



Bullfrog at Magnolia Circle

by Deborah Dennard

Illustrated by Kristin Kest

SMITHSONIAN'S BACKYARD

About the Bullfrog

Bullfrogs begin life as one of approximately 10,000 to 20,000 tiny eggs laid in a thin jelly-like film amongst plants floating on the surface of a body of slow-moving water. About four to eight days later, tiny tadpoles emerge from the eggs. Bullfrogs may spend one to three years as tadpoles, depending on where they live. It may take another three years for the frogs to become adults and to mate.

These amphibians are the largest frogs in North America. They may grow 5 to 6 inches long and may measure 12 inches with legs outstretched. Male bullfrogs have larger tympana or external ears than do female bullfrogs. Bullfrogs have white to yellowish throats and underbellies, and a smooth-skinned back in shades of green.

Male bullfrogs communicate by croaking—forcing air back and forth across their vocal folds. Some people describe the sound as “brrwoom.”

Their calls are used to proclaim territory and attract females.

Bullfrogs are excellent hunters and eat just about anything they can cram into their mouths. They sit and wait for a prey animal to come close enough, then pounce and catch their meal with their long, quick, sticky tongues, all in about one-half of a second. Bullfrogs help to control insects that are pests. They also eat lizards, snails, snakes, fish, mice and even other frogs.

Because they are highly prized by people for the meat in their long legs, they have been moved to many places outside of their natural homes. The bullfrog population in places such as California and Taiwan has become so great, that bullfrogs have become pests themselves, leaving little food or space for other native frogs.

Glossary

amphibian: An animal with a backbone, moist skin and usually two life stages.

bayou: A marshy course of water leading to a lake or river.

crustacean: An animal without a backbone, often living inside a shell.

tadpole: An immature amphibian in a stage after egg but before adult. Tadpoles live and breathe underwater.

Adult amphibians may live in or near water but breathe air.

tympanum: An external eardrum. The large circles on the side of a frog’s head just behind the eyes are the tympanum.

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For Judy—D. D.

To Harriet and Mela for honesty, vision and wise counsel—K²

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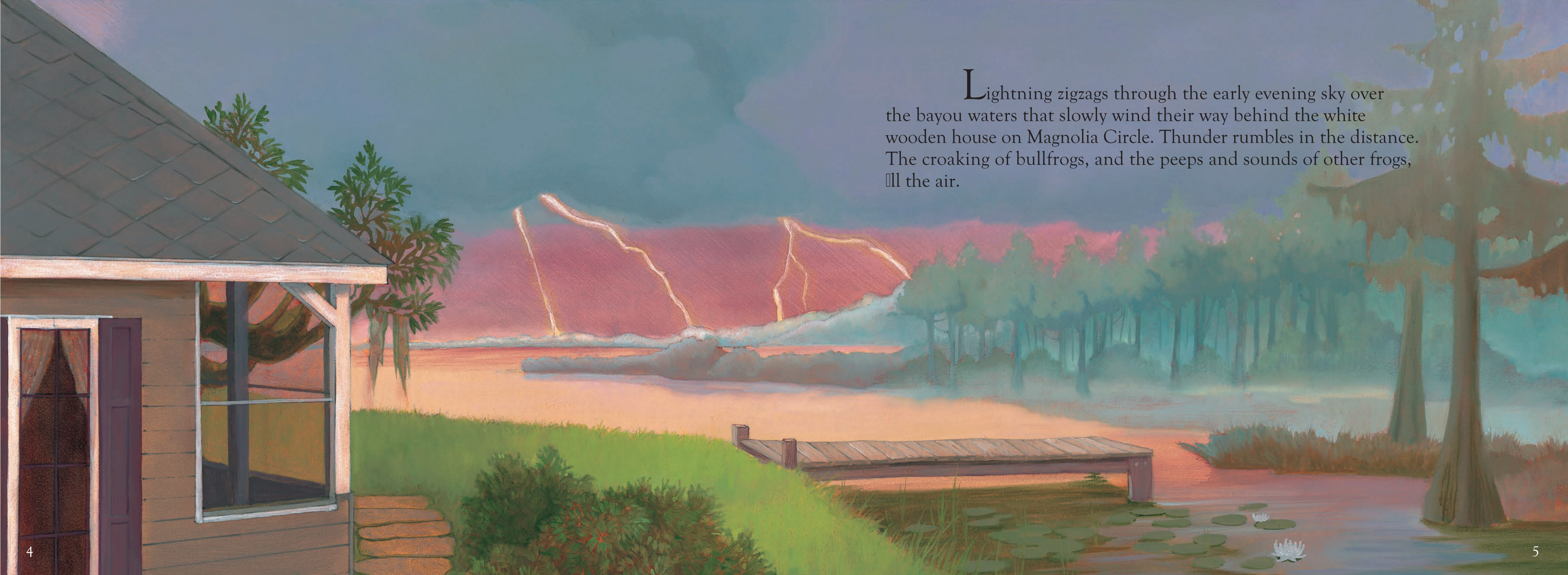
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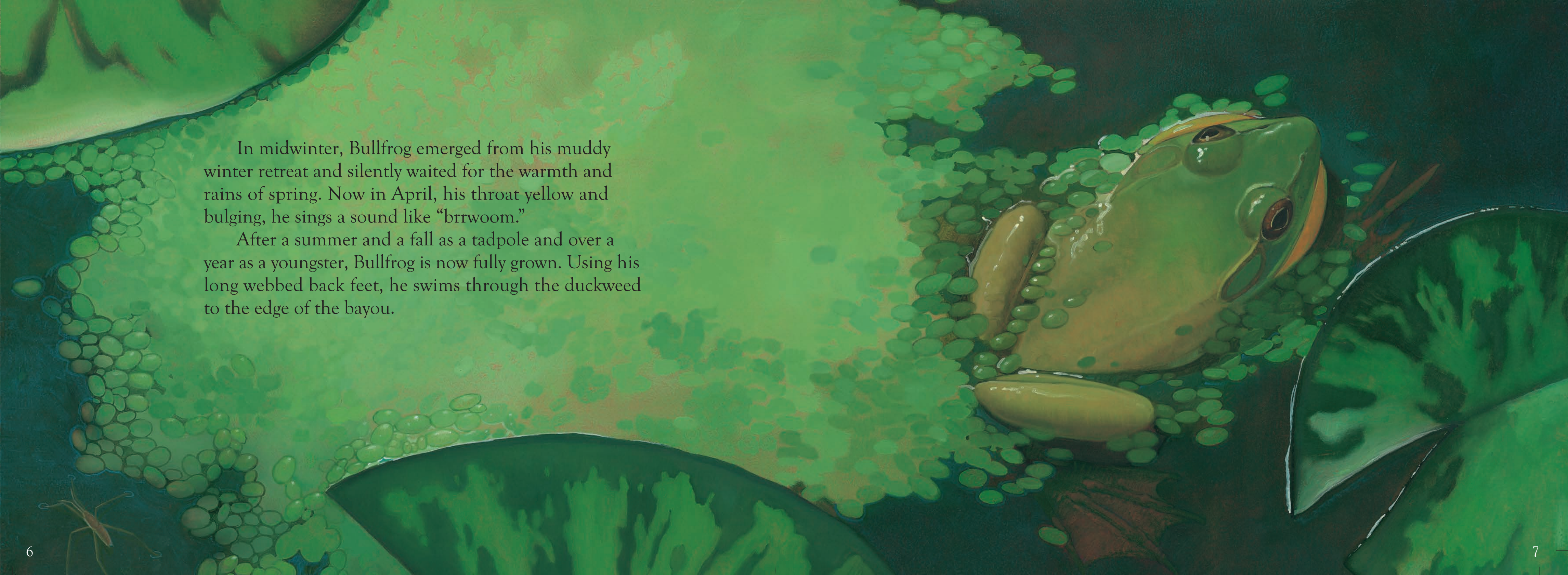
Bullfrog at Magnolia Circle



SMITHSONIAN'S BACKYARD



Lightning zigzags through the early evening sky over the bayou waters that slowly wind their way behind the white wooden house on Magnolia Circle. Thunder rumbles in the distance. The croaking of bullfrogs, and the peeps and sounds of other frogs, fill the air.




In midwinter, Bullfrog emerged from his muddy winter retreat and silently waited for the warmth and rains of spring. Now in April, his throat yellow and bulging, he sings a sound like “brrwoom.”

After a summer and a fall as a tadpole and over a year as a youngster, Bullfrog is now fully grown. Using his long webbed back feet, he swims through the duckweed to the edge of the bayou.




As Bullfrog pulls his long body up the bank of the bayou, a crayfish emerges from a chimney made of mud. In less than half a second, Bullfrog springs forward. His long, sticky tongue shoots out and grabs the crayfish.




The crayfish struggles, but Bullfrog uses his front legs to stuff the crustacean into his mouth. As he swallows, his large bulging eyeballs sink into his head to push the crayfish farther down his throat.

Rain cascades from the sky, soaking the earth. In the distance, by the large screened porch, huge oak trees covered by Spanish moss sway in the warm, heavy air. Bullfrog hops past the dock. He moves slowly, closing his eyes with each hop as the rain drips onto his smooth, green skin.






A bolt of lightning illuminates the sky. A few seconds later, a loud crash of thunder explodes. The warm, wet evening is perfect for Bullfrog to explore the bayou. Tonight he will begin his search for a calling site, and then he can start singing to attract his first mate.

A detailed illustration of a sphinx moth and a bullfrog in a natural setting. The sphinx moth, with its brown and white wings and a prominent pink stripe, is perched on a green blade of a wild weed. The bullfrog, with its green and tan mottled skin and large, round eyes, is positioned to the right, with its long, pink, sticky tongue extended towards the moth. The background is a soft, teal-colored wash, suggesting a pond or a similar aquatic environment. The overall style is painterly and naturalistic.

A sphinx moth flutters past Bullfrog and lands on a blade of a wild weed near the water. Bullfrog sees the moth with his big, round eyes. In an instant, his long, sticky tongue brings the moth to his mouth and it becomes part of his evening meal.




As Bullfrog eats the moth, he does not notice the silent landing of a black-crowned heron. But the heron notices Bullfrog. A nice, fat juicy bullfrog would satisfy a hungry heron.

A detailed painting of a black and white heron with a striking red eye, standing in a pond. The heron is positioned on the right side of the frame, facing left. Its long, dark beak is pointed towards a green bullfrog sitting on a lily pad in the middle ground. The pond is filled with lily pads and a single white lily flower. The background is a warm, orange-red glow, suggesting a sunset or sunrise. The foreground is dominated by tall, green grasses. The overall style is soft and painterly, with visible brushstrokes.

Ever so slowly, the heron stalks its prey. His neck is pulled back and he is ready to make a swift, killing stab. The heron moves slowly closer to unsuspecting Bullfrog.



Suddenly, a loud crash by the garage of the house echoes in the night. A fat raccoon scurries away from the trash can lid she just knocked over. The loud noise startles both Bullfrog and the heron. Squawking a loud complaint, the heron takes to the air, leaving Bullfrog behind, unharmed.



The bullfrog, startled by the departing heron, leaps into the water, but soon returns to the shore. He hears the clicking sounds of southern cricket frogs in the grass. One of the little frogs jumps. It lands just in front of Bullfrog. In less than a second, it is in Bullfrog's mouth.

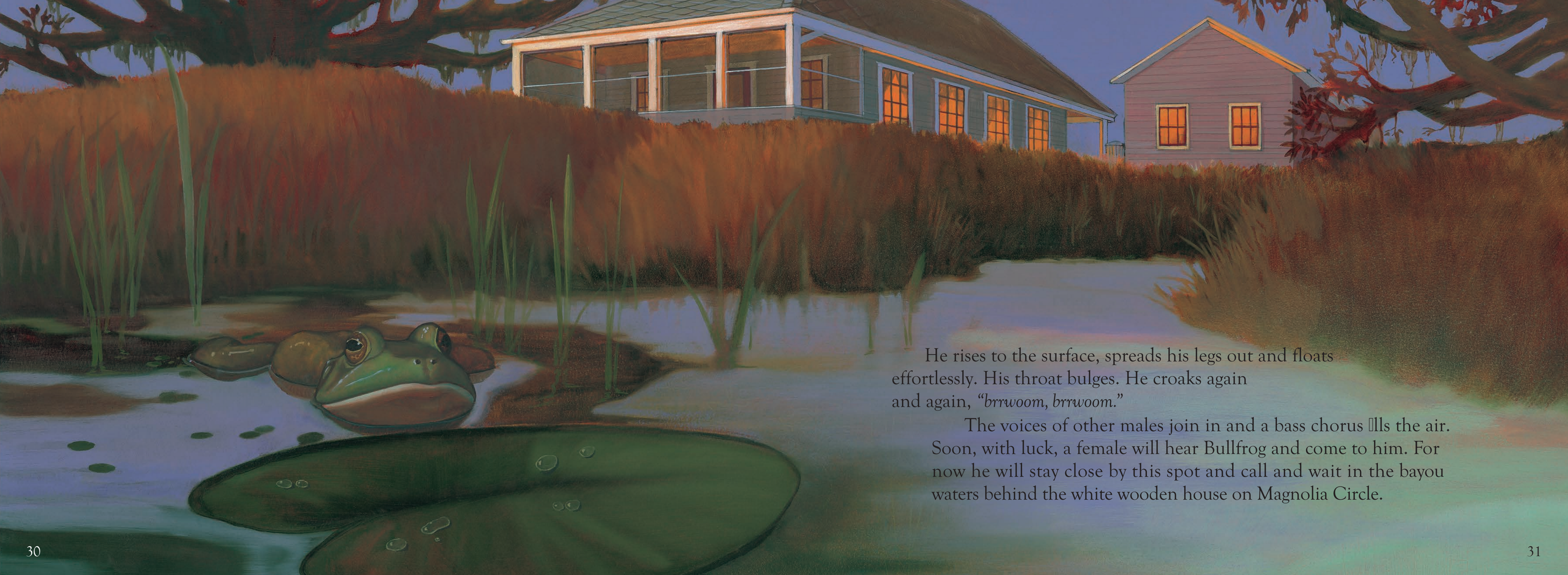


From the booming croaks all around, Bullfrog knows other male bullfrogs are nearby. While calling for his mate, Bullfrog might have to wrestle with one of these males, or he might simply do battle with his deep bass voice, calling and calling.

Bullfrog hops back to the water and dives in, landing with a splash. A special layer of skin protects Bullfrog's open eyes so he can see underwater. He swims farther out into the bayou, through a cluster of water lilies. At the edge of the water lilies, he stops.

He has been searching for a special place. This could be it. In this special place he will attract a female bullfrog by calling to her in his deep voice. She will come and deposit her eggs.





He rises to the surface, spreads his legs out and floats effortlessly. His throat bulges. He croaks again and again, “*brrwoom, brrwoom.*”

The voices of other males join in and a bass chorus fills the air. Soon, with luck, a female will hear Bullfrog and come to him. For now he will stay close by this spot and call and wait in the bayou waters behind the white wooden house on Magnolia Circle.



SMITHSONIAN'S BACKYARD

...is a world of wonder for children intrigued by the wildlife outside their windows. These entertaining stories have an educational message that answers the many questions about the habits and habitat of the animals in our own backyards. The series excites children about reading and learning through interactive storybooks, audiobooks, and stuffed animal toys developed under the direction of curators for the National Museum of Natural History (a Smithsonian Institution Museum).