## 1 KAYAKS, EQUIPMENT AND CLOTHING

### KAYAKS

The sea kayak has the same general tapered appearance as its Inuit ancestor as well as its main qualities: speed and stability. But, that's where the comparison ends.

Apart from certain foldable models, the internal structure has completely disappeared. Modern kayaks have a rigid, one-piece moulded hull and deck. This makes it possible to build kayaks long enough to seat two.

Although sea kayaks are available in models ranging from 3.5 to 6.7 meters (11' 6" to 22'), a **minimum of 4 meters** (13') is recommended for better handling in swells as well as superior tracking control.

Two types of material are used: polyethylene (plastic) and composites (fibreglass, Kevlar and carbon fibre).

Moderately priced polyethylene provides excellent impact resistance and average glide, but is quite heavy and has a low stiffness rating.

Composite materials, on the other hand, provide relatively good impact resistance and good glide, are average in weight, and are very stiff. The high stiffness allows for the construction of more sophisticated models. Composite materials cost more, however, and the price increases when high tech materials and techniques are used.

Choose a kayak suited to the type of water you expect to use it on.

When capsized, a kayak can float thanks to **watertight flotation compartments** or specially designed airbags. Watertight deck hatches provide access to the compartments, which can be used to store and protect your gear. This ingenious system makes it possible to bring along all the gear and equipment you need for day outings or multi-day expeditions.

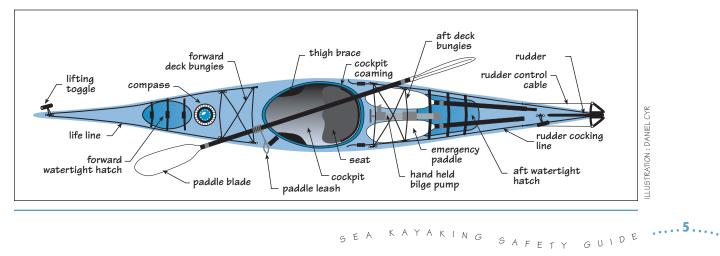
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Many sea kayaks are equipped with a **rudder**. This provides beginners with good tracking control and allows more experienced paddlers to correct drift caused by wind or waves. The rudder can retract upward onto the deck in shallow water or when transporting the kayak. Rudders are controlled by the feet using a system of pedals and cables.

Sea kayaks generally have a **tapered nose** for good cruising speed and a fairly high bow (front) to prevent ploughing in waves. The bow and stern are equipped with **lifting toggles**. Basic equipment generally includes **bungee cords** to keep safety equipment and maps close at hand. Kayaks may also be equipped with a lifeline around the edge of the deck. For ocean expeditions, it is important to add a deck-mounted compass and to know how to use it.

Kayak stability is directly linked to three things: the centre of gravity, the cross-section, and the width or beam.

- Since the seat almost touches the bottom of the kayak, the • centre of gravity is very low, which ensures excellent stability. The weight of baggage stowed in the watertight compartments increases stability.
  - Generally speaking, the wider the kayak the more stable it is. The cross-section or shape of the sides and bottom affects kayak stability and speed. Given the wide variety of models



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on the market, the only way to choose one that suits you is to try them out and to ask for advice from a specialist.

## EQUIPMENT

#### Mandatory equipment

Sea kayaks are subject to the **Small Vessel Regulations**. The equipment to be carried on board depends on the length of the kayak. See Chapter 5 on Regulations.

## ESSENTIAL EQUIPMENT

- **The sprayskirt** provides a watertight seal around the kayaker, preventing water from getting in the kayak. Sprayskirts are made out of coated nylon and/or neoprene and must be well fitted on the cockpit rim and around your waist. Certain models come with a mesh storage pocket.
- A paddle bladder or float is a very important piece of safety equipment. After a capsize, it enables you to get back into your kayak without help. The floater has a bladder that fits over a paddle blade. By resting the other blade on the deck, the kayaker can use the paddle as a brace to climb back into the cockpit. This manoeuvre is fairly straightforward but requires some practice.

- **A spare paddle**. A two-piece take-apart paddle is perfect. Store it on deck for easy access. Make sure you have at least one spare paddle for your group (1 for every 4 people).
- A chart or topographic map of the area being visited is your most reliable guide. Learn how to read and orient it. A transparent, watertight chart case will let you consult it easily. Select a model with eyeholes so it can be attached to the deck bungee cords.
- **A chart ruler** can be used as a course protractor with the map. Use it to determine a heading or bearing when planning your trip or en route.
- A first aid kit suitable for the group should be brought along and stored in a waterproof container.

## RECOMMENDED EQUIPMENT

**Waterproof gear bags** provide additional protection in the event water gets into a compartment. They are made of soft, vinyl-coated nylon so as to fit into any of the various compartments of a kayak.

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**Rigid, waterproof barrels** and cases are well suited for storing fragile items (camera equipment, binoculars, etc.).

- **Binoculars** are extremely useful. Waterproof 7 x 50 models are popular choice for water sports.
- A spherical glass marine compass is more suitable for navigating than a conventional hiker's compass. The compass rose is equipped with a magnet and floats freely in a sphere and a lubber line lets you keep track of your heading at all times. If the kayak is not equipped with a spherical compass, a conventional hiker's compass can be helpful if you stay close to shore. Be careful with objects containing iron; they can disrupt compass readings if stored too close.
- A VHF radio is one of the best ways of communicating with other ships and Canadian Coast Guard stations. Kayak models have a range of several kilometres and also receive weather channels. Choose a watertight model.

VHF radio operators must hold a restricted marine radiotelephony operator's certificate (lifetime certificate). See Chapter 5, Regulations.

**Cellular phones are not an adequate substitute** for VHF radios. Even though they may work near large urban centres, you have to know the local emergency number (911, \*16, etc.). On large lakes and remote reservoirs as well as in the far North (Zone 4), use a radio satellite link or an Emergency Position Indicating Radiobeacon (EPIRB) in place of a VHF radio.

**Radar reflectors**. Since kayaks (non-metallic) are invisible to radar, a radar reflector is required to avoid collisions in foggy weather or when there is heavy shipping traffic. Effective lightweight models are available in plastic covered with an aluminium film. To be detected, the reflector must

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be installed as high as possible (1.8 m or more). You can use a guyed tent pole as a mast.

- A GPS (Global Positioning System) will give your position to within 100 meters or so at all times. Despite its usefulness, it is a complex electronic device that can break down. It cannot replace your map or compass, but can be a very handy piece of additional equipment.
- On sunny days, flashes from an **emergency mirror** are visible for several kilometres.
- A smoke flare (Type D) will produce a thick cloud of orange smoke for several minutes and can only be seen during day light hours. A container of fluorescent dye will produce a fluorescent green spot. These two signalling devices must only be used when rescuers are in sight to help them spot you.

#### CLOTHING

# Should you choose clothing based on air or water temperature?

A compromise between the two is best. Take into consideration weather conditions, your skill level, and the type of kayak and deter-

mine the consequences of a capsize (time spent in water, proximity to the shore, outside help, etc.) when making your choice. Kayakers often get wet (waves, spray, splashing). Cotton clothing, which does not retain heat and dries slowly, should be avoided. Instead, opt for **synthetic** fibres (polyester, polypropylene), which dry quickly, or wool, which retains heat even when wet. In cold temperatures, a wetsuit is strongly recommended. Opt for slim fitting models that hug the chest and hips.

Dressing appropriately for sea kayaking requires constant adjustment. **Multiple layers** of thin clothing give you the flexibility you need to confront wide variations in temperature and weather. A **waterproof anorak** or a good windbreaker should always be part of your gear. Don't forget to **cover your head**, whether to protect yourself from the sun or to keep yourself warm.

**Always wear your PFD**. It will also help keep you warm. Sunglasses are often indispensable. Use a lanyard so you won't forget or lose them.

You should always bring along a **change of dry clothing** in a watertight container.

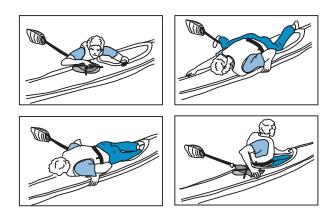
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## 2 BASIC TECHNIQUES AND COURSES

Designed to remain stable, a kayak does not easily tip over. However, while floating on calm waters may not seem threatening, keeping control of the kayak on rough waters may well pose a challenge. Waves, poorly adjusted or inadequate equipment, and fatigue are all elements that can provoke capsizing.

Before launching onto the water, take the time to feel comfortable in your position, to become accustomed with the movement of the kayak, and to make all the required adjustments. The following tips will help you to make sure that you are ready to start out. However, we caution that **THIS CHAPTER IS NOT A SUBSTITUTE FOR A COURSE.** 

Begin by adjusting the rudder pedals to the length of your legs. When you are comfortably seated with a straight back, your feet on the pedals and knees braced under the deck, you become one with the kayak. Beginners often have the uncomfortable sensation of being "trapped" in the kayak. The first step is to get in an out of the kayak, several times (on the water), to see if



you can get out in the event of a capsize. If conditions allow, **try capsizing** with the assistance of someone who can help you if need be. This exercise should always be done at least once with the sprayskirt in place. It is important to test your ability to get out of a capsized kayak.

The next step involves getting back into the kayak on your own. **Get used to using the paddle bladder** or float (see Chapter 1, Kayak, Equipment and Clothing). Practicing this technique will help



you better understand the consequences of capsizing far from shore and being in cold water for extended periods of time. It is also a reflection of reality–**you must learn how to get back into your kayak without assistance**.

Once you have practiced these techniques, you are ready to go. However, getting to know a **few other simple techniques will save you a lot of energy and greatly increase your enjoyment**. The main techniques you should be familiar with are forward strokes, sweep strokes, draw strokes, paddle bracing,

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## Eskimo rolls, and rescue techniques.

Remember, nothing can replace a course given by a qualified individual or accredited organization. However a number of excellent technical manuals are available for reference purposes.

#### COURSES

Sea kayaking associations exist in most Canadian regions. Often representing both kayaking and canoeing clubs, their mandate is to link the various kayaking clubs and to offer courses as well as information on places to kayak. Aside from these associations and clubs, kayakers can consult specialists from tour guide associations, outfitters, companies, as well as independent guides. Especially when exploring a region you have never been to before, professionals advice from these different fields can prove very helpful for planning a safe trip. When searching for these contacts, do not hesitate to consult your provincial tourism office that will be happy to orient you to your resources. Our chapter on each region will also provide you with references in this regard.

Excellent technique manuals also exist in addition to guidebooks on specific regions.

MIKE BEEDELL