

Race Boats: Whilst technically any K1 (single kayak) you race could be considered a race boat; we are going to concentrate on the normal fleet of *Racing* boats you'll experience.

The fastest boat is the one you can paddle and work hard in, **NOT** the fastest hull shape or the latest design. If you are not stable, you cannot work hard! If you keep falling out, you're not faster, if you can't turn then you are not faster. You do not gain an advantage by being in a "*faster*" boat if you can't paddle it.

You need to be able to sit in your K1 and feel confident (not scared). You need to be able to paddle backwards, turn left and right, cope with waves and current. A lot of kayak manufacturers rate their boats with a stability factor, this is not always a useful guide as each boat is person specific and has factors like paddler age, height and water conditions it's used in. It helps sell the myth that the fastest boats are the most unstable. Seat height has a bigger effect on stability than some boat designs (as it raises your COG, centre of gravity).

So, we are assuming that you have progressed out of stable K1s into your first "true" racing boat.

K1 Rapier/Lancer: These are a family of boats that still have widest points (51cm). The Rapier is generally for the lighter paddler and the Lancer for the heavier paddler (they are two different shape boats but act in a similar way).

These are still race boats but are more stable and forgiving, they tend to have a more rounded hull shape, so wobbles are gradual and more readily corrected.

These boats also have more volume in the bow (front of the boat) which makes the boats handle in certain ways.

Cornering: with the extra buoyancy in the front they tend not to turn as sharp as some later more modern designs.

Wash-hanging. Again, with the extra buoyancy in the front they tend not to "drop down" when going over a wave, they may seem harder to climb a wave and possibly more wayward in bumpy water or following groups. They still wash hang well and the likelihood is you'll be a smaller paddler, wash-hanging other smaller paddlers so the waves are not huge anyway. A great starter boat. There are a number of these in club ownership and chances are you'll hire/use one from your club as your first "Race" boat.

K2 Stiletto: The Stiletto K2 has similar properties to the above K1's. A more rounded and forgiving hull shape with more volume in the bow, however heavier paddlers (big men) may find that they don't quite have enough volume. A safe predictable K2.

K1 Cougar/Jaguar – Lynx/Sabre – Marsport – Nick Pink: These are still a very popular boat and still in manufacture today. These boats had a different concept to the above boats and had a more “U” shaped hull, they still had a widest point but had less volume in the front and “feel” livelier & more responsive, not only to steering and power/effort but also to wobbles. Like the Rapier/Lancer the Cougar is for the lighter paddler and the Jaguar for the heavier paddler, unlike the Rapier/Lancer they are the same shape boats. They are however more unstable than the Rapier/Lancer and tend to feel like they throw you out. This may be down to the boat not having a round hull, the tiny flat area at the bottom of the U shape transitions very easily to falling out!

Advantages: These boats corner very well, tighter turning than the above boats and they are excellent at wash hanging with the boat picking up the wave and with the nose “feeling” like it drops onto the wash. They are also good at climbing waves and keeping a good line or tracking along a wave (if the driver is capable of this). There are still lots of good examples around and are relatively cheap, new lightweight ones are still expensive.

Disadvantages: possibly quiet low volume for the heavier paddler.

K2 Regina: The Regina K2 has similar properties to the Cougar/Jaguar K1’s with a more “U” shaped hull with less volume in the bow, however heavier paddlers (big men) may find that they don’t quite have enough volume. A great K2 that is good at turning, following and climbing washes, and very good at sitting on washes too.

K1 Kobra – Double Dutch – Nick Pink: The last of the full width boats, this design is still probably one of the most unstable K1s around. It is also very narrow on the hips and some people struggle to fit into them. These boats were similar in look to a Cougar/Jaguar but had a more V shaped hull, they don’t even sit upright on their own on the water. They were very good at turning and accelerated very well and wash hung ok (with a tendency to follow the wash), but they really should only be considered for the very stable paddler.

K2 Kobra: The Kobra K2 has similar properties to the Kobra K1’s with a “V” shaped hull with less volume in the bow, however heavier paddlers (big men) may find that they don’t quite have enough volume and they are very tight in the front on the hips. A fast K2 that is very good at turning and accelerating off waves but not for the unstable paddlers.

New Shape K1s Nelos, Vadja, Elio & Kirton: The rules were changed meaning that boats didn’t have to have a minimum width. Whilst this made the boats very visually different and narrow looking, the actual hull shape didn’t change that much. In some ways the boats have reverted to a rounder hull shape but with differences in where the volume is placed i.e. bow, middle or stern. There is also another element which is called “Rocker” which is the amount of curve/banana shape to the boat. This can affect how a boat turns, accelerates and handles. Manufacturers have been playing around with these variables since racing kayaks have been around and with the *new* narrow boats, for the last two decades.

There are plenty of these style boats around in various conditions and they can be cheap or expensive depending on condition, Each of these designs is always a compromise between

competing needs, different boats suit different people and one design is not faster than another, the paddler paddling it may be!

New shape: Nelo Cinco & 7, Roman and Kirton Rift: The very latest designs are the first truly different K1s for many years. They have a different concept behind them. The Nelo Cinco was the first kayak of its type and caused a stir when it was first raced. I won't go into how it differs other than to say it is actually more stable than a lot of other "new" shape K1s and wash hangs really well.

Disadvantages: they are still relatively expensive on the second-hand market. The 7 is a refinement of the Cinco.

The Kirton has a different idea on how to make the boat faster and is visually different to most other K1s. At this level it is down to personal preference.

This is the same with other manufacturers too.

The purpose of this article is to give a little information on the boats, but the main point is the "Fastest" boat is the one you can paddle!

Set up: When you start out in your first K1 you are probably going to move the seat until you feel comfortable. When you are small this is fine. However, as you get bigger and faster you need to look at how the boat is "set up". This refers to where you have placed your body weight in terms of the boat's design. Most manufacturers say to put the seat in the middle of the adjustment (back & forth) and move the footrest accordingly. What you do not want to do is move the seat as far back as it can go because your legs have grown and have your back touching the cockpit, move the footrest forward instead. You want to avoid the boat jumping up and down and trying to climb out of the water when you paddle, this is a waste of energy. Anyone with their nose climbing out of the water and then back down again needs to look at their boat set up.

Nelo have written a specific guide on setting up their new 7 to achieve the optimum running for every paddler, this shows the importance of set up. In the main you would want your boat to run flat i.e. parallel to the surface of the water, not nose up or tail down or vice versa.

Nose up can be very hard to climb washes, complete tight turns and may feel as if you are constantly climbing. Conversely nose down whilst possibly making turns easier and the feel of washes easier to recognise, is also not ideal as the boat can literally plough through waves and even sink in a wave.

K2 setup: You don't want to be hitting each other! Having a taller, heavy person in the back may make it harder to turn in sharp corners and harder to climb over waves. Vice versa means good turning but possibly nose too far down for waves and washes.

In conclusion: You don't need a new boat to go faster.

Stability is key to going faster in any boat. The fastest boat is one you are confident in and don't have to think about keeping upright. When and where possible, try to set your boat up correctly (your coach can guide you).

