my last Uniseine broke due to time, engineering challenges, and the urgency of the hunt, so I invented Uniseine version 4.0B. (See “Uniseine Version 4.0”, American Currents Vol. 34, No. 1, for the beginning of this fish net construction story.) Version 4.0 broke because the handle joint was designed to swivel, but not freely. After two years of use, the joint rusted, swiveled one last time, and then stuck. Extra force was applied; I had traveled 900 miles to catch some minnows so a trip home for tinkering was out of the question. The brail snapped. The new Uniseine is 4.0'B' because it functions differently, and is not a direct improvement or replacement for 4.0. Version 4.0 would be superior if a strong swivel joint could be found that would easily lock in either of two positions.

Construction started with replacing the broken brail. Three inches of one end of a hardwood dowel were reduced in diameter so the dowel would fit inside the nipple. Then the wood was painted with exterior paint. The nipple lip was tapered to assist with later insertion into the conduit. The nipple was pounded onto the hardwood dowel (Fig. 1.). Then the nipple was temporarily screwed into a fitting. Electrical conduit (¾ inch, grey) was cut to 51 inches. The extra length is to allow any damage from the assembly process to be cut off. The nipple, with fitting, and one end of the conduit were submerged in boiling water for 30 seconds, removed, and then the conduit was quickly pounded over the nipple with a big hammer. The conduit was re-cut to a length of 50 inches, thereby removing the damaged end.

Version 4.0B uses ½ inch cross pipe fittings instead of a swiveling joint. I have found that I do not use the extended reach function of the Uniseine very often. I still can with this construction; the switch is just not as quick. The 4-foot seine netting is attached to the brails (Figs. 2 and 3, C and D). The brails are only screwed in by hand to the cross fittings. The brails can be unscrewed for compact transport, or screwed into the threads at E and F to give the Uniseine greater reach.
Fig. 2. Cross pipe fittings allow the Uniseine to be assembled with a short or long reach.

Fig. 3. The Uniseine in tripod configuration.

The handles (A & B) are permanently screwed into the cross fittings. The boiling water method can be used to assemble the handles. For each handle, part K can be cut to 9 inches. After pounding on the nipple, re-cut the conduit piece to 8 inches, then pound in a 30 inch hardwood dowel. The branching piece of the handle (L) is 7 inches long and glued in place pointing upward. The total length of the handle is 30 inches. One option is to tighten the handles to align with the cross fittings. What I did was to under-tighten handle A and over-tighten handle B so that when the cross fittings are flat on the floor, the free ends of the handles are 5 inches off the floor. Each handle is approximately 10 degrees from aligning with the cross fitting.

The Uniseine also forms a free-standing tripod to catch the fish while you chase these fish toward the netting. The need for a swivel is replaced by having a pre-bent connector. An 8 inch piece of conduit was heated in the oven for 5 minutes at 300 °F. Then rods were inserted into the conduit, and the conduit bent to a sharp 20 degree angle. After cooling, measuring from the inside of the bend, the sides of the angle were cut to 1½ inches and 2 inches (to allow for damage). A line was marked on the inside of the bend. A second line on the cross fitting marked 30 degrees from the top of the cross fitting. The joint at point I is at an angle so that the tube (end G in Fig. 2), points to the right, 20 degrees up due to the bend in the tube, and 30 degrees toward the bottom of the picture from the alignment at joint I. After using the boiling water and pounding on method, the bent piece was re-cut to 1½ inches.

I plan on using the Uniseine with the white coupler (H) on my left side and the net in front of me. Because of the 10 degree angles at the handles, the brails will make a larger angle than the handles. To set up the tripod, with the net in front of me, the white coupler (H) is on my right and facing down. The bent piece (G) points up and is inserted into the coupler (H). The brail ends are moved to stretch the lead line tight. Remember “white on right.” If line J in Fig. 3 is extended, then it will divide H from G, showing where the pieces fit together.

I still need to add the elastic to the top of the net. All this may sound complicated, but it will make sense when you have the parts in front of you. This is Uniseine “version 4.0B” because there is a learning process here. Resultant: A Uniseine that makes for some successful, quiet and solitary fishing. 🐟