HOW TO MAKE A VEST POCKET DUCK CALL

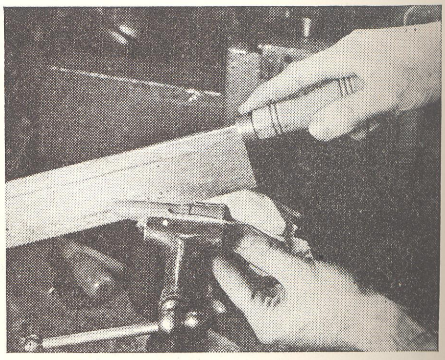
Though not much bigger than a shotgun shell—and thinner than most of them—this vest-pocket duck call will quack with surprising volume. You can have a lot of fun making it, and the job won't require more than one evening. Because of its small size, the call can be carried easily in a shirt pocket, in one of the loops in a shell vest, or in any other small space.

You will need but three or four essentials to make the call. These include a suitable piece of wood or plastic, sheet material for a reed, about 5 ft. of strong cord such as a heavy fishline, and some brushing lacquer or similar finishing material. If you want to add a loop for attaching the call to a cord or chain, you'll also need a short piece of copper or brass wire.

Although you could use plastic for the body of the call, the chances are that you will find wood easier to get and just as satisfactory. Select a strong, durable wood such as walnut, maple, or hickory. Redwood may be used and is highly resistant to moisture, but it is quite soft and often splintery. The calls illustrated were made from a broken hickory ax handle. If you have a lathe, you can shape the wood exactly as you want it, regardless of its original form. If you do not possess such equipment you will save quite a bit of whittling and rasping by selecting a piece of wood that already is approximately the shape you desire. A knife handle, a small file or chisel handle, or a section of chair rung will do. In some hardware stores you can buy ¾-in. hardwood dowels that provide ideal starting pieces when cut into 3½-in. lengths. Whatever its origin, the blank should be ¾ in. in maximum diameter and, when the ends are smoothed, 3½ in. long.

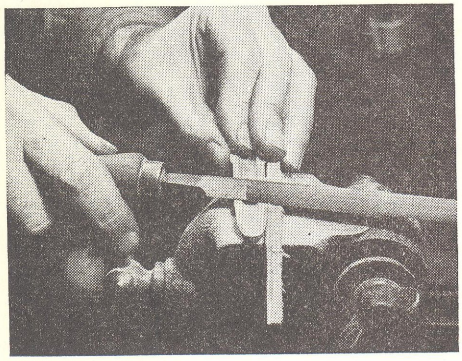
Turn, whittle, or file the blank to the shape shown. The spool-like construction at the front end is to permit a layer

Drilling the hole in the shaped blank. A twist drill (like that shown) often cuts end grain more easily than an ordinary auger bit



After the hole is drilled, the blank is split into two halves with a thin saw. Folds of cloth keep vise from marring the wood

of cord to be wound on to hold the parts together. Reduce the remainder to a diameter of about 5/8 in. and gradually round off the end to make a comfortable mouthpiece. If you wish, you can cut a groove around the wood 1/2 in. or so from the rounded end to provide a grip for your teeth when you are imitating the quack of a duck.

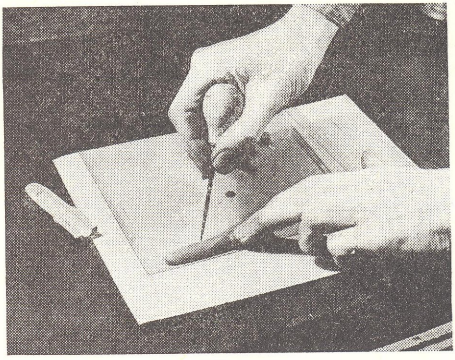


Next a slope is filed on the flat surface of each half so that, when joined, they form the V-notch in which the reed vibrates

With a twist drill 5/16 in. or a wee bit larger in diameter, bore a hole from the spool end to within 5/8 in. of the rounded end. A twist drill often cuts easier in end grain than a conventional auger bit. Take pains to keep the hole straight. Clamp the blank in a vise, and use three or four layers of cloth around it to prevent the vise jaws from denting or cutting the wood while you are drilling the hole.

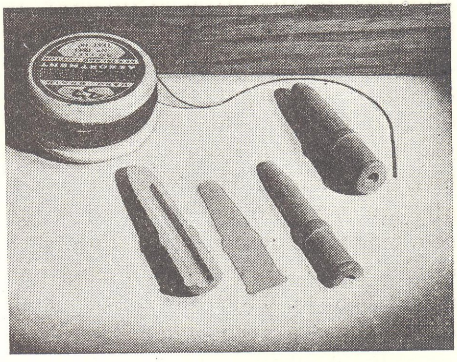
With a pencil, draw center lines on diametrically opposite sides of the blank, and saw along these lines to split the piece in halves, as in photo. Use as thin a saw as you have available. The one shown was made for cutting dovetail joints, and it makes a thin cut without wasting much material. A coping saw is the next best tool.

The flat surfaces of the halves must be worked down so that, when the blank is reassembled, there will be a long, slender V-notch extending the entire length (2 in.) of the 5/8-in. diameter. A wood rasp is handy for doing this job, although you can accomplish the same result with sandpaper or by careful whittling. When the call is assembled with the reed in position, the mouth end of the V-notch should be about 3/16 in. wide.



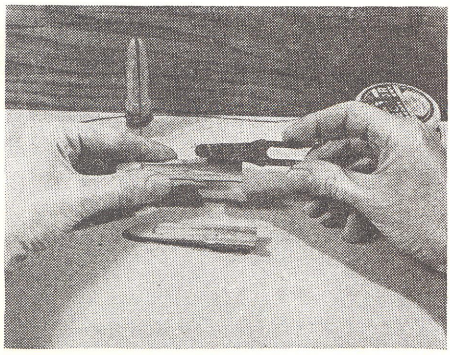
One half of the split blank is used as a pattern for the reed, which in this case is sheet celluloid, about 1/64 in. thick. This material gives good results

Sand all surfaces of the wood and round the sharp edges slightly along the V-notch. Sponge the surfaces with water to raise the grain; set the pieces aside to

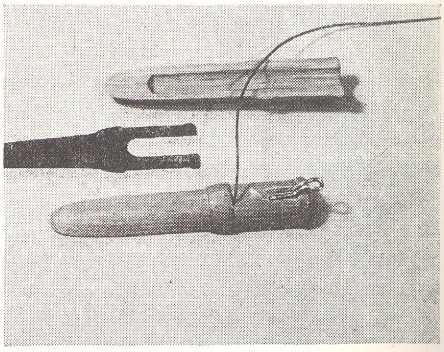


Here are shown the two wooden halves with a reed pattern between them; also a blank unsplit but with hole drilled

dry; and then remove the grain with sandpaper. A second sponging will do no harm and may bring up some grain that wasn't raised by the first treatment. Later, when the call becomes wet, the wood won't roughen. You can leave the wood unfinished, but the call probably will last a lot longer if you give all the wood surfaces a coat of brushing or linoleum lacquer, spar varnish, or similar finish.



Assembling the duck-call parts as a preliminary to testing quality of tone. The reed shown here is black pyroxylin. Note the slot which has been cut in the base of the reed as a means of improving the sound



How the carrying loop of copper or brass wire is attached. Grooves are cut to permit the wires to be set in flush with the surface of the wood. The loop is held in place by the same cord which binds the halves together

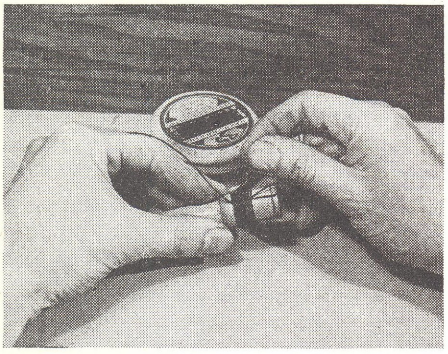
The reed may prove to be the most difficult part of the artificial quacker, for if it is too stiff or too limber it won't produce the proper sound. A metal reed will do, if you can get some sheet brass or bronze of the right thickness and springiness. Bronze shim stock about 0.008 in. thick may be used. However, the best results are likely to be produced with a reed made of pyroxylin (Celluloid) or similar plastic about $\frac{1}{64}$ in. thick—say from 0.015 to 0.018 in. Some of the photos show a reed made from clear pyroxylin sheet that originally was used as a frost shield on an automobile window. The opaque reed shown in photos on this page was made of similar material, black instead of transparent, that originally had been used to make a folding camera-lens shade. It is difficult to set down hard-and-fast specifications for a reed; the best way is to try whatever material you have.

It is a matter of a minute or two to cut a reed to the shape shown, using a sharp knife blade and shears. Pyroxylin sheet breaks cleanly along a scored line, eliminating the necessity of cutting all the way through.

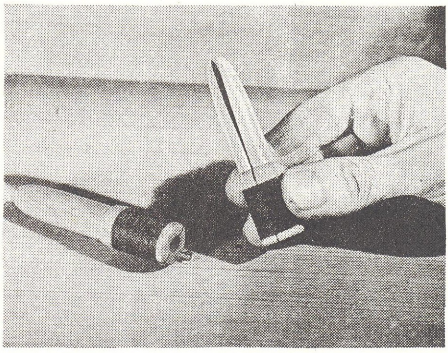
Be sure that the reed, whatever its material, is flat and straight. It should rest midway between the tips of the mouthpiece when in position. If it doesn't, wedge it over with a thread forced between it and the wood. Pyroxylin may be bent by heating it moderately. One way is to press it against a 25 or 40-watt lamp bulb for a second or two. After it is mounted in the duck call, a pyroxylin reed may be bent one way or the other with a heated kitchen knife blade.

If you want to carry the call on a chain or cord, make a loop of copper or brass wire, drill small holes for the bent-over ends, and cut grooves so the wire won't produce a hump in the winding that holds the halves in place.

You can assemble the call temporarily by using a rubber band or some string to bind the parts together. Be sure the reed is centered each way with respect to the wooden pieces. To sound the call, put the split end into your mouth for a distance of ¾ in. or so, encircle the body of the call with thumb and forefinger, and try to make a quacking sound.



Binding together the parts of the call with 18-lb.-test fishline. The final step is to lacquer or varnish the binding so you will have a strong joint



Two of the calls in completed form. Note how the V-notch forms a "duck's bill." Call at left has a loop which can be attached to a cord

After this preliminary tune-up you are ready to perform the final assembly. If necessary, file the edges of the reed to make them flush with the wood at the spool end. Apply a thin coating of pyroxylin (household) cement to each of the wood surfaces that comes into permanent contact with the reed, and sandwich it between the wood halves. Do not use very much cement, for it probably will have a softening effect on the reed.

Now wind the spool portion full of the fishline; there should be a single layer of cord, and the turns should be spaced closely. You can either drill small holes for the ends of the line or loop the starting end under the windings, so that when all the turns are in place, the loop can be used to pull the finishing end beneath the turns to make both ends invisible.

Saturate the winding with lacquer or varnish. When this is dry, you will have a strong, rigid joint that isn't likely to loosen and let the reed or wooden parts shift.

Your duck call is now ready to do its stuff. If you wish, you can make a slip-on cap to protect the reed end. This can be of wood or metal: if the diameter of the call is made to match, you can use an empty shotgun shell for a cap.

There are several factors that influence the tone and volume of the call. The thickness and stiffness of the reed have a lot to do with the results. The width of the V-gap in which the reed vibrates has a considerable effect—the narrower the gap, the sharper the tone. Volume and tone are improved if the reed has a U-slot as shown in photo. In blowing the call, you can vary the tone somewhat by grasping it at a point closer to or farther away from your mouth. And by cupping your hands, you can add still more variations. By enlarging the outer end of the hole, some change in tone and volume may be produced.

With this call, you should be able to quack realistically enough to make the average wild duck exhibit enough interest to make him come winging your way for a look-see.