Bosque Virtual Hike Student Booklet

Complete this book as you walk through the woods. At each STOP, pause the video to answer the questions or complete the activity.

STOP 1: Cottonwood Tree

Why are the cottonwood tree seeds having a hard time growing in the Bosque?

Is this a picture of a male or female cottonwood tree? How can you tell?



STOP 2: Invasive or Exotic Species

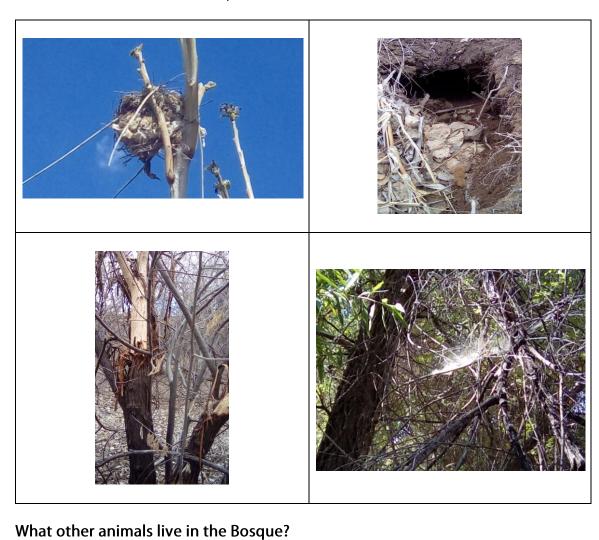
Some plants, like the cottonwood trees, have been growing in the Bosque for thousands of years. We refer to these as native species. Others, like the Russian Olive shown below, were introduced more recently by people. We call these plants invasive, or exotic species.



Look around your yard. See if you can identify any of the plants. Look them up online. Are they native or exotic to New Mexico? Write the names here:

STOP 3: Animals of the forest

Match the following animals with the homes they live in: spider, hummingbird, porcupine, and rabbit. Write the names below the pictures.



STOP 4: Porcupine

Next time you are walking in the Bosque, look up! You may see a porcupine high in the branches of a cottonwood tree.



Let's test your knowledge about these amazing animals. True or False? Circle One

| 1. | Porcupines can shoot their quills. | True | False |
|-----|---|------|-------|
| 2. | Most porcupines have about 30,000 quills. | True | False |
| 3. | Porcupines are the world's third largest rodents. | True | False |
| 4. | Porcupines are excellent climbers. | True | False |
| 5. | Porcupines lay eggs. | True | False |
| 6. | Porcupine teeth never stop growing. | True | False |
| 7. | Porcupines are really fast runners! | True | False |
| 8. | They can weigh up to 35 pounds. | True | False |
| 9. | Porcupines can grunt, whine and screech! | True | False |
| 10. | Baby porcupines are called porcupettes. | True | False |

(Check your answers at the end of the workbook.)

STOP 5: Decomposers

Decomposers have an important job – they break down dead organisms.



This is called shelf funghi. It is helping to break down the dead tree. You can find it growing throughout the Bosque.

Check out this website by National Geographic about decomposers: https://www.nationalgeographic.org/encyclopedia/decomposers/ List three types of decomposers:

STOP 6: The Rio Grande River



List the two places in Albuquerque where we get our drinking water:

Here in Albuquerque, we get about 70% of our drinking water from the Rio Grande. Scientists at the Water Authority clean it so that it is safe for us to drink. Take a virtual tour of our drinking water treatment plant here:

http://www.abcwua.org/education/el WSD 2.html

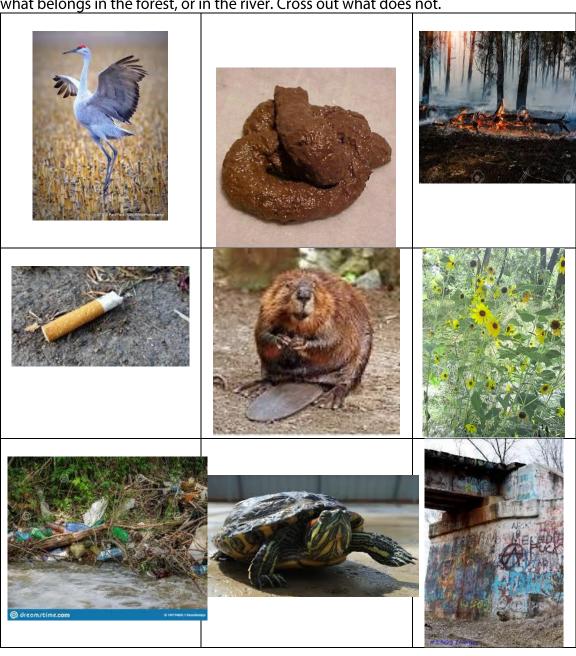
Then answer these questions:

- 1. What color are the pipes that deliver water which is being reused? _____
- 2. What happens in the ponds at the beginning of the treatment process?
- 3. How do we get the smallest particles, or sediment, out of the water?

- 4. What does ozone do to the water?
- 5. Why is chlorine added to the cleaned water at the end?
- 6. How many miles of underground pipe carry our drinking water to homes throughout Albuquerque?

STOP 8: Human Impact

Sadly, humans have impacted the river and the Bosque in some negative ways. Circle what belongs in the forest, or in the river. Cross out what does not.



| STOP 9: Positive solutions – Protecting the Bosque and the Rio Grande What can you do to help? List three ways you can protect the Bosque: | | |
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| | | |
| • | ave water at home, that means we can leave more water in the river! List ou can save water every day: | |
| | | |
| | porcupine questions: 1F 2T 3T 4T 5F 6T 7F 8T 9T 10T ion! Which two rodents are larger than porcupines? | |