

# INCREASING THE SELECTIVITY OF #330 BODY GRIPPING TRAPS - THE TOP SIDE PARALLEL TRIGGER -

New York State Department of Environmental Conservation

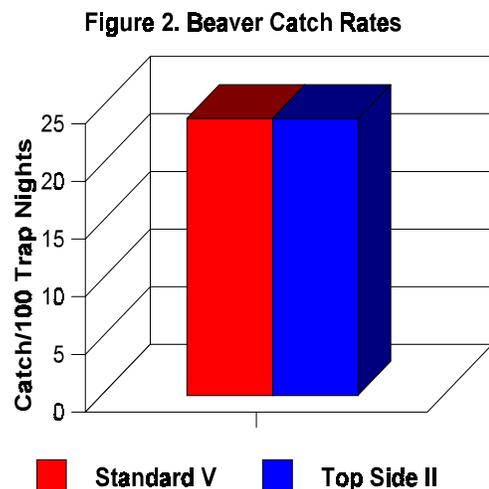
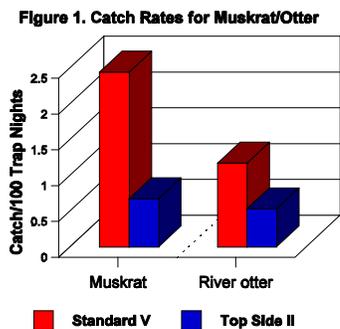
## INTRODUCTION

The NYS Department of Environmental Conservation (NYS DEC) has long recognized the economic and ecological importance of beaver. More than a decade ago biologists implemented a statewide beaver harvest management strategy to address these values.

Today it is essential that beaver trapping continue to maintain populations at acceptable levels. However, NYS DEC biologists also know that river otters are taken in beaver sets both in areas where otter populations are secure and in areas of New York where they are not.

In 1999 biologists in the NYS DEC and trappers from the NYS Trappers Association initiated a study to determine if the single most important beaver trap - the #330 body gripping trap - could be made selective for taking only beaver. In 2001 we continued our research by involving the North Carolina Wildlife Resource Commission and the NC USDA - APHIS Program in this endeavor. The results of these studies revealed that the Top Side Parallel Trigger would significantly reduce the catch rate of muskrats and river otters (Figure 1.), when compared with the Standard V shape trigger.

At the same time, the beaver catch rate with this trigger modification remained similar as that achieved with a standard V shape arrangement in either top or bottom configuration (Figure 2.).



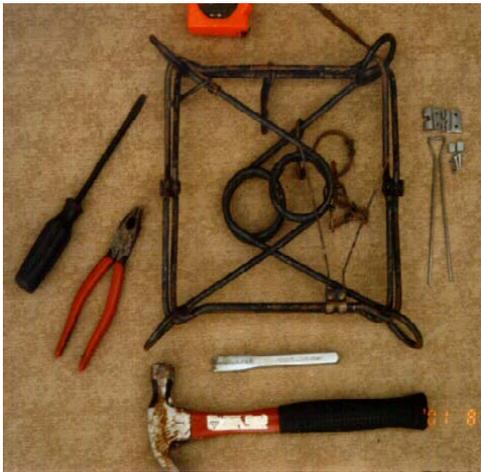
To produce a Top Side Parallel Trigger you will need the following tools and materials.

### Tools

- 1- Flat head Screw Driver
- 1- Pair pliers with side cutters
- 1- Standard Carpenter's Hammer
- 1- Cold Chisel
- 1- Triangular File or Hacksaw
- 1- Tape Measure

### Materials

- 1- Standard 2 way bolt on replacement trigger or a bolt on tension adjustable trigger
- 2- 12.5 ga Smooth Wire Splicing Sleeves or 1/8 double ferrules
- 1- Standard #330 body gripping Trap



**FIGURE 3.** Tools and materials needed to modify a standard #330.

## ASSEMBLY

It is a simple matter to modify the trigger on a #330 beaver trap. One person with all the tools and materials available can modify and change triggers on a dozen traps in less than an hour. Bolt on replacement triggers for the #330 trap cost about \$1.15 each. Steps 1 through 5 depict the procedures for assembling and attaching a Top Side Parallel Trigger to a #330 trap.



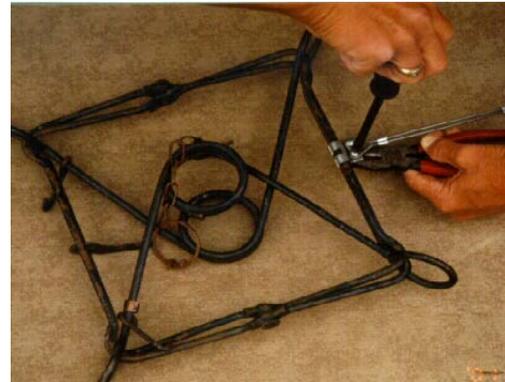
**STEP 1.** Remove the existing trigger using the cold chisel or screw driver and hammer. Most stock triggers are attached by rivets. These you will need to cut or pry apart in order to remove the old trigger.



**STEP 2.** Assemble the bolt on replacement trigger. Pinch the wires together and measure down 6 1/2" from the bottom of the trigger clamp and cut off the wires at this length.



**STEP 3.** Slide the two ferrules on the trigger wires and crimp using the cold chisel/screw driver and hammer. Crimp the splicing sleeves at the top and bottom of the now parallel wires.



**STEP 5.** Loosen the nuts and bolts and attach the trigger to the correct jaw. Retighten the nuts and bolts on the trigger clamp.

## CONCLUSION

The trigger modification is now complete. When the trap is set the trigger dog is centered over the reference mark. Compare this trap with one that still retains the stock V shaped trigger. Notice the area free of the trigger wires. The larger unobstructed space allows the smaller muskrat, kit beavers and the more streamlined river otter to pass through without firing the trap, as often as larger beaver.



**STEP 4.** Establish a consistent reference mark for the dog by cutting a shallow notch on the jaw with the file or hacksaw. Mark this groove 2" from the inside edge of the side jaw wire. You are now ready to attach the trigger to the trap.



**FIGURE 4.** A completed Top Side Parallel Trigger modification.



**FIGURE 5.** #330 with a Standard V Trigger configuration.



**FIGURE 6.** A modified Tension Adjustable Trigger.

That's all there is to it. With this simple trigger modification, you will be able to reduce by 50% the chances of an accidental otter catch in your #330 body gripping traps and ensure a speedier return of the river otter in parts of New York where they are rare. You will also be able to reduce by 75% the accidental catch of muskrats and small beaver, thus leaving your traps operable for catching the larger more valuable beaver.

If you wish to make this trap even more selective, then equip your traps with the Tension Adjustable Trigger<sup>1/</sup>. Assemble and attach it to your #330 traps in the same way as just described. Set the trigger tension at 8-12 oz at the end splicing sleeve by clamping the jaws open in the set position, so the trigger can still fire, and then tighten the adjusting bolts. As you tighten the adjusting bolts, measure the tension with a simple fisherman's digital or spring scale until the desired tension is achieved.

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<sup>1/</sup> Species Specific Traps and Exclusion Devices, LLC, 6604 West Slope Lane, Oconto, WI 54153. This product reference does not imply Agency endorsement.