

# CONSTRUCTED WETLAND

A WETLAND is land saturated or covered with water for part or all of the growing season. It has a very unique plant and animal community.

More than half of the natural wetlands in the United States have been drained for human use including farming and development. *Constructed wetlands* are built to help replace valuable habitat that has been lost due to wetland drainage.

This constructed wetland was created by building a levee (dam). The water level is raised and lowered seasonally to provide a consistent water supply and to make available a variety of foods (seeds and invertebrates) for wildlife year-round.



Male and female Mallard



Belted Kingfisher



Muskrat

## habitat

PROUDLY PROTECTED BY CARPENTERS ELEMENTARY

## Who lives here?

Wetlands are home to many kinds of wildlife such as wood duck, mallard, kingfisher, wading birds like great blue heron and green heron, bullfrog, gray treefrog, American toad, spring peeper, muskrat, snapping turtle, banded water snake, spiders, dragonflies, many other aquatic and terrestrial insects, and many plants.



## Why are wetlands important?

Natural and constructed wetlands are valuable because they...

**PROVIDE HABITAT**  
(food, water, and cover) for more kinds of fish and wildlife than any other habitat type on earth!

**REDUCE FLOODING**  
of downstream property by slowing floodwater during heavy rains

**CLEAN THE WATER**  
we drink and swim in by catching and filtering pollution and sediment

**CONSERVE WATER**  
by directing some rain water to underground streams and springs, in turn recharging our ground water supply

**PROVIDE EDUCATION & RECREATION**  
opportunities for people



# NATIVE PRAIRIE

A PRAIRIE is a treeless land dominated by warm season grasses and wildflowers. It is home to many species not usually found in forests.

Prairies were once common across this country, including the Southeast, because Native Americans and settlers burned the land. Fire eliminated trees and encouraged native warm-season grasses. This altered landscape attracted more game animals (like bison) to hunt for food. Later, prairies were converted to farmland and gradually disappeared.

This prairie was planted in 2010 by tilling the soil and hand-sowing native grass and wildflower seed. It is managed with an annual spring burn to prevent trees and shrubs from dominating the site. Without fire, this prairie would succeed to (become) a forest.



## habitat

PROUDLY PROTECTED BY CARPENTERS ELEMENTARY

## Who lives here?

Native prairies are home to many kinds of wildlife such as fox, coyote, rabbit, white-tailed deer, mouse, vole, skunk, raccoon, groundhog, sparrow, indigo bunting, bobwhite, bluebird, wild turkey, red-tailed hawk, meadowlark, box turtle, black snake, and many species of insects, grasses, and flowering plants.



### Why are prairies important?

Native prairies are valuable because they...

**PROVIDE HABITAT**  
(food, water, and cover)  
for wildlife and plant  
species that depend on  
grassland cover for survival

**INCREASE  
BIODIVERSITY**  
by supporting over 200  
species of native plants  
and many species of  
native grassland wildlife

**IMPROVE WATER  
QUALITY OF STREAMS**  
because warm season  
prairie grasses have deep  
root systems that keep  
soil from washing into  
waterways

**PROVIDE EDUCATION &  
RECREATION**  
opportunities for people



# CATTAIL MARSH WETLAND

A CATTAIL MARSH is a very unique type of wetland dominated by cattails, but also includes many other species of native plants.

Marshes and other wetlands are rare in the mountainous landscape of East Tennessee. Many have been drained or filled in for farming and development. As a result, many plant & animal communities uniquely adapted to marshes and wetlands have decreased.

This cattail marsh is dominated by cattails and Shrubby St. John's Wort. It's a good example of this rare and unique type of wetland. We are fortunate to have this marsh here at Carpenters Elementary to help us learn about wetland plants and animals.



Salamander



Green Frog



Dragonfly

## *habitat*

PROUDLY PROTECTED BY CARPENTERS ELEMENTARY

## Who lives here?

Cattail marshes are home to many kinds of wildlife such as crayfish (crawdads), bats, salamanders, raccoon, opossum, muskrat, great blue heron, green heron, sparrow, redwing blackbird, chorus frog, spring peeper, American toad, dragonflies, many other aquatic and terrestrial insects, and many plants.



### Why are cattail marshes important?

Cattail marsh wetlands are valuable because they...

**PROVIDE HABITAT**  
(food, water, and cover)  
for more kinds of fish and wildlife than any other habitat type on earth!

**REDUCE FLOODING**  
of downstream property by slowing floodwater during heavy rains

**CLEAN THE WATER**  
we drink and swim in  
by catching and filtering pollution and sediment

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**PROVIDE EDUCATION & RECREATION**  
opportunities for people



# WOODLAND RIPARIAN ZONE

A RIPARIAN ZONE is a corridor or strip of land running along the edge of a stream, creek, river, lake, or other body of water.

The word *riparian* comes from a Latin term for “bank” or “shore.” The quality of vegetation growing on a stream bank directly affects the health of the stream. A riparian zone densely wooded with trees and shrubs provides the best protection for water quality.

Many fish and aquatic insects cannot survive in a stream unless it is cool and clean. Centenary Creek supports more than 12 species of fish and many aquatic invertebrates. Woodland riparian zones like this one are doing a great job of improving water quality.



Beaver



Barred Owl



River Otter

## habitat

PROUDLY PROTECTED BY CARPENTERS ELEMENTARY

## Who lives here?

Riparian zones are home to many kinds of wildlife such as mink, muskrat, raccoon, river otter, beaver, snapping turtle, black rat snake, great blue heron, pileated woodpecker, green frog, barred owl, bats, green sunfish, banded skulpin, black-nosed dace, snails, and many aquatic and terrestrial insects and native plants.



### Why is vegetation in a riparian zone so important?

Native trees, shrubs, and herbaceous plants are critical to stream health because they...

**PROVIDE HABITAT**  
(food, water and cover)  
for aquatic & upland wildlife

**PREVENT EROSION**  
by holding soil in place  
with deep root systems

**PROVIDE SHADE**  
that helps cool the water

**REDUCE FLOODING**  
by slowing floodwater that  
flows through fields, forests,  
and developed areas

**CLEAN THE WATER**  
by filtering pollutants  
from water running off  
surrounding land

**PROVIDE EDUCATION & RECREATION**  
opportunities for people

