How to make a classic wooden fishing lure

By Tim Kubetz

1. The first step in the bait-making process is to choose a design for your lure and the type of wood to use. There is much room for creative freedom with the design of the lure. Don’t get stuck just copying other designs, all of the great baits had there start as a block of wood in the hands of someone who wasn’t afraid to experiment. The type of wood you use is dependent on the design and purpose of the lure. Each type of wood has certain attributes that make it better for certain application. Basswood is a good starting point as it is easy to carve and is fairly buoyant. Other popular materials include balsa, poplar, and cedar.

2. Now that you have a design in your head you can either trace it on the wood or, if a lathe will be used, just mark out the basic dimensions.

   Note: A lathe is a great tool if the lure has a consistent round shape. Baits like topwaters, for instance, are very easy to shape on a lathe.
3. Now it's time to start shaping. Whether you use a lathe or are going at it by hand, remember to be patient and go slowly. You can always sand away more wood but you can't undo a mistake. If using a lathe, it helps to create a straight blank of the preferred diameter before you actually start shaping. To carve the bait by hand, several tools can be used including: chisels, carving knives, or my personnel preference, a wood rasp.

4. Once the basic shape has been roughed finer shaping can be done with 80 grit sandpaper. When I'm sanding I usually make it a three step process, first with 80 grit, then with 150 grit, and finally finishing it off with a super fine 220 grade.

5. Now that you have finished shaping your lure, it's time to drill the hook hanger holes and, if necessary, cut the bill slot. Note: When carving baits by hand, I have found it easiest to drill the holes before any shaping is done while you still have a flat piece of wood. Doing it this way ensures the hook holes are perfectly inline and balanced. You will also want to cut the bill slot first. For hook hangers on bass-style baits I usually use ¾" brass eyescrews and make the pilot holes with a 1/16" bit. Lures designed for larger game fish such as Muskie require a larger, stainless steel eyescrew.

6. To insure durability, it is necessary to coat the eyescrews with epoxy when installing in the bait. Otherwise, you could end up with nothing but an eyescrew on the end of your line after hooking a big fish. Stay away from 5 minute varieties of epoxy and instead use a slow cure variety to ensure the strongest bond possible. When seating the hook hangers, when make sure they are inline with each
other as this is what ultimately affects how well a bait performs. Brass hook hangers allow you a small window of error because you can bend them to tune the bait.

7. If your design requires any kind of ballast weight in the body now is the time to install it. Small 1/8 oz finesse weights work well for this application, just make sure the weight isn’t off-center or it will kill the bait’s action. Use the same epoxy you used for hook hangers and be generous when seating the weight.

8. After the epoxy has had at least one day to cure you are ready to apply a coat of Varathane sanding sealer to the bait. The sanding sealer doesn’t actually provide water protection to the lure. What it does is soak into the grain and allow for a much smoother finish after it has dried and been sanded again. Although it is possible to skip this step. My experience has been that you get a much more professional finish when using the sealer.

9. Give the lure another day to cure before sanding to perfection.

You are now ready to apply the epoxy sealer that will waterproof the lure. The reason for sealing before painting is so the bait is protected if some mean, toothy critter should happen to puncture your topcoat (guaranteed to happen). There are lots of sealers on the market and I have tried many
different kinds, usually with unsatisfactory results. Luckily for you, you can learn from my experiences and avoid the expenses and frustrations that I experienced. The product which I now use is called Envirotex and is a two part epoxy sealer available at many hardware stores. Although epoxy is a real pain to work with, you will get away with nothing less for wooden baits. Lacquers, enamels, and water-based sealers simply aren't adequate.

The trick to achieving a smooth uniform finish with epoxy is to keep the bait constantly rotating so the finish doesn’t sag to the bottom. This can be accomplished two ways: either by turning the bait by hand for 6 hours (you will go insane), or by constructing a drying wheel powered by a small motor. You want a motor that turns between 1 and 8 rpm (I used a chicken rotisserie for a grill that does 4 rpm). Leave the bait on the rack for at least 5 hours before allowing the bait to finish curing for 72 hours (you’re probably gonna want to do something else while you’re waiting).

10. Alright, now that the epoxy has finally cured, it’s time to start painting. If you are just starting to dabble in the hobby you’ll do fine with hand brushes and a few spray cans, in fact I have seen some amazing color patterns painted this way. If you are a little more serious about painting and want to try to produce real professional finishes (key word being “try”) you’ll want to invest in a quality airbrush. Several good brands are out there including Badger, Paasche, and Iwata and all will serve you well. As a side note, I highly recommend a double action, verses single action, brush as they allow for much finer work.

The first step in painting, no matter what color pattern you choose, is to spray/brush a primer coat of white. This step is critical as it makes any color painted over it more vibrant and stand out more. Now the thing to keep in mind when painting is that it’s all about layers. Don’t try to paint it all at once, just keep adding more coats to build the pattern. For instance, for a basic baby bass pattern, start with pearl, then spray a leaf green on the back through a scale mesh fabric, next add the dark lateral line with a stencil, finally add a dark back and some red
accents around the gills. Walla! You’ve got a spot on match for a juvenile bass. The key with airbrushes is lots and lots of practice, and make sure that you practice on either plain paper or a reject bait. Also, don’t expect to freehand everything, stencils are a painter’s best friend. And know this, mess-ups will happen, just learn from your mistakes and have fun with it.

11. After you’ve finished painting, you’re probably eager to get out and cast your custom creation. But wait! Start fishing now, and chances are that your paint job will be destroyed and your bait will swell up with water and rot. Not good. To avert this catastrophic disaster we must apply the final coat of epoxy sealer. Using Envirotex, apply this coat just like you did in step 9, being sure to turn your bait on the drying wheel for a good six hours before still curing. The number of coats you use is up to you, the more you use the tougher your bait will be. But know this, too many coats will add weight and decrease buoyancy. For crankbaits and jerkbaits I usually use 2 or 3 but for topwaters I just do one coat to keep weight down. If applying more than one coat, you don’t have to wait the full 72 hours between each coat for the epoxy to cure. In fact, it’s best to just wait 12 hours in between applications as this will help the coats bond to each other.

12. Now comes the moment we’ve been all been waiting for, testing the bait. Use split-ring pliers to install the rings and hooks and experiment with several different sizes of each until you find which setup allows the best action. If your bait doesn’t run perfectly true remember to try tuning the lure by bending the brass line tie. Adding a split ring to the line tie will allow a freer action and help the bait stay in tune.

So there you go. You now have a one-of-a-kind bait that will hopefully catch the fire out of the fish. If it doesn’t, well that just means you get to experiment some more and you’ll find you get better and faster with every lure you make. Bait making is a great hobby, especially for those days when you can’t go fishing. I hope this tutorial will prove helpful.

Tim Kubetz “the mad bait maker” of WPB Co.
Materials

Here’s a list of what I use and recommend for each stage of the building process.

Tools:
- 4 in 1 wood rasp has four sides for shaping blanks
- Power drill with 1/16” bit for drilling hook hanger holes
- Wilton Scroll Saw for cutting out the basic shape
- Belt-drive lathe used to turn round baits
- Ruler with 1/32” increments
- Split ring pliers
- Badger 175 Crescendo double action airbrush
- 4 rpm motor for drying rack
- 2 gallon ¼ hp air compressor

Materials:
You can get most of these items at Janns Net Craft. Other items should be available at your local hardware store.

- Basswood for hand carving
- Poplar for lathe
- ¾” brass eyescrews
- 30 minute epoxy for hook hangers
- Varathane sanding sealer
- Createx airbrush paint
- Envirotex epoxy sealer
- Mustad short shank hooks
- Stainless steel split rings
- 3D holographic eyes ¾” diameter

Various lure making components including crankbait lips, propellers, and weights from Janns Net Craft