
Escape ramps in water troughs help bats, birds, and other wildlife

Most livestock tanks, ponds, and troughs have not been designed, installed, or maintained with wildlife in mind.

However, those watering devices established for livestock can double as a vital water source for bats, birds, and other wildlife that help ranchers maintain healthy rangelands.

They can be safe for wildlife and maximize water quality for cattle if a few guidelines are followed that may include making minor, inexpensive changes to the watering devices.

Dan Taylor, a conservation specialist with Bat Conservation International (BCI), says a survey of western water troughs found that fewer than 10 percent had functioning wildlife escape structures, more than half had obstructions over the water, and many had no water in them or had water levels well below the rim.

Those issues may seem minor to some, but they are all important to bats. That is because bats must drink “on the wing” over open water at night.

Much like airplanes need clear approaches to runways, bats need an unobstructed “swoop zone” to scoop up a drink of water and fly away safely. Obstructions like wire fences, posts, and brace bars on water tanks discourage bats from trying to take a drink, and when they do, can knock them down into the water.

If they are knocked into the water and there is no way to crawl out, the bats drown, fouling the water for cattle and losing a valuable insect-eating friend of ranchers.

Piling rocks, leaving logs in a tank, or using a ramp that does not extend to the bottom of the tank usually is not very effective in saving bats and other wildlife.

Taylor says an escape ramp is easy and inexpensive to build and can virtually eliminate wildlife mortality in water troughs. An effective structure should:

- Extend down into the water and meet the inside wall of the trough so animals swimming along the perimeter will find the structure, rather than becoming trapped behind or beneath it or missing it entirely
- Reach to the bottom of the trough, so it will be effective even if water levels drop sharply
- Be firmly secured to the trough rim so it will not be knocked loose by livestock or other animals
- Be built of graspable, long-lasting materials such as painted or coated metal grating, roughened fiberglass, concrete, rock and mortar, or high strength plastic composites
- Have a slope no steeper than 45 degrees so animals can climb out without slipping back into the water
- Be located to cause minimal interference with livestock

A fully illustrated, 16-page handbook entitled *Water for Wildlife* was developed by BCI. According to Wendell Gilgert, a biologist with the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) in Portland, Oregon, the guidelines were developed for ranchers, but also apply east of the Mississippi River.

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Photos by Mertin Tuttle, BCI

Bats watering in livestock trough (top);
Bat using escape ramp (bottom)

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