

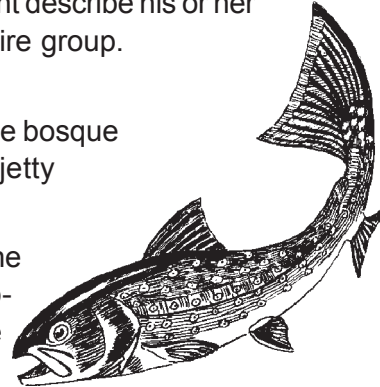


### Section A: Rio Bravo

2. Set up the river as Rio Bravo (see “Changing River” activity).
3. Option a: Animal Match: Hand out to the class the cards with pictures and descriptions of the Rio Bravo animals, making sure that no student receives the picture and drawing for the same animal. Have the students take turns reading a description, with classmates guessing which animal is being described. The student with the matching drawing should place the animal on the model in the habitat described in the reading. Continue around the room until all the animal descriptions are read and all the drawings are placed on the model.
- or Option b: If you have less class time, hand out the animals with their descriptions to the students. Each student should have at least one animal of his or her own. Have the student carefully read the description and decide where that animal lives. What is its habitat? Students should then place the animal on the bosque model in a location where it would best live. Place them on the Rio Bravo bosque—before the ditches, levees and homes. Have each student describe his or her animal and where it lives to the entire group.

### Section B: Rio Manso

4. Now add the human alterations to the bosque model: irrigation ditches, levees, jetty jacks, etc. (Rio Manso).
5. Place the introduced species on the model, using the method from Option A or Option B above. Ask the students if any of their animals are affected by the change in the river or the introduced species of animals. Which animals are thriving because of the changes and which have lost habitat?
6. Have the class review “Threatened and Endangered Animals” near the end of this activity—a brief summary of some threatened, endangered, or extinct bosque animals.



### Section C: Rio Nuevo

7. Discuss what impacts restoration projects can have on these animals (Rio Nuevo changes). Using restoration project ideas from “Changing River” or from the students themselves, adjust the cards (such as removing exotic species) based on student discussion.

## Who Lives Where? cards



### Part 1B: Rio Bravo: Upper Watershed Adaptations: Native

Text for older students top in single-line box, for younger students below in larger type in double-line box.

The following cards are for use with the model set up as Rio Bravo, but for upper watershed locations (upper tributaries or areas north of the Middle Rio Grande Valley.) Use these if your school is located in the upper watershed or if you want to study the upper watershed.

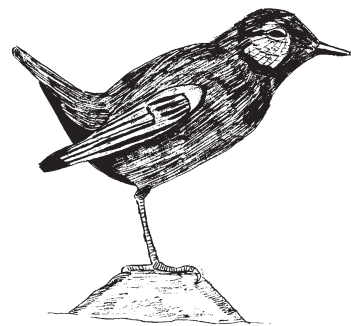
2

I am small but chunky with slate-colored feathers. Most often I hang out along rushing mountain streams of the upper watershed. I walk along the bottom as I search for caddisfly larvae and other aquatic insects. Sometimes I become completely submerged and I “fly” underwater using my powerful wings. I can even do this in water that is rushing too fast for you to stand in! I have very large oil glands and soft, dense feathers to help keep my body dry. I build my nests behind waterfalls or on rocks in the middle of the stream. You may see me bobbing as I wade and look for aquatic snacks.

I am small but chunky with slate-colored feathers. I hang out along fast mountain streams of the upper watershed. I walk along the bottom as I search for water insects. Sometimes I go all the way underwater and I “fly” using my strong wings. I have large oil glands and soft, dense feathers to help keep my body dry. I build my nests behind waterfalls or on rocks in the middle of the stream.

### American Dipper

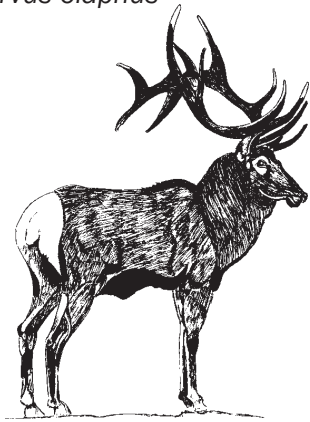
*Cinclus mexicanus*



**Rio Bravo**

When I am born, I have a white-spotted fur coat and lie still in tall grass to keep predators from seeing me. I weigh 30 to 40 pounds (13–18 kg). I grow up to 1,000 pounds (450 kg) if I am a male and up to 600 pounds (270 kg) if I am female. My adult body is reddish-brown with a short white tail. The males of my species, called bulls, grow huge racks of antlers and are famous for the bugle call used as an advertisement, a battle cry and a mating call. I feed on grasses and enjoy browsing on riparian willows as I migrate from mountain meadows to lowland river valleys.

When I am just born, I have a white-spotted fur coat. I lie very still in tall grass to keep predators from seeing me. My adult body is reddish-brown with a short white tail. The males of my species grow huge antlers and use their bugle call as a battle cry and a mating call. I feed on grasses. I also eat river willows as I migrate from mountain meadows to lowland river valleys.

**Elk***Cervus elaphus*

My fur can be black, brown, cinnamon, or blond. As an adult male, I can weigh 250 pounds (113 kg) and as a female I am usually around 150 to 180 pounds (65–80 kg). I like to eat berries, rosehips, nuts, insects and honey. I can smell food from a long distance. I usually stay in the mountains, but I also visit lowland streams and river valleys to look for food, or when young are moving to find their own territories. In the winter, I go into a deep sleep, although I may wake up some from time to time. My cubs are born when I am in my winter den. They stay with me through the next winter.

My fur can be black, brown, cinnamon, or blond. I like to eat berries, rosehips, nuts, insects and honey. I can smell food from a long distance. I usually stay in the mountains, but I also visit lowland streams and river valleys to look for food. In the winter, I go into a deep sleep, although I may wake up some from time to time. My cubs are born when I am in my winter den.

**Black Bear***Ursus americanus*

## Rio Bravo

### American Osprey

*Pandion haliaetus*

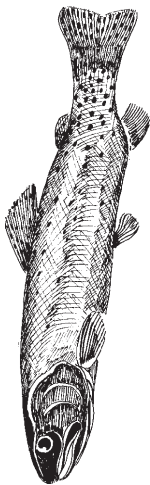


I have long, narrow wings with dark patches at the “wrists,” a dark back, a white underside and a dark stripe through my eyes. I hover high above lakes watching for fish. I can fold my wings and plunge feet-first to scoop up a fish. The best time to see me above New Mexico waters is during spring as I travel north to breed and again in the fall when I fly to southern lands for the winter. I usually mate for life, and my husband fishes for me while I incubate our eggs. As a parent, I am kept very busy fishing for my young. Each chick can eat six pounds (2.7 kg) of fish a day!

I have long, narrow wings with dark patches at the “wrists.” My back is dark and I have a white belly and a dark stripe through my eyes. I hover above lakes watching for fish. I am great at catching fish. The best time to see me in New Mexico is in the spring as I travel north to breed and again in the fall when I fly south for the winter. My mate helps catch fish for our young.

### Rio Grande Cutthroat Trout

*Oncorhynchus clarki virginalis*



My yellowish-green to gray-brown body is covered with scales and peppered with black spots. During breeding season the male’s belly becomes flaming reddish-orange. I am named for the reddish-orange slash in folds on either side of my lower jaw. I mostly live in headwater streams as I prefer cold, fast-moving waters. I eat aquatic insects and insects that land on the water. As an adult I may also eat small fish. My species was once found in all major watersheds on both sides of the Continental Divide and we were the only species of our kind in many New Mexico waters.

My yellow-green to gray-brown body has black spots. I am covered with scales. Males of my species have a belly that turns reddish-orange. I am named for a reddish-orange slash on the sides of my lower jaw. I mostly live in small, cold streams. I eat water insects and small fish. My species was once the only one of our kind in many New Mexico waters. I lay my eggs from March through July.