## **COMPASSES**

When a topographical map is right side up, you can be pretty certain the top of the map is north and the bottom is south. However, when you're in the backcountry you may not know which direction is which. That's where a compass comes in handy.

An ordinary orienteering compass is ideal for most wilderness travel. Wonderful in its simplicity, it consists of a magnetized needle floating inside a circular, rotating housing that's mounted atop a flat, rectangular base plate. The plate is etched with a direction of travel arrow. The floor of the compass housing is engraved with a compass housing arrow that helps simplify compass use.

The circumference of the housing is divided into directions – North, South, East, and West – further divided into degrees – 360 of them in all, just as in any circle. 0° coincides with North, 90° with east, 180° with south and 270° with west, and 360° is again North (0° and 360° overlap, completing the circle).

Any direction can be indicated in degrees. For example, 95° is a little South of straight East, while 315° is halfway between West and North.

## **HOW TO USE A COMPASS**

The steps or procedure for using a compass are as follows:

- 1) Hold baseplate and turn compass housing so index line is set to selected bearing (degree or number on housing). On most compasses bearings are set in two-degree increments for 360 degrees.
- 2) Once bearing is set, hold compass in your hand level enough to permit magnetic needle to swing freely and the direction of travel arrow is pointing strait ahead.
- 3) Now orient the compass and yourself by turning yourself around together with the compass until the rod north end of the magnetic needle lies over the orienting arrow and points to the letter "N" on the dial.
- 4) Look straight ahead and choose a landmark or a spot, which is in the direction you are facing as pointed out by the direction of travel arrow in the baseplate. Walk to the landmark or spot without looking at the compass.
- 5) When you reach your landmark or spot, repeat steps 2 and 3, and use the compass to locate the next landmark and repeat again until you reach your destination.

**NOTE:** Once you set your bearing **DO NOT CHANGE BEARING** until you reach your destination on that bearing. Just orient red magnetic needle with "N" and find landmarks with direction of travel arrow.

## **PACING**

Pacing, or pace counting, is a method used to measure distance in the field by counting each time the same foot strikes the ground (double step). Pacing allows one to estimate how far, in steps, the next control point is and when to begin to look for it. Each persons pace is different.

Pace can be determined fairly accurately to cover 100 meters. To do this, you can use the pace course immediately to the left rear of the kiosk. The distance from the start of the North Aiming Point is 50 meters. You may determine your pace of 100 meters by walking from the start point to the North Aiming Point and back to the starting point. Participants should determine their pace by walking the length of the course and the number of double steps taken.

## **Safety Concerns**

Although orienteering is a relatively safe activity and common sense will keep you out of trouble, one should review these safety concerns.

- 1. Although orienteering is an individual activity, an orienteer should have a partner along the first time on the Advance Course.
- 2. Since once can encounter spiders, bees, mosquitoes, and other insects in the woods, an insect repellant is a good idea. Those orienteers who have allergic reactions o insect bites should be advised.
- 3. Wear long pants to ward off possible brambles, poison ivy, and thick vegetation.
- 4. A safety bearing of 360° or (0° or "N") can be used anywhere on the course. This bearing will bring you to a park road or to the open area behind the Park Information Building.