Build Your Own Cane Rod:

PART TWO

Part One (Fall, 2000 issue)
described the tools and
materials for cane rod
building, sources for obtaining
these, and a list of books and
websites providing additional
information. Part Two
provides the step-by-step
instructions for using these to
build your first cane rod.

The rod featured in the following instructions is my favourite light trout rod—a 7'0", two piece, for a #4 DT, or #5 WF line. The dimensions of this rod across the flats at 5" intervals are provided in chart 1. The planing form should be set to half of the size or the height of one strip.

PREPARING THE CULM

In this and all subsequent work, handle the bamboo with care. The edges are sharp; splinters will form; and you may want to protect your hands with gloves.

Cut the 12'0' culm into two 6'0" pieces. The top half will be used for tip strips and the other piece will be used for butt strips. Split the 6 foot pieces in half, length-wise. Knock out the internal dams with a hammer or gouge. Now is a good time to heat-treat and flame the bamboo. Use long sweeping passes of the propane torch, starting and ending off the bamboo so as not to "burn" it. It's surprising how black the enamel surface can get, yet still be a pleasing straw colour where the enamel is scraped away.

SPLITTING STRIPS

You will need six tip strips approximately 3/16" to 1/4" wide, and six butt strips at 1/4" to 5/16" wide. Do not mix the tip and butt strips. Start by splitting a half culm into quarters, each quarter into eighths, and so on, until you have at least sixteen strips from each six-foot length. To split strips I use a DULLED steak knife clamped in my bench vice. The strip is pushed into the knife, working slowly so that it generates a split down the centre. The knife acts like a wedge, rather than like a cutting blade.

Select six strips and arrange these on the bench in a staggered pattern so that no two nodes are adjacent to, or opposite to, each other. The finished rod section will be 42" long. Make the rough sections 45" long so that you have 1 1/2" scrap at each end. Try to avoid having a node within 4" of the finished length. Mark each with a pencil and cut to length with a fine-tooth saw. I mark the tip ends with a coloured marker and the butt ends with a different colour so they will not get mixed up.

STRIP PREPARATION

Before you can do any planing, each strip has to be straightened, and the nodes flattened. I prefer to clamp the strip in my bench vise and use a 10" Mill file to level the node "bump". The under side of the node is also leveled at this time. Kinks and sweeps at each node are removed by warming the node and applying pressure by hand. On my first rod, I used the kitchen stove element to warm the nodes. These days I use a heat gun of the sort used to strip paint. Soaking the strips over night in a tube of water makes the nodes much easier to straighten and to rough plane. The



A good source for the Right Stuff

Charles Demarest Co.

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There are eight basic steps:

- 1. Preparing the bamboo culm for splitting into strips.
- 2. Splitting out six strips for a rod tip and six for a butt.
- 3. Straightening and flattening each of the twelve strips.
- 4. Rough planing the strips to achieve a triangular cross section.
- 5. Finishing planing each strip to size and preparation for gluing.
- 6. Gluing and straightening the sections and allowing them to cure.
- 7. Scraping off the glue, sanding, and straightening the blanks.
- 8. Fitting the ferrules, guides, reel seat, and cork grip, and applying the finishing varnish.

strips will dry out in a few days, and there seems to be no long-term effect on the finished rod.

ROUGH PLANING

Never plane the enamel side!

The initial rough planing is done to change a strip from a rough rectangular cross section to an equilateral triangle cross section. In this and all subsequent planing, keep the blade razor sharp! The strip is held by hand in the form, and one or two passes of the plane are made on each side until the triangular cross section is achieved.

It's important that the strips always be well nested into the planing form's groove. I use a wooden form with several grooves of different depths and work from the deepest groove downward until I have what I want.

FINISH PLANING

Set the planing form to finished sizes and sharpen your plane. Continue taking one or two passes until you are close

Dimensions Across Flats	
Station	Dimension A/F
0"	.285
5"	.285
10"	.285
15"	.264
20"	.255
25"	.243
30"	.230
35"	.213
40"	.200
45"	.183
50"	.171
55"	.161
60"	.150
65"	.135
70"	.119
75"	.101
80"	.085
84"	.075

FOURTH NORTHEASTERN BAMBOO ROD BUILDERS' GATHERING

The Fourth Northeastern Bamboo Rod Builders' Gathering will be held at Belwood Lake Conservation Area near Fergus, Ontario on Saturday May 26 and Sunday May 27, 2001. Workshops and demonstrations for levels of interest and skill will be offered. Some of the best split bamboo rodmakers in North America will be on hand to display their products and share their skills. For more information contact:

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to finished. Use a scraper blade to make three or four passes on the enamel side of the blank to clean up this side. Then continue planing the sides until the blade no longer removes any bamboo. The strip should now be exactly to size. Do the same for all six, then bundle these up and put away. Now set up and finish the other rod section.

GLUING

Tite Bond II glue is widely available, easy to use, and water-resistant. It has enough open time to allow you to apply the glue, bind the sections, and still do a little straightening before it sets up. Doing it by hand is messy, and you might want to use some throw-away gloves.

Arrange the six strips in the desired node stagger, bundle them together, and bind with cellophane tape in four places. Slit the tape along one seam and spread the strips for gluing. Any stiff brush, such as a tooth or stencil brush, is good for spreading the glue. Brush the glue out uniformly, then roll the six taped strips back into a bundle ready for binding with cotton thread. A binder, like those in the reference books would be nice, but wrapping by hand will work fine for this first rod. Hold the ball of cotton thread in your hand while you spiral wrap the entire section. Tie off the thread ends. Wrap a second layer of thread in the opposite direction to offset any twist in the bamboo. While the glue is still wet, straighten any twists and kinks in the rod section. When satisfied, put the bound up section away to cure for a few days.

FINISH ROD SECTIONS

The next step is to scrape and sandpaper away the string and glue. The planing form makes a good support for this work. Sand the sections with #280 sandpaper and polish with fine steel wool. There are always a few kinks and twists to be removed. Mark the high spots of each kink, then warm and straighten each until you are satisfied that they are as straight as possible.

INSTALLING FERRULES

This rod requires a 13/64" ferrule. A lathe would be nice to have for turning the ferrule stations, but you can do a satisfactory job by hand, with a little care. Use a small file to remove the hex corners. Take a small amount off each corner and try the ferrule frequently. Don't force it as it may jam in place and be difficult to remove! When the fit is right, the ferrule will slide smoothly into place. Use five-minute epoxy to glue the ferrule in place, binding the ferrule tabs down with cotton thread.

The male ferrule is always supplied over-sized so that it can be fitted to the female ferrule. Use #1000 grit wet/dry paper to polish the male to a good fit.

FINISHED ROD

You now have a tip and butt section ready for varnishing and installation of components of your choice. A varnish dip tank is easy to make, but for your first rod, I suggest that we keep it simple.



THE AUTHOR WITH ONE OF HIS CREATIONS

Apply 3 to 4 coats of varnish with a brush or spray can. Wet sand with #1000 grit paper (all but the last coat, which should be left glossy). Let it cure for at least a week. Now the rod is ready for the fittings. Install a preformed cork grip and reel seat. Wrap the guides in place and apply 5 or 6 coats of varnish to the wraps. I use Varathane 900, a flooring varnish which can be recoated every three hours. Apply the varnish carefully to each wrap, in order to avoid bleeding out on to the bamboo.

CONCLUSION

Well! You now have a fine split bamboo rod—a reflection of all the best traditions of fly fishing and a superb casting instrument. You have probably spent over 60 hours to make it, but it's yours, and you've touched every nuance of its making. Now it's time to take it fishing.

