

The Lamson Adventures!!!!



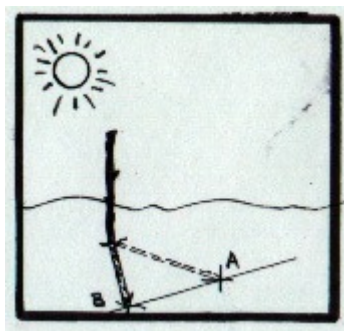
Finding Your Way Using the Sun, Moon, Stars, and Improvised Compasses.

[Sun](#) | [Moon](#) | [Star](#) | [Improvised Compasses](#)

SUN, the shadow Caster [TOP](#)

We all know that finding our way is the hardest thing about getting somewhere. Packing, nope, figuring out the menu, no!!! It is getting there. And if you are hiking, it is even worse. There are no gas stations to stop by and ask. I hope that these simple rules will help out with finding your direction. We know that the revolution of earth on its axis produces the changes from light to dark. And, depending where you are in the world, the rotation around the sun causes the seasons. But, did you ever sit and think that the sun can help you find your direction. Basic, the sun rises in the east and sets in the west - but not EXACTLY in the east and west. There is also some seasonal variation. In the Northern Hemisphere, when at its highest point in the sky, the sun will be due south; in the Southern Hemisphere this noonday point will mark due north. The hemisphere will be indicated by the way that shadows move; clockwise in the north, counter clockwise in the south.

Direction by Shadows

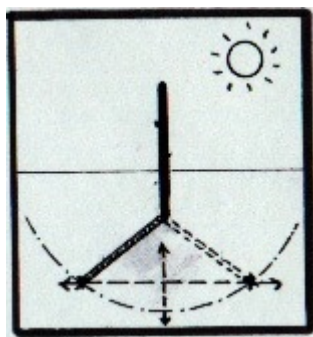


Shadow Stick Method #1

Shadows can be a guide to both direction and time of day. Let's take a look at a few tricks with shadows now. On a patch of flat, clear ground place a meter-long (3ft) stick as upright as

possible. Note where its shadow falls and mark the tip with a rock or an "X" on the ground. Wait at least 15 minutes and mark the new shadow tip. Bisect between the two and you have directions of east and west. The first mark is west.

North-south will be at right angles to this line. This stick method works at any time of the day when there is sunshine and at any latitude.



Shadow Stick Method #2

Another, more accurate method, if you have time, is to mark the first shadow tip in the morning. Draw a clean arc at exactly this distance from the stick, using the stick as the center point. As midday approaches the shadow will shrink and move.

In the afternoon, as the shadow lengthens again, mark

the EXACT spot where it touches the arc. Join the two points to give east and west. West is....of course, the morning mark.

The Moon!!!, Hmmm? [TOP](#)

The moon has no light on its own. We all know that. It reflects the light that comes off the sun. As it orbits the earth over 28 days, the shape of the moon changes. Why is that? Because the shape changes based on the shape of the light reflected according to its position in respect to the sun. When the moon is the same side of the earth as the sun, no light is visible. This is the "new moon". As the days pass, the moon reflects light from its apparent right-hand side, from a gradually increasing area as it waxes. At the full moon, it is on the opposite side of the earth from the sun and the it "waned". The reflecting area gradually reducing to a narrow slitver on the apparent left-hand side. This can be used to decide direction. That is right. Wacky huh?

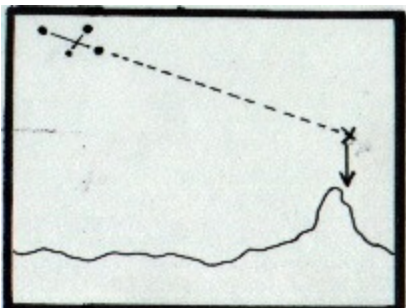
If the moon rises BEFORE the sun has set the illuminated side will be on the west. If the moon rises AFTER midnight the illuminated side will be in the east. This may seem a little obvious, but it does mean you have the moon as a rough

east-west reference during the night.

Stars do more than twinkle [TOP](#)

The stars are great. Every night they zoom over us and we never even notice they are in the same place each night. The path they take over the horizon starts four minutes earlier each night, a two hour difference in time over a month. If you study a star at a certain position at a certain time one evening and then check its place the next night at the same time, you will find it has moved one degree of arc clockwise in the Southern Hemisphere (counter clockwise in the Northern Hemisphere).

Southern Hemisphere Skies....wow!!!!



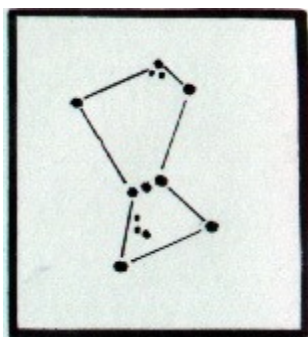
It is a lot easier using the Northern skies but do not dismay, the South has its tricks too. We will start in the Southern Hemisphere skies first. There are no stars near the South Celestial Pole bright enough to be easily recognised. BUT, we do have that every knowing constellation used as a signpost to the south; the Southern Cross (Crux), a constellation of five stars which can be distinguished from two other cross-shaped groups by its size-it is smaller and its two

pointer stars.

To locate south, project an imaginary line along the cross and four and a half times longer and then drop it vertically down to the horizon. Fix, if you can, a landmark, a tree or even hill. That is south my friend. Turn around, that is north. hehehe, sorry, could not resist.

Where the heck is the Southern Cross?

One way to find the Southern Cross is to look along the Milky Way, the band of millions of distant stars that can be seen running across the sky on a clear night. In the middle of that vastness is a dark patch where a cloud of dust blocks out the bright star background, known as the Coal Sack. On one side of it is the Southern Cross, on the other the two bright pointer stars from the Southern Cross.



Orion

Orion is by far my favorite constellation. I love the fact that when I am home the United States in the clear skies of St. Albans Vermont or here in Alice, I can see him, grand and bright. Wow, I sounded pretty poetic there for a moment. Anyway, Orion rises above the Equator and can be seen in both hemispheres. It rises on its (or his) side, due east, regardless of the observer's latitude, and sets due west. He is easy to spot by the three stars, making his belt, and those lesser stars, forming his sword.

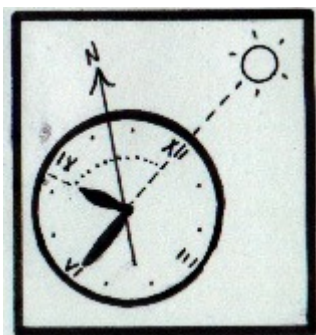
Magnetic Personality (The Improvised Compasses) [TOP](#)

A piece of metal wire, a needle is best, stroked repeatedly in one direction against sild will become magnetized and can be suspended so that it points north. The magnetism will not be strong in this method though.

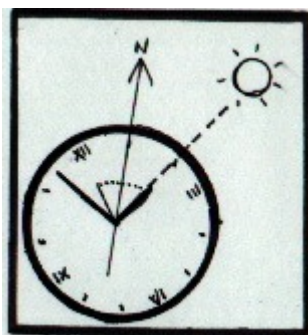
Here is another idea, still, using a needle. Suspend the needle in a loop of thread, so that it does not affect the balance. Any kinks in or twisting of thre thread must be avoided. Stroking with a magnet, if you happen to have one, is more effective than the silk. Stroke the metal smoothly from one end to the other in one direction only. Well, maybe you do not have a string. Float the magnetised needle on a piece of paper in a dish. If you do not have paper, how about floating it on grass. The point, yup, will point north!!!

Direction by Watch

I personally want a compas with me. But all these will work. And there are those times you just do not have one. A standard wrist watch with number, no, not digital, can be used to find the direction. This is important though, it has to be set to true local time (without vatiation for summer daylight saving, not that we do that here in Alice Springs). The nearer the Equator you are the less accurate this method will be. You guessed it, if you are on the Equator, the sun almost directly overhead and it is very difficult to determine its direction.

**Southern Hemisphere**

Hold the watch horizontal. Point 12 towards the sun. A mid-point between 12 and the hour hand will give you the North-South line.

**Norhtern Hemisphere**

Hold the watch horizontal. Point the hour hands at the sun. Bisect the angle between the hour hand and the 12 mark. this is the North South line.

If you have comments, suggestions, or questions about these places, email me at lamsons@lamsonadventures.itgo.com or



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Finding direction by sun moon and stars with the Lamson Adventures!!
on the Lamson Adventures Site!!!! Thanks