614/645 –Watering Facility
Wildlife Escape Ladder Design

Materials: 10 -14 gauge, flattened or regular, expanded metal. Recommend flattened expanded metal ¾”- #9.

4’x 8’ Panel of Expanded Metal (yields 8 tank ladders)

1] Torch cut eight 24”x24” squares. Total cutting length is 20’. Time: approx. ½ hour.
2] Make a template of the cutout areas and mark the cut lines with permanent marker or soapstone.
3] Torch cut the cut lines. Total cutting length is 46” per ladder. Time: approx. 40 min. (8 ladders)

4] Mark the bend lines. Use a tin break or bend over a metal edge using a hammer. Bend at a 45˚ angle. Time: approx. 40 min.
5] Leave the hook flat for ease of transport and storage. At installation, use a hammer to bend the hook over the rim of the stock tank.
6] Paint with a rust resistant, non-toxic neutral color. 2 coats. Time: approx. 40 min.

Cost to Fabricate Eight Ladders
Cost estimate for materials $45-60 (as of 11/06)
Labor estimate is 2.5 hours

Revised by C. Garcia 11-06
Purpose: Provides an approved design for wildlife escape ladders in watering facilities.

Because many species of wildlife drown in watering facilities, NRCS Standard 614, Watering Facility, requires installation of a wildlife escape ladder in these facilities. This attached design was developed by Rocky Mountain Bird Observatory (RMBO) and may be used to meet the standard requirements. The design was revised by NRCS to provide dimensions for ease of fabrication.

The key design component is to provide a ramp with “holes”, which touches the sides of the stock tank. This makes it easier for the trapped animal to find the ramp. Designs that do not provide this, result in the trapped animal swimming along the perimeter of the tank, passing underneath the ramp, until exhausted and eventually drowning.

The design is somewhat diamond shaped; the front ramp is 4.5” wide and 28” long, and will touch the bottom of a 24” deep stock tank. The wings are bent down to a 45” angle, and designed to touch the vertical wall of the stock tank. The top hook can be bent around the rim of the stock tank (metal or tire tank). No drilling is required.