Solution Coming to the Defense of the Bristle Brush

by Pam Wedd

ne of my favorite parts of the summer Assembly is getting together with other builders and restorers, both professional and amateur, and arguing amicably about painting. Invariably, our discussions turn to paint brushes and whether to use foam or bristle brushes. Although many others seem to have gone over to the "dark side," a few diehards, like Dave DeVivo and me, are sticking to our beloved bristle brushes.

Why? Well, a good paint job is much more than learning a technique; it's an art. Getting that great finish is not just a matter of using high-quality paint and doing good preparation. It's also having a feel for the paint, and the only way I know how to achieve that feel is with a bristle brush. Foam brushes don't carry the same amount of paint and don't really have much of a "feel." (And do I need to even mention the black bits that eventually start coming off as the brush breaks down, contaminating the finish?) A good bristle brush carries a good amount of paint, and you

can really feel the flow when applying and tipping.

Another problem with foam brushes is the cost. Typically, I pre-varnish the insides of inwales, outwales, seats, and thwarts, apply four coats of varnish on the inside and five coats on the gunwales, and use five coats of paint on the exterior. All that painting and varnish-

With her bristle brushes, Pam Wedd of Bearwood Canoe achieves results worthy of a Wooden Canoe cover (December 2004). This canoe is Pam's Shadow, a 15-footer. Ron Sauter of Rochester, N.Y., (www.ronsauter. com) was the photographer.

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ing would cost at least \$15 in foam brushes per canoe, which are all thrown out. All those brushes could add up to a significant amount of money over time.

My investment in bristle brushes costs less in the long run. For painting I use a $2^{1/2}$ -inch Epifanes full oval bristle brush that I bought for \$30 ten years ago, and for varnishing, three Red Tree badger hair brushes—a 1-inch for gunwales, a $1^{1/2}$ -inch one for interiors, and a 2-inch for exterior varnishing. Each of the varnish brushes cost about \$15 and have been in use for a number of years.

"But," you say, "it's too much work to keep a bristle brush clean." That excuse is probably why most people shy away from using brushes. However, I have a cleaning system that has worked for me for years and is quick and easy. I think if you try it you'll be sold on brushes, too, and on your way to a truly beautiful finish on your next canoe.

The first thing to understand about brushes is that they

must be stored so that they never dry out. To store my brushes, I hang them in diesel fuel in a tin can (Figure 1). I start by drilling a new hole in the handle of each brush just above the ferrule and punching a hole on each side of the can. Then I run a piece of coathanger wire through the can and the brush, which suspends the brush off the bottom just a bit. I fill the can with enough diesel fuel to completely cover the bristles and just start to cover the bottom of the ferrule. I cover that can with another one to help keep out shop dust. Occasionally, I will clean out the brush storage cans and put in fresh diesel. I have also hung brushes in turpentine or kerosene, but diesel seems to be quite adequate. It is a bit oily for the bristles (which helps keep

them from drying out) is relatively cheap, and not very flammable.

When it is time to use a brush, I take it out of the storage can and attach it to a spinner, a tool readily available in paint stores (Figure 3). I spin the brush out in what I call a "slop" pail (Figure 4), which is a five-gallon plastic pail that contains used thinners (more on that later). This is the first cleaning, and spinning is essential in this step to get rid of most of the diesel. I rinse the brush in a can (about the size of a soup can) in about a half inch of thinner (Figure 5) and spin it again in the slop pail. The brush is now ready for painting or varnishing.

After I have finished with a brush, I take it back to the can and work it in the thinner. Then I spin it out again in the slop pail and repeat the spinning and rinsing two more times. I treat my varnish brushes and paint brushes a bit differently in the cleaning process. For my varnish brushes, I have a two-can rinse system (Figure 6). Can number 1 contains the cleaner thinner of the two cans. After varnishing, I first rinse the brush in can number 2, spin it in the slop pail, give it a second rinse in can number 1, and spin it out again. I throw the thinner from can number 2 into the slop pail and the thinner from can number 1 into can number 2. Finally, I put fresh thinner into can number 1 and give the brush final rinse and a final spin. The brush is now ready to be hung back up in the storage can. This way I can reuse the slightly used thinner to begin the cleaning of the brush and finish up with fresh, clean thinner for the final rinse. With this method, I don't use nearly so much thinner for cleaning. There's nothing to it!

Because the paint brushes are bigger and carry so much more paint than the varnish brushes, it usually takes several more rinses to get them clean. It's important to make sure that the thinner gets worked right up into

the ferrule where the paint wants to hide (Figure 7). If you don't mind the mess, you can pour the thinner up inside with the paint brush held bristles up. I normally just work the brush in the can, bending it back and forth to get the solvent right up.

As my slop pail fills with used thinners, it eventually needs to be emptied out. When it reaches that stage, I pour it into an empty jug using a funnel. I then date it, and put it aside for a year or two. Gradually the paint and varnish solids that are suspended in the thinners settle out, leaving a pretty clean jug of reusable thinner with a heavy sludge on the bottom. I use this settled thinner for the initial cleaning of my paint brushes (*but never* for the varnish brushes) and so get more mileage out of it. I will check a used jug after a year or so, and if it hasn't settled out at all (it always seems to be the green/blue paint that won't settle for some reason), then I put it aside for disposal. I am lucky that can take these used thinner jugs to my car

Figures 1 (lower left). Brush storage containers, one with the lid on and one without. Proper storage is essential to brush care. Figure 2 (below). Holes are drilled through the brushes and the sides of the can. A piece of coat hanger suspends the brushes. The wire is bent on one end to hold it in place (see detail). Another can serves as a lid.

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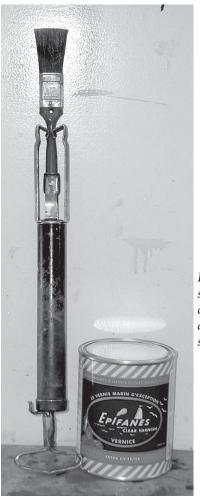


Figure 3 (left). The paint spinner is integral to cleaning brushes. Spinners are available at most paint suppliers.

repair guy, who sends it back with all his used oils and solvents to be recycled.

It really pays to buy good brushes if you want them to last and if you want good paint coats (Figure 7). For painting, I used to buy 3-inch china bristle brushes for \$6 to \$10 from my hardware store until I discovered the 2¹/2-inch Epifanes full oval bristle brush. The difference is outstanding. I started with just one brush, and now have three. I use one as a "build-up" brush that is used for all the early paint coats, and two "final" brushes, which are only used for the final paint coat on the canoe. Because a wee bit of paint always seems to stay way up in the ferrule, there is a chance that it will work its way out by the end of the paint job, which I really don't want to happen on a final coat. So I usually use one for red paint and one for green. (I also paint in white and blue and yellow, and I like my green brush better than my red brush, so I often use it no matter what color. But for the most part, I use one brush for red paint and one for green.)

A new brush really should spend a while being a "build-up" brush before it graduates to being a "final" brush. New brushes will lose bristles for a while, have quite a bit of dust left in them during manufacture, and will sometimes have a hard bristle. Hard bristles are those that have been put in backward, and they will leave a groove or trough in your paint coat. These need to be searched out and removed so that only the flagged ends are left. Don't worry, all this care and attention will pay off in great paint-

Figures 4 (left). A spin in the "slop" pail to remove the diesel fuel is step one in preparing a brush before using. The action is intense, but the bucket contains the spray. After taking a spin, the brush is rinsed in about a half

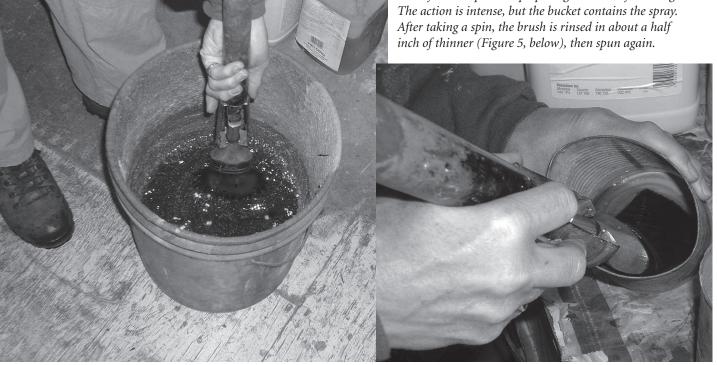




Figure 6. A two-can rinse system does the trick for varnish brushes.

ing and a brush that is a joy to use. (I have yet to hear a foam brush user who says his brush is a joy to use!)

For my varnish brushes, I use Red Tree brand badger hair brushes, but I am sure there are other good ones available. With these brushes as well, I have both build-up and final brushes. Having a brush dedicated to final varnishes helps produce great, clean, final coats.

When I started building canoes, I thought the work was woodworking. But I soon found out it was mostly sanding and painting. If you are planning on doing more than the occasional bit of painting and varnishing or if you want your canoe to have a spectacular finish, maybe it is time to consider moving up to some good bristle brushes.

In a follow-up article, I will discuss painting and varnishing techniques, prepping, sanding, masking, and other little tricks of the trade. \checkmark

Pam Wedd owns Bearwood Canoe Company in Perry Sound, Ontario.



Figure 7. Paint brushes carry a lot of paint, so it's important to work the thinner up into the ferrule of the paint brush.



Figure 8. Some of the author's collection of brushes: an Epifanes full oval and three different sizes of Red Tree varnish brushes.