

Animal Enhancement Activity – ANM38 – Retrofit watering facility for wildlife escape and to enhance access for bats and bird species



Enhancement Description

Retrofit all existing watering facilities (troughs, tanks, etc.) to allow for the escape of wildlife that become trapped while trying to drink and to remove obstructions above the watering facility such as boards and wires. Selection of this enhancement requires the activity to be planned concurrently on all eligible land use acres.

Land Use Applicability

Crop, Pasture, Range, Forest

Benefits

This activity provides wildlife with a definitive means of escape while utilizing a livestock water facility as a water source. Concurrently, livestock performance is improved by supplying a cleaner water supply. Dead wildlife in water facilities impair the water quality which results in decreased water consumption by livestock and reduced rates of weight gain. In addition, obstructions (e.g., boards and wires) located above the watering facility reduces the availability of water to wildlife that need open sources of water in order for them to swoop and drink while in flight. Removal of these obstructions will make many previously unavailable water sources available while reducing the injury or death potential to bats and birds as they fly in to scoop water from the watering facility. This enhancement will eliminate this threat.

Conditions Where Enhancement Applies

This enhancement applies to all open watering facilities in the crop, pasture, range, or forest land use area. This enhancement does not apply to earth stock ponds, ball type, energy-free waters or similar.

Criteria

This enhancement applies to ALL watering facilities located in the land use acres. Both criteria, A and B below must be met.

- A. Wildlife escape structures for watering facilities must meet the following requirements:
1. Extend into the water and meet the inside wall of the watering facility,
 2. Reach to the bottom of the watering facility or to the depth of the lowest possible water level,
 3. Be firmly secured to the rim of the watering facility so as not to be displaced by livestock
 4. 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,
 5. Have a slope no steeper than 45 degrees,
 6. Be located to cause minimal interference with livestock drinking, and
 7. One structure for every 30 linear feet of watering facility edge.



B. Obstruction removal above the watering facility's water surface.

1. Fencing material such as wire strands and boards shall not be within a 36" zone above the highest planned water surface (e.g., if a trough is bisected by fencing to provide water between two pastures, remove the lower strands of wires; or if wood bracing is present across the top of the trough, re-brace the tank to create an unobstructed space above the water's surface), or
2. Rearrange the fence line to create an adjustable pivot point thereby removing any obstructions above the water surface while allowing full access to a single trough from two different grazing areas.

Adoption Requirements

This enhancement is considered adopted when the watering facility has the wildlife escape structure installed and obstructions above the water surface, if present, meet either Criteria B(1) or B(2).

Documentation Requirements

Photograph showing a properly installed escape device for each watering facility. The photograph must also show that there are no obstructions suspended within 36" above the watering facility's water surface.

References

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Kiryuchuk, B. 2000. Effect of Water Quality on Cattle Weight Gain. Canada-Saskatchewan Agri-Food Innovation Fund. AFIF Coagulation File: 6672-1-12-1-4.

Krausman, P., R. Rosenstock, S. Steven and James W. Cain III. 2006. Developed Waters for Wildlife: Science, Perception, Values, and Controversy. Water and Wildlife Special Section. The Wildlife Society Bulletin 34:563-569.

McCullum, T. 2010. Some points to consider about cattle water. AgriLIFE Extension. Texas A&M. Amarillo, TX. <http://amarillo.tamu.edu/files/2010/10/Some-points-to-consider-about-cattle-water.pdf>

Taylor, D.A.R. and M.D. Tuttle 2012. Water for Wildlife: A handbook for ranchers and ranch managers. Bat Conservation International, Austin, TX. <http://www.batcon.org/pdfs/water/bciwaterforwildlife.pdf>

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United States Department of Agriculture
Natural Resources Conservation Service

Conservation Stewardship
Program (CSP)
South Dakota
Enhancement Supplement
Program Year 2014

ANM38

South Dakota Goals:

Provide wildlife a means of escape while utilizing a livestock water facility as a water source.

*Wildlife escape ramp required for this enhancement.

3/4" X 9 ga. - 4' X 8' FLAT or REG. EXPANDED METAL (yields 8 tank ladders)

TANK HOOK DETAIL FOR TIRE TANK INSTALLATION

TANK HOOK DETAIL FOR FIBERGLASS TANK INSTALLATION

TANK HOOK DETAIL FOR STEEL TANK INSTALLATION

CONSTRUCTION NOTES

1. THE FRONT RAMP IS 4.5" WIDE AND 28" LONG WHICH WILL TOUCH THE BOTTOM OF A 24" DEEP STOCK TANK. THE WINGS BENT DOWN TO A 45° DEGREE ANGLE AND SHOULD TOUCH THE VERTICAL WALL OF THE TANK. THE TANK HOOK CAN BE BENT FOR TIRE, STEEL or FIBERGLASS TANK (see details).
2. MARK THE BEND LINES. USE A TIN BREAK OR BEND OVER A METAL EDGE USING A HAMMER. BEND AT A 45° ANGLE.
3. LEAVE TANK HOOK FLAT FOR EASE OF TRANSPORT AND STORAGE. AT INSTALLATION USE A HAMMER TO BEND THE HOOK OVER RIM OF STOCK TANK.
4. PAINT WITH 2 COATS OF RUST RESISTANT, NON-TOXIC NEUTRAL COLOR PAINT.
5. ONE LADDER REQUIRED FOR EVERY 30 Lin.Ft. OF TANK EDGE.
 Tank dia. 9' or Less - 1 Escape Ladder
 10' to 19' - 2 Escape Ladders
 20' to 28' - 3 Escape Ladders
 29' or Larger - 4 Escape Ladders
6. LADDER FOR TIRE TANK MAY REQUIRE SOME MODIFICATIONS DEPENDING ON HOW TIRE HAS BEEN CUT.

TANK BOTTOM
EXPANDED METAL ESCAPE LADDER
TANK WALL

3/8" dia. LAG BOLTS or 3/8" BOLTS W/ NUTS AND WASHERS

WILDLIFE ESCAPE LADDER
JOB PLAN No. 13.1 Rev. 8/10

<p>Natural Resources Conservation Service United States Department of Agriculture</p>	PRODUCER _____ _____ SECTION _____ T. _____ R. _____ _____ COUNTY _____ _____ CONSERVATION DISTRICT _____	Date _____ Designed _____ Drawn _____ Checked _____ Approved _____	File Name: _____ Drawing No. _____ Sheet _____ of _____
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Feb. 2014