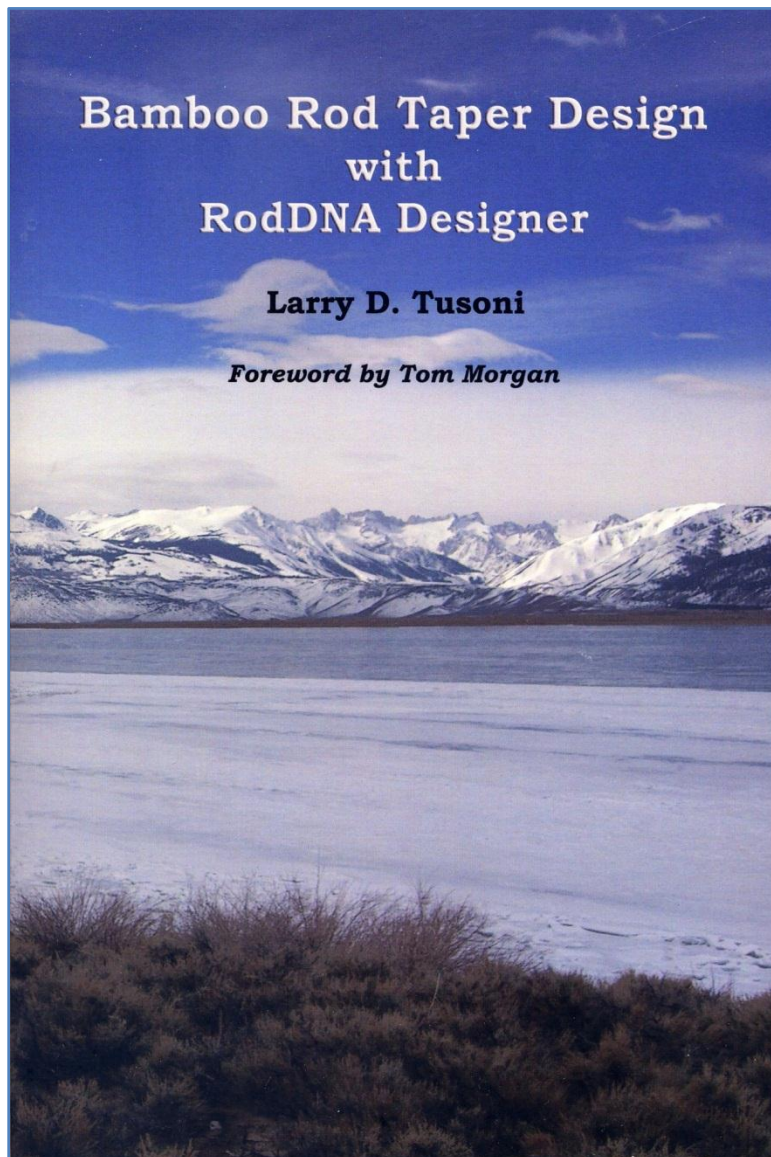


Review and Introduction
To
Larry Tusoni's RodDNA Designer

By
Chris Bogart



This new software program and book marks another leap forward for anyone who wants to design bamboo fly rods. After Larry Tusoni created RodDNA, we had a series of long talks on what a real rod design program should be. Up to then, everything has been to enable someone to engage in rod tweaking. The conceptual new program would give a rodmaker a total design environment along the lines of Adobe Photoshop where you can build complex items using basic building blocks and manipulating them. This is the approach Larry took in giving you a taper design framework that will allow you to generate completely new tapers and manipulate any taper in a very creative manner.

I should note at this time, that RodDNA Designer is not for the novice. The user must have experience modifying tapers, building those tapers and then evaluating rods to use the tools he has provided. This program is intended for the experienced rodmaker who want to break out from building the same old tapers, designing their own comprehensive set of complementary tapers or who want to experiment and is interested in advancing the art of taper design.

The book (265 pages) is a very comprehensive tutorial into how to use the software program. This alone makes it the best documented taper program around. The book will help you take advantage of RodDNA Designer capabilities with the least amount of hassle. Larry also provides his insights into rod design along the way.

The Foreword is by Tom Morgan who quickly grasped the power, capabilities and potential for RodDNA Designer. He is an experienced rod designer who really appreciated the power of RodDNA Designer gave him to further his rod designs. It is a tool that we all wish we had many years ago. This program is more than an evolutionary step forward. It leaps forward and provides capabilities that most people had not considered before.

At one level there are things that people have come to cherish. The stress and dimension graphs are there. But two new graphs are added – the delta (changes between stations) and deflection (bend of the rod) graphs.

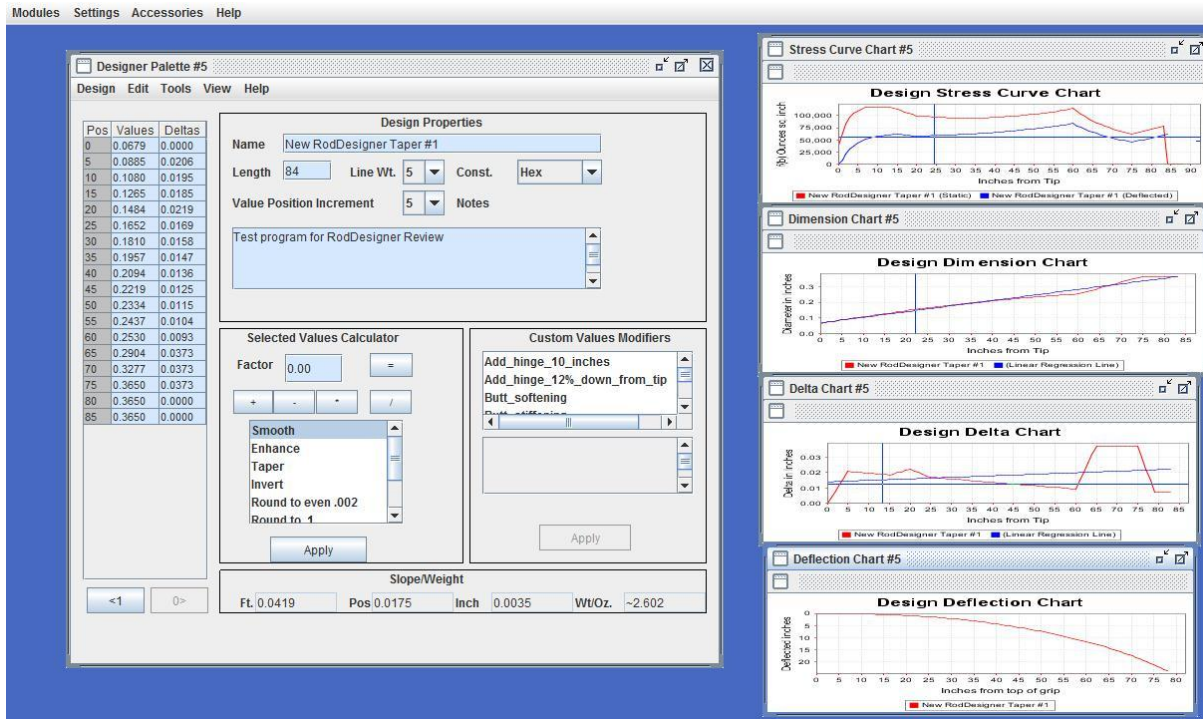


Fig 1. RodDNA Designer Main Screen

The rod designs are separate files from your standard taper files in the RodDNA models database. You can generate from a design file a taper to easily add to the RodDNA models database. Conversely you can import existing tapers into a design file. What this program is about is giving you the capability to generate a design and then manipulate it in many ways. But one nice thing is that it allows you to undo an operation(s) if you are not pleased with the results.

The initial taper design generation can be done from a number of built in generators – linear / parabolic / progressive, etc. You can manipulate the basic generator parameters for each based upon your desires. I found that I especially liked the Parabolic (Parabola) generator and I modified the % rise (vertex) value that produced an initial taper that I felt comfortable with based upon my experience.

Once you have a basic taper then you can apply any of the built-in modifiers or create your own custom modifiers. To me, this is the real power of the program. You can create a modifier and link modifiers to manipulate the taper. Make a strong tip, delicate tip, swell butt or step downs across ferrule or

even guide stations. You can mix built in modifiers and your new modifiers. This gives you the capability to have your own unique set of modifiers to apply to your tapers.

Select/Enter Modifier: Make-StepdownFerrule-2pc

Select range

(Inches) (%.10 = 10%)

From 0 % From .30 Relative to tip

To 0 or % To .49 Relative to tip

Select action

* Factor .98 or ask for value

or method

Method (none) Degree (none)

Notes: no-notes

Chain to Modifier: _SmoothFerruleStepdown-tip2pc

Save Print Delete Done

Fig 2. Custom Modifier Editor Window

I built modifiers for providing step down's in both two and three piece rods. I made the step-downs based upon my preferences. One of the modifiers that Larry has was the one I did for doing a swell butt up to a preset dimension - .365"

– the same as Dickerson. Larry allows you to modify that number when you apply the modifier. Again, you are not locked in to someone else’s preferences.

So when you have a taper design that you feel comfortable with. You can compare this design against your other designs.

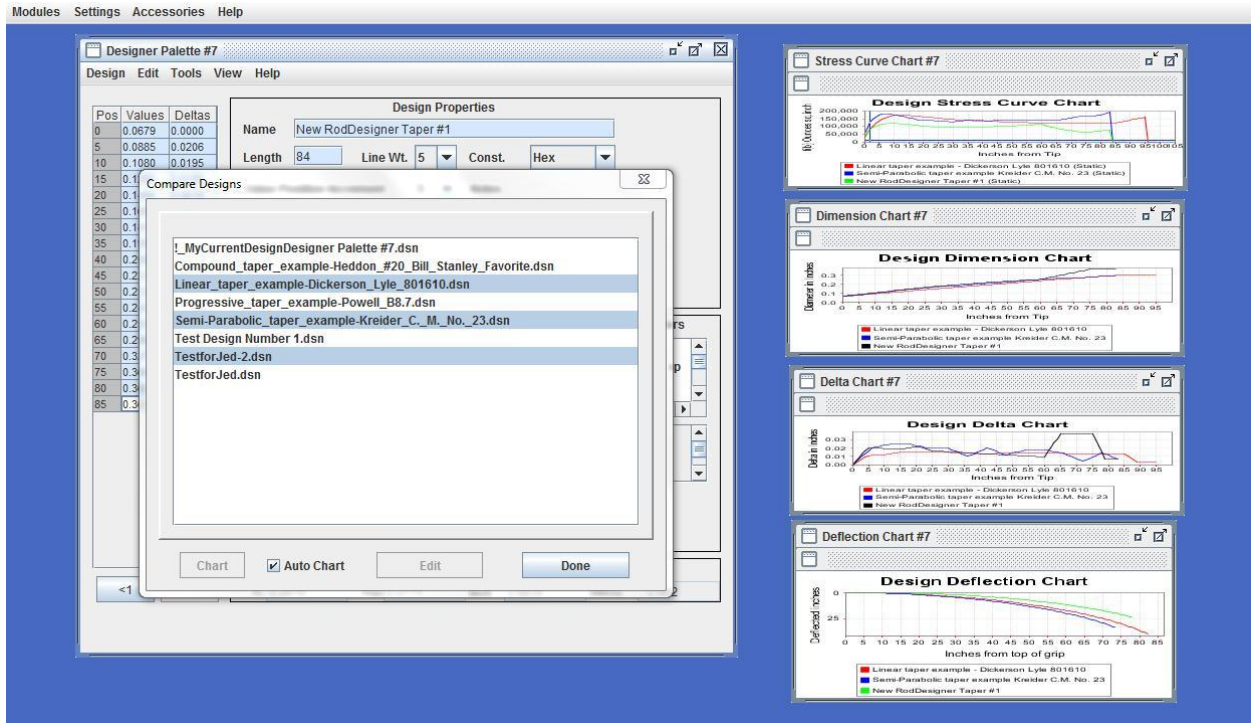



Fig 3. Comparing Designs

There is also the unique capability now to search existing tapers in the RodDNA data base. Now is the time to see if you reinvented the wheel or find out who is your taper’s nearest cousins. Larry has provided a total awesome capability to search and compare your design against all tapers in the models database – all 858 of them! Under tools you can select the menu item “Determine Closet model/taper using any one of the following (they give different results) – Taper, Delta, Stress, Deflection or Slope values. This produces a result of the top 12 matches in match order – you can now view those tapers and compare them. Pretty cool stuff. I did find that certain tapers in the models database kept showing up. It is well worth while to look at these tapers.

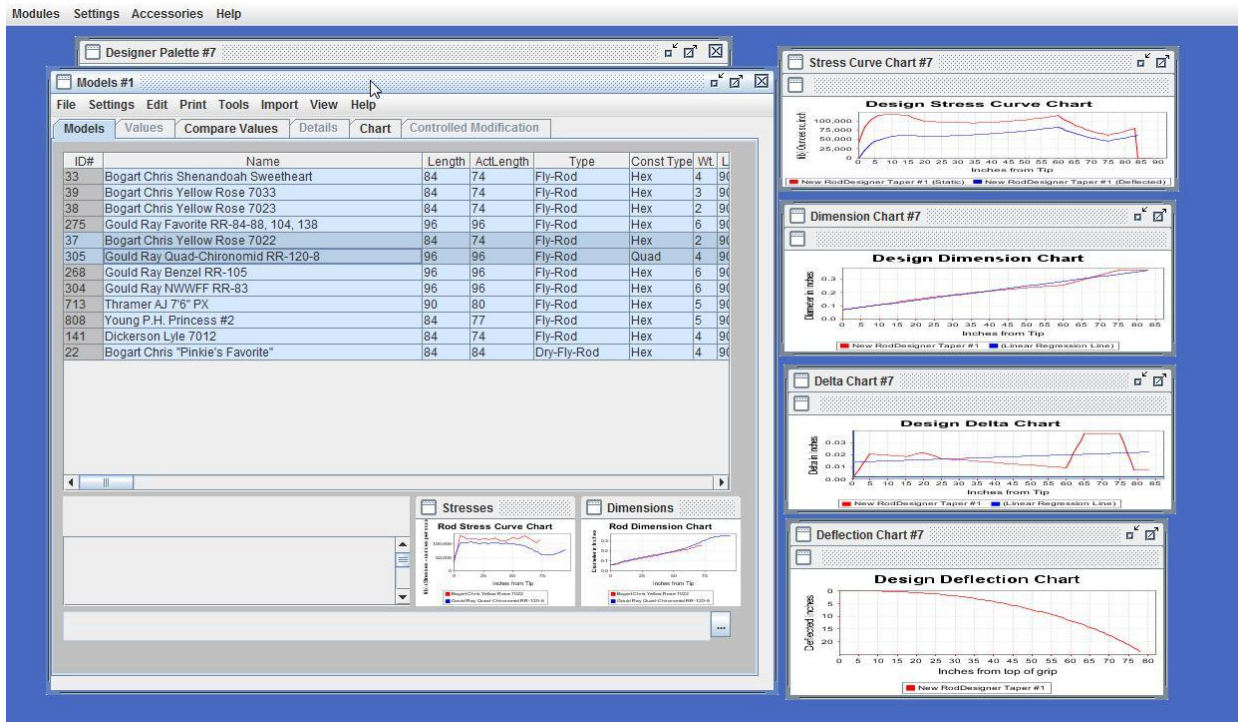


The closest selected Models/tapers are:

1. Bogart Chris Shenandoah Sweetheart [33] [99.81565107717798]
2. Bogart Chris Yellow Rose 7033 [39] [99.81565107717798]
3. Bogart Chris Yellow Rose 7023 [38] [99.77158510490418]
4. Gould Ray Favorite RR-84-88, 104, 138 [275] [99.71611160297907]
5. Bogart Chris Yellow Rose 7022 [37] [99.68319060371175]
6. Gould Ray Quad-Chironomid RR-120-8 [305] [99.6813358910019]
7. Gould Ray Benzel RR-105 [268] [99.6803365563847]
8. Gould Ray NWWFF RR-83 [304] [99.67566204091528]
9. Thramer AJ 7'6" PX [713] [99.66392693987804]
10. Young P.H. Princess #2 [808] [99.65121237510776]
11. Dickerson Lyle 7012 [140] [99.6494112293386]
12. Bogart Chris "Pinkie's Favorite" [22] [99.63445528391351]

OK

Fig 4. Matches to Taper Search



Modules Settings Accessories Help

Designer Palette #7

Models #1

File Settings Edit Print Tools Import View Help

ID#	Name	Length	Act.Length	Type	Const	Type	Wt.	L
33	Bogart Chris Shenandoah Sweetheart	84	74	Fly-Rod	Hex	4	9	9
39	Bogart Chris Yellow Rose 7033	84	74	Fly-Rod	Hex	3	9	9
38	Bogart Chris Yellow Rose 7023	84	74	Fly-Rod	Hex	2	9	9
275	Gould Ray Favorite RR-84-88, 104, 138	96	96	Fly-Rod	Hex	6	9	9
37	Bogart Chris Yellow Rose 7022	84	74	Fly-Rod	Hex	2	9	9
305	Gould Ray Quad-Chironomid RR-120-8	96	96	Fly-Rod	Quad	4	9	9
268	Gould Ray Benzel RR-105	96	96	Fly-Rod	Hex	6	9	9
304	Gould Ray NWWFF RR-83	96	96	Fly-Rod	Hex	6	9	9
713	Thramer AJ 7'6" PX	90	80	Fly-Rod	Hex	5	9	9
808	Young P.H. Princess #2	84	77	Fly-Rod	Hex	5	9	9
141	Dickerson Lyle 7012	84	74	Fly-Rod	Hex	4	9	9
22	Bogart Chris "Pinkie's Favorite"	84	84	Dry-Fly-Rod	Hex	4	9	9

Stresses

Dimensions

Stress Curve Chart

Rod Dimension Chart

Stress Curve Chart #7

Design Stress Curve Chart

Dimension Chart #7

Design Dimension Chart

Delta Chart #7

Design Delta Chart

Deflection Chart #7

Design Deflection Chart

Fig 5. Retrieved Matches Displayed in RodDNA to Evaluate.

When I have shown my Beta release to accomplished rodmakers who all said, "Where can I get this"! The capabilities are that impressive. The program

and book speak for themselves. They are far ahead of anything else you may consider or currently have.

So when you want to take that next step forward and delve into serious taper design and exploration, this is the only tool I would recommend for you. You can get a taste for tapers with Hexrod and even more so with RodDNA, but with RodDNA Designer takes you to a whole another level all together. It is well worth the money. If nothing else, the book will help you understand taper design in ways you were not aware of. With the software program, a whole new vista in taper design, analysis and manipulation has been opened to the serious rodmaker.