

# SOUNDSIDE LEARNING

## THIS WEEK ON CORE SOUND

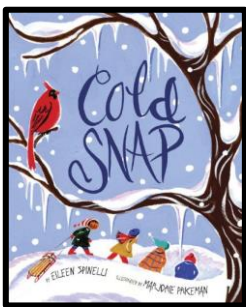


January 1, 2024

### COMING UP AT CORE SOUND...

- **Currently – Mid January:** Gallery of Trees
- **January 26:** Volunteer Dinner ... *New volunteers are welcome!*

### Sound Reading Material For You and Your Child



#### Cold Snap

By Eileen Spinelli

It's snowy cold in the town of Toby Mills. The thermometer is sinking toward zero, and the icicle hanging from the nose of General Toby's statue is growing closer to the ground.

The newspaper headline reads "COLD SNAP!" The people of the town are losing hope—and the feeling in their toes—until the mayor's wife saves the day with a toasty treat.

Pages: 40

Grades: K – 3rd

### Surviving Cold Waters

Have you ever wondered what it is like to be a fish in January? Well, I have, and I had to investigate!

A free-swimming fish in the Atlantic Ocean typically migrates to a warmer part of the sea. But a sound or bay fish doesn't have that option. Luckily, the properties of water make its solid form (ice) less dense than its liquid form. As our sounds and bays freeze, the ice floats on their surfaces, insulating the water below and keeping most areas, as well as the fish within them, from freezing.

Fish in winter may still, however, get very cold. When this happens, fish must lower their metabolism and enter a state called torpor to reduce their energy demands enough to survive the winter. This is especially important in spring before the ice melts for at this time oxygen levels in the water trapped under the ice may be dangerously low.

Some unlucky fish dwell where it's even colder than North Carolina's waters. Fish in polar regions live in saltwater that is about 28° Fahrenheit. Folks, that is below the freezing point of fish blood! In that case, fish need antifreeze in their veins, and polar fish have developed exactly that. They produce a glycoprotein that slows down water's molecular motion to keep ice crystals from forming.

Interestingly, medical researchers and car makers have teamed up to study fish antifreeze in hope of discovering better ways to keep radiators from icing up and humans from being damaged by ice crystals when in deep storage.

Isn't Mother Nature amazing?



*Pamlico Sound in  
Winter 2015  
photo from  
<https://www.youtube.com/watch?v=OX8qEPR50rc>*

## Crissie Wright's Fatal Night

On January 11, 1886, the Philadelphia schooner *Crissie Wright*, was on her way from Baltimore to Savannah, and according to legend (there are no known official investigations of the shipwreck), the *Crissie Wright* lost her rudder and the schooner's captain, Thomas Clark, took refuge in the Cape Lookout light. He anchored off Shackleford Banks to wait out the coming storm.

The breakers were much too high to launch any lifeboats, so the captain and crew took to the rigging. Meanwhile, many of the Diamond City residents gathered on the banks to watch the ship's plight. The whalers tried repeatedly to launch their small boats, but to no avail. The would-be rescuers built a huge bonfire on the beach, hoping some of the crew could swim to shore. It was not to be. The weather turned so quickly, however, that no crew member could get off the ship before the temperature dropped below 20 degrees.

*Daddy remembers hearing stories in his youth of how the residents tried to communicate with the Crissie Wright's crew by yelling when the winds would ebb. The crew and residents could not make out what either was saying, but indecipherable voices were heard on both ends that communicated fear, worry, concern, and compassion for one another.*

The next day the storm subsided allowing the whalers to finally reach the stranded schooner. According to *Our Shared Past* by Grayden and Mary Paul, after boarding the *Crissie Wright*, the rescuers "saw a big bulge in the jib sail where they discovered four men wrapped together in the canvas. Three of them were frozen stiff, but the man underneath, covered by the other three, showed some signs of life. This was the ship's cook, Robert Johnson, the lone survivor."



mural portraying the *Crissie Wright* by Simka Simkhovitch (1939) in the old Beaufort Post Office (<http://beaufortartist.blogspot.com>)

## How Arctic Animals Keep Warm

1. Place a towel on the table.
2. Fill a container with cold water and ice cubes.
3. Set the container on the towel.
4. Put vinyl gloves on your child, & dunk one gloved hand in Crisco shortening.
5. Have your child dunk both gloved hands into the water.
6. Ask your child to compare the hand not coated in Crisco with the one that is and notice how much colder it feels.

*Explain to your child that arctic animals, like polar bears and seals, have a thick layer of fat under their skin called blubber. Just like the Crisco, it helps them feel warm and protects them from freezing in icy water.*

