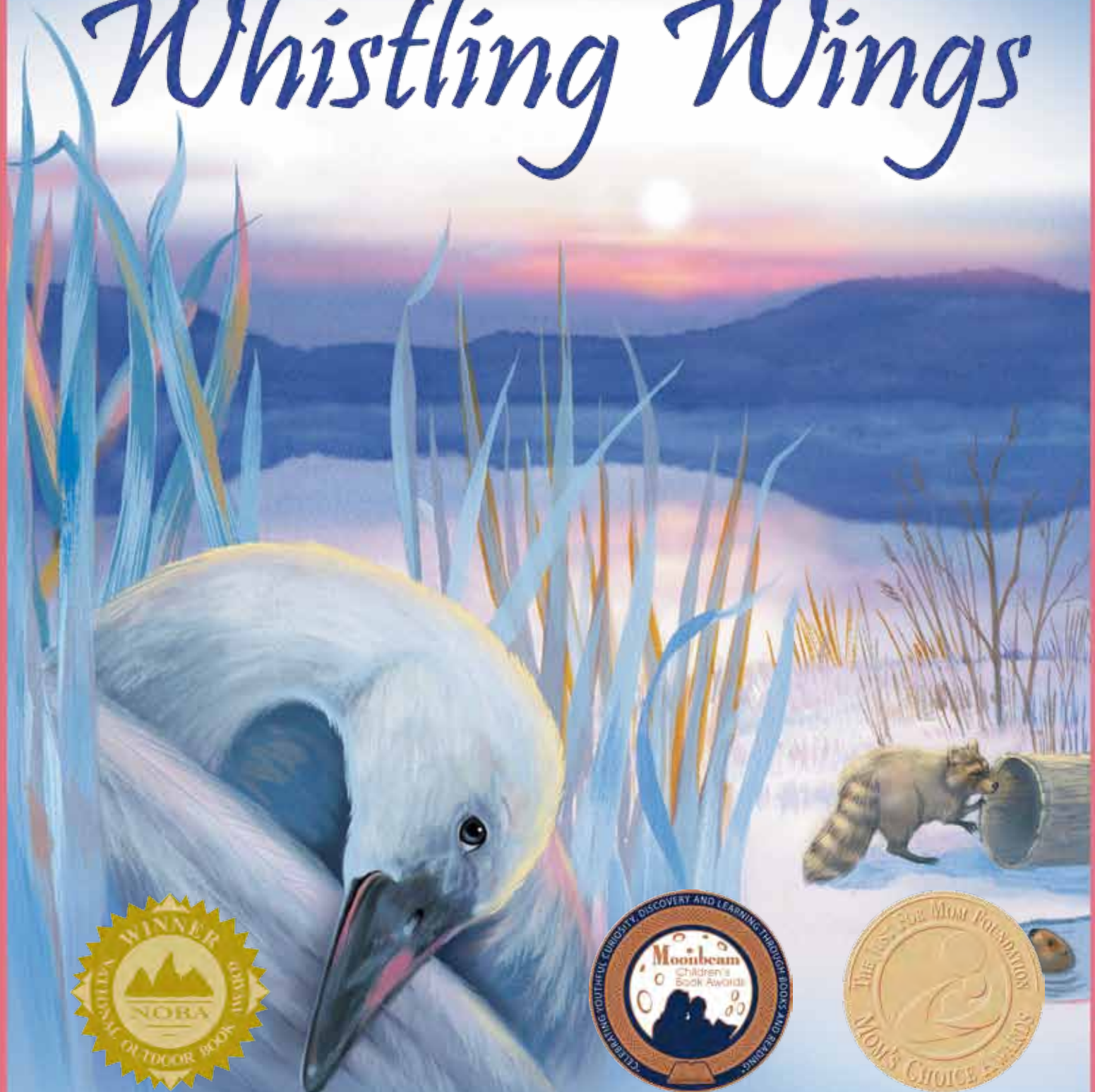


Whistling Wings



By Laura Goering

Illustrated by Laura Jacques

Whistling Wings

Marcel, a young tundra swan, is tired from the first half of a winter migration. One thousand miles is a long way to fly—too long for Marcel, so he hides in the rushes to stay behind while his parents and the flock continue south. But with the lake nearly frozen over, he soon realizes that he is not cut out for life on ice. Other animals offer advice about how to survive the winter, but their ways of living aren't right for the swan. Hungry and scared, he falls asleep—only to be awakened by a big surprise!

It's so much more than a picture book . . . this book is specifically designed to be both a fun-to-read story and a launch pad for discussions and learning. Whether read at home or in a classroom, we encourage adults to do the activities with the young children in their lives. Free online resources and support at www.ArbordalePublishing.com include:

- For Creative Minds as seen in the book (in English & Spanish):
 - Tundra Swan Fun Facts
 - Tundra Swan Life Cycle Sequencing Activity
 - Migration Fun Facts
 - Animal Adaptation Matching Activity
- Teaching Activities:
 - Reading Questions
 - Language Arts
 - Science
 - Mathematics
 - Geography
 - Coloring Pages
- Interactive Quizzes: Reading Comprehension, For Creative Minds, and Math Word Problems
- English and Spanish Audiobooks
- Related Websites
- Aligned to State Standards (searchable database)
- Accelerated Reader and Reading Counts! Quizzes
- Lexile and Fountas & Pinnell Reading Levels

eBooks with Auto-Flip, Auto-Read, and selectable English and Spanish text and audio available for purchase online.

Thanks to Roland J. Limpert of Maryland's Department of Natural Resources and co-author of *Tundra Swan* (*Cygnus columbianus*), *The Birds of North America* for verifying the accuracy of the information in this book.

Laura Goering (pronounced Gehring) is a professor of Russian language and literature (including Russian Literature for Children) at Carleton College. Every fall, people travel from all over the Upper Midwest to Alma, Wisconsin, to view the thousands of whistling swans (also called tundra swans), who stop there on the way from their breeding grounds in northern Canada and Alaska to their wintering grounds in the Chesapeake Bay area. It was this spectacle that inspired Laura to write *Whistling Wings*. While Laura has poems published in anthologies and several magazine articles to her credit, this is her first picture book. Laura lives with her husband and their daughter in Minnesota.

Laura Jacques (pronounced Jakes) has more than 25 years of professional experience as an illustrator in the fields of advertising and publishing. Laura draws and paints traditionally using pencil, inks, acrylic and oils. She sometimes puts some digital finishing touches on her art. She enjoys illustrating children's books that focus on natural history, wildlife and the environment such as: *Baby Owl's Rescue* for Arbordale as well as *At Home in the Rain Forest*, *Going to a Horse Farm*, *Sweet Magnolia*, and *The Field Trip*. Her books have won several honors and awards, including "NSTA-CBC Outstanding Science Trade Books for Children" sponsored by the Children's Book Council and the "KIND Children's Book Award" sponsored by the Association for Humane and Environmental Education, a division of the Humane Society of the United States. She is a member of SCBWI, (Society of Children's Book Writers and Illustrators), PBAA, (Picture Book Artists Association) and WMIG (Western Massachusetts Illustrators Guild). Laura lives in Connecticut with her husband.



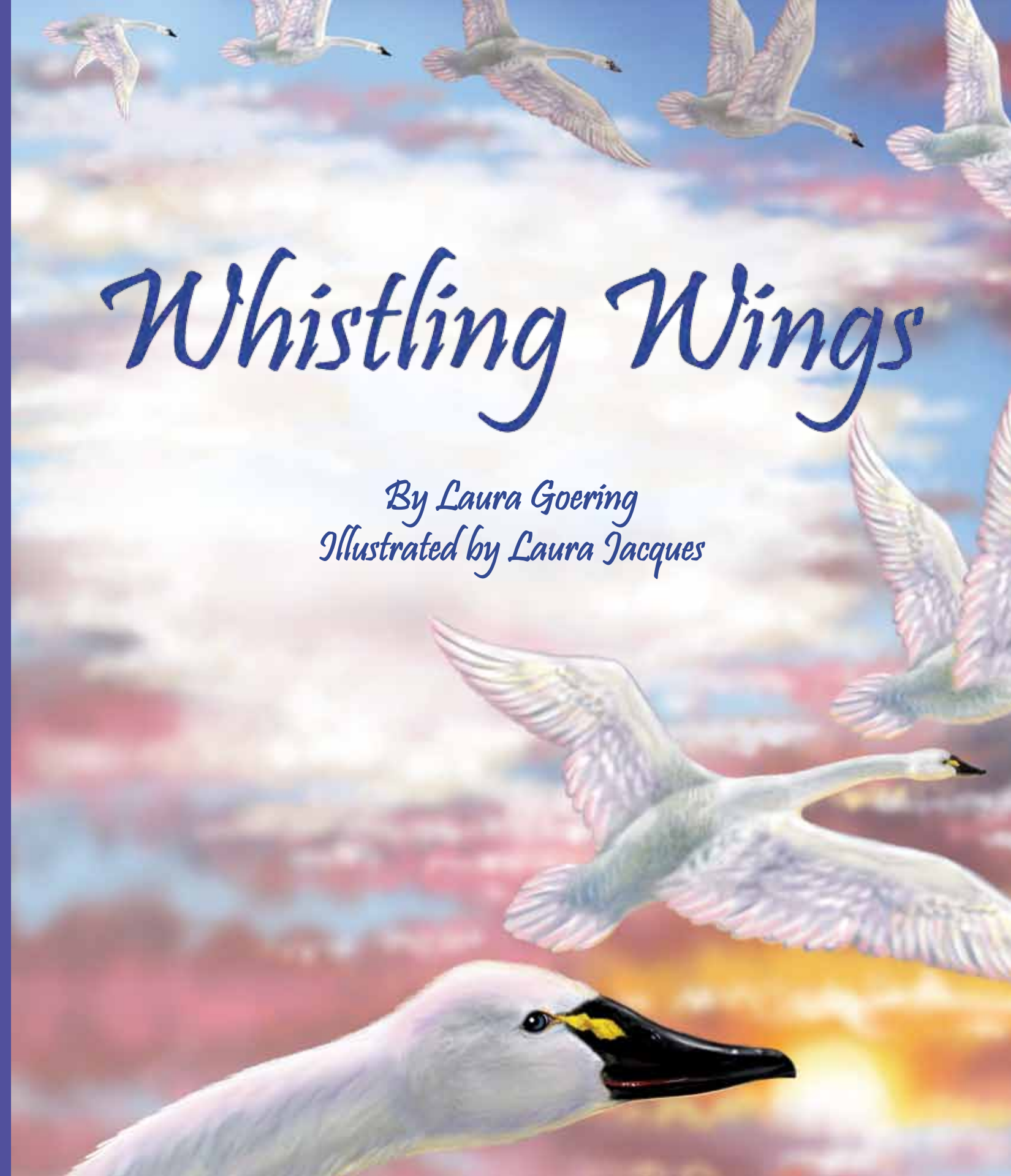
Laura Goering



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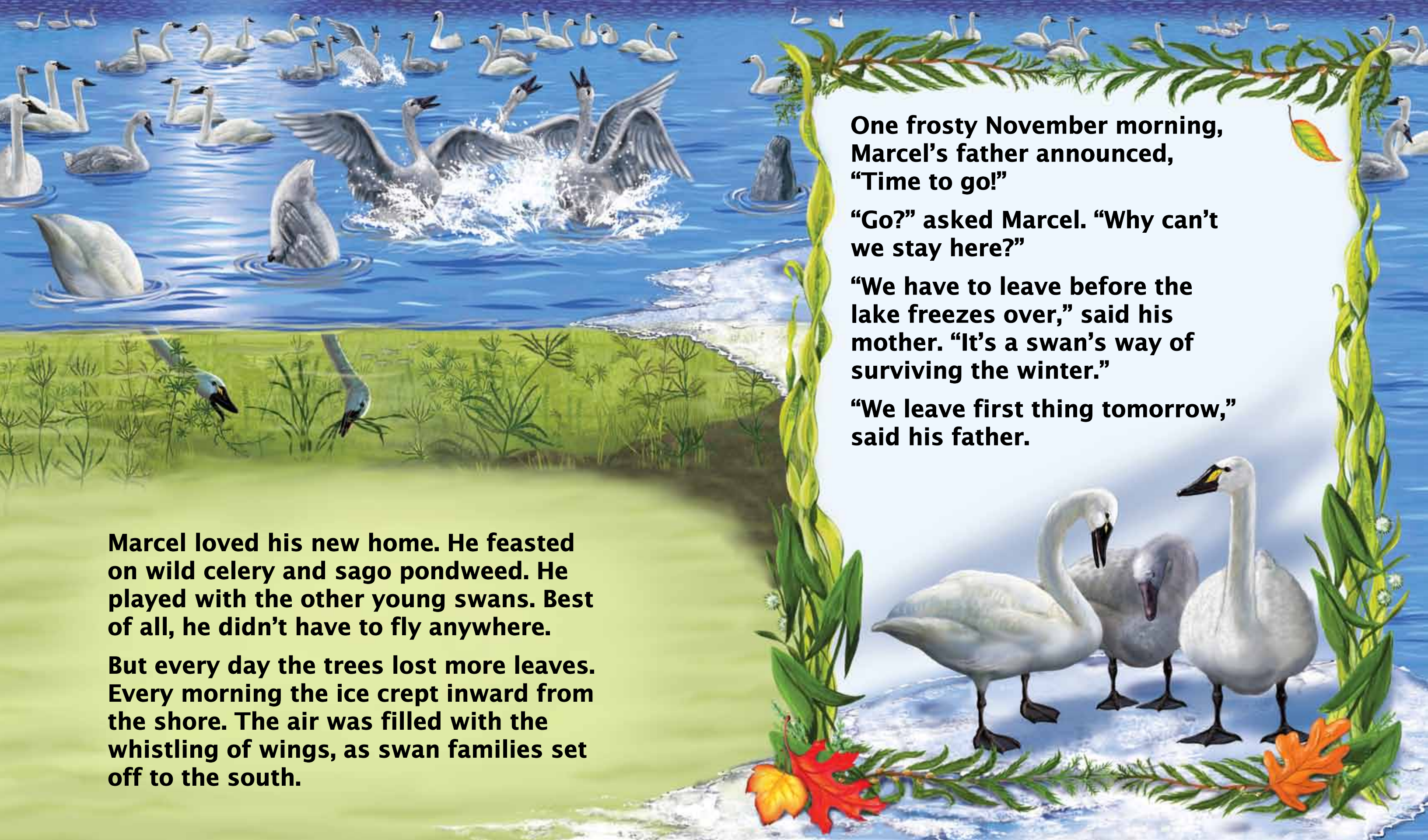


“I see it!” cried Marcel. Down below he could just make out the long necks and black beaks of the swans who had already arrived.

“Get ready!” called his father. The “V” of the flock separated into smaller groups. Marcel followed his parents toward an open patch of water. They skidded forward, then plopped backwards onto the lake. Marcel plunged his beak into the water and drank.

“Time to rest,” said his mother. But Marcel was already sound asleep.





One frosty November morning, Marcel's father announced, "Time to go!"

"Go?" asked Marcel. "Why can't we stay here?"

"We have to leave before the lake freezes over," said his mother. "It's a swan's way of surviving the winter."

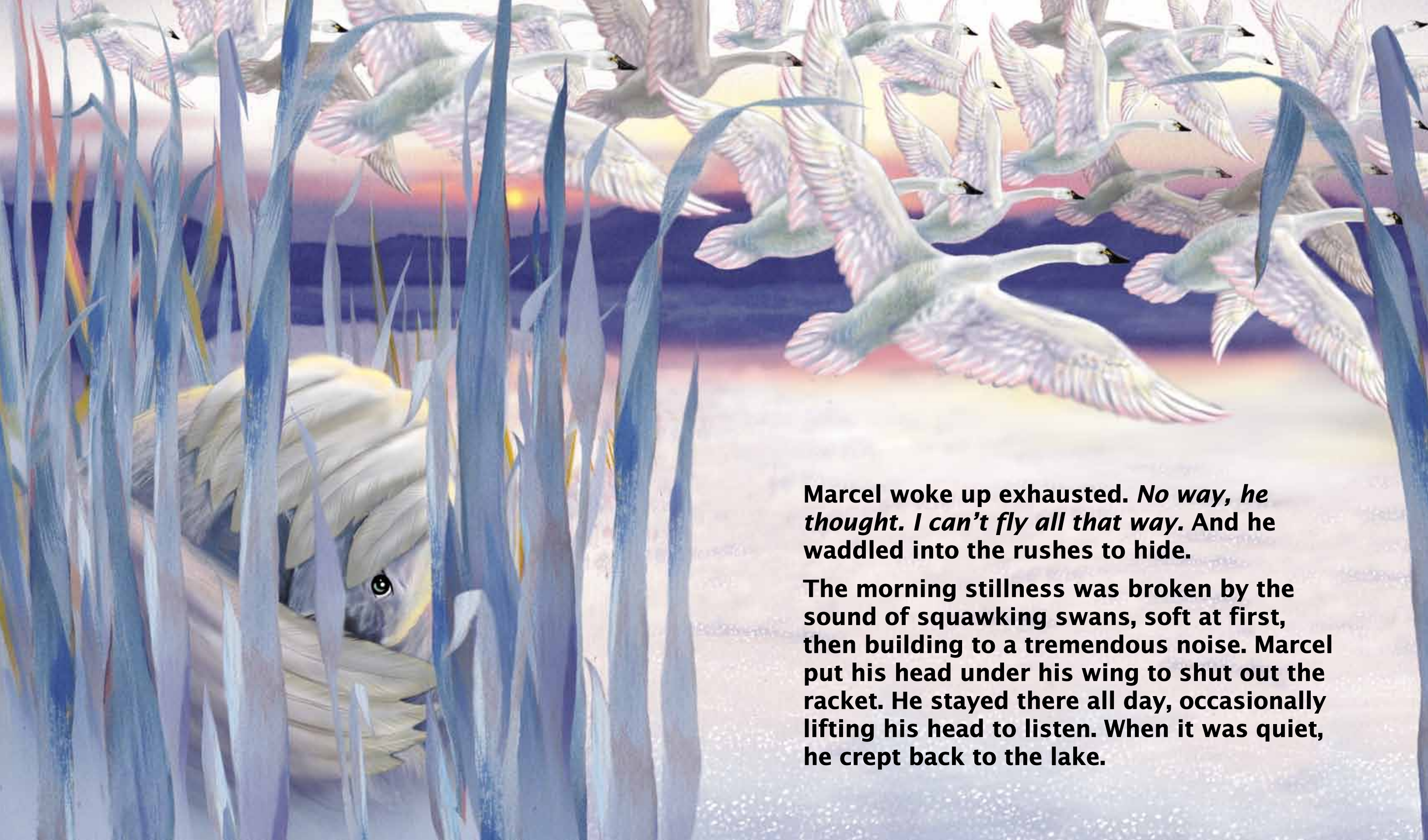
"We leave first thing tomorrow," said his father.

Marcel loved his new home. He feasted on wild celery and sago pondweed. He played with the other young swans. Best of all, he didn't have to fly anywhere.

But every day the trees lost more leaves. Every morning the ice crept inward from the shore. The air was filled with the whistling of wings, as swan families set off to the south.

That night Marcel dreamed of flying. He flapped his wings, but made no headway. “Are we almost there?” he asked his father in the dream. But the answer was always the same: “A thousand miles to go. Keep flapping!”





Marcel woke up exhausted. *No way, he thought. I can't fly all that way.* And he waddled into the rushes to hide.

The morning stillness was broken by the sound of squawking swans, soft at first, then building to a tremendous noise. Marcel put his head under his wing to shut out the racket. He stayed there all day, occasionally lifting his head to listen. When it was quiet, he crept back to the lake.

The "For Creative Minds" educational section may be photocopied or printed from our website by the owner of this book for educational, non-commercial uses. Additional "Learning Links," cross-curricular "Teaching Activities," and interactive quizzes are available online. Go to www.ArbordalePublishing.com and click on the book's cover to find all the supplemental materials.

Tundra Swan Fun Facts

Tundra swans are birds. Birds are the only animals that have feathers. Like mammals, they breathe air and are warm-blooded. Birds hatch from eggs.

They are also called Whistling Swans because their wings "whistle" as they fly. They have a high-pitched call that can be heard at great distances.

Adult tundra swans are between 3 and 4 feet with a wingspan of 7 feet. Adult tundra swans weigh between 13 and 20 pounds (males are heavier). *How tall are you and how much do you weigh?*



When angry or scared, a tundra swan will hiss and raise its wings. With the wings spread open, the swan looks very big and that helps to scare off other animals. The wings have a hard bony spur on the elbow of the wing, especially large on an adult male that could hurt other animals.



Their webbed feet help them swim.

Tundra Swan Life Cycle Sequencing Activity

Put the swans' life-cycle events in order to spell the scrambled word.

Cygnets stay with their families about a year and get adult plumage at about 15 months. They will mate and start their own family when they are four or five years old.

The female lays three to five cream colored eggs that are about five inches long in each nest.

The female incubates the eggs while the male stands guard. The parent birds can't protect eggs from large predators (wolves, polar bears, or humans) so they will often fly away from the nest making it harder for the nest to be found.

The babies, called cygnets, have gray, down feathers and pink on their beaks that gradually turns black. They leave the nest and can swim within 24 hours of hatching.

Eggs hatch after 31 or 32 days—usually in late June.

The young cygnets eat plants, worms and other invertebrates to gain strength. As they get older, they tend to eat more plants and seeds, like their parents.

The male and female work together to build a large, open bowl-like nest in tundra ridges close to a pond or lake. They use grass and moss to build a nest that is about one to two feet across and about 12 to 18 inches deep.

Answer: When put in order, it spells "TUNDRAS"

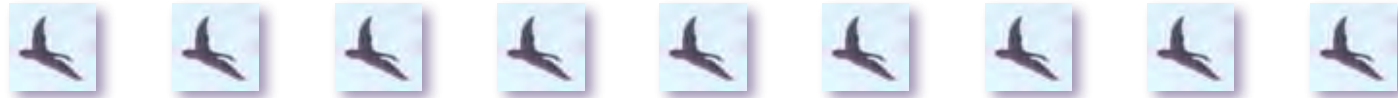
Migration Fun Facts

Migration is the survival movement of animals for breeding or to follow food or water during changing seasons.

Migrating animals may travel short distances (up and down mountains) or very long distances, like the tundra swans.

Migrating animals will follow the same route year after year. Because of that, scientists can predict when and where you can go to see migrating animals.

Many animals migrate in the fall to avoid cold winter weather and then back again in the spring. Other animals only migrate a few times in their lives, like a female sea turtle returning to the area she was born to lay her eggs, or salmon swimming upstream to lay their eggs.



Swans migrate south from the breeding grounds in September or October and will travel in family groups or small flocks.

Tundra swans will stop at lakes and ponds in the northern US and Great Lake areas to rest and eat. Then they will take off again and fly over 1,000 miles without stopping.



Tundra swans start to arrive in their wintering grounds at coastal estuaries, lakes, and ponds in mid-November. Then they turn around and migrate back to the tundra from their wintering grounds in mid-March.

During the summer, tundra swans nest in the northern tundra above the Arctic circle. Each pair claims their territory and guards it carefully. They'll return to the same area year after year.

Animal Adaptation Matching Activity

All animals have physical or behavioral adaptations that help them survive in their environment and with seasonal changes in that environment. Physical adaptations are parts of their bodies that help them move, make their homes, and get their food. Some animals have learned behavior adaptations to help them survive: like migration or hibernation. See if you can match the animal adaptations that are listed below to the right animal. Can you tell which adaptations are physical or behavioral?

1.

- These birds fly thousands of miles to warmer weather.
- Like many birds, they have huge wings to help them fly long distances. Their bones are hollow (less weight) for flying.
- They usually eat plants but will also eat some small animals (insects or small clams, etc.).

2.

- These mammals' long back feet have hair between the toes that they use to help paddle through the water. They use their long, flat tails to steer, like a boat rudder.
- They build "pushups" or piles of plants in the ice where they store food to eat and where they breathe during the winter.
- Like tundra swans, they are mostly plant eaters but will eat small animals if they are really hungry.

3.

- These birds of prey have large, sharp talons (claws) to catch and hold onto their animal dinner.
- They soar high in the sky on air currents and use their good eyesight to see prey below. Depending on where they live, some of these birds migrate ahead of freezing ice; others do not migrate at all.

4.

- These mammals are true scavengers and will eat whatever they can find: plant or animal. Their long front paws have five "claw fingers" that they can use to open things—like trash cans!
- They don't hibernate but they do sleep snug in their dens for long periods of time in the winter. On warm days, they'll stretch and grab some food.

a. Eagles



b. Raccoons



c. Tundra Swans



d. Muskrats



Answer: 1. c, 2. d, 3. a, 4. b

If you enjoy this book,
look for other Arbordale books that may also be of interest:



To Molly—LG

To Fred who has been “the wind beneath my wings” for such a long time. With all my love—LJ

Thanks to Roland J. Limpert of Maryland’s Department of Natural Resources and co-author of *Tundra Swan* (*Cygnus columbianus*), *The Birds of North America* for verifying the accuracy of the information in this book.

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Summary: Marcel, a young tundra swan, tires halfway through the winter migration and stays behind while his parents and the flock continue south. He asks for advice from other animals about how to survive the winter, but their ways are not right for the swan. “For Creative Minds” section includes fun facts about tundra swans, migration, and an animal adaptation matching activity.

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