



Using the Single Shot Tag Injector for Coded Wire Tags

The Single Shot Tag Injector is an inexpensive means of implanting small numbers of pre-cut sequential Coded Wire Tags (CWTs) for trials of the system and for limited-scale experiments involving only tens or hundreds of animals. For further information see: Using Precut Sequential Coded Wire Tags on our website www.nmt.us.

The Single Shot Tag Injector kit contains one injector with needle attached, a wire with looped end for cleaning the needle, a sharpening stone.

The Single Shot Tag Injector is used with pre-cut, pre-magnetized sequential tags, which are ordered separately from the injector. The tags are supplied mounted under clear adhesive tape on sheets of waterproof paper. They are loaded into the needle of the injector one at a time. This can be done by sliding the needle tip, beveled side down, over the tag while it is on the tape. Alternately, the tags can be picked up on a wetted fingertip, and loaded into the syringe from there. You may find it easier to use magnifying glasses or a magnifier headband to load the tags. Care must be taken, as the tags are very small and easily lost. It is wise to load the tags over a large clean tray so that the tag can be recovered if dropped. (If dropped, a magnet can be useful to recover the tag.)

The tag is injected into the animal by inserting the needle to the required depth and ejecting the tag by pushing forward on the knob projecting from the side of the injector. A small piece of rubber or tape can be positioned on the needle as a penetration depth guide.

A wide range of tagging locations has been used in different species, and experimentation may be needed to find the optimal location. Permanent subdermal implants have been made into cartilage, muscle, adipose tissue and fins. A guide to the optimal location of snout tags in salmonids can be found in the Coded Wire Tag Project Manual which is available on our website. For other locations, applications, or assistance please contact us at biology@nmt.us.

Clean the injector after each use. If allowed to dry before cleaning, the push rod may stick and will be damaged when trying to move it. Dismantle the injector by unscrewing the needle and the injection knob. Wash all parts in detergent. Particulate material can be removed from inside the needle with the cleaning loop. The parts should be rinsed with water followed by alcohol, and dried. A dilute solution of bleach should be used following the detergent cleaning to disinfect the injector, and then it should be rinsed with pathogen free water and dried.

Inspect the beveled end of the needle for sharpness. The point can be restored using the sharpening hone included in the kit, plus oil. When finished, clean the needle as indicated above.