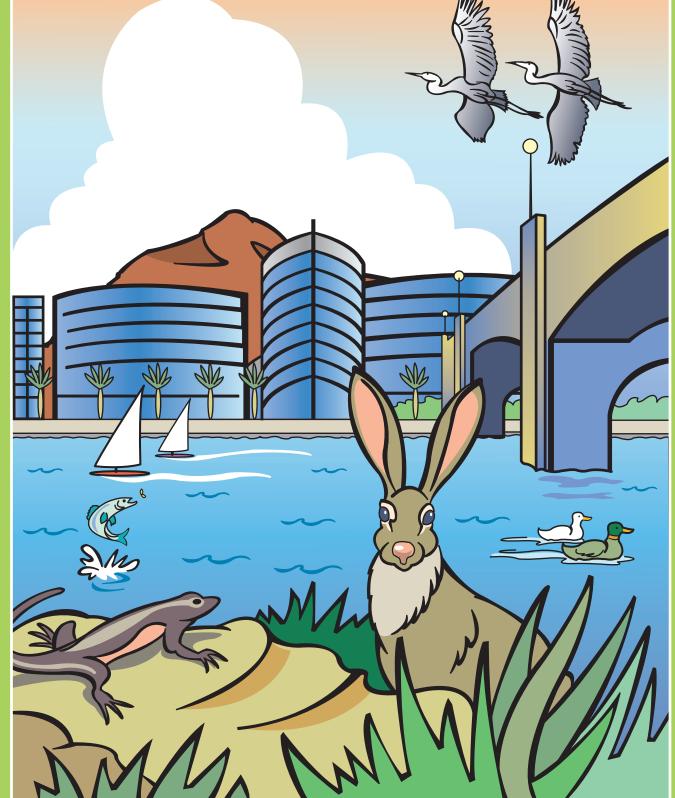
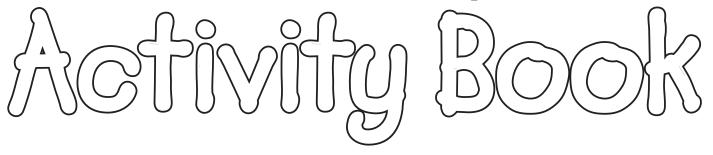
Birds and Animals of Tempe Town Lake Activity Book





Birds and Animals of Tempe Town Lake



Tempe Town Lake is home to many different kinds of wildlife. Birds, mammals, reptiles and fish make their home in the lake, on its banks and shores, and in the trees. This guide will help you learn about some of them and give you ideas on where and when to spot them. For more information about the birds, fish, and other animals shown in this guide and many others who live around Tempe Town Lake, visit our website at tempe.gov/lake.

How do we know which animals live at Tempe Town Lake?

The U.S. government sends wildlife biologists out in the field to make a list of the wildlife that lives in different environments. These observers have to find out about not only the species they can see but also the ones that try to stay out of sight or only come out at night.

Besides direct observation, workers have other ways to help them find out who lives in their study area.

They may:

- Play recorded birdsongs or animal calls over loud speakers and record responses
- Turn on a spotlight at night to observe wildlife creatures unexpectedly
- Smooth over sand in a special pit and examine the tracks after a few hours
- Look for the burrows or droppings of birds and other animals

The wildlife categories observed at Tempe Town Lake are: BIRDS, MAMMALS, REPTILES, FISH and INVERTEBRATES (creatures without backbones).

Your Turn!

Unscramble the letters to discover which creature was most observed around Tempe Town Lake.

RDIBS _____

I am the habitat where the most creatures were observed.

My Spanish name is agua. ___ __ __ __ __

Respecting our Wildlife Friends

The wildlife around Tempe Town Lake adds lots of interesting sights and sounds to the area. You can help keep your wildlife friends healthy and safe by following a few simple guidelines.

Wildlife creatures need a healthy diet

Keep people snacks and other foods away from them. Most food we like is not good for birds, fish and other animals and can make them sick. If you feed wild animals like coyotes, they lose their fear of people and may put you and themselves in dangerous situations.

Observe wildlife repectfully

Chasing and shouting frightens birds and other animals and sends them off to hide.

Let wildlife mothers take good care of their babies

Keep a good distance away from any nests or other wildlife homes.

Always ask a park ranger for help If you notice any injured wildlife at Tempe Town Lake ask a park ranger for help. Never try to help injured birds and animals yourself.

Report any incident of someone bothering the birds and animals or tampering with their homes

The rangers will help protect the wildlife.

Enjoy Tempe Town Lake wildlife even more Observe your wildlife friends with a pair of binoculars!

BIRDS

Wildlife observers found more than 80 kinds of birds in the Tempe Town Lake area.

Here are some that you may see.



Great-Tailed Grackles

(Quiscalus mexicanus)

The Great-tailed Grackles that live around Tempe Town Lake are sure to get your attention! These large shiny black birds whistle, squeak and squawk very loudly. They are expert noisemakers who enjoy each other's company and even nest near each other. Together they can really raise a racket!

Grackles can be up to 18 inches long and have bright yellow eyes. Their favorite foods are insects, lizards, toads, bird eggs, fruit and seeds.

Cool Fact ...

Each swallow's nest takes about 1,000 mud pellets to build and the birds spend many hours and lots of energy building their homes. Because they resemble wasp nests, some people try to destroy them, but if they are left untouched, the swallows will return to them every year to raise their babies.

Cliff Swallows

(Petrochelidon pyrrhonota)

Swallows are small slender birds with long pointed wings. They hunt for flying insects in wide swooping flight and are often mistaken for bats. The Cliff Swallows at Tempe Town Lake have shiny blue-black feathers with white streaks and brownish colored wings and tails. Their underbellies are white.

Swallows nest in colonies and are usually found around water where they can find insects, their favorite food. You can see many of their mud nests under the Mill Avenue Bridge.

Cool Fact ...

When they are on the ground, grackles walk or run but never hop with both feet.



Herons and egrets are large, slow-flying birds that range in size from the Cattle Egret at about 20 inches to the Great Blue Heron at 46 inches. These birds usually nest in trees near the water's edge.

Most of the time you will find them alone.

Great Blue Heron

(Ardea herodias)

When they are not flying, you may find Great Blue Heron perched on the bridges and dams at Town Lake. This bird's back, wings and belly are a blue-grey color with a black stripe on the back of its head. Its favorite foods are fish, insects and plants.

Be sure to observe all wildlife from a safe distance - especially herons. Never approach these birds since they are very strong and will give you a painful peck if you get close.

Cool Fact ...

The Great Blue Heron has large feet with four toes that help distribute this heavy bird's weight so it will not sink in the mud as it walks in the water looking for food.

Great Egret

(Ardea alba)

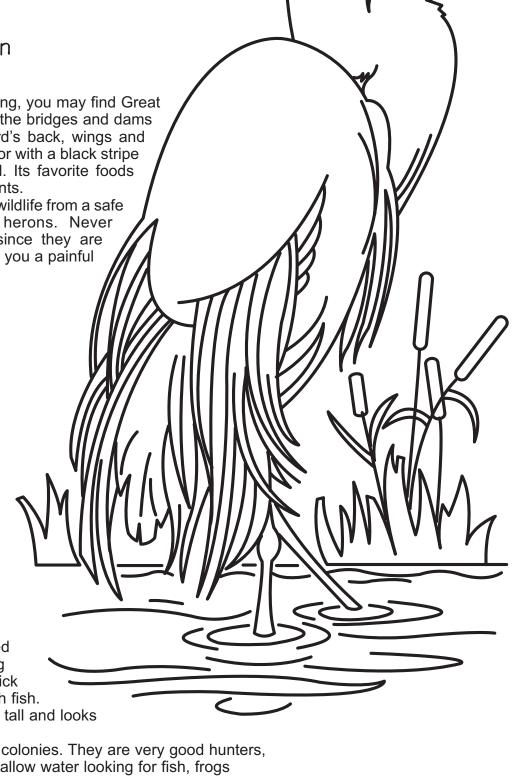
This large, long-necked bird is all white, has long black legs and a long thick yellow bill to help it catch fish. It grows up to 39 inches tall and looks

somewhat like a stork.

Egrets usually nest in colonies. They are very good hunters, wading around in the shallow water looking for fish, frogs and snakes to eat.

Cool Fact ...

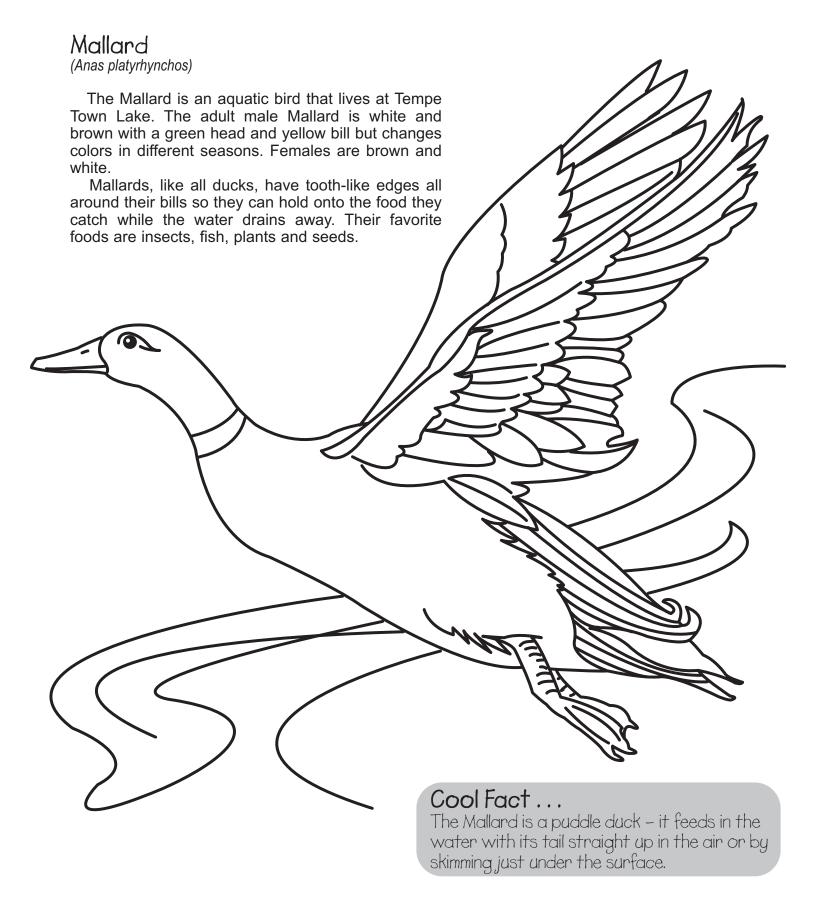
When it is flying, the Great Egret keeps its neck tucked in an "S" shape.

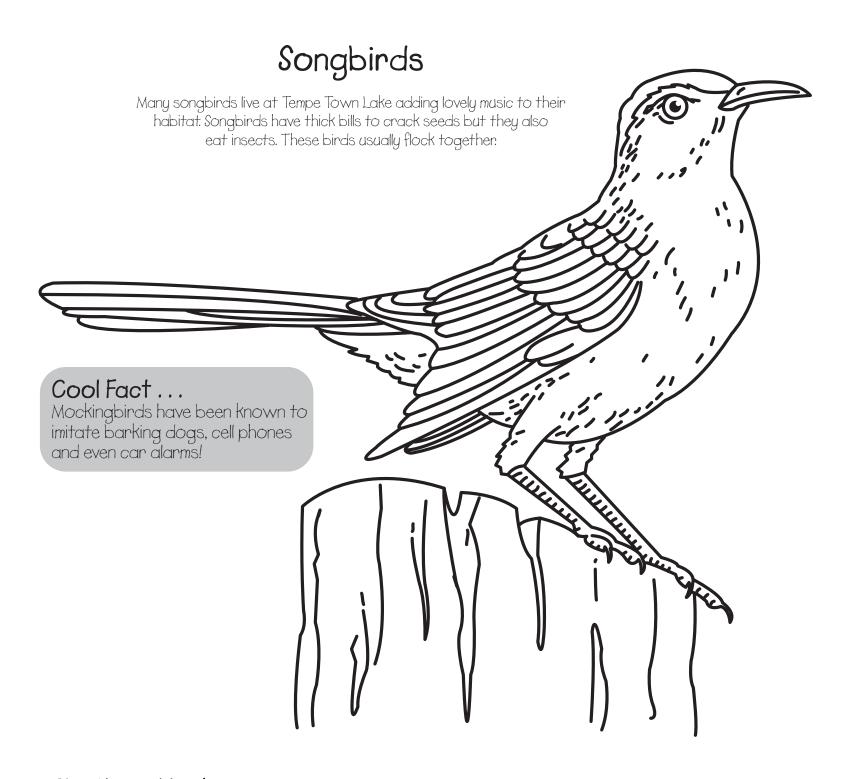


Waterfowl

(geese, ducks and swans)

Waterfowl are aquatic (water) birds with webbed feet, flat bills and narrow pointed wings. They have short legs and large bodies - some can weigh more than 10 pounds. They usually flock together.





Northern Mockingbird (Mimus polyglottos)

Observers found the Northern Mockingbird at Tempe Town Lake. It grows to about 9 inches long, has a slender bill and is colored grey, black and white.

The mockingbird is the great impressionist of the bird world – it can sing up to 200 songs including imitations of other birds, insects, amphibians and even some mechanical sounds.

You can identify this clever mimic by the white bars visible on its wings when the mockingbird is in flight.

Cormorants and Pelicans

Cormorants and pelicans are fish eaters with webbed toes who live near water. They weigh up to 10 pounds and some have wingspans of 7 feet. They can fly very high and may plunge 60 feet from the sky to pluck a tasty fish from the water. In the past it was unusual to find ocean birds in Arizona, but it has become more common. The ones who live around Arizona lakes, like the pelicans, were probably visitors from California who settled here as they adapted to their new desert surroundings.

California Brown Pelican

(Pelecanus occidentalis)

The California Brown Pelicans that live at Tempe Town Lake are a grayish-brown color and have large pouched bills. The pelican scoops up as much as 3 gallons of water with its catch of fish and waits until all the water is squeezed out before swallowing its meal. Their pouches help cool the birds in hot weather and make great food bowls for their young.

Cool Fact ...

While the pelican is squeezing the water out of its pouch, sneaky gulls may wait nearby or even sit on the pelican's bill to try to steal a fish from its pouch.

Cool Fact ...

If the killdeer spots an enemy too close to its nest, it will fly down to the ground and drag itself along, hopping on one leg with its tail spread as if it has a broken wing. When the predator turns its attention to the lamelooking trickster and tries to catch it, the killdeer flies away making loud calls.

Killdeer

(Charadrius vociferus)

The Killdeer is a shorebird that lives around Tempe Town Lake. It is a medium-sized bird around 8 inches long with a long tail and a short thick dark-colored bill. Its body is brown on top with white below and two black neck bands.

It gets its name from one of the shrill calls it often makes; "killdeer, killdeer."

Black-necked Stilt

(Himantopus mexicanus)

You will know how the Black-necked Stilt got its name as soon as you see it! The black and white shorebird has very unusual legs. They are bright pinkish-red and are the longest of any bird its size.

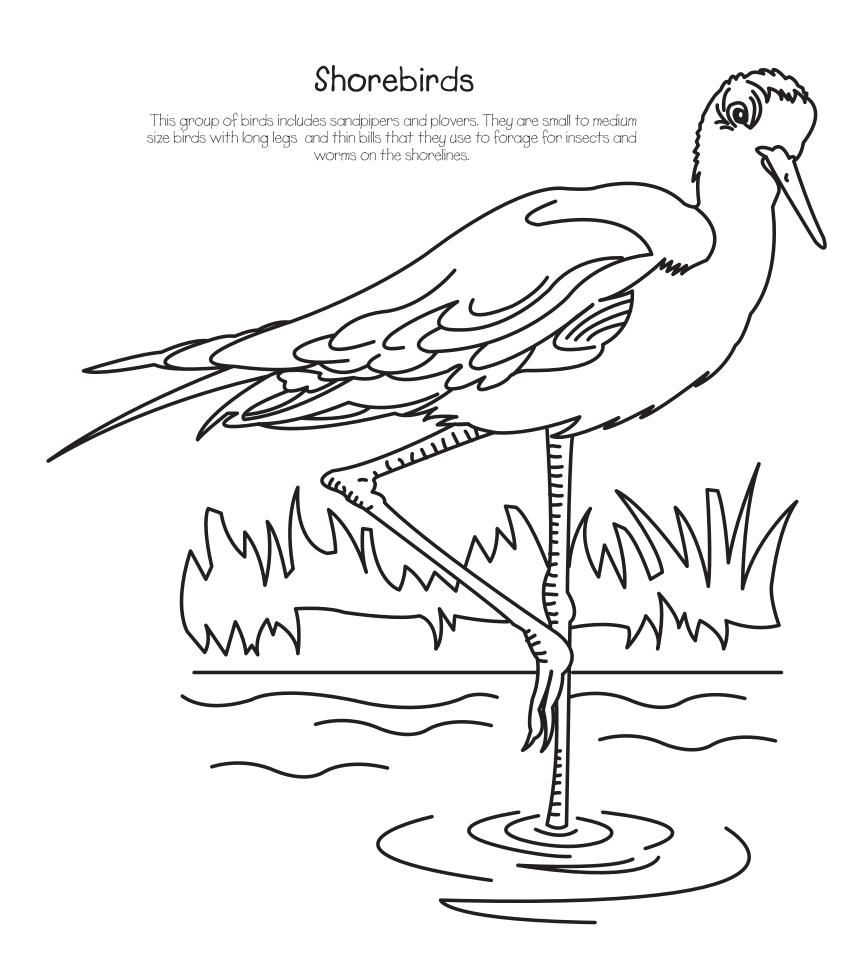
Stilts may be 13 to 16 inches long. They use their long legs to wade around in the water and their long beaks to catch things to eat. Their favorite foods are water bugs, tadpoles, snails and small fish. They are fine swimmers and fliers.

Cool Fact ...

Their legs are so long that sometimes the stilts have to bend to reach the ground with their beaks.

Pelicans

Pelicans migrate to Gulf of Mexico and coastal Southern California from Canada and the US East Coast, but many of them make pit stops at Tempe Town Lake – an end up staying for much of the winter – because of our great weather, the shallow water at Tempe Town Lake and most importantly, the fish that live in it. Pelicans can range in size from 10 to 30 pounds and their wingspan can extend out 8 to 9 feet. They like to flock with each other, but don't like people to get too close. They can eat a fish in one big gulp! A great white pelican is able to eat a fish that weighs more than 4 pounds!



Raptors

This group of birds includes large birds of prey, including falcons, hawks, owls and scavengers such as vultures. They have hooked beaks and talons to capture and feed on small mammals and birds. These birds often fly alone or in pairs around open areas with little vegetation, ideal spots for sighting their favorite foods.

Osprey

(Pandion haliaetus)

Osprey are large hawks with narrow wings and short hooked beaks. They are about 2 feet long with wings spans of more than 4 feet. Their bodies are brown and white and their tails have white bands on them.

This hawk looks like it's floating in the air above the water as it hunts for fish. When it spots one, the osprey will drop suddenly into water, feet first, to catch the fish with its sharp talons. Sometimes it plunges completely underwater to catch its meal so before flying away, the osprey has to shake all the water from its feathers.

Cool Fact ...

Osprey nests are usually out in the open so osprey babies have to be very good at hiding when their parents are not there to protect them. They do this by lying very still and flat against the bottom of their nests so no other birds or predators can see them.

Burrowing Owl

(Athene cunicularia)

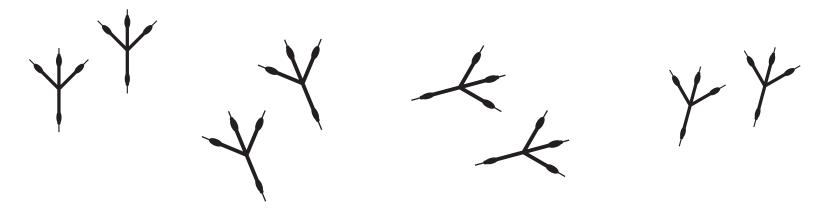
Observers found the Burrowing Owl near Tempe Town Lake. This small brown and white owl has yellow eyes and a yellow beak. It is about 8 inches tall with a wingspan of 22 inches and very long legs.

While most owls hunt at night, the Burrowing Owl enjoys the heat and is active during the day. Instead of nesting in a tree, it lives in a hole in the ground.

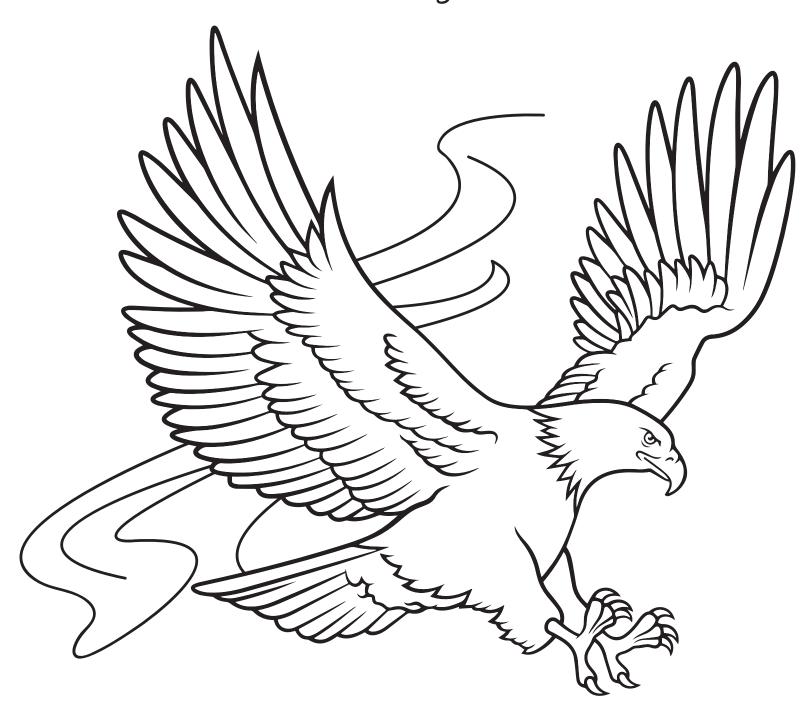
Though the owl can burrow and make its own home, it prefers to take over the abandoned holes of squirrels and prairie dogs.

Cool Fact ...

This owl has a clever way of discouraging unwelcome visitors to its burrow – it makes a sound very similar to a rattlesnake.



Bald Eagles



Bald eagles can often be seen at the east end of Tempe Town Lake. There is a reason they are the symbol of our nation – they are truly majestic birds! The bald eagle is one of the largest raptors in the world. It has a 7-foot wing span, weighs as much as 15 pounds and can be over 3 feet tall! They can fly up to 100 miles per hour and go as high as 10,000 feet in the air. Bald eagles mate for life. They like to build their nests next to lakes and rivers. Their nests are huge! They are often more than 5 feet across and can weigh up to nearly 2,000 pounds.

Ground Birds

This bird group includes quail and roadrunners.



(Callipepla gambelii)

Quail need brush for food and cover. They eat seeds, insects, grass, leaves, flowers, fruit, nuts, roots, tubers and forbs, which is a kind of ground cover. They make their nests of sticks on the ground in thick brush.

The Gambel's Quail at Tempe Town Lake are pear-shaped birds with short legs. They are gray, brown and white with a black plume on the tops of their heads. Though they weigh only about 6 ounces, they can have a 14-inch wingspan.

Groups of up to 20 birds, called coveys, are usually found scurrying along in single file. You may notice them running into the brush from danger instead of flying away.

Cool Fact ...

Mourning doves can fly as fast as 60 mph.

Mourning Doves

(Zenaida macroura)

Mourning Doves are light brownish-colored birds with black spots on their wings and white spots on the edges of their tails. They are about 12 inches long with slim, long, pointy tails. Their wings make a whistling sound when they take off.

The "mourning" in its name comes from the dove's sad sounding call "coo woo woo-woo." You will often see the doves walking along the ground looking for seeds or perched on wires.



1.	Most of my relatives sleep all day and hunt at night but I love the daytime and I don't mind the heat at all.
2.	I can scoop up 3 gallons of water along with my meal of fish and store it all in my pouch/beak.
3.	I can mimic the songs and calls of other birds, mammals and insects. Now and again I even imitate a machine!
4.	We all like to stick together and enjoy returning to our mud nests year after year. You can see our nests under the Mill Avenue bridge.
5.	My legs are very long and colorful. Sometimes I have to bend them to catch an insect on the ground.
6.	I am very colorful – in fact my head is green. I have webbed feet for speedy paddling on the lake.
7.	I am a big bird with very shiny black feathers and love to make loud noisy calls with my friends.
8.	We are always in a hurry, running along one behind the other. We are very proud of the fancy dark plume on top of our heads!
9.	I am almost 46 inches tall with a long neck and legs. You will often see me alone looking for my favorite meal of fish or water plants. My friends call me Big Blue.
10.	I am snowy white with black legs and a yellow bill. When I fly I have an "S" curve in my neck.
11.	I am named because of my sad sounding call.
12.	I can pretend to have a broken wing to distract predators from my young.
13.	My babies are great at hiding from other birds when I am away from our nest.

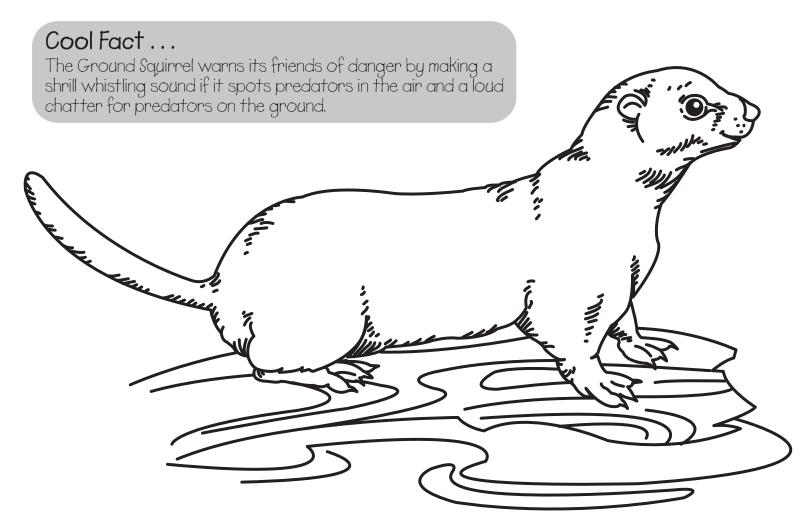
Answers: Burrowing Owl, Brown Pelican, Northern Mockingbird, Cliff Swallow, Black-necked Stilt, Mallard, Great-tailed grackle, Gambel's Quail,

Great Blue Heron, Great Egret, Mourning dove, Killdeer, Osprey.

MAMMALS

Observers found several kinds of mammals, including rodents, around the lake. Now, don't think that all rodents are big, ugly, rats. Rodents live in many different habitats and come in all sizes - from a Pygmy mouse that weighs less than an ounce to an American beaver that can weigh up to 75 pounds.

Rodents all have one unique characteristic in common: long, yellow-orange, self sharpening teeth that are specially designed for gnawing. These mammals make up more than half of the animal species in the world and include such creatures as rats, mice, squirrels and beavers.



Round-tailed Ground Squirrel

(Spermophilus tereticaudus)

Observers found the Round-tailed Ground Squirrel at Tempe Town Lake. It is a small brownish gray rodent, 8 to 11 inches long, with no stripes or spots. Ground Squirrels are daytime creatures and are most active in the morning and evenings. They often take a midday nap.

These squirrels dig their own burrows or use old ones left vacant by other animals. They make sure to keep entrances near a bush with no mounds of dirt to give away the location of their homes. Their favorite foods are seeds, plants and insects.

Now and again you might see ground squirrels climb into low bushes – they may be looking for a snack or a break from the hot sand. Take care not to approach or feed these squirrels as they are unpredictable and may bite even a friendly hand.

Beaver

(Castor canadensis)

Beavers are the largest rodents in North America and live mostly in water. They can weigh as much as 75 pounds and live 10 to 20 years in the wild. Beavers eat tree bark, water plants, buds, and roots.

These rodents have glossy brownish coats with small round dark brown ears. Their hind legs are longer than their front ones. Beavers are great swimmers and can hold their breath underwater for 15 minutes.

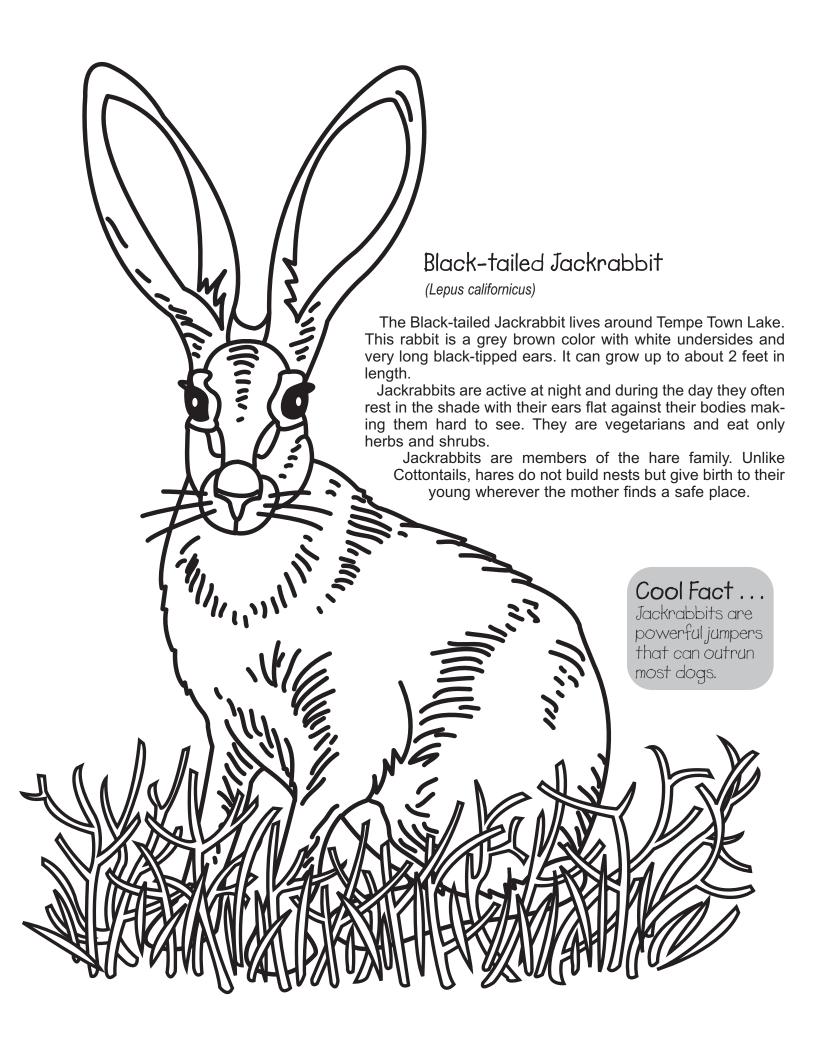
Beavers make lodges from sticks and grass and live in them with up to seven other family members in groups called colonies. Though they are nocturnal animals, you may spot them around dusk as they become active or near dawn, when they are getting ready to sleep.

Several Tempe Town Lake rowers and kayakers have spotted large beavers under the Rural Road bridge swimming alongside their boats. If you are lucky enough to see one swimming near your boat, grab your camera, but be sure not to touch or scare the beaver.



Cool Fact ...

Beavers warn each other of danger by slapping their large tails on the water.



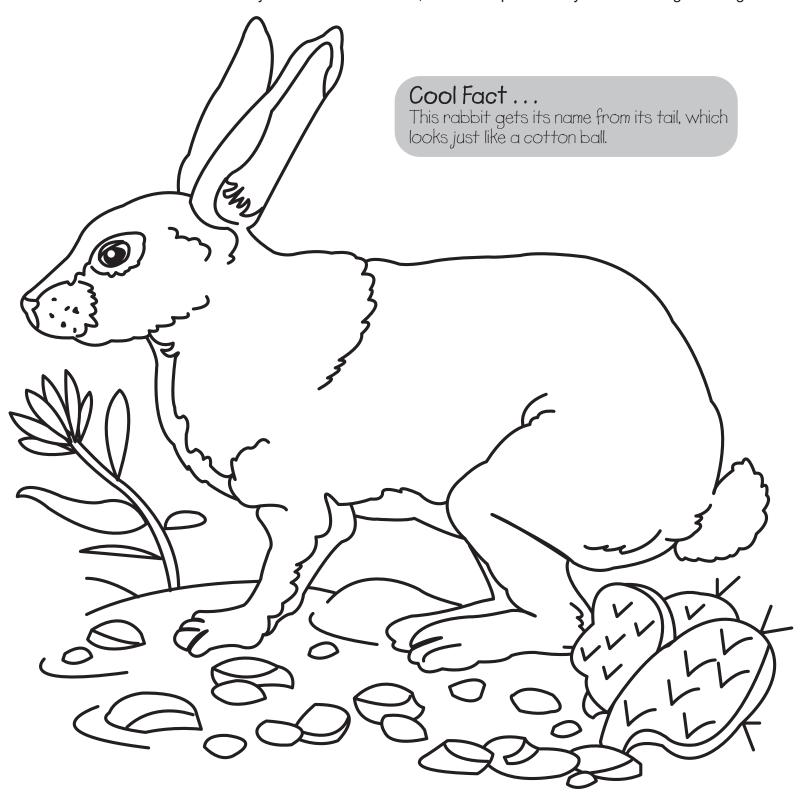
Desert Cottontail

(Sylvilagus audubonii)

Observers found Desert Cottontails around Tempe Town Lake. The Cottontail's body is light brown or gray with a white underside and tail. Its diet of plants and grass help this rabbit grow up to 17 inches long and weigh up to 3 pounds.

The cottontail is active in the early morning, late afternoon and at night. During the day it rests in the shade or in its burrow.

If it senses danger, the desert cottontail will raise its white tail and hop away at speeds of up to 20 mph. It heads for a burrow or thick bushy area but if confronted, it will thump its enemy with its strong back legs.



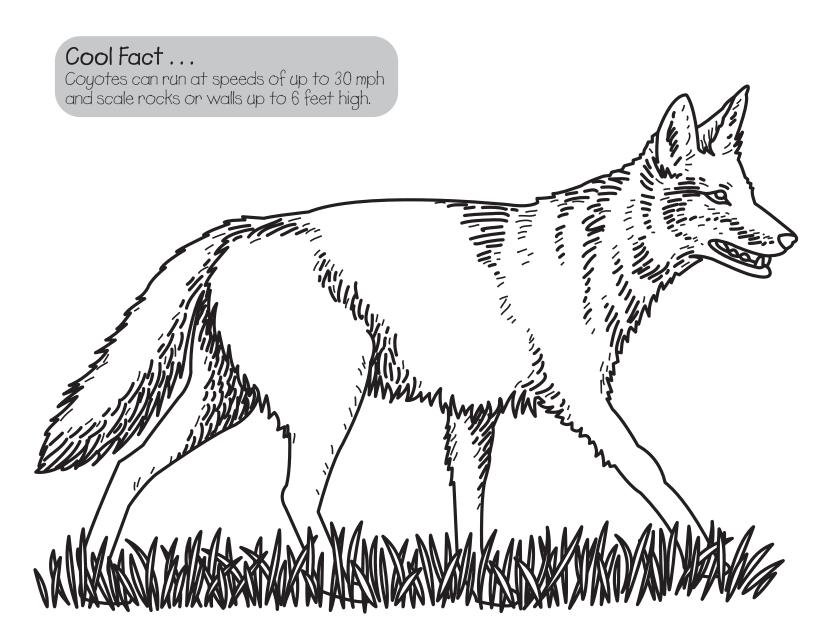
Coyote

(Canis latrans)

The coyote is a member of the dog family. It can weigh as much as 40 pounds and live up to 15 years in the wild. It is a reddish gray color or tan with a beige underside and has a big bushy black-tipped tail. Coyotes have yellow eyes.

The coyote's diet includes small mammals, insects, reptiles and fruit but they will eat almost anything and are very good hunters. Coyotes howl to signal their presence to each other. They may hunt alone, in pairs or in a pack and live in tunnels called dens.

Never approach coyotes and be sure to keep all pets on a leash when you are on their territory.



REPTILES

Western Whiptail Lizard

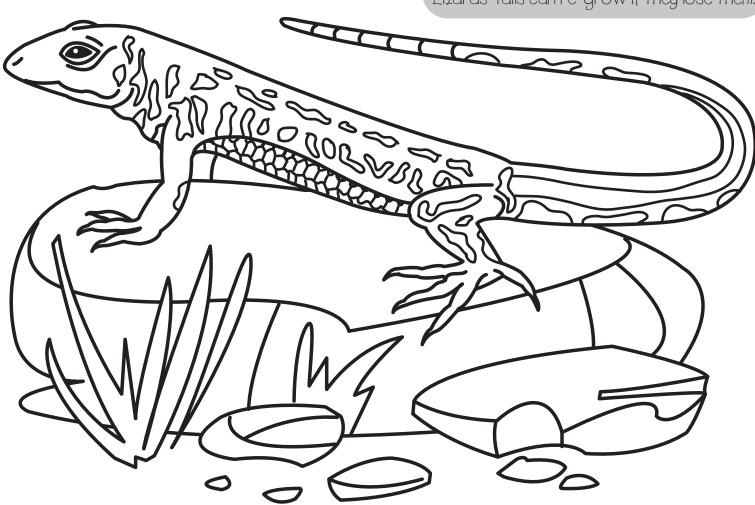
(Cnemidophorus tigris)

Western Whiptails live around Tempe Town Lake. These lizards have triangular shaped heads with pointed snouts and have scales on their backs. They are light brown colored with stripes and have long tails.

Whiptails grow to a length of 5 to 13 inches. Their favorite foods are insects, spiders, scorpions, and other lizards. They live in burrows that they dig or those abandoned by other animals.

Cool Fact ...

Lizards' tails can re-grow if they lose them.



Spiny Softshell Turtle

(Apalone spinifera)

Softshell turtles live in and around Tempe Town Lake. Unlike their hard-shelled relatives, these turtles have shells covered with soft, thick skin.

They are very flat, with greenish-brown coloring. They have dark spots on top and are completely light in color underneath. They grow from 5 to 18 inches in length. Snails, insects, fish and other water creatures are their favorite foods.

Softshells can move quickly on land and in the water and are difficult to approach.

Cool Fact ...

If you want to catch a glimpse of one of these turtles, check out the dams at either end of the lake with your binoculars. They are popular basking spots for the sun-loving turtles.

WORD SEARCH ...

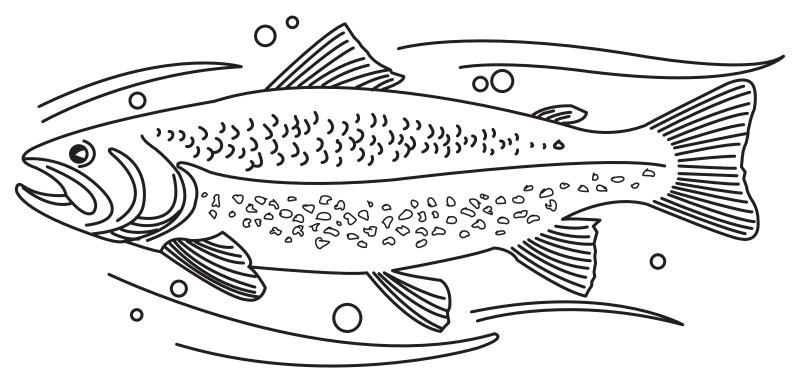
ACKR D J Α В В Τ Ε S SS M T 0 W Ν Α Ε Τ 0 Н WD Q W K C Ε S U O R Α Н Ε D R 0 Τ R Α D M S 0 S Ν Ε S L Ε R Α D 0 Ν Т S F В Τ Α Y L L V C O W S Н Τ G Ε G R U S Τ D 0 D Ε Т W S S F Ε A W Τ 0 Ν Ν В Η S U F R Α N S N Ε T 0 0 Ε C Τ S S Τ O G Н Α M M Н R R R A M C A E Ε F R M Ν K L L W D Т R S C Τ Z R S В 0 Α Α L U Τ U S Τ A H 0 R Α U Α Τ В WTWN Ε K В S Ε В Α Q E R D P Р C S M 0 C K Ν G Ε V Α G В S Ε Y N Т Ε Ε P Α 0 R P R Α В

Find the words listed below and circle them in the puzzle above.

Arizona	Bass	Beak	Beaver	Bluegills
Burrows	Carp	Catfish	Cottontail	Coyote
Dens	Desert	Dig	Doves	Duck
Egret	Fins	Fly	Habitats	Heat
Heron	Hot	Insect	Jackrabbit	Lizards
Mallard	Mammals	Mockingbird	Nap	Owl
Pelican	Prey	Quail	Reptiles	Scavenger
Shore	Songbird	Squirrel	Sun	Swallows
Tempe Town Lake	Trout	Turtle	Water	Wildlife
Worm				

FISH

With more than a dozen varieties of fish swimming around, Tempe Town Lake is one of the best places in Arizona to cast a line. Here are some kinds of fish you might see:

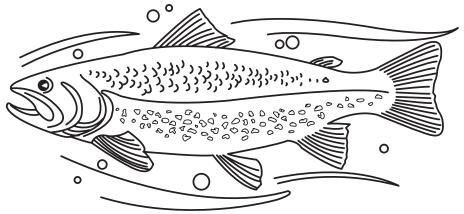


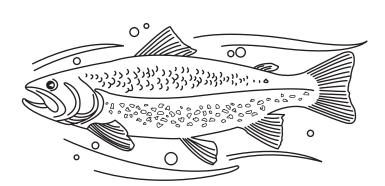
Rainbow Trout

(Oncorhynchus mykiss)

The Rainbow Trout has fine silvery scales, and a spotted body with a pink streak on its sides. These fish grow up to 22 inches long. Their favorite foods are insects and in the early morning you can spot the trout near the surface of Tempe Town Lake catching their breakfast.

Arizona Game and Fish stocks Town Lake with thousands of these fish from November through March every year. They are great for eating and very nutritious.





Cool Fact ...

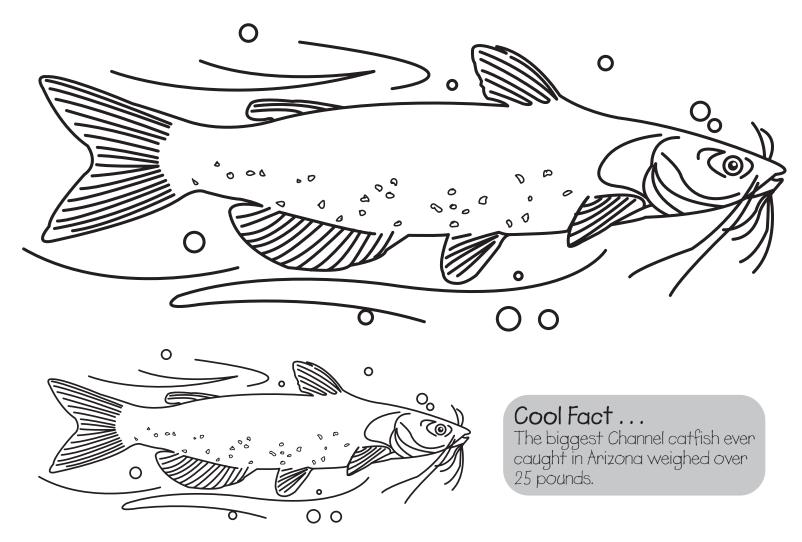
Rainbow Trout are great jumpers!

Channel Catfish

(Ictalurus punctatus)

The Channel catfish has a bluish-colored back with black spots, light blue sides and a white belly. It has a distinctive deep fork in its tail. The sharp spines on the catfish's front and top fins help it defend itself against predators that try to eat it.

Catfish help keep Tempe Town Lake clean by eating insects, other fish and plants from the lake bottom. Most grow to between 2 to 4 pounds but some are much larger.



Bluegills

(Lepomis macrochirus)

Bluegills are oval-shaped, almost round and have small mouths. They are purple and bronze colored with several dark bars on their sides. Their bellies are silver to slightly blue most of the year, with some yellow or orange during spawning season. Males often have a copper-colored bar on the top of their heads behind their eyes. Females are generally lighter colored than males.

These fish have two prominent black spots on their bodies – one on the rear edge of their gill-covers and one at the base of their top fins.

Bluegills prefer quiet, weedy waters where they can hide and feed.

Their favorite foods are insects and small fish. You can spot bluegills near the surface of the water during spring, summer and fall looking for a bug meal.

Cool Fact ...

Bluegills are also called sunfish.

Largemouth Bass

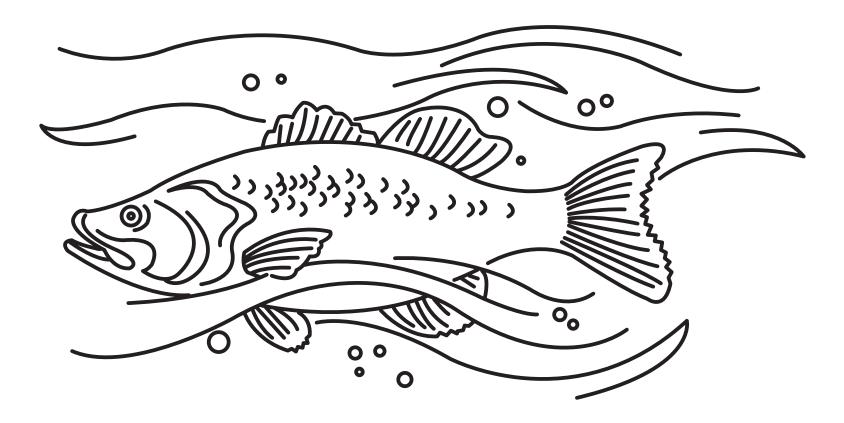
(Micropterus salmoides)

The Largemouth bass is usually dark green on top with a white belly and a wide dark bar running along the sides of its body. This fish lives up to its name with its very large mouth.

Largemouth feed mainly on other fish and can grow up to 10 pounds. Their favorite habitat is quiet water with lots of underwater plants.

Cool Fact ...

Bass move to deeper water during the day and come back to shallow water at night to eat.



Israeli Carp

(Cyprinus carpio)

Carp are yellow-gold, torpedo-shaped fish with big scales. Even their fins may be a bright sunny color. When they are young, the carp's favorite foods are plants and insects.

Israeli Carp have been stocked into Tempe Town Lake to eat midge flies and other pesky insects. These fish are also helpful by eating the green algae which they find near the boat docks on the lake.

You may spot carp near the surface of the water swimming or sunbathing.

Cool Fact ...

Carp can live 17 to 20 years.

WILDLIFE LOG

Here's a place for you to note the wildlife you observe at Tempe Town Lake

Fish, Bird or Mammal	Date and time of day	Location	What it was doing





Special thanks to:

The Arizona Fish and Game Department
The United States Department of Agriculture – Wildlife Services
Sponsored by: Hayden Ferry Lakeside
Written by: Shirley Brogan
Illustrated by: Mike Gushock

For more information on Tempe Town Lake, please visit the website at tempe.gov/lake.

If you would like to know more: Here are some books about desert birds and mammals:

<u>Birds</u>

National Geographic Field Guide to the Birds of North America - 4th edition, National Geographic, Washington D.C., 2002

The Audubon Society Encyclopedia of North American Birds, John K. Terres (Alfred A. Knopf, Inc., New York 1980)

Birds of North America: Western Region (Smithsonian Handbooks), Fred J. Alsop
(Dayling Kinderslay, Inc., New York, 2001)

(Dorling Kindersley, Inc., New York, 2001)

<u>Mammals</u>

A Natural History of the Sonoran Desert, Arizona-Sonora Desert Museum (University of California Press, Berkeley and Los Angeles, 2000)

A Field Guide to Mammals (Peterson Field Guide), William H. Burt

Peterson First Field Guide to Mammals of North America, Peter C. Alden

Especially for kids...(birds and mammals)

<u>Critters of Arizona Pocket Guide</u>, Wildlife Forever (Adventure Publications, Inc., Cambridge MN, 2002).

