USE OF MIST NETS FOR CAPTURING PASSERINES

I. GENERAL

This procedure will be used to select sites for setting up mist nets, capturing birds, removing birds from the net, and recording general descriptive information about the birds captured. The bird capture could be for the purposes of collecting species presence information, morphological data, or for collecting blood or other tissues. Those specific additional procedures are outlined in study protocols or other standard operating procedures.

II. EQUIPMENT

State and Federal Permits
Equipment for clearing brush (bank blades, machetes, etc.)
Mist nets and poles
Pole pounder (sledge hammer and bolt)
Holding bags
Pesola scale
Identification guides
Supply box
Data forms

III. FIELD PROCEDURE

Mist net poles will be made of galvanized steel or aluminum conduit. Each pole will consist of one 5’ section of 3/4” diameter conduit and one 5’ section of 1/2” diameter conduit. The larger pole will be pounded into the ground (between 4 and 6 inches deep), and the smaller pole will be inserted into the top of the larger pole to provide between 8 and 9 feet of pole height to mount each end of the nets. The extent of overlap between the smaller upper pole and larger lower pole should be approximately 6 inches. A small hole could be drilled in the lower pole and a small bolt inserted through that hole to restrict the extent of pole overlap. Alternatively, a sledge hammer could be used to pound flat a 1-2” segment of the 1/2” conduit approximately 6 inches up from the bottom. The 1/2” conduit can then be inserted into the 3/4” conduit to make the pole. To set up the net, pound the base (3/4”) conduit into the ground by placing a large bolt into the
top of the conduit and pounding on the bolt with a sledgehammer. Once the base is firmly in the
ground, place the end loops of the mist net over the base. Place the top pole into the base, and
spread the mist net loops evenly across the pole. Unfurl the net and stretch it tight. Mark the spot
where the net stretches to and pound another pole base into the ground. Place the end loops of the
mist net over the pole base, and insert the top portion of the pole. Spread the mist net evenly up
and down both poles.

Mist nets will be placed in or near habitats where the targeted species are likely to frequent. The
nets should be placed against a dark background (usually dense vegetation) so that they will not
be visible to the birds. Record locations of mist nets using a hand-held Global Positioning
System (GPS) unit. In some cases a decoy or recording of a song or avian predator may be used
to attract a targeted individual into the net. If nests of the target species are found, it will be
acceptable to place nets such that the nesting adults are captured when leaving or coming to the
nest.

Nets will be checked frequently (at least once an hour, if possible). Care will be taken while
removing birds from the net so as not to subject them to injury and to minimize stress. To
remove a bird from the net, first determine the direction from which the bird entered the net and
remove it from that side. Because birds generally fly into the net headfirst, it is usually easier to
remove them in the reverse order: tail, feet, wings and the head. A crochet hook may be useful in
removing the net from around the bird.

After removing the bird from the net, determine its age (adult or juvenile), sex, breeding status,
and condition. If bird weight is to be collected, the bird can be weighed using a Pesola scale.
Ensure that the bag used to hold the bird for weighing is tared from the scale read weight prior to
placing the bird into the bag. Bird weights can be collected away from the bird capture location.

If the bird is of a species targeted for further processing and data collection, place the bird into a
cloth holding bag. Further processing will be conducted as indicated in the Sampling Protocol or
Sample and Analysis Plan.

Live birds should be released as soon as possible. Clip one right side tail feather approximately
½ the shaft length to clearly identify that the bird has previously been captured. This will allow
for the analysis of recapture of birds.
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