## **Cottonwood Quiz**

Answer these questions with T for true or F for False.

T or F?	Statement
	A Rio Grande cottonwood lives about 300 years.
	2. Most cottonwood seeds germinate and start new trees.
	<ol> <li>Russian olive trees and salt cedar have always been a part of the Rio Grande bosque.</li> </ol>
	4. Rio Grande cottonwood trees get all the moisture they need from rain.
	<ol><li>We don't have to be concerned about the bosque. It will always be the way it is now.</li></ol>
	<ol> <li>The cottonwood has been the most important tree in the bosque for thousands of years.</li> </ol>
	7. Cottonwood seeds need sunlight, clear space, and soil that stays wet to start to grow.
	8. Historically, annual floods provided the wet ground that cottonwood seeds needed to grow and develop.
	<ol> <li>Cottonwood trees have either female or male flowers, but not both on the same tree.</li> </ol>
**	10. With river conditions today, cottonwoods do not naturally regenerate on a large scale. For the cottonwood to be a significant tree in the future forest, people need to plant the trees or manage the river for flooding over the banks.

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- 1. False: Cottonwood trees are like people—not many grow to be more than 100 years old. Cottonwoods are not long-lived trees.
- 2. False: Very few seeds germinate. Even fewer find the conditions they need to develop into trees.
- 3. False: Russian olive and elm trees came to the bosque in the 1930s. Saltcedar (tamarisk) was also introduced about the same time.
- 4. False: Large trees like cottonwoods need much more than the 10 inches (25 cm) of rain that make our area a desert. We often get even less than that. Cottonwoods tap the water table for their needs.
- 5. False: The bosque has always been changing following natural cycles. But today's changes are not cyclical. Instead they represent a progression from one type of habitat to another. Without responsible management the bosque may not survive as a cottonwood forest.
- 6. True: The Rio Grande cottonwood has been evolving with the river for thousands, perhaps more than a million years.
- 7. True: Cottonwood seeds need sunlight, a clear space, and soil that stays wet until the seedling roots reach the water table.
- 8. True: Annual floods kept the soil wet long enough for this to happen. Because the river is now controlled by levees and dams, it no longer floods unless managers allow it.
- 9. True: Cottonwoods with male flowers release pollen in the spring. It floats in the air to the trees with female flowers which later produce the cottony seeds.
- 10. True: Without flooding to provide a start for new trees, existing cottonwoods will die off and introduced species will take over. Changing management goals to manage for the entire ecosystem are setting an optimistic outlook for the bosque.

