

# Project Tutorial

Featuring compatibility with nearly all CNC Machines

It is our pleasure to provide our customers with fun and useful projects to enjoy!

Vetric Project Tutorial  
www.vetric.com

Compatible with:

**Aspire 3.5**  
(or greater)

Sample Carved with:  
**ShopBot Buddy**  
PRSalph BT48

**ShopBot®**  
www.shopbottools.com

## Trout Bookends

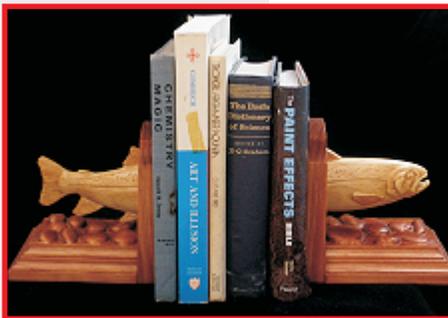
Designed for Vetric™ by Michael Tyler

This fun bookend project features a full 3D trout “swimming” through your books! The bookend bases each have a hidden pocket under the river rock design to place weights into (zinc BB’s) to enhance their functionality and “mass”.

The design can be customized by incorporating a few bits of real driftwood if desired.

You can also experiment with glazing or colorizing the rocks and trout for an interesting and perhaps more realistic (or stylistic) rendition of the scene, as you wish!

Each bookend measures about 6" deep x 6" tall x 4" wide.



Main items you will need:

**1) The Project Files (included):**

- Bookend\_Base\_and\_Backboard.crv3d
- Trout\_Bodies.crv3d

**2) Boards with the following dimensions:**

- Base & Backboard: 0.75 "x 11 "x 20 "
- Trout Bodies: 0.75 "x 9 "x 11 "

**3) Wood glue, epoxy, clamps, sandpaper, wood stain and/or paint and clear finish**

**4) Finish nails, wood screws, self-stick felt and/or cork sheeting, zinc BB’s**

**5) A Dremel-type rotary tool with assorted sanding wheels and bits to sand small details and speed up preparation for finishing.**



**CNC Bits used for the Sample:**

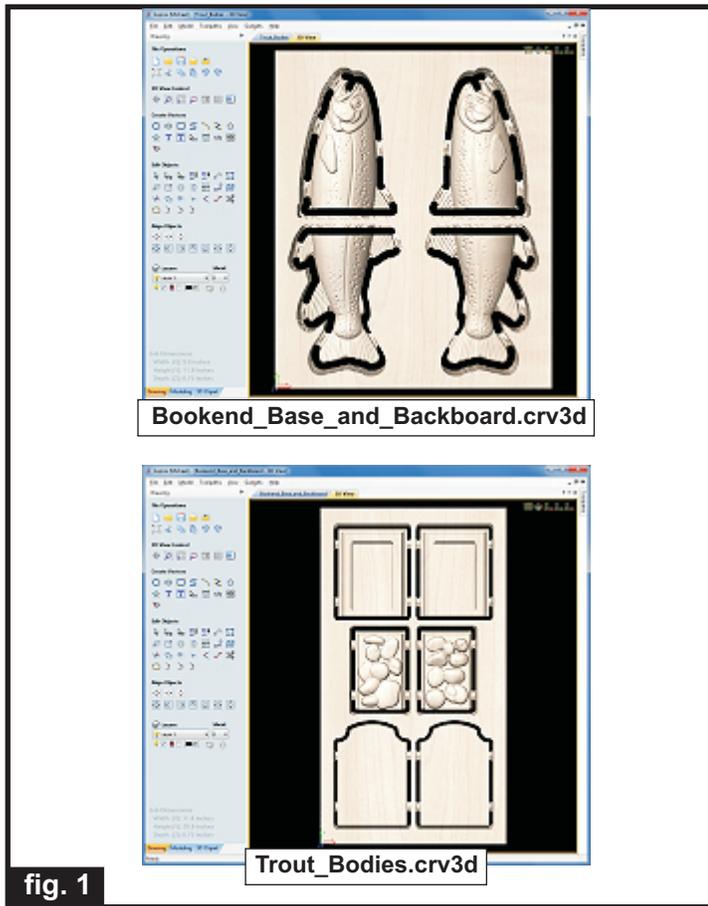
- Roughing, Pockets, and Profiles**  
0.25" down-spiral End Mill
- Profiles**  
0.5" Ball Nose
- Finishing**  
0.125" Ball Nose

# Trout Bookends

(cont.)

## STEP 1 - Open and Review the Project Files

Start your Aspire software and open the project files.  
(fig. 1)



## STEP 2 - Run the Project

When you are satisfied with your tool settings, save the toolpaths to the appropriate Post Processor for your machine, place your material on your machine bed and proceed to run the project.

(fig. 2a, 2b)



Carefully review all the toolpaths and make any necessary changes to suit your particular bits and machine. The toolpaths are currently set with feed and speeds that were used in creating the original sample. Please don't use them directly until you review them for your own setup.

You can edit the tools and change the settings to your own preferences and requirements. **It is very important to recalculate all toolpaths after making any edits/changes.** Once you have recalculated for your own machine and bits, reset the preview, then preview all toolpaths again to visually verify the project outcome on-screen.

The project is designed with tabs to hold parts in place during the final part cut outs. You may delete the tabs if you use some other reliable hold-down method.

Your boards will look something like this...(fig. 2c)



# Trout Bookends

(cont.)

## STEP 3 - Release Parts

Separate all the parts from the boards with a utility knife or small saw. (fig. 3)



fig. 3

## STEP 4 - Sanding and Pre-Assembly

Glue the trout halves together and clamp until dry. (fig. 4a)



fig. 4a

Sand the bookend base components. Use a Dremel-type tool with various abrasive wheels/tips to make detail sanding go faster. (fig. 4b) Pour as many BB's as will fit into the pockets of each base. (fig. 4c)



fig. 4b



fig. 4c

Glue the river rock tops onto the bases, then glue the backboards to each base assembly. (fig. 4d, 4e)



fig. 4d



fig. 4e

Further secure the backboard to the base by drilling a couple small pilot holes and drive in two finish nails. (fig. 4f)



fig. 4f

Sand the trout assemblies once the glue has fully cured. Again, use a Dremel-type tool with various abrasive wheels/tips to make detail sanding go faster. (fig. 4g)



fig. 4g

# Trout Bookends

(cont.)

## STEP 5 - Apply Finish

Apply your choice of finish. Here's what I used on my own Trout Bookends made from Select Pine:

### Bookend Bases:

- Minwax Gunstock #231 stain
- Several coats of Krylon Crystal Clear Acrylic gloss

### Trout Body:

- Three coats full-strength Zinnser Bulls Eye Seal Coat
- Rustoleum Golden Mahogany Ultimate Stain (applied lightly as a dry-brush glaze technique to enhance details/shadows)
- Several coats of Krylon Crystal Clear Acrylic gloss



## STEP 6 - Final Assembly

Lay the backboards flat on your work surface and position the trout halves as desired.

Mark their locations using blue painter's tape, a ruler and pencil. (fig. 6a)



fig. 6a

Mix up some quick-set epoxy and glue the trout halves in place. (fig. 6b)



fig. 6b

After the epoxy has fully set, further secure the trout halves by drilling counter sunk pilot holes from the rear of the backboards into the body halves and drive in a couple wood screws into each. (fig. 6c)



fig. 6c

Cut out some felt and/or cork sheeting using the provided templates as a guide. Affix the cutout shapes to the base and backboard surfaces to complete your project. (fig. 6d)



## IN CONCLUSION

I hope you enjoyed the Trout Bookend project and that it will inspire you to come up with your own ideas. The base/backboard design gives you the basics of where to start, so don't hesitate to create your own versions. Have fun!

Happy Carving!

*Michael*

# Trout Bookends



Backboard Felt/Cork Template

The image shows a template for a backboard. It is a rectangular shape with a decorative, wavy left edge. The text 'Backboard Felt/Cork Template' is centered within the shape.



Base Felt/Cork Template

The image shows a simple rectangular template for a base. The text 'Base Felt/Cork Template' is centered within the rectangle.

# Materials Source Page

- **3M Radial Bristle Discs** from [www.mcmaster.com](http://www.mcmaster.com)  
(stack 3 discs at a time on your rotary tool mandrel)

**80-grit: part # 4494A19**

**220-grit: part # 4494A18**



Krylon Clear Gloss Acrylic  
from WalMart™

## Miscellaneous Items Purchased at Lowes™

- Zinnser Bulls Eye Seal Coat
- Minwax Gunstock #231 Stain
- Rustoleum Ultimate Stain - Golden Mahogany
- Paint Rags and disposable brushes
- Wood Screws
- Self-stick Cork Shelf Liner Sheeting

## Items Purchased at Michael's Art & Crafts™

- Self-stick Felt Sheeting



Zinc BB's  
from WalMart™

# Additional Resources

## **RESOURCES...**

There are numerous resources for Vectric software owners to make their experience with their products more enjoyable. The Vectric website includes videos and tutorials to provide a good overview of the software products and how to use them. ([http://www.vectric.com/WebSite/Vectric/support/support\\_vcw\\_tutorials.htm](http://www.vectric.com/WebSite/Vectric/support/support_vcw_tutorials.htm))

As well as the resources available from the Tutorial page, please also visit the 'FAQ' and 'How To' pages for more support information...

### **'How To' webpage**

[http://www.vectric.com/WebSite/Vectric/support/support\\_how\\_to.htm](http://www.vectric.com/WebSite/Vectric/support/support_how_to.htm)

### **'FAQ' webpage**

[http://www.vectric.com/WebSite/Vectric/support/support\\_faq.htm](http://www.vectric.com/WebSite/Vectric/support/support_faq.htm)

### **Vectric User Forum**

Every Vectric software owner should join the Vectric User Forum (<http://www.vectric.com/forum/>) where fellow users share their experience and knowledge on a daily basis. It is a FREE service that you will surely appreciate. A handy Search Feature helps you find answers to any questions you may have. There are Gallery sections as well, where you can post and view photos of projects created with Vectric software.

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