

Making Jewel Beetle Wing and Abalone Shell Blanks

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I met Wayne Racinowski the IAP librarian at the 2016 MAPG where he saw my Jewel Beetle Wing pen. Wayne is always trolling for articles and indicated that he thought it might make for a good article. That's all the impetus that I needed to make another Beetle wing pen. Additionally, I recently made some abalone shell blanks using abalone strips. Since my approach to both types of blanks is basically the same, I decided to describe that process as well.

The Jewel Beetle blanks require:

- Jewel Beetle Wings
- A background medium
- Clear Fingernail Polish
- Something to cut the wings with
- A tube-in casting setup

Jewel Beetle Wings must be purchased from Asia. I found mine on Etsy. Here's how they look upon receipt.



The wings are somewhat oily and have to be prepared for use. I prepare the wings by waiting until my wife is going to be gone for at least an hour, grab her best pot with a lid, boil the wings in water for 20 minutes, rinse, drain, and let dry. Clean the pot, dry and put back precisely where I found it. If the odor is still lingering when your wife gets home claim ignorance and say that you have been in the shop the whole time that she was gone.

Now it is time to prepare the tube and to start cutting up the wings.



You now need to prepare the background for your wings. I do this by placing Mylar tape on the tube or by painting the tube with acrylic paint or fingernail polish. These tubes were prepared with black Mylar tape.

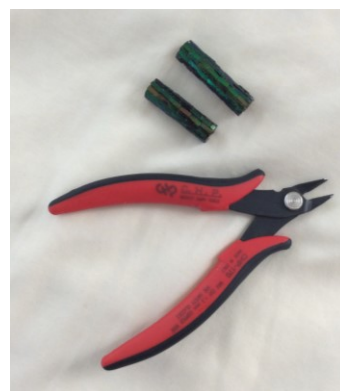


After prepping the tube, I start cutting the beetle wings in to pieces suitable for gluing. Japanese craftsman use an x-acto or other very sharp knife to cut the wings into precise squares, I cheat and use a hole punch with a rectangular punch that I bought at Hobby Lobby. I use the punch to get as many rectangles as I can from each wing.



After cutting enough pieces to get started its time to start gluing the pieces to the tube. This is where it gets tedious.

The Japanese craftsman use an urushi-e lacquer when working with the wings. Here, I cheat again and use clear fingernail polish as an adhesive. I have used CA but found that the polish is less messy and gives you a little more working time. It is important to start with as straight a row as possible. I use a piece of tape as a guide to start the first row. I touch the nail polish brush to the back of the beetle wing section and the section generally sticks to the brush long enough to transfer to the tube. I then use a toothpick to maneuver the section into place. I usually do a row and let set for a few minutes between rows. I generally stagger the rows to give them an overlapping appearance. This is just a matter of preference.



Here are the tubes ready for casting. I use the cutters to trim any overhang flush with the tubes.

Abalone Shell

The process for abalone shell blanks is very similar but actually easier and faster when using abalone strips. I purchased the abalone strips from a vendor on etsy as well. I prepare the blanks using Mylar tape, acrylic paint or fingernail polish. Here are the strips and blanks where I have started placing the strips on the prepped tubes.



I used black Mylar tape as the background for the blue Paua abalone strips and white fingernail polish for the prism abalone strips.

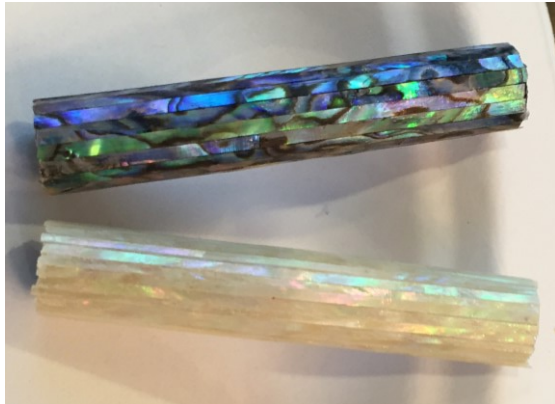
To glue the strips, I simply apply fingernail polish to the strip and place on the tube. I can usually get 2 rows from each strip. I glue the strip, let set up for a couple of minutes, hold the tube with my finger nail pressed down on the strip at the end of the tube and snap the strip off flush with the end of the tube. I then use the 2nd half of the strip for a new row.



The last strip can overlap to fill the gap without being noticeable. I clean the tube with a paper towel and a little denatured alcohol. Here are the abalone tubes ready for casting.

Casting

I use tube in silicone molds for the casting. I clean the tubes with denatured alcohol and use a brush to pre-coat the tubes with PR before casting and cast after allowing the pre-coating to dry. I generally use PR and pressure cast. Pressure casting may not be necessary with the PR but I do not want to take any chances after putting in the time to prepare the tubes. The tubes used for jewel beetle wing blanks in this article are for a dragon pen. I have not found tube-in molds for that kit and made my own. Here are the tubes in the molds ready for casting.



Final Products

