the article.  
Then, write the full word on the line. Be sure you spell each word correctly.

1. penguins

clue: Antarctic bird

1. penguins

2. endangered

clue: in danger of becoming extinct

2. endangered

3. flippers

clue: paddle-like limbs for swimming

3. flippers

4. flightless

clue: not able to fly

4. flightless

5. discovered

clue: found for the first time

5. discovered

6. anchors

clue: holds down; secures

6. anchors

7. hollow

clue: unfilled, not solid inside

7. hollow