



WILD Kids



DROUGHT AND WILDLIFE

Just like you, wildlife needs water to survive. Water is necessary to digest food, to rid the body of wastes, to maintain a healthy body temperature, and for nursing mother animals to provide milk for their young. In

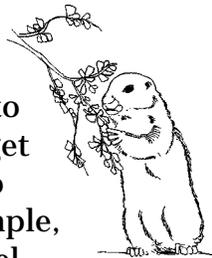
fact, the bodies of most animals, including humans, are mostly made up of water. (An adult deer's body is about 65% water.) Since water is so important to wildlife, what happens to animals during times of drought?

What is drought?

Drought is an abnormally long dry period. In the desert, dry conditions are normal. However, if there is no rain for an unusually long period of time, it is considered a drought.

How does drought affect wildlife?

During times of drought, animals must work extra hard to find water. Some animals can get water from the food they eat, so they simply eat more. For example, the round-tailed ground squirrel eats more ironwood tree leaves during drought periods. However, during a drought when there is less water available, there are also fewer plants. The ground squirrel must travel farther to find food and is more likely to be captured by a predator. Some predators fulfill their water needs during drought by eating more prey animals.



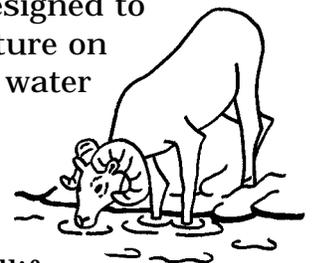
Animals that need to drink water frequently, or those that rely on free-standing water (lakes, streams, etc.) have the most difficult time during a drought. When animals must travel longer distances to find water, they lose precious body water through perspiration (sweating) and respiration (breathing). During their travels, they are also more susceptible to predation.

Some species of toads endure drought by burrowing underground until rains return.

What can be done about drought?

Drought can be hard on wildlife; some animals may not survive. But, since drought is a natural event, we have to find ways to work with nature. One way the Arizona Game and Fish Department helps wildlife during times of drought is by providing places where animals can find water. These places are called "water catchments".

Water catchments are designed to catch rain water (see picture on back). The captured rain water flows into a large tank, where it is stored. This water is directed into a drinking trough, making it available to thirsty wildlife.

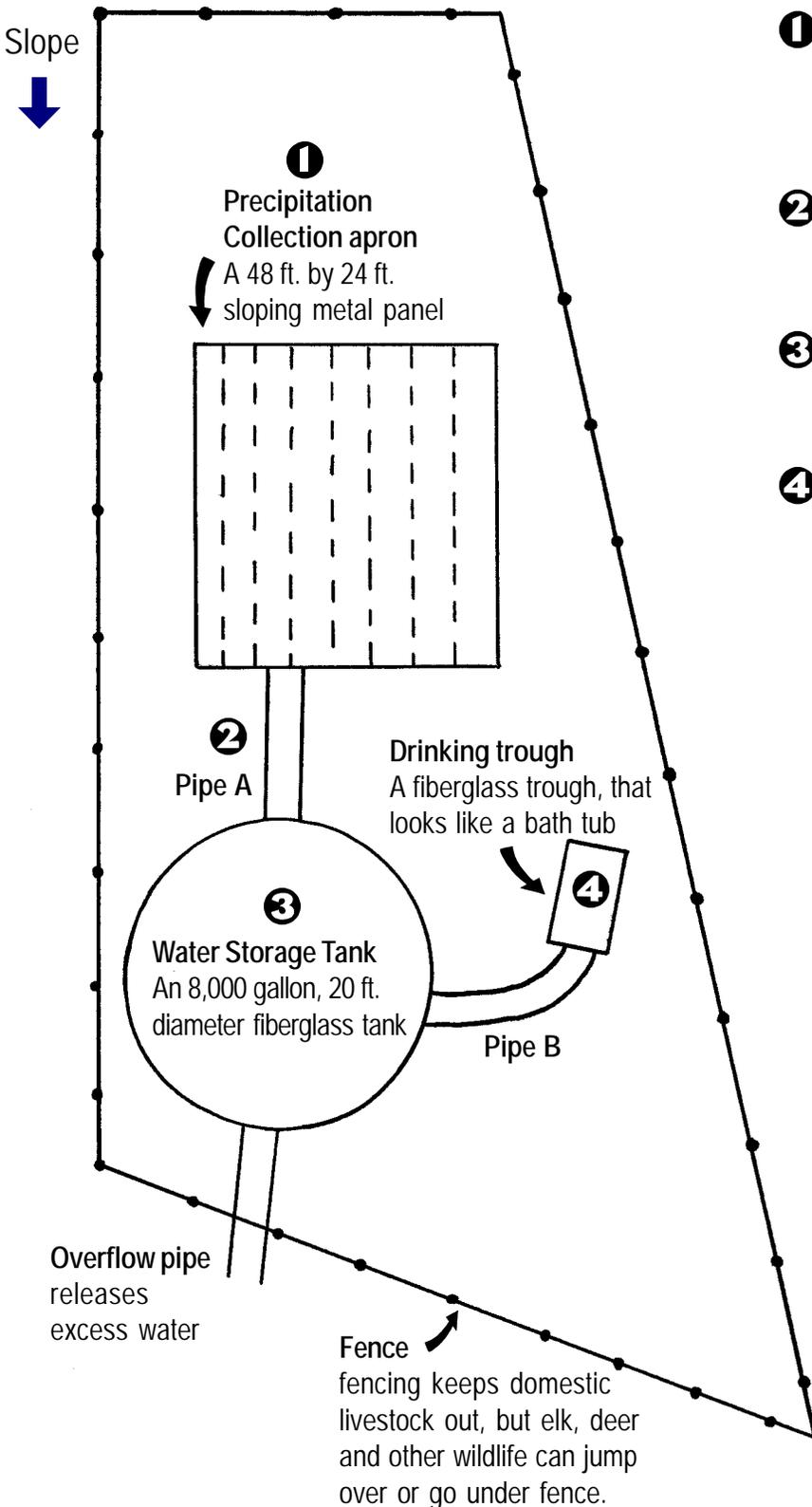


In some years, by early summer there is little, if any, rain to catch. During these dry periods, the Arizona Game and Fish Department hauls water to some of the catchments. Water is hauled in 1,500 gallon water trucks or in 400 gallon "water buffaloes" - a water trailer hitched to a truck (for remote areas, a helicopter is used). This gives wildlife an opportunity get a much needed drink during extended dry periods.

The nearly 1,000 water catchments located throughout Arizona provide water for a diversity of wildlife species, including birds mammals, reptiles, amphibians, and insects.

A Water Catchment

(From a bird's eye view)



- 1** Rainwater falls onto the precipitation collection apron and flows into pipe A.
- 2** The water flows from pipe A into a storage tank.
- 3** Water is stored in the tank until needed.
- 4** Water flows through pipe B and into the drinking trough.



1. In the photo above, can you identify the precipitation collection apron, the storage tank, the drinking trough and the fence?
2. How many trips would it take for a water buffalo to completely fill the water storage tank? How many trips would it take for a water truck to fill the water storage tank to 75% full?
3. If a deer drinks 1 gallon of water each day, how many gallons of water would a herd of 25 deer drink during the summer (June, July, and August)?