Kayaks – What, Why & How Much!

Copyright © Michael Jacques

With an ever-increasing array of boats on the market kayak choice ain't getting any easier. The following guide, however, should help novices and experts alike.

Buying a multisport kayak is the sport's single biggest choice. Why? Because \$2000 is a butt load of money spend on floating down the river upside down. Whether you're new to multisport or upgrading to a faster boat, this new kayak will be a step into the unknown, so making the right choice is crucial not only to success, but also enjoyment.

By and large, the point to multisport kayaking is getting from point A to B without a swim. No one is asking us to dismount bikes and kayak the Huka Falls, so kayak selection becomes a matter of finding a boat stable enough to suit your skills yet fast enough to beat your training partner. Having said that, multisport kayaking involves a wide range of water conditions, sometimes even within the one race. A boat in which you're happy paddling on the Avon, Hutt or Waikato rivers could have you filling your pants on the Waimakariri or Tongariro where eddies, whirlpools and standing waves can throw you every which way but where you want to go. Thus, selecting the right kayak is a tad more complex than simply being able to sit in it.

Before you start sweating though, rest assured that a bit of basic knowledge will help with selection. Generally the wider the kayak the more stable it is. But also, the wider the kayak the slower it will be. Long narrow boats are faster but less stable and manoeuvrable. To confuse the issue, however, it should be explained that the end stability and speed of a boat is not governed by the maximum width, but by the width of the kayak on the waterline.

For practical purposes, the waterline width of a boat is where the buck stops. Because a heavier paddler will sit the boat down more, the end waterline will be wider. Thus, the heavier the paddler the more stable but slower a boat will be. Even the tippiest kayak in the world will be more stable but a bit slower in the hands of a heavier paddler. In short – when considering kayak choices don't pay too much attention to anyone else's opinion but your own. Unless a person is much the same weight and much the same skill level, your requirements will be vastly different.

The reason here can be shown in some simple arithmetic. Trials indicate the longer narrower so-called "fast boats" such as the Sisson Evolution, JKK UFO, or Ruahine F1 are 2% to 5 % faster than the shorter wider models. Over the 67km kayak at the Speights Coast to Coast that's a saving of some five to 15 minutes. That's a considerable saving. However, a paddler struggling with the tippy and less manoeuvrable nature of these so called 'fast boats' can loose as much as 10% in energy to inferior technique and trying to keep the bloody thing upright, which on the Waimak equates to some 30 minutes. So in short: an inexperienced paddler in a supposed "fast boat" could expect to pull up at the Gorge Bridge as much as 15 minutes behind a similarly skilled rival using a kayak more suited to their experience.

It's obvious then that novice paddlers should err on the side of caution. Having said that, however, you shouldn't resign yourself to life in a slow boat. The reason you need to choose now is to give yourself time to get used to a new boat. The human body is a wonderful thing; its central nervous system can fine-tune itself to almost any type of new activity you throw at it. Spend enough time in a tippy boat and eventually it'll become less tippy. What's more, the more time you spend the fitter you'll become. This becomes a key ingredient because the fitter you are the faster you'll paddle, and the faster you can paddle the more stable a boat becomes.

A paddler with the fitness to keep a fast boat moving for the required distance will be a lot better off stability wise than a similarly skilled but less fit paddler. And while the fit paddlers boat may initially feel a tad too tippy, with a couple of months perseverance that kayak could

become the perfect choice. This is why winter is the ideal time to buy. It gives you longer to raise fitness and skills level, and thus more chance of being happy in a faster kayak.

So where does all this leave you? Well, if you're a novice, you're a novice and as such should be considering kayaks listed in that category. Likewise if you possess a good deal of skill and fitness you'll head straight for the advanced listings. The tough decisions are left to those in that intermediate area, whose adequate skills and fitness often mean they can paddle a fast boat in some conditions but not in others. Some people also have better natural co-ordination than others, so just because you're a beginner doesn't mean you can't paddle a fast'ish kayak. Similarly, just because you're an average athlete doesn't mean you don't have the skills for a true fast boat. This brings us back to the earlier statement – when considering kayak choices don't pay too much attention to anyone else's opinion but your own.

Most people will have an idea of what category – novice intermediate or advanced – they fit in to. But beyond that the kind of kayak you need might be completely different to the kind of kayak your similarly skilled training partner paddles. So before you go racing off to try out kayaks take a moment more to consider a few individual aspects. If you're a heavier (85kg plus) or lighter (under 70kg) paddler, you also have to consider kayak volume. Basically, the rougher the water the more volume you need to keep the kayak travelling on top the water rather than in amongst it. The more water that washes over your boat the slower you will be. This flooding of the deck, commonly known as "diving," also affects manoeuvrability due to your boat becoming much more a part of the water's directional flow.

So volume is important. In some kayaks (e.g. VO Pinnacle and JKK Total Eclipse) this volume is achieved by increasing the height of the hull and deck, particularly the bow area, which helps keep the diving effect at bay. In others volume is achieved via the overall length of the kayak so the boat will travel along and over the top of waves instead of up and down them. For heavy or light paddlers, however, this volume factor can prove tricky. Lightweight's (u/70kg) may have trouble keeping a high volume boat in the water, often being tossed around too much in rough water. In contrast, heavier paddlers (o/80kg) need the volume to make up for the fact that their boat sits lower in the water.

The heavy and light paddler makes up a big cross section in multisport. But only in the last few years has their body weight been fully catered for. Until a few years ago there were not many true fast boat option for lightweights, which meant almost all experienced female paddlers. Likewise, as the popularity of the sport grew and attracted more average punters, the demand for wider but not slower boats has grown. The result has a total shake up of the market place to the extent that almost every body type and level of experience is catered for. JKK kayaks designed the Meteor 2000 exclusively for women, Sisson have the Nucleus range within which there are three variations for different weight paddlers, and the Ruahine Opus has proven to be the most popular all round boat available.

At the end of the day it's less a situation of one kayak being better or worse than another as it is a situation of finding a kayak to match your experience, body type and fitness. Ultimately though, it comes down to you putting a boat through it's paces. Not just to check out whether you can stay right side up either, but also to check out how the boat performs in different water conditions. Two kayaks may feel identical in regard to how tippy they are or aren't, but they may perform completely differently due to design features. Some kayaks are brilliant downriver or in following seas but not very fast in flat water. Some are very fast in deep water, but hopeless in shallow water. And there are several examples out there of different models having similar stability but vastly different speed.

There's more to making a kayak choice than simply design too. You might find a kayak design suited perfectly to your level of experience, but absolutely hate the fittings. The seat, for example, is a very individualistic fitting. Some people could paddle all day on a sawhorse, while other can't handle anymore than half an hour in an armchair. Likewise, some foot pedal setups are better than others and some rudders perform better and last longer than others. And while design is what will make the kayak suited to you, quality of construction will make the boat last... and some boats are definitely constructed better than others.

Outside of quality, you also need to consider the materials your boat may or may not be made with. Fibreglass is cheapest, but of lower quality and higher weight than the space age kevlar and carbon fibre materials. Kevlar is more forgiving than any other material, meaning it

will not crack or break as easily. But carbon is lighter and also stiffer, meaning it will holds its form better both in regard to longtevity and water forces, which is important for optimum speed. It doesn't hurt to ask what resins are holding the materials together either; polyester resins are cheapest and easiest to work with, but epoxy resins have better bonding characteristics, water resistance and impact resistance. Some boats come with gel coats too, which means they can be your colour of choice. Gel coating is said to last longer, but the plain finish such as you see on JKK kayaks is lighter. Of course, every kayak manufacturer has their own ideas of what makes a good kayak. However, you'll be glad to know that on the New Zealand market all the current manufacturers seem to me producing a well-made product.

Sisson Kayaks (www.sissonkayaks.co.nz) were the pioneers of the purpose built multisport kayak, with their Evolution range being the first racing kayaks to venture beyond the rules and regulations of K1 Olympic kayaks. Multisport legend Steve Gurney had a hand in the Evolution design, which in the 15 years it has been around has won more races than any other design. Sisson have also been the first to build kayaks tailored specifically for certain body weights, as seen in the Nucleus range.

JJK Kayaks (www.jkkkayaks.co.nz) have also been something of an innovator in to design, but even more so for combining the very best materials and attention to details to produce the lightest but arguable strongest kayaks on the market. Their Eclipse model is the fastest beginners boat on the market and their UFO design has arguably the best speed/stability ratio amongst the fast, tippy long boats, as evidenced by the fastest men's and women's kayak at this year's Speights Coast to Coast.

The market leader in regard to sales is Ruahine Kayaks (www.sportzhub.com/ruahine). They have been producing as long as anyone, but really only established a firm footing in multisport since the mid-1990s. Their Opus is without doubt the leader in speed/stability, being stable enough for keen punters but fast enough for elite athletes. Amongst true fast boats their new F1 rivals the JKK UFO and Sisson Evolution. Another brand who have been around for a while but only recently in multisport circles is Paddling Perfection (www.paddlingperfection.com). This popular sea kayak specialist also produce the Excalibur and Tri-Bear multisport models. Both look a little like sea kayaks and both perform best in following water.

The newest manufacturer is Venture Out (www.ventureout.co.nz), an outdoor activity and product provider who while new to kayak manufacture are actually producing one of the sports more established brands. Venture Out are now making the old Andrew Martin brand, a past favourite especially amongst women who have long favoured the Sprinter and Arrow models as their boat of choice. Being new to the game it's hard to comment on the quality of their product, but the Andrew Martin designs have been proven with many a race win. In fact, the current Coast to Coast kayak record was set in a Sprinter.

Another new brand is the Brainwaves Python (www.brainwaves.net.nz), which is actually a high end multisport boat based on the same design as the Fenn Surf Ski of South African fame. The Fenn is renowned as the fastest ski in the world, and the Python certainly performs well, especially in big water. But being new on the market is has yet to prove itself both in performance and structure. Another design yet to prove itself is the Paddlerzone Saracen and Saracen-X (www.paddlerzone.co.nz). In testing these boats proved to be quite nice, with the Saracen being a reasonably responsive beginners boat. The Saracen-X sits nicely for serious intermediate level paddlers, but like the Brainwave Python these boats have yet to be proven.

So, rest assured that most the manufacturers out there are producing good quality kayaks. Sure, some are faster, tippier, lighter and made better than others, but at the end of the day how your boat is made is somewhat irrelevant if you can't stay upright. Hopefully the following guide will help you do just that.

Kayak Guide

NB: The following kayak guide has been collated via manufacturer information and testing either by the author or another suitably experienced kayaker. The kayaks are listed in order of stability. Prices are for the most popular lay-up and the final statistic lists the number of each kayak at the last Coast to Coast.

Kayak Type	Length	Weight	Comments	Price	CtoC
Sisson Eliminator	4.9m	15kg	Traditional benchmark for novice multisporter.	\$2317	31
Paddling Perfection Tri Bear	5.4m	17kg	The only long boat for beginners. Fast in following water.	\$2626	2
Ruahine Intrigue	4.9m	12kg	Similar stability to Eliminator, but faster?	\$2100	61
Sisson Esprit	5.0m	14kg	Longer, narrower Eliminator. Good speed/stability.	\$2317	29
Paddler Zone Saracen	5.2m	13kg	Good all round boat for beginners.	\$2250	1
VO Epic	5.2m	13kg	Good speed/stability with good volume for heavier paddler.	\$2500	20
Ruahine Swallow	5.4m	12kg	Great choice for co-ordinated beginners.	\$2600	55
Sisson Centrix	5.1m	13kg	Significantly faster but only slightly tippier than the Esprit.	\$2317	2
JKK Eclipse	5.2m	10kg	Fastest beginners boat. Fast enough for intermediates.	\$2175	30
JKK Total Eclipse	6.0m	13kg	Fast intermediate boat with envious stability. For 70kg+	\$2300	13
VO Arrow XL	5.2m	11kg	Good for intermediate paddler under 75KG.	\$2450	10
Sisson Nucleus 60	5.3m	13kg	Designed specifically for paddlers around 60kg	\$2525	6
Sisson Nucleus 80	5.3m	13kg	Designed specifically for paddlers around 80kg	\$2525	2
Sisson Nucleus 100	5.3m	13kg	Designed specifically for paddlers around 100kg	\$2525	0
JKK Meteor 2000	5.5m	11kg	A fast boat with stability. Excellent for lightweights.	\$2200	11
VO Sprinter	5.2m	11kg	Fast boat with good stability for paddlers under 72kg.	\$2650	17
Ruahine Opus	5.9m	12kg	The boat that redefined speed/stability. Best for 70kg+	\$2800	47
Paddler Zone Saracen-X	6.0m	15kg	Good intermediate choice, especially for 75kg+.	\$2580	0
Paddling Perfection Excalibur	5.8m	13kg	Good speed/stability. Best for 70kg+	\$2694	5
Sisson Defender	5.7m	13kg	Shorter Evolution Classic and almost as fast.	\$2525	2
Sisson Evo' Extreme	5.9m	13kg	A fast boat maximised for lightweight paddlers.	\$2634	0
Brainwaves Python	6.0m	14kg	Based on world's fastest surf ski. Good in rough.	\$2280	0
Sisson Evo' Classic	6.1m	14kg	Proven performer, although best suited for paddlers 75kg+.	\$2634	25
JKK UFO	6.1m	11kg	Best speed/stability of the truly fast boats. Suits all sizes.	\$2600	13
Ruahine F1	6.0m	13kg	New fast boat maximised for downriver conditions	\$3000	2
Sisson Evolution Edge	6.1m	13kg	Faster and tippier than Classic. Suits wide range of weight.	\$2634	9
VO Pinnacle	5.2m	11kg	An Olympic K1 modified for river use. Suitable all weights.	\$2700	6
VO Advantage	6.0m	12kg	Possibly the fastest multisport kayak, but also tippiest.	\$2700	2

High Performance Sea Kayaks

Kayak Type	Length	Weight	Comments	Price
JKK Supernova	6.3m	16kg	The fastest racing sea kayak. Popular for Length of NZ race.	\$3600
Paddling Perfection Slingshot	5.7m	22kg	The first of the high performance sea kayaks. Popular.	\$4355
Ruahine Ocean-X	6.4m	TBA	Currently in production. Combines best of surf ski & multisport kayak.	TBA

Adventure Racing Doubles

Kayak Type	Length	Weight	Comments	Price
Ruahine Duet	7.0m	24kg	Based on popular Opus. Light & fast. Perhaps not suited to big seas.	\$5200
Sisson Voyager	6.7m	30kg	Nice all round boat. Reasonable fast & handles big seas.	\$5670
JKK Quasar	7.6m	18kg	The fastest adventure racing double on the market.	TBA
JKK Hypernova	7.8m	30kg	The most popular model on the market. Fast but also handles big seas.	\$5500