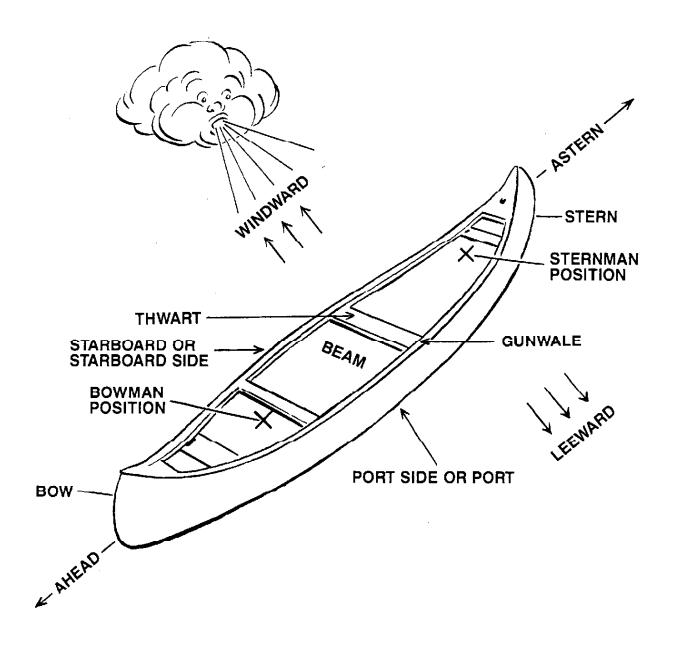
### Parts Of The Canoe



# Other Important Parts/Terms:

Forward: towards the front

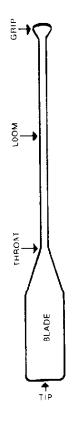
Aft: towards the back

Amidship: center of the canoe

Ribs & planking: reinforce walls of the canoe

Keel: bottom seam of canoe

#### **Paddles**



Paddles are sized using one of two methods:

- 1. The paddle should reach between your outstretched arms with the grip in the palm of one hand the tip in the other.
- 2. Resting the tip of the paddle on you toe, the grip should reach up to about you nose.

#### Types of paddles:

Trader Large blade surface, squarish end.

Voyager Smaller blade area and longer shaft than the Trader.

• Beavertail Recommended for all-purpose paddling. The blade is shorter,

with a rounded tip, and is normally lighter and easier to use.

• Racing This paddle is used in racing where long, powerful strokes are

required. Because of its wide blade and square tip, it bites

solidly into the water.

• Indian Has a long, narrow blade and no top grip. Provides short,

steady strokes and doesn't move much water, conserving

energy.

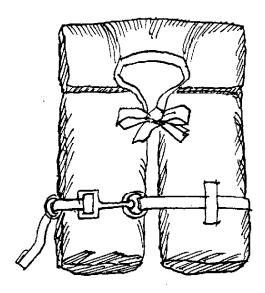
# Types of Person Floatation Devices (PFDs)

Type I: an approved device designed to turn an unconscious person in the water from a facedown position to a vertical or slightly backward position, and to have more than 20 pounds of buoyancy. The device will maintain a vertical or slightly backward position and therefore greatly increase chances for survival. This is the most effective PFD in rough water.

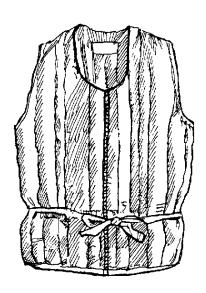
Type II: an approved device designed to turn an unconscious person in the water from a facedown position to a vertical or slightly backward position, provided there is some movement of the water. These must have a minimum of 15½ pounds of buoyancy.

Type III: an approved device designed to keep a conscious person in vertical and slightly backward position; these have at least 15½ pounds of buoyancy. While these have the same buoyancy as Type II, the Type III has lesser turning ability.

Type IV: an approved device designed to be thrown to a person in the water, but not worn. It is designed to have a least 16½ pounds of buoyancy.



Common style of Type II device designed to turn the wearer, in the water, to a vertical or slightly backward position. Has at least 15.5 pounds of buoyancy.



Common style of Type III devices designed to maintain the wearer, in the water, in a vertical or slightly backward position. Has at least 15.5 pounds of buoyancy.

### Other Equipment

- Painters: lines secured to the bow and stern, used to secure the canoe to a dock or shoreline and for towing
- **Kneeling Pads:** can rest in the bottom of the cance or can be secured to the paddler's legs. If pads are fastened to legs, make sure they can be unfasted easily and quickly.
- **Bailers:** large sponge, plastic jug or cup to help rid the canoe of water. Never let water build up in the canoe. Shifting water can throw off balance and trim and make paddling "tippy".
- Waterproof containers: containers to protect equipment from water damage.

  Dry bags or 5 gallon buckets (with lid) can be used. Liners, such as trash bags or Ziploc bags, can be used inside non-water proof bags.
- **Shoes:** should have a non-slip tread, dry quickly, and stay secure to foot, such as sandals or aqua shoes. Some lace-up shoes with canvas tops and rubber soles work fine, but drying and comfort may be a problem.

# **Suggested Equipment List\***

- PFD
- Swimsuit
- T-shirts (cotton or synthetic material that will dry quickly)
- Shorts (cotton or synthetic material that will dry quickly)
- Wool/fleece jacket/shirt (NO COTTON)
- Light weight pants (cotton or synthetic material that will dry quickly)
- Wool/fleece pants (NO COTTON)
- Rain gear
- Sandals/water shoes
- Dry pair of shoes and socks
- Brimmed Hat or Visor
- Sunscreen
- Towel
- Whistle
- Bailer(s)
- Water bottle
- Rope
- First Aid Kit
- Duck tape
- \* This list is a suggested equipment list for canoeing, not necessarily what you will need to bring on the Green River Trip.

### **Equipment Care and Mainenance**

Preventive maintenance and careful handling will increase the life expectancy of all canoeing equipment. Remember that your canoeing equipment spends more time out of water than it does in the water, and the most damage and deterioration occur when equipment is carelessly maintained and handled out of the water.

- Canoes should be stored out of the water upside down and off the ground (when possible) on a secure rack. For long-term, off-season storage, canoes should be under cover and protected from the weather.
- Paddles should be hung up when not in use, and should be kept in the shade. If hanging is not possible, rest the paddle on the grip, never the blade
- PFDs should be properly dried, hung up when not in use, and protected from the sun.

#### Repairs:

- Dents should be pushed out, either by hand or with a rubber mallet.
- Duct tape can be used for temporary repair of punctures or cracks.
- Puncture holes that are to large for taping can be stuffed with cloth, or even a wood plug, for a temporary repair that will enable you to paddle home.

### Knots, Bends and Hitches

#### Knots

Square Knot: used for lashing items to the canoe or for tying gear together

**Bowline:** most useful and reliable knot that can be used around canoes; used to put a loop into the end of a rope

**Butterfly Knot:** most useful in forming and eye in the middle of a rope, providing something to grab onto when fingers are cold and numb

Figure Eight Knot or Stopper Knot: makes a stopper to keep the end of a rope from running through a confined opening; can also be used at the end of a throw rope

#### Bends

Sheet Bend: used for tying two ropes together, especially two ropes of unequal diameter

Englishman's Bend or Fisherman's Knot: used to tie two ropes together; once tight, this knot is nearly impossible to untie, especially if the ropes were wet when tension was applied

Rosendahl Bend or Zeppelin Knot: will not jamb under heavy loads; distributes the load evenly throughout the knot and can be quickly untied

### **Hitches**

Clove Hitch: a simple knot that can be used in various circumstances; quick to tie and easy to remember

**Rolling Hitch:** more dependable knot and is more often used when a line is being attached to a smooth surface or larger rope

**Tautline or Midshipman's Hitch:** can be used to take up slack in a rope or to exert a small amount of strain between two objects; this hitch is useful for tying the ends of boats to car bumbers.

# **Types of Strokes**

- Forward Stroke: Also called the bow stroke or power stroke, it is the simplest and one of the most important stokes in canoeing. The purpose of this stroke is to move the canoe forward.
- Backstroke: Also called backwatering, it is the reverse of the forward stroke.

  The purpose of this stoke is to stop the forward motion of the canoe or to move it backward.
- **Drawstroke:** Also called the Pullover, the purpose of this stoke is to move the canoe sideways towards the paddle.
- **Pushaway:** The opposite of the Drawstroke, the purpose of this stroke is to move the canoe sideways away from the paddle.
- **Forward Sweep:** Similar to the forward stoke, this stoke turns the bow away from the paddling side as it moves forward. Usually used in the bow position.
- Reverse Sweep: Similar to the Backstroke and the reverse of the Forward Sweep, this stoke turns the bow toward the paddling side as it reduces headway or moves the canoe backward. Usually used in the stern position.
- **J-Stroke:** This stroke is a Forward Stroke with a hook action at the end of the stroke that pushes out and away from the stern to turn the bow toward the paddling side and aid in steering the canoe.
- **Diagonal Draw:** Similar to the Drawstroke but done at an angle to turn the bow of the canoe toward the paddling side.

# Flatwater (Lake) vs. Moving-water (River) Canoeing

For flatwater canoeing, certain features of the canoe should be considered. The bow and stern should be low to offer less surface to the wind. A small keel will lessen sideways drift. A rounded bottom will increase speed, but this is also less stable. A fine bow and stern will cut easily through waves, but some flare is needed to push water away.

The primary difference between flatwater and moving-water canoeing involves the action of the water on the canoe. Flatwater canoeing you are reaching with the paddle to grab the water and pull yourself along. When canoeing on moving water, your forward momentum comes from the movement of the water – the water is actually pushing you along. For this reason, the paddle is not used for pulling yourself along, but instead is used almost exclusively for directing the coarse of the canoe and slowing forward momentum.

# **Canoe Sailing**

If you have a canoe, you can have a canoe sailing rig. Some dealers sell kits for use with aluminum or other types of canoes. A canoe sailing rig can be improvised fairly easily from materials generally available.

The BSA canoe sailing rig (illustrated on the following page) was first developed and published more than 50 years ago. This early publication noted: "Canoe sailing is one of the most thrilling forms of sport. Properly rigged, a canoe can be sailed as accurately as any small craft; it will point as high on windward work; come-about as handily; run well; can be gibed smartly when necessary; and it is safe, because even though swamped or capsized it will not sink."

#### **CANOE SAILING RIG**

#### All Measurements Will Vary With Size of Canoe\*

#### Lee Boards and Sail Supports

