GORILLA GLUE AS A ROD FINISH

Text and photos by Tim Anderson (appeared in Power Fibers, Vol. 38, January 2010)

For my rod finish, I use Gorilla Glue, a brown-colored polyurethane (PU) glue. Gorilla Glue is a trademark name in the US (at least) for glue originally made in Denmark and now, apparently, produced in the US. When used as a glue, it foams before hardening, but when rubbing a thin film on a surface, there's no such effect. The product is catalyzed by moisture, but a thin, rubbed-on film needs no moisture beyond ambient humidity at room temperature. The resultant rod finish, which is both hard and tough, can be considered a catalyzed polyurethane finish. Other, similar, polyurethane glues are available, and may work just as well as Gorilla Glue.

Using Gorilla Glue for a rod finish was not a total accident. I was experimenting with a variety of urethane/polyurethane finishes using rub-on methods. A bottle of Gorilla Glue was sitting on my workbench (having been used for many woodworking projects) and it got included in the experiments. Turned out to produce better results than anything else.

The Procedure

First, know that this glue is nearly impossible to clean off your fingers, so wear nitrile gloves. The surface of the cane needs to be very smooth before starting on the finish because the layers are thin, and build slowly. Thin layers of finish will telegraph an imperfect surface, and good preparation will

remove "chatter marks" and all small scratches.

The directions on the bottle say to dampen the mating surfaces when gluing. Despite that, don't dampen your blank; you are using the product as a rubbed-on finish and not as glue.

Very little equipment is necessary. My applicators are pieces of a Bounty paper towel torn into 16 approximately-equal squares. I fold one of these pieces in half, four times to make an applicator. The result is a pad about 3/4" (1.5 cm) square with one thick, rounded corner. I use that corner only once. Rearranging the folds, you can have four such "fresh" corners from each pad.

Before beginning, I need to warn that extreme care is necessary with fine tips. Gorilla Glue is sticky, and the rubbing process can "grab" and put a nasty bend in a fine tip. Near





The equipment, Gorilla Glue, nitrile gloves, a Bounty paper towel torn into 16ths, and the torn squares folded into applicators.

The applicator with a drop of Gorilla Glue on the corner fold.

the tip-top, especially, use the smallest possible drop of the glue on the applicator, and, if you notice any grabbing, rub only toward (or "off") the tip itself.

It isn't necessary to clean the bare blank with solvent before applying the first coat of Gorilla Glue. Do so, if you wish, but the first coat of Gorilla Glue is able to clean many minor contaminants off the bare surface of the bamboo.

Start at the smaller end of each section, and apply the smallest possible drop of Gorilla Glue to the folded corner and then rub it slowly, flat-by-flat, over about 6-8" (15-20 cm) of the blank, increasing the rubbing pressure as the glue gets evenly wiped on. If fibers pull off the paper towel, rub over them until they are picked up. Don't worry about tiny dust or fibers, however, because of the next step.

Take a clean, unfolded piece of the paper towel (one of the 1/16 pieces) and buff what you just applied as if you were polishing wax. You can do this for each flat, or, as I prefer, you can "pinch" across opposing flats and buff the pairs. The process absorbs excess glue and levels all surfaces, leaving a perfect coat. You will not remove all the film you just applied, and the resulting layer is exactly what you want. Again, on tip sections, take great care: you may want to buff only toward the tapering end. As you get more proficient with the method (or the rod section you are finishing is relatively short) you can wait for this buffing step until you have finished applying the Gorilla Glue to the entire section.

Refold your applicator pad and apply another small drop of glue to the fresh corner and use for the next section of the blank. Work your way down the blank with appropriate overlaps, always using a fresh corner of the folded towel for each application. The buffing piece can be reused. It can also be used to grip an area of the blank that has already had its finish applied. This may be necessary when you get to the larger end of the blank. For that end, use another clean paper towel square for the buffing. Using both buffing squares, wipe up and down the rod section and hang up to cure. There is no need to protect the blank against airborne dust. Dust will not spoil the finish.

The buffing step is important. You will be tempted to avoid it because the applicator may seem to leave what appears to be a great surface. But, believe me, that surface is not so great. It will almost always have tiny blobs, lines, and ridges of glue that turn rock hard and are miserable to remove. The buffing removes and levels them before the finish hardens.

One coat will harden in 2-3 hours and the gloss will increase with each coat. I often lightly sand after the first 3-4 coats with very fine (800-1500 grit, wet-or-dry) sand-



Various views of a butt section finished with Gorilla Glue. Taken at an angle to show reflections.

paper and polish lightly with 3M "Perfect-It." After another 3-4 coats, I polish again with 3M "Perfect-It" and apply another 3-4 coats. This sounds like a lot of coats, but you can easily apply 3 in one day. If you're easily satisfied, you can stop the application process after 6 coats, but you can also carry

on with 12-20 coats if you like. The temptation is great to keep adding coats. No matter how many you apply, it's not likely you'll build a layer of finish as thick as a dipped finish.

I prefer to finish the blank before wrapping, as this prevents messing-up the tiny areas between the guide feet. After wrapping, I apply a few more coats of finish to the entire rod. This equalizes the gloss level across the bamboo and the wraps. Be certain to complete your wrap-varnishing before applying the final coats of Gorilla Glue, as the sticky glue will tear away any bare thread. I like to use epoxy for my wraps, then sand off the blobby flats before applying the final coats of finish.

For final polishing, I use 3M "Perfect-It", apply a couple more coats and then used 3M "Finesse-It" before waxing. Waxing, of course, is purely optional.

Characteristics of the Finish

The overall finish is thin, flexible, and extremely hard. It takes only a few hours, not days or weeks of curing, to achieve that hardness. Because the finish is thin, the rod's corners don't end up rounded as they sometimes do with a dipped finish. The finish is not only hard and very durable, the rub-on method helps the first coat penetrate into the surface of the blank.

The completed "look" is a little different from a dipped or brushed rod. The gloss on a Gorilla Glue finish can be very high and extremely smooth (depending on the number of coats and degree of polishing), but it doesn't have a "wet" look.

Another advantage of this finish is that you can touch up any damaged area at any time, using the same technique as the original application. Nice, after your rod goes through a few years of use...

Other Uses

The same procedure used for finishing a rod blank with Gorilla Glue can be used for reel-seat inserts. Pores in open-pored wood need to be filled by some other method, but, once again, a very hard, glossy, durable finish can be achieved. A sliding ring or reel foot can wear away the gloss, but touch-up, using a paper-towel applicator, is quick and easy.

Gorilla Glue can also be useful as a first sealing coat before dipping or hand brushing a blank. Two to three coats may work better than a single coat. Remember, these are very thin coats and even 3 will result in very little buildup on the rod.

One well-known builder has used it for quick finishing on "prototype" rods. Three coats can be applied to a bare blank in a day, and will be ready for wrapping the guides only a few hours after the last application.