## Choosing a Kayak

## So Many Boats - So Little Money

By Ed Berg

This is the first of a three part series discussing choosing a sea kayak.

Opinions are like elbows; everybody's got a couple. Here are some of mine (not elbows, opinions!) about picking out a kayak suited to your strength, your size and the way you will use it. After designing and building a few boats, I've made some mistakes that you can hopefully avoid. The intent of these articles is to reduce some of the technical bits of kayak design and performance to terms of daily experience and enjoyment.

Choosing a kayak can be done in several different ways. You can take the first thing that comes along in your price range, hoping it all turns out all right. You can take the advice of a friend, hoping that he or she knows something about the subject. You can get very analytical and figure it out for yourself. Only Kayak Nerds like me do this. So this leaves your last option; take the opinion of a certified K.N. Therefore this article. And never, NEVER buy a kayak without paddling it, preferably on a windy day in choppy water.

Kayaks and bicycles are the two most personal of all vehicles. Being musclepowered, they are more adapted to human dimensions and abilities than any motorpropelled vehicle. Kayaks have been in development for about 15,000 years longer than bicycles, and they create a unique bond between man and water. Modern kayak designs do not differ significantly from Stone Age Alaskan (Aleut) or Greenland (Inuit) designs. Records made by Russian fur traders in the 18th and 19th centuries indicate that the Aleuts were paddling at Olympic levels in boats made of driftwood, sealskin, and bits of bone and sinew. Modern kayaks accommodate the bigger dimensions of European folk, and allow for less skill in paddling. Even with all we know of hull design theory, we still have not surpassed these ancient designs in efficiency and handling. But OUR boats last longer... the Aleuts got two or three seasons' use from a sealskin covering, and maybe six seasons from the framework.

The Aleuts and Inuits built each boat for its paddler, using dimensions taken from the paddler's height, arm length, and shoulder span. You can do the same when

you go shopping for a kayak. You and your kayak should fit and complement each other in size, strength, paddling style, and your intended use. A kayak should fit you as comfortably as your paddling clothes. A little attention in choosing your next one will reward you for a long time.

Start the selection process by identifying the most important elements to you personally. There are undoubtedly more than these, and your priorities will be different than mine:

- 1) How do I plan do use my boat?
- What handling characteristics should I
- 3) What are my price restraints?
- Could I build my own boat to save money?
- Could I use a collapsible or a tandem
- How do my size and weight and strength affect the choice?

This will be an article in installments, dealing with each item in turn. I won't attempt to list specific manufacturers or models here: read the reviews in Sea Kayaker Magazine for excellent descriptions of the characteristics and features of different boats. If you don't get Sea Kayaker, shame on you, but the club has back issues. Call Harv Mastalir.

## **Boat Use**

This is the most important of all factors in choosing a kayak design for yourself. Do you want to take extended long-distance trips in open water with food, gear and water on board? Do you only intend to paddle on protected waters on the weekend? Do you want to run down rivers in rapids? Running rivers in a 22 foot tandem puts some severe restraints on which rivers you get into, and how much you can play with the river. If you want to stay in Colorado, paddle a few reservoirs, and run some of the Class 1 or 2 rapids, you will want a shorter boat, under 16 feet. Polyethylene hulls won't get hurt if you bash a few rocks.

Kayaks are usually described as "high" or low" volume. If you want to take weeklong trips on big lakes and coastal waters, and cover 15 to 20 miles in a day, then get a higher volume 16 to 18 foot boat. A high-volume, expedition-type boat can take on 50 pounds of supplies and only sink a half inch deeper in the water. If you like to paddle hard and play with lots of wind and waves, the expedition type of high volume boat can be difficult to handle, like a limousine on a twisty mountain road. A low volume boat has less profile to act as a sail, and is less tossed about by waves.

## Handling

Desirable sea kayak handling can be described in two sentences: 1) A kayak should hold a steady course without a rudder, no matter what the wind or wave direction, yet it should turn easily with a sweep of the paddle when leaned. 2) A kayak should be fun for YOU to paddle. Period. Everything you've read (or haven't read) about initial stability, secondary stability, "fast" kayaks, et cetera ad infinitum can all be reduced to these two elements. No matter how good a boat's performance looks on a drag chart, if it isn't matched to your paddling strength and handling skills, you'll suffer reduced performance and most importantly, reduced ENJOYMENT.

Rudders are great aids for paddling, especially when using a sail and in rough weather. But if either you or your kayak needs a rudder to hold a course in a crosswind, it can be frustrating and downright dangerous if the rudder fails or jams.

Read your (or the club's) back issues of Sea Kayaker Magazine for reviews of specific boats. Whether you like a rudder or not, look for boats that the Reviewers say do not need rudders. Paddle different boats in a range of different conditions. Ask other club members to let you paddle their boats to get a feel for what you like and don't like. That is part of what club paddles are for, and almost every club member will be happy to let you take a spin in their boat.

Look for a boat that you feel secure in: not big and loose, not cramped, maybe a bit "tippy", but you'll soon adapt to moderate tippiness. You shouldn't have to constantly keep yourself upright with the paddle, but the boat should lean over easily when you sashay your hips. This is all very qualitative, so paddle that boat around with some friends, in wind and calm. Paddle it empty, then load it down with

Choosing a Kayak-continued from page 2 milk jugs full of water. See how easy it is (or isn't) to get back into if you have to exit.

In a very general way, wider boats have more "initial" stability. This means they resist tipping over from a horizontal position on calm water. Get a boat with high initial stability if you only intend to paddle occasionally in protected waters. "Secondary" stability is the boat's resistance to tip when it is already leaned over at about 30 degrees. Most boats with low initial stability have high secondary stability. They are frequently narrower than the more "stable" boats. But these are the boats to have in rough water. Think about

it: the same force that keeps a boat horizontal on calm water will tend to tip it over when the water tips, as on a wave. Conversely, waves have less effect on boats with low initial stability. High secondary stability becomes a real treat when you learn to tilt the boat with your hips to make those elegant paddle-sweep turns. These boats feel like they're "with you" no matter what you do.

Above all, with the rudder up, the boat MUST NOT turn strongly upwind or downwind when the breeze picks up. Paddling on one side to correct this, or cocking the rudder over, will only eat up your strength when you need it the most. The boat should stay firmly on course

when it is held upright, but turn easily when leaned 15 or 20°. Some boats even turn on their own when leaned. This trait connects you through the boat to the water. It lets you hold the boat on course when those big waves come up from behind instead of "broaching", or turning parallel to the wave. Being parallel to the wave direction is the most difficult, dangerous position to be in.

Some boats are difficult to impossible to turn into the wind when it's blowing hard. Not good. Read those Sea Kayaker back issues!

Look for installments in the next two newsletters.