Frog Trap Specifications, Construction, and Deployment

Background:
Bullfrogs have been shown to prey on a variety of wetland related wildlife in the United States and elsewhere in the world. In a recent study, introduced bullfrogs, (*Rana catesbeiana*) were demonstrated to be major predators on Hawaiian stilt (*Himantopus mexicanus knudseni*) chicks on the Kii Unit, James Campbell NWR. In response to this finding techniques to reduce numbers of bullfrogs have been discussed. A bullfrog trapping program was implemented at the beginning of the 2005 stilt breeding season to reduce numbers of bullfrogs in the vicinity of stilt nests or broods. This document outlines materials and construction information for these traps. Photographs are included at the end of the document to assist in the construction process.

The following are appropriate for constructing either the 14-16" diameter or 18-20" diameter traps. Traps of two different diameters are being used because of varying water depths. When placed on the bottom of the pond the small funnel opening should be approximately at the water surface or partly covered with water (Doesn't seem to matter). The trap to use is determined using this criterion. While designed for capturing bullfrogs, these traps also catch apple snails, tilapia, and crayfish.

Materials:

- 1" x 1" x 48" galvanized hardware cloth (for cylinder)
- ¼" x ¼" x 48" galvanized hardware cloth (for funnel)
- 18 gauge galvanized steel wire (for threading hardware cloth together when needed)
- "J" clips (hold edges of cylinder and funnel together)
- Red flagging (surveyors ribbon)
- 10" mini bungee cord with hooks on each end (available commercially)
- Circular metal punch tags

Tools:

- Wire cutters/side cutters (to cut wire)
- Needle-nose pliers (to assist when working with wire)
- Regular pliers (to assist when working with wire)
- "J" clip pliers (to close "J" clips)
- "J" clip removal tool (to remove "J" clip, if necessary)
- Steel punch set or engraving tool
- PPE:
  Appropriate attire for field work