

## Why use wood for a boat?

With all the modern materials available to make boat, why would you want to choose wood? There are several reasons. The first is that working with wood is well within the means of most people. It doesn't take a lot of time, the material is relatively easy to obtain and it is not too expensive. But even if you are not interested in building your own boat, wood still has some significant advantages. Done right, wood is an almost miraculous. It is very strong, lightweight and does not fatigue.

Most people are used to the ability of taking a stick of wood, bending it over their knee and breaking it in to pieces quite easily. How can it be so easy to break, yet still strong? You need to consider how little that stick weighs, if you were to get a piece of plastic, fiberglass, Kevlar, carbon fiber or even steel, of the same weight, what would you be able to do with it if you bent it over your knee. Most would bend very easily, some would break with very little effort.

If you just compare strength vs weight, wood is stronger than steel, most fiberglass and aluminum. If you compare stiffness vs weight, wood is stiffer pound-for-pound than Kevlar, all fiberglass, and steel. By these measures wood still doesn't measure up to carbon fiber and other exotic materials like titanium, but if you look at structural efficiency which relates stiffness to density it turns out that pound-for-pound wood is the most efficient material for producing a given structure.

The down side of wood is it is soft, and it rots. However, there is a simple solution to both these problems. A simple layer of fiberglass and epoxy sheathing the wood will provide protection from abrasion as well as moisture. This composite construction is one of the best ways to build a boat that is light weight, strong and durable. And it is something most people can do in their basement or garage with a minimum of tools. All it takes is a little time.

## Why "Stitch-and-Glue"?

Because stitch-and-glue boat construction uses a relatively small number of wood pieces a boat can be build in relatively short order. Because plywood is inherently quite strong for its weight the resulting boat is quite tough and lightweight with a minimum of additional reinforcement.

While the technique quickly produces a boat, that does not imply that it is necessarily easier than strip-building. The shape of a stitch-and-glue boat is largely determined by the shapes of the plywood panels. If the panels are not accurately cut, the resulting boat may be quite badly distorted.

This makes stitch and glue designs very well suited for kits. With a CNC cut kit, the accuracy of the panel shapes is assured. Building from plans introduces the possibility for more errors. While this should not scare you away from building from plans, you need to understand the need for care and accuracy as you layout the panels.

[See our range of Sassafra and Chesapeake kayaks. New designs about to be added to our range.](#)

## Why "Strip-Built"?

One of the biggest benefits to building a small boat with narrow strips is how accessible it is. While it looks intimidating, taking a bundle of small strips and wrapping them around a set of forms really is a matter of patience and not one of specialized skills. The tool requirement is minimal and the technique is very tolerant of mistakes. If you fail to make perfect joints between strips, the epoxy and fiberglass will fill them in and seal the mistakes.

If you are looking for a way to mass-produce wooden boats, strip-building is probably not the best choice. It is a time consuming method. More traditional methods of boat building tend to be quicker when performed by experience craftsmen, but that speed and ability to build a usable boat is largely dependent on the skill of the builder. The strength and water-tight integrity of the finished traditionally-built vessel is a result of the ability of the builder to make tight and sound joints. This takes skill and practice.

With strip-building, there is really only one woodworking skill that you are required to master; this is the ability to taper the end of one strip to fit between two existing strips. You must perform this step many times, but it is not hard and if you don't do it perfectly, it will be fixed later.

Strip-building allows you to reproduce virtually any boat shape imaginable, with a minimum of skill.

Hobby and Marine will soon add a kayak with strip build deck, the so called hybrid. Full strip built boat plans are not far away though. Strip building a boat is great. But strip-buidling takes much more time and is more expensive if you do not take short cuts with the wood you have chosen.

## What boat should I choose?

Not the easiest question to answer. So much depends on you. Your requirements, your abilities (to paddle and to build) and your budget.

Are you ready to head for the open sea, then our Chesapeake/Sea Wolf Tourer represent a large volume, stable and easy to build. Or do you want a sleek fast, performance orientated West River 180, but which is more challenging to build. The Merganser and other kayaks we will introduce, provide further solutions.

Or do you wish to go for a quite gentle canoe on a river, lake or lagoon. Maybe a favorite fishing spot. The our Sassafras canoes could be the ideal answer.

Even our fast performance Sonatina and Chickadee are within the reach of a someone with reasonable wood-working experience. These boats just go to show how one can build a boat that is both beautiful to behold, and yet right up to date technologically speaking.

*This article (except the red) from one of the master designers and plan suppliers of strip built boats, Nick shade, of Guillemot Kayaks. See [www.guillemot-kayaks.com](http://www.guillemot-kayaks.com)*