Making a net frame and handle

Bend 44.5 inches* of the desired size wire (thin, 10 gauge or so for an aerial net, thicker 6 or less gauge for aquatic net) around an appropriate sized bucket to get general round shape then make bends on each end at 2.5 inches on one and 4.5 on the other, these bends mark frame stays. Bend a 0.25 inch nubbin on each end of the wire at 90 degrees to serve as frame stay anchors. This is for a round 12 diameter net bag, you could form the frame with one flat side for a D-shaped net, as is desirable for some aquatic collectors.

Net frame is complete.

Get a 1 inch diameter dowel or clean up an old broom handle for a dowel, some people prefer a lighter dowel, especially for younger collectors.

Make grooves on opposing sides of one end of dowel, depth of grooves is equal to diameter of the wire used for the frame, one groove is 2 inches long and the other is 4 inches long.

\[
\text{Diameter} = 12 \text{ inches} \\
\text{Circumference of circle} = \text{Diameter} \times \pi, \quad \pi = 3.14159 \\
\text{so for this case:} \\
\text{Diameter} \times \pi = 12 \times 3.14 = 37.7 \text{ inches} = 38 \\
\text{Length of wire} = 38 + 2 + 4 + 0.5 = 44.5 \text{ inches (circle plus stays plus anchors)}
\]

*For a 12 inch diameter net, remember from basic geometry:

Assemble by placing frame stays in frame stay grooves and sliding aluminum tubing up over stays and taping below to prevent tubing from sliding down

Length of dowel is personal choice, roughly 24-36 inches

Aluminum tubing to slide over frame stays when they are in the frame stay grooves. Alternatively, wrap stays in grooves with heavy tape and/or wire to hold frame on handle.