



Celebration of Cranes

at

Quivira National Wildlife Refuge

sponsored by

Audubon of Kansas

Activity Book

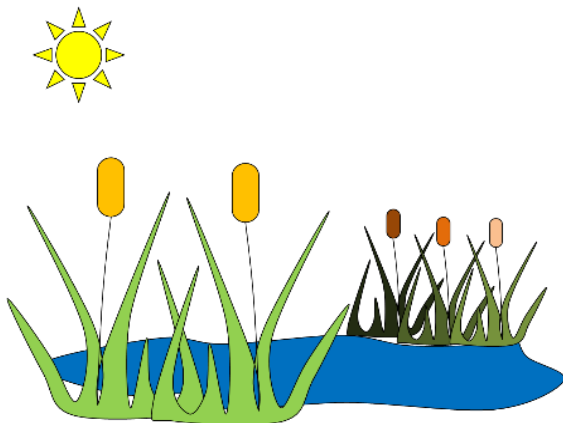
What is the Quivira National Wildlife Refuge (QNWR)?

QNWR is public land where the habitat is protected to conserve fish, wildlife, & plants. Hunting & fishing is forbidden or strictly controlled in the refuge.

QNWR is a wetland & it is unique due to high amounts of salt in many areas. The soil is also very sandy. Most of QNWR is located in Stafford County.

QNWR started as a refuge for migrating waterfowl such as geese, ducks, cranes, shorebirds such as avocets & stilts, & many more bird species.

Migration is the annual movement of birds from their summer homes to their winter homes. Late fall is the best time to see migrating waterfowl at QNWR.



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What is a wetland?

A wetland is an area where the ground is covered by water or where the ground is very wet. During dry seasons, the water may evaporate and the ground becomes dry. Wetlands have specific types of water plants, frogs, insects, leeches, shrimp, crayfish, and more. Wetlands are important for migrating waterfowl, especially cranes.

What are cranes?

Cranes are large birds with long legs and long necks. Two types of cranes can be seen at QNWR during migration: Sandhill and Whooping. Sandhill Cranes are very common; Whooping Cranes, commonly called Whoopers, are one of the rarest birds in North America and in the world.

Why is QNWR important to cranes?

Twice a year, Whooping and Sandhill Cranes move (migrate) between their wintering grounds and breeding (summer) grounds. Each time, they fly up to 2,500 miles. Wetlands like QNWR provide the right food and shelter for the cranes to rest and eat so they can gain strength to fly to their next resting place. Without refuges like QNWR, many cranes would not survive the dangerous migration journey.

Can you find the words listed below in this word scramble? Note: Some word may be diagonal but none are backwards.

N	M	M	O	A	J	L	J	C	R	S	T	A	F	F	O	R	D
Q	S	H	Q	T	C	Y	K	H	U	N	T	I	N	G	Z	X	G
C	U	E	V	T	R	E	F	U	G	E	X	S	H	P	L	G	Z
W	T	Y	H	Z	X	F	L	G	N	Y	H	A	T	Z	D	Z	C
L	D	W	M	M	I	G	R	A	T	E	A	W	F	I	Z	L	F
J	X	E	F	E	V	M	G	V	D	L	Z	X	R	I	L	C	J
M	L	T	A	W	V	N	D	P	N	Y	O	D	K	N	D	T	J
A	N	L	G	P	Z	X	S	K	R	G	J	U	O	Y	O	W	Q
X	O	A	O	F	R	U	A	S	V	Z	P	C	I	U	M	T	V
T	M	N	L	I	R	K	N	C	O	N	Y	K	X	H	W	E	I
V	K	D	U	N	W	X	D	S	A	L	T	S	T	F	T	Z	T
V	Y	V	L	O	V	H	Y	K	L	J	F	U	A	V	E	J	S
A	V	O	C	E	T	J	O	N	V	X	T	J	A	E	X	U	N
J	Q	U	I	V	I	R	A	O	K	G	V	B	S	N	O	V	I
I	M	G	F	Z	C	S	R	V	P	S	A	N	D	H	I	L	L
R	F	E	N	I	G	O	T	R	D	I	Q	M	Z	N	B	P	G
L	E	G	Z	R	W	I	B	H	R	N	N	B	G	H	C	T	Y
A	O	G	B	F	C	R	A	N	E	S	R	G	T	H	P	E	O

AVOCET

CRANE

DUCKS

HUNTING

MIGRATE

QUIVIRA

REFUGE

SALT

SANDHILL

SANDY

STAFFORD

STILT

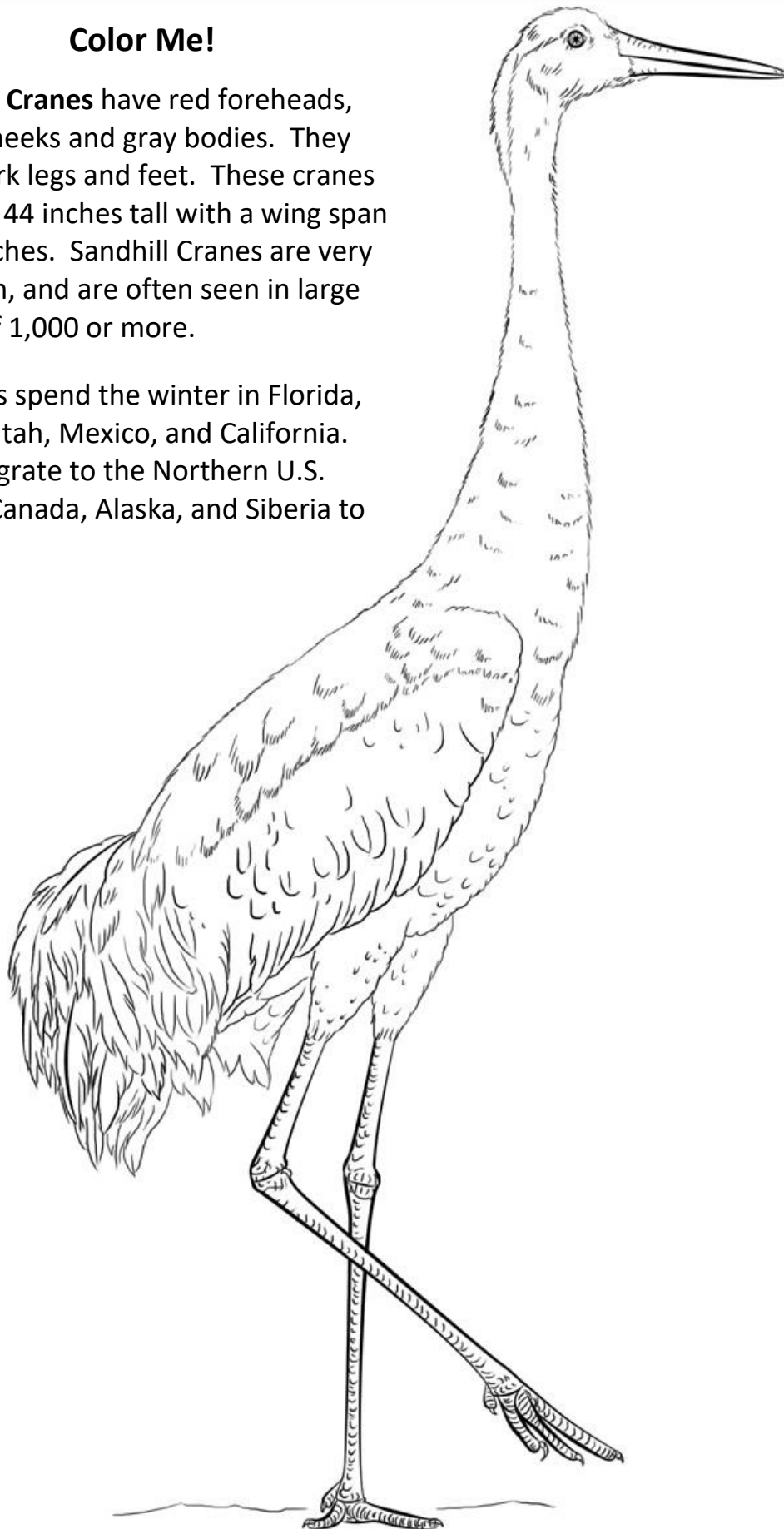
WETLAND

WHOOPING

Color Me!

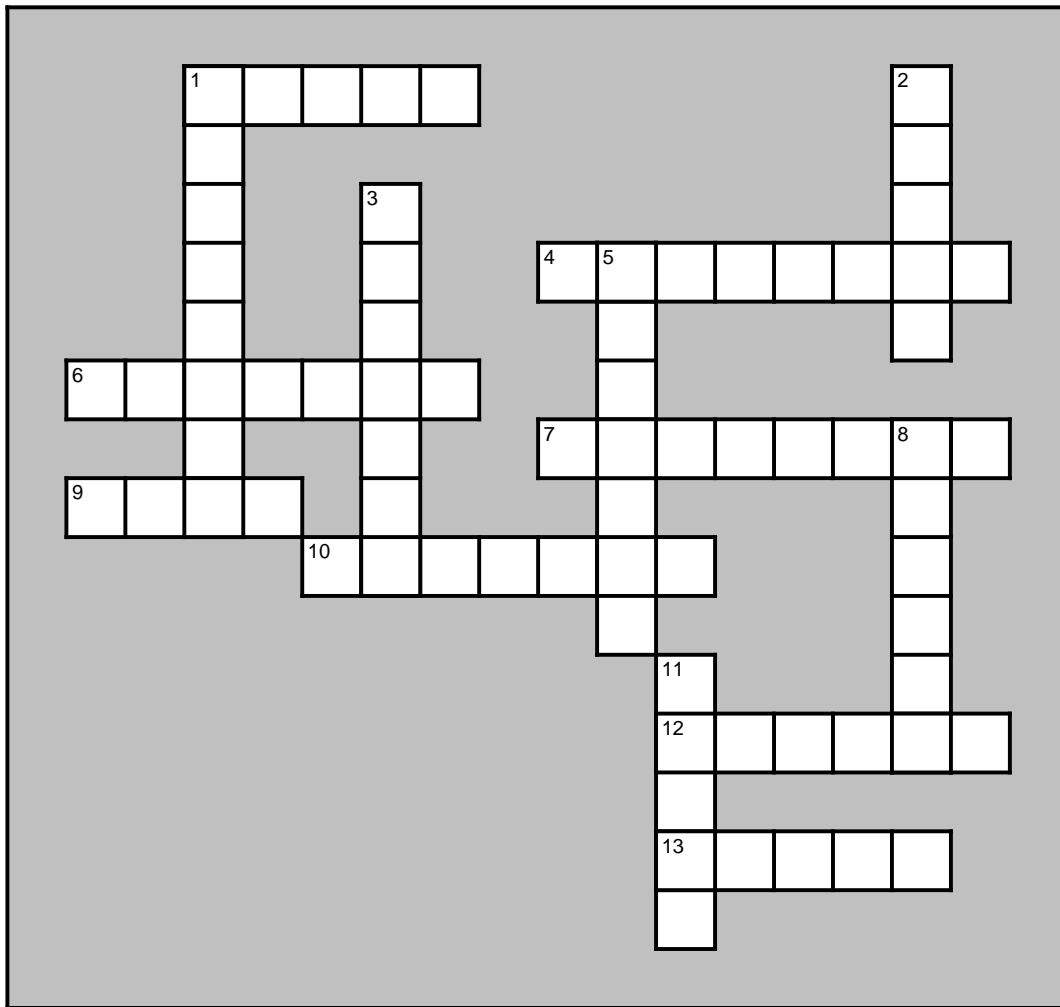
Sandhill Cranes have red foreheads, white cheeks and gray bodies. They have dark legs and feet. These cranes average 44 inches tall with a wing span of 75 inches. Sandhill Cranes are very common, and are often seen in large flocks of 1,000 or more.

Sandhills spend the winter in Florida, Texas, Utah, Mexico, and California. They migrate to the Northern U.S. states, Canada, Alaska, and Siberia to breed.



paint the world
SUPER
COLORING

Complete this crossword puzzle to see what you have learned!



Across

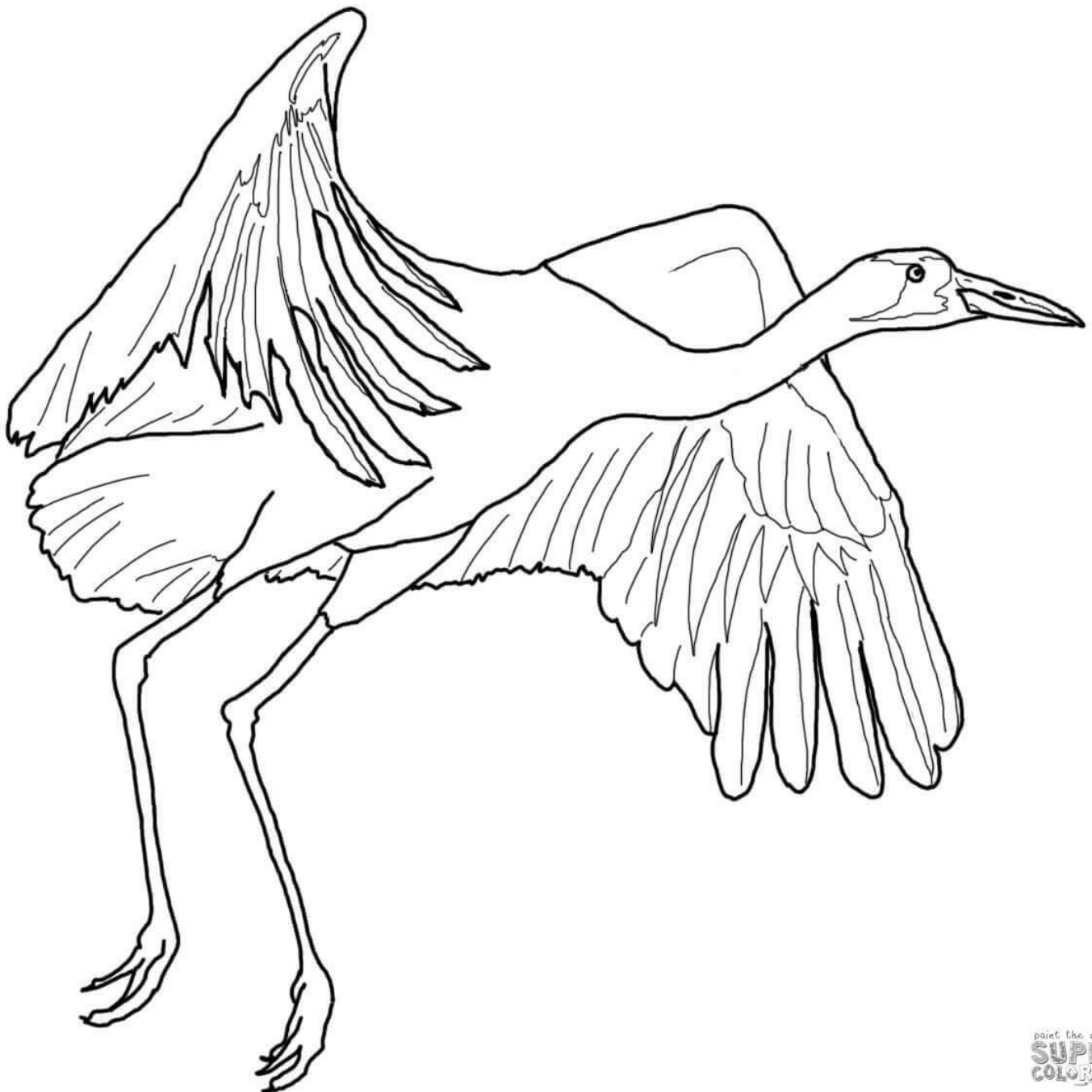
1. A shorebird seen at QNWR
4. A very rare crane
6. _____ National Wildlife Refuge
7. Most of QNWF is located in _____ County
9. This makes QNWR unique
10. A type of land is covered by water or is very wet
12. A shorebird seen at QNWR
13. One of the types of waterfowl seen at QNWR

Down

1. A very common crane
2. A large, long-legged and long-necked bird
3. Regular movement of birds from summer areas to winter areas
5. This activity is strictly controlled or forbidden at QNWR
8. A place where wildlife is protected
11. The soil at QNWR is very _____.

Color Me!

Whooping Cranes have red foreheads, white bodies and black wingtips. They have dark legs and yellow feet. They average 52 inches tall with a wing span of 87 inches. Whoopers are the tallest birds in North America. They live and travel alone, in pairs, or in flocks of up to 7 birds. Whoopers are sometimes seen in flocks of Sandhill Cranes. Whoopers winter primarily off the Texas Gulf Coast. They migrate about 2,500 miles to Northern Canada and the Northwest Territories to breed.



What else can you see at QNWR?

The sand prairie & diverse wetlands of QNWR supports a wide variety of wildlife species.

Over 340 different **birds** have been seen at QNWR. Swallows, ducks, owls, gulls, hawks, & many more species of birds can be seen throughout the year. During the summer 2 very important bird species at QNWF: the Interior Least Tern (an endangered species) & the Snowy Plover (a threatened species). In early to mid-December, up to 200 Bald Eagles can often be seen. For a complete checklist of birds, go to <https://www.fws.gov/uploadedFiles/Bird%20Checklist%202011.pdf>

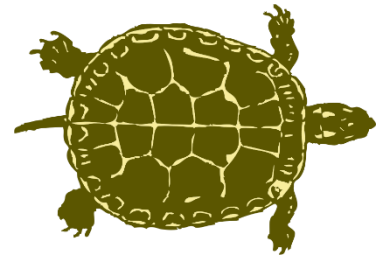
Common **mammals** seen at QNWR include Coyote, Beaver, White-tailed Deer, Plains Pocket Gopher, Muskrats, & Eastern Wood Rats. For a complete checklist of mammals, go to <https://www.fws.gov/uploadedFiles/Mammal%20Checklist.pdf>

Many types of **herps** such as turtles (6 types!), lizards, snakes (only 1 is venomous), & frogs can be seen. For a complete checklist of herps, go to <https://www.fws.gov/uploadedFiles/Herp%20Checklist.pdf>

Up to 12 species of **dragonflies** & 2 species of **damselflies** can be seen at QNWR.



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Almost 60 types of **butterflies** have been observed at QNWF! While butterflies enrich our lives by their beauty alone, they also play an important role in the environment. Butterflies collect pollen on their bodies when they feed on fruits, vegetables, and flowers, & then they transfer the pollen to other fruits, vegetables, & flowers which helps to produce new seeds. Butterflies & caterpillars are also an important source of food for birds, spiders, lizards, bats, & more.

For more information about QNWR, visit their website at <https://www.fws.gov/refuge/Quivira>

What is Audubon of Kansas?

Audubon of Kansas (AOK) is an independent grassroots nonprofit organization that promotes appreciation and stewardship of natural ecosystems in Kansas and the central Great Plains, with special emphasis on conservation of prairies, birds, other wildlife, and their habitat. **It is neither funded nor administered by the National Audubon Society.**

While not affiliated with the National Audubon Society, AOK works in partnership with local Audubon chapters and many other organizations. Representatives of local Kansas chapters serve on the Board of Trustees. AOK seeks to implement its goals by working cooperatively with individuals and groups representing a wide variety of interests including landowners, businesses, communities, policy makers, and other conservation organizations.

Following are some of the important state conservation issues in which AOK is involved.

- Expanding the range of River Otters and Osprey
- Conserving the habitat for Sandhill Cranes and Whooping Cranes
- Combatting Old World Bluestem and other non-native invasive plants
- Re-establishing the Black-footed Ferret population
- Enhancing Farm Bill conservation programs
- Fighting legislative threats to native prairie, prairie dogs, and short-grass prairie ecosystems
- Conserving Prairie Chickens and their habitat
- Restoring senior water rights to Quivira National Wildlife Refuge
- Advocating for ecologically responsible roadside management
- Opposing wind power siting in native prairie landscapes
- Managing 3 important sanctuaries: Hutton Niobrara Ranch Wildlife Sanctuary, Connie Achterberg Wildlife-Friendly Demonstration Farm, and the Mt. Mitchell Heritage Prairie

For more information about AOK, visit their website at <https://www.audubonofkansas.org>