

OH NO! Hannah's Swamp is Changing



Written by Marilyn Barrett-O'Leary Illustrated by Catherine Kiffe



This publication was produced by the Louisiana Sea Grant College Program,
a part of the National Sea Grant College Program maintained by
the National Oceanic and Atmospheric Administration of
the U.S. Department of Commerce. Louisiana Sea Grant is based at
Louisiana State University and is also supported by the state of Louisiana.

Copyright © 2002, Louisiana Sea Grant College Program

Formatting by Robert Ray, Louisiana Sea Grant

Louisiana Sea Grant College Program
Communications Office
101 Sea Grant Building
Louisiana State University
Baton Rouge, LA 70803-7507
www.laseagrant.org

OH NO!
Hannah's Swamp is Changing

Written by Marilyn Barrett-O'Leary

Illustrated by Catherine Kiffe

Hannah the heron
lives in a *swamp*.





6 Insects, birds, fish and other vertebrates live in the swamp's water, trees, and other plants.





Their swamp
neighborhood
is a wetland
habitat.



8

Some plants in the swamp provide food and a home for insects and other animals. Some also protect animals from storms and predators, and clean pollutants from the water. The species are all part of the same *ecosystem*.

Hannah and the other animals and plants that have always lived in Louisiana swamps are *native species*. New plants or animals that come from other wetland habitats and start living in the swamp are called *non-native* or *nonindigenous* (non-in-dij-uh-nus) *species*.



Even though the swamp looks the same every day,
Hannah knows it is not always the same.

10

She sees fish eat tiny plants and animals
living in the water, and alligators catch small birds.
Hannah eats some fish, too.

In every *ecosystem*, each day, some
plants and animals are eaten and new
ones grow up to replace them.





People visit the swamp. They like to watch the community of animals and plants. Sometimes they take photos of this wetland habitat.

People catch fish and eat fish for supper. People get food from the swamp just like the native animals. They participate in the ecosystem.

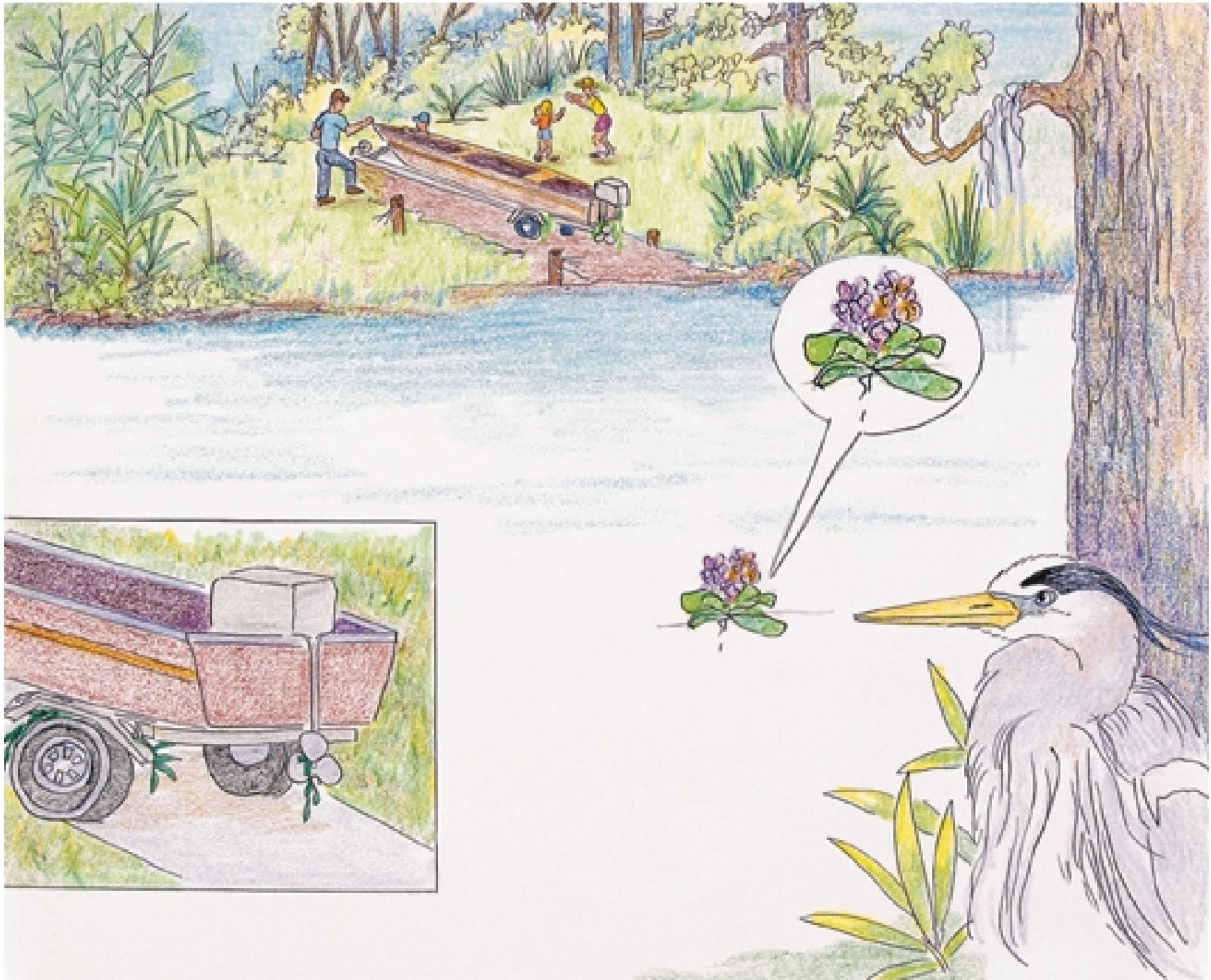




But people are different from the native plants and animals. Sometimes they explore the swamp in their boats or go fishing. But, at the end of the day, they go to their own homes.

Hannah's swamp is not their habitat.



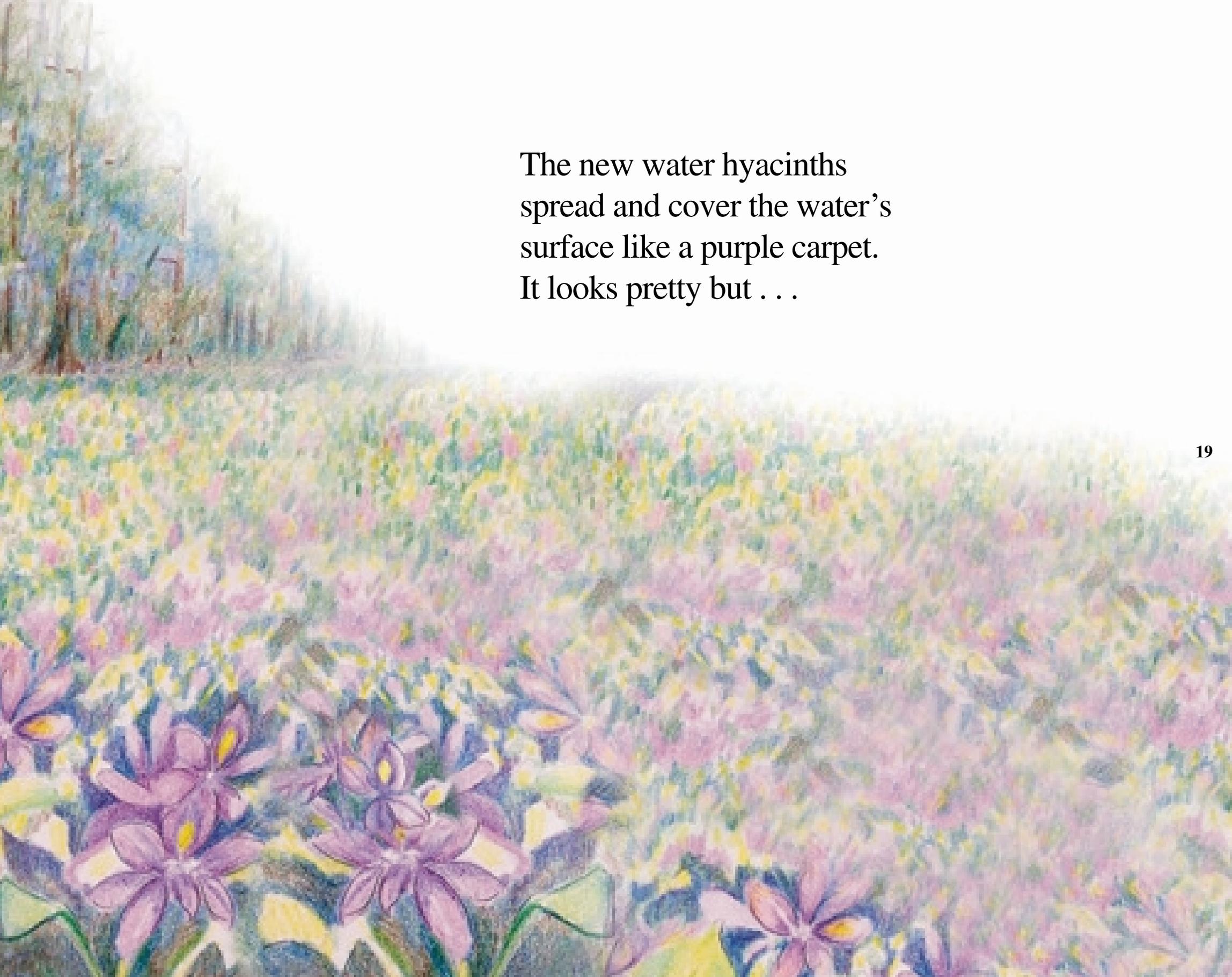


One day, Hannah sees some people launch a boat. The people don't see a non-native plant float off the boat trailer. Hannah does. That *water hyacinth* (hī-a-sin-th) begins to grow and spread.

The increasing number of water hyacinths provide food for some native animals.
Other animals hide under the non-native plants while hunting for food.





A dense field of purple water hyacinths covering a body of water, with a line of trees in the background.

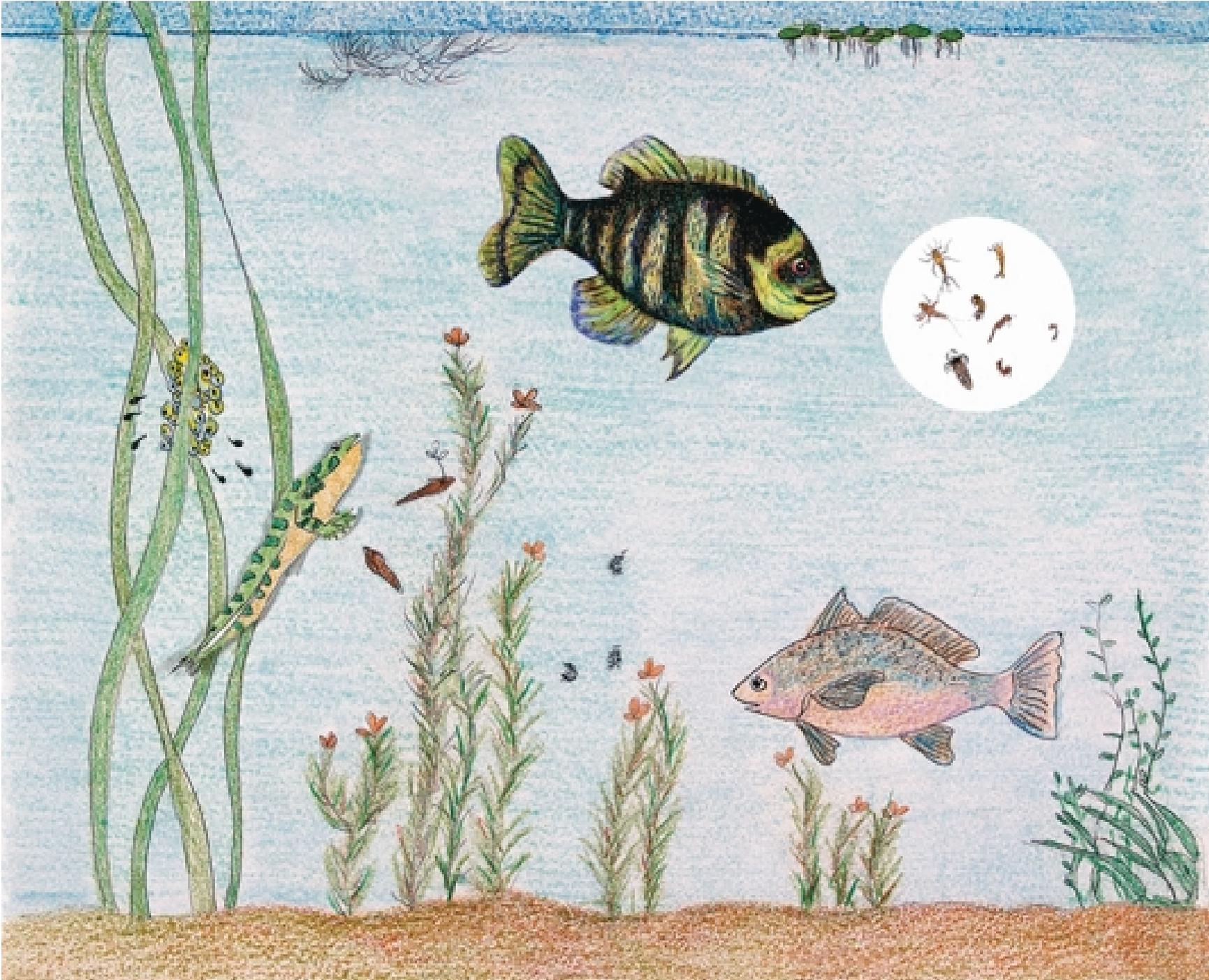
The new water hyacinths
spread and cover the water's
surface like a purple carpet.
It looks pretty but . . .



20

After a while, Hannah notices that it is dark under water, even in the daytime. Oh, No! Native underwater plants are becoming sick or dying. Oh, No! Native fish no longer feed near the plants. The carpet of water hyacinths is blocking sunlight.

Hannah knows that plants need sunlight to grow. Hannah knows that healthy underwater plants make oxygen that fish breathe. Without the tiny underwater plants that fish eat, some small fish starve. Other animals have no small fish to eat. Hannah is worried.





22

People see that the swamp needs sunlight underwater. They want to return light into the swamp.
Hannah sees some people carefully spray the carpet. Some water hyacinths die.

Hannah sees others pull many water hyacinths from the water, and others spread the non-native plants on the ground to dry and die. But people cannot remove or kill every water hyacinth.





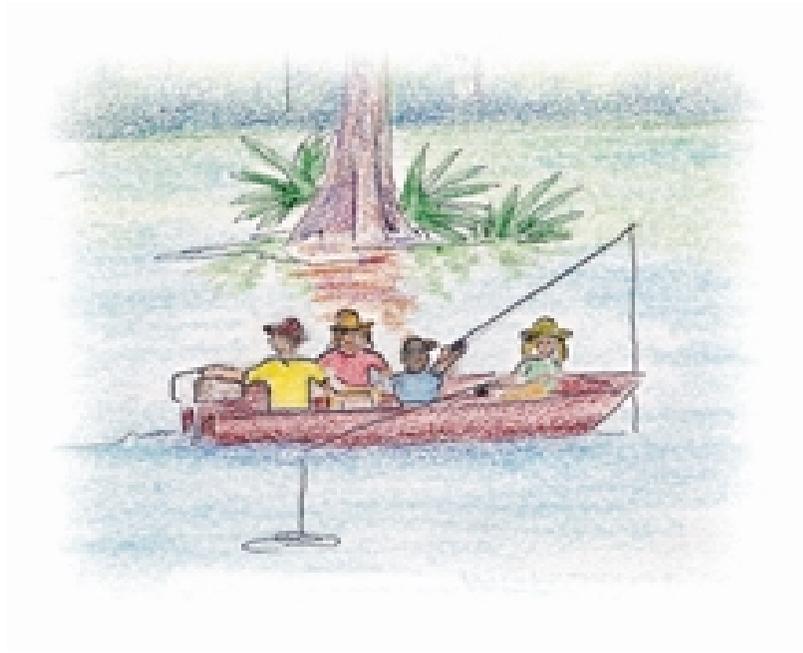
24

After many of the water hyacinths are taken away, sunlight reaches deep into the water once again.

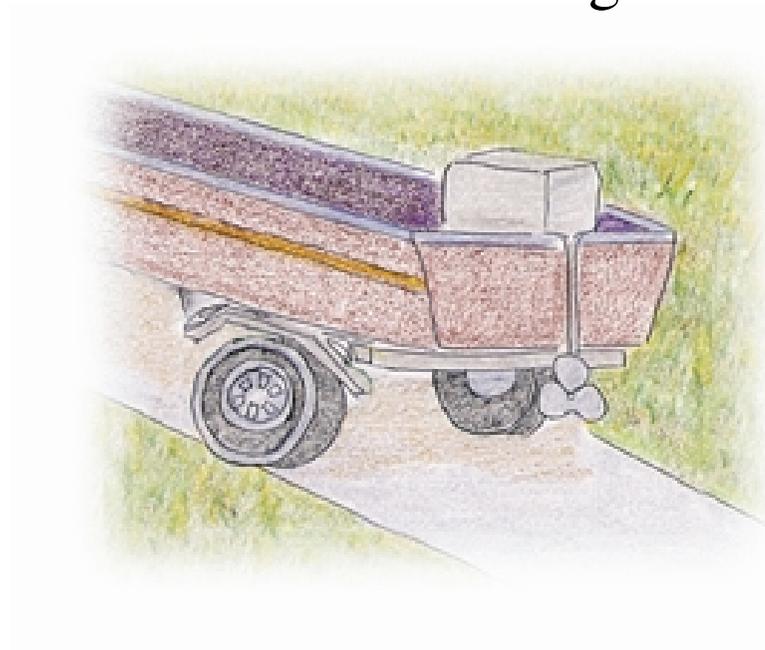
Underwater plants begin to grow again. The wetland animals can find food again. The swamp has changed. Water hyacinths are now part of the ecosystem.



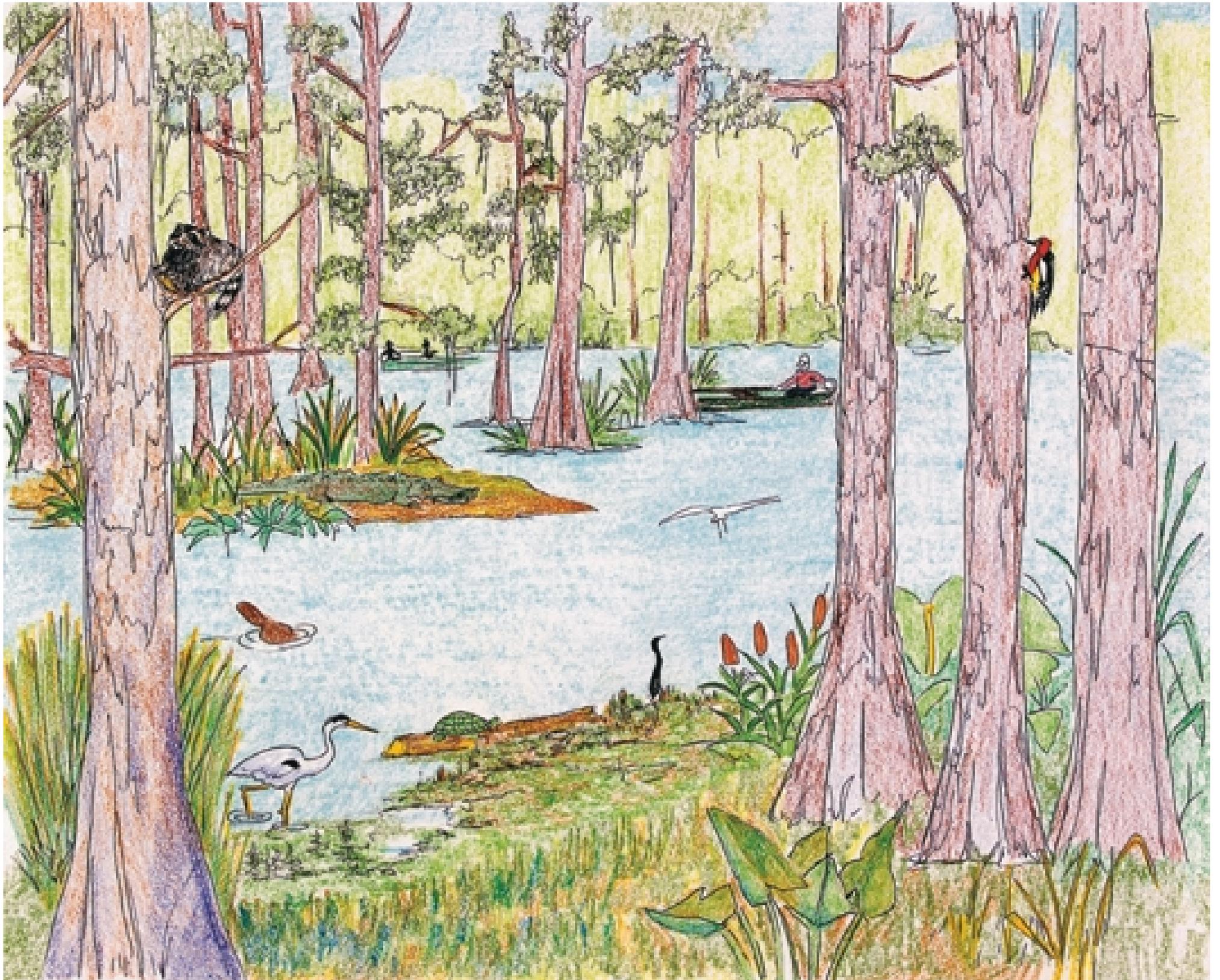
People catch fish again.



People are now careful.
They check their boats, motors,
and trailers for plants before
launching.



They check their boats
when they leave to be sure that
no plants from Hannah's swamp
are attached. People don't want
to spread plants from this
wetland habitat to others.



Every day Hannah watches over her happy neighborhood. She knows that some plants and animals are born and some are eaten every day. The habitat is healthy again. The ecosystem is working.



Hannah sees that people care for the habitat. They work to keep the ecosystem healthy.



Glossary

Amphibians - (am-fib-ēē-ans) Animals like frogs and toads that live in the water as babies and on land as adults

Aquatic species - (a-kwot-ik spēē-sheēz) Animals and plants that live in water or waterlogged areas (wetlands)

Ecosystem - (ēē-kō-sis-tum) A community of living things together with everything in their environment

Fish - (fish) Aquatic animals that get oxygen from water

Habitat - (hab-i-tat) Area where an animal has the necessary food, water, shelter, and space to live

Mammals - (mam-als) Animals with a backbone that feed their young with milk

Native species - (nāt-iv spēē-sheēz) Classification of animal or plant that naturally occurs in a place

Non-native species - (non-nāt-iv 'spēē-sheēz) Classification of animal or plant that does not naturally occur in a place

Nonindigenous species - (non-in-dij-uh-nus spēē-sheēz) Non-native species

Predator - (pred-a-tor) Animal or plant that catches and eats another

Reptiles -(rep-tīls) Animals like snakes and alligators that may spend time in the water, but live on land and breathe air

Swamp - (swomp) A wetland with trees

Water hyacinth - (wot-ur hī-a-sin-th) A non-native aquatic plant living in Louisiana's wetlands. It was brought to Louisiana from South America for the Cotton Exposition of 1903.

Wetland - (wet-land) Waterlogged places where plants and animals live

Vertebrate - (vert-uh-brāte) Animals with a backbone. Amphibians, fish, birds, mammals, and reptiles.

