

Why fish a bamboo fly rod?

When people see me fishing with one of my split-bamboo fly rods, they often stop to chat and inevitably, the topic of how bamboo rods differ from graphite rods comes up. Unfortunately, there are no simple answers to this question - graphite rods are not better than bamboo rods, or vice-versa, they are, well, just very different! Let's begin with a brief description of how each type of rod blank is made. Graphite fly rod blanks are manufactured by rod companies. The process involves wrapping graphite/resin impregnated sheet (boron fibres may be incorporated for added power and strength) around a mandrel specifically designed to the length and taper of the fly rod. Additional steps of heating and surface finishing result in thin, hollow graphite blanks of relatively consistent construction. In contrast, bamboo is a natural material – actually, it is a type of grass. Bamboo poles (or culms) from the Guangdong Province in China are preferred by rod-makers because of their superior quality (this bamboo is also known as, Tonkin cane). The special features of Tonkin cane include a dense layer of power fibres running lengthwise under the surface, which give the bamboo its exceptional strength (bamboo is sometimes referred to as “green steel”). The basics of bamboo rod construction involve splitting the round bamboo culm into strips, which are then precisely shaped by hand-planing or milling to form the individual splines that make up the rod. Specialized shaping techniques can also involve hollowing or fluting the inner “pith” material of the bamboo splines. Because the bamboo splines can be individually shaped in systematic ways, bamboo rods of different lengths, line weights and tapers with varying power to weight ratios can be produced.

Graphite and bamboo fly rods display markedly different casting actions, which results from differences in the physical properties of the two materials and the methods of rod construction. Graphite rod makers emphasize terms such as “modulus of elasticity” (basically, a measurement of the tendency of a material to bend when a force is applied to it) as well as rod “speed” and “power”. These terms sound impressive when describing a rod, but differences in individual casting styles, variable environmental conditions encountered during fly fishing and a lack of standardization among rod manufacturers make them difficult to quantify, although they are definitely useful marketing tools! The ultimate goal of graphite fly rod manufacturers seems to be the desire to make a more rigid, powerful rod that can cast farther. However, in striving for these ideals, other desirable features of a fine rod – grace and finesse – have been sacrificed. There is no disputing that in certain situations, the ability to cast a long line is useful. However, trout (and other target species) are most often fished within approximately 30 feet, so why the need to routinely cast so much farther than this? While graphite fly rods are certainly capable of delivering a long line, their rigidity contributes to a lack of sensitivity, which is a definite impediment to hooking and delicately playing a fish. Further, their lightness requires more input energy to drive the weight of the line during casting (especially, in a breeze) and this can be tiring.

The casting properties of rigid, modern graphite fly rods are distinctly different from those of a finely, hand-crafted bamboo fly rod. Bamboo's unique cellular makeup endows it with several desirable characteristics including strength and internal resistance to resonance, a self-

dampening quality that can absorb vibrations caused by extension of the fly line during casting. It is this “damping” feature which reduces the oscillation of a bamboo rod after a cast is made. This property is important in fly-casting because it permits the fly to be presented with a delicacy of drift akin to that of the natural insect – it is also definitely beneficial for hooking and playing a fish. The cane-rod builder can achieve various types of rod action by changing the way the bamboo splines are shaped in forming the external rod taper- from a faster action rod to one that is more progressive and full flex according to individual casting styles, preferences and requirements. More complex shaping can involve hollowing or fluting to generate an internal rod taper. Internal tapering is unique to bamboo rod making and improves performance by increasing the rod’s power to weight ratio. The cane-rod maker is thus presented with a combinatorial set of possible rod tapers such that rod design is limited only by his/her imagination! Cane rods are solid and therefore, slightly heavier than hollow graphite rods. At first glance, this feature might be considered undesirable, but actually, the opposite is true. Once in motion and fully-loaded with line, the fly fisher needs only to learn how to slow down his/her cast, expending less energy and letting the rod do the work. Casting with a cane rod is rhythmic and enjoyable and the benefits of rod motion are definitely noticeable in a breeze! In contrast, the much lighter graphite rod requires more energy to maintain rod momentum with a fully extended line. While cane rods excel in terms of accuracy and precision over the casting distances commonly encountered in actual fishing conditions, don’t venture to think that they cannot present a long line when required. The extremely strong, longitudinal power fibres permit deep flexing right into the butt section of the cane rod meaning that very long casts can be executed if the need arises. Don’t forget that tournament fly casting distance records have been set using split-bamboo fly rods! The strength of a bamboo fly rod also makes it quite resistant to failure from surface nicks. This contrasts with graphite rods, which can break or literally explode when heavily loaded, failure that usually occurs when the very thin-walled graphite tube is nicked or scratched.

There is no question that there are many fine graphite rods on the market today. They’re popularity stems from their lightness, compactness, availability in various actions, lengths and line weights, and their affordability. Bamboo fly rods host many unique and impressive features as well, and because they are hand-made, tend to be more expensive. Most people that now own and fish bamboo fly rods once fished graphite rods. However, it is unfortunate that many people that own and fish graphite fly rods have never cast (or even held) a hand-crafted split bamboo fly rod! Those that do immediately notice the difference in the feel and appearance of a bamboo fly rod and often this kindles a desire to own one. As I indicated near the beginning of this essay, “graphite rods are not better than bamboo rods, or vice-versa, they are, well, just very different!” However, it is these differences that ultimately convince serious fly fishers to own at least one bamboo fly rod!