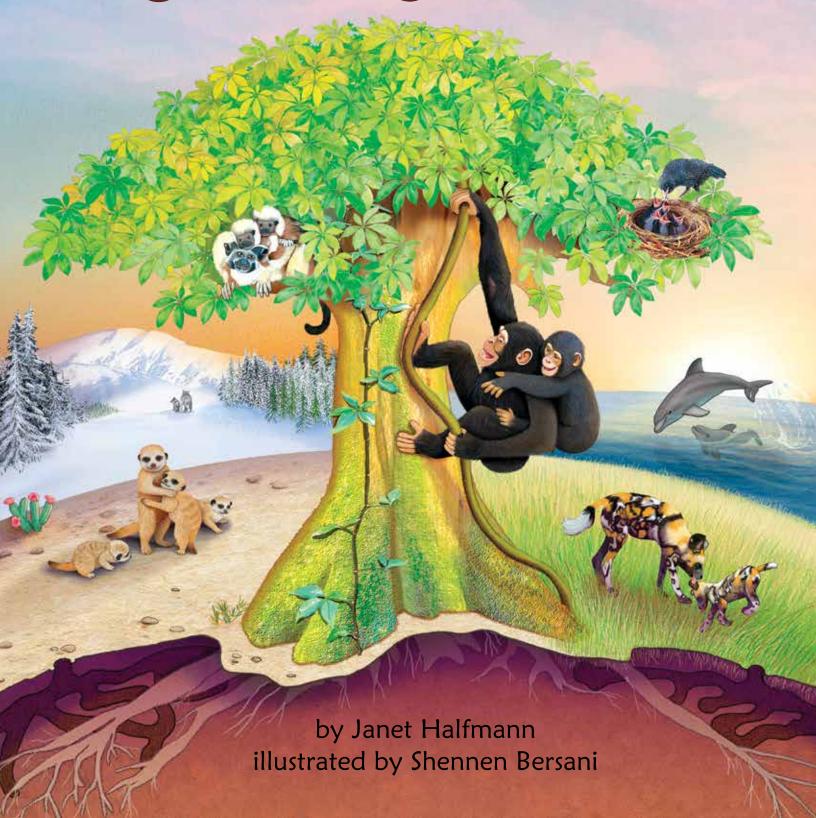
Yay for Big Brothers!



Yay for Big Brothers!

Big brothers are amazing! Did you know that big brothers are important in animal families, too? Animal big brothers do many of the same things as kid big brothers. They play with their younger siblings, teach them new things, and help with their care. Sometimes animal big brothers even babysit when their parents leave to hunt for food. Are you a big brother or do you have a big brother?

Animals in the book include African wild dogs, beavers, chimpanzees, crows, dolphins, hoary marmots, kangaroos, meerkats, naked mole rats, tamarins, and wolves.

Arbordale Publishing offers so much more than a picture book. We open the door for children to explore the facts behind a story they love.

The For Creative Minds includes

- Glossary
- · Animal Families that Live in Groups
- · How Many Babies?
- · Fun Facts

Visit www.ArbordalePublishing.com for free resources and support: teaching activities; quizzes; reading levels; and alignment to Common Core, NGSS, and state standards.

Thanks to the many zoo and nature center educators for verifying the wildlife information found in this book.

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Janet Halfmann (pronounced Howlf-mun) is the award-winning author of more than forty fiction and nonfiction children's books, including Yay for Big Brothers!, Home in the Cave, Fur and Feathers, and Little Skink's Tail for Arbordale. Other recent titles include The Clothesline Code: A Bobby-Dazzler of a Pouch!; The Story of Civil War Hero Robert Smalls; Midnight Teacher; Grandma Is a Slowpoke; Animal Teachers; Good Night, Little Sea Otter; and Seven Miles to Freedom. Janet is a member of the Society of Children's Book Writers and Illustrators. Previously, Janet was a newspaper reporter, children's magazine editor, and a creator of coloring and activity books for Golden Books. She is the mother of four and the grandmother of six. She grew up on a farm in Michigan and now lives in South Milwaukee, Wisconsin. Visit her website at www.janethalfmannauthor.com.

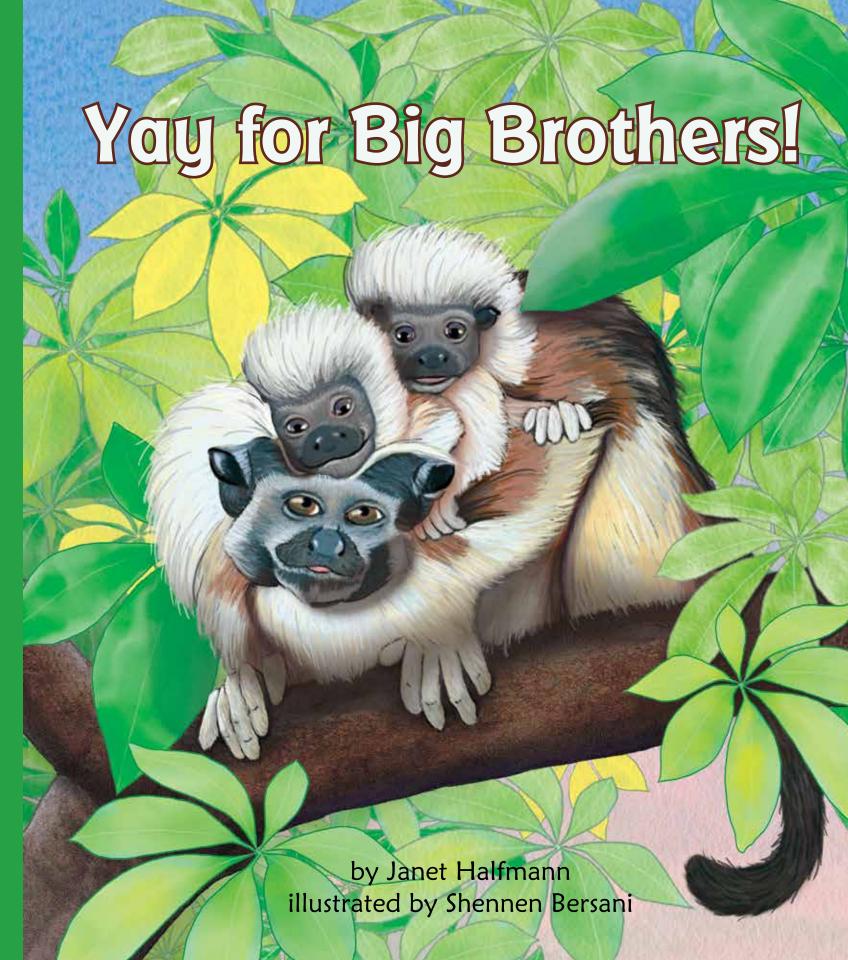
Shennen Bersani is an award-winning illustrator with 2 million copies of her books cherished and read by children, parents, and teachers throughout the world. Her art delivers heartfelt emotion, the wonders of nature and science, and creates a unique joy for learning. Some of Shennen's other illustrated works include River Otter's Adventures; Night Creepers; Cheetah Dreams; Animal Partners; Astro: The Steller Sea Lion; Home in the Cave; The Glaciers are Melting!; Once Upon an Elephant (CBC Children's Choice Book Award); Salamander Season; Sea Slime: It's Eeuwy, Gooey and **Under the Sea; The Shape Family Babies;** and Shark Baby for Arbordale. She is also the author and illustrator of *Achoo! Why Pollen Counts*. Shennen lives with her family near Boston. Visit her website at www.shennenbersani.com.



Janet Halfmann

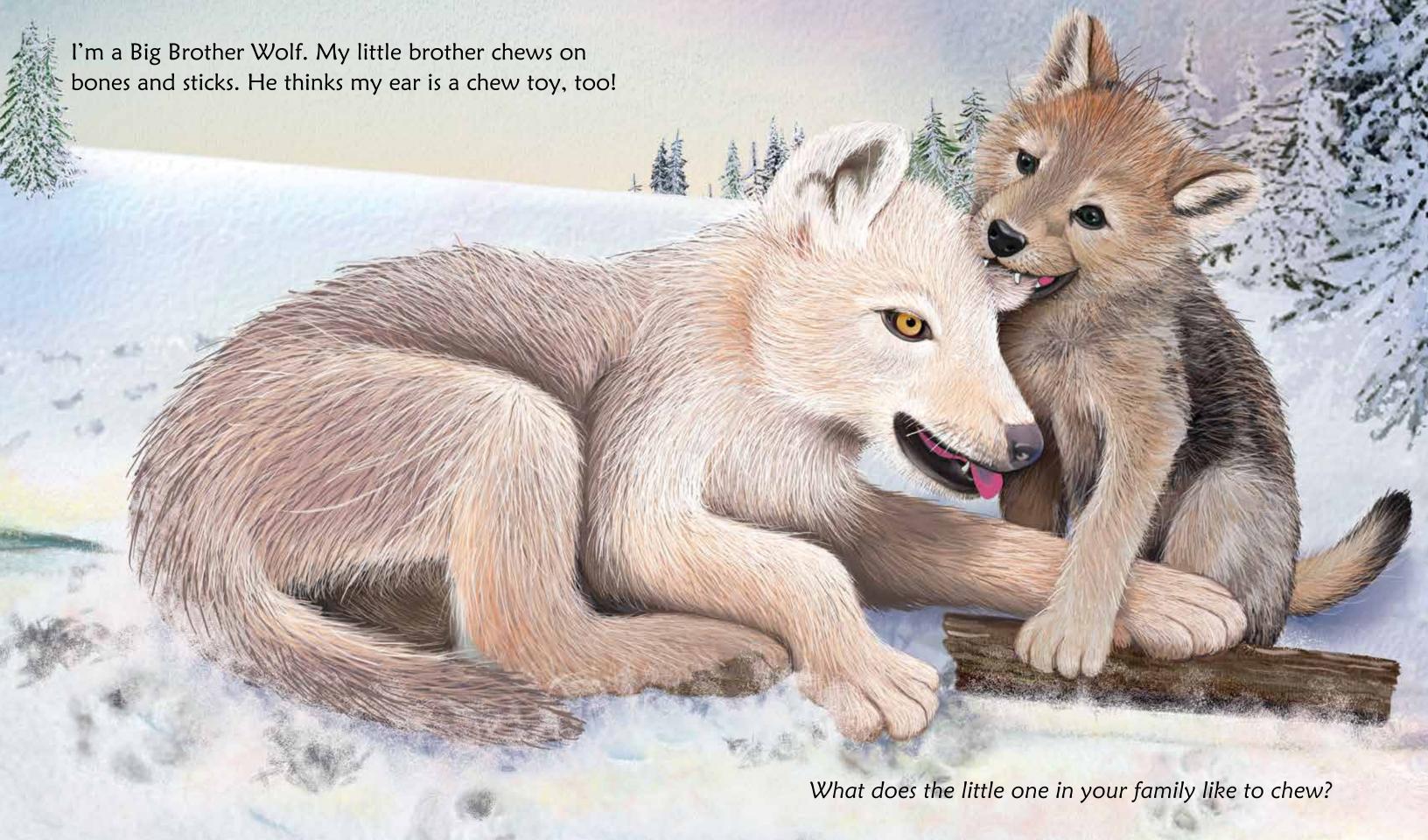


Shennen Bersani











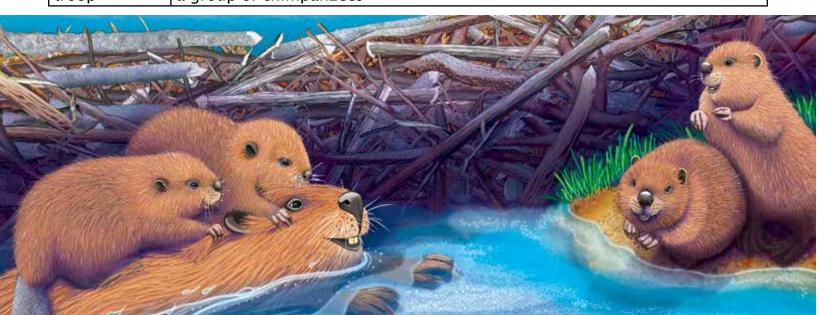
For Creative Minds

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Glossary

brood	a group of siblings born or hatched at the same time	
calves	young dolphins	
chicks	young birds	
colony	a group of beavers, naked mole rats, or hoary marmots	
community	a group of animals that live together in the same area	
flock	a group of birds, including crows	
infants	young humans, tamarins, and chimpanzees	
joeys	young kangaroos	
kits	young beavers	
mammal	a class of animals with a backbone that has fur (hair); the young drink milk from their mothers	
mob	a group of meerkats or kangaroos	
offspring	a child or children born to parents	
pack	a group of wolves or dogs	
pups	young dogs, meerkats, wolves, naked mole rats, or hoary marmots	
regurgitate	to bring up food from stomach back into the mouth	
siblings	brothers and sisters	
troop	a group of chimpanzees	



Animal Families That Live In Groups

All of the young animals in this book live in groups. But the groups are very different. Some have only mothers and young. Others have fathers, mothers, brood siblings, and older siblings. Still others include aunts and uncles or unrelated adults.

In addition to living with siblings, which of these animals live with

- 1. mothers in nursery groups within a large community?
- 2. mothers and fathers?
- 3. mothers, fathers, and unrelated adults?
- 4. mothers of all ages, including grandmothers and daughters about to give birth?

Is your family like any of these animal families? What is your family like?

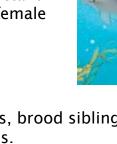
Beaver kits live with their mothers, fathers, brood siblings, and older siblings.





Chimpanzee infants live in a large troop of males and females of all ages. Mothers form nursery groups within the larger troop to care for the young, while other group members provide protection and search for food.

Dolphin calves spend time in a nursery group that includes expectant mothers and mothers of all ages, including grandmothers. The female dolphins come and go. Older siblings sometimes visit.





Meerkat pups live with their mothers, fathers, brood siblings, and older siblings. The whole mob helps raise the pups.

Tamarin infants live with their mothers, fathers, twin siblings, older siblings, and maybe even a few unrelated adults. The entire group helps raise the infants.



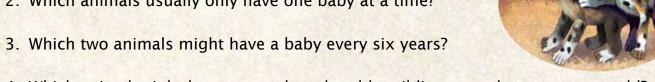
Answers: 1. chimpanzees; 2. beavers, meerkats; 3. tamarins; 4. dolphins

How Many Babies?

Use the chart to answer the questions. The information in the chart is based on averages and what is most common.

	How many babies are born (hatch) at a time?	How much time is normal between babies?
African wild dog	9 to 12 pups	1 year
beaver	3 to 4 kits	1 year
chimpanzee	1 or 2. They can have twins.	5 to 6 years
crow	4 to 6 chicks	1 year
dolphin	1 calf	3 to 6 years
hoary marmot	2 to 5 pups	2 years
kangaroo	1 joey	8 to 12 months
meerkat	3 or 4 pups	4 to 6 months
naked mole rat	12 (up to 27 possible) pups	70 to 80 days
tamarin	1 or 2 with twins most common	1 year
wolf	4 to 6 pups	1 year

- 1. Which animal has the most babies at the same time?
- 2. Which animals usually only have one baby at a time?



- 4. Which animal might have pups when the older siblings are about two years old?
- 5. Which animal usually has two babies at a time (twins)?
- 6. Which animal mother has the least amount of time between babies?
- 7. Which animal mother gives birth every eight to twelve months?
- 8. Which animal gives birth to nine to twelve pups every year?
- 9. Which animal gives birth to one baby when the older sibling is three to six years old?

Answers: 1. naked mole rat; 2. chimpanzee, dolphin, kangaroo; 3. chimpanzee, dolphin; 4. hoary marmot; 5. tamarin; 6. naked mole rat; 7. kangaroo; 8. African wild dog; 9. dolphin



Fun Facts

Except for the crows (bird), all of the young animals in this book drink milk from their mothers when they are born. That means they are all mammals.

Wolf pups start eating regurgitated meat when they are about three weeks old. They start hunting when they are six months old.

Tamarins start eating fruit as early as ten days old. By five weeks, they are eating fruit consistently.

When kangaroo joeys are about six or seven months old, they lean from their mother's pouch to nibble grass.

Parents and older siblings spit up food for crow babies to eat: eggs, insects, small vertebrates, plants, and decaying animals.

Beaver kits can swim within twentyfour hours of being born. They will stay with their family until they are about two years old.

Dolphins swim as soon as they are born. They start to eat fish when they are about three months old.

A group of chimpanzees is called a community or a troop. It has many families and other groups. There can be up to one hundred fifty chimps in a troop.

With tons of love to my grandsons—Big Brother Desi and Little Brother Sid—my inspirations for this book.—IH To Big Brother Ryan, honoring his special day with Tracy, October 9, 2021—Love, Mom/SB

Thanks to the following animal experts for verifying the information about the animals:

- · Wolves, hoary marmots, beavers, and crows: Naturalists Samantha Blumenkönig & Ute Olsson from Eagle River Nature Center
- Tamarins: Aszya Summers, Curator of Animal Care and Conservation Education at the Racine Zoo
- Meerkats: Educators at Zoo Miami
- Beavers: Cathleen McConnel, Educator at the Point Defiance Zoo & Aquarium
- Chimpanzees: Amy Fultz. Director of Behavior & Research at Chimp Haven
- Naked Mole Rats: Blaine McCarty, Education Operations Coordinator at Zoo Atlanta
- Dolphins: Educators at Clearwater Marine Aguarium

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