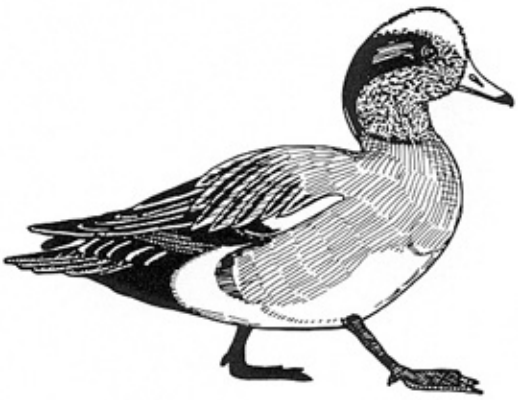
American Avocet
Black-necked Stilt

American Bittern

American Wigeon

Belted Kingfisher

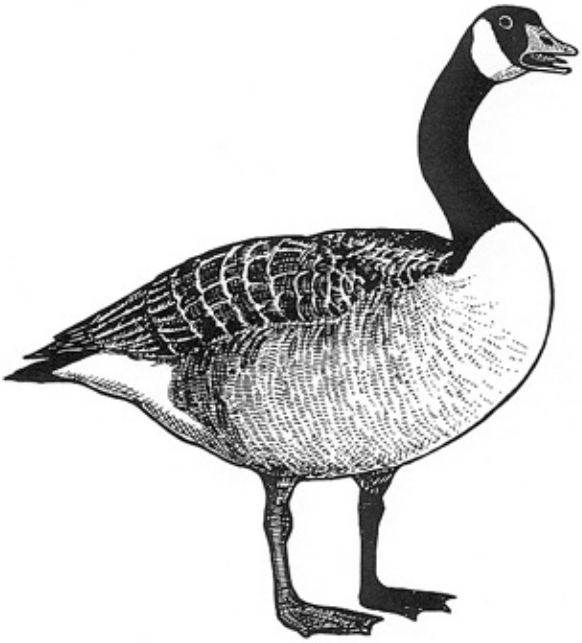


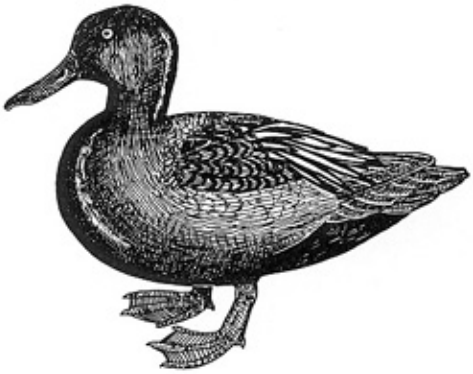
Canada Goose

California Quail

Cinnamon Teal

Canvasback



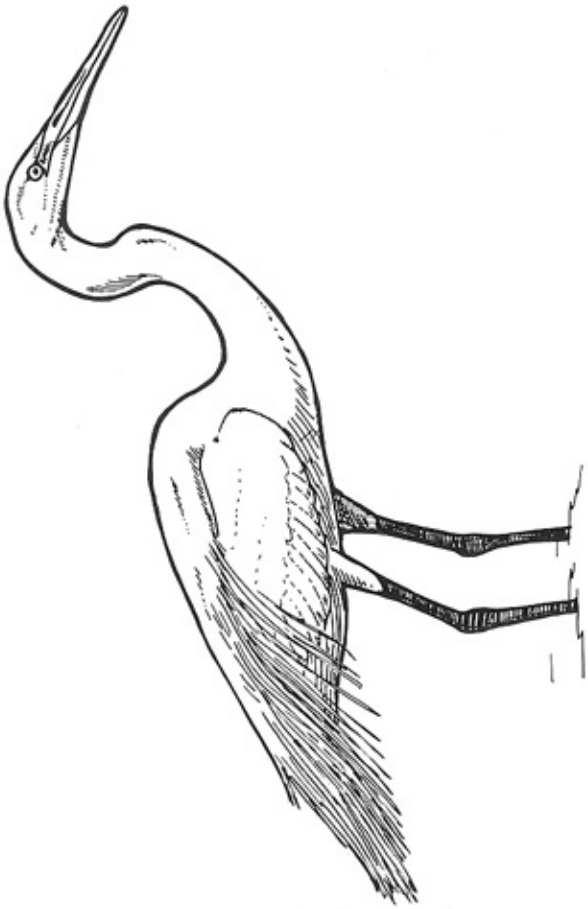


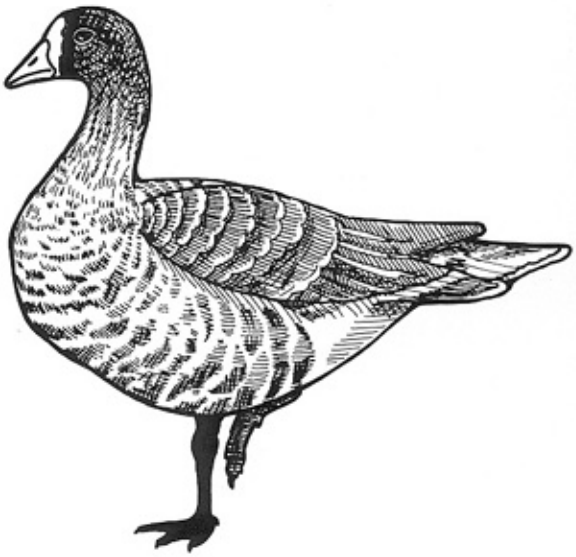
Great Blue Heron

Coot

Greater
White-Fronted
Goose

Great Egret



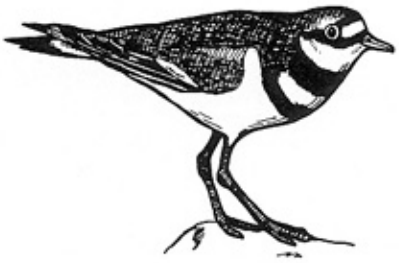


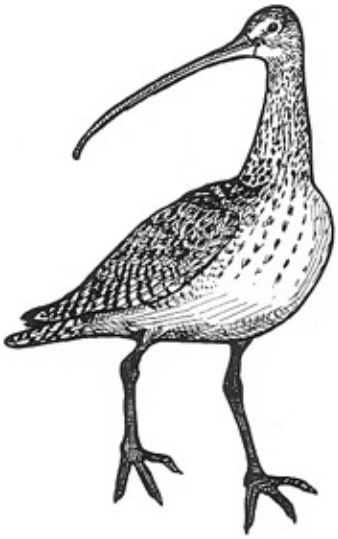
Long-billed Curlew

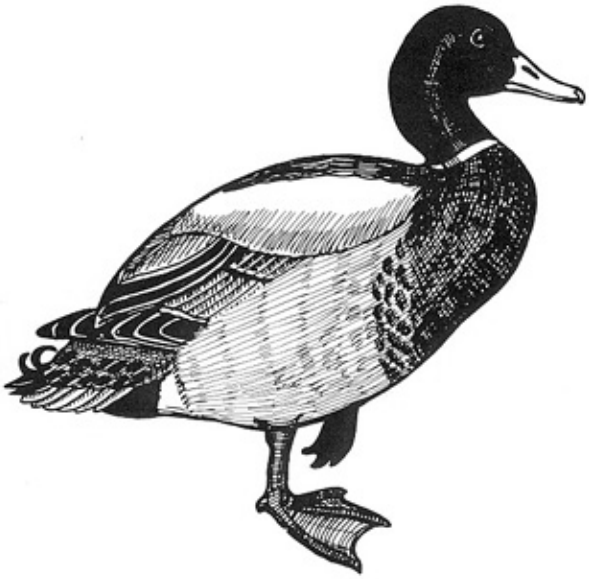
Killdeer

Northern Flicker

Mallard





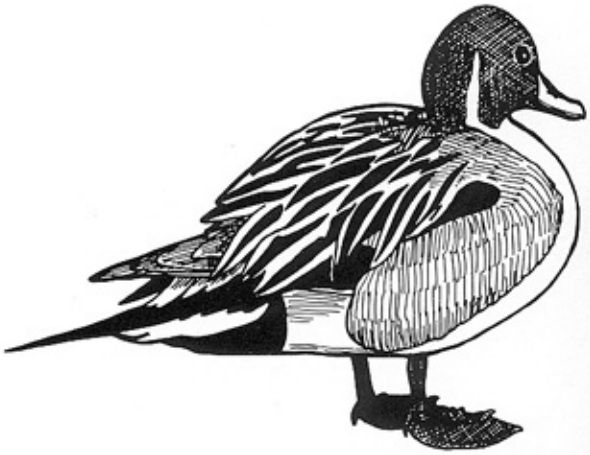


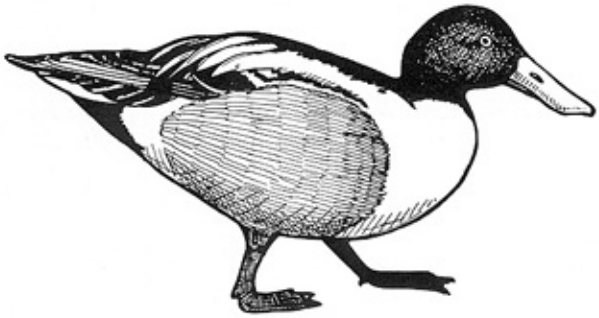
Northern Pintail

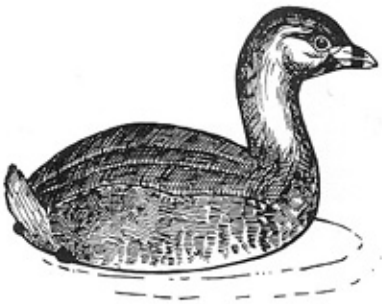
Northern Harrier

Pied-billed Grebe

Northern Shoveler





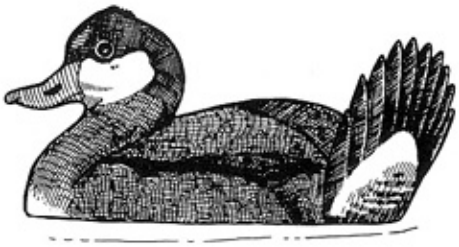


Ring-necked Pheasant

Red-winged Blackbird

Sandhill Crane

Ruddy Duck

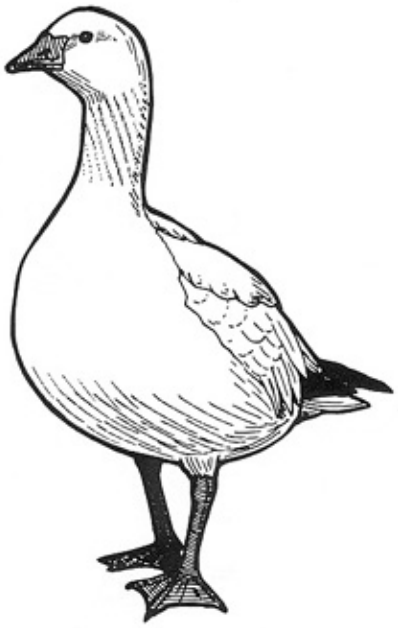


Western Grebe

Snow Goose

Wood Duck

Western Meadowlark

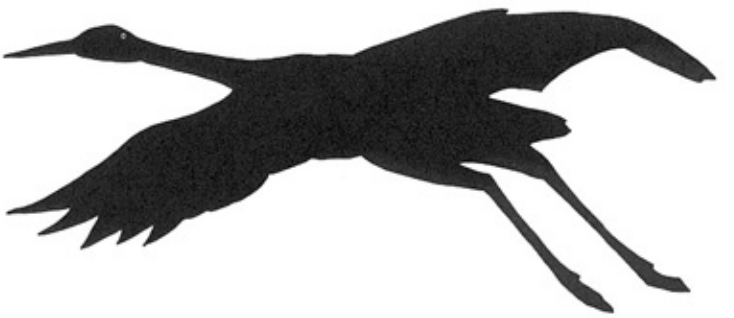


Name

## Migration Identification

When studying migratory birds, it is important to be able to identify them in flight. Here are the outlines of seven migratory birds from the Central Valley. Can you identify *any* of them? *Some* of them?

Answers below.

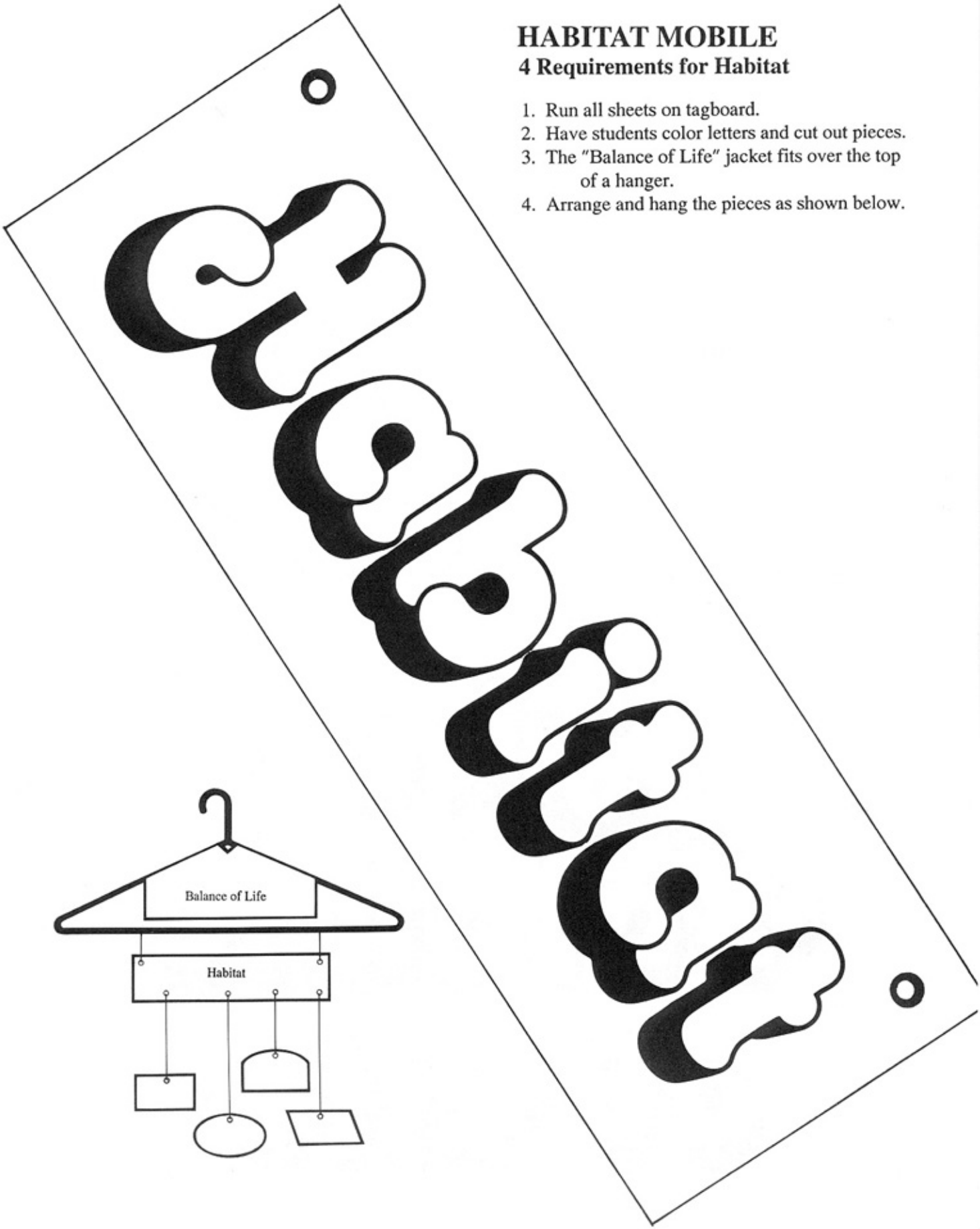


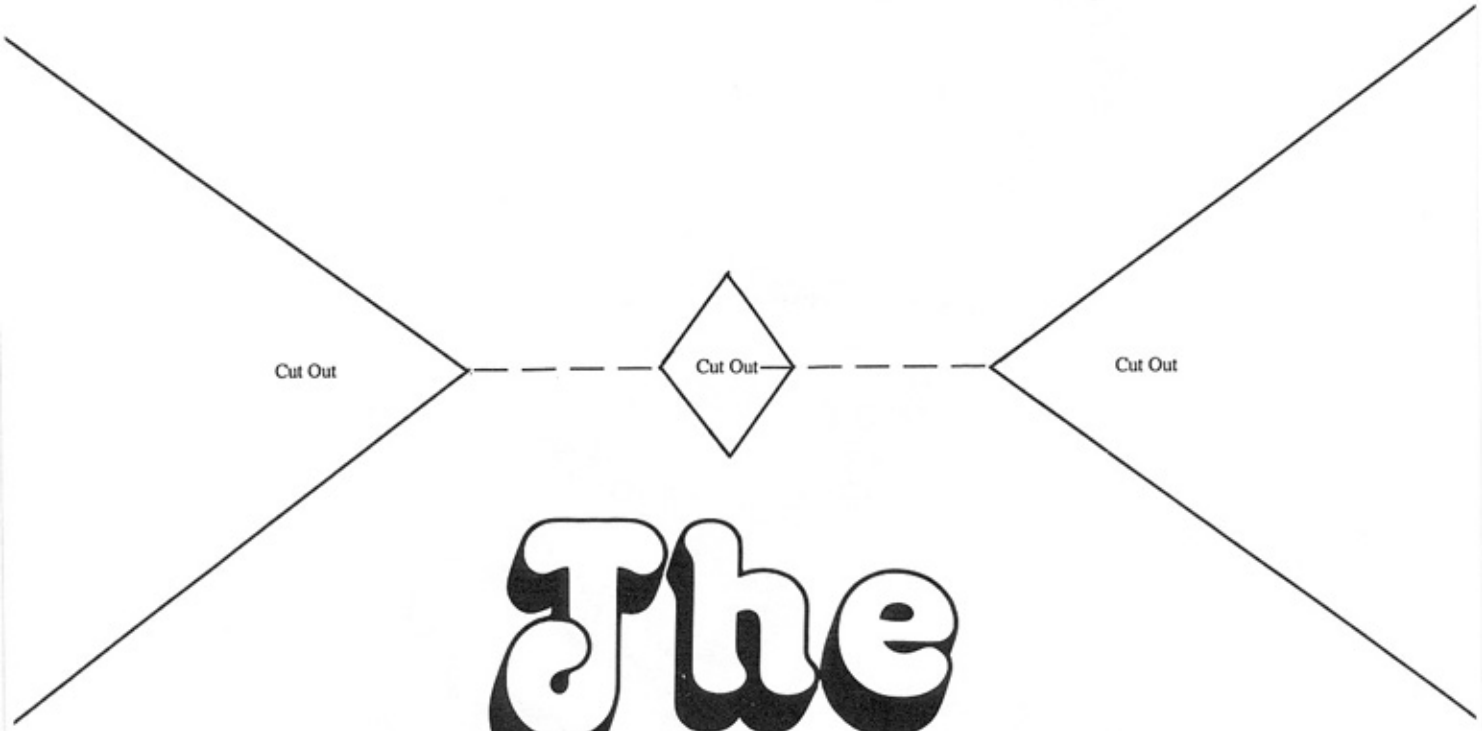
1. Northern Harrier Hawk
2. Northern Pintail
3. Northern Shoveler
4. Mallard
5. Canada Goose
6. Kingfisher
7. Sandhill Crane

# HABITAT MOBILE

## 4 Requirements for Habitat

1. Run all sheets on tagboard.
2. Have students color letters and cut out pieces.
3. The "Balance of Life" jacket fits over the top of a hanger.
4. Arrange and hang the pieces as shown below.






# The Balance of Life

Cover

Space

Food

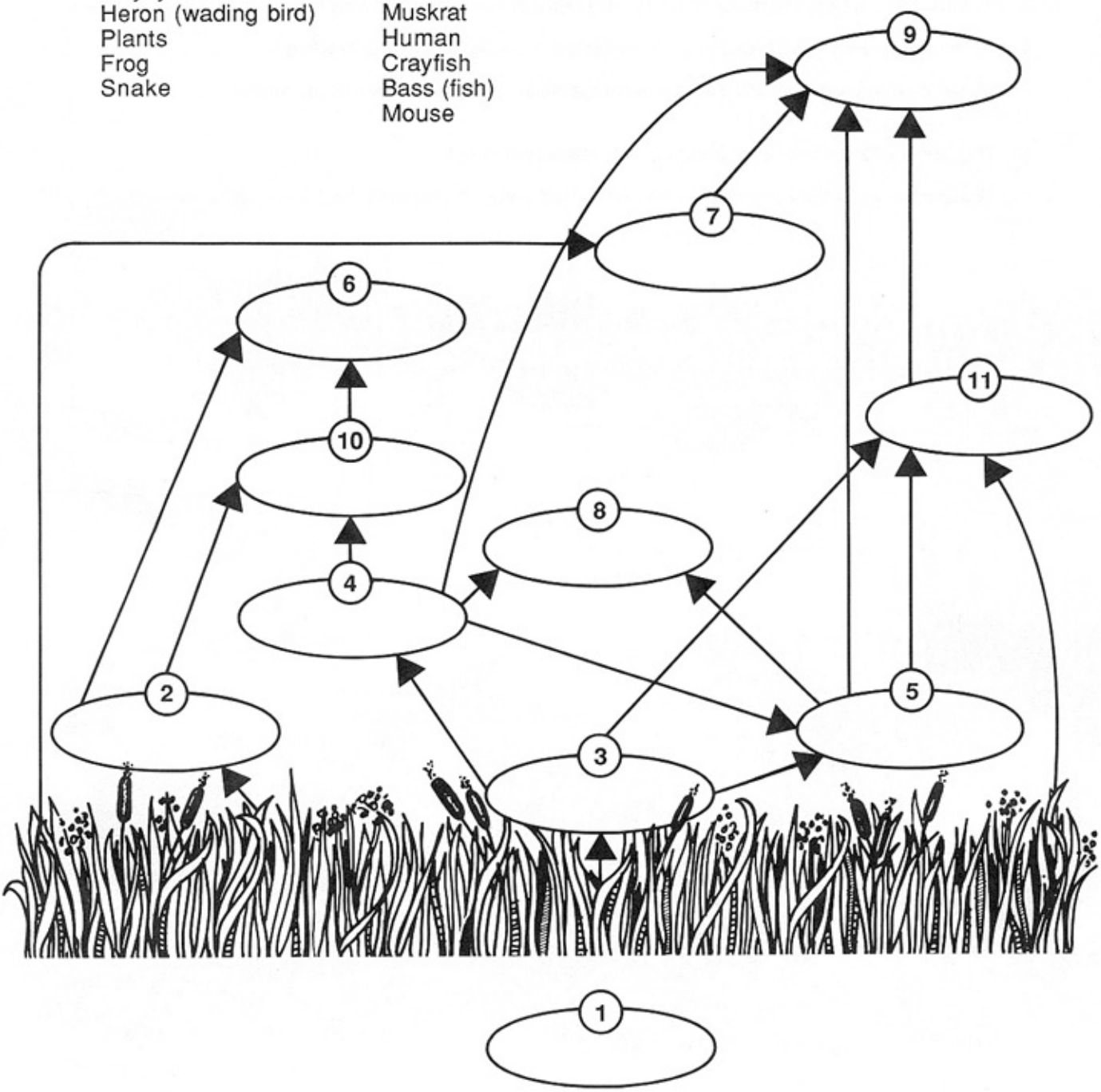
Water

# Freshwater Marsh Food Web Puzzle

Every creature has to eat. Some food comes from plants and some from animals. Most creatures eat many different things. Plants and animals, including humans, are all linked in a "food web".

Here is a simplified food web from a freshwater marsh area where pioneers might have settled 200 years ago. Read the clues and see if you can work out the web. Use the words below to fill in the correct numbered places. (Note: The arrows point away from the "food" toward the creature that eats it.)

Mayfly
Heron (wading bird)
Plants
Frog
Snake
Owl
Muskrat
Human
Crayfish
Bass (fish)
Mouse



## Clues

1. These living things use energy from the sun to make food. They provide the most food in the entire world.

2. This small marsh rodent eats plants and sometimes insects.

3. The larva of this flying insect feeds on plants.

4. This creature eats insects; it stays close to water but is sometimes found on land.

5. This animal lives all its life in the water and feeds on insects and frogs.

6. This bird hunts at night for snakes and mice.

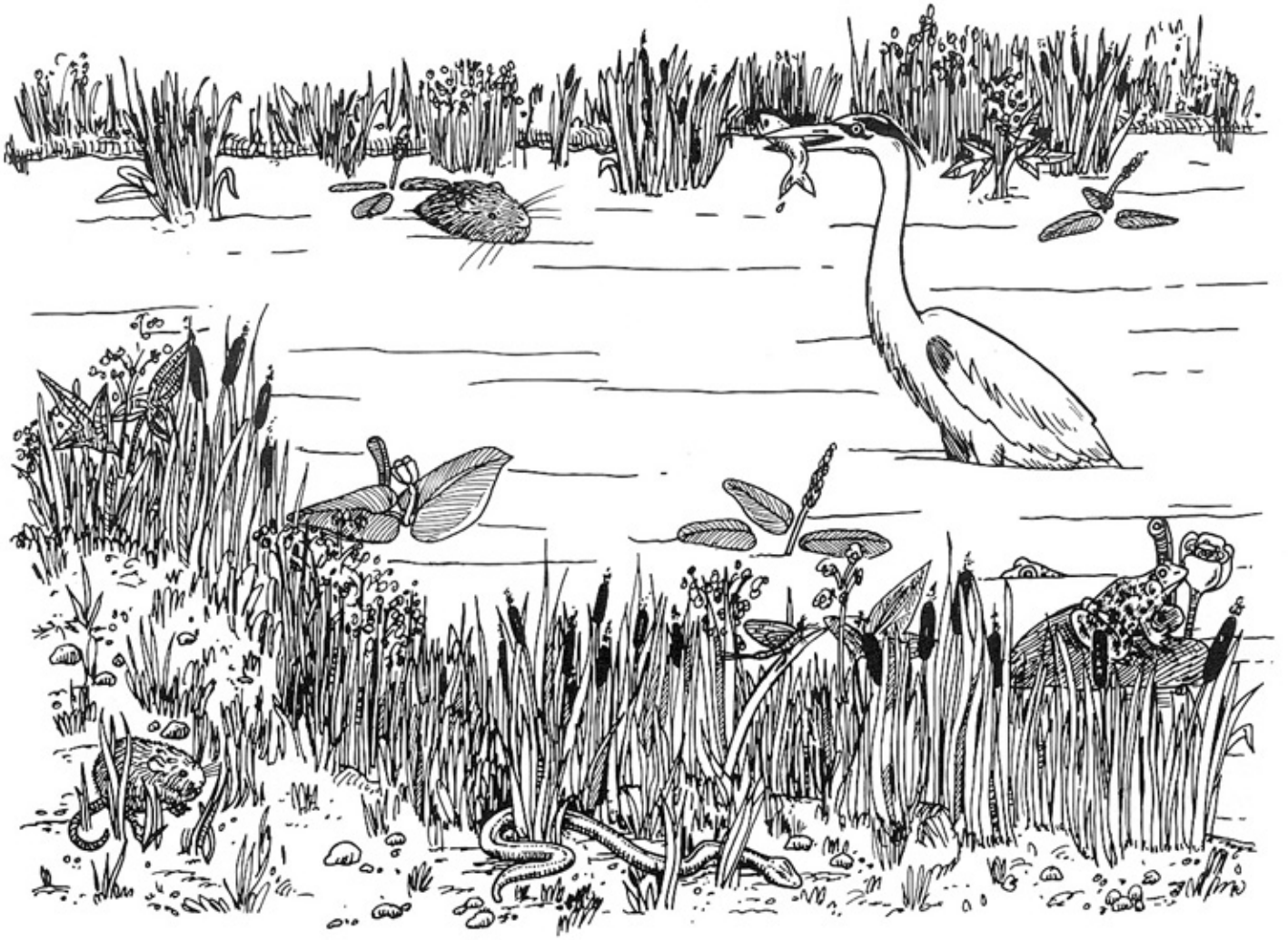
7. This small mammal was hunted for its fur; its meat was also eaten. It eats mostly plants.

8. This long-legged bird wades among plants in shallow water, looking for fish and frogs.

9. This creature can find many things to eat in the marsh, including plants, fish, frogs, crayfish and muskrats.

10. This long reptile hunts for frogs and mice. It swallows prey whole.

11. This creature looks like a small lobster and swims backwards. It eats small dead fish, insect larvae and plants.



Answers: 1. plants, 2. mouse, 3. mayfly, 4. frog, 5. bass, 6. owl, 7. muskrat, 8. heron, 9. human, 10. snake, 11. crayfish.

# PUT ME IN MY PLACE!
## Habitat Match 4 - 6

A Wildlife Refuge is a special place for birds and other animals. Government workers take care of the Refuge so that it will always be used by the wildlife. Different kinds of birds like to be in different parts of the Refuge. Read about the birds, cut them out, and put them where they like to be. Or, take the short cut - write the letter that is next to the bird in the part of the refuge where you would find that bird.

**SNOW GOOSE** **A**

Likes to feed in grasslands and grainfields.

**AMERICAN COOT** **B**

Can be found in the water or wandering on the edges of the water. This bird can walk along on lily pads.

**WESTERN GREBE** **C**

Found on open water where it builds floating nests.

**RUDDY DUCK** **D**

**CANVASBACK** **E**

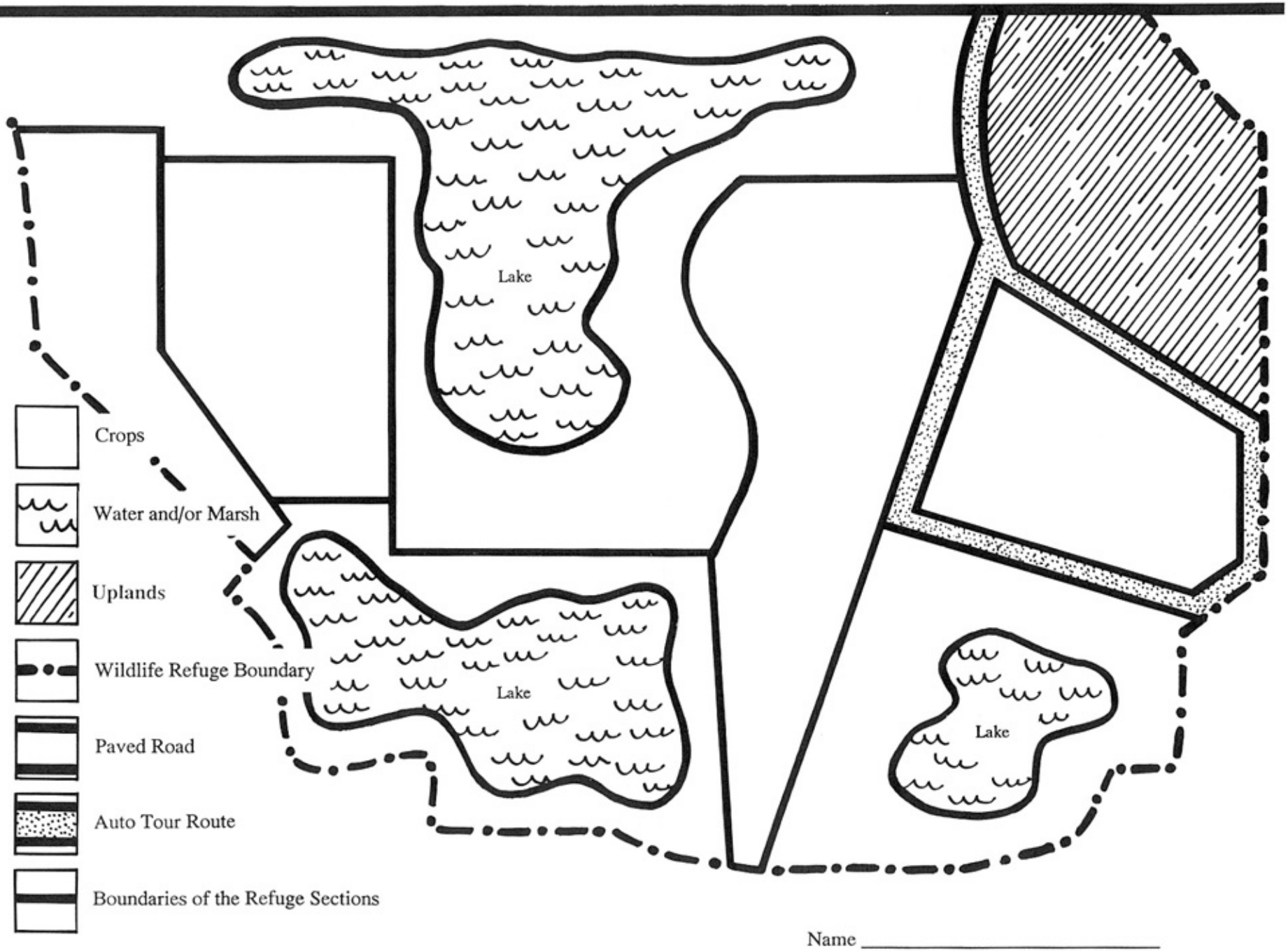
The Ruddy Duck and the Canvasback are ***diving ducks***. The Ruddy Duck is found in marshes, lakes and ponds. Canvasbacks like open lakes and marshes.

**CINNAMON TEAL** **F**

**PINTAIL** **G**

**MALLARD** **H**

The Cinnamon Teal, Pintail and Mallard are **dabbling ducks**. They feed by tipping tail up to reach aquatic plants, seeds, and snails. The Cinnamon Teal can be found on ponds and in lakes and marshes. The Pintail will be in marshes and open areas with ponds or lakes. The Mallard enjoys the water, but can be found in many places on the refuge, so you can put it where you like!


Lake
Lake
Lake
Crops
Water and/or Marsh
Uplands
Wildlife Refuge Boundary
Paved Road
Auto Tour Route
Boundaries of the Refuge Sections

Name _____