

Saving Water for Wildlife

BY JOHN KOLESZAR

Trail Camera Photos Courtesy of Ben Brochu







RANDALL D. BABB

he desert, parched dry from the incredibly hot summer, is in desperate need of water. With little or no rain for several months, plants and wildlife are reacting to the shortage of available water sources. Each year, the monsoons begin to build in early July. Suddenly, massive clouds soar over the desert. With incredible fury, Mother Nature delivers an astonishing amount of water in a very short period of time.

In most of the desert, the water is absorbed into plants and the ground and just as quickly vanishes from sight. There are, however, over a hundred places where creative, manmade water catchments capture the water. As rain starts to fall, you can hear the staccato sound of raindrops hitting metal aprons. The rain's intensity increases, and the water begins to find its lowest level, flowing down toward a gutter system that, in turn, replenishes underground storage tanks.

This system releases the water through piping to a walk-in trough. The trough is at the same level as the storage tanks, so gravity balances the water level in both. The ingenious system guarantees that as long as there is water in the storage tanks, there will be water in the trough for wildlife. With a very tiny area exposed to wind and sun, little water evaporates from the trough. Wildlife from surrounding areas quickly learn there is a consistent water supply nearby.

The Raffle ~~~

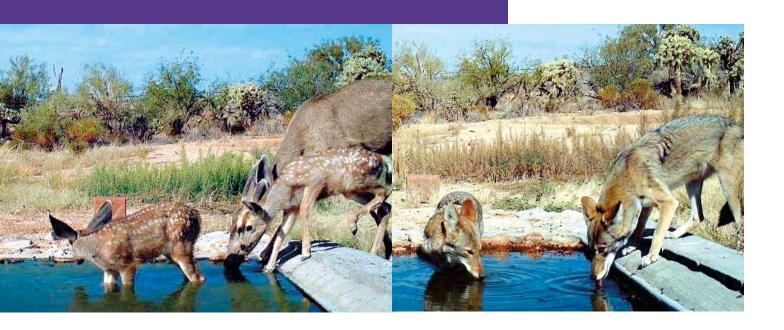
The cost of building these catchments is significant. Each one can range from \$40,000 to upwards of \$60,000. Where does the money come from?

One of the leading organizations in funding these projects is the Arizona Big Game Super Raffle. Each year, this small group of volunteers is awarded one Special Big Game Tag for each of the 10 big game species native to Arizona. The sole purpose of this group



The Arizona Big Game Super Raffle is a 501(c)(3) organization founded in 2006. Since then, this committee of volunteers has given the Arizona Game and Fish Department almost \$6,000,000 for habitat improvements that benefit wildlife. Raffle entries come from all 50 states and from other countries, as well.

July 20 is the deadline to enter this year's Arizona Big Game Super Raffle for a chance to win one of the 10 Special Big Game Tags. Other prizes include an optics package donated by Swarovski Optic (valued at over \$17,000) and a trophy elk hunt in New Mexico. Complete rules and information are at www.arizonabiggamesuperraffle.com.



is to raffle these tags for the Arizona Game and Fish Department.

The raffle is almost a year-long process. Each July, the drawings are held at Arizona Game and Fish headquarters. One hundred percent of the money raised is returned to the department to be used for habitat enhancement projects throughout Arizona. This past year, the raffle raised over \$630,000.

All funds raised in this process must be used for habitat enhancement. The money that comes from the raffle of each tag is allocated to habitat projects that benefit that particular species.

The Projects ~~~

Once the funds are allocated by species, the hard work of determining where to spend the money begins. This process is overseen by the Habitat Partnership Committee, which includes Arizona Game and Fish personnel as well as representatives from nonprofit wildlife groups.

Not all projects considered by the committee are for water catchments. But each water catchment and tank that is funded provides incredibly valuable water to all wildlife, from songbirds to big game animals.

Because environmental and archeological clearances are always needed, the process of getting permits to construct these projects from land management agencies and private landowners can be a lengthy one. Arizona Game and Fish manages the process until all approvals are completed. Then, Habitat Partnership Committee groups and conservation groups across Arizona review all potential projects annually. Approved projects are scheduled for construction (see "A Catchment's Creation"). The lesson here is that water does not come cheaply or easily in the desert.

Water in the desert is scarce. Every precious drop that falls on a catchment apron needs to be stored for those times when drought wreaks havoc on all wildlife. In order to have water for wildlife in the future, it is imperative that we keep building these catchments, helping all species of wildlife survive.

John Koleszar is president of the Arizona Big Game Super Raffle.



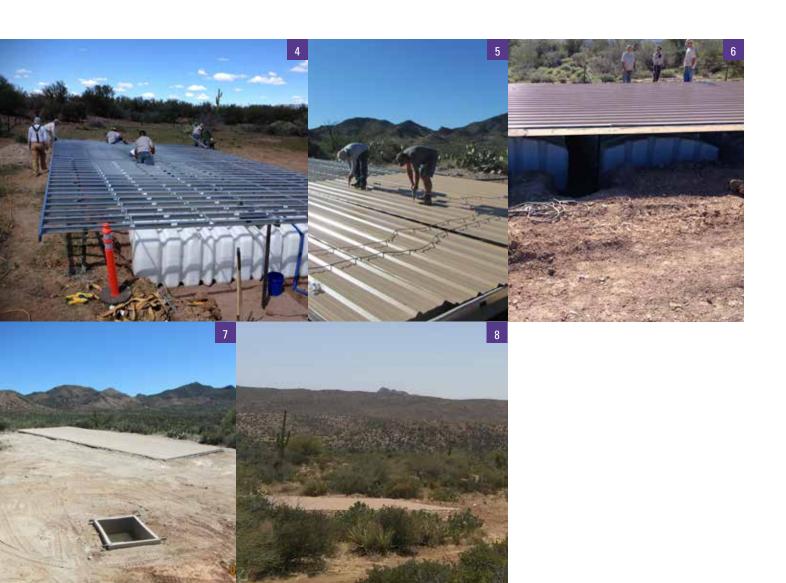
PHOTOS COURTESTY OF JOHN KOLESZAR

A Catchment's Creation A catchment takes about a week

to create. With all their experience over the years, the catchment development crew has become accustomed to the obstacles and nuances each project will offer.

Often, local conservation groups provide manual labor to help build these catchments. Many catchments are located in inaccessible areas, where people and materials have to be flown in by helicopter and the excavation done by hand.

The development crew stakes out the area that has been approved and begins using heavy equipment to carve out the site. The first steps are to dig out a hole that



will hold the two to four water tanks that will be buried. Each water tank can hold 2,500 gallons of water and is replenished through monsoon rains and winter snows. Once the tanks are in place, they need to be balanced and leveled so they work properly.

Then, construction of the overhanging structure is begun, creating the apron that the water falls on. This apron is set at a slight pitch so water runs into the gutter system and then into the storage tanks.

Around this perimeter, the crew creates a fence that restricts wildlife from damaging the apron.

Finally, the trough that holds the water is placed about 20 yards away in an open area.

When all work is completed, the development crew replants most of the vegetation that had been dug out, restoring the surrounding area to a natural setting.