

ORIENTEERING - BY NATURE'S SIGNS



NATURE WILL HELP YOU FIND YOUR WAY

SOUTHEASTERN MICHIGAN



HIKING MICHIGAN



PART 1.

Nature's ways of telling you where you are vary. They are not rules written in stone. You will learn to use multiple signs from Nature to determine the direction and your whereabouts. Putting a number of natural signs together will usually tell you what you need to know. The Natural signs we will be listing are for primarily the lower peninsula of Michigan. But many can also be used or adjusted to where ever you may be.

These ways take practice. You will not learn these things overnight. You will start to develop acute senses you forgot you had. You will see things differently, you will smell things you didn't before, you will hear things in a different way. Not only will these acute senses help you guide yourself around the forest, but your experiences there will also change. You will see much more wildlife, plants will become more apparent to you, your whole outdoor experiences will change forever. Everyone can do these things, in one manner or another. It's worth it too.

BE CALM - STAY ALERT - NOTICE ALL THINGS AROUND YOU, BE A PART OF IT:

It is not very easy to read nature's signs while you are in Panic Mode. Calmness of mind is where you need to be at. Always take a direction bearing from wherever it is you may be starting your forest Hike, Bike, outing. Stay alert while you are traveling through the woods. Take notice of the different landmarks, interesting trees or Rock outcropping. Realize the lay of the land. Take notice of the terrain and how the hills flow, or what basic direction the streams or rivers are running, ect. Be a part of your journey, not just a passenger.

BRING ALONG A COMPASS:

It's great back-up and it will help you confirm the Natural Signs as you are learning them.

WINDS OF SUMMER ARE WEST-S.WEST / WINTER WINDS ARE WEST-N.WEST:

The winds in this part of our State (S.E. Michigan) will generally blow from the West-SouthWest during the spring, summer and fall months. Again, this is generally speaking. If there is bad weather rolling in, it is not uncommon for the storm to hit the water (Lake Huron, Lake St. Clair) and kick back onto the land, and all of a sudden, the winds are coming out of the East.

The winds of winter will generally blow out of the West - NorthWest, bringing that Arctic and Northern Canadian cold with it. Again, a good snow storm can reverse this process, back-up when it hits the Lakes and now the Snow or winds can be coming from the East.

NOTICE THE TREES AND THE PLANTS:

Trees and the plant life deal with the weather and winds in many different ways. Some trees will go with the flow and it's limbs and branches will all be pointed in the direction of the common wind blow. That would be generally West to East in this part of the State. Other trees, with shallow roots may grow directly into or lean into the predominant winds, to help hold itself in place. Many plants will do the same things, or will grow in places that protect themselves from the predominant high wind directions. If you start to look a little more carefully, you will learn what trees and plants do what, to protect themselves from bad weather. You are required to learn the names of these Trees and plants, just take notice as you move through the forest. Certain Trees and plants will start to become apparent to you, on a more regular basis. Cross-reference your observations with a Compass to start learning these Trees and Plants.

USE ALL OF YOUR SENSES, IT'S A GOOD PLACE TO START

ORIENTEERING - BY THE MILITARY

SCIENCE WILL HELP YOU FIND YOUR WAY

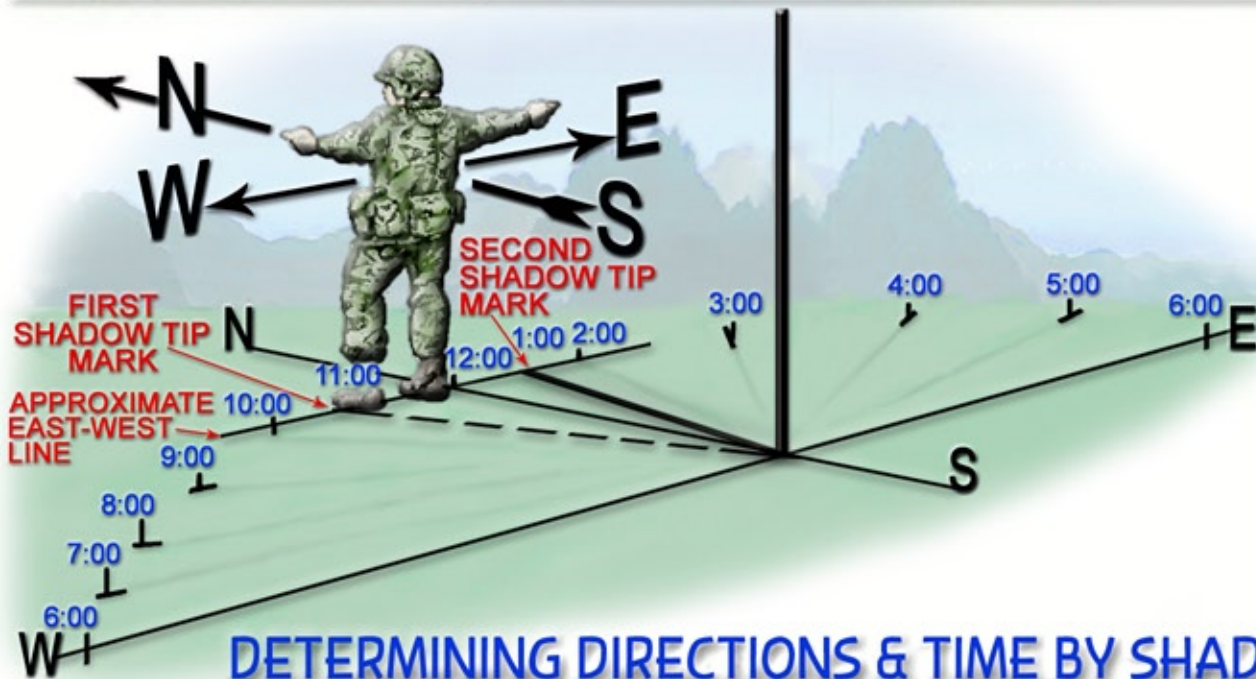


PART 2.



SOUTHEASTERN MICHIGANS

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DETERMINING DIRECTIONS & TIME BY SHADOW

- Step 1.** Place a stick or branch into the ground at a level spot where a distinctive shadow will be cast. Mark the shadow tip with a stone, twig, or other means. This first shadow mark is always the west direction.
- Step 2.** Wait 10 to 15 minutes until the shadow tip moves a few inches. Mark the new position of the shadow tip in the same way as the first.
- Step 3.** Draw a straight line through the two marks to obtain an approximate east-west line.
- Step 4.** Standing with the first mark (west) to your left, the other directions are simple; north is to the front, east is to the right, and south is behind you.
- (2) A line drawn perpendicular to the east-west line at any point is the approximate north-south line. If you are uncertain which direction is east and which is west, observe this simple rule--the first shadow-tip mark is always in the west direction, everywhere on earth.
- (3) The shadow-tip method can also be used as a shadow clock to find the approximate time of day.
- (a) To find the time of day, move the stick to the intersection of the east-west line and the north-south line, and set it vertically in the ground. The west part of the east-west line indicates 0600 hours (6am), and the east part is 1800 hours (6pm), anywhere on earth, because the basic rule always applies.
- (b) The north-south line now becomes the noon line. The shadow of the stick is an hour hand in the shadow clock, and with it you can estimate the time using the noon line and the 6 o'clock line as your guides. Depending on your location and the season, the shadow may move either clockwise or counterclockwise, but this does not alter your manner of reading the shadow clock.
- (c) The shadow clock is not a timepiece in the ordinary sense. It makes every day 12 unequal hours long, and always reads 0600 hours at sunrise and 1800 hours at sunset. The shadow clock time is closest to conventional clock time at midday, but the spacing of the other hours compared to conventional time varies somewhat with the locality and the date. However, it does provide a satisfactory means of telling time in the absence of set watch.
- (d) The shadow-tip system is not intended for use in polar regions, which the Department of Defense defines as being above 60° latitude in either hemisphere. Distressed persons in these areas are advised to stay in one place so that search/rescue teams may easily find them.

ORIENTEERING - BY ELECTRONICS

ELECTRONICS WILL HELP YOU FIND YOUR WAY



PART 3.



SOUTHEASTERN MICHIGANS

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Even if you DON'T know what direction you originally came from, the compass may not help you to get back to your origin, but it WILL help keep you from wandering in circles. Whether you chose a direction by certain knowledge, or by guesswork, you must now use the compass to actually head in that direction. This is NOT as simple as just glancing at the compass and walking. Believe it or not, that can have you wandering all over the place. What you must do is take a "Heading". To take a Heading, Level the compass to allow it to point North. Once North has been established, find the direction you want to go, and choose a terrain feature in that direction that is both far away and easy to differentiate from other features (a hilltop, large tree, rock, etc). You have just taken a heading. Some compasses (called "Lensatic" compasses), have a sighting device built in to help pick out an object.

The next step is to make your way to the object you picked out. As you approach or reach the object itself, take another heading, pick another object, and continue on your way. Continuing to repeat these two steps keeps you headed in the direction you chose.

The reasoning behind this method is that it allows you to head for faraway objects in the easiest way or path available. If you were to just keep watching the compass and walking, you would have to potentially trek through swamps, thorns, up or down cliffs, etc. By picking large objects in the distance, you can focus on the best way to get to each. Note that in dense forest or jungle, you will either have to climb a tree now and again, or just pick tree trunks or other objects as far away as the foliage allows you to see.

THE WATCH METHOD

A watch can be used to determine the approximate true north and true south. In the north temperate zone only, the hour hand is pointed toward the sun. A south line can be found midway between the hour hand and 1200 hours, standard time. If on daylight saving time, the north-south line is found between the hour hand and 1300 hours. If there is any doubt as to which end of the line is north, remember that the sun is in the east before noon and in the west after noon.



THE BASIC COMPASS

Not all compasses include each of these parts and some compasses include even more.

Baseplate: hard, flat surface on which the rest of the compass is mounted. It has a ruler on its edges for measuring distances on maps. It's edge is straight and useful for laying lines on a map

Scales: each edge of a compass may have different rulers for use with different map scales

Direction-of-Travel Arrow: marked on the base plate.

You point this the way you will be traveling

Magnifier: for seeing small map features better

Index Pointer: butt end of the direction-of-travel arrow. It ends right at the edge of the dial and is where you take degree readings

Dial: ring around the housing that has degree markings engraved. You hold the dial and rotate it to rotate the entire housing

Declination Marks: use to orient the compass in an area with known declination

Orienting Arrow: marked on the floor of the housing. It rotates with the housing when the dial is turned. You use it to orient a compass to a map

Orienting Lines: series of parallel lines marked on the floor of the housing and on the base plate

Needle: magnetized piece of metal that has one end painted red to indicate North. It sits on a fine point that is nearly frictionless so it rotates freely when the compass is held fairly level and steady

Housing: main part of the compass. It is a round plastic container filled with liquid and has the compass needle inside

Bubble: a bubble of air in the housing liquid is useful for making sure you are holding the compass fairly level

Mirror: lets you see the compass face and distant objects at the same time. Useful for emergency signaling

