

Florida & Caribbean

Activity Guide



Visit these Refuges!

Archie Carr NWR
Melbourne Beach, FL
772-581-5557
Fws.gov/archiecarr

A.R. Marshall Loxahatchee NWR
Boynton Beach, FL
561-734-8303
Fws.gov/refuge/arm_loxahatchee

Buck Island NWR
St. Croix, USVI
Fws.gov/caribbean/refuges/buckisland

Cabo Rojo NWR
Boqueron, PR
787-851-7258
Fws.gov/refuge/cabo_rojo

Cedar Keys NWR
Cedar Key, FL
Fws.gov/refuge/cedar_keys

Culebra NWR
Culebra, PR
787-742-0115
Fws.gov/caribbean/refuges/culebra

Chassahowitzka NWR
(Accessible by boat)
Fws.gov/chassahowitzka

Crystal River NWR
Crystal River, FL
352-563-2088
Fws.gov/refuge/Crystal_River

Egmont Key NWR
St. Petersburg, FL
Fws.gov/egmontkey

Florida Panther NWR
Immokalee, FL
239-657-8001
Fws.gov/refuge/florida_panther

Hobe Sound NWR
Hobe Sound, FL
772-546-6141
Fws.gov/hobesound

Great White Heron NWR
Johnston Key, FL
305-872-0774
Fws.gov/refuge/great_white_heron

J.N. "Ding" Darling NWR
Sanibel, FL
239-472-1100
Fws.gov/refuge/jn_ding_darling

Key West NWR
(accessible by boat)
305-872-0774
Fws.gov/refuge/key_west

Laguna Cartagena NWR
Lajas, PR
787-851-7258
Fws.gov/caribbean/refuges/lagunacartagena

Lake Woodruff NWR
DeLeon Springs, FL
386-985-4673
Fws.gov/refuge/lake_woodruff

Lower Suwannee NWR
Chiefland, FL
352-493-0238
Fws.gov/refuge/lower_suwannee

Merritt Island NWR
Titusville, FL
321-861-5601
Fws.gov/refuge/merritt_island

National Key Deer Refuge
Big Pine Key, FL
305-872-0774
Fws.gov/refuge/national_key_deer_refuge

Okefenokee NWR
Folkston, GA
912-496-7836
Fws.gov/refuge/okefenokee

Pelican Island NWR
Indian River County, FL
772-581-5557
Fws.gov/refuge/pelican_island

Sandy Point NWR
(Closed April-August)
Christiansted, St. Croix, USVI
340-773-4554
Fws.gov/caribbean/refuges/sandypoint

St. Marks NWR
St. Marks, FL
850-925-6121
Fws.gov/refuge/st_marks

St. Vincent NWR
Apalachicola, FL
850-653-8808
Fws.gov/saintvincent

Vieques NWR
Vieques, PR
787-741-2138
Fws.gov/refuge/vieques

Welaka National Fish Hatchery
Welaka, FL
386-467-2374
Fws.gov/welaka

**To get the most
fun out of your
Refuge visit, view
their website for
more information**

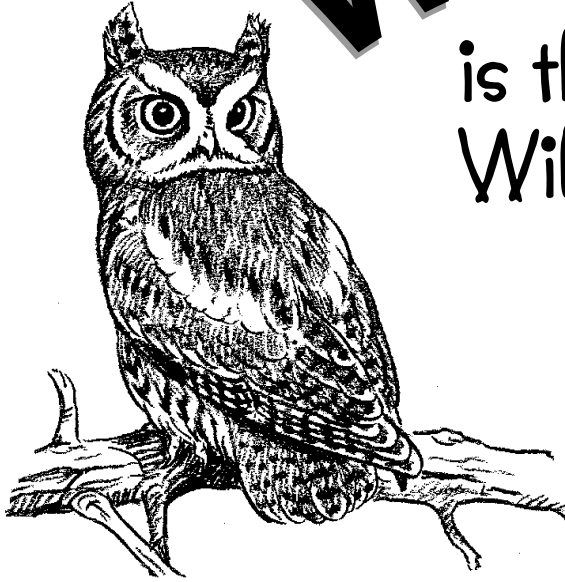
**National Wildlife Refuges of Florida, Puerto Rico,
& the U.S. Virgin Islands**

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Whooo.

is the Fish and Wildlife Service?



The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people.

This nation's fish and wildlife resources are some of our priceless natural treasures, a legacy that cannot be replaced. These fish and wildlife resources provide opportunities to enjoy the outdoors, serve as indicators of the environment's health, and in many ways provide jobs. With pressures on our natural resources increasing each day, efforts to preserve them for future generations are becoming more critical.

The Service contains National Wildlife Refuges, National Fish Hatcheries, Wetland Management Districts who manage habitat for migratory birds, protect endangered species, enforce wildlife laws, and consult on federal development projects.

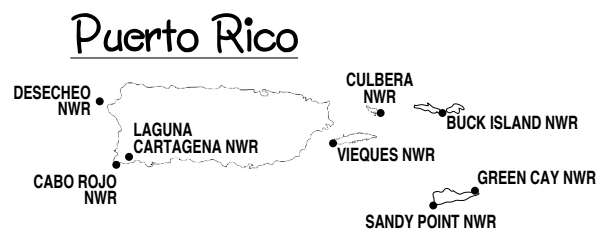
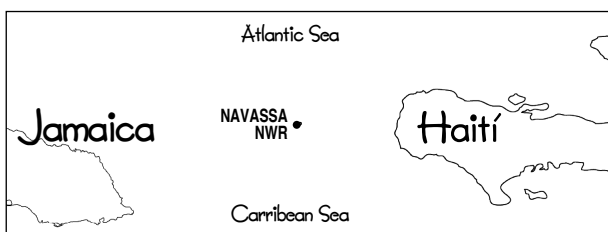
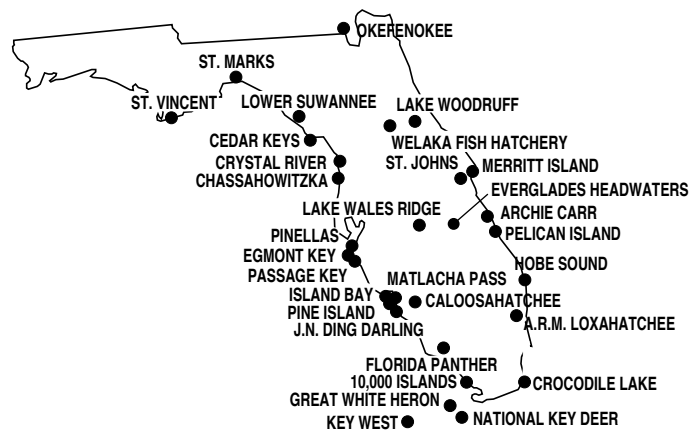
National Wildlife Refuge System



The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Refuges and Hatcheries in Florida

Florida and the Caribbean are fortunate to have 39 National Wildlife Refuges and one National Fish Hatchery. These refuges include habitats like woodlands, beaches, grasslands, and swamps, providing habitat for a wide variety of wildlife. Hatcheries are important for working to restore fish populations that have been hurt by overfishing, pollution, or other habitat changes. They also provide millions of fish for stocking in lakes and ponds.

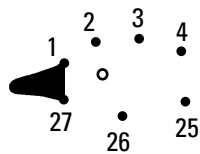


The Beginning of the National Wildlife Refuge System

Over 100 years ago, people were killing wading birds and pelicans so they could use the birds' beautiful feathers, or plumes, on women's hats. Thousands of birds were killed. Several species were in serious danger of becoming extinct.

Concerned citizens asked President Theodore Roosevelt for help. In 1903, President Roosevelt created the first National Wildlife Refuge, tiny Pelican Island in Florida, to protect brown pelicans and other birds. This three-acre Refuge in the Indian River was, and still is, a nesting place for hundreds of species of birds.

Today, the National Wildlife Refuge System is the world's largest and most diverse collection of lands and waters set aside specifically for wildlife. The Refuge System has grown to include more than 150 million acres of the nation's best wildlife habitats. Varying in size from half-acre parcels to thousands of square miles, our country's Wildlife Refuges stretch from the Arctic Ocean to the South Pacific and from Maine to the Caribbean.



Connect the dots

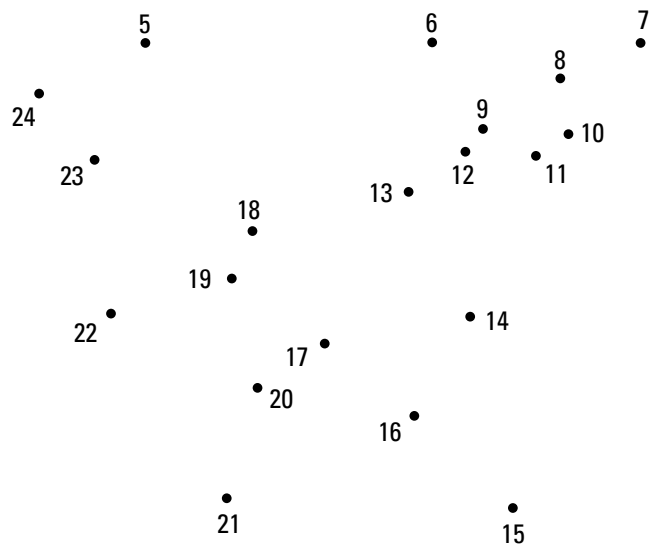
(and color the picture blue) to see what Jay Norwood "Ding" Darling designed to represent the National Wildlife Refuge System. Mr. Darling was a Pulitzer Prize winning editorial cartoonist, a friend of Franklin D. Roosevelt, and the head of the U.S. Biological Survey (the forerunner of the U.S. Fish and Wildlife Service).

Did you know these wild facts?

There are over 560 refuges, several thousand Waterfowl Production Areas, and over 38 Wetland Management Districts.

Refuges are important habitat for over 700 bird species, 220 mammal species, 250 reptile and amphibian species, and over 1,000 species of fish.

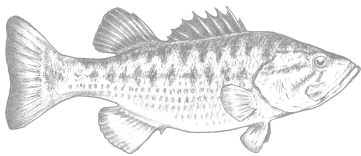
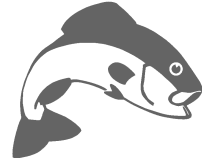
The Refuge System has more than 45 million visitors every year to enjoy wildlife-dependent recreation. Refuge visitors come to watch and photograph wildlife, hunt, fish, and participate in environmental education programs.



National Fish Hatchery System

The National Fish Hatchery System began 100 years ago in order to produce fish to add to dwindling wild fish populations. As with other kinds of wildlife, many fish populations suffered from human activity and impacts on their habitats. For example, when streams are dammed, it is often impossible for fish to return to their spawning areas.

Pollution of the water has caused fish populations to decline or even disappear from many streams and lakes. Fishing has always been a very popular American outdoor recreation activity and is important in subsistence living. The hatchery system is working to preserve this tradition for the future.

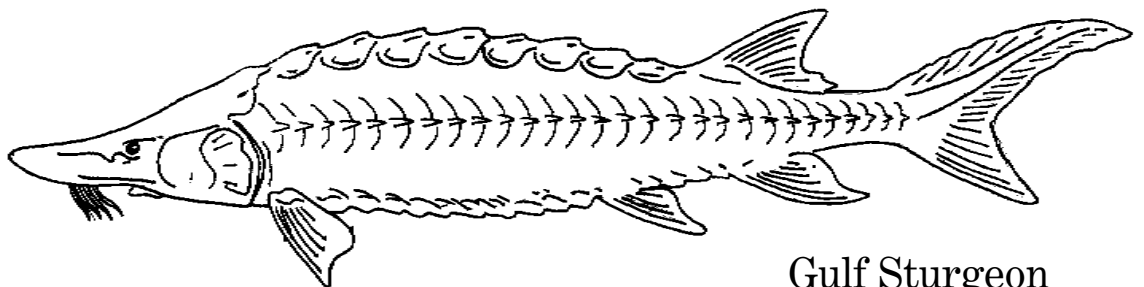


Largemouth Bass

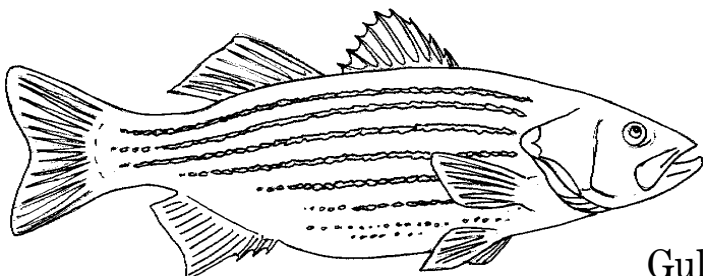
Welaka National Fish Hatchery

Welaka National Fish Hatchery is a warm water hatchery. This facility is involved in the restoration of declining striped bass populations, both in the Gulf of Mexico drainage and the Atlantic Ocean. It produces and distributes over 5,000,000 fish annually. Welaka National Fish Hatchery also assists the recovery efforts of two species of sturgeon – the threatened Gulf sturgeon as well as the endangered shortnose sturgeon.

Color These Fish!



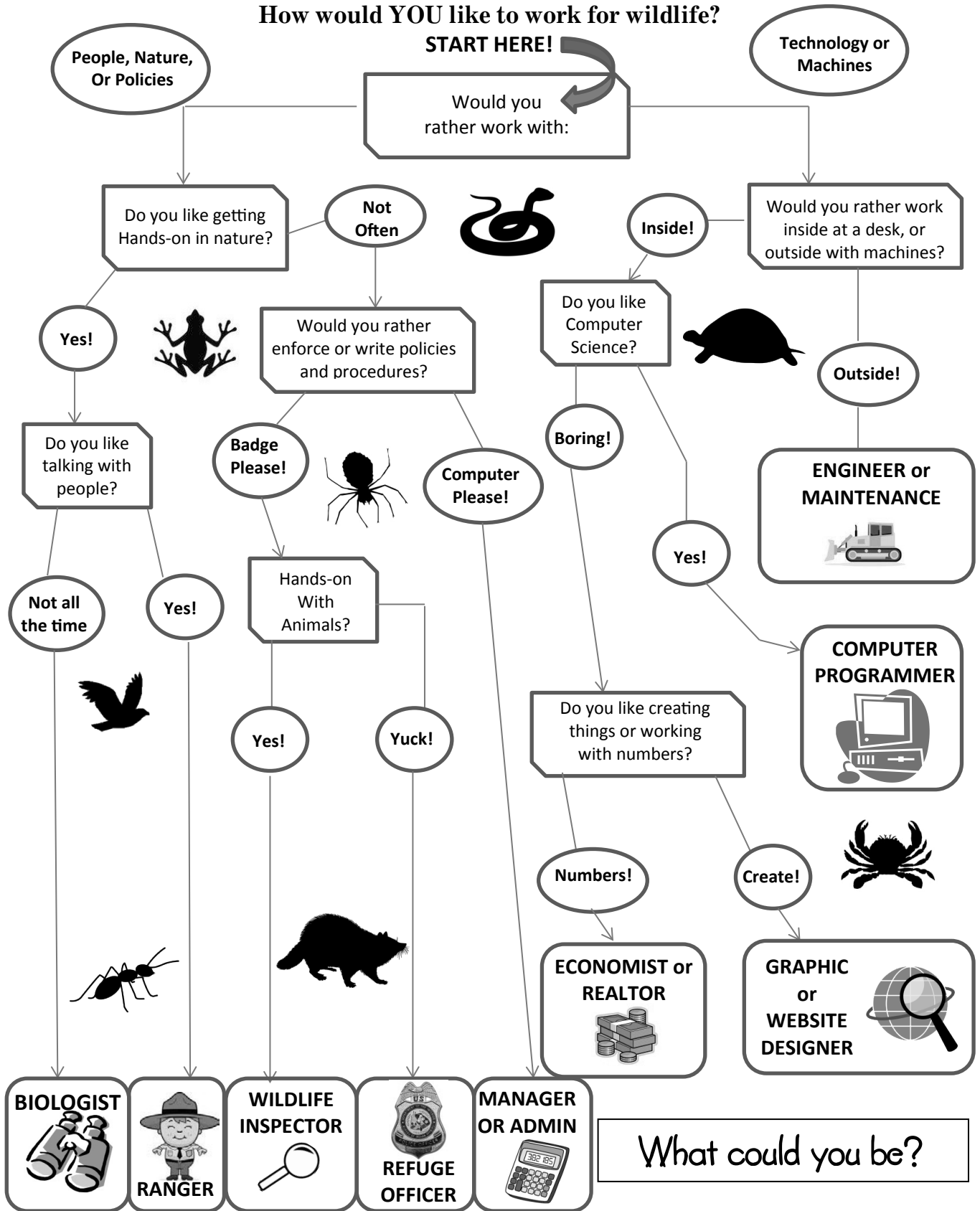
Gulf Sturgeon



Gulf Coast Striped Bass

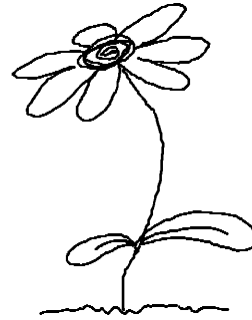
Working for Wildlife

How would YOU like to work for wildlife?



All animals need habitat.

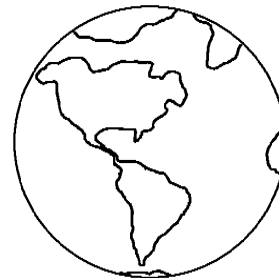
Every animal species needs habitat to survive. Its habitat supplies food, water, shelter (from the environment and natural predators), and living space. Some animals can adapt to a variety of different kinds of habitat, while others need a very specific place to live.



National Wildlife Refuges provide and protect habitat for many kinds of wildlife and plant species. Some refuges were established for migratory birds, especially ducks and geese, but others were established to provide habitat for a specific animal, like the American crocodile or the Florida panther.

What in the world is an ecosystem?

An ecosystem is a community of organisms, including humans, interacting with one another and the environment in which they live. Many different kinds of habitat can be included in one ecosystem.



The U.S. Fish and Wildlife Service is working to achieve healthy, sustainable ecosystems that ensure a continuing legacy of abundant and diverse wildlife. Managing for the whole ecosystem is an approach in conserving environments to benefit a diversity of life.

Color by Number

This is the U.S. Fish and Wildlife Service Shield. It represents the service and the protection that refuge staff provide for wildlife, fish, and habitats across the country. The letters are all dark brown.



- 1 = yellow
- 2 = orange
- 3 = gold
- 4 = blue
- 5 = white
- 6 = light brown
- 7 = dark brown

Federal Junior Duck Stamp Competition



Like its forerunner, the Federal Duck Stamp, the Federal Junior Duck Stamp Program encourages students to improve their wildlife observation skills and create a nature-based work of art. This program connects science with the arts, and promotes environmental stewardship in children.

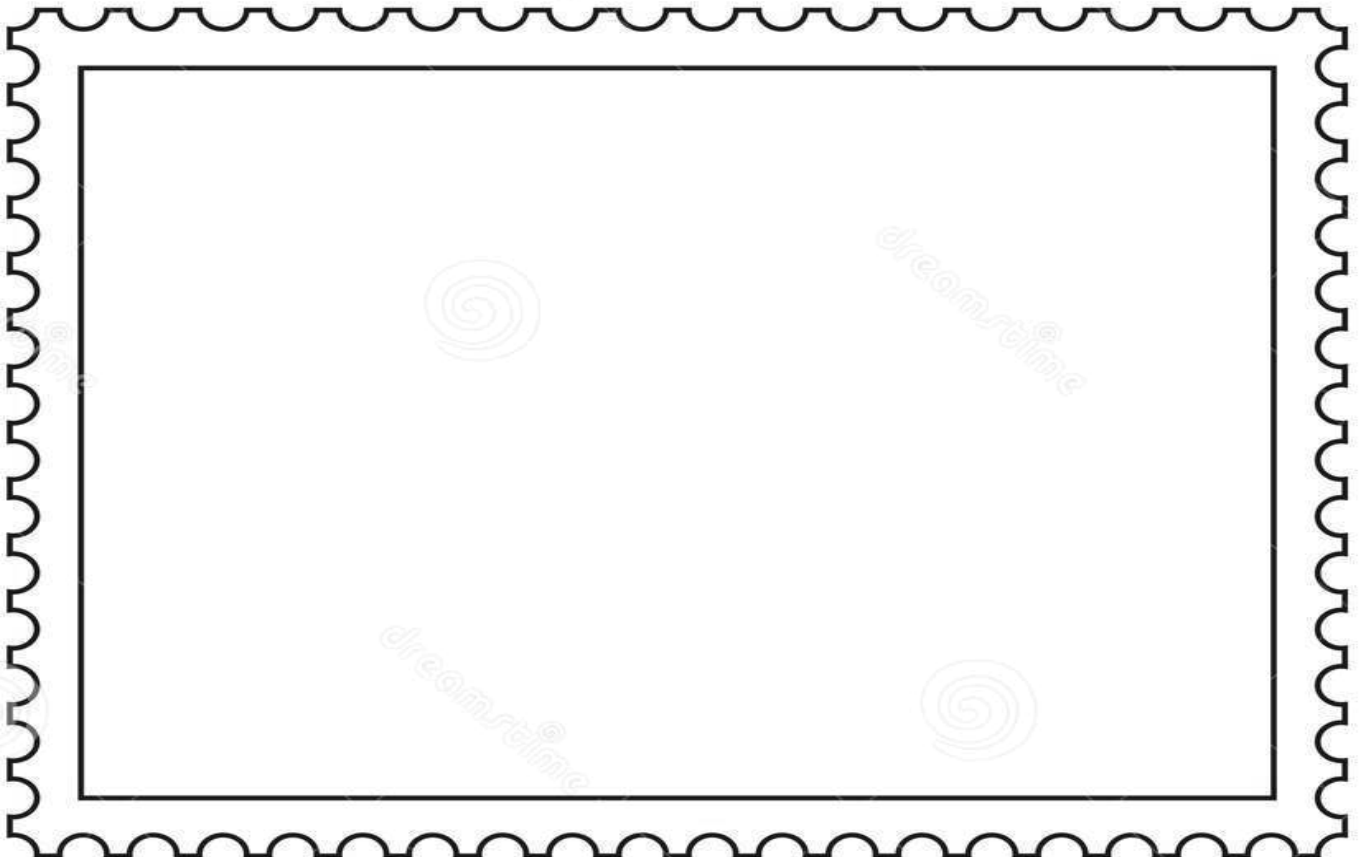
Want to get involved? Submit your artwork by March 15, and enter the Federal Junior Duck Stamp Contest! You might be the nation's next winner!

Visit this website for more information:

<https://www.fws.gov/birds/education/junior-duck-stamp-conservation-program.php>

Design a Duck Stamp!

Create your own Duck Stamp. If you need help, try watching a duck in a pond, or look at pictures of ducks in magazines, calendars, and websites with help from your parents.



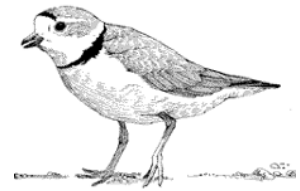
Piping Plover

Charadrius melodus

Status: Federally Threatened

Tough Life

Living on the beach is a tough life for shorebirds. They face many challenges to survive, such as predators and disturbance. Below are a list of threats shorebirds face. Draw a line from the threat to the correct category.



parking lot

trash

PREDATORS

cat

NATURAL EVENTS

hurricane

raccoon

gull

oil spill

disease

overgrazing

flood

HUMAN-RELATED

polluted water

buildings

drought

Cedar Keys NWR was established in 1929 and is composed of 13 islands, totaling 762 acres. **Egmont Key NWR** is a 328-acre island that was set aside for protection in 1974. Both island refuges provide sanctuary and nesting habitat for pelicans and wading birds.

The piping plover is a small sand-colored shorebird that nests and feeds on open coastal beaches. They have long yellow legs and a short neck with white bellies, and one black or brown band on the chest, often broken in the middle. There is also a black band across the forehead from eye to eye, and a black-tipped beak. Their diet mainly consists of insects, marine worms, and crustaceans.

This skittish shorebird is threatened due to overhunting during the plume trade in the early 1900s, and recently from increased development and recreational use of beaches. The most recent surveys place the Atlantic population at less than 2,000 breeding pairs.



Brown Pelican

Pelecanus occidentalis

Status: State Species of Concern

Group Up

The name you call an animal depends on its age or how many there are. Draw a line to match the common name of the animal to its correct baby name and group name. You may have to research to figure out the answers!



| <u>Baby Name</u> | <u>Common Name</u> | <u>Group Name</u> |
|------------------|--------------------|-------------------|
| ephyra | mosquito | smack |
| hatchling | oyster | scourge |
| spat | sea turtle | swarm |
| calf | bee | herd/pod |
| fry | jellyfish | school |
| larva | heron | bed |
| wiggler | dolphin | bale |
| chick | fish | sedge |

Pelican Island NWR is unique because it was established as our nation's first National Wildlife Refuge on March 14, 1903 by President Theodore Roosevelt to protect brown pelicans and other native birds nesting on the island. This was the first time the federal government set aside land for the sake of wildlife.

An endangered species success story, the brown pelican was in danger of extinction due to pesticides like DDT, but has now made a remarkable comeback.

Brown pelicans dive into the water and gather up water and fish in their large bills and throat pouches. The water then drains out, leaving the fish for the pelican to swallow. This inspired the rhyme by Dixon Lanier Merritt, "A wonderful bird is the pelican, his bill can hold more than his belican."



Eastern Indigo Snake

Drymarchon couperi

Status: Federally Threatened

Make Words

How many words can you make from the letters in Eastern Indigo Snake?



| | | |
|-------|-------|-------|
| _____ | _____ | _____ |
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| _____ | _____ | _____ |
| _____ | _____ | _____ |

Chassahowitzka NWR was established in 1941 and provides important habitat for waterfowl as well as other wildlife.

The eastern indigo snake is a large, glossy, blue-black snake. It is non-venomous and hunts during the cooler parts of the day for rodents, birds, amphibians, and reptiles. They can grow up to 8 feet long!

The main threats facing this snake are habitat destruction, fragmentation, and degradation.



Okefenokee Hooded Pitcher Plant

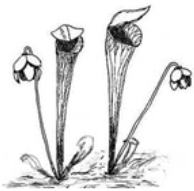
Sarracenia minor okefenokeensis

Status: Not Listed

Pollinator-palooza!

Draw a line to match the pollinators to the plants they pollinate based on what each animal wants, and what each plant looks like or smells like.

"My pollen is close to the ground, so I don't eat my pollinators!"



"I bloom at night and smell like rotting fruit."



"I'm a big yellow flower with a large flat surface."



"I have a very deep, red flower."



"I like brightly-colored long flowers."



"I crawl on the ground all the time!"



"I'm nocturnal and love sweet-smelling nectar."



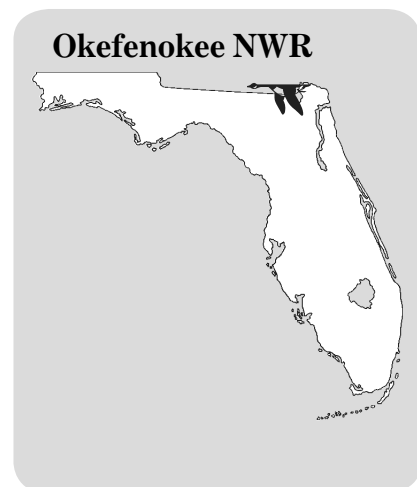
"I like to have a flat place to land."

Okefenokee NWR was established in 1936 to protect the swamp for the use of migratory birds and other wildlife. This immensely diverse ecosystem is home to 37 amphibians, 39 fish, 50 mammals, and 64 reptiles, 234 birds, and over 620 species of plants!

One of these plants is the Okefenokee hooded pitcher plant. This carnivorous plant lures insects into its trap with very sweet-smelling nectar. How does this plant get pollinated if it tries to eat them? Pollinators and plants have mutualistic relationships, meaning that they work together in order to survive.

The pitcher trap is located at the top of the plant's body, while the area where pollination occurs is near the ground. Many flying insects fall prey to the pitcher plant, whereas ground-dwelling beetles can get close to it without being eaten.

Each pollinator is attracted to a certain type of plant. Try to figure out pollinator-plant relationships in your backyard! It might be more complicated than you think.



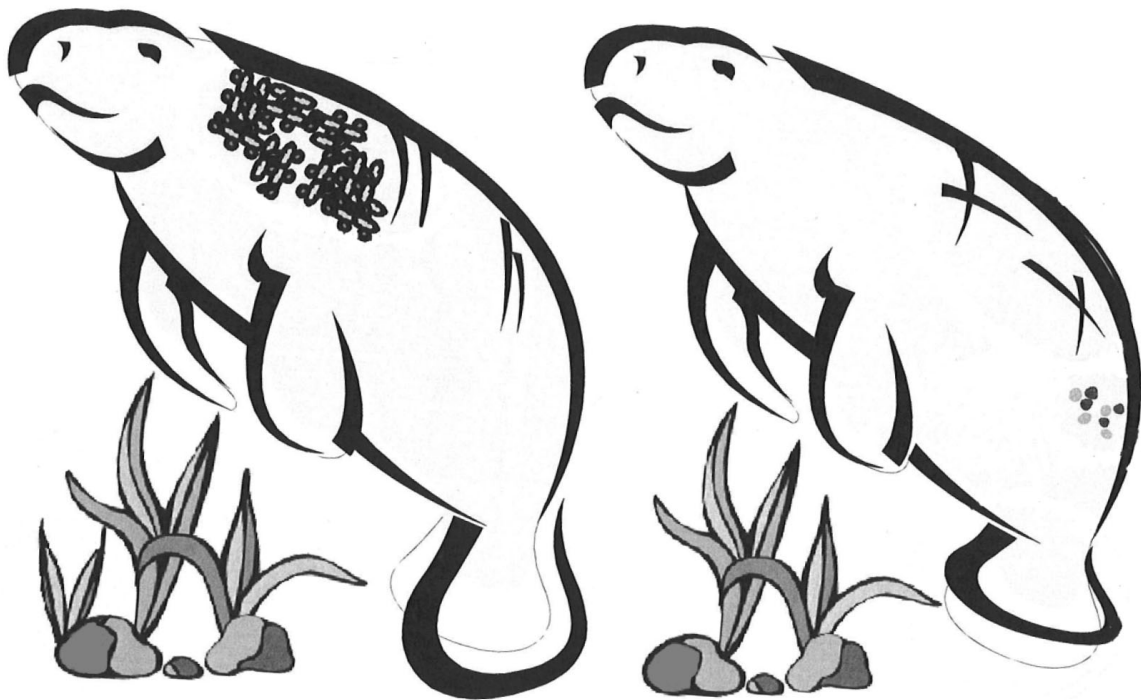
Florida Manatee

Trichechus manatus latirostris

Status: Federally Endangered

Spot the Difference

Though animals may look alike, many of them have scars and different features like humans. Try and spot the five differences between these two pictures.



Crystal River NWR was established in 1983 specifically for the protection of the endangered Florida manatee.

All manatees can live in slow-moving waters, brackish water, rivers, salt water bays, canals, and the ocean. They are found in Florida's coastal waters, along both the Gulf and Atlantic shorelines. Manatees depend on warm water for their survival. When water temperatures drop below 68 degrees F, they seek out warmer water in springs and man-made hot spots (like power plants).

Manatees are herbivores and eat 10% of their weight in plant material daily! Manatees are endangered mainly due to their interactions with humans, particularly collisions with watercraft, and have no natural predators. That's why it is very important to follow boating laws and pay attention to no-wake zones.



Florida Scrub Jay

Aphelocoma coerulescens

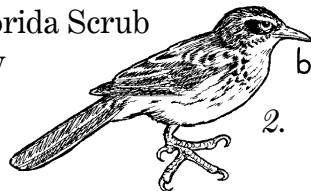
Status: Federally Threatened

Mixed Up Feet!

Can you help these birds? They all have the wrong feet! Match the bird with the number that represents the “correct” feet.

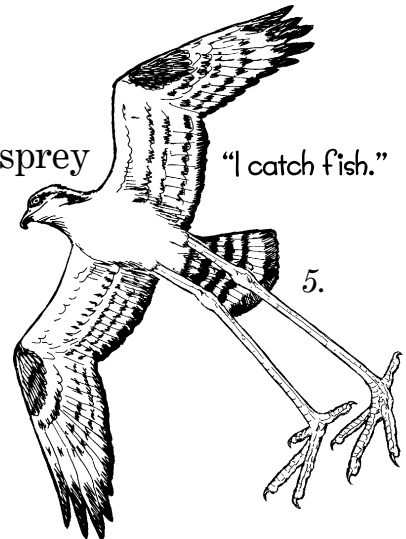
- ___ Great Egret
- ___ Osprey
- ___ Duck
- ___ Red-headed Woodpecker
- ___ Florida Scrub Jay

Florida Scrub Jay



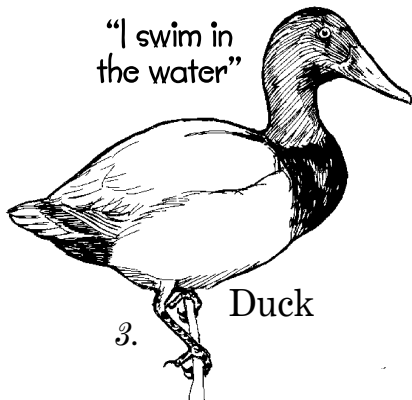
“I sit on branches.”

Osprey



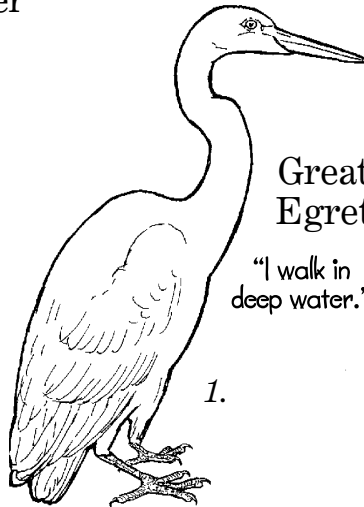
“I catch fish.”

“I swim in the water”



Duck

Great Egret



“I walk in deep water.”

Red-headed Woodpecker



“I cling onto trees”

Hobe Sound NWR was established in 1969 on land donated by local residents. The dune and barrier island communities provide important wildlife habitat.

During the breeding season, the male and female scrub jays work together to build a twig nest in spring and help incubate the 3-5 eggs. Young jays stay in the territory for at least one year as “helpers,” defending the nest and territory and feeding the chicks. Scrub jays feed on insects, spiders, frogs, lizards, acorns, and berries.

The Florida scrub jay is threatened due to the loss of the oak scrub habitat, and is only found in Florida! The bird is also dependent upon the periodic burning of this habitat. Controlled fires burn old vegetation, and make way for new plants, with increased berry and acorn production.



Hobe Sound NWR

Key Deer

Odocoileus virginianus clavium

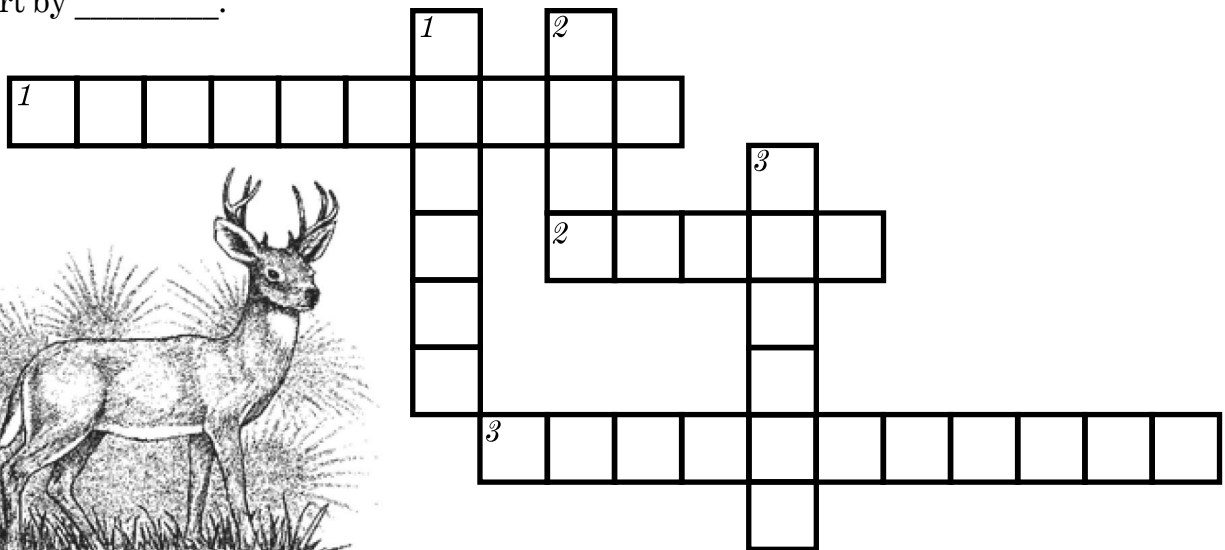
Status: Federally Endangered

Across

- The Key deer is _____, which means it is in danger of extinction.
- The Key deer is very tiny or _____.
- The Key deer population was hurt by _____.

Down

- National Key Deer _____ protects habitat for this animal.
- The Key deer lives on small islands, or _____.
- What does the Key deer like to eat?



National Key Deer Refuge was established in 1957 to protect the endangered Key deer; the smallest subspecies of white-tailed deer.

The Key deer is endangered because of collisions with vehicles, interactions with humans, and habitat destruction. By the 1940s the population had shrunk to fewer than 50 animals because of uncontrolled hunting. Today, with the establishment of the Refuge and intensive law enforcement, the population has stabilized.

The Key deer is found on Big Pine Key and other surrounding keys, but nowhere else on earth. They eat mangroves, thatch palm berries, and other plants.



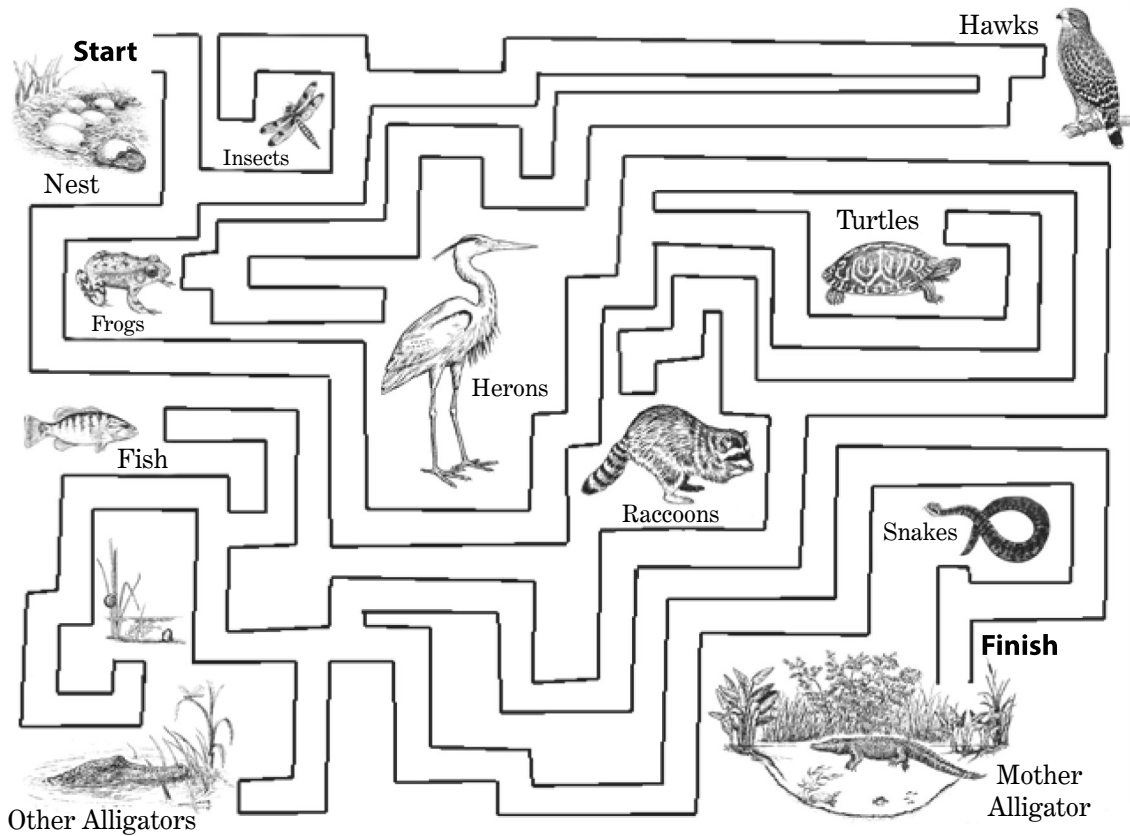
American Alligator

Alligator mississippiensis

Status: Similarity of Appearance to a Threatened Species

Alligator Crawl

Can you help the hatchlings find their way to the alligator hole? Which of these animals would like to eat the eggs or young alligators? Which would share the alligator hole with the alligator?



Merritt Island NWR was established in 1963 through a management agreement with the Kennedy Space Center. The Refuge shows how nature and technology can coexist.

Adult alligators have no predators except people, who once hunted the alligator for its soft belly skin. Alligators are found in the southeastern United States in large shallow lakes, marshes, swamps, rivers, creeks, and ponds. Adult alligators eat fish, turtles, mammals, snakes, birds, and smaller alligators!

Did you know that alligators help other species survive during the dry winter months? Alligators dig gator holes that hold water in dry weather where fish, frogs, crayfish, insects, and other aquatic life can survive until the rains come again.



Puerto Rican Parrot

Iguaca (Spanish)

Amazona vittata

Status: Endangered

Endemic to Puerto Rico

West Indian Whistling-Duck

Chiriría (Spanish)

Dendrocygna arborea

Status: Critically Endangered in Puerto Rico

Scrambled Names

Unscramble the letters to form the names of these common birds.



RCIBALKDB

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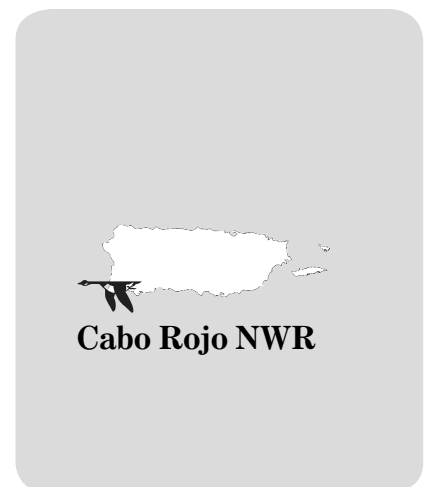
URLUVET

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Cabo Rojo NWR was established in 1974 as an upland buffer for the Cabo Rojo Salt and its potential value as habitat for migratory birds. Laguna Cartagena NWR, a lagoon, was established in 1989 and is a remnant of what was once a large open expanse of water and one of the most important freshwater habitats for migrating and aquatic birds in Puerto Rico.

The Puerto Rican parrot's primary flight and main covert feathers are dark blue, which can be seen during flight. The body and tail are covered predominantly in green plumage and the forehead is predominately red. When resting, the red forehead and white around the eyes are the main ID's.

The West Indian whistling-duck is the largest of the whistling-ducks. It is a long necked brown duck with a whitish belly, face, sides of the upper throat and chin with dark markings on the flanks. A combination of habitat loss, over-hunting, and predation by introduced rats and mongoose have led to its population decline.



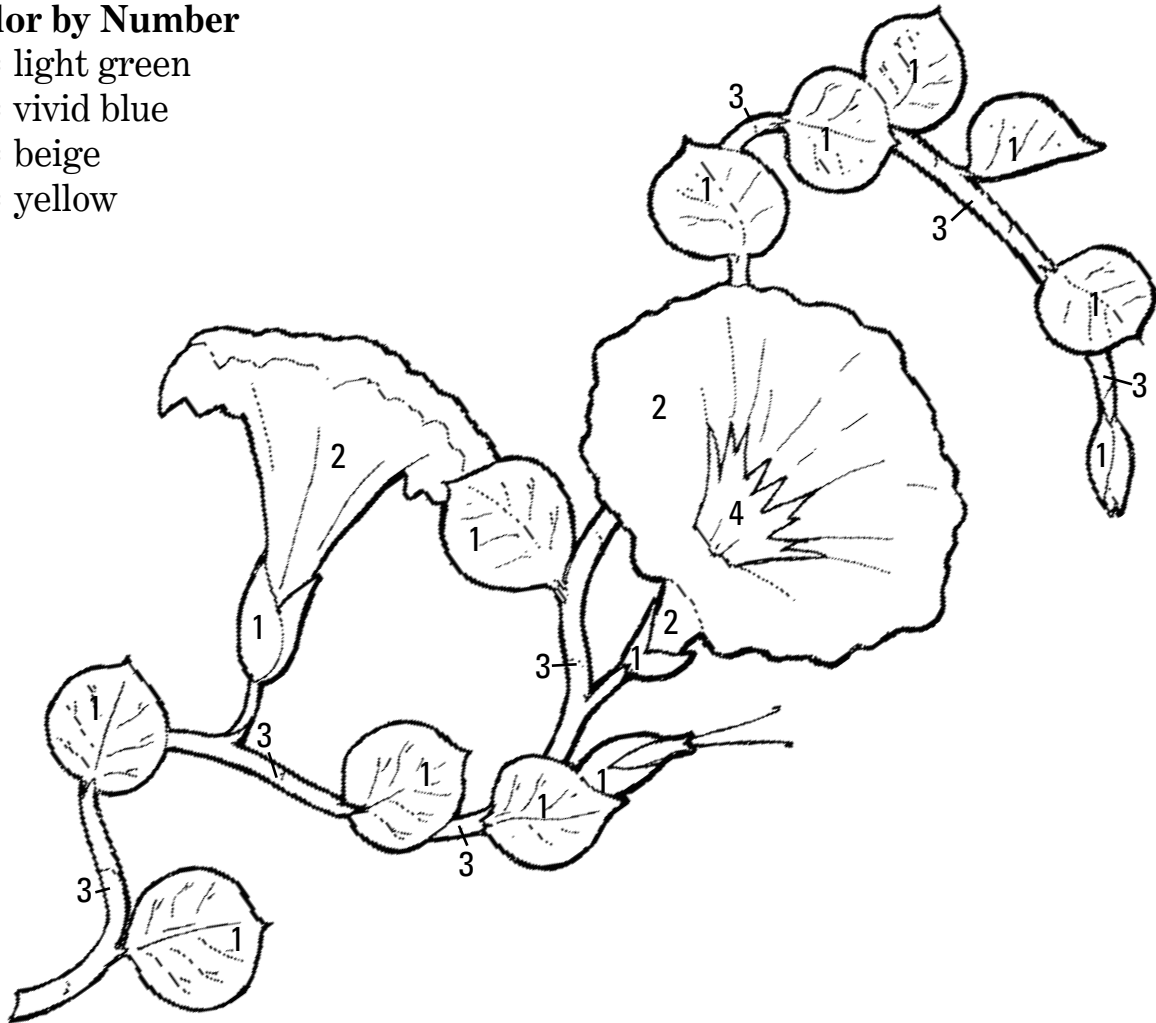
Florida Bonamia

Bonamia grandiflora

Status: State Endangered, Federally Threatened

Color by Number

- 1 = light green
- 2 = vivid blue
- 3 = beige
- 4 = yellow



Lake Wales Ridge NWR was established in 1993 for the protection of rare scrub vegetation found along a high sandy ridge which runs down the middle of Florida.

Millions of years ago, when sea levels were much higher, Florida consisted of a series of islands which remained above the ocean. Today, the ocean is 60 miles away, but traces of these ancient islands remain and form the present Lake Wales Ridge.

Isolated from the mainland for millions of years, a unique group of plants and animals developed. The only place in the world where these plants still exist is along the Lake Wales Ridge. It is the first refuge established specifically for the protection of plants, like the endangered Florida Bonamia, a member of the morning glory family.



Red-cockaded Woodpecker

Picoides borealis

Status: Federally Endangered

Can you **FIND** the endangered **Red-cockaded Woodpecker** in its **longleaf pine** forest habitat?
COLOR the picture after you find it! Hint: There is only one woodpecker in this picture.



St. Marks NWR was established in 1931, and includes close to 68,000 acres.

The seven-inch red-cockaded woodpecker makes its nest in mature living longleaf pine trees, usually those with a fungus which softens the heartwood, making it easier to dig a cavity. This unique woodpecker is one of the only species to use live trees as their tree of choice for a cavity nest site.

This woodpecker is endangered because the pine trees are usually cut for timber before they reach old age. 97% of the original longleaf pine habitat has been destroyed. Without the conservation of the longleaf pine forest habitat, the red-cockaded woodpecker would not continue to survive.

Woodpeckers drill small holes around the cavity to cause resin to flow, which protects the nest from predators, like raccoons and snakes.



Red Wolf

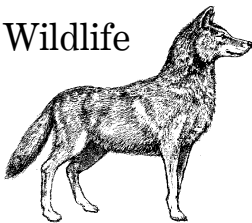
Canis rufus

Status: Federally Endangered

Hidden Words

Look for these hidden words in the puzzle below. Answers can be found forwards, backwards, up and down, or diagonally.

| | | | | | | | | | | | | | |
|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Habitat | Q | W | T | H | R | A | L | Y | V | U | I | X | P |
| Canis Rufus | A | I | C | A | N | I | S | R | U | F | U | S | B |
| Deer | W | L | R | B | R | L | A | I | C | O | S | B | E |
| Raccoon | O | D | L | I | P | A | C | K | S | R | E | E | D |
| Packs | L | L | T | T | W | B | L | L | N | L | T | S | R |
| Mammal | F | I | K | A | B | A | C | R | D | N | F | G | K |
| St. Vincent | M | F | J | T | M | O | A | R | E | F | U | G | E |
| Wolf | N | E | F | M | R | C | Q | C | N | O | J | F | H |
| Social | Q | B | A | S | C | T | N | H | O | P | I | E | L |
| Endangered | V | M | U | O | Z | I | B | M | G | Y | D | K | Q |
| Breeding | W | X | O | Y | V | A | C | I | J | O | O | N | M |
| Refuge | B | N | D | T | B | H | T | U | V | W | S | T | R |
| Wildlife | C | F | S | D | E | R | E | G | N | A | D | N | E |
| | D | E | G | Y | X | G | N | I | D | E | E | R | B |



Established in 1968, **St. Vincent NWR** includes St. Vincent Island, a barrier island on Florida's Gulf Coast. Red wolves have been released on St. Vincent Island to breed and supplement the existing population of this endangered species.

Wolves are social animals, forming small family groups, called packs. They hunt for raccoons, rabbits, rodents, and white-tailed deer.

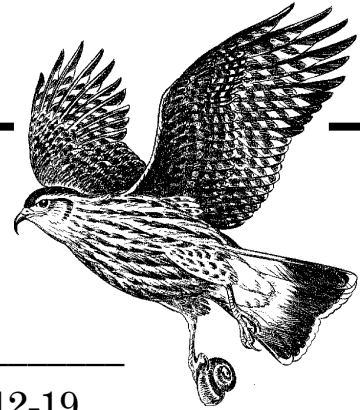
The red wolf is endangered due to loss of habitat and persecution by humans. The refuge is an "island propagation site" for the red wolf. Adults raise their pups to 18 months of age, then they are transported to suitable habitat on the coast of North Carolina to help sustain the only wild population of red wolves left in the world.



Snail Kite

Rostrhamus sociabilis plumbeus

Status: Federally Endangered



Secret Messages

Can you decode the answers to questions about the snail kite? Use the code below to discover the answers.

1. What do snail kites eat? _____
1-16-16-12-5 19-14-1-9-12-19
2. Where do snail kites live? _____
6-18-5-19-8-23-1-20-5-18 13-1-18-19-8-5-19
3. Why are they in trouble? _____
12-15-19-19 15-6 8-1-2-9-20-1-20
4. The kite is a _____. _____
2-9-18-4 15-6 16-18-5-25
5. Loxahatchee Refuge protects part of the _____
5-22-5-18-7-12-1-4-5-19

| | | | | | | | |
|------|------|------|------|------|------|------|------|
| A=1 | E=5 | I=9 | M=13 | Q=17 | U=21 | Y=25 | B=2 |
| F=6 | J=10 | N=14 | R=18 | V=22 | Z=26 | C=3 | G=7 |
| K=11 | O=15 | S=19 | W=23 | D=4 | H=8 | L=12 | P=16 |
| T=20 | X=24 | | | | | | |

Arthur R. Marshall Loxahatchee NWR was established in 1951. It protects the northern portion of the Everglades.

The snail kite is a slate-gray, hawk-like bird of prey. The kite has a sharply hooked beak which is perfectly adapted for getting its main food, the apple snail, out of its shell.

Preservation of the endangered snail kite will depend on protection and proper management of their freshwater marsh habitat through cooperative efforts between federal, state, and local agencies.



Gopher Tortoise

Gopherus polyphemus

Status: Federally Threatened




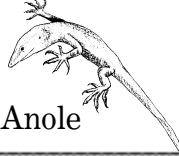













Roseate Spoonbill

Platalea ajaja

Status: State Threatened

Bird Bingo

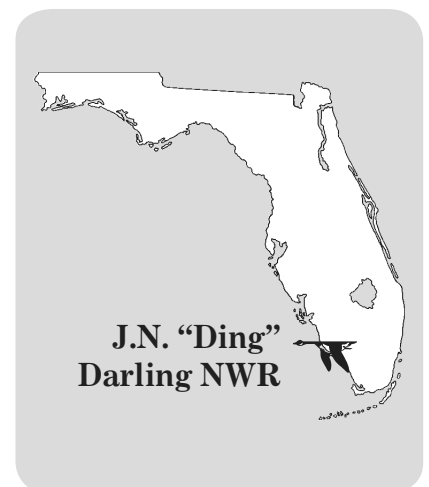
While visiting the refuge, look for all these plants and animals around the water. Some birds are long-legged wading birds. One is a bird of prey. Look underwater for some animals. How many can you find? Can you get BINGO?

| | | | | |
|---|--|--|---|---|
|  Fish |  Red Mangrove |  Snowy Egret | Something smooth |  Anole |
| Something red |  Horseshoe Crab |  Snail | Something that smells bad |  Anhinga |
|  Spider | Animal Noise | FREE SPACE |  White Ibis |  Cormorant |
| Scat |  Roseate Spoonbill | Something yellow |  Brown Pelican |  Little Blue Heron |
|  Wood Stork |  Animal Tracks |  Osprey | Something cool |  American Alligator |

J.N. “Ding” Darling NWR was established in 1945. The refuge is named for one of the pioneers of the conservation movement, Jay Norwood “Ding” Darling, a political cartoonist who designed the first “Duck Stamp”.

“Ding” Darling hosts one of the largest wintering concentrations of spoonbills in this country. There are two breeding populations of spoonbills in Florida. One nests in Florida Bay in the fall, the other nests in the Tampa Bay area in the spring. Spoonbills are known to be night-foraging birds.

The gopher tortoise is a slow-moving, land turtle. It grazes on grasses and other plant foods throughout the day. The gopher tortoise uses its spade-like front legs to dig long underground burrows which it shares with a number of other animals, including the indigo snake. Both the tortoise and the snake are in danger due to the loss of suitable habitat to development.



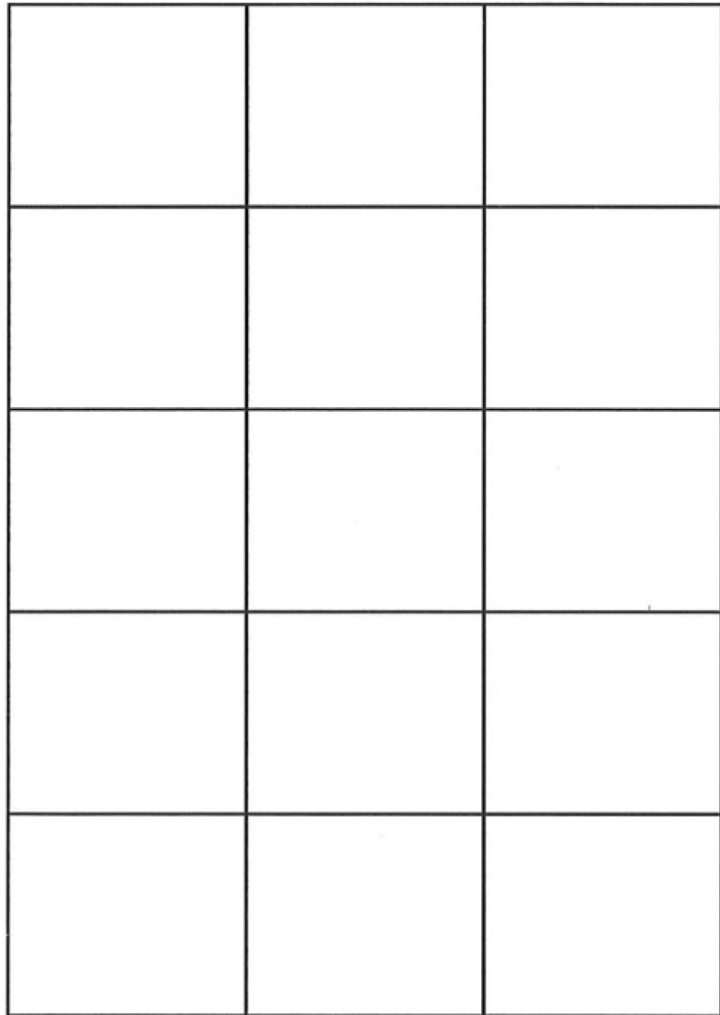
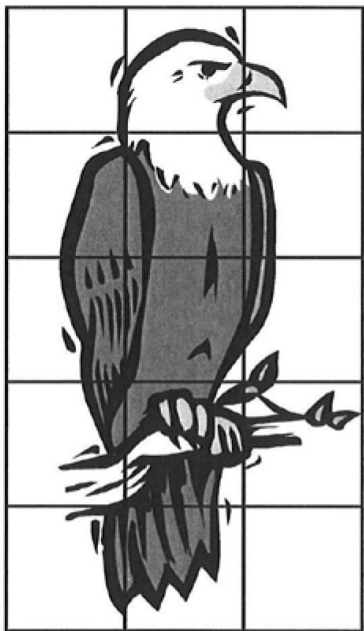
Bald Eagle

Haliaeetus leucocephalus

Status: Delisted due to Recovery

Be an Artist!

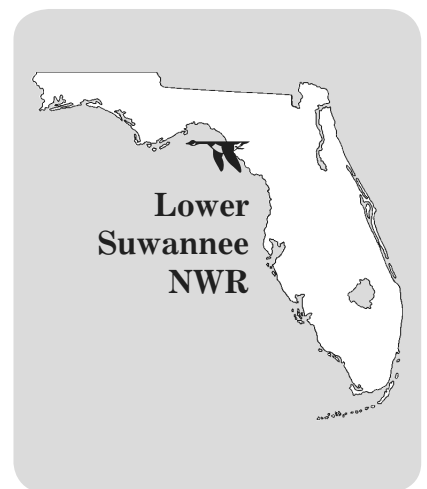
Draw this bald eagle by copying it one square at a time.



Lower Suwannee NWR was established in 1979 and contains different habitats including coastal salt marshes, freshwater creeks and rivers, hardwood swamps, and upland sandhills.

Bald eagles are large, magnificent birds of prey. The eagle does not attain the white head and tail feathers until 4 to 5 years of age. Bald eagles are found in open areas and forests, near water. They feed mainly on fish, carrion, and waterfowl.

The eagle was once in danger of extinction due to loss of habitat, pesticide pollution, and illegal hunting, but the prohibition of certain pesticides helped restore the population. Bald eagles live for 30 years or more and often return to the same nest year after year, adding to it until it reaches weights of a thousand pounds or more.



Florida Panther

Felis concolor coryi

Status: Federally Endangered

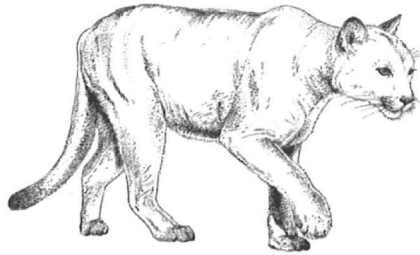
Bobcat

Lynx rufus

Status: Least Concern

What's the Difference?

Use the spaces below to list some things that are different between the Florida panther and the bobcat. You can use the paragraphs under this activity to help formulate your answers.



| |
|-------|
| _____ |
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Florida Panther NWR was established in 1989 specifically to protect habitat for the endangered Florida panther. It is a large, light brown cat now found only in south Florida in the refuge, Big Cypress National Preserve, and Everglades National Park. This feline needs a large habitat since it can travel as far as 20 miles in a single day searching for deer, its main food source. Illegal hunting and the loss of its habitat have pushed the panther to the edge of extinction.

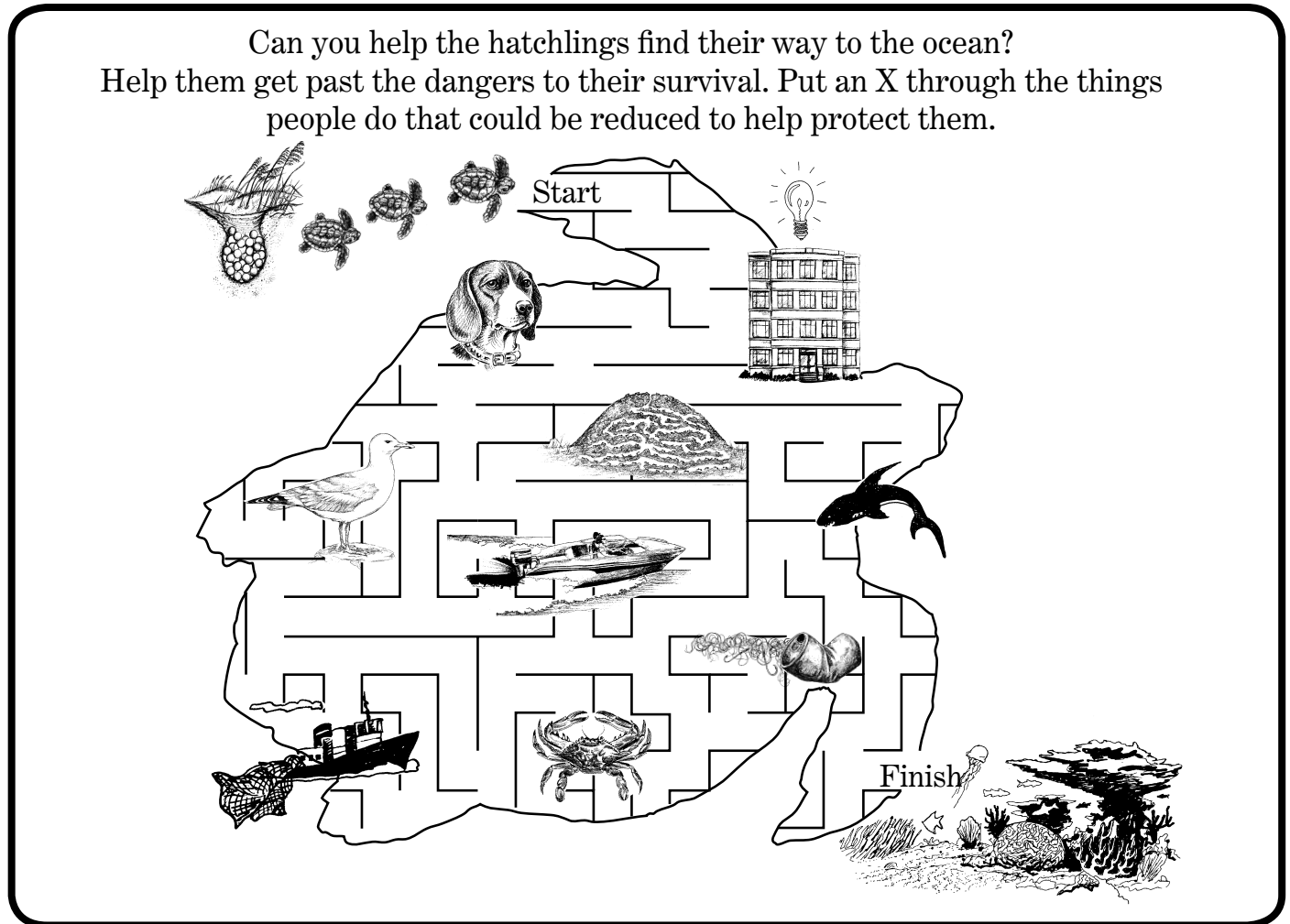
In Florida, this cat is often confused with another member of family Felidae, the bobcat. Bobcats live all throughout North America, and their populations are stable. Male panthers can be almost 8 feet long, including their long tail, and weighs up to 120 pounds, whereas the bobcat is about 2 feet long and only weighs up to 30 pounds. Look carefully when you are outdoors so you can tell the difference!



Loggerhead Sea Turtle

Caretta Caretta

Status: Federally Endangered



Archie Carr NWR was established in 1991 to provide protected nesting beaches for sea turtles. Five species of sea turtles nest on the beaches of Florida: Atlantic loggerhead, Atlantic green turtle, Atlantic hawksbill, Atlantic leatherback, and Kemp's Ridley turtle.

As with all of these turtles, the loggerhead sea turtle is endangered mostly because of nesting habitat loss. Development has claimed many of the nesting beaches. Bright lights disorient the hatchlings, preventing them from reaching the ocean. Turtles also drown in fishing and shrimping nets. The skin of the loggerhead ranges in color from yellow to brown, with a reddish-brown shell. They are omnivorous, and feed mostly on bottom dwelling invertebrates but also on other creatures such as jellyfish, sand dollars, plants, corals, etc.

Sea turtles are large, marine turtles that come ashore only to lay eggs. The female returns to the beach where she hatched, crawls up onto the sand, digs her nest, and lays her eggs. She then leaves the eggs to hatch on their own.



Crested Caracara

Caracara cheriway

Status: Federally Threatened

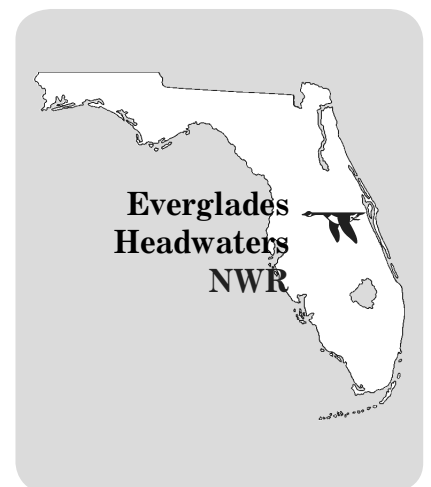
Time to Research!

Use a bird identification book or a cell phone app to research what the crested caracara looks like and even other birds. Then draw its grassland savanna habitat in the background



Everglades Headwaters NWR is one of the greatest grassland savanna landscapes of eastern North America. This area is a mosaic of seasonally wet grasslands, longleaf pine savannas, and cattle ranches. This habitat sustains some of the most imperiled wildlife in the southeast U.S., and a large portion of the unprotected natural habitat remaining in peninsular Florida.

The grassland savannas represent the northern range limit and the last stronghold for the crested caracara, the national bird of Mexico! This unique bird's diet consists of carrion, amphibians, reptiles, mammals, eggs, and even other birds. Caracara populations have declined in the past due to hunting and habitat loss to urban development and agriculture.



Answers Page

Pg. 9 - Tough Life

Predators- raccoon, cat, gull

Human-related- parking lot, polluted water, buildings, overgrazing, oil spill, trash

Natural events- hurricane, disease, flood, drought

Pg. 10 - Group Up

FISH- fry, school DOLPHIN- calf, herd/pod HERON- chick, sedge

JELLYFISH- ephyra, smack BEE- larva, swarm OYSTER- spat, bed

MOSQUITO- wiggler, scourge SEA TURTLE- hatchling, bale

Pg. 11 - Make Words

There are about 2,509 words that can be made. Good luck!

Pg. 12 - Pollinator-palooza!

Hummingbird- deep, red flower

Beetle- pitcher plant

Bat- night-blooming flower

Bee- big yellow flower

Pg. 13 - Spot the Difference

Differences: algae on back, scars, sea grass, microorganisms near tail, size of tail.

Pg. 14 - Mixed Up Feet!

1. Florida scrub jay, 2. Red-headed woodpecker, 3. Osprey, 4. Duck, 5. Great egret

Pg. 15 - Word Fill-in

Across - 1. Endangered, 2. Small, 3. Habitat loss

Down - 1. Refuge, 2. Keys, 3. Plants

Pg. 17 - Scrambled Names

1. Blackbird, 2. Hummingbird, 3. Puerto Rican Parrot, 4. Duck, 5. Heron, 6. Vulture

Pg. 21 - Secret Messages

1. Apple snails, 2. Freshwater marshes, 3. Loss of habitat, 4. Bird of prey,

5. Everglades

Pg. 24 - What's the Difference?

Panther -light brown, found only in south Florida, main food source is deer, endangered, can be 8 feet long, can weigh up to 120 pounds, bigger size

Bobcat - found throughout North America, not endangered, can be 2 feet long, can weigh 30 pounds, spotted, smaller size

Tips for Visiting National Wildlife Refuges

Check the refuge website and social media pages prior to your visit to receive the latest information on access, trail accessibility, special activities, regulations, weather conditions, and more.

Leave only footprints – take only memories. The flower you pick today may be the food that feeds the butterfly tomorrow.

Keep your distance from wildlife. It is dangerous for you and the wildlife to get too close. When you approach wildlife, they may defend themselves or flee; either way robbing them of precious energy.

Plan to arrive in the early morning or late afternoon when wildlife is most active. Wildlife generally rest during the heat of the day and stay hidden in the shadows where they are less likely to be seen.

When driving a tour-route or road, you should remain in your vehicle as it makes an excellent blind. Wildlife is less wary of a slow-moving or stationary vehicle than it is of a potential predator on foot.

Let us know how we are doing. Your comments are important to us so that we can ensure a quality experience for others.

America's Best Kept Secrets: National Wildlife Refuges & Hatchery

| | |
|-------------------------------|-------------------------------|
| Archie Carr NWR | Key West NWR |
| A.R. Marshall Loxahatchee NWR | Laguna Cartagena NWR |
| Buck Island NWR | Lake Wales Ridge NWR |
| Cabo Rojo NWR | Lake Woodruff NWR |
| Caribbean Islands NWR | Lower Suwannee NWR |
| Caloosahatchee NWR | Matlacha Pass NWR |
| Cedar Keys NWR | Merritt Island NWR |
| Chassahowitzka NWR | National Key Deer Refuge |
| Crocodile Lake NWR | Navassa Island NWR |
| Culebra NWR | Okefenokee NWR |
| Crystal River NWR | Passage Key NWR |
| Desecheo NWR | Pelican Island NWR |
| Egmont Key NWR | Pine Island NWR |
| Everglades Headwaters NWR | Pinellas NWR |
| Florida Panther NWR | Sandy Point NWR |
| Great White Heron NWR | St. Johns NWR |
| Green Cay NWR | St. Marks NWR |
| Hobe Sound NWR | St. Vincent NWR |
| Island Bay NWR | Ten Thousand Islands NWR |
| J.N. "Ding" Darling NWR | Vieques NWR |
| | Welaka National Fish Hatchery |



<https://www.fws.gov/southeast/>



Special thanks to the "Ding" Darling Wildlife Society and sponsored in part by the State of Florida, Department of State, Division of Cultural Affairs and the Florida Council on Arts and Culture.

