One of the recent developments in camping is "orienteering", a program using a map and compass. Orienteering can be dovetailed into an overall camping program and used to "point up" the entire program, or it can be confined to a single simple game. The arrangement depends on the situation. The minimum age of the participants should be about 9 or 10. The ideal size group to instruct at one time is 20. The following program suggestions are based on an arrangement that has been used under a variety of conditions: divide program into 3 main parts—(1) preliminary instruction to teach the simple use of a compass; (2) compass games; and (3) pointing up the general program—that is, a compass hike combining various outdoor skills into a unified adventure. There are no real limitations regarding the area to be used. A small back yard or even indoor rooms are usable. Instructions are also given for how to teach the Silva Compass, how to measure distance with a compass and how to organize a hike. (FF)
One of the finer recent developments in camping programs is "orienteering." The essential tools are as old as the hills, because orienteering is a program using map and compass.

But a new dress has been added. The compass has been modernized. The program has been streamlined. Being both simple and fun, orienteering can lift the moderately successful camp program to become outstanding successful.

**CAMPSITE REQUISITES FOR ORIENTEERING**

There are no real limitation regarding the area. Some advanced programs require a vast expanse of unfamiliar wilderness. At the other extreme, a small back yard or even indoor rooms are usable.

For normal camp purposes, an ideal arrangement would include a level playground area at least one hundred feet square plus two or more acres or traversable wooded area.

**THE PROGRAM ARRANGEMENT**

Program possibilities are infinite. Orienteering can be dovetailed into the overall camping program and used to "point up" the entire program, or it can be confined to a single simple game. The arrangement depends on the situation. As a consequence, it is wrong to say that any special program arrangement is better than another.

The following suggestions are based on an arrangement that has been used under a variety of conditions. It is helpful to examine them for your own program.

Divide program into three main parts, (1) Preliminary Instruction, (2) Compass Games, (3) "Point-up" the general Camping Program.

(1) Preliminary Instructions.

Preliminary instructions can be part of an evening program indoors, or may immediately precede the compass games. Essentially its purpose is to teach the simple use of a compass in preparation for other parts of the program.

The ideal size group to instruct at one time is about 20. For large groups have several instructors working simultaneously, or divide the program time so that the instructor has several sessions to accommodate the group. One hour is normally more time than needed for each group, although active groups having a good leader may ask many questions and extend the time. Normally, the minimum age of the participant should be about nine or ten years old.
The preliminary instruction will hold the interest of the campers as much as any other activity if certain rules are followed: First, keep it simple and explain one step at a time. Second, keep the campers busy handling their compass, doing the things explained by their instructor. For best results, sufficient compasses should be available for everyone in the class and all compasses should be alike. Don't give a lecture. Encourage questions.

One page 5 is a tried and proven test which the instructor may use.

An essential part of the training is the measuring of distance by stepping. On page 6 is an approved method. If the compass instruction is done inside after dark, step-length training can logically follow on the next day, just before the Compass Games. In fact, it is advisable to have a short compass review and a bit of step-length practice before the games anyway.

(2) **Compass Games**

One recommended game called "Competitive Compass Game" is available by writing to Silva, Inc., LaPorte, Indiana, enclosing 25¢ for printing and mailing costs. It is especially designed for use at day camps or similar functions and is played on an area of 100 by 100 feet. The game accommodates 20 players although 40 to 60 players can participate simultaneously by having two or three sets of game cards. As with preliminary instruction, 20 is an ideal size group to work with. This game consists of 20 score cards and one answer card. The only thing to set up for the game is a straight row of twenty numbers, five feet apart. These numbers are starting and ending points for twenty separate three-legged compass courses which are precalculated on the score cards. Instructions on the score cards tell the participants where to go. The answer card tells whether or not participant has gone correctly. If the participant arrives at the correct destination, the score is 100. Otherwise, a deduction is made according to the amount of error. Scores may be kept individually, or patrol score averages may be used. It's fun for both children and adults.

Another game is a simple compass walk and is suitable for elementary use. It requires more "set-up" time by the leader than the game mentioned above, and requires about 1000 by 100 feet. The object of this game is to walk accurately by compass to a given distant fence post, although the contestants do not know in advance which is the correct post.

Preliminary set-up is as follows: A row of fence posts are numbered with chalk or by thumb-tacking numbered cards onto the posts. One of these posts is chosen at random to be the destination - preferably not the exact center one, but definitely not too close to the end either. Suppose it is #5 in the drawing on the next page. Then a distant spot is chosen as the starting point. This spot may be 500 to 1500 feet from the numbered posts. The leader determines the exact compass direction, (the degree reading) from "Start" to post #5 (Suppose it is 85°),
Playing the game is simple, but good fun. Contestants are led to the "Start" and the game is explained. One by one, they are to go 85° by compass until reaching the fence, noting the number of the nearest post, then returning to the leader for scoring. They are told before starting that arrival at the correct number gives a score of 100, otherwise 10 is subtracted for each post in error.

In this particular example, a person arriving at #5 is scored 100, but a person arriving at #3 received a score of 80 because the error was two posts from the correct one.

If patrol scores are desired, use the average score for the patrol. That is, add the individual scores and divide that sum by the number of persons in the patrol.

Caution: If the groups are large, more starting points are required. Otherwise the game will be slow. Calculate one starting point for every six or eight contestants. Each leader can handle two or three starting points with little difficulty.

(3) Pointing-up the General Program

The third phase of this orienteering program is a compass hike combining various outdoor skills into a unified adventure. It is sometimes used to point-up the general camping program in one grand finale. The compass itself becomes a tool to accomplish a purpose -- and that is really the prime purpose of a compass.

Repeating again, that there is no single procedure which is best, the following outline is one method proved to be successful and applicable to small or large camps. In general, various stations are located around the camp (see page 8) and are identified by numbers. A 3"x5" card bearing the appropriate station number is suitable. At each station there is a job to do, or some information to receive, or some beauty to see, or some spring water (tested) to drink, or some skill to be tried, or a chance to swim -- or what have you in your camp? In addition to these specific references the hike has one central theme such as conservation, or trees, or geological formation or general nature study. By compass, the various patrols go from station to station.
The hike ends at the cooksite. And very important, a report is made of the adventure later at dinner or campfire.

Preliminary preparations are quite important. If swimming is involved, a life guard or other protection is necessary. If cooking is involved, a menu must be prepared and food must be secured, etc. Stations must be chosen and the compass directions determined. An instruction card for each patrol should be prepared. (See page 7).

When the day arrives for the big adventure, the group is formed into patrols (maximum of 8 to a patrol). Each patrol leader receives an instruction card. A sample is shown on page 7.

Upon giving the instruction cards to each patrol leader, time is allowed to study the instructions. The patrol which is ready first is led to Station #1 and told to start immediately. Other patrols are started at five minute intervals.

Notice the instructions for Station #3. In our example, a person located between Stations #2 and #3 was lying side of the road, unquestionably injured (tallow from a red candle, or mortician's wax colored with lipstick can be used to create a realistic injury). While no instructions were explicitly given, the situation obviously demanded that a doctor be called immediately. (A less serious injury might only require first-aid attention).

The scribes' reports are usually the highlight of the day. These reports should be given in the evening so that the scribes will have time to write them out in an interesting fashion. Evening campfire is an excellent time, but in any event, not sooner than the evening meal.

You will feel well paid for your planning, time and efforts if it happens that one of the reports is written in the poetic rhythm of "Hiawatha" or is put to the tune of the "Whippenpoof Song."
Let's suppose that an airplane crashed in a nearby woods and your group was asked to rush there to help out. In the woods there are no street signs, no road markers to show the way so the leader simply says that the wreckage is 40 degrees, 1,000 feet from the entrance to Jones Woods. When we arrive at the entrance, we can quickly go there if we know how to use our compass. Here is how: (Explain slowly and carefully and by individual steps).

Notice several parts to the compass.
The "Direction of Travel" arrow is on the plastic base. This is the arrow that shows which way to walk after our compass is set. (Point out the arrow).

This is the housing.
It turns -- try it. (Demonstrate).

The numbers around the outside of the housing are degrees. Whichever degree number is at the "Direction of Travel" arrow is the degree setting of the compass.

Inside of the housing is an arrow needle which swings on a pin. It is the "magnetic needle." It always points North and therefore is not the way to go. The "Direction of Travel" arrow points the way to go.

Now let's determine which way is 40 degrees -- the way we want to go.

**First**, turn the housing until the figure "40" is at the "Direction of Travel" arrow. Now the compass is set -- do not turn the housing any more.

**Second**, hold the compass level, about waist high or a little higher -- and be sure the "Direction of Travel" arrow points straight ahead of you -- not towards you nor to one side. If you hold the compass with both hands and keep your elbows tight against your sides, you can hold it steadier.

**Third**, rotate your body and watch your compass. Keep turning until the red end of the magnetic needle points to the letter "N" on top of housing. As you turn, do not twist the compass in any way. Keep the "Direction of Travel" arrow pointed straight in front of you at all times. When you have turned far enough so that the red end of the needle points to "N", (needle will coincide with orienting arrow), then you are facing the correct direction to walk.

Look up and sight an object straight ahead, such as a tree in that direction, then forget the compass and walk to that object. When you arrive there, repeat the process and pick out a new objective. Repeat until you reach your destination.

(Demonstrate and repeat until each person can set the compass to a degree reading and determine his direction of travel).
MEASUREMENT OF DISTANCE

The compass shows the direction of travel but usually it is also desirable to know how far to travel. Measuring and judging distances therefore should be part of most orienteering programs.

Timing

One method is by timing your walk. If you normally walk 4 miles per hour, and your destination is two miles away, you will reach it in a half hour of normal walking speed. In woods or places where walking speed is retarded, you must estimate whether your speed is retarded and how much. If, for example, you think you are walking about one-half normal speed, you will allow yourself an hour to reach the destination two miles away.

Mental Measurement

Another method is by estimation of judging of actual distances. Use several distances with which you are acquainted and apply them to unfamiliar places. For example, if you recall that your boyhood home was 1/4 mile from the main road, you probably have a very good idea how far away 1/4 mile would be. Then use it as a mental measuring stick when judging distances. Almost everyone knows how far it looks along the length of a football field. It is 100 yards and you can also use that as a mental measuring stick.

Stepping

For shorter distances, stepping is ideal and can be one of the most accurate methods to estimate distances. Measurement is done by walking at your normal speed and counting your strides (two steps) as you walk. Then if you know the length of your stride, you can convert into feet, yards or miles as desired. For example, if the distance is 200 strides, and your stride is 5 feet long, the distance would be approximately 1000 feet.

Finding a "Measuring Step Length"

With an average step length 2-1/4 or 2-3/4 feet, it is difficult for many of us to figure distances of stepping. But if you learn the FEEL of a 2-1/2 foot step length it is easy to measure distances. Two such steps equal 5 feet, and it is easy to count by 5's. When measuring, simply walk along and count every second step by 5's to obtain the distance in feet.

To learn the feel of this "measuring" step, measure off a distance of 200 feet with a tape measure and mark each end with stones or stakes. Then walk along the course, counting each second step by 5's until your count reaches 200. If you did not reach the end of the course, or if you went past the end, try again with a slightly readjusted step length. With but little practice you will learn the FEEL of this convenient "measuring" step where two steps (one stride) equals 5 feet.
INSTRUCTIONS
Read all before starting

A. Appoint a scribe - to record the adventure.

B. Appoint two guides to lead the way (change guides at each station so everyone has a chance to lead the way).

C. All other members are observationists who will report things of interest to the scribe.

D. This will be a wild-life hike. Scribe keeps record of all wild life seen by patrol, or signs of wildlife.

E. Important - Scribe keeps record of anything of special interest on the trip. Examples: Patrol member sits on a briar; guides lose the way; last night's rain raised the lake level; patrol member rebuffed for raiding food bag.

F. Scribe will compose an interesting report of the trip to be read at campfire tonight.

G. Get your swim suits and report immediately to leader, west of Dining Lodge.

H. When leader gives the signal, go to Station #1 and proceed immediately as follows:

THE TRIP

Station #1-Go 170° - 200 ft. to #2

Station #2-Give three safety rules for highway hiking.
       Go 85° - 425 ft. to #3

Station #3-What first aid treatment or other help, if any, did you give between station #2 and #3.
       Go 330° - 300 ft. to #4

Station #4-What is the degree reading and estimated distance to the flag pole. Go by canoe 20° to #5 on shoreline.
       Bank your canoe. (The ranger will get it later)

Station #5-Note view to the South. Look North West and notice the mounds.
       They are Indian Mounds. Chiefs and others of importance were buried in a vertical position under such mounds, and lesser persons in a horizontal position.
       Proceed upstream to #6.

Station #6-This is a beaver dam. Note the tree stumps nearby. The trees were cut down by the beaver, not by man. Identify each kind of tree you can see.
       Go 190° - 300 ft. to #7.

Station #7-Give three waterfront safety rules. You may now go swimming.
       Follow the rules of the beach. When life guard says time is up, dress immediately and proceed to cooksite (100 feet south).

Station #8-The end of hike. Find your box of food on table, build a fire where leader designates, and cook your lunch according to menu in food box.