



EAST COAST OUTFITTERS

Choosing the right kayak

If you are like many people out there, chances are you have tried kayaking, or have at least been meaning to. Many of you have decided to take the plunge and buy a boat for yourself. The key to safe and enjoyable paddling is making sure you buy a boat that's right for you, and then get proper instruction on how to use it. Choosing a boat can be overwhelming: there are a half a dozen well known manufacturers out there, each having as many as 40 models to choose from. So where should you begin?

First, ask yourself a few questions. What sort of paddling do you plan to do with your new kayak? Where will you typically paddle? What sort of trips will you take? Will you do mostly short trips along the shore, half-day trips, weekend overnights, or do you hope to take longer trips that last a week or more? Is this a boat that the whole family will share, or is it pretty much just for you? Also, who do you plan to paddle with? What types of boats do they paddle? If they are all paddling 17 foot long kayaks and you buy one that's only 13 feet long, you will spend most of the day trying to catch up with the group. The answers to questions like these will help guide you in deciding which boat is right for you.

Before we talk about the types of boats available, let's talk about some basic principles of boat design and how they affect performance. First, let's define some terms that describe how a kayak performs.

Design considerations

Boat speed:

Even if you have no intention of ever racing your kayak, boat speed is important to consider because it translates into ease of paddling. In general, the longer the boat, the faster it is in the water. It takes less energy to paddle a "fast" (long) boat than it does a "slow" (short) boat, even if the boats are actually going the same speed. So if you have two people of the same size, weight, and strength, and one is paddling a 13 foot long kayak and the other is paddling a 16 foot long boat, the person paddling the shorter boat will tire sooner. Boat length is not the only thing that affects its speed. The shape of the hull is also a factor. In general, flat surfaces create a lot of friction with the water that slows down the boat, whereas a rounded shape allows the hull to pass through the water with less drag. That's why jets, torpedo's, and tuna fish are rounded, not flat.

Stability:

Stability is an important consideration when choosing a kayak. In small boats like kayaks and canoes, there are two phases of stability: primary and secondary. The *primary phase* is what you feel when you are just sitting upright in the boat. In general, a wide, flat bottomed boat will have very good primary stability (but it will be slow). Likewise, a narrow, rounded hull will be tippy (but fast). If you are new to kayaking and are concerned about how tippy the boat may feel, you may want a very stable boat. If stability isn't an issue for you, consider a more rounded, narrow hull. The wider the boat, the more stable it will be. So, a



EAST COAST OUTFITTERS

boat that is meant to be super stable for first time paddlers will tend to be 24 to 30 inches wide, whereas a boat intended for more experienced paddlers will be as narrow as 21 inches.

Secondary Stability is the stability you feel when you tilt a boat on its side. To use a maritime example, a traditional dory, when empty, has very poor primary stability, but very good secondary stability (which makes them good for hauling fish or nets over the side). Secondary stability can be created by *flare*, which is when the boat gets wider and wider as you move up from the waterline (like in a dory). Also, secondary stability is affected by *chine*. Chine is the line on the hull of a boat where the bottom becomes the side. A boat with a very sharp, distinct line is said to have a *hard chine*, whereas a boat with a more gradual, rounded transition from the bottom to the side has a *soft chine*. A hard-chined boat will have a very distinct phase of secondary stability, whereas a more rounded, soft-chined boat will have a less distinct transition between primary and secondary stability.

Tracking:

Tracking is a term which describes how easy it is to paddle a boat in a strait line. In general, a longer boat will track better than a shorter one. Again, hull shape, not just length, affects this feature. A rounded hull, even though it may be fast, will not track as well as a boat with a keel, or a ridge (sometimes called a 'shallow vee') that runs down the centre line of the bottom of the boat. To help with tracking, many boats will have a *skeg* or a *rudder* (see below).

Maneuverability:

Some boats are designed for long, extended touring (i.e. paddled in a more or less straight line for an extended period of time), while some are more designed for quick turning and short bursts of speed (i.e. surfing or paddling amongst rocks and shoals). The feature that most directly affects this aspect of boat design is called *rocker*. Rocker describes how "banana-shaped" a kayak is. If the front and back (bow and stern) of a kayak are turned up (like a banana), the boat will turn quickly (i.e. it is very maneuverable). At the same time, when the rocker of a boat is increased, its length is decreased so it gets slower. Also, a boat with a lot of rocker does not track as one with a more or less flat keel.

Outfitting:

Once you have figured out which shape hull is right for you, you need to consider *outfitting*. Outfitting is all of the things that aren't part of the boat itself, i.e. the seat, backrest, thigh-braces, decklines, bungees, hatches, bulheads, rudder, skeg, etc. Even if you find the perfect shaped kayak, you won't enjoy it if it isn't outfitted to meet your needs. Here are some basic things to consider:

Seat:

Is the seat comfortable? Is the backrest supportive? Does it come up high enough? Too high? Is it adjustable? Is there enough room for your thighs? No matter how good a boat looks in the showroom, you will regret buying the boat if your legs fall asleep after ten minutes of paddling.

Hatches/bulkheads

Some kayaks have storage compartments in the bow and stern that are accessed through *hatches* on the deck. These compartments are separated from the cockpit area by partitions, called *bulkheads*. These compartments give you the convenience of a dry storage area for your gear. So, if you plan on taking your boat out on day long excursions, bulkheads



EAST COAST OUTFITTERS

are a really good idea. They also serve a safety function: when capsized, a boat without bow and stern bulkheads will pretty much fill with water making it very difficult to rescue without pumping it out for a very long time, or towing it to shore. So, if you plan on paddling much further from shore than you would like to swim, buy a boat with bulkheads.

Deck rigging

Most touring kayaks have some sort of deck rigging. This can be as simple as a criss-cross of bungees to tuck your water bottle under, to a full compliment of static line which runs along the outside of your deck, called *deck lines*. Deck lines are important during rescue situations. If you plan on paddling your boat in exposed conditions (wind and waves), where a mid-water rescue is likely, you want a boat with deck lines, not just bungees.

Rudder & Skogs

If you are paddling a kayak in a crosswind, your boat will tend to turn in the direction the wind is coming from. The primary function of a rudder or skeg is to stop this from happening. The key difference between the two is a rudder turns and is controlled by the foot pedals, while a skeg stays straight. The main advantage of a rudder is that it provides steering, and adds some stability to the boat when engaged. The key advantage to a skeg is that when not in use, it is totally out of the way (it folds up into your boat). On very short boats, you will most likely not see a skeg or a rudder; you can control those with your paddle.

Types of Kayaks

OK, now you have a general idea of the factors you need to consider when selecting a boat. Now let's take a look at some of the categories of boats you have to choose from. There are basically three types of commercially available touring kayaks which are popular in this area: recreational, day touring, and expedition touring. Your challenge will be to decide which type best suits your needs.

Recreational kayaks

If you have a cottage on a lake, or live on a protected cove on the coast, a recreational kayak may be what you are looking for. These boats tend to be short (8-12 feet), wide (which makes them stable), and have a large, roomy cockpit. Because of they are short, recreational boats are not ideal if you plan on paddling for extended periods of time. They are designed to be comfortable, stable, and easy for anyone to paddle. They also tend to be relatively inexpensive (\$450-\$850 retail). The reason that they are inexpensive is that they tend to have very little outfitting: the seat will be molded right into the boat, it will have limited deck rigging, will probably not have a skeg or a rudder, and will not have bow and stern hatches or bulkheads.

Remember that while a kayak without bulkheads won't sink when it is full of water (the plastic itself is slightly buoyant, and it will come with foam pillars), it will be a real chore to deal with. If you do end up purchasing a recreational kayak, keep in mind that they are designed to be paddled in protected waters close to shore. If you do plan on venturing further from shore, consider buying airbags to give the boat some buoyancy for added safety.



Day Touring

Day touring boats are a step up in performance from Recreational boats. Like recreational boats, they are designed to be comfortable and stable. They tend to have a large roomy cockpit with a comfortable seat, and have a wide relatively flat hull with a hard chine. The key difference between day touring kayaks and recreational kayaks is their length. Day touring boat will be anywhere from 13 to 16 feet long, which gives them enough speed to be paddled for longer distances and times. Also, day touring boats will have bulkheads, and most likely will be equipped with a skeg or a rudder. These are very versatile boats, and are the most popular selling boats on the market. They retail from \$1000-\$1600. If you live on a lake and mostly do half day trips, but would like the versatility to paddle on the ocean and even go for an overnight, a day touring boat is probably what you are looking for.



Expedition Touring

Sometimes simply referred to as 'sea kayaks', these boats are at the top of the design categories in touring kayaks. You do not actual have to plan on heading off to Greenland to make these boats right for you. But, if you plan on pursuing sea kayaking and enjoying the full potential it has to offer, then these are the boats you need to be looking at. They are designed for performance. They range from 15.5 feet to 19 feet, and tend to be on the narrow side. They vary in hull shape based on how the designers intended the boat to perform. They will without question have bow and stern bulkheads, a full compliment of deck rigging, a rudder or a skeg, and an adjustable, snug fitting seat system. If you plan to paddle a lot, intend to paddle in exposed conditions or go on extended trips, then consider an expedition class boat.

Safety

Regardless of which type of boat you choose, safety is paramount. We recommend that you do not start your paddling career without taking lessons. Many shops will throw in lessons with the purchase of a boat, or at least point you to a place that will provide them. You will also need proper equipment for your boat. The Coast Guard requires that every kayak be equipped with the following items: a paddle, a Canadian Coast Guard certified Personal Flootation Device (PFD) which fits the paddler, a bailing device, a whistle, 50 feet of buoyant heaving line, a whistle, and a water proof light (for paddling in reduced visibility conditions). This is only a list of required equipment. There is a lot of specialized kayaking equipment that can make your paddling safer and more enjoyable. But, like any specialized equipment, it is only helpful if you know how to use it. So take lessons.