

Definition

A ramp attached to the interior of a watering facility trough, to allow wildlife that fall into the water, a ladder to safely exit thereby reducing the risk of drowning.

Purpose

To provide a method of escape for wildlife that become trapped within an existing watering facility that lacks a functional wildlife escape ramp.

Conditions Where Practice Applies

This practice applies to watering facilities where no functional wildlife escape ramp is installed. Biology Technical Note 14, Aquatic & Terrestrial Habitat Evaluation Guide need not be completed to apply this retrofit. Simply determine if the watering facility has an escape ramp and install one if necessary.

Criteria

In order for the ramp to properly function, the recommended steel mesh must be properly attached to the outer wall of the livestock water tank, so that any animals that fall in can find the ramp. Trapped animals tend to swim along the edge of the tank and so the edge is the best location for placement of an escape ramp.

Operation and maintenance

The following actions shall be carried out to insure that this practice functions as intended throughout its expected life. These actions include inspection, repair and upkeep of the entire watering facility (maintenance), including the escape ramp on at least an annual basis.



An escape ramp installed in a metal trough. The triangle point at the top of the ramp is bent over the edge of the trough and attached using a 3/8" x 1" bolt.

Specifications

Specifications for this practice shall be prepared for each site. Specifications shall be recorded using approved specifications sheets, job sheets, narrative statements in the conservation plan, or other documentation. Requirements for the operation and maintenance of the practice shall be incorporated into site specifications. Plans and specifications should be reviewed by staff with appropriate training in design and implementation of watering facilities.



Watering Facility Criteria - Wildlife Escape Ramp
(Retrofit) - 614

Conservation Practice Supplemental Specification Sheet

March 2010

Client/Operating Unit:	<input type="text"/>	Tract Number:	<input type="text"/>
Farm/Ranch Location:	<input type="text"/>	Farm Number:	<input type="text"/>
Specifications Date:	<input type="text"/>	Field Number(s):	<input type="text"/>
Planned Installation Date:	<input type="text"/>	Proposed Treatment Acres:	<input type="text"/>
		Program:	<input type="text"/>

Field Description and Landowner Goals:

Wildlife Goals/Objectives:

The objective of this supplemental is to ensure that existing livestock watering facilities are retrofitted with a wildlife escape ramp so that wildlife experience a reduced risk of drowning if they fall into the tank.

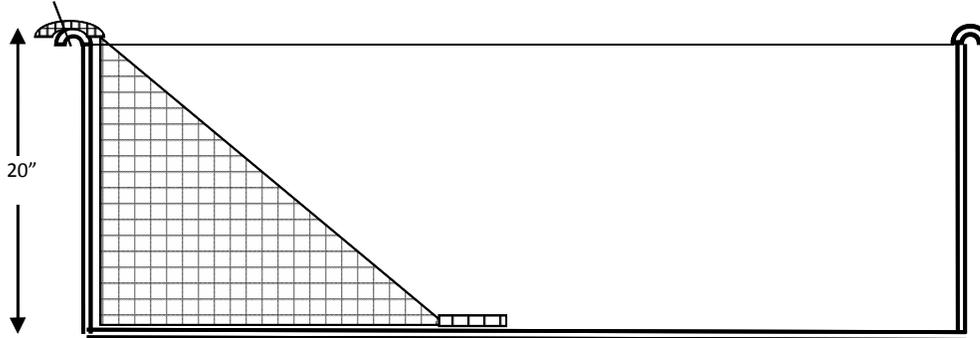
Design & Drawings (drawings and construction method)

The ramp is constructed of 14 gauge expanded metal x 3/4" holes for the ladder effect. They can be cut out with a cutting torch, hand grinder or have the supplier pre-cut with a shear. Shearing often leaves a very sharp edge that needs to be dulled prior to bending into a ramp shape. One 4'x8' sheet of expanded metal will yield eight (8) ladders that fit 20" deep troughs.

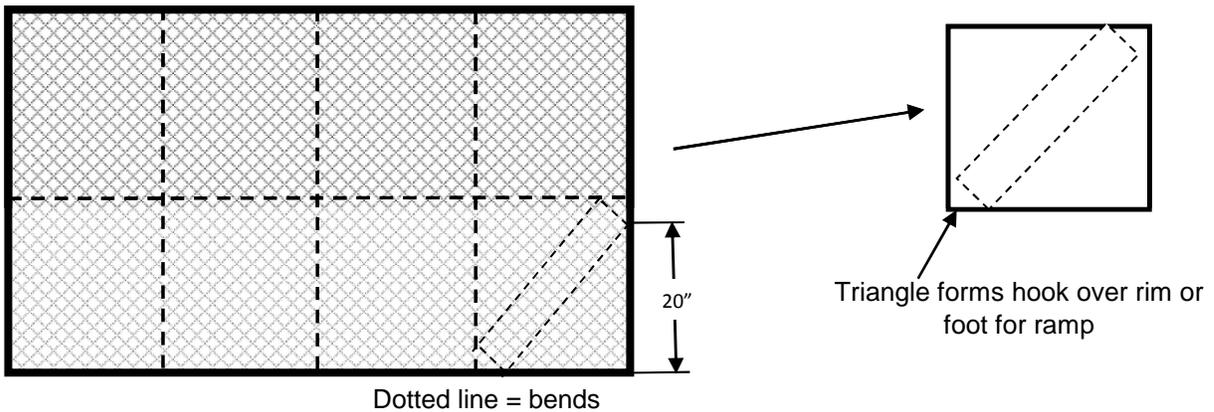
After cutting the design out, the metal is bent with a metal brake or clamping to a sturdy bench to make the sloped side or "wings" for the ramp. Be sure to keep the wing slope somewhat consistent as varying angles will make the ladders difficult to stack and transport. A 3/16" rod can be used to form the hangers for round rim and rimless tanks or use a bolt, washer and nut to secure them to the tank.

Another option for hanging is to use the triangle shaped end of the ramp as a hanger (see diagram below). After bending the wings, bend the triangle in a half-circle to fit the trough rim. The other triangle is bent in the opposite direction to rest flat on the bottom of the trough.

The ladders can be painted or dipped with a neutral color farm implement paint to prevent rusting. Be sure that paint is non-toxic after drying. The design can also be modified for rubber tire tanks by rounding the outer edge of the "wings". For easier transport and storage, stack ladders and zip-tie in bundles of five.



Side View: escape ramp in trough showing upper triangle bent over rim and lower triangle bent to form a foot to contact the trough floor.



Cutting Example Diagram: an 8'x 4' sheet of expanded metal can be cut into 8 - 2'x 2' squares and bent along dotted lines as indicated in lower right square to form the ramp for a trough 20 inches deep.

Operation and Maintenance: Refer to individual O&M requirements listed in the Watering Facility Practice

References:

● eFOTG, <http://www.nrcs.usda.gov/technical/efotg/>

Client's Acknowledgement (To be signed after Specification Sheet is completed and before practice installation.)

By signing below, I acknowledge that I:

- have reviewed and understand the installation specifications and operation/maintenance requirements in this Specification Sheet and have an understanding of purposes and criteria for use of this conservation practice;
- will install and maintain this conservation practice in accordance with this Specification Sheet.
- will make no changes to the planned design and installation without prior written approval of the Natural Resources Conservation Service.

Signature

Date

Required Job Approval Authority or TSP Certification Category

NRCS Job Approval Authority:

(Job Class required for design and installation). (I, II, III, IV, or V).

Conservation Practice JAA:	<input type="text"/>	Design:	<input type="text"/>	Installation:	<input type="text"/>
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Practice Units of Measure:	<input type="text"/>
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Required Certification Categories for Technical Service Providers

"TECHREG CATEGORY" Listed for this Practice:

Water Supply Facilities

Practice Design Certification: (To be completed after Job Sheet is complete and before practice installation.)

By signing below, I certify

- The conservation practice planning and design outlined in this Specification Sheet meet the purposes, associated criteria, appropriate site conditions and client objectives; and
- I have the required Job Approval Authority or TSP certification required for this conservation practice design.

Signature

Date

Print Name

Title

Practice Installation Certification (To be completed after practice installation and check out)

By signing below, I certify that:

- The practice has been installed according to the site specific installation requirements and
- the required operation and maintenance requirements are being met;
- I have the required Job Approval Authority or TSP Certification for this conservation practice installation.

Signature

Date

Print Name

Title

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