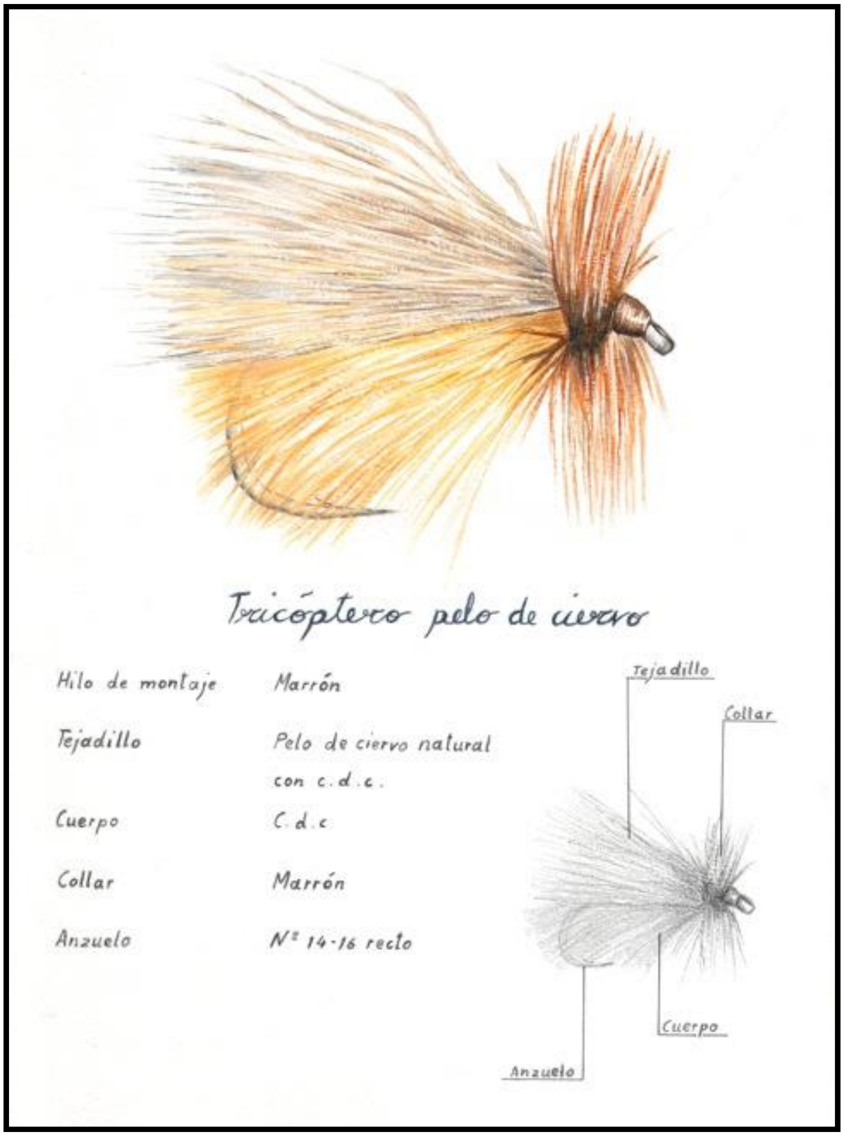
Power Fibers Online Magazine

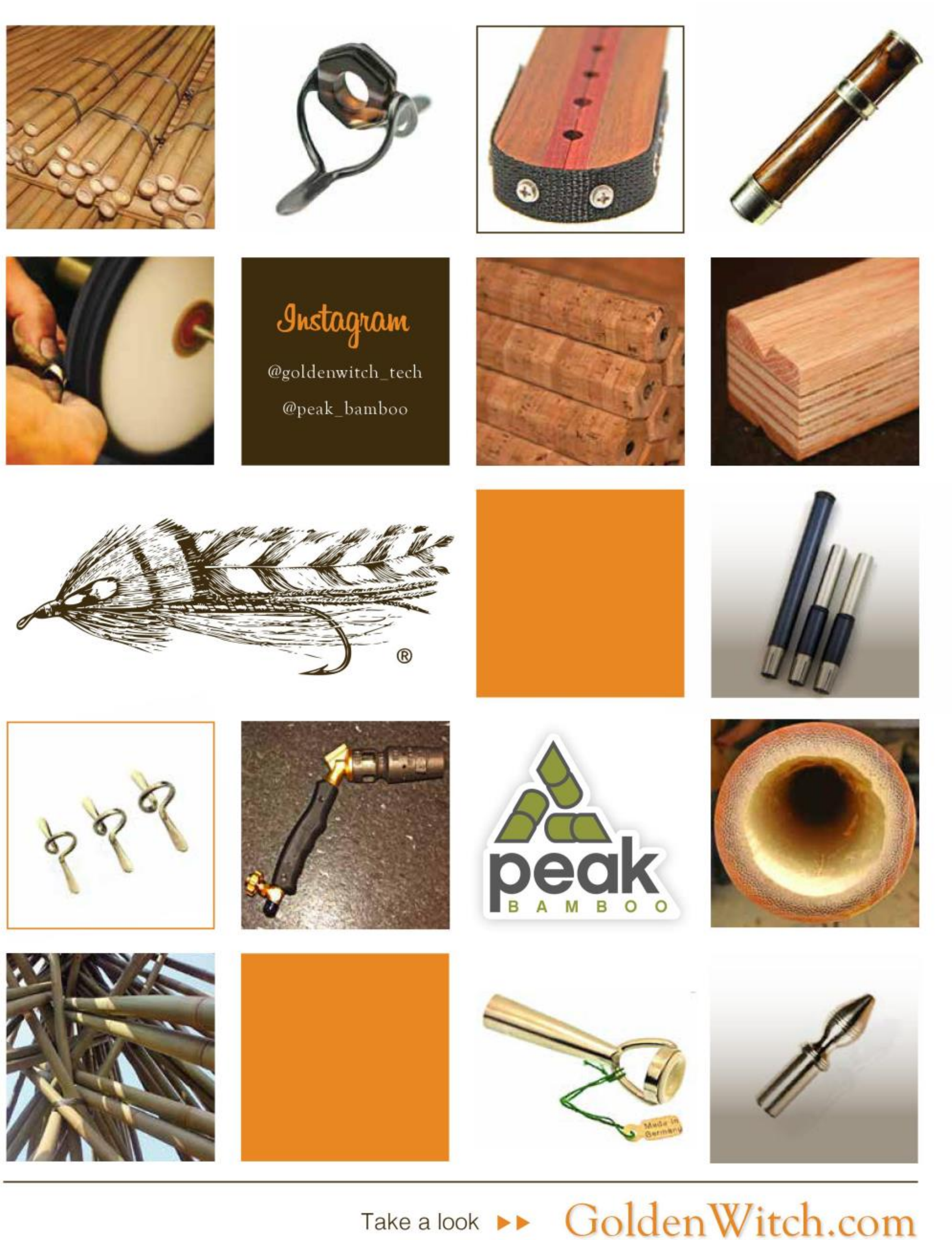
April 2018 (Volume 59)

Dedicated to the Making of Fine Bamboo Fly Rods

Inside this issue:



Watercolor on paper courtesy of Alfonso Jaraiz Puig (http://artificialfliesdrawings.blogspot.com)



Instagram
@goldenwitch_tech
@peak_bamboo
peak
BAMBOO
Made in Germany
Take a look ▸▸
GoldenWitch.com

The First Cast

Todd Talsma, Editor

We're at the brink of another trout season here in Michigan. Unfortunately, Mother Nature isn't cooperating at this point though. It's April 17th as I write this and we still have snow on the ground. The snow will be gone by the weekend, but this is getting a little crazy. I drive by the Grand River every day and the river is over the banks again, so hopefully the rivers will fall before opening day and we'll be able to get on the rivers for some long awaited fishing.

This issue of Power Fibers contains articles which are quite interesting to me. The information presented by Daniel Le Breton on the history of what we refer to as "parabolic" rods adds to my understanding of these rods. Kathy Scott and David Van Burgel have given us a little glimpse into the Maine event, SuperBoo. This event is held on the Sunday of the Super Bowl and has become a tradition in Maine. There have been several articles in Power Fibers about making grips with different types of bark. In this issue, Dave Beerbower shares the technique he uses to make grips using Poplar bark. Tony Spezio once again continues to share his techniques, this time showing us how he creates a nodeless, twisted scrap rod. Finally, Chris Sparkman shares how he constructs his rod cases. These cases are as beautiful as they are functional.

Don't miss the information found on page 16. Wolfram Schott has gathered and published a listing of two-handed rod tapers and also shows some construction information on how he makes these rods. Wolfram has published a paper on heat treating which is available in the downloads section of the Power Fibers site. If you're thinking about making a two-handed rod, this paper is going to be of great value to you.

I can always use more ideas, feel free to contact me. If you have a suggestion about improving *Power Fibers,* drop me an email at the following email address: power.fibers@bamboorodmaking.com

Warning!

Because many aspects of bamboo rodmaking bring the maker in contact with machinery, bladed tools, volatile chemicals and gases, the editor and advisory board of *Power Fibers* ask you to exercise the utmost caution when attempting to build or mimic any devices or activities mentioned in this magazine.

Please have any devices you build and use in your shop checked by a safety professional before attempting to use such devices. This is to guarantee your personal safety and that of others around you.

If you choose to build any device or use any technique found in this magazine, you are doing so at your own risk.

Power Fibers

Online Magazine

Editor

Todd Talsma

Contributors

Beerbower, Dave

Le Breton, Daniel

Scott, Kathy

Sparkman, Chris

Spezio, Tony

Van Burgel, David

Copy Editors

Bret Reiter

Carol Talsma

Mark Wendt

Advisory Board

Russ Gooding

Bob Maulucci

Bob Nunley

J.D. Wagner

For more info contact:

Todd Talsma

power.fibers@bamboorodmaking.com

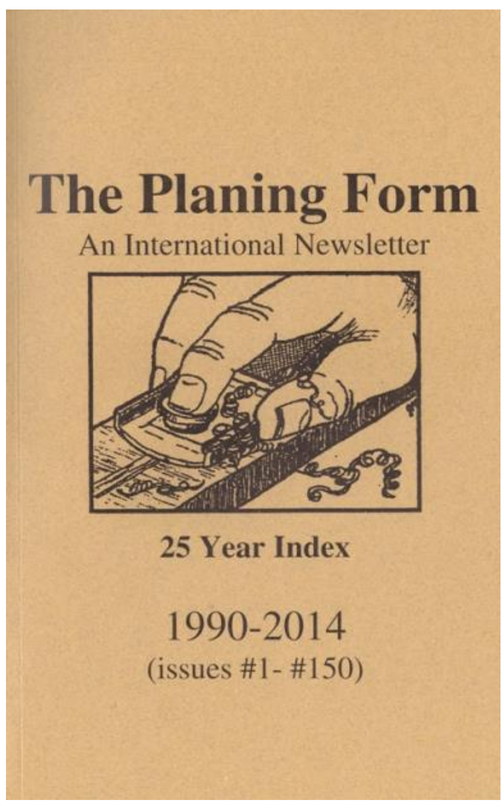
8412 North Maple Court

Zeeland MI 49464

616.772.5043

THE PLANING FORM NEWSLETTER….THE FIRST 25 YEARS!

Now available; a DVD with all 150 back issues, years 1990 to 2014 and a 174 page, hard copy index, organized in a 6 category table of contents. Search more than 1500 pages of rod making history by dates, titles, authors, tapers, ads and places/events! All this for $75.00 which includes shipping. Add $15.00 shipping and handling for orders outside the USA. For more information or to order contact: Ron Barch at alder-creek@core.com or aldercreekpublishing.com



Things of the Past: The Parabolic Fly Rod

Text and figures by Daniel Le Breton

Here is the story of parabolic rods, something that made a buzz during the 1930s. It was the era of cane rods, silk lines and gut leaders. Some smart rod makers had already understood the hidden secrets and underlying mechanisms ruling the behavior of fly rods. They did this without any computing facilities, trial and error was the only method to reach their goal, the very best fly rod.

Our story starts with Charles Ritz (yes, of the Ritz Hotel) who spent a lot of time on fly rods and fishing during his life. He managed to collaborate with a French rod company, Pezon & Michel, and created several specific series of fly rods starting with the Parabolic series in 1937 and ending with the Super Parabolic PPP (for Pendulum Progressive Power) series in the mid '60s. At the end of his life, Ritz switched his interest to fiberglass and made a series of glass rods, the Long Flex/ Long Lift with Garcia (1972). Charles Ritz passed away in 1975 and Pezon & Michel cane fly rod production declined from 1965 and ceased around 1995. The factory closed in 1999 after missing the change to synthetic rods. Today Pezon & Michel is a commercial brand of imported spinning tackle.

You can find in some books (e.g. E. Schwiebert, *Trout Tackle 2*; J.A. Knight, *The Complete Book of Casting* and E.E. Garrison & Hoagy B. Carmichael, *A Master's Guide to Building a Bamboo Fly Rod*) a few versions of the story of the birth of the parabolic action, which was the expression Ritz chose for his concept. Amazingly, Ritz never told this story in his books, *A Fly Fisher's Life*, the English version of *Pris Sur le Vif* and *A la Mouche*, written with T. Burnand. I was finally lucky enough to find an interview with Ritz on this subject published in 1984 in a small French book which gathered fishing magazine articles. Ritz's interview took place around the mid '50s, some twenty years after the events of the story took place.

In fact there are two stories: the one about the broken rod, which, once repaired, had the "right" action and the one about the name given to that action. To my knowledge, this is only written about in Garrison and Charmichael's book. You know what happens to stories, they change time after time and I leave the pleasure of tracking them to you (look at the following link: http://www.davidnorwichrodmaker.co.uk/DNscomments.htm, you will have to scroll down to find the article on parabolics), but here is a summary of the whole story as told by Ritz himself.

Charles Ritz managed a shoe store in the center of Paris during the early thirties. The back of the shop was turned into a workshop devoted to fishing tackle. Ritz was a Payne agent at that time and sold some rods, but he bought an 8' Warrior (2 piece and 2 tips) from Ogden Smith in London to get a softer rod and sent it to one of his friends in Paris for a fishing test in Normandy. However, the delivery boy carrying the rod on a bicycle fell down and the rod was broken. He brought it back to Ritz one hour later. The butt section was broken right at the grip and the two tips were shortened at the top by a couple of inches. Ritz filed the tips to be able to put the tip top guides back in place and asked a skilled craftsman to fit a ferrule within the grip. Thus he got a shorter rod with a detachable handle. The rod waited for one month in the back of the shop before being used. Ritz found the rod very interesting and took it on a trip to the USA where he met John Alden Knight. The rod was tested on the Beaverkill and there is a photo of Knight casting the rod in Ritz's book, *A la Mouche* (1939). Ritz asked Payne to build some prototypes but was not satisfied with them, and he then started his relationship with Pezon & Michel.

(Continued on page 6)

During his interview, Ritz stated he decided to call the action parabolic. He just forgot to tell the story which the parabolic name came from. In 1934, four people were attending a meeting: Alfred Miller (Sparse Grey Hackle), John Alden Knight, Everett Garrison and Charles Ritz. Ritz had brought with him the famous Ogden Smith clipped rod, and told the bicycle story. The description of the characteristics of the rod was a source of inspiration In fact, the description provided the cunning Ritz with a marketing idea. During the meeting, Garrison commented on the fact that the rod now had little taper and he computed the stress curve by using a simplification: a cantilever beam of straight profile with a mass at the end. If you do the stress calculation with a small deflection assumption, then the stress curve is effectively a true parabola. So, a rod with little taper was associated with a parabolic stress curve and this word was taken out of its context to become a marketing teaser. Charles Ritz later recognized the marketing potential of the phrase "parabolic action" in his book *A Fly Fisher's Life* (1972): *"... This is the action which I have called "Parabolic," though the term is only a figure of speech, and the curve of the rod has absolutely nothing to do with a parabola."* This sentence does not appear in the original French version of this book (1953).

Ritz was looking for a rod having power and smoothness, but the actions of his rods were not so much "parabolic" in fact, at least in the sense Garrison understood it. I give here a couple of quotes from Garrison's book which clarify what he meant: "*In short, rods with a simultaneous action assume the load of the line and discharge it instantly, much like a catapult… Parabolic action is an example of "simultaneous" action which you have in a rod of little taper. All of the bending is down at the handgrasp."* Garrison described the action of his rods as being semi-parabolic or progressive. However, it is not easy to characterize this kind of action. It could be understood as being neither a butt action nor a tip action, but rather something in between, hence maybe the name progressive. But all rods bend progressively more and more as their load is increased. The most discernible type of action is the butt action because the bending can be felt by the casting hand, and this is much easier to detect than the bending of the tip. It is unfortunate that the word "parabolic" is included in the "semi-parabolic" name, it would have been better not to use it there, but maybe it was a means to say that these rods were next to parabolics.

It is pretty difficult to give a clear definition of fly rod action, so let's consider the technical approach to referring to Garrison's explanations. A parabolic rod is what we would call today a butt action rod because most of the bending is in the butt. Ritz used the word parabolic for commercial purposes but did not really build butt action rods only, some of them are close to Garrison's preferred action: i.e. progressive/semi-parabolic.

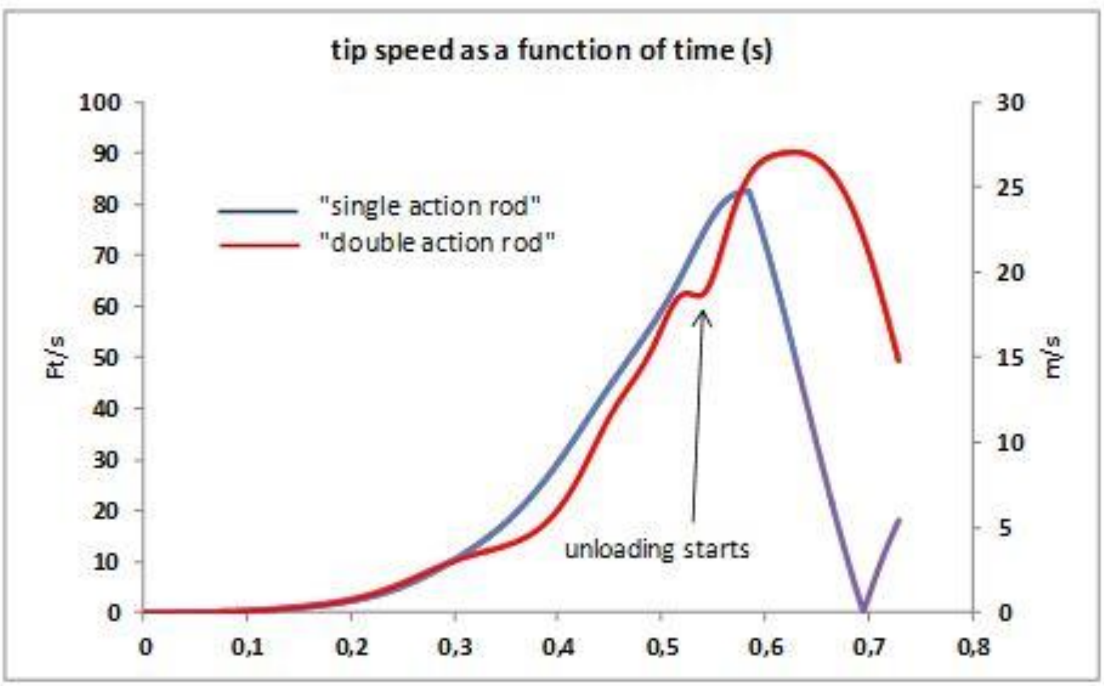
Things would have remained simple, so to speak, if other terminology had not emerged at the same period of time, the parabolic tapers. This expression means that the taper of the rod is a parabola. It is not linked to a particular action but, inevitably, things became messed up and confusion took its part of the discussions. The renowned rod maker who first published this approach in 1937 (written in 1935) was E.C. Powell, from California. His grandson, Press Powell, re-edited his articles on fly rod mechanics and construction in 1989. You can make any type of rod with a parabolic taper, the orientation of the parabola being different from butt action to tip action, and some rod makers like Paul H. Young produced some parabolic (and semi-parabolic) action rods which had something like a parabolic taper. I don't know if Young read Powell's articles, but he was in a business relationship with both Ritz and Pezon & Michel and the taper of his Para 15 (created during the mid '40s) is very close to that of the first Ritz Parabolic based upon what I could find in cane rod databases. If you want to know more about Powell rods and their tapers then download the article written by Michael McGuire "Of Powell tapers and Parabolics."

(Continued on page 7)

Regularly, some people interested in cane rods inquire about parabolics, and this is not surprising given the confusion which can arise from the references to taper or action at least. Reading some threads on specialized forums (e.g. Classic Fly Rod Forum), I discovered that we not only speak of dry fly/wet fly actions (most 20th century), of tip/butt actions (today), and at the very beginning of fly rod history there were both the single and double actions rods (19th century).

Incidentally, Paul Young mentioned that one of his rods, the Para 16, had a double action. This rod has a completely flat taper in approximately its lower third. This is not a true parabolic taper because of that flat portion, but it corresponds to the description of parabolic action as understood by Garrison. Until recently I had not heard of that, but I suspect that I just did not know the term double action. In a few words, this is what Garrison describes as a simultaneous action: the rod loads progressively and then unloads abruptly, hence the second action. This behavior is typically due to a lack of synchronization between the caster, whose stroke is too fast for the rod, and the too slow/ soft rod. I am not surprised to see that earlier rods, about 12 feet long or more, were exhibiting that double action, they were likely very slow indeed.

Below is a theoretical illustration of single action (blue curve) and double action (red curve), with a brutal acceleration as the rod starts to unload at 0.55 s. Although this example is a bit of a caricature, it does show clearly the change in rod behavior. These rods are soft long glass rods.



These results come from one of my casting models. The red rod is as slow as the earliest 12 ½ foot rods from the 19th century and it is much slower than the blue one which is approximately as slow as cane rods from the great era of bamboo (1940s). The double action rod provides a higher maximum tip speed for the same casting motion; amazing, isn't it?

I attempted a comparison with a model of the Para 16, but I could only find such a type of double action with a competition cast as the input. The possibility of obtaining a double action with some rods in certain circumstances does not mean that all parabolic rods exhibit this behavior, so it would

(Continued on page 8)

be wise not to generalize. On paper you can design a fast parabolic which will never achieve double action characteristics. Today rods have only a single action and so whatever the choice of action (i.e., tip or butt action) a double action rod would feel very strange to modern casters, I think.

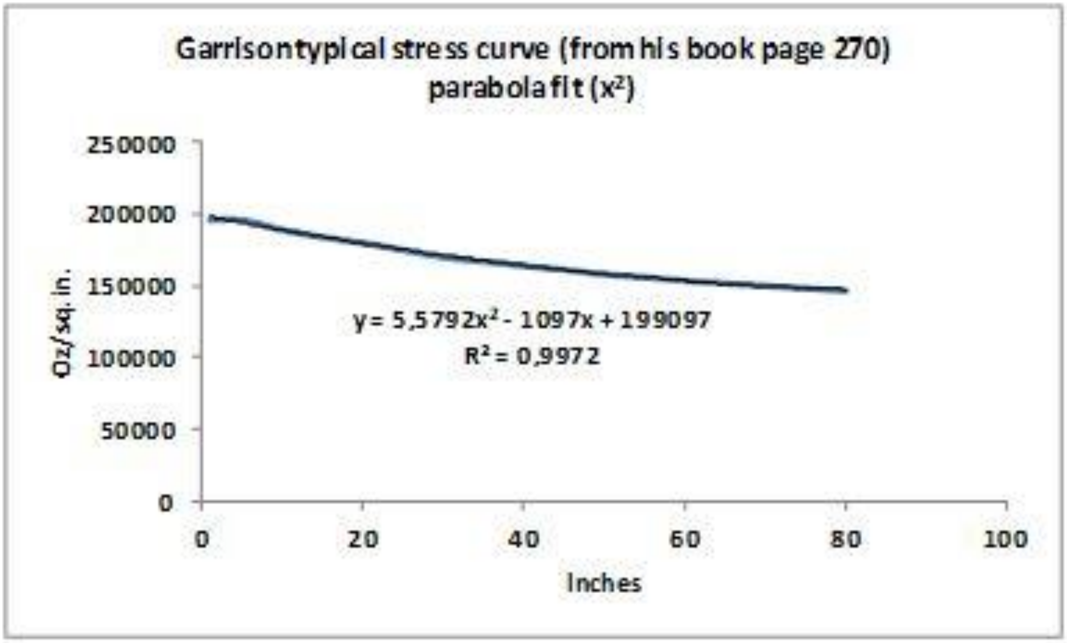
Cane rods have a particular feel which is due to the nature of the material itself. These mostly solid rods are heavier than synthetic ones and this has an effect on casting. As Powell had realized by 1937, a fly rod is a compound machine with three mechanisms: lever, spring, and momentum (inertia). This is still true with synthetics but the momentum part is reduced given the lightness of such rods. This momentum mechanism gives a boost to the tip speed at the end of the cast, during unloading and helps in decelerating the butt (the stop), which is comfortable for the caster. This is the same phenomenon that makes the tip kick back when you start a strong acceleration forward. It explains why a cane fly rod handles leader casting easily (fishing in one's boots). You may call this inertial effect cane action, but it is just the momentum machine coming into play. To give you some idea of the effect, the gain in speed due to the momentum effect may reach 25% for cane non-hollowed rods, 15% for glass rods and 5% for graphite rods in similar fishing conditions. This inertial effect is not the cause of the double action; it's all in the spring and the timing of the cast.

If you believe that the description of the parameters of parabolic are complete once action and taper have been reviewed then you are wrong. The original reference to a parabolic stress curve made by Garrison generated a new understanding: some parabolic rods have a parabolic stress curve. In his article "What is a parabolic rod" (you can download it on the internet), Michael McGuire concludes: "*In summary we can say that there are two very different flavors of parabolic rods, those whose tapers are very close to or exactly on parabolic curves, and those whose tapers are derived from stress curves which are parabolic."* I'm afraid that there are parabolic rods which have neither a parabolic taper nor a parabolic stress curve; a good example is the Payne Parabolic 214. What this conclusion means is that parabolic action rods and semi-parabolic action rods are considered to be in the same category, and that creates more confusion unfortunately.

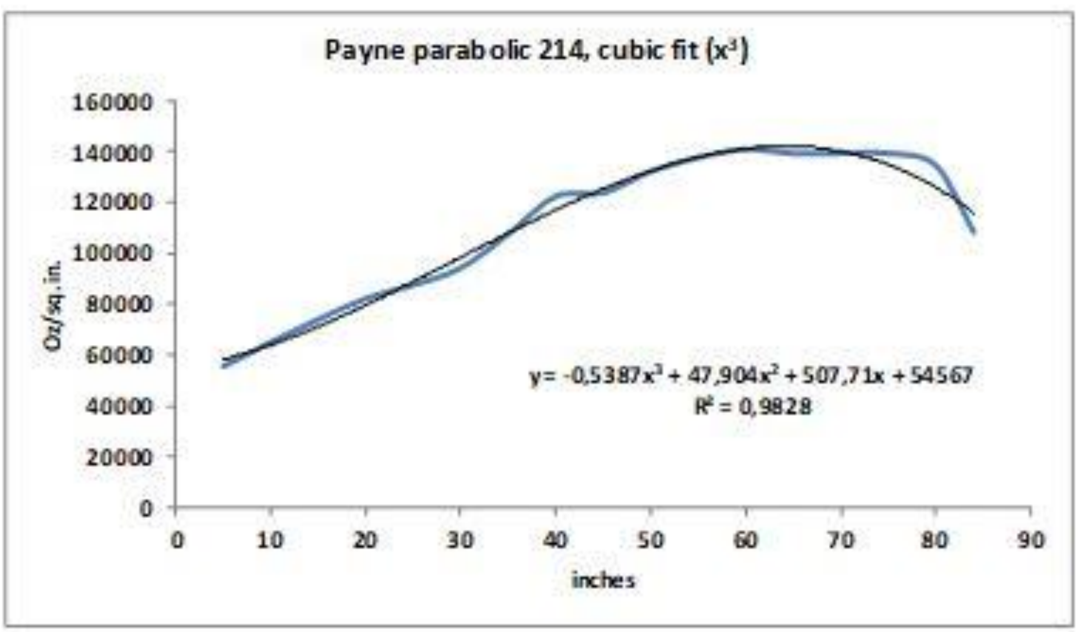
Garrison's example was extreme and he never referred to a link with a parabolic stress curve for his rods. His calculation methodology is a simplification of reality since the rod is not supposed to bend, so the considered stress curve used to compute the taper is rather theoretical. There is no explanation about the foundation assumptions of the stress curves he used, but they are pretty clever. The design of his series of rods is so smart that you can compute one rod based upon another. Garrison considered that his stress curves were lying somewhere between parabolic curves, with the vertex at the butt end, and linear curves, but they are quite close to a parabola in fact. That's the miracle of mathematics: you may always find a suitable fit with a given type of curve, until you test another type which can fit better. The taper of a Garrison rod is very close to a cubic curve, and it is the same for the Payne Parabolic 214 for example, which incidentally also has a nearly cubic stress curve! You may find what you like with curve fitting and mathematics, and I would not generalize any finding in this domain. The Payne Parabolic and a Garrison (semi-parabolic) are different in both action and stress curve, and it is not because a cubic curve fits their taper that they belong to the same category.

(Continued on page 9)

A Garrison rod's typical stress curve can be fit with a parabola (x^2). The data below comes from page 270 of his book (the origin of the graph corresponds to the tip of the rod):

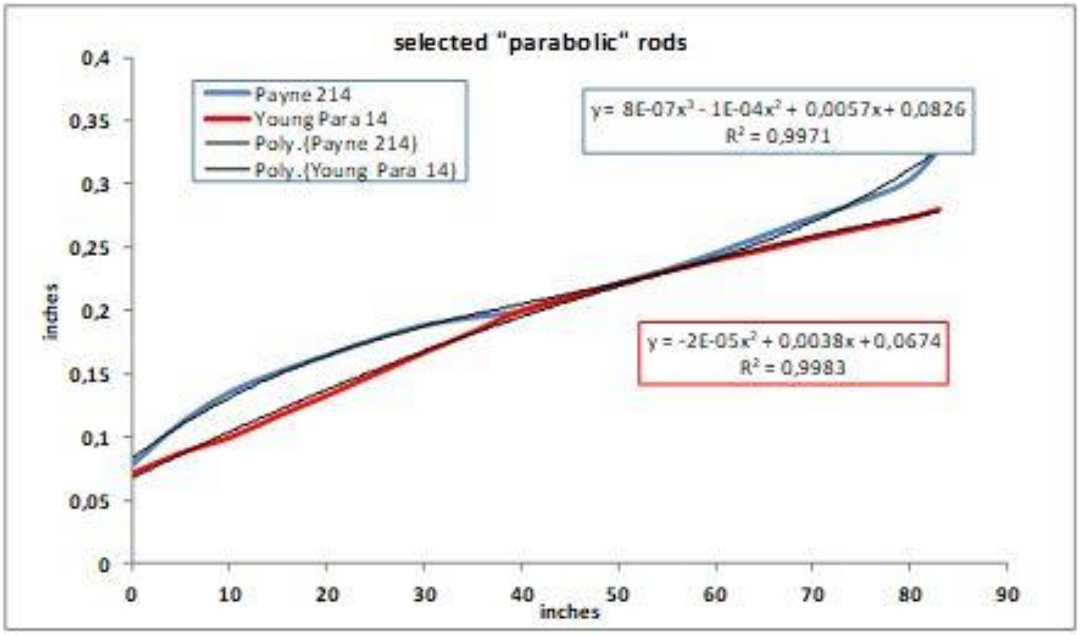


The next stress curve example is taken from the Hexrod database for the Payne Parabolic 214 and a cubic curve fit seems to be appropriate. Note that the high level of stress in the butt looks like the example used by Garrison to describe a parabolic rod even if the curve is not a parabola in this case:

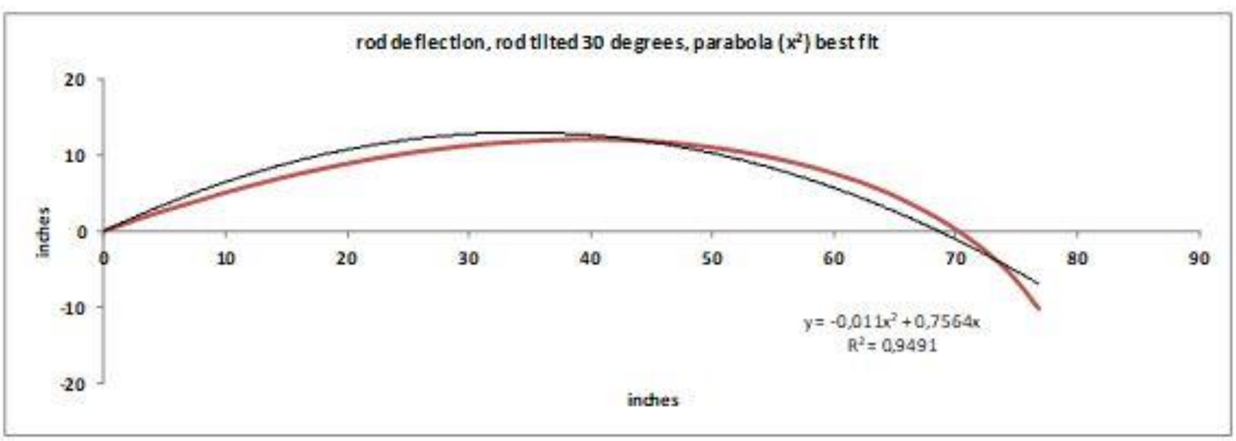


(Continued on page 10)

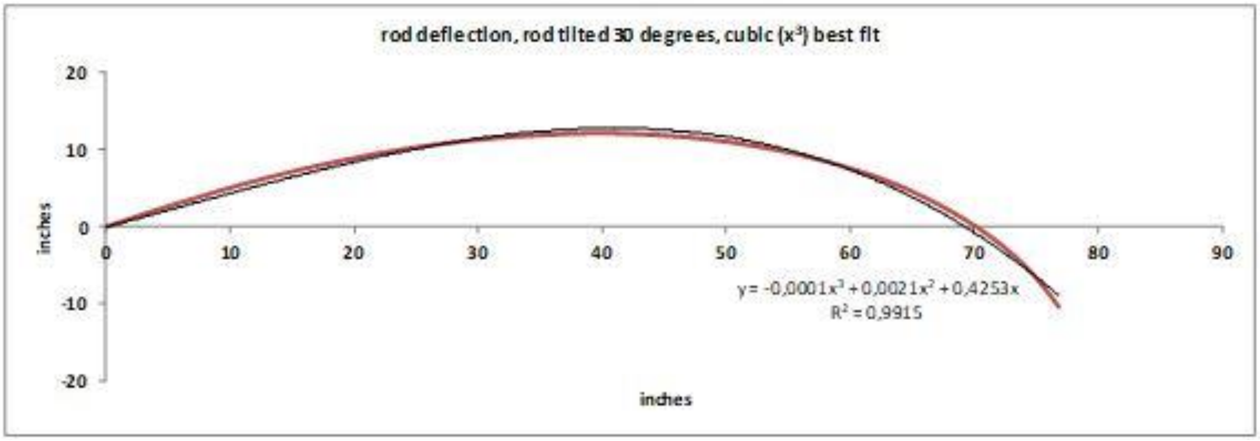
For taper curves, here is a comparison between the Payne Parabolic 214 and the Young Para 14. The polynomial equation corresponding approximately to the taper of the Payne Parabolic 214 is a cubic function (x^3), and the one for the Young Para14 is a quadratic/parabolic function (x^2). The tapers come from the Hexrod database:

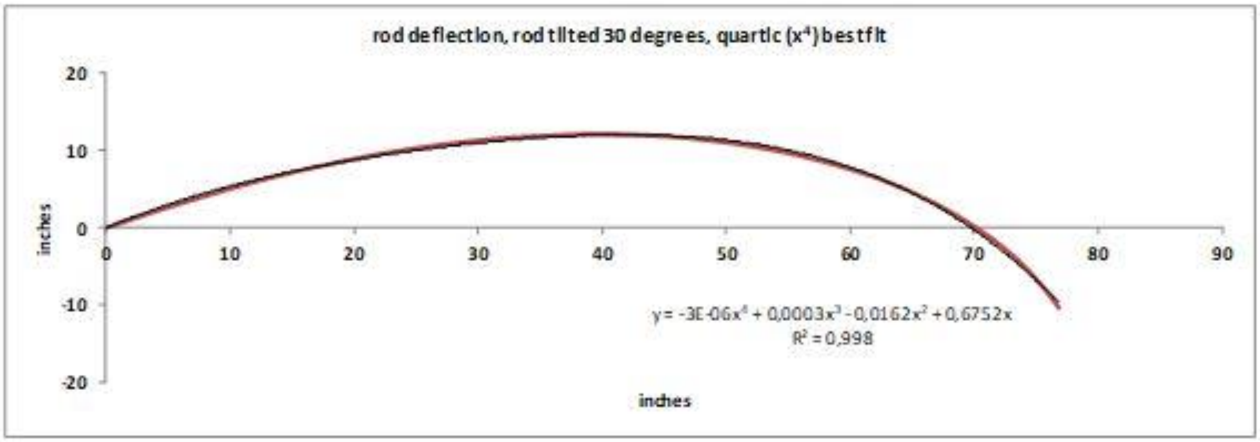


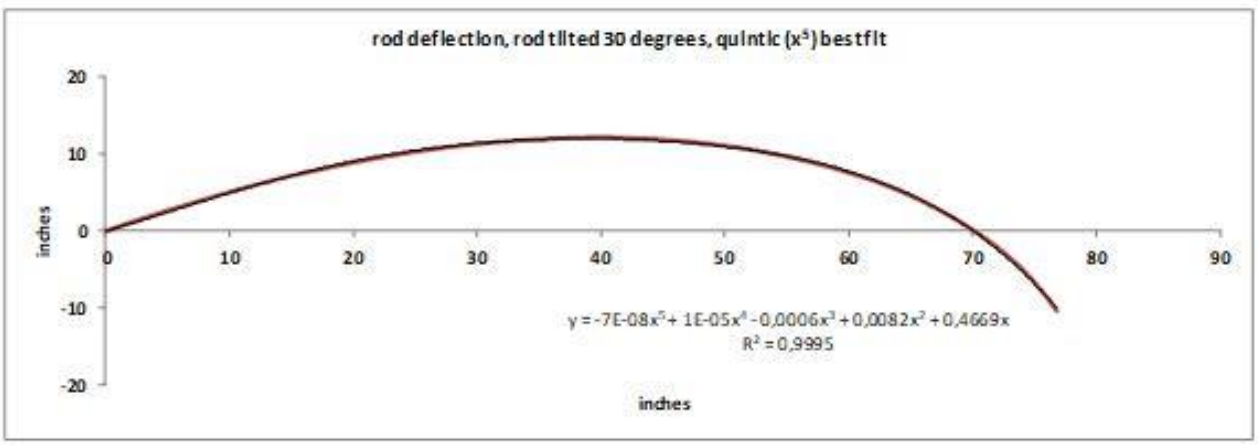
Some authors refer to parabolic deflection curves, but this has little to do with reality. The bending shape of a rod is rarely a parabola (x^2), it can be a cubic function (x^3) for small loads, a quartic function (x^4) or even a quintic function (x^5) for average loads and I do not know exactly what beyond that. Here is an example of curves fitting a Garrison 212E under average load (the origin is the butt):



(Continued on page 11)







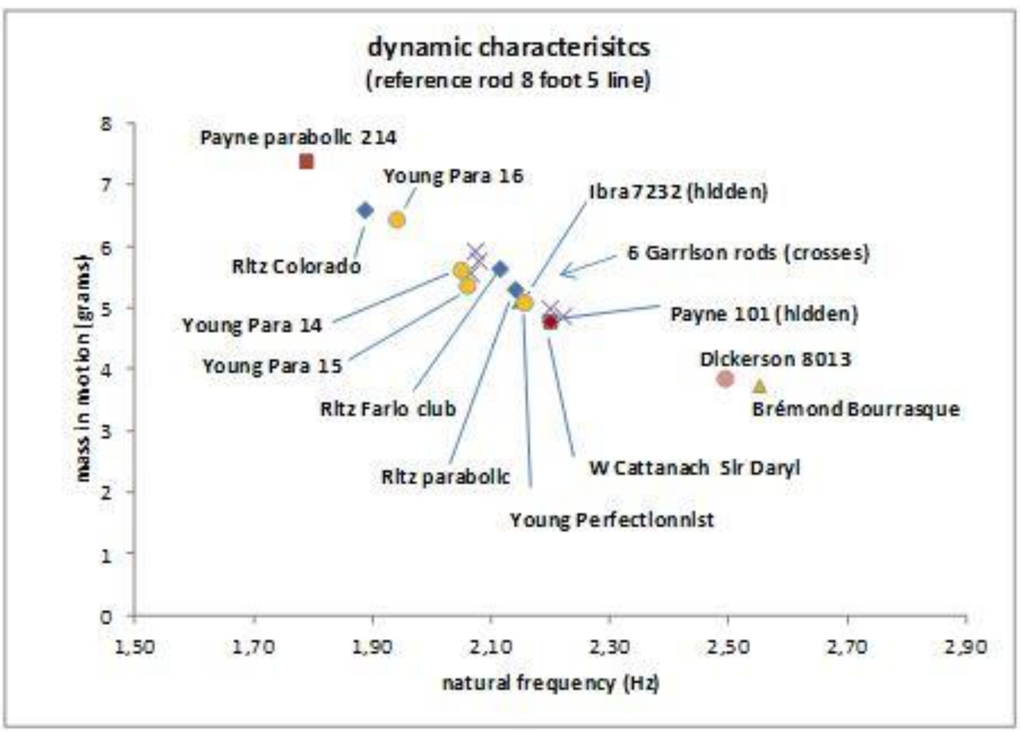
Apart from Garrison's stress curve example, I cannot see any clarification of how a parabolic rod or a semi-parabolic rod is based upon curves, either related to stress or taper or bending shape. I suggest having another view of the typology of rod action.

A precise classification of rod action is difficult (it would already be applied in practice if it were easy), but we can find some trends. Today we use two main criteria: rod speed and rod deflection shape. They have the advantage of being visible and discernible. It is possible to use measurable parameters to get an idea of rod action: the natural speed of the rod (a vibration frequency) and

(Continued on page 12)

what is called its equivalent mass (a technical term) which we can translate as the mass in motion as the rod flexes from its straight position. The mass in motion is smaller for a tip action rod because most of the moving mass is in the tip, and larger for a butt action rod because the moving mass increases as the lower portions of the rod shaft become involved. Here it is calculated using known tapers, but it is measurable by means of a simple test on actual rods. There is an adjustment that may be required in order to compare rods under similar conditions because rod length and rod stiffness influence the above parameters significantly. For example, long rods are slower and have more mass in motion due to their construction and it is thus necessary to adjust such data to create a virtual rod of a given length and a given stiffness (line weight). It means you need to know the stiffness of the rod (for a small deflection), and this is easy to measure. The data for cane rods are subject to uncertainties since characteristics are estimated through calculations using their tapers as the input; I wish I could have measured them!

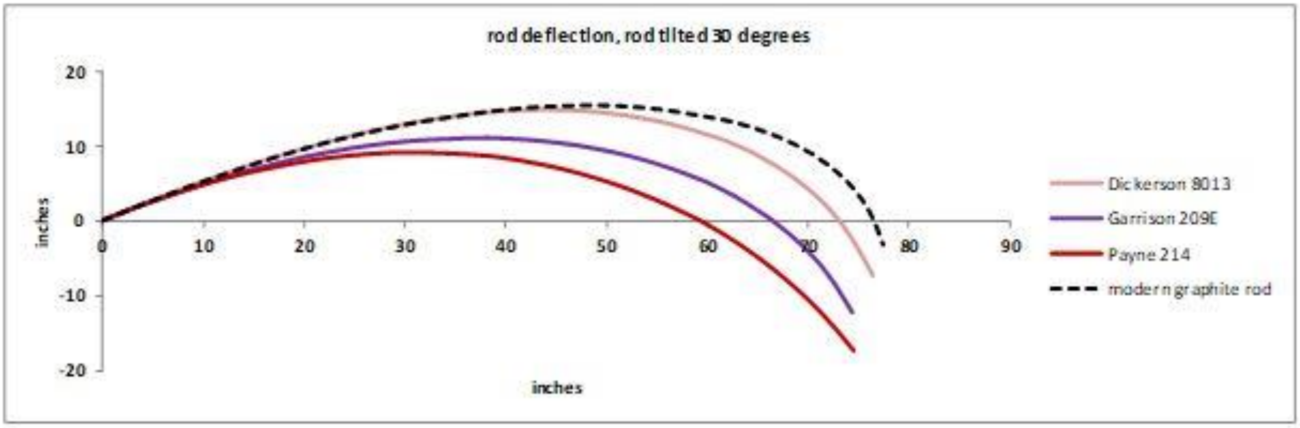
Below is a graph illustrating the trends in rod action obtained from the calculated dynamic characteristics of 19 cane rods. For all of them, correction has been made to create a virtual 8 foot rod with a stiffness corresponding to a number 5 line.



From left to right, we have a threesome of parabolic action rods, a bunch of progressive/semi-parabolic action rods (all the crosses represent six Garrison's rods, thus defining a semi-parabolic area), and a couple of "tip" action rods. On this graph you can see that a rod maker's designs could vary. To create a more conventional representation of action through rod deflection shape, I com-

(Continued on page 13)

pared the deflection of three rods, one in each category, for a load proportional to their stiffness to keep the comparison on a sound basis. I added a modern graphite rod to illustrate what the extreme range of tip action looks like (the origin of the graphic corresponds to the butt):



The comparison is less caricatured than the illustrations that we can see in books, but the trends are visible. The spectrum could cover a range of butt action (Payne parabolic), butt mid-action (Garrison), tip mid-action (Dickerson), and tip action (modern graphite rod).

I would like to remind you what Edwin Powell wrote a long time ago: *"Muscular power furnished by the angler is applied by leverage to the rod, which converts most of this into spring power and power by momentum."…"A fly rod built to apply power by spring as exclusive as possible of momentum, must taper from fineness at the tip comparatively to heavy butt. A rod built to apply power by momentum, as far as it is consistent with fly casting, would be heavier at the upper part of the second joint and lower part of the tip than the above mentioned rod, but smaller at the butt."*

That quote speaks to me about rod characteristics, especially the last sentence. How could that be known without a deep knowledge of rod mechanics? I take my hat off to you forever, Mr. Powell. What this means is that the parabolic rods are on the momentum side of power transmission, and that tip action ones are on the spring side. Powering by spring is easy to understand, but it is not so obvious when speaking of momentum. Maybe an extreme comparison can help: it is as if the momentum in the rod wanted to be conserved (or to change sufficiently slowly). You move one end in one direction, then the other end moves in the opposite direction to compensate (momentum is a vector). You experience this phenomenon as you accelerate the rod, which must be done progressively otherwise the tip will create a tailing loop in the line. You also experience it as you decelerate the rod and the tip is kicked forward. People like Ritz and Young were likely attracted by this characteristic while others chose a different compromise between momentum and spring. Modern rods are mostly spring oriented.

Were the Parabolic rods commercially successful? Yes, if we consider that Pezon & Michel sold some 2500 Fario Club fly rods and maybe more. Unfortunately for cane rods, synthetics captured the market from the early '70s and the Parabolic era ended progressively thereafter. Parabolic rods started with a nice story, and even though the word Parabolic has been sometimes used improperly on the technical side, and because it refers to different things (action, taper or stress) which do not necessarily relate to each other (although they sometimes do) and to the corresponding action, the term had great success among anglers. No one uses the term "parabolic" to characterize or sell his rods today (but it is used for skis). This word nearly disappeared along with cane rods although it

(Continued on page 14)

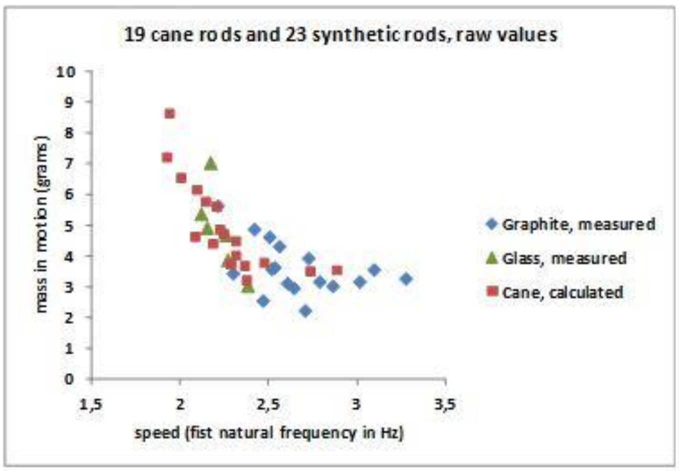
is still used by the successors of the renowned cane rod makers I quoted in this article.

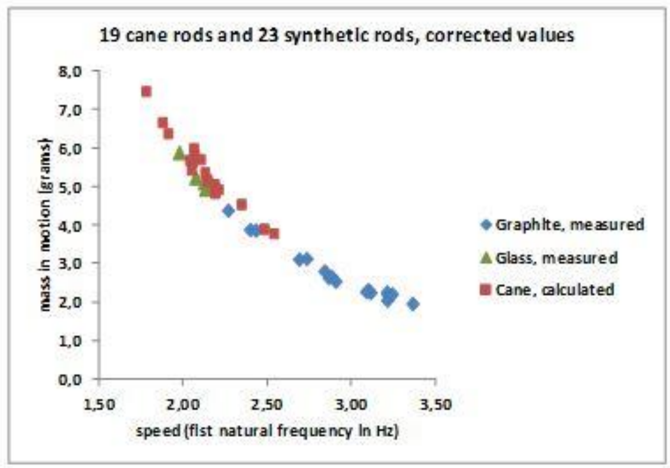
All beautiful stories have an end. I hope you now have more information which will allow you to have some perspective with regard to claims and names. Now I leave something for your thoughts: it is possible to characterize rods with a few measurements. One figure and you know where the action is in terms of bending shape. For a more complete view we should consider their speed (first natural frequency), and maybe their swing weight. In the end the confusion raised by parabolics may help clarifying an everlasting subject, rod action.

D Le Breton, 11 November 2017

Addendum

Have a look at the following:





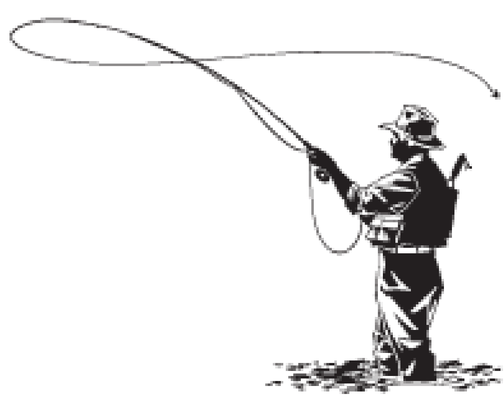
Interesting, I think. It is then possible to draw an "action scale" using the corrected values of the mass in motion. Since the corrected speed is related to the corrected mass in motion as shown in the illustration above, you do not need it to classify the rods; you can refer to its actual measured speed to complement the mass in motion (corrected). Then you could say "my rod is a 4.2 (bending) action class and its speed is 2.6 Hz (or any other scale, like cycles per minute = 60*frequency in Hertz, in that case 156 cpm)." To get a broader idea of action, it would be good to consider the swing weight of the rod which is an important part of the feel when casting. This is also measurable. Now we have three criteria to express the description of rod action, and this is too much for large rod building companies. Next time I shall explain how to find those figures for your rods.

Two Hand Tapers

By Wolfram Schott

"Over 10 years ago, I was fortunate enough to attend a rodmakers gathering in Germany. I am still savoring the memories of the innovative and beautiful rods I saw, and of the many talented people I met. One morning I found myself sitting next to Wolfram Schott, and I was able to tell him how much I appreciated his research on heat treating, and that I had revised my own practices as a result of his work. We have kept in contact over the years, exchanging comments on a variety of topics. A few weeks ago I heard from him and he asked me if I thought Americans would be interested in seeing a large collection of detailed two hand rod tapers. I advised him immediately that in my opinion, such a collection was badly needed. I further explained that unlike in Europe, for most of the 20th century Americans had little interest in spey or two hand fishing techniques, and that when we did get interested, the age of graphite was already upon us. Therefore, there are not large numbers of old bamboo rods available to us, and existing taper libraries have only a few scattered examples. Here is a remarkable collection of 95 tapers made all the better because they were put together by an experienced builder, and also some useful information on how to build them. For someone thinking about building a spey rod, here is a wonderful resource to help you get started." - Tom Smithwick

The collection Tom speaks of in the above quote is available on the *Power Fibers* site or on the CD version of the magazine. To get a copy of Wolfram's paper on two handed rods, visit the Power Fibers web site and go to the downloads page. To make it easier to get to the page, click here and scroll to the bottom of the page.



Superboo XV

Text and photos from Kathy Scott and David Van Burgel

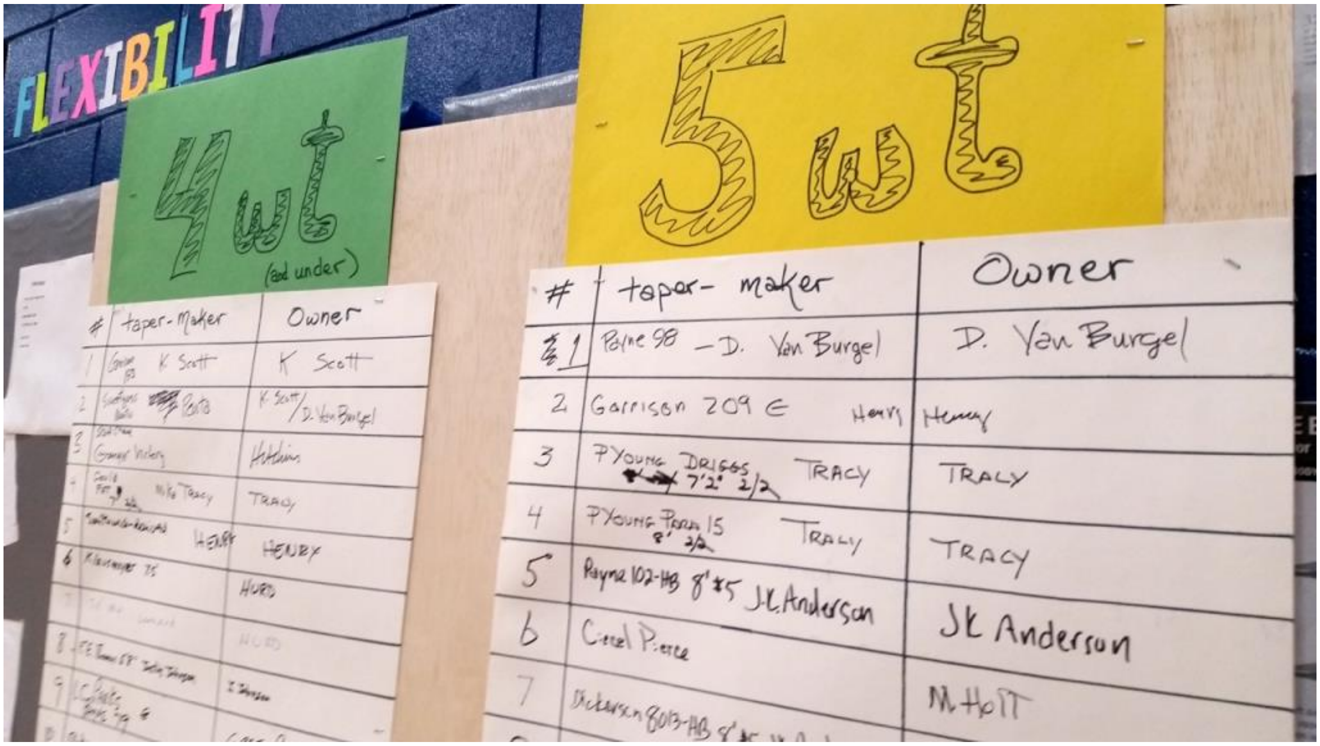
The community dinner is a staple of Maine culture, in a state where coming together is a way of life. Maine is also the historic home of some of the legends of split bamboo rodmaking: H.L. Leonard, F.E.Thomas, and Eustis Edwards, to name just a few. So when someone from Maine posts on the Internet, "I've cast a bamboo rod," and our ears hear "I've eaten a food," it's time to combine the two. The community gathering and the bamboo fly rod first met fifteen years ago, on the weekend of the Super Bowl. The combination is still going strong, a mid-winter tradition in a place where tradition is important, even if cane rods seemed almost forgotten for a time.

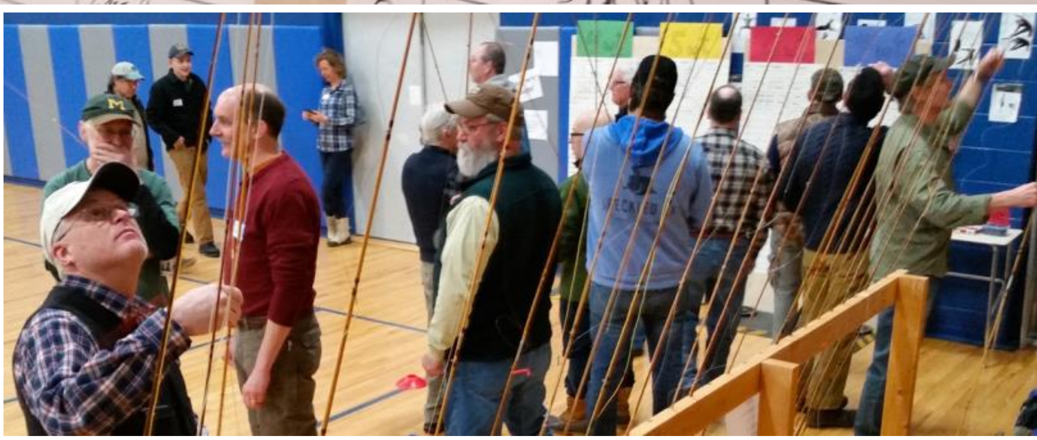
The information and education event is still free and open to the public. Rodmakers come, and some collectors, but the stars of the day are the split bamboo fly rods. As many as will fit crowd the racks, labeled on the cork grip with a color-coded lobster band (the familiar thick rubber band used on claws on the coast). These numbered bands correspond to posters of the same colors where participants note the taper, maker, and owner of each rod. The posters are like the menu. Interested in a 3-weight rod? Look for yellow bands on the grip. Looking for a certain rod and maker? Check the chart, then find the color and number of that band and search the racks. The goal is to create awareness. There is no single "bamboo rod" just as there is no single food; there are multitudes of them. So many more rods were volunteered by their owners that we're adding another long rack next year.

There are also, of course, obligatory t-shirts to commemorate the event. This year's featured a caster and the slogan, "Standing in the Gym Waving a Stick." Someone suggested a Game of Thrones styled, "Winter is Casting," or even "Grass That's Legal in All 50 States." The latter seemed a bit much for a school setting, and kids still host the event. The middle school Robotics Club offers up the gym, bypassing the out-of-house rental, in return for the proceeds from the t-shirts, which completely fund the group and all its entry fees for the next school year.

The heart of Maine in winter. Despite the snow and cold, or maybe because of them, 128 people signed the guest book this year, bringing with them bagels and cookies and coffee and even a birthday cake this time. The rods may be the stars, but they certainly aren't the whole draw. There's something about getting together, about sharing what we have alike instead of dwelling on differences, that attracts not just Mainers, but folks from states near and far. SuperBoo, a community dinner of split bamboo fly rods.

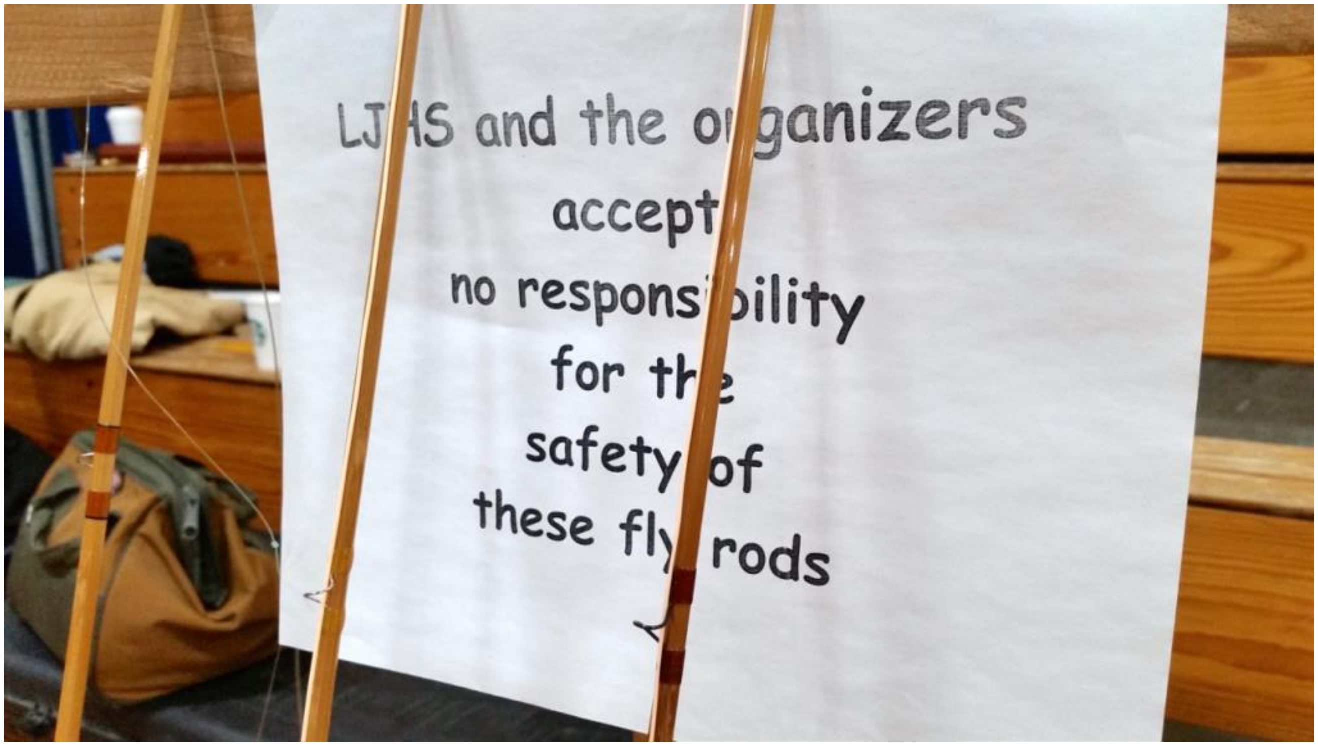

Community
Scholarship


FLEXIBILITY
4wt
(and under)
taper-maker
Owner
5wt
taper- maker
Owner
1 Payne 98 - D. Van Burgel
D. Van Burgel
2 Garrison 209 E Henry
Henry
3 P Young Driggs 7'2" 2/2 TRACY
TRACY
4 P Young Para 15 8' 2/2 TRACY
TRACY
5 Payne 102-HB 8' #5 J.K. Anderson
JK Anderson
6 Cecil Pierce
7
M. Holt




Community
Scholarship
Sportsmanship


Wes Jordan
Jim Payne
Ed Payne
Pritchard
Sewell Dunton
Southbend
Gene Edwards
Fred Thomas
Leon Thomas
Thomas Chubb
Dickerson
Devine
Frost
Granger
Orvis
Happy 70th Birthday
Jeff!



Taper Listings

4 wt rods

Garrison 193 taper -	Kathy Scott maker
Mantra Penta -	Sweetgrass
Granger Victory -	Scott Chase
Ray Gould Pet 7 -	Mike Tracy
Smithwick derived -	Henry Mitchell
Klausmeyer 7'6" -	Dave Klausmeyer
38 H -	H. L. Leonard
F. E. Thomas 6'*' -	Justin Johnson
Payne 79 -	L. C. Parks
Dickerson 7012 HB -	Joel Anderson
Whittle 6'6" -	Tom Whittle
Whittle 5' 10" -	Tom Whittle
PHY Perfectionist -	Justin Johnson
F. E. Thomas 7' 9" -	FE Thomas
8' Rapid River -	Joel Anderson
Garrison 201E -	John Devin
Garrison 209E -	Joel Anderson
7' #3 Morgan HB -	Joel Anderson
6'6" -	Dick Green
6'6" -	Jake Castonia

5 wt rods

Payne 98 taper -	David Van Burgel maker
Garrison 209E -	Henry Mitchell
Paul Young Driggs -	Mike Tracy
Paul Young Para15 -	Mike Tracy
Payne 102 HB -	Joel Anderson
Cecil Pierce -	Cecil Pierce
Dickerson 8013HB -	Joel Anderson
Garrison 209E -	Scott Chase
Granger 8642 -	Goodwin Granger
Whittle 7' -	Tom Whittle
Dickerson 7613 -	Scott Chase
Dickerson 8013 -	Lyle Dickerson
Rogue 7'6" -	Headwaters
Payne 98 HB -	Joel Anderson
Orvis 7'6" -	Ron Rothenburger

6 wt rods

Battenkill taper -	Orvis maker
Dickerson 8014 -	Scott Chase
8' -	F E Thomas
Dickerson 8014 -	Scott Chase
Fulk/Pezon/Tracy -	Mike Tracy
856 -	Bob Summers

7 wt and up

Garrison 215 taper -	David Van Burgel maker
Dickerson 8014G3 -	Kathy Scott
Dickerson 8014G2-	David Van Burgel and Kathy Scott
Lee Wulff design -	Farlows in Scotland
Gould/Tracy 8' -	Mike Tracy
Whittle 7' -	Tom Whittle
Dickerson 8014G3-	John Devin

Making a Poplar Bark Grip

Text and Photos by Dave Beerbower

In rodmaking, unless you design your own tapers, there are few opportunities to individualize your rod apart from thread color or reel seat wood choices. The grip has been made of cork for generations and purists would argue that this should not be changed. While making a set of rods for my daughter and myself, it occurred to me that I wanted these to be a matched set and to be visually different from others rods I had made. While staying in the Blue Ridge Mountains of North Carolina, I noticed people are using the bark from the Eastern Poplar as architectural shingles on vertical surfaces. The bump-out on this home has the bark shingles.

At one of the numerous craft fairs in the area, I saw a furniture maker who had partially planed the top of the bark surface and used this as a panel insert for his cabinet doors. The "grain" under the bark was extremely variegated and caught my eye. I talked to the vendor and he gave me some of his scrap pieces to play with and my thought was that this should make a beautiful grip.

Finding the right pieces of bark

This may be more difficult than you think. There are several building material suppliers in the southeast that carry these shingles, but I have not seen them in the Midwest or west. I was fortunate enough to have a local company in North Carolina that actually harvests and cuts the bark panels to size. This produced an enormous pile of small scraps that they let me pick through to get the pieces I needed. You should be looking for pieces with a thick outer bark with large enough flat areas for grips and/ or reel seats. See below.

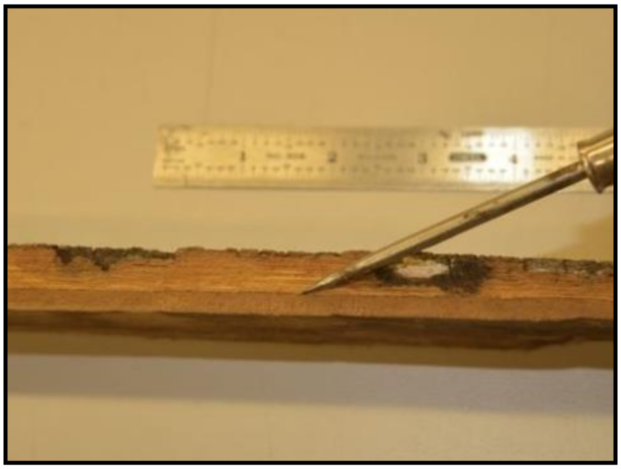
Cut the strips and squares

Take the various sized pieces and cut them into 1.25" strips for grips or 1" strips for reel seats. Then pick the best flat areas and cut the appropriate size squares for the strips. You should be looking for the flattest, thickest outer bark sections for your use. Sadly, there is quite a bit of waste to get enough squares for what you need.

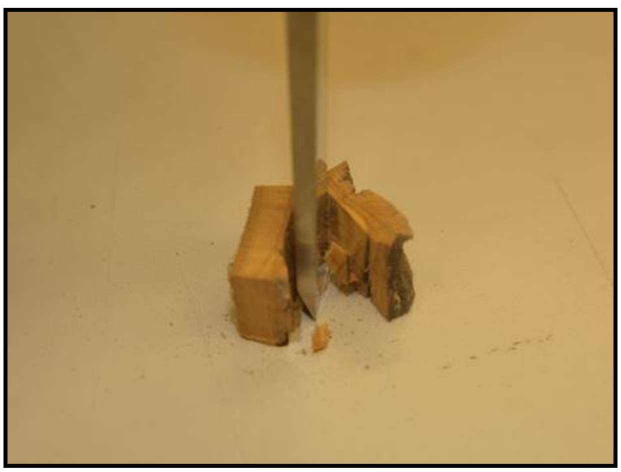
(Continued on page 25)

Split the outer bark from the inner bark

The inner bark does not have the variegated grain and it does not look good when turned and finished. Ask me how I know this! I use a sharp chisel to cut through the interface. Discard the inner bark. The picture below shows the bark interface.



The picture below shows the chisel position after the cut.



Sand and drill the squares

To facilitate the gluing process, the squares you just created must now be sanded on a belt sander. The objective here is twofold. You want to get both sides of the square as smooth as possible and you want both faces to be as parallel as possible. When you are done, the squares will be about ¼” thick and should look

like the ones in the picture below. They are now ready to be drilled. I use a 0.375 hole for both the grips and reel seats. A word of caution here, easy does it with the drill press. The squares are hard to hold and are prone to breakage if you apply too much pressure. See the picture below for the completed hole. Carefully clean the slivers from the hole edges to prepare for glue up.

Glue and clamp on a mandrel

It pays to dry fit the pieces on your mandrel to make sure you have enough squares for the piece you are making. They do compress and you should have 2-3 extra squares ready just in case. I do not recommend trying to make a

(Continued on page 26)

grip/reel seat combination in one piece. You can use any wood glue that you like, but I use TiteBond III. Apply the glue as you would for cork and start stacking the squares, alternating the direction of the grain 90 degrees for each square. Apply moderate pressure to the finished stack and let dry overnight.

Round the stack

Before trying to turn the stack on a lathe, I find it helpful to smooth the corners off the stack first. I start this process on the bandsaw and finish on the belt sander. It doesn't have to be perfect, just start the shape.

Turn the piece on a lathe

You can leave the piece on your mandrel and chuck it up in your lathe. Preshape with your cutters and when you get close to the shape you want, switch over to sanding. Abranet does very well for this step. It is amazing how easily this material machines. Remember, this is a natural material. There may be times when the piece will have a small void. I think this adds to the personality of the piece, but if that gives you heartburn, then this may not be the material of choice for you.

Finish

Apply your finish of choice. I used TruOil on the grip and reel seat in the pictures below. As an option, you may want to impregnate the reel seat for added protection.

Green Highlander Flyfishing Company

Home of Bret's Bamboo Ovens

These are the best bamboo ovens you can buy for heat-setting and heat-treating.

Visit our website at: www.greenhighlanderflyfishing.com

- or -

highlander07@live.com

Fly Rod Bags

Click Here

We're offering rod bags for all you bamboo rodmakers out there. Our bags are produced on custom order basis. The bags have the appropriate number of pockets based on the number of sections your rod has. The open edge of the the bag is double-rolled and zigzagged on the edge so that there will be less chance of your section snagging the hem of the bag. We also add a pull loop on all of our rod bags to ease extraction from your rod tube. If we don't list a particular configuration that you need, drop us a note and we'll do our best to help you out.

Postage is included with the bags. Pricing is $15/bag with custom bags priced at $18/bag or at our discretion based on configuration. Use the buttons below to start shopping for your bags.

1 Piece Bags | 2 Piece Bags | 3 Piece Bags

Scrap Pile Rod

Text and photos by Tony Spezio

What do you do with all those scrap pieces in your scrap box? I make a rod.

My scrap pile kept building up and one day I decided to do something with them.

I scarfed a bunch of scrap into strips cutting out all the nodes. I alternated the scarfs with flamed and un-flamed strips giving contrast to the scarf.

Thanks to Al Medved for showing me the scarf setup. Some of the strips were only 6 inches long. I used a corn cob for the seat. The rattan on the grip was scrap given to me by a friend that does cane chair seats. I got the idea for the grip from a post by Phil Kosmas; I want to thank him for the help on making this basket weave.

After gluing the strips together as a normal rod, the guides are put on adjacent flats in a spiral. I twisted it one flat per guide to align the guides. The tips twist easily by hand, the butt does not so I use two adjustable wrenches for leverage. See *Power Fibers* issue 45 Oct. 2011 on my twisting article.

The taper I made is based on the Garrison 209. The rod is a sweet casting rod. I had it at the SRG Gathering and a lot of attendees cast it, with all good comments. It is not the first scarfed twisted rod I have made, this is the first from scrap.

You have to use a glue that will take high temperatures or the sections will De-laminate. I use Epon and have not had any problems.

Photo 1 shows my scrap bin.

(Continued on page 29)

2

Photo 2 shows flaming the pieces.
Photo 3 shows a flamed piece. I flame the

3

scrap with the nodes on then cut them out before scarfing.

4

5

Photo 4 shows cutting the scarf.

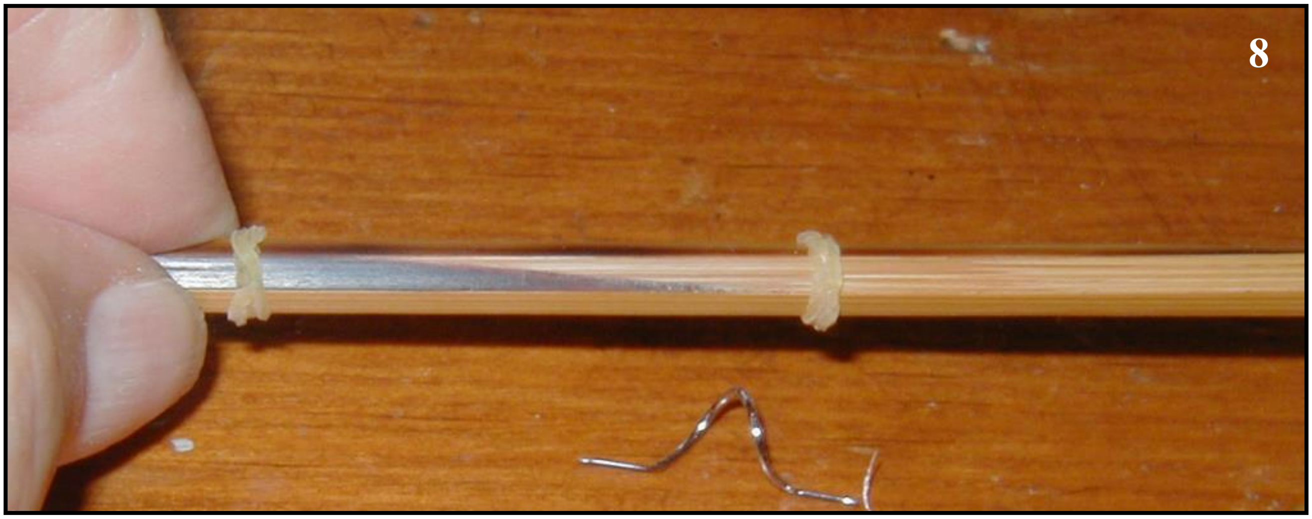
6

Photo 5 shows a scarf cut.

7

Photo 6 shows gluing the scarf.
Photo 7 shows a glued scarf.

(Continued on page 30)

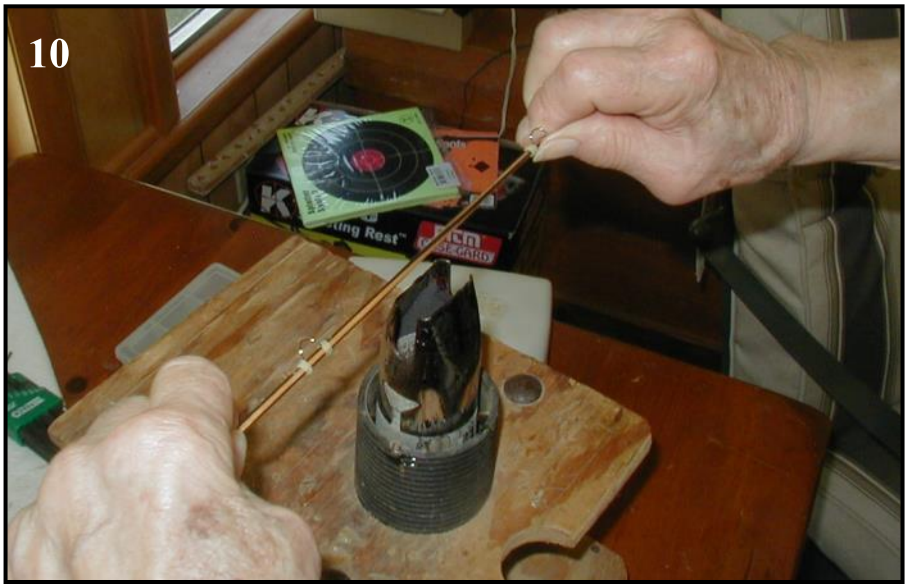


(Continued on page 31)

Photo 8 shows a scarf in a blank.

Photo 9 Guides on ad-
jacent flats around the
blank.

Photos 10, 11, 12 and 13 are
twisting, note the wrenches.



10

11

12

(Continued on page 32)


Butt Twist


Stripper Guide

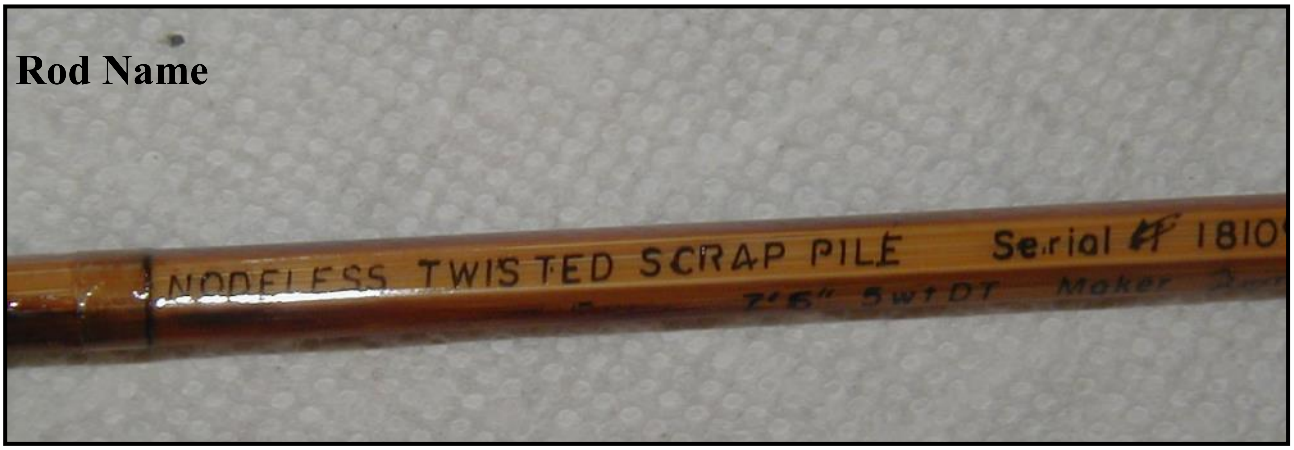

Guides


Grip

(Continued on page 33)

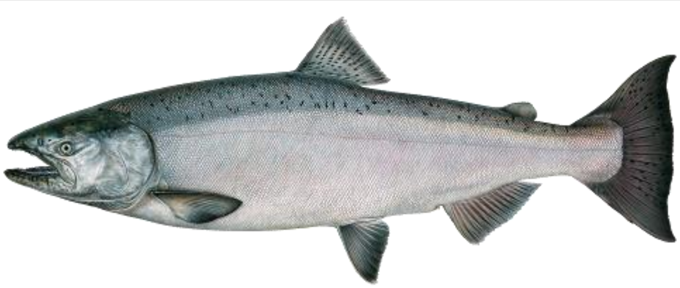
The rest of the photos are of the finished rod.

Corn Cob Reel Seat



Rod Name

Complete Rod



Quinchat Rods LLC

machines for makers

Bertram Multi-Track Bevellers
Bevel, taper & scallop plus mortise reel seats.
Hex, Quad & Penta
Over 140 in use world-wide

The new Programmable Cane Mill
Finished strips in 2 passes.
Touch screen control.
Click to watch the [video]

Wrap Finishing Station

Bertram Binders
2-String & 4-String - Nearly 100 sold. Click to watch the [video].

Laser Guided Rod Wrapper

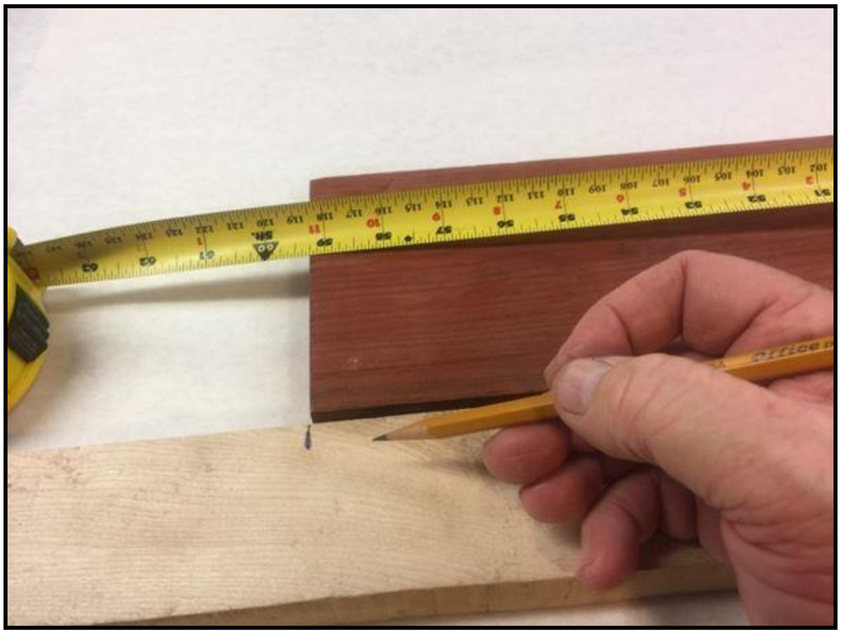
For details and more videos go to www.quinchat.webs.com
Visit us on Facebook
Available thru Peter Jones
pjones8944@yahoo.com
989 297 0131

Making a Wooden Rod Tube

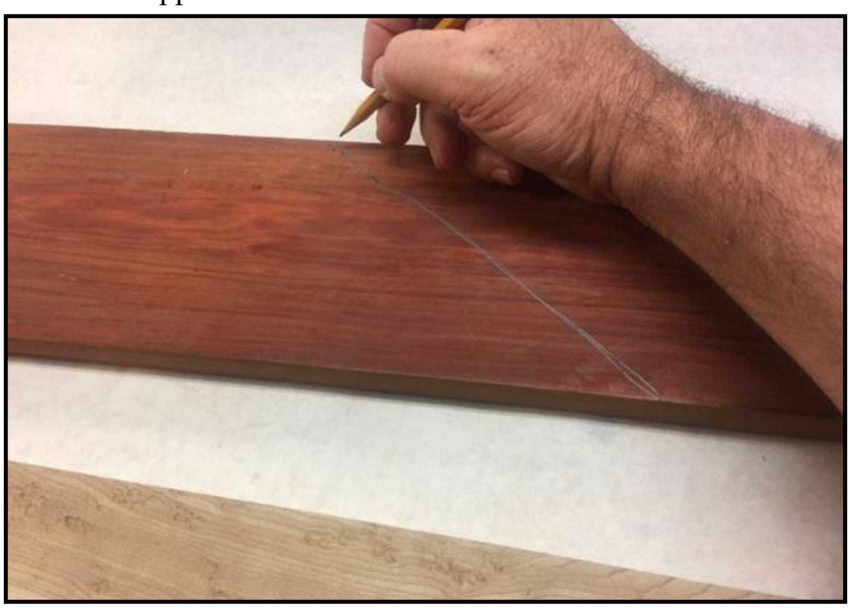
Text and photos by Chris Sparkman

I've been making wooden rod tubes to go along with my custom built rods for the past ten years. In that time, my process has evolved to the point that making a case is now a simple, straight-forward endeavor. Here are my steps:

Select the wood. A thickness of 3/4" to 1" is ideal. Make sure the board is long enough for the rod it's being made for, and decide whether a contrasting wood for corner strips will be used as well. I find that the raw lumber needs to be at least 3 1/2" wide to make a tube.



Details matter. If you want the grain of the wood to line up, start by making some reference lines across the board before it is ripped.



(Continued on page 36)

Rip the board into three strips. I find that in general, you need strips approximately 1" wide, so I rip with a fence setting of about 1 1/8". If you're incorporating contrasting strips at the corners, you need one or two strips from 3" to 4" wide to begin.

At this point, I like to run the strips through the planer or drum sander on the cut sides to smooth out the marks from the table saw. At the same time, this is how I get the width down to my desired measurement.

Now arrange the three strips on your bench in their original order, using the marks you made earlier to make sure the grain of the wood is lined up. Starting at the top, number the strips clearly with a pencil starting at the top (1, 2, 3).

(Continued on page 37)

Keeping the order, flip the entire "board" over and continue the numbering (4, 5, 6).

Each strip now has two numbers written on it. That's because in the this step, each strip will be ripped in half so that we will have six strips altogether. I do this step by marking a center line and ripping on a bandsaw, but this can also be done on the table saw, providing your wood is thick enough so that your strips will be ¼" after final planing/sanding.

(Continued on page 38)

Run the strips through a planer or drum sander, making sure not to lose the number you've written. If you must plane the surface where the number is written, be sure to re-write the number as soon as it comes through, and in the same orientation as previously written. Now you should have six strips, all evenly planed to 1/4" thickness.

Set the table saw to cut a bevel. To know the setting, take 180 and divide by the number of strips. 180°/6 = 30°. When using contrasting corner strips, then we actually have 12 sides altogether, so we have 180°/8 = 15°. (These instructions are easily adapted to make octagonal cases, so your setting would be calculated the same way to get 180°/8 = 22.5°) Set the fence so that you get a sharp bevel without decreasing the width of the strip. To get the best bevel possible, I use three feather boards to keep the strips tightly against the fence and firmly pressed down onto the table between the blade and the fence. Run each strip through twice, once on each side, making sure to keep the written number up and visible on each pass.

(Continued on page 39)

End view of a beveled strip.

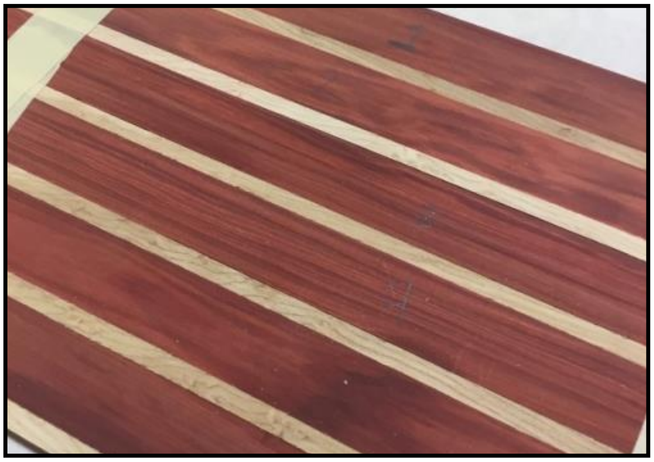
If you are using corner strips, set the fence to cut a thin strip, using the same angle for the bevel. I like to cut strips about 5/16 of an inch wide. Again, I use featherboards to keep things safe and secure.

End view of a beveled corner strip.

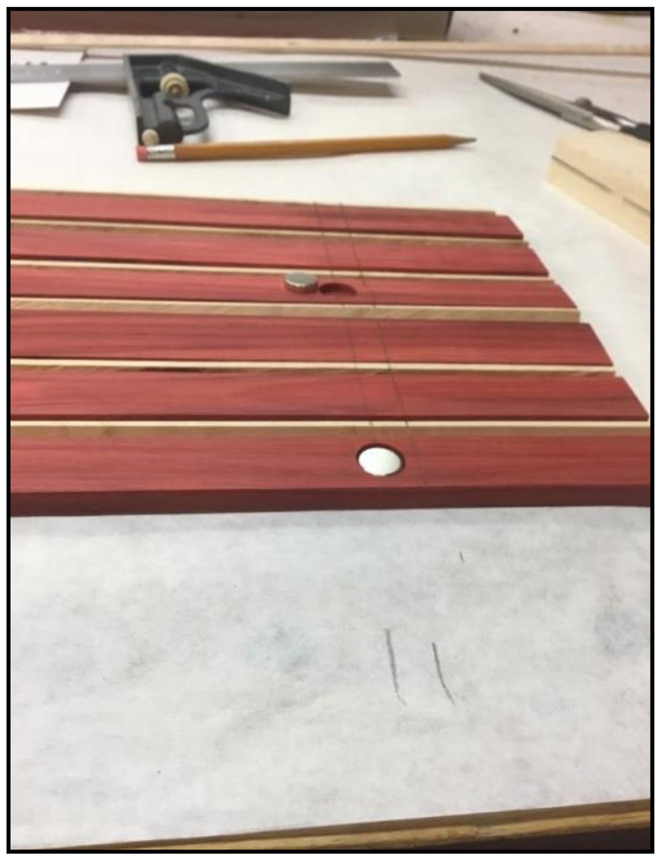
Lay the strips, numbers up, on a bench and arrange them in the order that you numbered them. If you're using corner strips, place them between the numbered strips and check for fit. I use a block plane to smooth out any rough saw marks.

(Continued on page 40)

Line them all up carefully and lay masking tape across them in several places to keep them together.

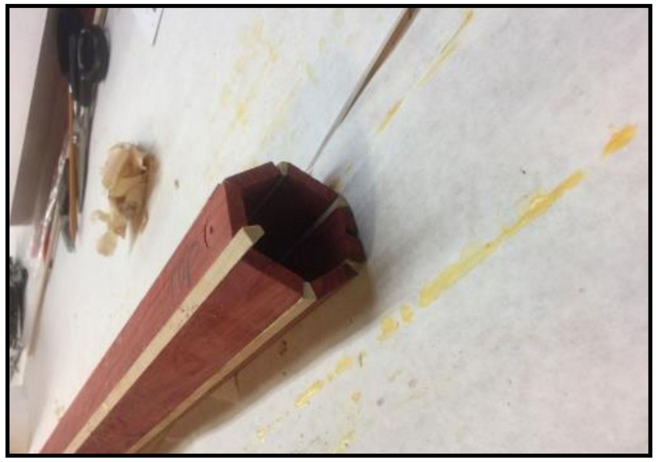


Now flip the whole sheet over. Here's where I drill holes for the magnets that will hold the cap in place. Choose a point close to the end and drill two holes, about an eighth of an inch deep that will accommodate a half-inch wide magnet. (I get these at any hardware store.) Drill one strip, skip two strips (or three if making an octagonal tube), then drill the second. This will ensure that the magnets are opposite from each other when rolled into a tube. Notice the pencil line I drew to make sure the holes were aligned.

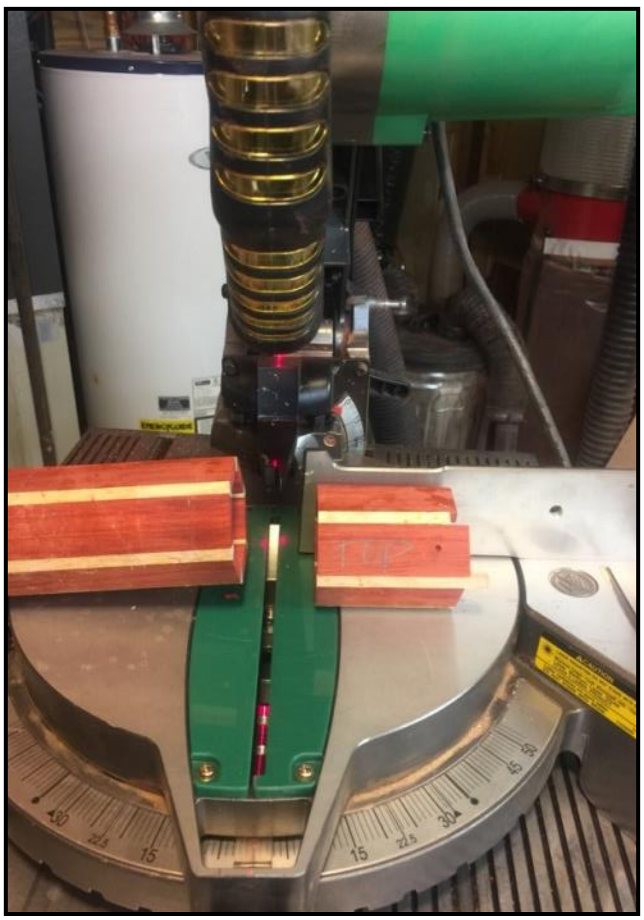


(Continued on page 41)

Fill the grooves between the bevels with wood glue (not too much but enough…find the balance). Don't forget to cover one of the edge bevels with glue as well. I use TiteBond II for this, but any reliable wood glue will work fine. Roll the sheet into a tube and secure with tape. Bind the entire tube tightly with nylon cord, similarly to the way a bamboo rod is bound when gluing the strips. Allow time for the glue to set up completely. I usually leave it overnight.



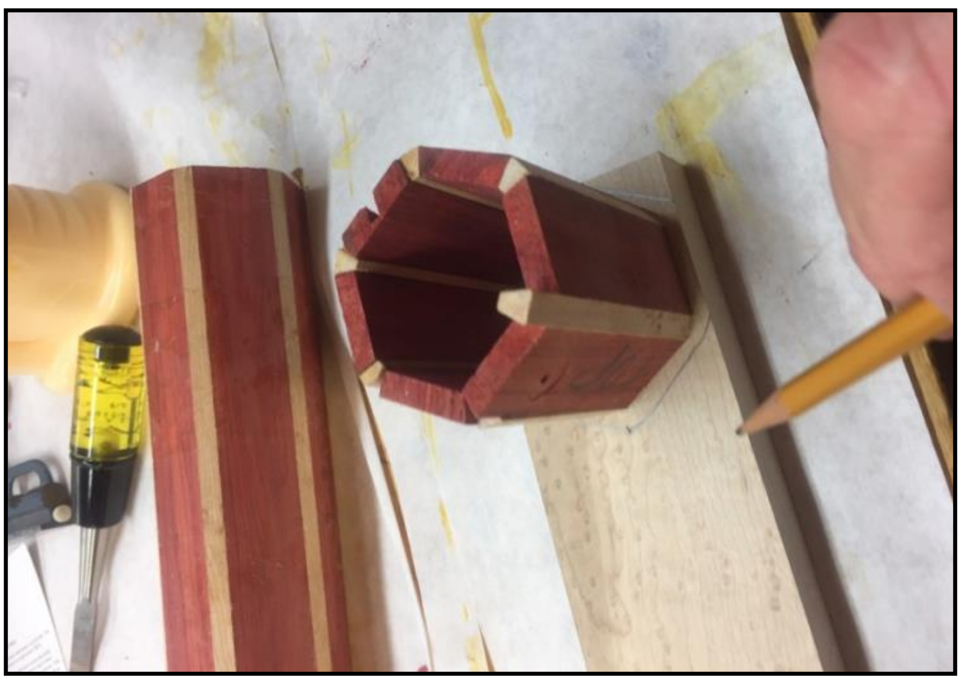
Cut the tube, first at the end where you drilled the holes. I like to leave about 3/8 of an inch between the holes and the end. Cut the other end so that the tube will be 2 inches longer than the longest section of your rod.



(Continued on page 42)

I like to true each end of the tube using a disc sander and the cross-cut guide to keep it square.

Using one of the cut-off ends, trace the outside onto a suitable piece of wood that you've selected for the cap. I like to draw it with an extra quarter-inch on all sides. Draw another for the bottom.

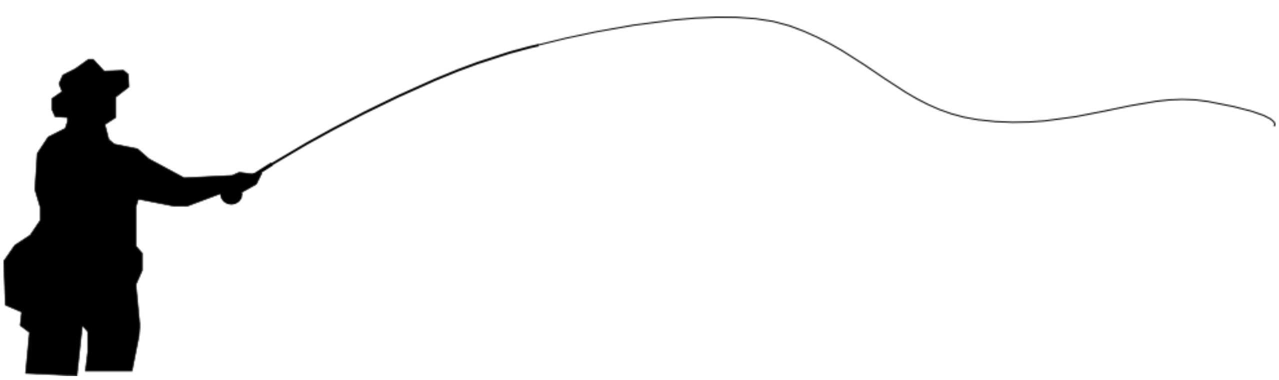


(Continued on page 43)

Use the inside of the cut-off to trace a smaller shape that will be used for the inside of the cap.

Cut them out on the band saw.

(Continued on page 44)



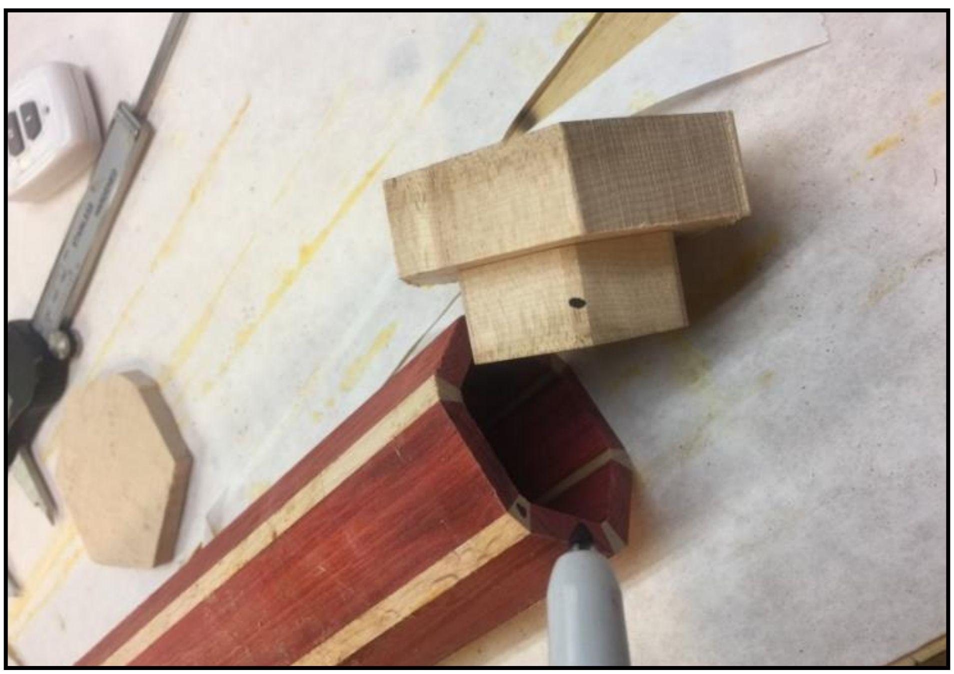
I use the disc sander to carefully sand away the sides of the smallest cutout until it just fits inside the tube on the end where the magnet holes were drilled.

Glue the small insert that you just made to the center of the larger cutout that you've chosen for the cap.

(Continued on page 45)

Glue the remaining cutout to the bottom of the tube.

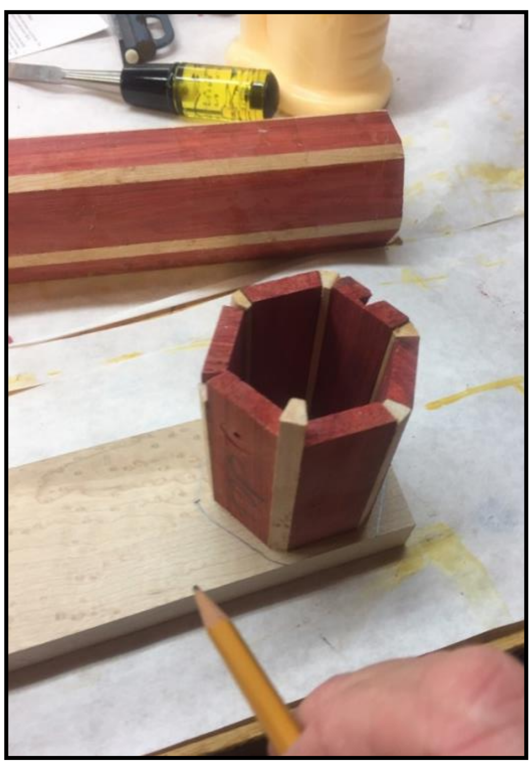
After the glue has set and dried, it's time to install the magnets. Find the position where the cap fits the best and make a couple of witness marks. I use a Sharpie for this.



(Continued on page 46)

Drill the sides of the insert that correspond to the holes that are already inside the top of the tube. Again, just deep enough for the magnet.

Put two magnets together and put a dot on the outsides of the matched pair. This is so that when you glue them in, with the dot in the glue, the magnets will attract rather than oppose each other.



(Continued on page 47)

Mix some 5-minute epoxy and install the first pair.

After the magnets have been installed and the cap has been checked for a secure fit, it's time for the final fitting and sanding. I use the disc sander to sand the cap and the bottom flush with the sides. I then sand everything with an orbital sander using 220-grit sand paper. At this point, if you have a lathe, you can cut a rounded profile on the cap, but this is only for aesthetics. A squared-off cap looks just fine. Four to six coats of Tru-Oil or some other finish, lightly sanded between coats, and you have a finished rod tube.

Web Hosting

We at Power Fibers have decided to offer web site hosting services for anyone who wants to set up a web site at an affordable price. We're offering space for you to upload your site along with a secure login to maintain the site. If you're interested in more information, send a message to power.fibers@bamboorodmaking.com.

PowerFibers Online Magazine
8412 North Maple Court
Zeeland MI 49464
Phone: 616-772-5043
616-970-1601
Email: power.fibers@bamboorodmaking.com

PowerFibers

DEDICATED TO BAMBOO RODMAKING

We're on the Web!
www.powerfibers.com

Power Fibers is an online magazine that is dedicated to all things related to bamboo rodmaking and fishing. We welcome submissions of material from you, the readers. Submissions can be for rodmaking techniques, maker interviews, product reviews, book reviews, tapers, bamboo fishing stories or fly patterns and how to fish them. Please visit our web site and go to the "Write for Us" link for more information about submitting articles for the magazine.