INSTRUCTIONS FOR CODED WIRE DETECTOR

FIELD PROCEDURES

1. **SCAN ALL SEA LAMPREY**
* Remove any metal (watches, rings, bracelets, gloves) from hands/wrists.
* Turn on detector and test the detection capability by swiping the index card with a coded-wire tag taped to it from top to bottom through the center of the v-shape.
* Adjust sensitivity to the point where it will readily trigger a positive response when a tag passes through, but is not “going off” repeatedly because of movement around the detector.
* It is important that the dorsal side on the lamprey (where the fins are) is oriented to the inside of the detector. Sea Lamprey that contain tags had them injected alongside the front dorsal fin. “Swipe” the lamprey through the detector in a top-to-bottom motion (see figure). The detector detects the change in the magnetic field as a tag passes through it. If the lamprey is run through too slowly or too quickly, it will not detect the change. Practice the motion with the index card/tag. During this step, remember these two critical points: (1) Make sure dorsal fins are completely inside of the v-shape, and (2) Swipe lamprey from the top of the detector through to the bottom of the detector in an up-to-down motion.
* Be careful not to touch the sides of the detector while you are testing the index card or scanning sea lampreys (this type of contact will trigger the detector).
* **Scan all sea lampreys including those that you plan to mark with v-notch fin clips**.
* If the lamprey triggers a response from the detector, **do not** mark and release. Set aside in a separate bucket. The lamprey does not have to be kept alive – it will be measured and weighed at the end.
1. **PROCESS SEA LAMPREY WITH CODED WIRE TAGS** (triggered positive response from detector) from step 7.
* Record the capture of Sea Lamprey that trigger a positive response from the detector on the standard trap catch form.
* Record stream name and date on a tag. Weigh (g) and measure (mm) the lamprey and record this information on the tag also.
* Place the lamprey and tag in a small plastic bag (so the tag can be read from the outside of the bag) and store in freezer until lamprey can be picked up by USFWS personnel.