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March Madness



Texas is well represented  
in March Madness :  
Texas Southern  
Abilene Christian  
North Texas  
Texas Tech  
Texas  
Houston  
Baylor

### Climate Change Disaster

The Arctic Ocean is warming up, icebergs are growing scarcer and in some places the seals are finding the water too hot according to a report to the Commerce Department yesterday from the Consulate at Bergen, Norway.

Reports from fishermen, seal hunters and explorers all point to a radical change in climate conditions and hitherto unheard of temperatures in the Arctic zone.

Exploration expeditions report that scarcely any ice has been met as far north as 81 degrees 29 minutes.

Soundings to a depth of 3,100 meters showed the gulf stream still very warm.

Great masses of ice have been replaced by moraines of earth and stones, the report continued, while at many points, well known glaciers have entirely disappeared.

Very few seals and no white fish are found in the eastern Arctic, while vast shoals of herring and smelts which have never before ventured so far north, are being encountered in the old seal fishing grounds.

Within a few years it is predicted that due to the ice melt the sea will rise and make most coast cities uninhabitable.

**I must apologize. I neglected to mention that this report was from November 2 , 1922, as reported by the AP and published in The Washington Post 99 years ago.**



#### Free Masks

Lavelle Ford and Barbara Spencer are still making masks. Masks are free to all members and to all TMRC residents and staff.

Barbara: [barbs1145@hotmail.com](mailto:barbs1145@hotmail.com)

Lavelle: [lavelle.ford@gmail.com](mailto:lavelle.ford@gmail.com)

### **How to find North without a compass**

During the daytime, when the Sun is shining:

Find a stick that's almost a foot tall. Poke a stick into the ground so that it is standing straight up. Look for the shadow.

Then place a rock at the end of the shadow cast by the stick. Wait about 15 minutes.

Put another stone at the end of the second shadow. With your back to the stick, stand with your left toe touching the first rock, and your right toe touching the second rock. You're facing north.

Draw an imaginary line from the first rock marker to the second.

West is the direction of the first marker.

#### **USE A WRISTWATCH**

If you have a watch with hands (not digital), you can use it like a compass.

Place the watch on a level surface.

Point the hour hand towards the sun. Then find an imaginary line halfway between the hour hand and the 12 on the watch face. (During daylight savings time, the halfway line is between the hour hand and the 1.)

That imaginary line points south. This means North is 180 degrees in the other direction.

If you can wait, watch the sun and see which way it is moving. If it's rising, that's east. If it's setting, that's west.

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#### **MAKE A NEEDLE COMPASS**

Got a first aid kit? Get the needle from it. Find either the silky liner of your sleeping bag or another material.

Rub the needle on the silk or wool material about 100 times and static electricity will build up and create a magnetic charge.

Lay the needle on a leaf placed in a small pool or cup of water.

Place the leaf delicately on the pool of water and place the needle on top.

If there is no wind, the needle should orient in a north-south axis toward magnetic north.

The thicker end of the needle (the side with the eye) will favor the northern direction.

You also can use shadows (shadows tend to favor north) to determine which way your needle is pointing. From there, you can figure out your coordinates.

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### **To find North:**

#### **OBSERVE NATURE**

During the day, look for these directional signs (applicable for certain locations in the Northern Hemisphere):

Deciduous trees tend to grow on the south side of hills; evergreens grow on the north side.

In the desert, the giant barrel cactus always leans toward the south.

The leaves of the pilot weed grow in a north-south line. (Settlers crossing the Great Plains called it the "compass plant of the prairie.")

Moss on a solitary tree that is openly exposed to the sun. Moss likes shade so the northern side of a tree is typically in shade most of the day.

In the Northern Hemisphere, the Sun lies due south at local noon every day.

[Note: Local noon, aka "local apparent noon or "solar noon," occurs when the Sun crosses the meridian (an imaginary line that runs through the north and south poles and a point directly overhead) and is highest in the sky for the day.

Local noon is usually not the same as clock-time noon.]

SOURCE: The Old Farmer's Almanac for Kids, Volume 1

## **At night;**

### **Here's how to find the North Star:**

Find the Big Dipper.

Then, find the two stars at the outer edge of the Dipper's bowl.

These are pointer stars. They "point" to the North Star.

Extend an imaginary line from the pointer stars across the sky to the next bright star.

Stretch your arm out full length and spread your fingers, and the

North Star should be about as far away as your thumb is from your middle finger.

big-dipper-2954237\_1920\_full\_width.jpg

### **USE TWO STICKS IN A FIELD**

In the evening, when you can see the stars:

On a cloudless night, drive a stick into the ground until the tip of it is at your eye level. Behind it, plant a taller stick such that the tips of the sticks line up on a bright star, as you look at them. After a few minutes, the star will appear to have moved (but remember: stars don't move; it's Earth that's rotating). If the star seems to move ...

up, you are facing east.

down, you are facing west.

right, you are facing south.

left, you are facing north.

### **POLARIS (the North Star) DOES NOT MOVE**

Polaris does not move in the sky (well, it rotates just a little, as it isn't exactly North, but close enough), and is always there-- it does not set. Polaris is also the tip of the handle of the Little Dipper.

The orientation of the Little Dipper will rotate as Earth rotates (so our view changes), so sometimes the bowl of the dipper will be higher than the handle, and sometimes lower. Also, the orientation will be usually the opposite to the Big Dipper--so if the bowl of the Big Dipper is higher than its handle, the bowl of the Little Dipper will probably be lower than its handle.

The Big Dipper will be rotating as well--sometimes you'll see the bowl higher than the handle (as if liquid in the bowl would pour out), sometimes level, and sometimes lower (to hold the liquid in). The two stars defining the outer side of the bowl of the Big Dipper (away from the handle) will always point to the tip of the handle of the Little Dipper.

As you've done, you need to draw the line from the bottom of the Big Dipper bowl to the top of the bowl, and extend it further about 5 times out to find Polaris. Sometimes this line is drawn down (or south) in the sky if the Big Dipper is on top of the Little Dipper at that point, as both rotate around Polaris. The direction of that line drawn may move downward, or southward, from Big Dipper to Little Dipper, but its stopping point, Polaris, in relation to where you are on the ground, is north (you'll be facing north to see it).

How high above the horizon that you can see Polaris will depend on your latitude.

It's about on the horizon at the equator. As you move northward, Polaris will be seen higher

in the sky. At, say, 42 degrees north latitude, Polaris will not be overhead, so drawing a line to it down from the Big Dipper, if it was "above" Polaris at that point, would seem to be going southward (even though the line would be going to the north point).

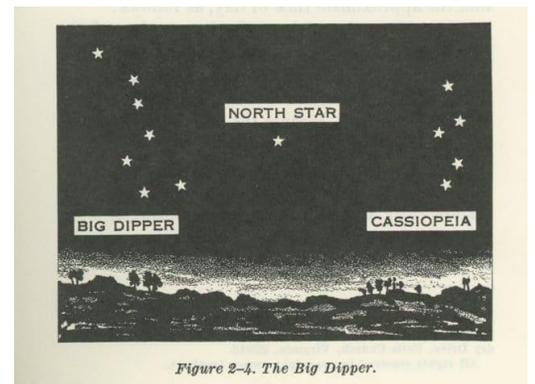


Figure 2-4. The Big Dipper.

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**In Texas**, only the evergreen juniper trees/bushes grow on south side of hills. Deciduous trees grow on north side. As you go further west in Texas, only cactus grows on south side of hills, and the evergreen junipers are only on north side. Basically the south side of hills supports only the vegetation that is most drought/heat resistant, while the north side supports vegetation that needs more moisture/shade.  
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Also, to find North without a compass, look for green moss on trees & rocks. It grows best on the North side. Some boulders that have lain undisturbed for long periods will tend to split along a North-South line due to uneven heating by the sun  
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### Determining Time

The Shadow-Tip Method previously described (fig. 2-2) can also be used to find the approximate time of day, as follows:

(1) 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 line indicates 0600 hours, and the east part is 1800, ANYWHERE on earth, because the basic rule, described in 1c in "Finding Direction by Day" above always applies.

Vintage illustration using stick to find direction with sun.

(2) 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 (fig. 2-6). 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.

(3) The shadow-clock is not a timepiece in the ordinary sense. It makes every day 12 unequal "hours" long, and always reads 0600 at sunrise and 1800 at sunset. However, it does provide a satisfactory means of telling time in the absence of watches (which is the usual case with escaped prisoners of war) or properly set watches. Being able to establish time of day is important for such purposes as keeping a rendezvous, pre-arranged concerted action by separated persons or groups, estimating the remaining duration of daylight, and so forth. Twelve o'clock shadow-clock time is always true midday, but the spacing of the other hours, compared to conventional time, varies somewhat with the locality and the date.

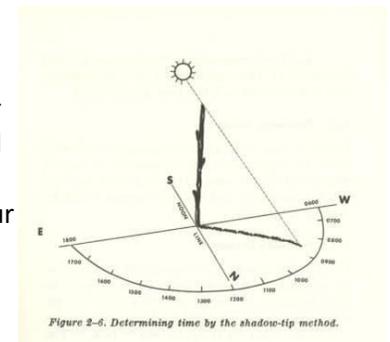


Figure 2-6. Determining time by the shadow-tip method.

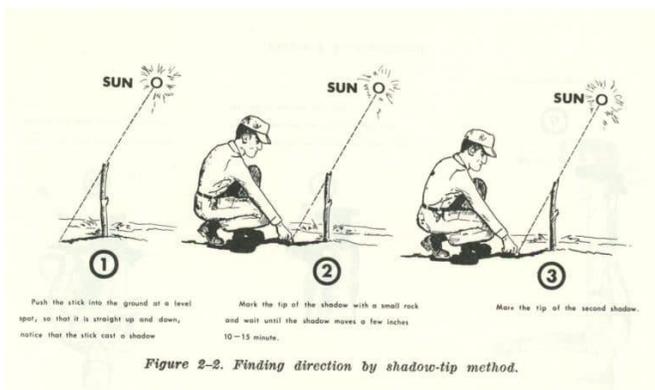


Figure 2-2. Finding direction by shadow-tip method.

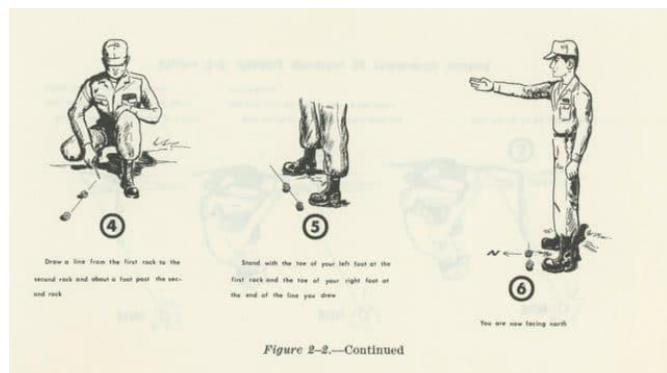


Figure 2-2.—Continued