FEATHER INLAYS

Using Multiple Feathers

by Neal Hall

I have been building rods for about 10 years. Five years ago I became intrigued with a feather inlay designed by Charles Reading of Lebanon Mo. He gave me some tips on how it was done. I tried it and was pleased with the results. Since then I have tried many techniques to try to get the best looking feathers in the most pleasing color compliment for the specific rod I'm doing.

My technique is to lay the feathers directly on the rod. It gives the impression that the feather is painted onto the blank. When this is done many types of feathers will turn opaque and blend into the rod color. I have found that most pheasant rump feathers hold their color when the epoxy is applied. However they won't retain that powdery look. They look great when you apply them but when you put the first coat of epoxy on them they loose a bit of their appeal. What causes this to happen is the epoxy takes up the space that used to be air around the feather barbules and causes the light waves to reflect off of them a little bit differently, which causes the change of color. The challenge is to recognize that this will happen and plan for it in your application. Other feathers, which I have found that hold their color are Jungle Cock, Parrot, and Parakeet.

I hope this article will be detailed enough to show how to do a basic feather inlay. One that will give you decent results while at the same time give you the courage and incentive to try your own techniques. One of the reasons I use pheasant feathers is I was raised in Western Kansas and loved hunting them. In fact I still hunt them. For me they are easy and fun to come by. Photo 1 and 2 show the various colors available on the Ringneck and the Golden pheasant.

Photo 1

Photo 2

To start the process I like to study the way the feather colors blend together on the bird and visualize how they could be placed on the rod to look like they were painted on it. I try to be a little artistic with my style. I pull a few off the skin, trim them and lay them together to get an idea of how they will blend. See photo 3 for an example. To trim them just strip the fuzzy marabou type barbules down and cut the main shaft of the feather at the point you want the base of your feather to start.

Photo 3

You need to realize that all feathers have some amount of natural oil on them. As you know oil and epoxy do not make a good combination so after you have selected the feathers you want, you will have to clean them. To do this I dip them in a small container of Acetone. Swirl them around, pull them out and place them on a paper towel to dry (Photo 4 & 5). They will dry in a few minutes. While the feathers are drying I get the rod ready. I like to take the shine off of the rod by rubbing it with a little gray scotch-brite (Photo 6). Be sure to clean the rod with Isopropyl Alcohol. 70 percent is okay but I like to use 91 percent.

Photo 4

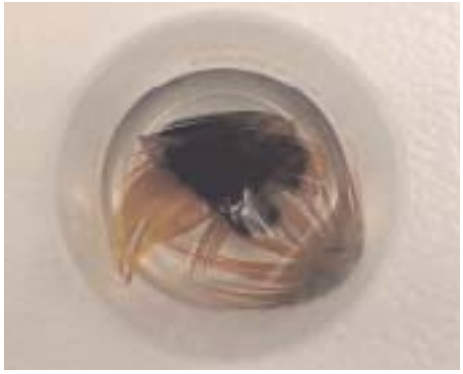

Photo 5

Photo 6

The epoxy is the next thing to be considered. I have tried Flex Coat and Duragloss L/S Supreme. Both will work however I prefer the Duragloss. It seems to be easier to work with and doesn't bubble quite as much. I like to work with Duragloss with the temperature at about 72 degrees. I mix exactly 1.5 cc of each in my special built mixer, which mixes the epoxy without getting any bubbles in it. (That is another story). After the epoxy is blended (about 3 minutes in the mixer) I apply a THIN layer to the area the feather will go. Throughout the application process be sure and DO NOT use a lot of epoxy. The feathers will only float to the top of it. To apply the epoxy I have the best results using a 1/4 inch slanted sable brush. It's a rose petal by Loew-Cornell #2013 (photo 7). With it I can make the feather flow onto the rod and move each barbules into the exact position I want.

Photo 7

Next we're ready to apply the first feather of a four-feather design (photo 8 & 9). Be sure to measure the space you will require. Pick up the first feather with the tip of the wet brush and place it onto the rod with the tips to the right hand side of the space you have allowed. This is assuming you are right handed and the rod handle is to your left. I always work so the feather base is pointed toward the rod handle. Brush the feather down using soft strokes of the brush. Go ahead and clean your thumb and forefinger with alcohol and use them to hold the feather base in place while you use the brush to separate and place the barbules where you want them. You may need to apply a small amount of epoxy to make the feather lay right. NOT MUCH!

Photo 8

Photo 9

The next feather will go right over the first one. Pick it up with the tip of the wet brush and place it where you want it to be over the first feather (photo10). Make it so its tips are lower (more to the left) than the first feathers. Keep the main line of the two feathers together. The feathers will be applied so they will lie from right to left with the bases pointing left. Use the brush to blend the barbules. Brush from the base to the tips. Try to make it look like the two have become one. The longer feathers will want to wrap around the rod. I think it looks good to let them. It's natural. Just don't let the tips cross on the bottom side of the rod. It looks tacky. You may need to add a small amount of epoxy.

Photo 10

Photo 11

The third feather is applied just like the other two. (photo 11). It will be a little trickier to make it lie right. If you are not satisfied with it you can pull it off with a tweezers and lay it down again. Work all of the air out from under the feathers as you go. Air bubbles will appear as a light color. Gently brush them with the tip of the brush and they will most generally disappear. If you end up with an air bubbles don't worry. I have a way to get them out.

The fourth feather goes on the same. This is the last feather and is usually a small type feather that will cover the light areas of the bases of the other feathers. It should give the application a finished look. (Photo 12 and 13) are examples of two different applications of the last feather. One is of course a Jungle Cock nail. The other is a feather from a parrot.

Photo 12

Photo 13

You are done with this stage. Gently brush off any excess epoxy. Make sure the feathers are laying the way you want them. You don't have to turn (rotate) the rod on this first application. If you are not happy with the way your creation looks, now is the time to give up on this application and start over with a different design. There is nothing wrong with pulling off all of the feathers and washing down the rod with alcohol. Better now then when the epoxy gets hard. If you want to rescue your feathers you can wash them off in acetone then soapy water then rinse with water and dry.

After the epoxy has set-up (about 5 hours) you can mix up another batch and brush it on your feather application. Brush longitudinal not around. Stroke gently and slowly. Do not put too much on. Keep your bubbles to a minimum. You may not be able to cover all of the feathers with this first coat. Some of the barbules just won't take the epoxy. It's okay they will take it on the second coat. Apply the epoxy in uniform coats all the way around the rod where the feathers are. The more coats you put on the better the inlay will look. It kind of magnifies it. I have put on as many as 12 coats. On the first coat and after be sure to put the rod in a finish turner and keep it moving for at least three hours.

I know that everything will not go according to plan so here are a couple of things you can do to fix it:

If you have a bubble appear under the feather after the first or second coat you can use a razor blade to punch a hole through the epoxy (photo 14).

Photo 14

Apply a spot of new epoxy over the hole. With the wood end of a small paintbrush or a knitting needle, press down on the bubble then release (photo 15). The air in the bubble will be pressed out and the new epoxy will be sucked into the space. You may have to repeat this procedure several times with a fresh spot of epoxy each time but I assure you it works. Just remember when you cut through the epoxy to the bubble you will be going through the feathers. Keep your blade parallel to the barbules.

Photo 15

If, after the 5th or 6th coat of epoxy, the surface is not smooth and even, let the epoxy cure for a day or two. Then file the surface with a flat bastard file. File gently and turn the rod with your hand as you file. You will be able to tell by the color where the low places are. The places where the file touches will be white and powdery while the low spots will still be shinny. Just be careful not to get down to the feather. After you have all the high places evened out clean with alcohol and put some more coats of epoxy on.

Good luck
Neal Hall