A PRIMER FOR MAKING A SIMPLE BALSA POPPER IN 30 MINUTES
(excluding any drying times)

By Jerry Snider

AN ASSORTMENT OF SMALL AND MEDIUM BALSA POPPERS

LIST OF MATERIALS: (these are recommendations only)

Body—balsa wood stock in 1”x 1”, 1” x 1/2”, 1/2”x 1/2”, and 1/4”x 1/4” dimensions.

Hook—Tiemco 2312 2XL 1 XF dry fly hook # 8 or 10 for small round bodied bluegill poppers, Tiemco 8089 for medium and large bass poppers, Mustad 33900, 33903 for small bass poppers.

Glue—Thin super glue or 2 ton epoxy; head cement for whip finish after tailing.

Thread—3/0 black or gray monocord or Uni-Thread.

Eyes—Round-headed map or craft pins and/or painted eyes, or commercially made stick-on or glue-on decal eyes, or doll eyes, or 3-D molded eyes. Or use your imagination and come up with your own ideas!

Legs—assorted colors of fine and medium round rubber legs, or Sili Legs, or Crazy Legs.

Paint—Acrylic hobby paint, Testor’s model enamel, or finger nail polish in assorted colors. Clear Gloss lure and jig finish and glitter for the latter.

Tails—your choice of combinations of Crystal Flash and/or Flashabou, rubber legs in assorted colors, strung grizzly saddle hackle in assorted colors, assorted colors of maribou, or simply make a tail using a clump of deer hair.
LIST OF TOOLS:
Sandpaper—one sheet each of 200 grit, 320 grit and 600 grit dry sandpaper for wood.
Small saw—either a fine toothed hobby hand saw or Harbor Freight’s small and inexpensive power cutoff saw. A Dremel rotary tool with saw blade will work if care is used.
Brass tubing—8-10” long, in .375”, .312” and .275” O.D. Other sizes as desired. Used for boring out cylindrical bodies. Sharpen one end of tubing on a belt sander or disc sander.
Pin vise—small hand vise to hold wire drill bits and needles. Used for drilling holes in popper body for hooks & rubber legs.
Drill bits—Wire drill bit sizes 53 (.059”) and 69 (.029”).
Dremel ¼” round high speed cutting tool for hollowing cup face on popper body. Use in pin vise.
Bobbin threader—of the looped fine wire type, for pulling rubber legs through body.
Paint brushes—1/4”, #2, #4 Ox hair brushes, round or flat bristled.
Nails—assorted sizes of headless and headed nails used for painting eyes and body spots.

INSTRUCTIONS:
O.K., O.K. I fibbed! So you WON’T be able to tie your first popper in 30 minutes. However, your second popper should easily be done within that time frame. Nor will you need ALL of the materials and tools listed. See what you have on hand that might make a good substitute. Please don’t spend more than a few dollars to tie your first balsa popper. Discover what works and what doesn’t work. If you really get into making poppers, THEN get what you need for the style, size and color of poppers you wish to make. Certainly you will come up with better/easier materials, tools, methods and ideas to do than what is described below. Use the techniques that work for YOU. Ideally, it is best to make up at least half dozen bodies at a time. This will allow you to use the otherwise wasted drying times to continue to work on other stages of the building process. For example, it takes little longer to paint/finish a half-dozen bodies as it does one body.
Fig. 1. Balsa stock that can be used in making popping bugs for bluegills and bass. ½” x ¼” and ¼” x ¼” strips were used for the bugs presented here.

Fig. 2. The hooks shown above are just a few of the brands, types and styles available for making brim and bass poppers. The black vertical bar between center of hook shank and hook bend provides an idea as to the maximum body length that should be used for each hook. Used here is the TMC 2312, size 10, a 2XL 1XF straight eye dry fly hook, for small bluegill poppers. The Mustad 33900 hump-shanked hook can be used for small bass and large brim poppers, the TMC 8089 hooks in size 6 and 8 can be used for medium bass poppers. For really large poppers we are looking at sizes in the range of 1/0 hook size.
Fig. 3. Use a small strip of 220 grit sandpaper to rough-shape the body.

Fig. 4. Select hook to be used and measure body against hook shank to determine where body is to be cut to length. At the very minimum, the hook point should extend just beyond the end of the body. If you find you are missing a lot of fish, either a hook with a wider gap should be used or a hook with a longer shank (or use a shorter body). The larger the fish, the greater the gap/shank length distance should be.

Fig. 5. If you are NOT going to cup the popper face (this will be discussed later), cut the front of the body to a 20 deg. miter. Shown here is a cheap Harbor Freight hobby chop saw with built in miter to make the cut. A small hobby/model handsaw can be used if the cuts are carefully made.

Fig. 6. Use a small pin vise to hold the wire drill bits used to drill the body hole to accept the hook. We drill hook and rubber leg holes freehand. If you struggle with this, place the body and the pin vise on a flat surface, the body shimmed if necessary, to achieve the correct height between body and drill bit. Slowly push drill bit through body.
Fig. 7. After drilling hole, carefully run hook shank through hole to check for diameter and length.

Fig. 8. One can also slit the bottom of the body from front to rear and insert the hook into the slit. This requires using a wood filler or spackling paste to fill the slit after gluing the hook in the body. Here the hook has been glued in and the slit filled and sanded.

Fig. 9. After fitting the hook to the body, wrap a short strip of small chenille around the hook shank where the body will fit. Cut most (not all!) of the fuzz off the chenille after wrapping. Check to see if the hook will still fit into the body. If not, the hook hole should be reamed out just enough so that the hook and chenille will slip tightly into the hook hole. Be careful not to split balsa body!

Fig. 10. Soak chenille in a drop or two of thin super glue OR coat with a small amount of 2 Ton Epoxy. Here the chenille/hook shank is being coated with super glue. Quickly slide the popper body over the hook shank until the hook eye just clears the face of the popper. Make certain that the body is correctly aligned with the hook shank.
Fig. 11. Note the bit of glue on the body by the toothpick. If super glue is used, this must be sanded clean. Otherwise, water-based acrylic paint will adhere poorly to the glue unless several coats are applied.

NOTE: Super glue works O.K., but if you don’t want the hook to rotate inside the body a bit after landing half dozen good fish, use 2 Ton epoxy to glue in the hook. If using the latter, give it an hour or so of drying time. Then the body, if handled gently, can be sanded to final shape.

Fig. 12. While the glue on the first body is drying, let’s now make a small, cylindrical bluegill popper.

Fig. 12. Use brass tubing sharpened on one end to cut the cylinder. End of tubing can be sharpened on a belt sander or a disc sander.

Fig. 13. After cutting to depth, place your thumb against the tubing where it contacts the balsa to mark depth of cut. Slide the tubing from the balsa, place against the edge of the stock and mark where to cut off stock containing the cylinder.
Fig. 14. After cutting stock to length, slide cylinder free from balsa stock.

Fig. 15. Use a Dremel ¼” round high speed cutting tool held in a pin vise, hollow a cup face on popper. This is easily done by hand, so don’t risk using a high speed Dremel tool so close to your fingers.

Fig. 16. Drill hook hole and glue hook to body just as we did in the first popper. After glued body has dried for an hour or so the body can carefully be sanded to final shape.

Fig. 17. Both popper bodies are final shaped, fine sanded, and ready for painting. We will continue the remainder of the steps using the larger body. The same steps should be followed in completing the smaller cylindric body,
Fig. 18 A variety of paints can be used: Testor’s model enamel, fingernail polish, and water-based acrylics among them. I prefer to use water-based acrylics because they store well, come in a wide variety of colors, offer easy cleanup of paint and brush, and do not require the use of a filler prior to application. Acrylics do require a final coat of clear gloss lacquer or varnish for protection, however. Your creation will look pretty dull after painting, but when the clear gloss is applied the bug really “pops”!

Fig. 19 The first coat of acrylic paint has been applied to the body.

The next step is to determine what type of eyes we want on our bug—round-headed map or craft pins, painted eyes, or commercially made stick-on or glue-on decal eyes, doll eyes, or 3-D molded eyes. A variety of additional choices are also available. Use your imagination! For example, try three drops of paint—a large white circle, a medium red circle inside the white circle followed by a smaller black pupil.

Fig. 20. On our first bug we are going to cut down the pin portion of some round-headed craft pins. After the first coat of body paint has dried, insert the round pins in the body as desired. Push firmly on the heads enough to create a slightly rounded depression in the balsa body.

Fig. 21. Remove pin eyes, add a very small drop of super glue or epoxy to the pin tip and reinsert into body. Apply 2nd coat of paint to body and eyes and let dry.
Apply 3-4 coats of acrylic paint to the body. If body spots and/or painted eyes are desired (wait at least an hour before spotting), use a variety of sizes of headed and headless nails or small wooden dowels trimmed to various diameters in a pencil sharpener to apply spots. Shown here are the turned down ends of a couple of pieces of aluminum rod, resulting in four different diameters to use for spotting.

Fig. 22. First eye spot and body spots being applied.

Fig. 23. Application of the second set of spots. Wait at least 2-3 hours before applying, as the paint drop applied is very thick and takes a while to dry. If the second spots are applied too soon, the first spots may smear.

Fig. 24. Spots have dried and body is ready for coat of clear gloss jig finish or varnish.
While you have been reading to this point, we have prepared yet another popper body, glued the hook, painted the body, and painted in the eyes. On this popper we are going to add rubber legs to the body.

Fig. 25. Here we are using a small #69 (.029") wire drill bit in the pin vise to drill a small hole at an angle through the body. Drill a 2nd hole at cross angles to the first (black line).

Fig. 26. Insert a fine wire bobbin threader (or thread and small needle) through one hole, insert 6" long piece of fine round rubber into threader, and pull through hole. Repeat process for 2nd hole.

Fig. 27. Legs are now completed. If necessary, use a small toothpick with a bit of body paint to touch up around the leg holes. If you want to insure the legs are secure, place just a tiny smear (not DROP!) of super glue on the point of a toothpick and touch the junction where the leg enters the hole. You only need to do this on one side. Or you can pull each leg out of the hole slightly (1/64" or so), touch a smear of super glue to the exposed section and pull the legs back into the holes. Since our final step is applying a coat of gloss jig finish to the popper, I let the finish serve to anchor the legs. Sometimes it even works!
Fig. 28. If glitter is desired, sprinkle a very small amount (quantity about the size of a small aspirin tablet) onto a flat piece of cardboard or something similar.

Fig. 29. Dip a small brush into clear gloss jig finish, then touch brush to glitter and brush onto body areas as desired. Try not to apply glitter over the eyes. Fish won’t care but you most likely will!

Fig. 30. Once glitter/gloss application is completely dry (about an hour or so), apply a full coat of gloss jig finish to the entire body. Try to avoid getting gloss on rubber legs. If necessary, apply a 2nd coat of gloss to body.
Fig. 31. The first and second poppers completed except for clearing the hook eyes of excess paint. The third popper still requires adding the tailing materials.

Tying in the tailing material should be familiar to you. Use pretty much the same techniques one would use in tying in the tail of a Woolly Bugger or on bluegill flies that use rubber legs, feathers and Krystal Flash at the rear. Select your choice of any color and combination of Crystal Flash and/or Flashabou, rubber legs, strung grizzly saddle hackle, or maribou. Or simply tie in a clump of deer hair for the tail. EXPERIMENT!

If you have problems in making a selection, please refer to the photo on the first page for ideas.

All photos in this guide can be viewed at magnifications up to 500% with excellent clarity. Take full advantage of this when necessary.