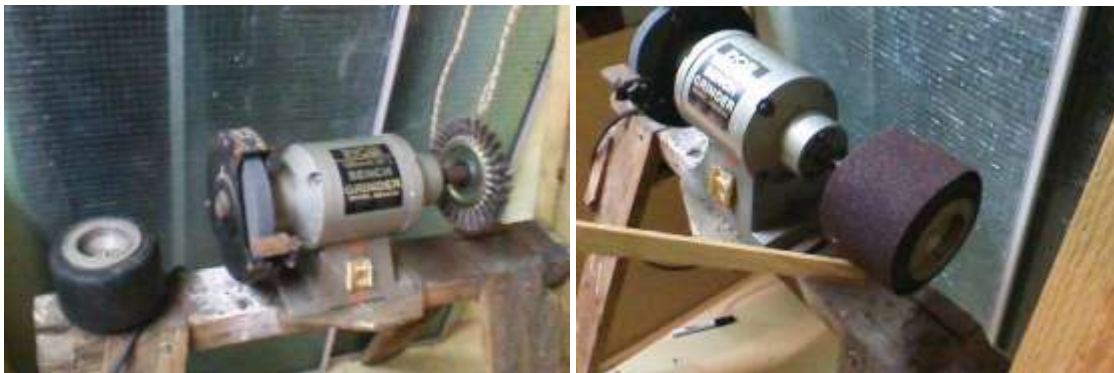


Lure Making – Part 1

“...but more importantly make sure you have timber lures in your box...Timber lures give off a more subtle and natural sound and I have clearly witnessed the benefits of using them in the last 12 months.” Matt Perdau, Hooked magazine May 2014.

Introduction to lure making

Lure making, especially with wood, is a relatively simple task. Most workbenches, fly making, and even model building tools are useful. The other great thing is the abundance of ideas for design, not just from the local tackle shop and what's in your tackle box, but also in various catalogues, Tackle Junky, lures books, the internet, and also nature in general (e.g. copying a trout or redbfin). You can also apply the building principles to small lures or large, able to catch trout to barramundi and saratoga.



Sanding drums can be attached to bench grinders. Be sure to check suitability and safety for your grinder.

For wooden lures, think about what you want to make the lure from. Hardwood will hold up to toothy critters and being thrown against rock better, but is harder to carve and shape, and weighs heavier if you want to fish with finesse rigs. Pine is a good, cheap compromise, and balsa wood is even easier to experiment with and can still be pretty strong (for example, the original Rapala was made of balsa), but they can be a little light if casting them against the wind with a baitcaster. Whatever the type of tree, wood with the grain running down the length of the body works best, and should be free of knots. Even old broom handle can be fun to turn into some lures.

For those who haven't toyed with lures much before, the swimming and stationary depth of the lure depends on a few factors. The type and size of the wood affects the buoyancy, and even the profile will move its centre of gravity, changing how the lure sits and swims in the water. The split rings and hooks used will affect the buoyancy, weighing it down, and even lead tape can be applied to lures to change their buoyancy. Finely tuned lures could be positively buoyant (good to help bounce over snags), neutrally buoyant (good to twitch in front of a stubborn fish), or sinking (to get the lure down to the strike zone before retrieving it). The profile will also change the way the lure lies, especially before the hooks are added if you are giving it a test swim. A tall, skinny lure will want to lie on its side. For this reason, most lures have a V or inverted egg profile, keeping the majority of the buoyant material on the back of the lure.

Lure bodies

Body shape also affects the motion of the lure, creating some of the action, or wobble. If a bib is used this also affects the action, and the swim depth. The location of the tow point also affects this, which may be on a bib out the front, on the nose of the body, or on top of the head. Other lures such as poppers can be built bib-less, although sinking bib-less lures are a bit harder to tune, especially as a beginner lure. Small poppers are somewhat easier, and with the extra weight can be reasonable to cast and still catch saratoga, barramundi, or bream.

In designing a lure, it is worth considering what action, depth, weight, recovery/trolling speed, let alone what you are trying to imitate. Other lure features include snag reduction, including hook use, the ruggedness of your lure for the target species, and also any additional features such as rattles or feathers, flash, or holographic stickers or glitter.

For this initial build, we will be building a small lure from wood. Provided is a variety of balsa, pine, and hardwood to experiment with. Think about the final shape you want, and if you like, make some sketches to help guide your carving. Grid paper can also be used to help scale your drawing (or expand a photo), and a side and top view are good to remind you as you carve, unless you just want to chance it.



The outline of the lure is drawn on the wood before coarse cutting it with a jigsaw, chisel, or rotary tool. A hobby knife can also be used for softer wood, such as balsa.

If the piece is large enough, the wood can be initially shaped with a jigsaw. If it's a bit smaller, a chisel can be used on harder wood. If you're lucky enough to have a sanding belt or drum on a bench grinder, these are great for shaping lures. Otherwise, a rotary tool with a sanding bit can be used to perform the next shaping anyway – it's just faster using a sander, chisel, or jigsaw. Failing that, an old-fashioned sanding block or some sandpaper and a whittling knife can help fill in the quiet afternoons. For softer materials like balsa, normal hobby tools like a hobby knife and foam sanding block can be used to shape it quite easily.



Shaping can be done with a rotary tool and a sanding attachment

The main thing is to not over-trim the wood, as just like any woodwork it is harder to rebuild it once it's been shaved off. The good thing is lures can be adjusted. The more important matter is to even out the lure so it swims straight. It doesn't have to be too symmetrical, but ideally it is close. At worst case, the lure imitates a wounded fish, just harder to get to swim into the strike zone.

The lure can be given a finer sanding, to give it a smoother finish. It doesn't have to have a finish like it has been spit polished, unless you want something to hang in the pool room – most fish have scales, some scars etc.



Check the shape both on the side and in profile. Try to balance it as much as possible to make the lure swimming straight, so it doesn't want to spiral or swim on its side – unless you're trying to make an injured fish, rather than a swimming lure.

Bibs and anchors

If your lure is using a bib (usually much easier for the first few at least), now is the time to think about where it, and the towing point will go. Similarly, now you can mark out your hook anchors. Consider what size hooks you will want, as it is better to avoid positioning them where they can tangle each other. If targeting a particular species, another consideration is where and how the fish

will bite the lure to maximise hook-ups, but avoiding snags if desired. Other considerations include weight of the hooks and if you want trebles, but that will come later – first is the bib.



Bibs can use a variety of plastics, depending on the size and strength required. You may need to check before cutting up the family's best Tupperware.

The bib can be made out of many materials. It can be clear, or painted, or natural. Some smaller bibs can use wooden bibs, but care should be taken with the wood grain to avoid it splitting and breaking off the first time it is cast against a rock or tree. Plastic can be used – just check it is rigid enough for the size you want. Stainless steel is good, and if you have spring sheet steel it can be good.

Aluminium is a good all rounder. I used to use old aluminium cans. Aluminium bar, such as 1-2mm thick is good for bigger bibs. Bibs again can be marked out with a permanent marker – they need to be as balanced as possible, but again it can be evened out later. Cut the bib out – tinsnips are good for plastic and metal. The rotary tool is good for the wood, to avoid putting too much pressure on the wood with a saw or knife. For smoothing the edge, use a file or rotary tool. For the rotary tool, used the sanding drums, not the grinding bits as the aluminium and plastic will just bog up the grinding bit. If you're emulating other designs, the majority of the lure action on the bib is from its front edge, so just focus on that edge, not the back edge.

In addition to the external bib section, remember to leave a tongue to insert in the lure. The can be as narrow as the section of the lure you are putting it into, and if you need you can taper the tongue a fraction to avoid cracking the lure body and also leave some room for glue if the bib is particularly thick.



You can trace out the bib, and leave a tongue. Also shown are some tools you can use to cut the slot – a hobby saw, hacksaw, and rotating saw blade.

The towing point can be placed on the lure, or in the bib, depending on your design. Now is the time to also confirm your desired hook points. Depending on your lure body, the length of the anchors will vary. Ideally they will be about 3cm long, but if required can be as short as about 1.5cm. Hook and towing anchors can be made by taking about 8-10cm of stainless steel wire and putting it midpoint over a small cylindrical item such as a fine screwdriver, nail, or pop rivet. The diameter of this is where your hook will attach, so you don't need it too big, but it needs to be big enough to fit the split ring, particularly if using the really heavy duty ones.



The anchors can be twisted out of wire, in a vice or pliers. Try to keep the tension even.

Take the two tail ends, and put them in a vice, vice grips, or even pliers. Twist the top, which will create a spiral thread from the two tails. Make sure you don't overtwist it as if you do it too tight, the wire may fatigue and snap. You can trim each of these to your desired length.

To make the anchor points, use a drill bit ideally no bigger in diameter than the anchors you just made (which are roughly twice the width of the wire). Tubing or a straw can be used around the bit for a depth gauge. Think about the angle it will be pulling, and the best way to get the lengths of the anchor desired. Drill these holes, and shake out any remaining sawdust.

The bib slot can be made with a hacksaw, hobby saw, or much easier with a rotary cutting disk on a rotary tool. Try to match the blade thickness to what you made the bib to make it easier than trying to evenly sand out the gap. It is also important here to cut perpendicular to the lure's centreline as this will be the pivot point of the lure, and an offset will cause the lure to trend to one side. It can be overcome with some extra glue, but it's easier to have it set in the right aspect if the cut is made right in the first place.



Checking the bib before gluing shows if the bib is out of alignment. It can be fixed by widening one side to straighten it, and be sure to check it whilst drying.



The bibs have a slight taper on the tongues. Also shown are the anchors prior to gluing.

Glue can then be used. Five minute epoxy is good, but almost any hard setting glue suitable for the materials is useful. The anchors make good stirrers for the epoxy if it comes in two parts. Here the same nail or pop rivet can also be useful to act as a screw driver, and the anchors can be screwed into the lure once they are covered in the glue. Screw them in to the position you want them. Most lures have them in line with the centreline of the lure. Also put the glue onto the tongue of the bib and position this in. Apply a second coat of glue if required. Position the bib to provide an even resistance to the lure – once the glue sets, it will be much harder to balance the lure, so more time here is well invested. Often resting the lure on its back will help the glue set into the slot, and avoid the bib from being pushed out of position.



Quick setting epoxies work well, better than wood glue.

Now we can let the glue cure, and next will test how it swims and fine tune it – and work on techniques to patch up any mistakes we've made, so if it looks like a failure, don't bin it yet!

