Hamper Trap

Construction Manual

For capture of invasive aquatic species

Tsolum River Restoration Society

www.tsolumriver.org

Introduction:

Thanks for taking an interest in helping remove invasive species from the Tsolum Watershed. Bullfrogs have become established in many waterways, wetlands and ponds in our area and volunteers setting traps is one way to reduce their numbers. With the recent discovery of Pumpkinseed Fish in Wildwood Marsh, we are trying to remove these invasives as well. These step by step instructions are for making a portable bullfrog tadpole or pumpkinseed fish trap.

You will need:

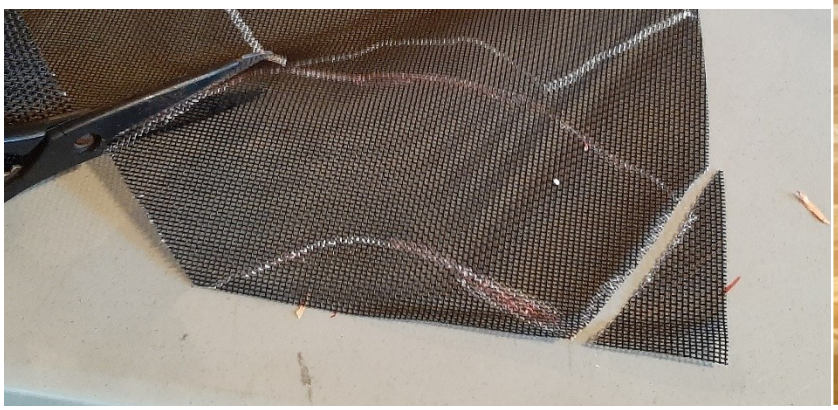
- Collapsible laundry hamper
- Pool noodle (for floating trap)
- Fine mesh black plastic mesh/screen
- Zap straps (large and small)
- Rope
- Scissors
- Wire cutters
- Non-motion sensor Solar powered light/ small LED fishing lure light/glow stick
- 1cmx1cm wood for light pole
- 1in diameter bamboo pole to insert the solar light
- Rope and float to attach to trap

Instructions: _____

1. Using the correct size template (refer to the templates at the end of the manual, cream cheese and yogurt containers were used initially), and a white wax pencil, trace the outline of 3-4 entrance holes around the sides of the hamper. Cut out these holes with scissors

Note: When positioning the holes, position them so that they are well dispersed across the trap, so the trap can be approached from any side and an entrance will be available.

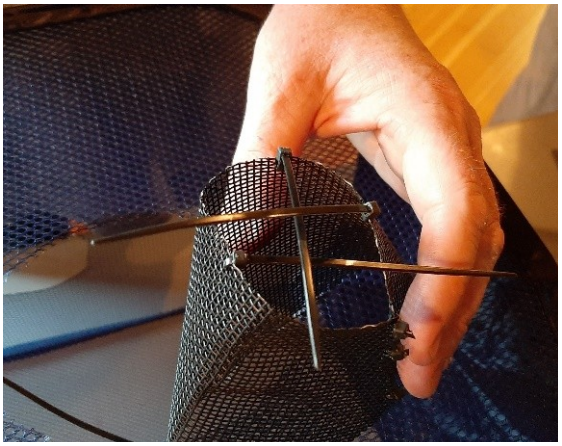
2. Using a template for either pumpkinseeds (larger) or bullfrogs (smaller) trace and cut the plastic mesh that will be used to make the entrance ways into the trap



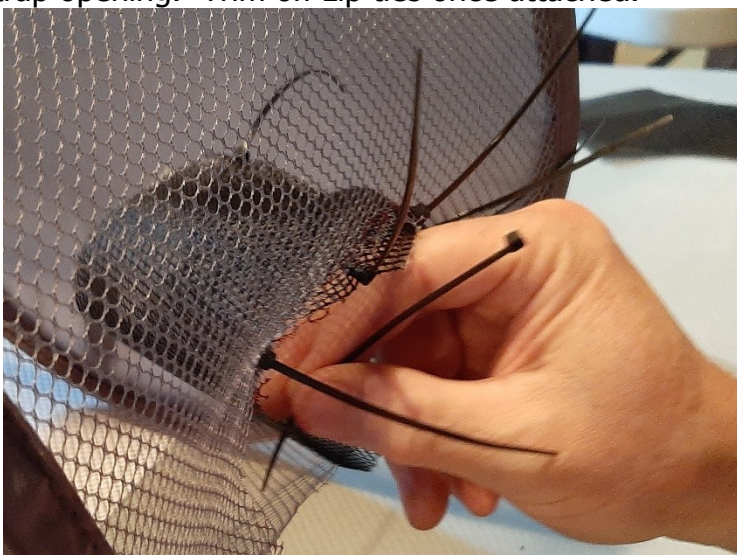
3. Bend the black plastic mesh into a funnel shape, overlapping the edges. Line it up with one of your cut holes and adjust the shape of the funnel until you know it will fit nicely into the hole. Once you have the correct funnel size, hold the shape and use zip ties to seal the funnel together (see photo below). Trim the fastened zip ties off completely.

Note: to avoid scratches and cuts from trimmed zip ties, do your best to cut the ends off flush, or to a squared end. If cut off at an angle, the trimmed zip ties have a pointed edge which can cut you

4. Using three or four zip ties, thread them through as shown in the picture at the narrow end of the funnel to create a "one way" fence for your funnel trap. This will allow the tadpole or fish to enter the trap, and prevent it from exiting. Make sure the zip ties angle across the funnel opening when you thread them through.



5. Insert your funnel into the trap with the wide part at the trap entrance and the narrow part with the zip tie "fence" on the inner part of the trap. Using more zip ties, attach the funnel to the trap opening. Trim off zip ties once attached.



6. Repeat steps 3, 4 and 5 until all your entrance holes are complete.

7. For floating traps, you will now need to attach the pool noodle to the top of the trap. Fold the noodle around the top of the hamper and cut to the correct size.

8. In order to make sure animals cannot escape through the gap in the top of the hamper, cut a rectangular piece of plastic mesh and lay it parallel to the hamper opening, tucking each end under the pool noodle. Holding this in place, use a long zap strap and wrap it around the pool noodle, through the plastic mesh and around the wire of the top of the hamper. Secure the zap strap and make sure when you tighten it that the slot is facing the inside of the trap. Tighten completely and trim. Note that the

trimmed edges of zap straps can be very sharp; this is why you should orient it on the inside of the trap so that you don't risk getting cut by the zap strap edge when moving the trap.

9. Setting up your light lure system:

Solar light: Using zap straps, attach the light to your 1X1 piece of wood as shown on left photo below. You will pound the bamboo into the ground and insert your light set up into the bamboo support. The light switch should be in the "on" position when you set it up in the field and it will automatically turn on when its dark. You can also use the set up in the photo on the right

LED light lure: To make sure your light lure is watertight, do an overnight test in a contained vessel of water at home for a few hours at least, preferably overnight. Once you have determined the light will not leak and will be an affective lure, attach it to a piece of waterproof string (not fishing line) and secure it to the top of the trap. Hang it on the inside the trap, positioned in the middle of the trap once deployed.

Glow sticks: Crack and hang a few glow sticks inside the trap (make sure the glowsticks were not perforated). They will only last a few hours, so traps deployed with glowstick lures should be set in the evening.

Trap setting Practices

- Make sure you are 100% positive about your tadpole ID before euthanizing your catch! Note that if you are trapping between September and February, you will only find bullfrog tadpoles and not other species. Refer to available ID guides in spring and summer (see page 9 of this guide). Gently release any bycatch (non target species) where you captured them, and remember it is illegal to take living wild animals home. When in doubt about your ID, take a photo and send it to stewartmcintosh@shaw.ca
- Initially you may want to set your traps for 24 hours, especially if you are targeting pumpkinseeds. Set times can increase to up to one week for bullfrogs based on the results you get. Shorter set times are preferable if you are finding non targeted species in your trap.
- Bait might be useful for catching pumpkinseed fish. You can try cat food tied in plastic bags with small holes made in them, or fish roe (available at Gone Fishing or from TRRS)
- We recommend either soaking your catch in a solution of clove oil mixed with water to sedate the animals, and then freezing your catch. Other methods include freezing without using the clove oil. If you do not use clove oil, then the frozen catches can be donated to MARS for food for their animals in care.
- Always ask permission from landowner before trapping in a privately owned wetland. This should be done by phoning ahead or leaving a letter in a mailbox. You may want to choose a discrete location to avoid any theft or vandalism to your trap or lights. Do not set traps in parks because we need a permit to do this. You can print off labels (next page) to provide people with info about what you are doing.
- Keep note of the date, set time, location and numbers of different species caught for our record keeping (data form on page).

Please do not tamper with/
remove these traps

The traps are for removing
invasive Bull frog tadpoles
from this
Tsolum watershed wetland

For more information, call
TRRS at 250-897-4670

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Bullfrog or Pumpkinseed Data Form

Date: (MM/DD/Y)		Location:	

Weather

Air Temp:		Cloud Cover____%		Precipitation(Y/N)

Catch

Pond:	_____	Adults:	_____	Dispatch:	Pellet Gun	Pole & Line
Water Temp:	_____	Tadpoles:	_____	Trap attractant:	LED	
Trap Number:	_____				Solar	
					Glow	

Bycatch:		Trap Maintenance:	

Comments:

Catch

Pond:	_____	Adults:	_____	Dispatch:	Pellet Gun	Pole & Line
Water Temp:	_____	Tadpoles:	_____	Trap attractant:	LED	
Trap Number:	_____				Solar	
					Glow	

Bycatch:		Trap Maintenance:	

Comments:

Please scan or photograph form and email trrs.projectcoord@gmail.com when full. Thanks!

Tadpole Identification

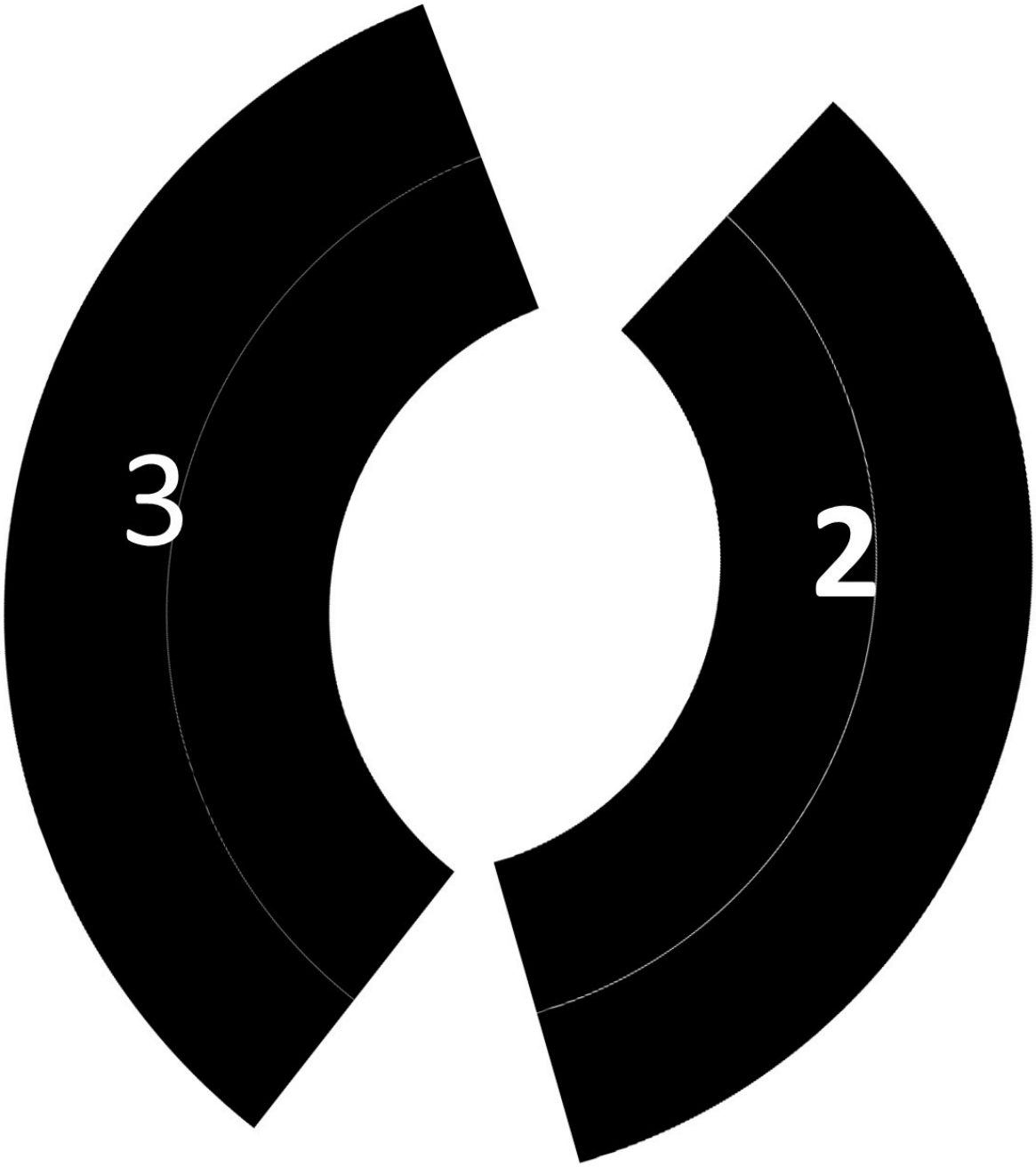
American bullfrog - Largest up to 7” or 17cm

Western Toad – small and black

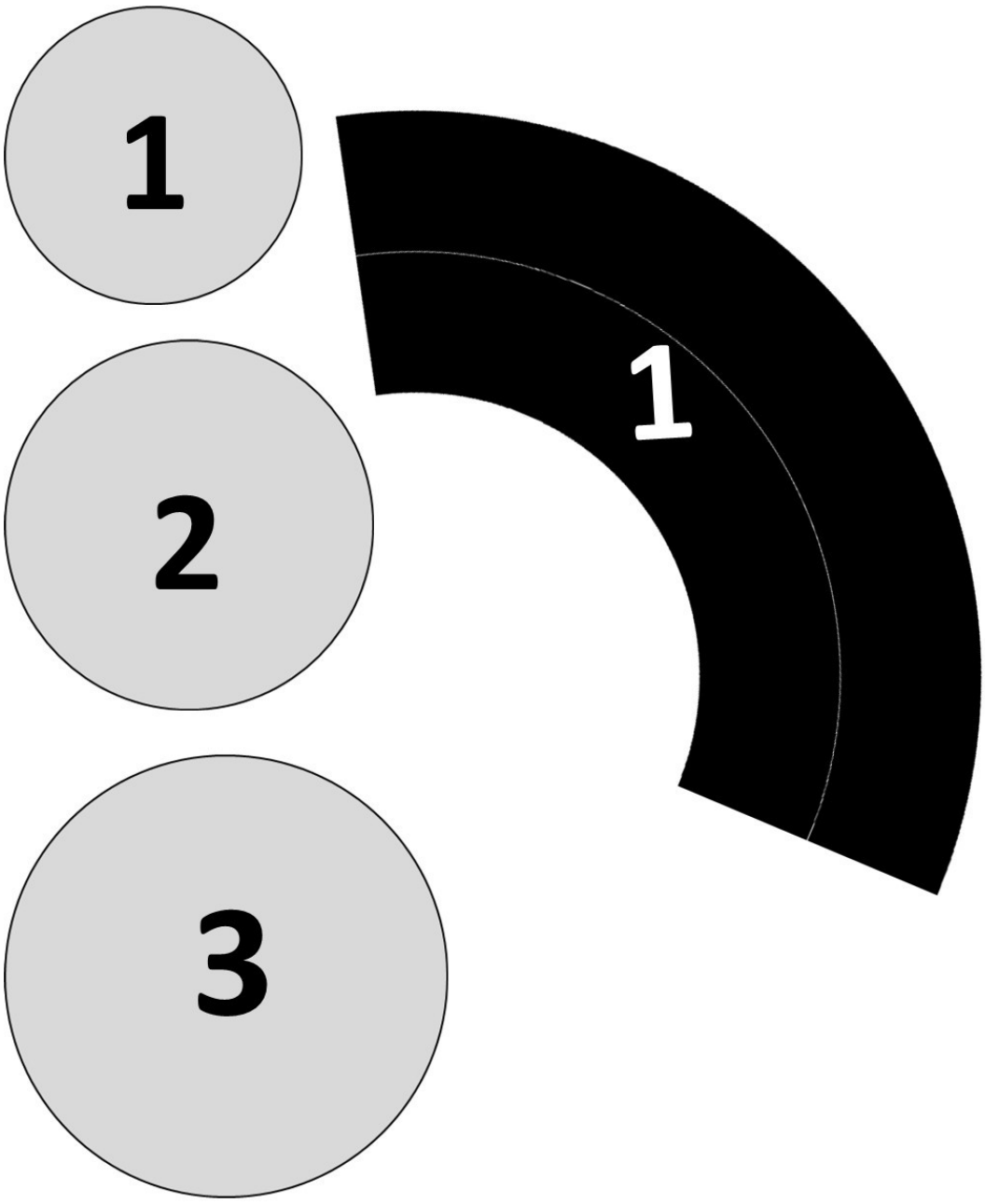
Red leggedTadpoles reach max of 3cm or just over 1”, are tan to brown with mottling and gold flecking. The tail is at least as long as the body and the tailfin extends onto the back.

Red legged- black when small

Cone Templates:



Use sizes 1 and/or 2 for traps targeting bullfrog tadpoles, use sizes 2 and/or 3 for traps targeting pumpkinseed sunfish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2
3
1