USDA

United States Department of Agriculture

Natural Resources Conservation Service

Farm Service Agency

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NRCS

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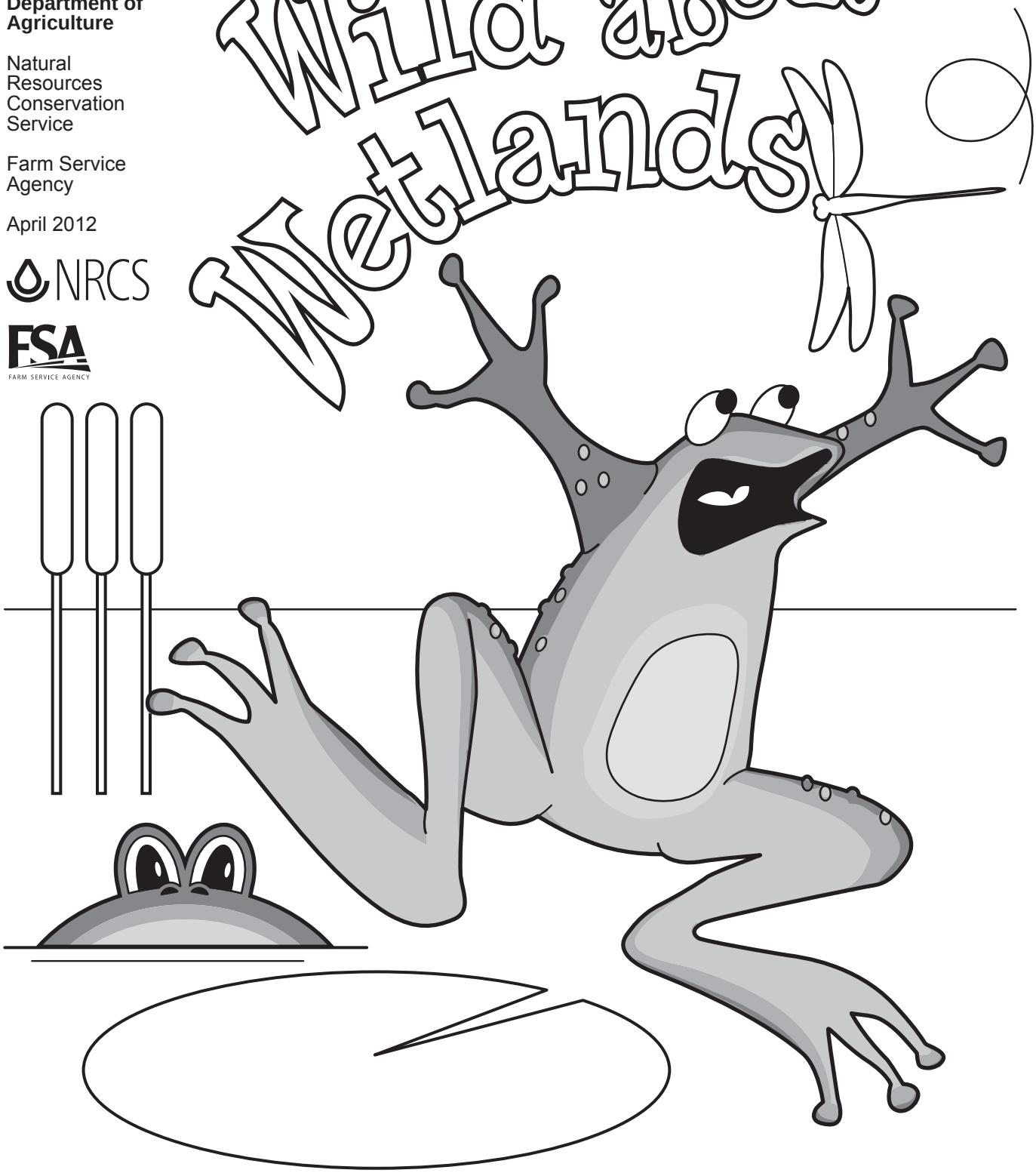
FARM SERVICE AGENCY

Wild about Wetlands!



Helping People Help the Land

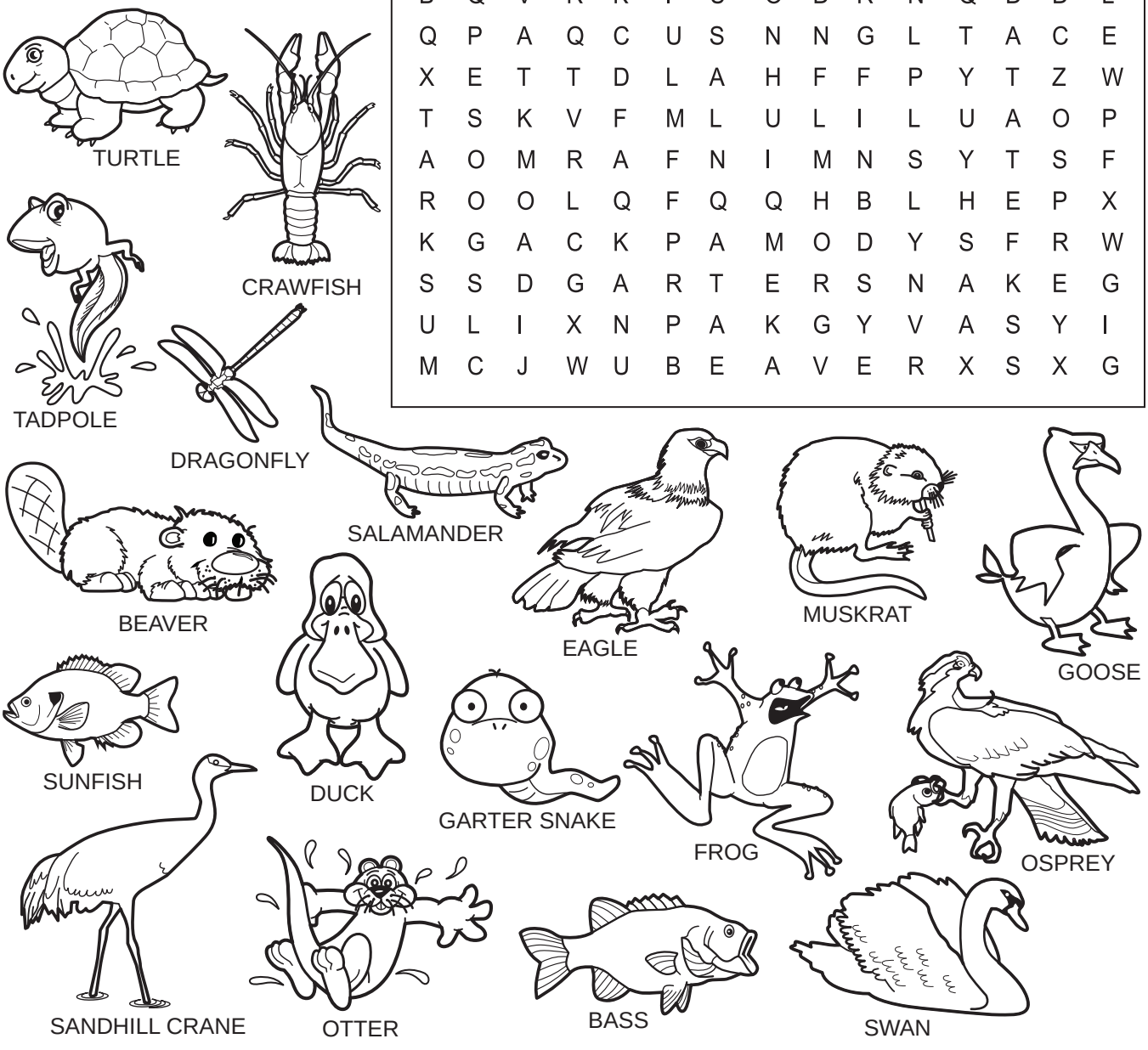
Wild about Wetlands

Wetlands are amazing places. Think of a wetland as an area of land where the soil is so wet that the water can't drain for a long time. It's a perfect home for plants, animals, and insects that need a wet place to live or hunt for food. If you visit a wetland, you will get to see some water-loving creatures. You can find wetland areas around lakes and ponds, along riverbanks, near the coast of an ocean, and in low-lying areas of a landscape.

Wetland Wildlife Word Search

Circle the names of Montana's wetland wildlife hidden in the box.

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



Wetland Types

There are three wetland groups: marine, tidal and non-tidal. Marine wetlands are found in coastal shallows. Beaches and shallow coral reefs are marine wetlands. Tidal wetlands, or estuaries, occur in coastal areas inland from the oceans that are still affected by tides. The Everglades in Florida are tidal wetlands. Non-tidal wetlands occur inland and are not affected by the tides. Some types of non-tidal wetlands are peat bogs, fens, mountain meadows, and prairie potholes. Non-tidal wetlands make up 94% of the wetlands in the United States!

Montana is a long way from the ocean, so it's easy to guess that Montana's wetlands are non-tidal. But how can you tell if it's a marsh, a bog, a prairie pothole, or some other type of wetland? Here are some definitions to help you identify the different kinds of wetlands you might find in Montana.

Bogs are freshwater wetlands with spongy peat deposits, evergreen trees, and a bottom covered by a thick carpet of sphagnum moss.

Fens are groundwater-fed, peat-forming wetlands covered by grasses, reeds, and wildflowers.

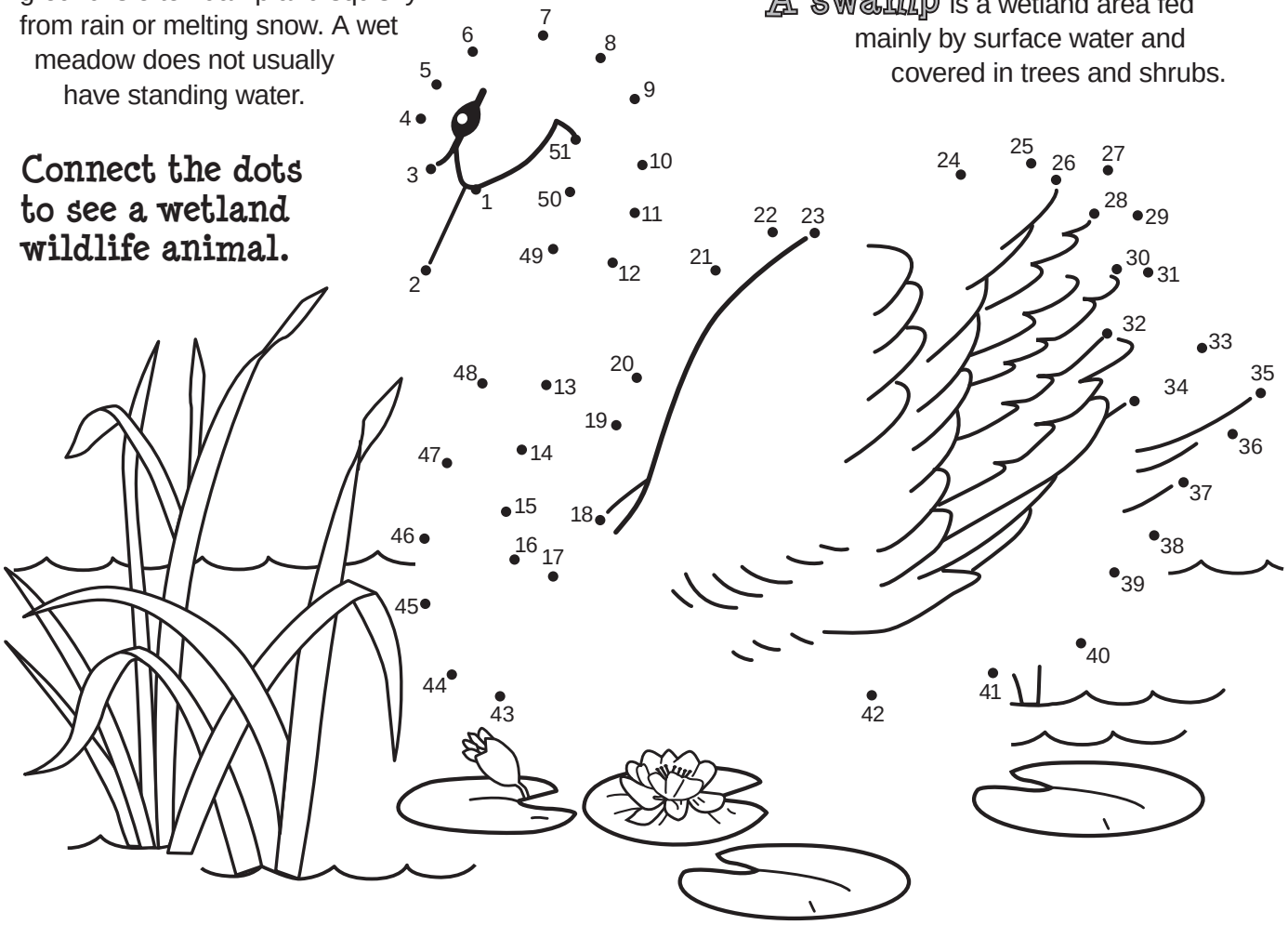
A mountain meadow, or **wet meadow**, is a grassy area where the ground is often damp and squishy from rain or melting snow. A wet meadow does not usually have standing water.

Prairie potholes are wetland areas that develop when rain and melting snow fill low spots left on the landscape by glaciers. These are found in northeastern Montana.

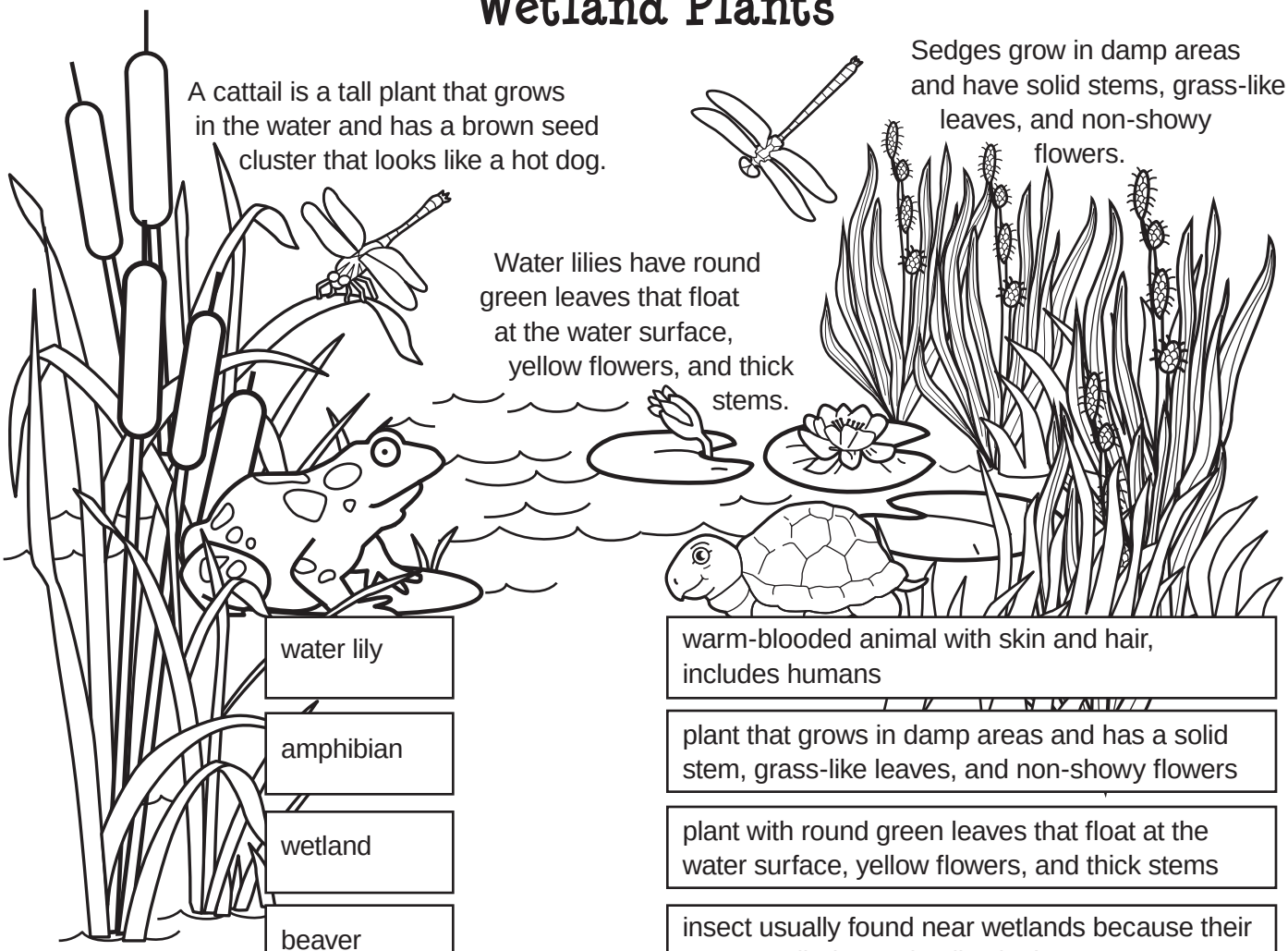
A marsh is an area that is saturated (wet), flooded, or ponded for much of the year and has non-woody vegetation that grows well in wet soil.

A swamp is a wetland area fed mainly by surface water and covered in trees and shrubs.

Connect the dots to see a wetland wildlife animal.



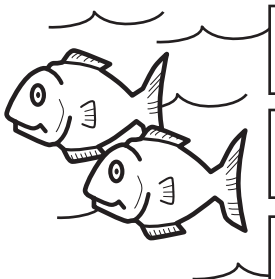
Wetland Plants



Wetland Vocabulary Match

Draw a line from the words to their definitions.

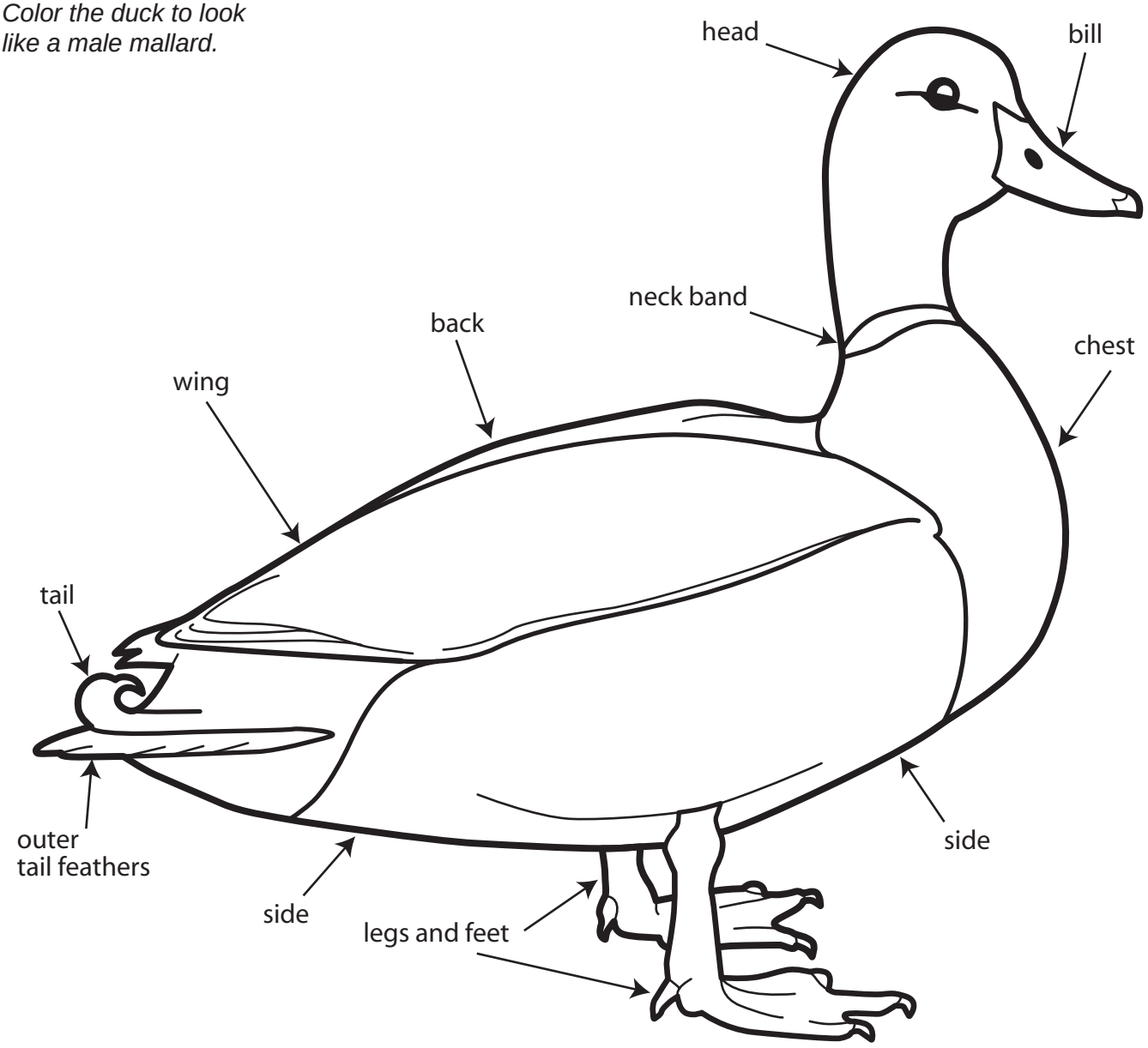
water lily	warm-blooded animal with skin and hair, includes humans
amphibian	plant that grows in damp areas and has a solid stem, grass-like leaves, and non-showy flowers
wetland	plant with round green leaves that float at the water surface, yellow flowers, and thick stems
beaver	insect usually found near wetlands because their young, called nymphs, live in the water
conservation	tall plant that grows in the water and has a brown seed cluster that looks like a hot dog
mammal	flat-tailed mammal that lives in and out of water and builds dams
watershed	protecting and managing the environment and natural resources
habitat	area where the soil is so wet that the water can't drain for a long time
sedge	the type of environment where a plant or animal usually lives
cattail	area of land where all the water drains into one river system
dragonfly	cold-blooded animal with moist skin that grows up in the water and lives in or near water as an adult



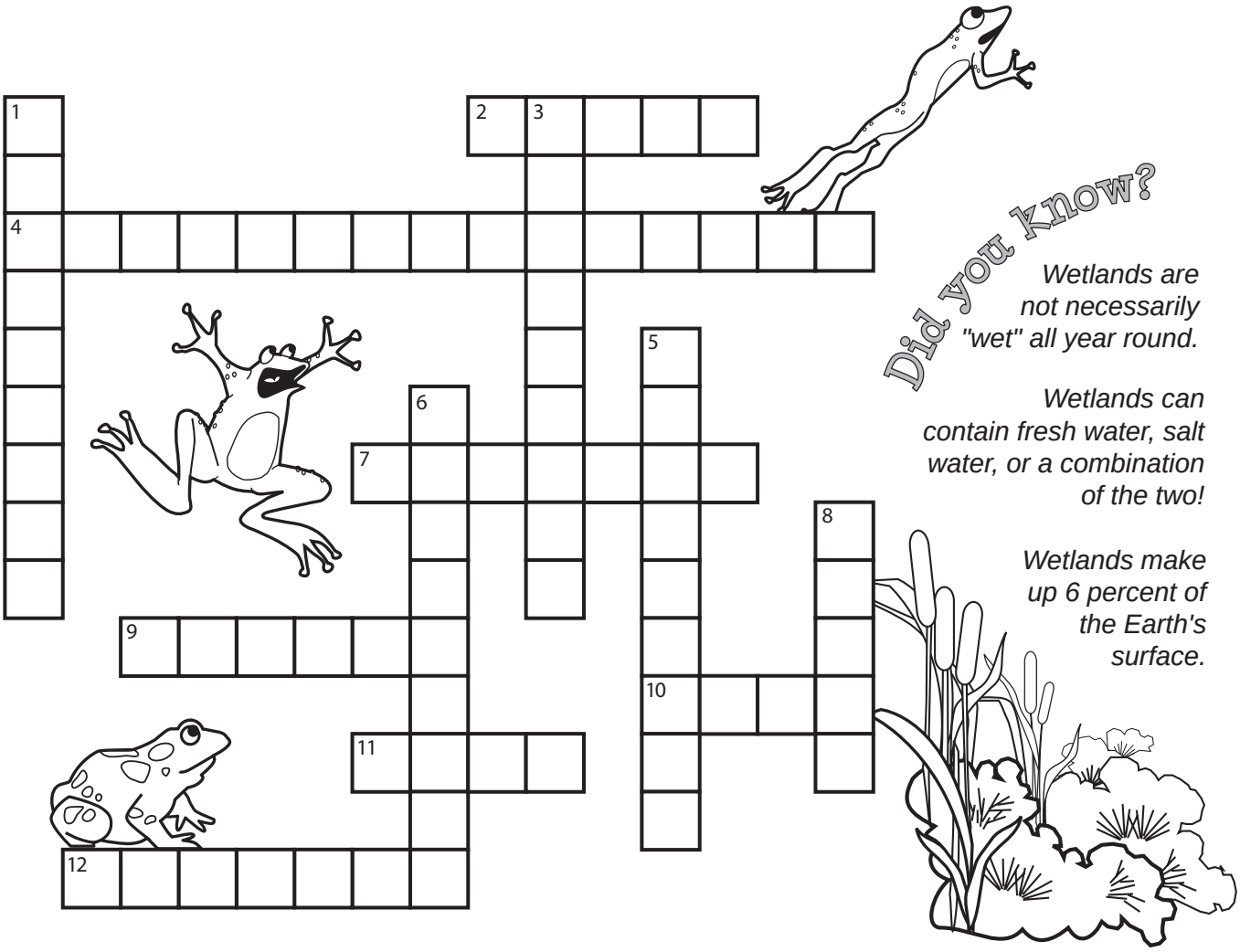
Wetland Waterfowl

Birds that live on or near the water are called waterfowl. One type of waterfowl that is often seen around wetlands is the mallard duck. Mallards can be found across the northern United States and as far north as the Bering Sea near Alaska. They are most common in the prairie pothole regions of northeastern Montana, as well as North Dakota, South Dakota, and Minnesota. Female mallards are shades of brown and make nests on the ground near wetlands to lay around nine eggs. Male mallards are much more colorful with a green head, white neck band, reddish brown chest, grayish wings and sides, and a brownish back. Their tails are black, except for the white outer tail feathers. Their bills are yellow, but their feet and legs are red.

Color the duck to look like a male mallard.



Wetlands Crossword



Across

2. A wetland fed by surface water and covered in trees and shrubs
4. Wetland areas where rain and melting snow fill low spots left on the landscape by glaciers
7. The type of environment where a plant or animal usually lives
9. Flat-tailed mammals that live in and out of water and build dams
10. Groundwater-fed wetlands covered by grasses, reeds, and wildflowers
11. Freshwater wetlands with spongy peat deposits, evergreen trees, and a floor of moss
12. A tall plant that grows in the water and has a brown seed cluster that looks like a hot dog

Down

1. A cold-blooded animal with moist skin that lives in or near the water
3. A plant with round green leaves that float at the water surface, yellow flowers, and thick stems
5. An insect usually found near wetlands because their young, called nymphs, live in the water.
6. A group of flying animals found around wetlands; some examples are ducks, geese, and swans
8. An area that is wet or flooded much of the time and has non-woody vegetation

Wetland Values

Wetlands perform an amazing assortment of ecological functions that we have only recently begun to appreciate. A century ago, some people thought it would be a good idea to get rid of wetlands. Today, we recognize the values that wetlands provide. Wetlands help us by storing and cleaning water; growing plants and animals; and giving us a place to fish, swim and have fun.

Follow the way through this maze and you will see the route water takes from its source to the ocean and how wetlands help to make it cleaner and safer for all to use.

Habitat for Wildlife

Wetlands are prime habitat for nesting, feeding and cover for insects, amphibians, reptiles, waterfowl, songbirds, and mammals. Wetlands in the United States are home to about 5,000 plant species, 190 species of amphibians, and a third of all native bird species.

Reduced Soil Erosion

Wetlands slow the overland flow of water, reducing soil erosion along water courses downstream.

Less Sediment

Wetlands filter and collect sediment from runoff water, helping prevent mud from clogging lakes and reservoirs farther downstream.

Reduced Flooding

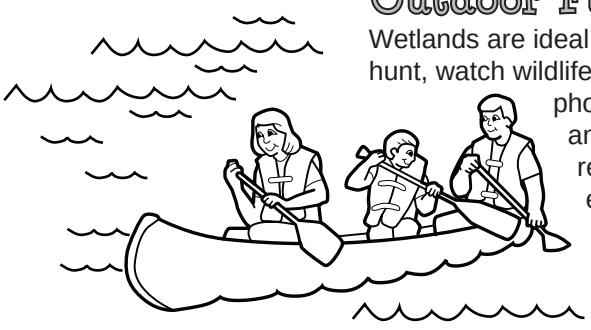
Wetlands store rain water temporarily, allowing it to move into the ground or evaporate. The temporary storage reduces high water flow.

Water Quality

The cleansing power of wetlands provides natural pollution control by removing chemicals and nutrients from water.

Money Sense

Trying to farm frequently flooded areas can cost a lot of money; the better economic choice may be to restore a wetland.



Outdoor Fun

Wetlands are ideal places to hunt, watch wildlife, take photographs and just relax and enjoy nature.

The Wetlands Reserve Program

The Wetlands Reserve Program (WRP) is designed to help private landowners trying to restore wetlands that were drained in the past. This popular program has been used to restore nearly 2.5 million acres since it began in 1994! Most of these acres are put into permanent easements, which means the Natural Resource Conservation Service (NRCS) buys certain rights from the landowner and pays for the entire wetlands restoration project. The landowner keeps title, control of access, and certain other rights, but must protect the restored wetland ecosystem for future generations. The permanent easement remains in place even if the property is sold in the future.

Can you solve this word puzzle?

This puzzle is called a Cryptogram. At the top there is a KEY that lists all the letters from A thru Z with a box below. Each of the letters has a corresponding number. The bottom part contains a secret phrase. Each of the blanks has a number underneath it. Fill in the letters that correspond to the numbers below the blanks to solve the phrase.

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

21 20 19 25 19 21 4 23 17 14 9 1 19 9 19 1 8 19 11 1 7 18 1 23 10

2 9 23 11 1 7 18 1 23 10 3 7 1 4 23 17 14 7 25 17 19 1 9 21 7

11 1 7 21 19 16 21, 1 19 9 21 7 1 19 23 17 14 19 17 20 23 17 16 19

25 19 21 4 23 17 14 9 7 17 21 20 19 2 1 11 1 7 11 19 1 21 22.

Answer Keys:

The Wetlands Reserve Program is a program for landowners to protect, restore and enhance wetlands on their property.

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warm-blooded animal with skin and hair, includes humans	water lily
plant that grows in damp areas and has a solid stem, grass-like leaves, and non-showy flowers	amphibian
plant with round green leaves that float at the water surface, yellow flowers, and thick stems	wetland
insect usually found near wetlands because their young, called nymphs, live in the water	beaver
tall plant that grows in the water and has a brown seed cluster that looks like a hot dog	conservation
flat-tailed mammal that lives in and out of water and builds dams	mammal
protecting and managing the environment and natural resources	watershed
area where the soil is so wet that the water can't drain for a long time	habitat
the type of environment where a plant or animal usually lives	sedge
area of land where all the water drains into one river system	cattail
cold-blooded animal with moist skin that grows up in the water and lives in or near water as an adult	dragonfly

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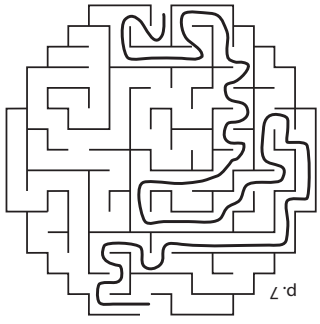

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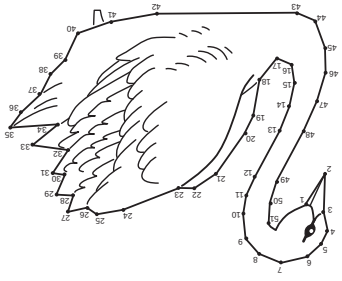

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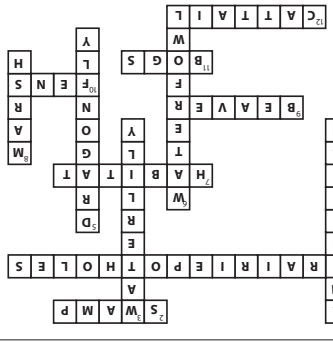

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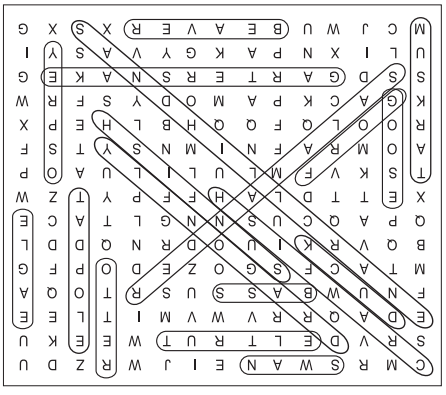

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