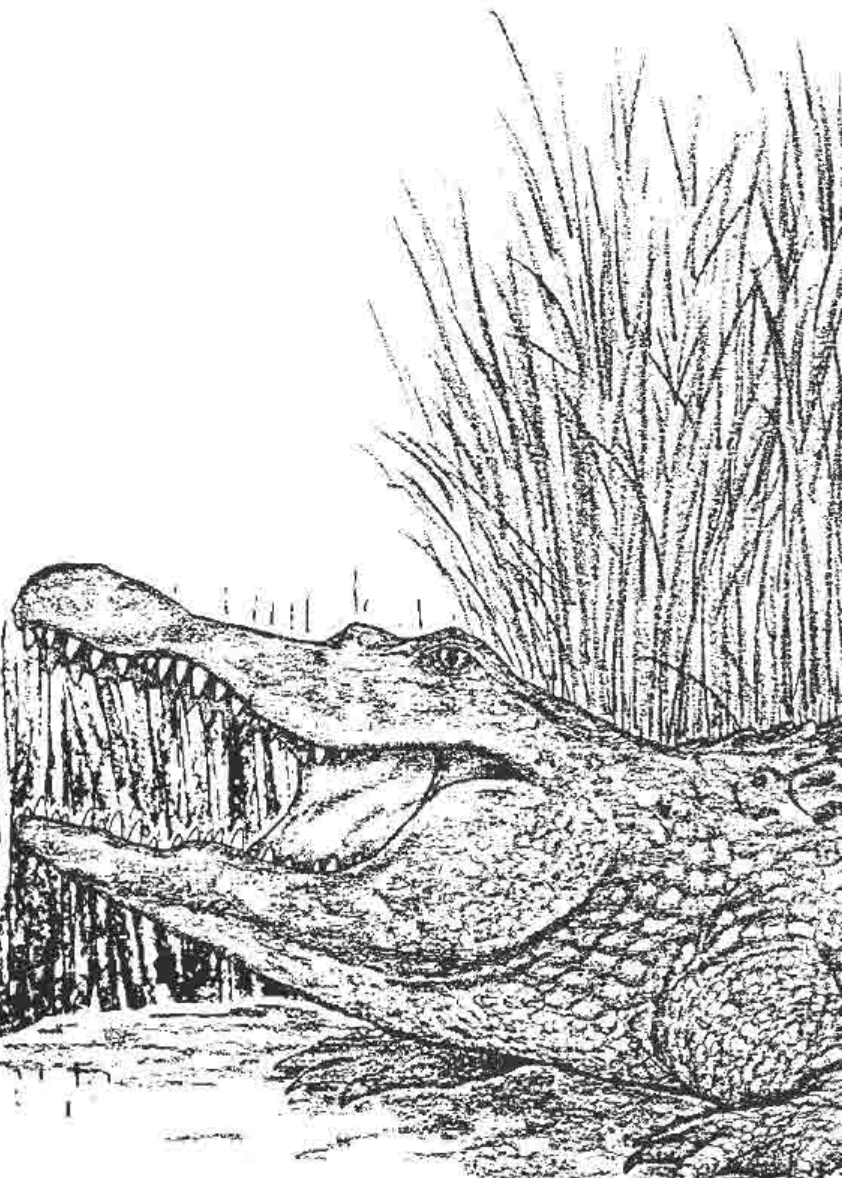


U.S. Fish & Wildlife Service

Florida

Activity Guide



Tips for Visiting National Wildlife Refuges

Contact the refuge prior to your visit to receive the latest information on access, 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.

Prepared by the National Wildlife Refuges and National Fish Hatchery located in Florida

Illustrations by Wilderness Graphics, Inc., Tallahassee, FL

Activity on page 14 courtesy of Northeast Florida Regional Planning Council

Illustration of child on page 13 courtesy of Tom Broderick



FWS ACTIVITY BOOK

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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 and wildlife 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 more and more critical.

The Service manages National Wildlife Refuges and National Fish Hatcheries. In addition, the Service manages habitat for migratory birds, protects endangered species, enforces wildlife laws, and consults on federal development projects.

National Wildlife Refuge System



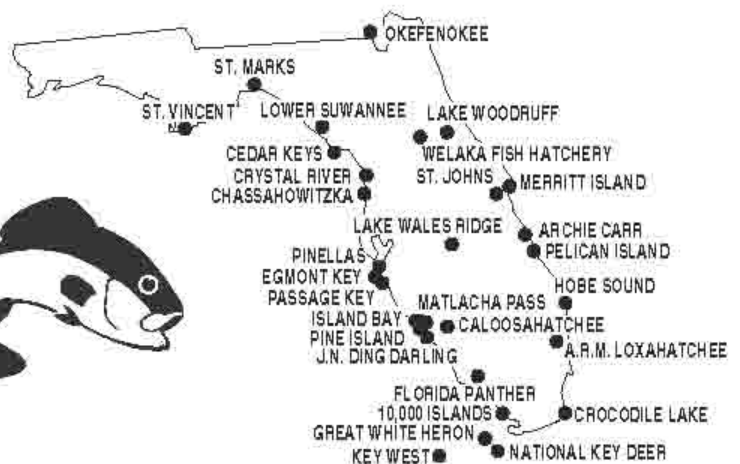
The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future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

National Wildlife Refuge System Improvement Act of 1997

The National Wildlife Refuge System is the world's largest and most diverse collection of lands set aside specifically for wildlife. Begun in 1903, with tiny Pelican Island Refuge, the system now includes over 500 refuges that stretch across our country.

Refuges and Hatcheries in Florida

Florida is fortunate to have 29 National Wildlife Refuges and one National Fish Hatchery. These refuges include habitats from woodlands to beaches, and grasslands to swamps, providing places for a wide variety of wildlife. The hatcheries are important in working to restore fisheries 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

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

Concerned citizens appealed to President Theodore Roosevelt for help. In 1903, President Roosevelt created the first refuge, tiny Pelican Island in Florida, to protect pelicans and other birds. This three-acre refuge in the Indian River was, and still is, a nesting place for herons and pelicans.

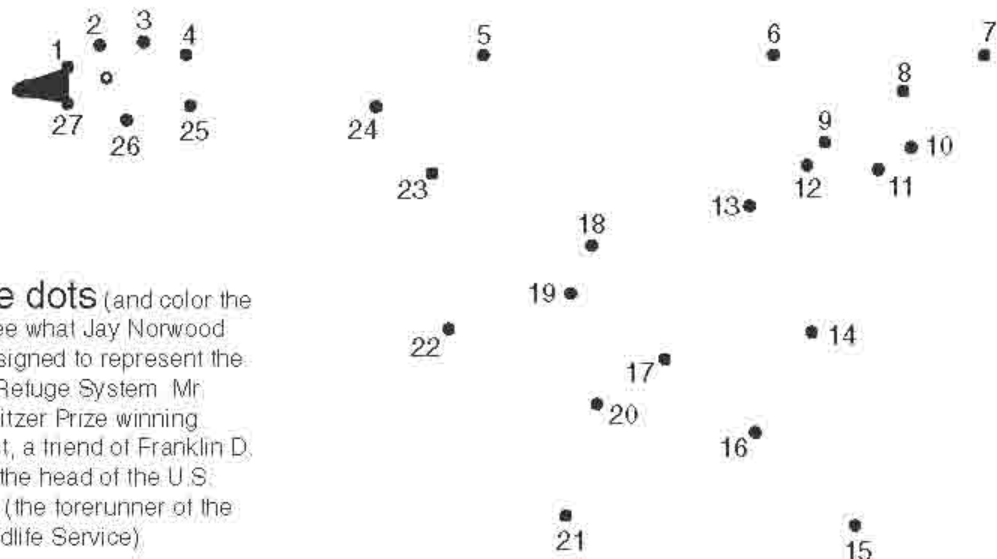
Today, the National Wildlife Refuge System is the world's largest and most diverse collection of lands and waters set aside specifically for wildlife. The Refuge System has grown to include more than 93 million acres of the nation's best wildlife habitats. Varying in size from half-acre parcels to thousands of square miles, our country's wildlife refuges stretch from the Arctic Ocean to the South Pacific and from Maine to the Caribbean.

Did you know these wild facts?

There are over 514 refuges, several thousand Waterfowl Production Areas, and over 3,000 Wetland Management Districts.

Refuges are important habitat for over 700 bird species, 220 mammal species, 250 reptile and amphibian species, and over 200 species of fish.

The Refuge System has almost 37.5 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.



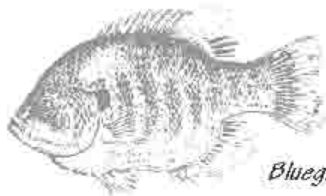
Connect the dots (and color the picture blue) to see what Jay Norwood "Ding" Darling designed to represent the National Wildlife Refuge System. Mr. Darling was a Pulitzer Prize winning editorial cartoonist, a friend of Franklin D. Roosevelt's, and the head of the U.S. Biological Survey (the forerunner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

National Fish Hatchery System

The National Fish Hatchery System was begun over one hundred years ago 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. The hatchery system is working to preserve this tradition for the future.



Channel Catfish



Bluegill

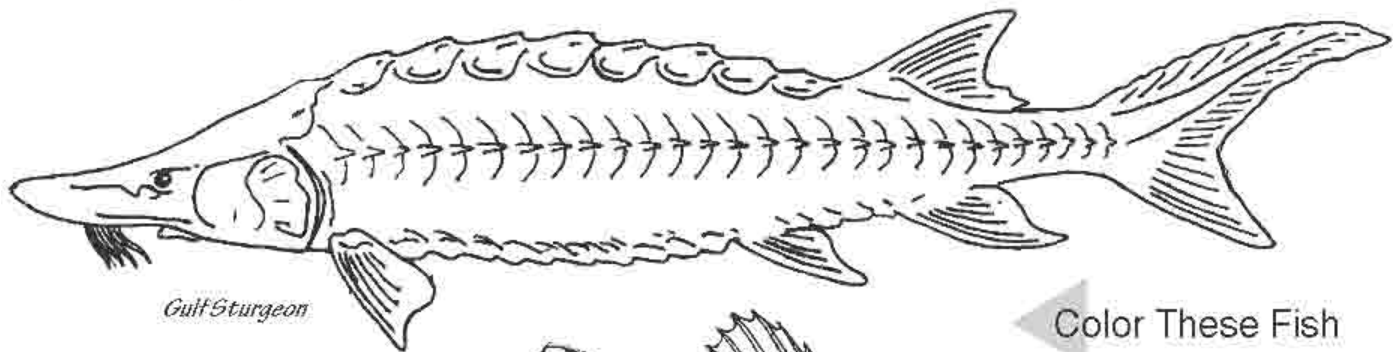


Largemouth Bass

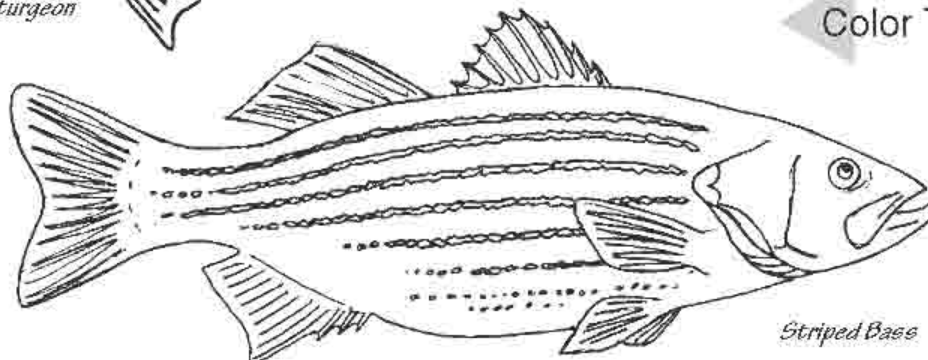
Welaka National Fish Hatchery

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

Striped bass and Gulf sturgeon are anadromous species, meaning they spend their lives along our coast in saltwater and then return once a year to freshwater to spawn. Populations of these species have declined, with sport and commercial fishermen alike reporting dwindling catches. Not all of the reasons for the decline are known, but it is agreed that a combination of factors, including loss of habitat, construction of dams, dredging of rivers, overfishing, and pollution are all important and connected reasons.



Gulf Sturgeon



Striped Bass

Color These Fish

Working for Wildlife

The U.S. Fish and Wildlife Service has many responsibilities besides managing refuges and hatcheries. Some of these include: providing biological advice, conserving migratory birds, saving endangered species, conducting research, working with public outreach, coordinating the Fish and Wildlife Partners program, responding to pollution problems, and enforcing wildlife laws.



Biological Advice

The U.S. Fish and Wildlife Service provides expert biological advice to state and federal agencies about the potential effects of certain projects that require a permit, such as dredge and fill activities, dams, or highways. Biologists recommend ways to avoid, minimize, or compensate for the harmful impacts these projects might have on fish and wildlife resources.



Conserving Migratory Birds

Many of our most familiar

birds fly thousands of miles in their annual migrations crossing state and national boundaries. The U.S. Fish and Wildlife Service is responsible for regulating hunting, studying bird populations, and managing refuges for habitat. The Service cooperates with state agencies as well as those of other countries.



Saving Endangered Species

The goal of the endangered species program is to restore species to the point that they are no longer endangered or threatened. The Service identifies species that appear to be in trouble. Service biologists work with other scientists to develop recovery plans that identify actions needed to help these species.



Conducting Research

Service laboratories investigate a wide range of topics including the effects of pesticides and other pollutants on fish and wildlife, fish health, nutrition, and ecology, migratory bird populations, habitat, diseases, and studies of endangered species and their habitats.

Fish and Wildlife Partners

The U.S. Fish and Wildlife Service provides technical

and financial assistance to private landowners so they can improve their land for fish and wildlife.



Pollution Response

Service personnel assess the effects of contaminants, or pollution, on fish and wildlife. Biologists take samples, help with cleanup of hazardous waste sites, identify and correct contaminants on wildlife refuges, and respond to emergency situations like oil spills that threaten fish and wildlife resources.

Public Outreach

The Service works with the community and schools to help people learn more about our country's fish and wildlife resources.

Enforcing Wildlife Laws

The Service enforces federal laws that protect endangered species, migratory birds, marine mammals, and fisheries. Special agents and inspectors investigate cases ranging from individual migratory bird hunting violations to large-scale poaching or trade in protected 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. For example, the white-tailed deer can live in forests, swamps, and grasslands, but a scrub jay needs a specific scrub habitat.

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 crocodile or Florida panther.



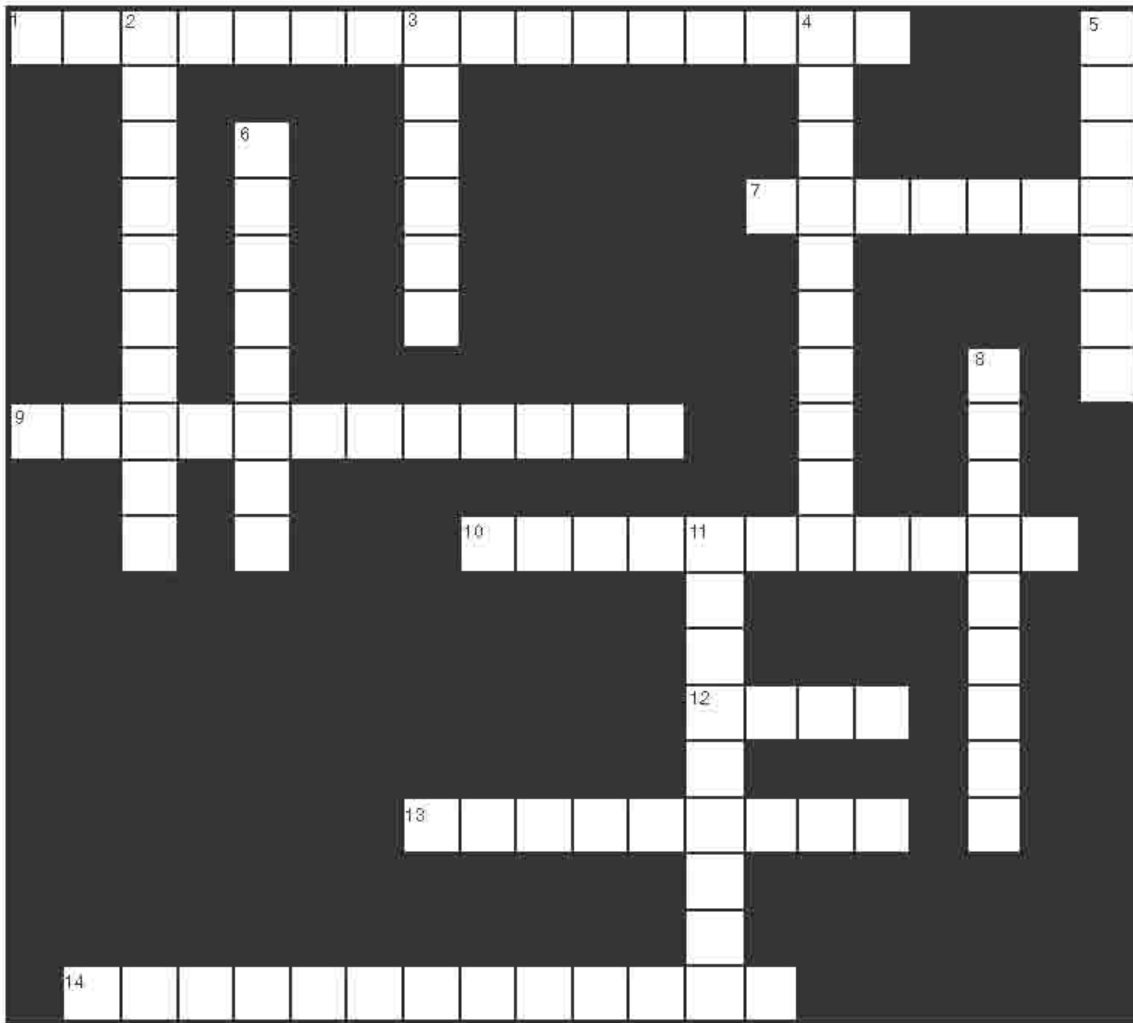
What in the world is an ecosystem?

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 fish and wildlife resources for all Americans to use and enjoy. Managing for the whole ecosystem is an approach in conserving environments to benefit a diversity of life.

Color this U.S. Fish and Wildlife Service Shield. The sun is yellow, and the mountains are orange. The sky is gold. The duck is dark blue. The fish is also dark blue. The water drops are white. The rest of the water is blue, except for one area that looks like a stream, which is white. The shield itself is light brown, with dark brown lettering, and dark brown border lines.





Across:

1. Wildlife is one of our country's _____
7. Food, water, shelter, space
9. Management of a natural resource to protect it
10. Species of endangered fish raised on hatchery in Florida
12. Rules to protect wildlife that FWS enforces
13. Kinds of birds that move from place to place in spring and fall
14. Name of first National Wildlife Refuge

Down:

2. Likely to become endangered
3. Protected place for wildlife
4. In danger of becoming extinct
5. To shield from danger
6. Place where fish are raised
8. Community of organisms
11. Something that contaminates the air, water, or land

American Crocodile

(*Crocodylus acutus*)

Status: Endangered

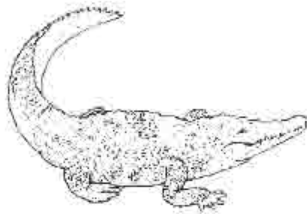
Schaus' Swallowtail Butterfly

(*Heraclidaes aristodemus*)

Status: Endangered

Can you match the adult with the young?

Each picture of the adult on the left has its young in the column on the right. Draw a line to match the young with what it will look like when all grown up.



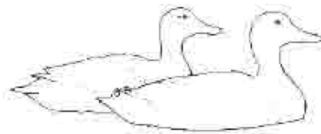
Crocodile



Brown Pelican



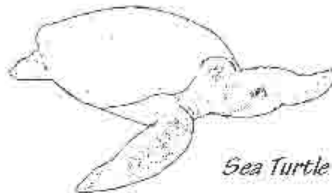
Schaus' Swallowtail Butterfly



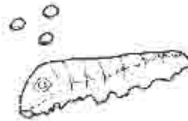
Duck



Frog



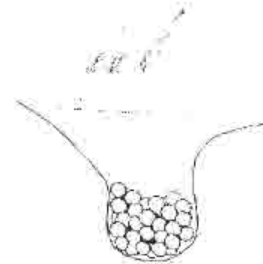
Sea Turtle



Eggs, Caterpillar



Tadpole



Nest with Eggs - Hole




Downy Young in Nest




Nest with Eggs - Mound





Ducklings


 Crocodile Lake NWR was established in 1979 to protect habitat for the endangered American crocodile and other wildlife.

 Often confused with the alligator, the American crocodile is a large reptile with dark gray-brown scaly skin.

 The crocodile is endangered due to hunting for its hide in the early 1900s, and by recent loss of its salt marsh and mangrove swamp habitat to development.

 A young crocodile feeds on many different kinds of aquatic animals, but the adult eats mostly fish.

 The Schaus' swallowtail butterfly is found in shady hardwood hammocks only in southernmost Florida. Development has eliminated much of its undisturbed habitat, threatening this butterfly's survival.

 The egg of the Schaus' swallowtail is green and the caterpillar is maroon with off-white patches and blue spots.

On which refuge might you find an American crocodile or a Schaus' swallowtail butterfly?



Crocodile Lake NWR


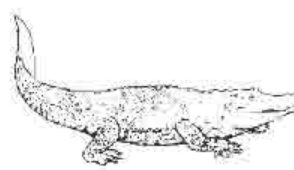


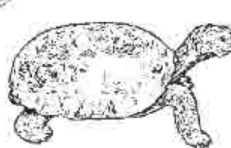







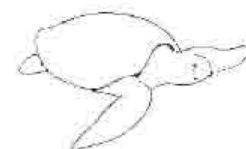




Brown Pelican


(*Pelecanus occidentalis*)


Status: Species of Special Concern (Florida)

Match the Animal with Food and Shelter

Habitat is defined as a place where an animal can find food, water, shelter, and space. Below are seven animals that need to find food and shelter. Help them find the right food and shelter by drawing a line to match them up. Some animals may share the same shelter or food.

Shelter	Animal	Food
 Marsh/Swamp	 Alligator	 Dragonfly
 Ocean/Beach	 Gopher Tortoise	 Seagrass
 Estuary/Seagrass Bed	 Brown Pelican	 Mosquito
 Pine Forest	 Manatee	 Crawfish
	 Sea Turtle	 Dandelion
	 Raccoon	 Fish
		 Frog

 Cedar Keys NWR was established in 1929 and is composed of 13 islands, totaling 800 acres, that provide sanctuary and nesting habitat for pelicans and wading birds.

 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.

 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."

On which refuge might you find a Brown Pelican?



Cedar Keys NWR

Indigo Snake

(Drymarchon corais couperi)

Status: Threatened

Gopher Tortoise


(Gopherus polyphemus)

Status: Species of Special Concern (Florida)


What's Different?


There are at least 6 things different in the picture on the right from the picture on the left. Can you find them?





 Chassahowitzka NWR was established in 1943 and provides important habitat for waterfowl as well as other wildlife.

 The gopher tortoise is a slow-moving, land turtle. It grazes on grasses and other plant foods many hours a day.

 The indigo snake is a large, glossy, blue-black snake. It is not poisonous and hunts during the cooler parts of the day for rodents, birds, amphibians, and reptiles.

 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.

On which refuge might you see an indigo snake and a gopher tortoise?



Chassahowitzka NWR

Florida Black Bear

(Ursus americanus floridanus)

Status: Threatened (except in Baker and Columbia Counties and Apalachicola National Forest, Florida.)

Help Tracie the Tracker identify these animal tracks!



- Raccoon
- White-tailed Deer
- Black Bear
- River Otter
- Squirrel
- Bald Eagle



2. _____

3. _____



1. _____



6. _____



4. _____



5. _____



Okefenokee NWR was established in 1937 to preserve the Okefenokee Swamp and the plants and animals that live there. Staff and researchers are studying black bears in the Okefenokee.



The Florida black bear is the only bear found in Florida. It is black, often with a brown muzzle and white chest blaze.



An adult male can weigh well over 300 pounds, but the blind, hairless cubs weigh only 1 pound at birth. Average males weigh 187 pounds and average females weigh 121 pounds – less than most human adults.



The black bear prefers habitat with dense cover, including cypress swamp and pine forests. It may range 90 square miles each year looking for food, including nuts, berries, roots, leaves, invertebrates, and small animals.



The bear's decline in population is most directly related to the loss of wilderness habitat.



Bears often den in tree cavities up to 100 feet above ground or in thick vegetation on the ground. They den from December through April.

On which refuge might you find a Florida black bear?



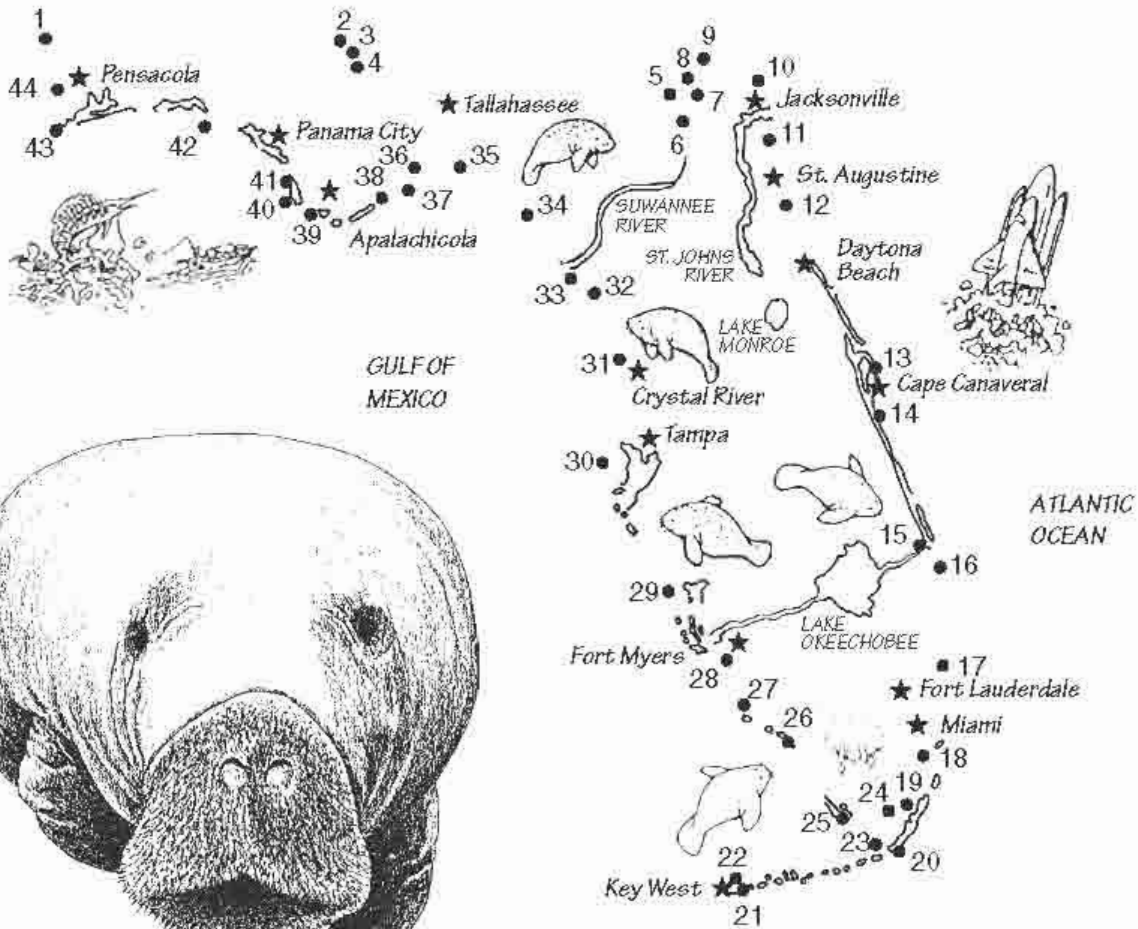
Okefenokee NWR

Florida Manatee


(*Trichechus manatus latirostris*)


Status: Endangered


Connect the dots to see where manatees live!



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

 All manatees can live in slow-moving waters, saltwater bays and 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 and cannot survive when water temperatures fall below 68 degrees Fahrenheit.

 Manatees are vegetarians and eat ten percent of their body weight in plants daily. That's 100 pounds of plants for a 1000 pound manatee! Some manatees weigh over 2000 pounds.

On which refuge might you find a manatee?



Crystal River NWR

Scrub Jay

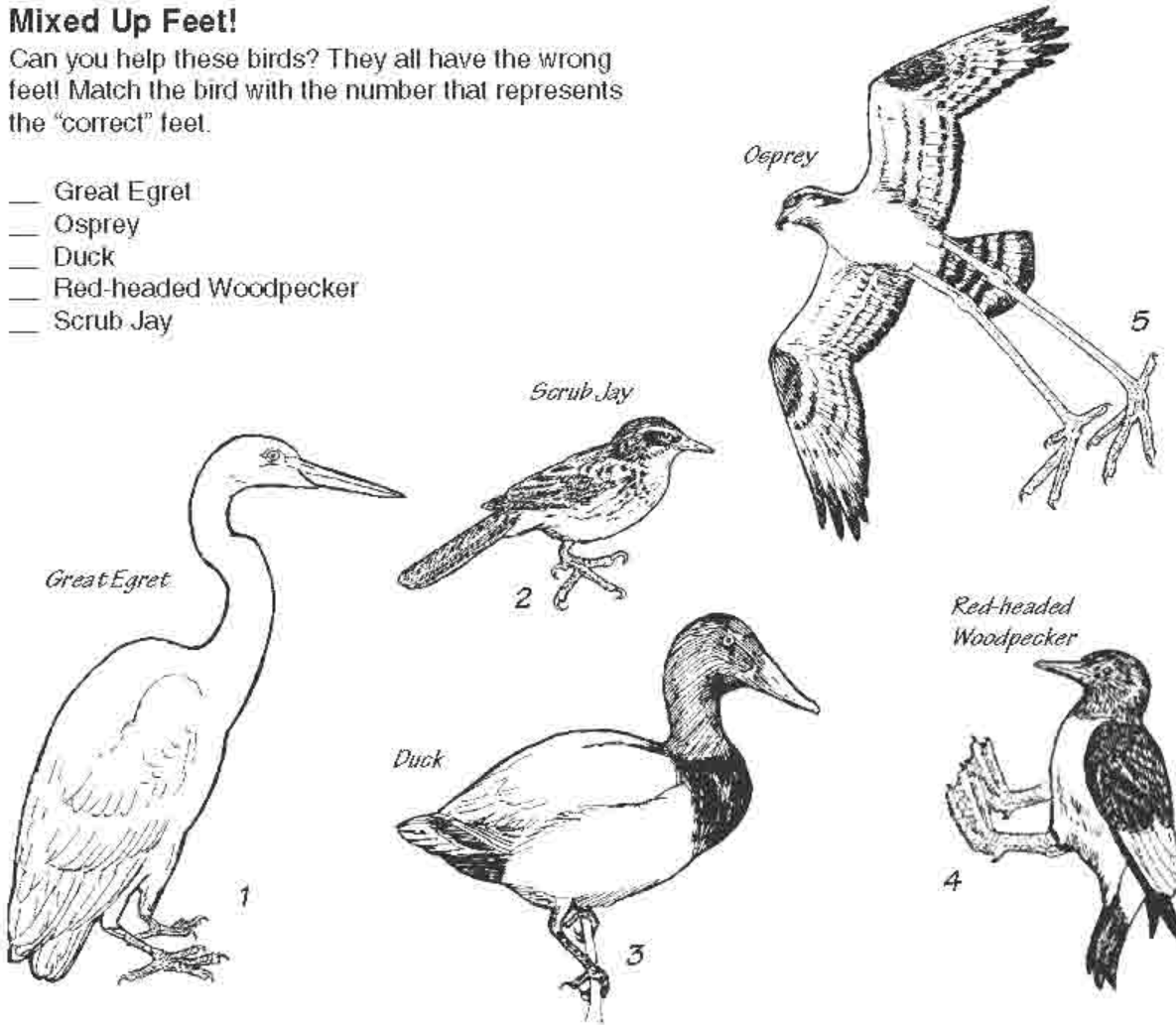
(*Aphelocoma coerulescens coerulescens*)


Status: 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
- ___ Scrub Jay




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

 The scrub jay has solid blue wings and tail, a black mask on the face, and a white throat which help distinguish it from the more common blue jay.

 Scrub jays mate for life. The male and female both 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.

 Scrub jays are threatened because the dry, scrubby habitat that they love is disappearing due to development, and lack of habitat regeneration by means of fire every 10 to 20 years.

On which refuge might you find a scrub jay?



Hobe Sound NWR

Key Deer

Odocoileus virginianus clavium

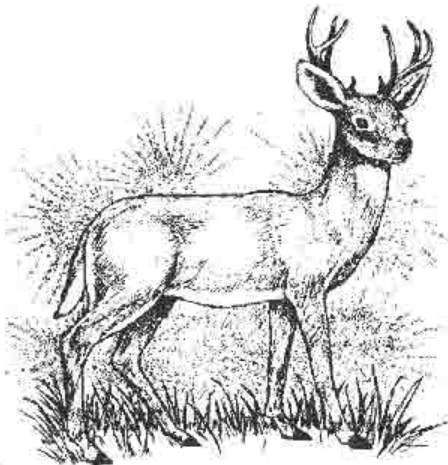
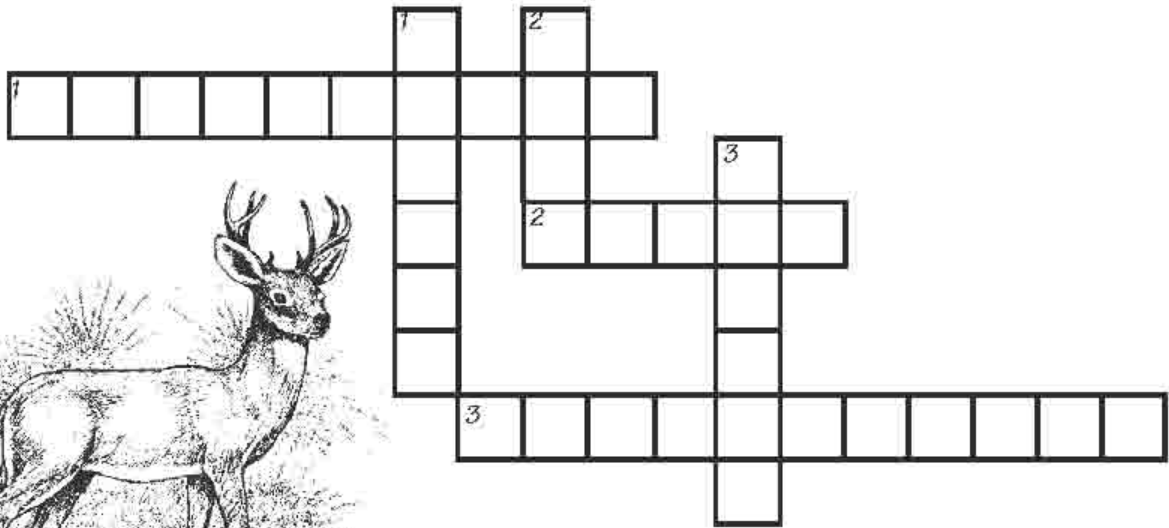
Status: Endangered

Across


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

Down

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



 National Key Deer Refuge was established in 1957 to protect the endangered key deer, the smallest of all white-tailed deer.

 The Key deer is in danger of extinction, or endangered, because of collisions with vehicles, interaction 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 at between 580-680 deer.

 The Key deer is found on Big Pine Key and other surrounding keys, or islands, but nowhere else on earth.

 The Key deer feed on mangroves, thatch palm berries, and other plants.

On which refuge might you find a Key Deer?



National Key Deer Refuge

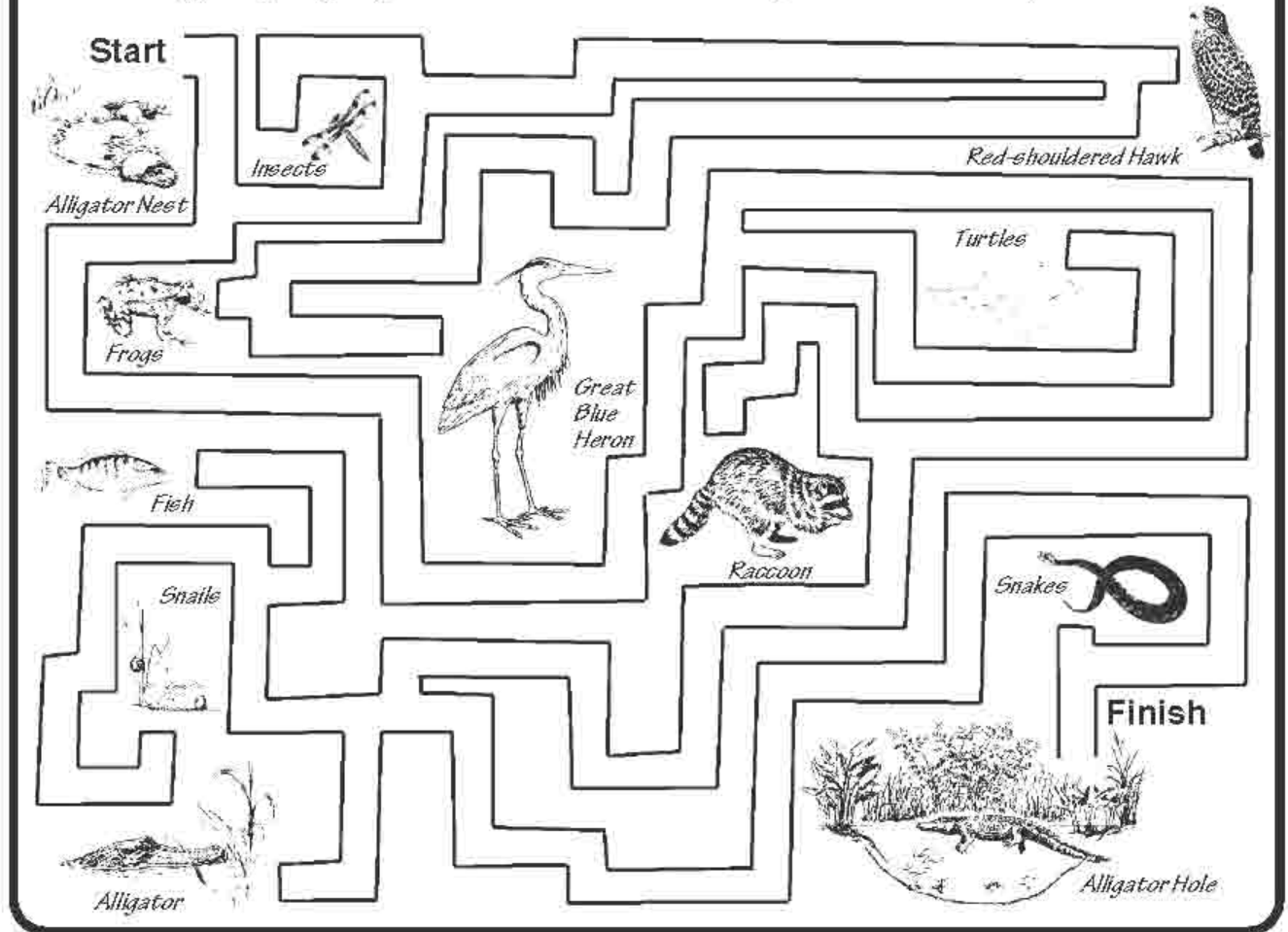
American Alligator


(*Alligator mississippiensis*)


Status: Threatened; Species of Special Concern (Florida)


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!

 Alligators are grayish-black reptiles. The largest gator in Florida was over 17 feet long, but an average male is 6 to 12 feet long.

 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.

On which refuge might you find an American alligator?



Merritt Island NWR

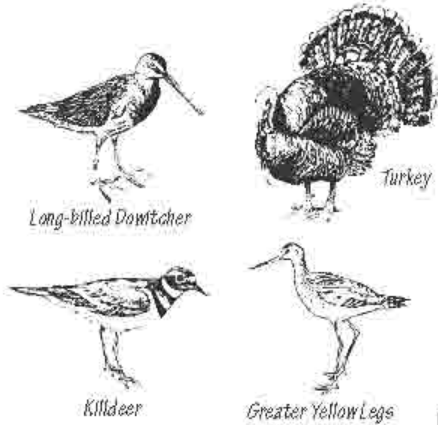
Limpkin

(*Aramus guarauna*)

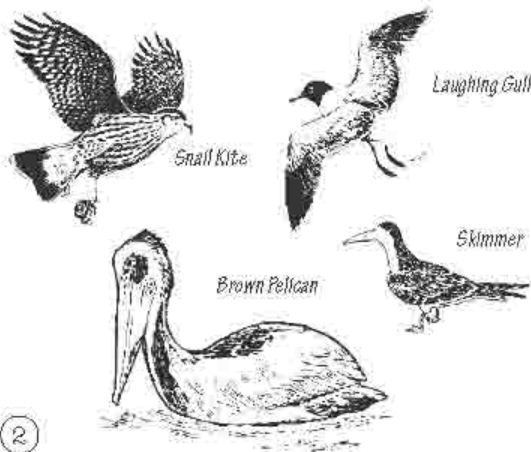
Status: Species of Special Concern in Florida

An Odd Bird

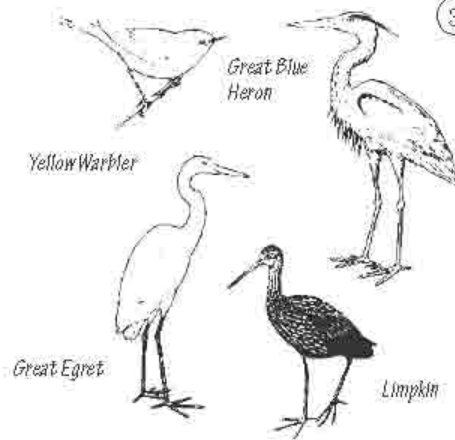
Circle the bird in each box that is not like the other birds in the box. Of the birds circled, which is the bird-of-prey? The game-bird? The neotropical migrant? Of the other birds in the boxes, which group of birds are shorebirds? seabirds? wading birds?



①





②





③


1. _____
- _____
- _____
- _____
- _____
2. _____
- _____
- _____
- _____
- _____
3. _____
- _____
- _____
- _____

 Lake Woodruff NWR was established in 1964 as a migratory bird refuge and includes over 21,500 acres of various habitats along the St. Johns River. Most of the refuge acreage is considered wetlands with large tracts of hardwood swamps and freshwater marshlands.

 The limpkin is generally an elusive and secretive bird that is hard to spot in the swamplands due to its excellent camouflage coloration of brown feathers and some white spotting and streaking.

 The limpkin has a long bill which is slightly curved downward and is used for probing. The limpkin's favorite food is the apple snail which is only found in freshwater marshes and swamplands.

 The limpkin produces a loud wailing call which has earned it the name "crying bird."

 The limpkin was almost hunted to extinction during the 1920s, but today the population is fairly stable with almost the entire population occurring in the state of Florida.

On which refuge might you find a limpkin?



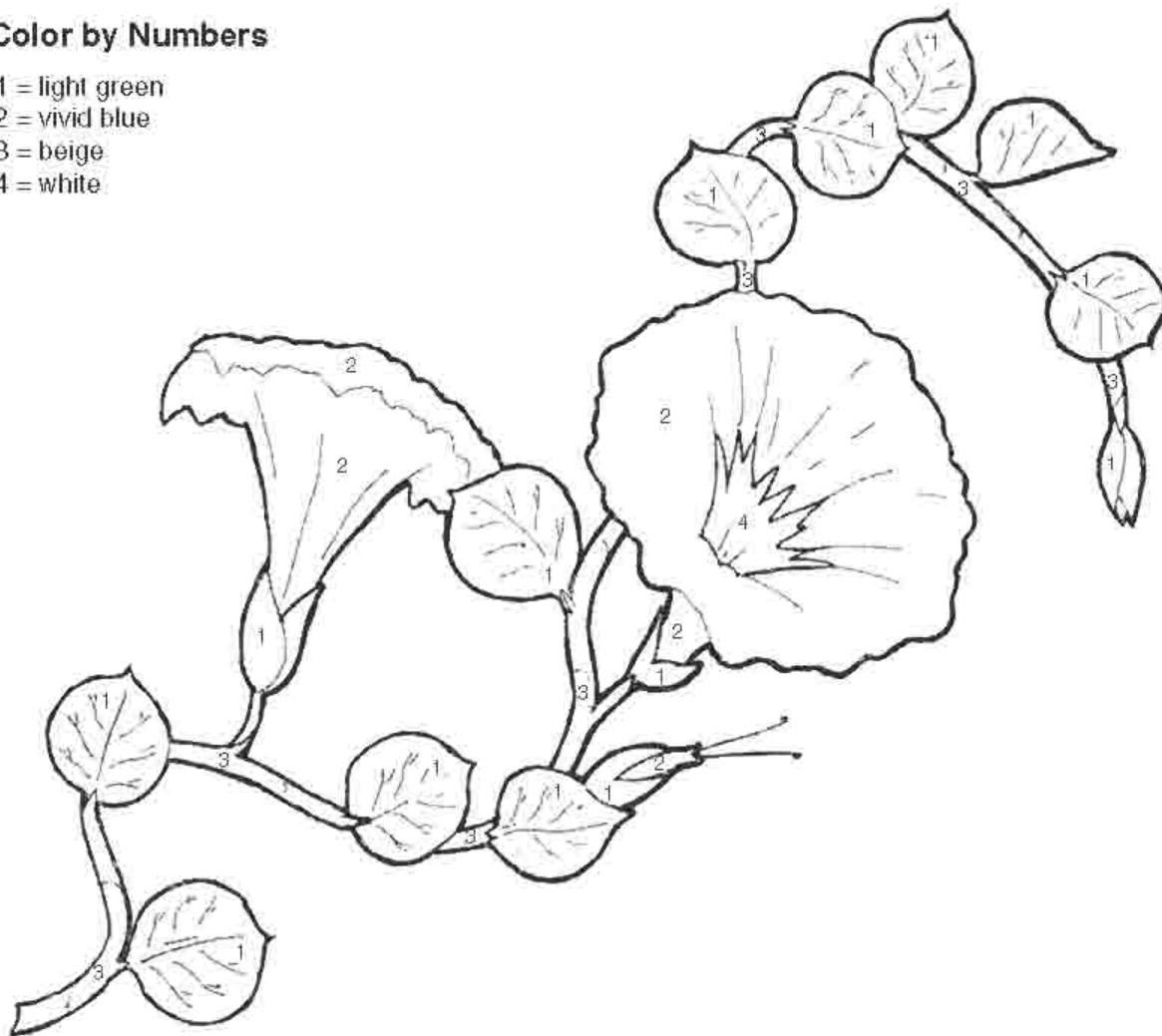
Lake Woodruff NWR

Florida Bonamia

Status: Endangered

Color by Numbers

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



Lake Wales Ridge National Wildlife Refuge 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.

On which refuge might you find a Florida bonamia?



**Lake Wales
Ridge NWR**


Red-cockaded Woodpecker


(*Picoides borealis*)


Status: Endangered


Color in the animals you find hidden in the pine forest below?



 St. Marks NWR was established in 1931, and includes close to 67,000 acres. It is known for its excellent birdwatching opportunities.

 The red-cockaded woodpecker makes its nest in mature living pine trees, usually those with a fungus which softens the heartwood, making it easier to dig a cavity.

 This woodpecker is endangered because the pine trees are usually cut for timber before they reach an old age.

 Birds drill small holes around the cavity to cause resin to flow, which protects the nest from predators.

On which refuge might you find a red-cockaded woodpecker?



St. Marks NWR

Red Wolf

(*Canis rufus*)

Status: 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 the 12,358-acre 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 breeding population of this endangered species.

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

 The red wolf is a dog-like mammal with reddish-gray fur. It is smaller than a gray wolf and larger than a coyote.

 The red wolf is endangered due to loss of habitat and persecution by humans.

On which refuge might you find a red wolf?

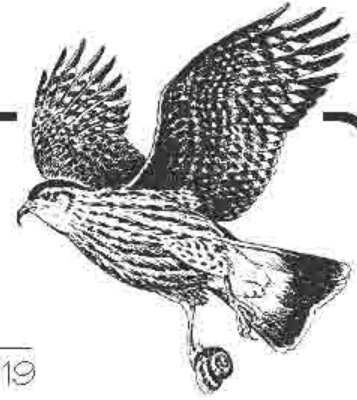


St. Vincent NWR

Snail Kite

(*Rostrhamus sociabilis plumbeus*)

Status: 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 legendary Everglades.

 The snail kite, once known as the Everglade 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.

On which refuge might you find a snail kite?



**Arthur R. Marshall
Loxahatchee NWR**

Wood Stork

(*Mycteria americana*)



















Status: Endangered

Roseate Spoonbill


(*Ajaia ajaja*)


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
 Black Mangrove	 Roseate Spoonbill	SOMETHING YELLOW	 Brown Pelican	 Little Blue Heron
 Woodstork	 Animal Tracks	 Osprey	SOMETHING COOL	 Alligator


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

 Storks are declining because the habitat where they live, including swamps and wetlands, is quickly disappearing.

 Storks are tall, long-legged wading birds that eat mostly fish, frogs, reptiles, and insects. They build flimsy looking nests of sticks and twigs high in the trees and in large, noisy colonies.

 "Ding" Darling Refuge 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.

On which refuge might you see a wood stork & a roseate spoonbill?



J.N. "Ding" Darling NWR

Bald Eagle

Haliaeetus leucocephalus

Status: Threatened

Connect the dots

and then color to see our symbol of freedom.



Lower Suwannee NWR was established in 1979 and includes about 52,935 acres of 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 shooting.



Bald eagles live for 30 years or more and often return to the same nest year after year, adding to it until it can weigh a thousand pounds or more.

On which refuge might you find a bald eagle?



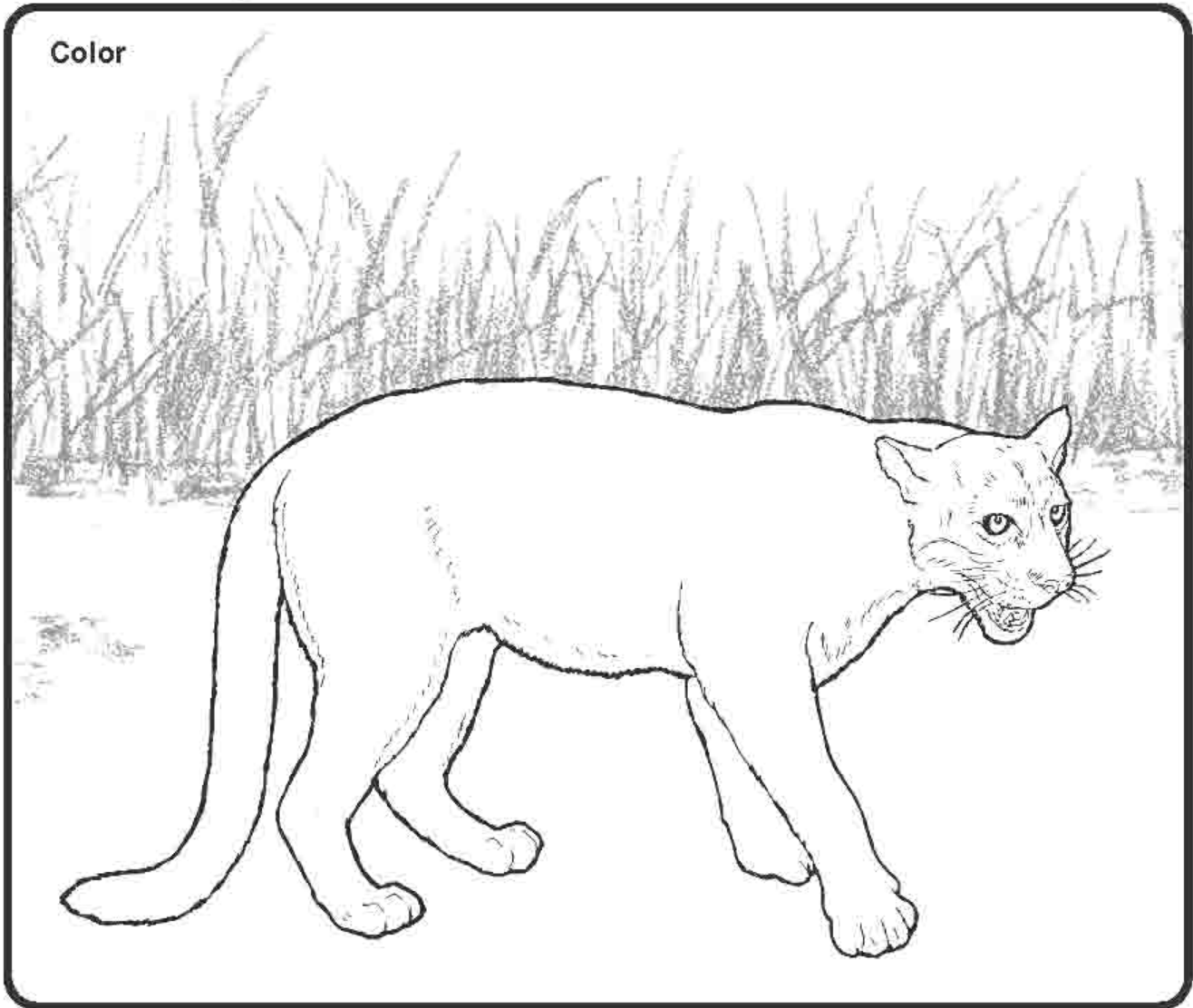
**Lower
Suwannee
NWR**

Florida Panther

(*Felis concolor coryi*)

Status: Endangered

Color



Florida Panther NWR was established in 1989 specifically to protect habitat for the endangered Florida panther.



The Florida panther is a large, light brown cat now found only in south Florida in the area around the refuge, Big Cypress National Preserve and Everglades National Park.



The panther needs a large habitat since this cat can travel as far as 20 miles in a single day searching for deer, its main food.



People have long feared and persecuted this cat. Shooting and a loss of its habitat have pushed the panther to the edge of extinction.

On which refuge might you find a Florida panther?







Florida Panther NWR

Sea Turtles

Status: Endangered

Can you help the baby sea turtles find their way to the ocean?
 Help them get past the dangers to their survival. Put an X through the things people do that could be reduced.

-  Archie Carr NWR was established in 1979 especially to provide protected nesting beaches for sea turtles.
-  Five species of sea turtles sometimes nest on the beaches of Florida: Atlantic loggerhead, Atlantic green turtle, Atlantic hawksbill, Atlantic leatherback, and Kemp's Ridley turtle.
-  All of these turtles are 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, and were once hunted for their meat and shell.
-  Sea turtles are large, marine turtles that come ashore only when the female crawls onto the beach to dig her nest and lay her eggs. She then leaves the eggs to hatch on their own.

At which refuge might you find sea turtles?



Archie Carr NWR

Visit *Your* National Wildlife Refuges & National Fish Hatcheries!

Use the space below to collect "stamps" from the different refuges you visit!

Answers Page

FWS CROSSWORD PUZZLE

ACROSS: 1. natural resources, 7. habitat, 9. conservation, 10. striped bass, 12. laws, 13. migratory, 14. Pelican Island. DOWN: 2. threatened, 3. refuge, 4. endangered, 5. protect, 6. hatchery, 8. ecosystem, 11. pollution.

CROCODILE LAKE

Crocodile = Nest With Eggs-Mound; Brown Pelican = Downy Young In Nest; Butterfly = Eggs, Caterpillar; Duck = Ducklings; Frog = Tadpole; Sea Turtle = Nest With Eggs-Hole

CEDAR KEYS

Alligator=Marsh/Swamp=Fish, Frog; Brown Pelican=Ocean/Beach=Fish; Manatee=Estuary/Seagrass Bed=Seagrass; Raccoon=All Of The Habitats=Fish, Frog, Crawfish; Sea Turtle=Ocean/Beach=Seagrass; Dragonfly=Marsh/Swamp=Mosquito; Gopher Tortoise=Pine Forest=Dandelion

CHASSAHOWITZKA

(Left picture/Right picture) Squirrel/Owl; Bear/Deer; Gopher Tortoise/Indigo Snake; Red-cockaded Woodpecker nest/no nest; twisted tree trunk/straight trunk, dead tree/live tree

OKEFENOKEE

1. Bald Eagle, 2. Squirrel, 3. Raccoon, 4. Black Bear, 5. River Otter, 6. White-tailed Deer

CRYSTAL RIVER

An outline of Florida

HOBE SOUND

Great Egret = 5, Osprey = 2, Duck = 4, Red-headed Woodpecker = 1, Scrub Jay = 3

NATIONAL KEY DEER

ACROSS: 1. endangered, 2. small, 3. habitat loss. DOWN: 1. refuge, 2. keys, 3. plants

LAKE WOODRUFF

Box 1: Turkey - a Gamebird among Shorebirds; Box 2: Snail Kite - a Bird-of-Prey among Seabirds; Box 3: Yellow Warbler - a Neotropical Migrant among Wading Birds

ST. MARKS

hawk, lizard, frog, quail, gopher tortoise, white-tailed deer, black bear, owl, red-cockaded woodpecker

ARTHUR R. MARSHALL LOXAHATCHEE

1. Apple Snails, 2. Freshwater Marshes, 3. Loss Of Habitat, 4. Bird Of Prey, 5. Everglades

LOWER SUWANNEE

Bald Eagle

America's National Wildlife Refuges

Where Wildlife Comes Naturally.

Visit us online at <http://refuges.fws.gov/>

Archie Carr NWR
P.O. Box 6504
Titusville, FL 32782
(407) 861-0667

Arthur R. Marshall Loxahatchee NWR
10216 Lee Road
Boynton Beach, FL 33437-4796
(561) 732-3684

Cedar Keys NWR
16450 NW 31st Place
Chiefland, FL 32626
(352) 493-0238

Chassahowitzka NWR
1502 SE Kings Bay Drive
Crystal River, FL 34429
(352) 563-2088

Crocodile Lake NWR
P.O. Box 370
Key Largo, FL 33037
(305) 451-4223

Crystal River NWR
1502 SE Kings Bay Drive
Crystal River, FL 34429
(352) 563-2088

Florida Panther NWR
3860 Tollgate Blvd., Suite 300
Naples, FL 34114
(941) 353-8442

Hobe Sound NWR
P.O. Box 645
Hobe Sound, FL 33475-0645
(561) 546-6141

J.N. "Ding" Darling NWR
1 Wildlife Drive
Sanibel, FL 33957
(941) 472-1100

Lake Wales Ridge NWR
P.O. Box 6504
Titusville, FL 32782
(407) 861-0667

Lake Woodruff NWR
P.O. Box 488
DeLeon Springs, FL 32130-0488
(904) 985-4673

Lower Suwannee NWR
16450 NW 31st Place
Chiefland, FL 32626
(352) 493-0238

Merritt Island NWR
P.O. Box 6504
Titusville, FL 32782
(407) 861-0667

National Key Deer Refuge
P.O. Box 430510
Big Pine Key, FL 33043-0510
(305) 872-2239

Okefenokee NWR
Route 2, Box 3330
Folkston, GA 31537
(912) 496-7366

St. Marks NWR
P.O. Box 68
St. Marks, FL 32355
(850) 925-6121

St. Vincent NWR
P.O. Box 447
Apalachicola, FL 32329-0447
(850) 653-8808

Welaka National Fish Hatchery
P.O. Box 130
Welaka, FL 32193-0130
(904) 467-2374

