A Ridgewalking Primer

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Whether on a ridge or not, looking for new caves is the grunt work of speleology, full of long hours with little return. But when ridgewalking pays off, as it eventually does, nothing can match the thrill of finding your own new cave. So if you want to find caves, here are some hints on how to go about it.

An Hour in the Home is Worth Two in the Bush

Where do you go to start finding caves? The answer is simple—go home! A few hours of research at home will pay big dividends in the field. Look for areas where caves are known but where they have not been carefully documented recently.

Start by seeing what's already been published. Call someone in the grotto who collects cave books—he or she may be able to lead you to publications that will get you started. Check the state geological survey publications, local grotto newsletters, Speleo Digests, etc. If there is a cave database for the state or county, check it out!

While publications certainly can help, your homework will be much easier if you can find the right person to talk to—that local cave guru who knows the caves and who may be compiling a county survey. Perhaps he (or she) is sitting at home right now lamenting the fact that there's not enough time to ridgewalk all the promising karst. Perhaps he ridgewalked your area last weekend and knows there's nothing there. The point is, find the guru and talk to him. Chances are, he needs help.

In 1990, the author asked the Greenbrier County, West Virginia, guru for places to look for caves, and he was given a map with ten dots on it. "I think there are some caves here, but I've never been in them," said the guru. As it turned out, four of the dots turned out to be 1600-, 1699-, 2300-, and 4300-foot long caves, much of them virgin.

If you find an area that was ridgewalked years ago, don't necessarily write it off. Decades ago, when here was more virgin passage than there is now, some cavers didn't feel the need to push. The author has personally crawled into a not-so-tight entrance which a very well known caver from the 1960s also looked at. He wrote, "There is no air movement, and little hope is held for this cave." The author came into a mile of cave beyond that entrance. Remember, too, that floods periodically move fill and open new entrances.

Before you leave home, get a copy of the appropriate USGS 7.5-minute quadrangle topographic map. Examine it for closed depressions (depicted by ticks along the contour lines), springs, and sinking streams before you start.

A Little Geology Goes a Long Way

We know to look for caves in limestone, but there are other geological ways to narrow your search and multiply your chances of success. For example, some limestones are cave formers and some aren't. Look for caves along faults, at contacts, etc. The author has found caves in a type of limestone which has few natural entrances by looking for strike and dip measurements on the map—which conveniently located every old hand-dug quarry in the county.

Get the most detailed geologic map you can find. However, it may not be detailed enough to pinpoint exactly what rock is where. Sometimes, the map is simply wrong. Even if your map clearly and accurately shows where the limestone outcrops, a thickly wooded hillside often makes it impossible to tell where you are on the map. For these reasons, it helps to be able to recognize different rock types on the ground. Experience is best, but the text which accompanies your geologic map may help. If there's a local quarry, you may be able to learn what the limestone looks like there.

Don't look only at the limestone, however. Often the best way to tell where the limestone is is to spot the sandstones or shales which overlie or underlie it stratigraphically. Remember to look at bedrock only, because loose rocks and boulders may have been moved by gravity, glaciers, plows, logging operations, etc. They cannot be relied upon to tell what the underlying bedrock is.

Ridgewalking Is Not Caving

Have you ever lugged your cave gear up a mountainside in search of a cave, only to have to walk around with it for an hour or two looking for the entrance. Looking for entrances while carrying cave gear is tiring and foolish. It slows you down and diminishes the amount of territory you can cover.

Besides, ridgewalking in the East is best done in winter, when the leaves are missing and visibility is much better. A coating of snow helps in spotting rock outcrops, and it melts where warm cave air surfaces. Holes blowing steam in cold weather are easy to spot. Conversely, caving in the winter is often uncomfortable—changing clothes is miserable, and underground streams are often icy-cold. In short, ridgewalking is a great winter activity for cavers.

Remember, if you are successful, you will find a cave that no one has ever found before. A good rule of thumb is not to go in a new cave beyond the twilight zone on a ridgewalking trip, even with a group. Even more than in most caving, you are very much on your own when you go into a new and unknown cave.If something should go wrong and you need help, there's little chance of anyone's finding you. If the cave goes, you can either return at a later date, or stop the day's ridgewalking and turn it into a caving day.

On the other hand, don't just note the entrance and walk away without finding out if the cave goes. Another very well known caver who had discovered a virgin pit while ridgewalking recently dragged the author up a mountainside through briars and nettles in 100-degree heat loaded with vertical gear and miles of rope to explore his discovery—all six feet of it!

People Don't Find Caves—Organization Do

Man is a social animal. A half-dozen friends waiting on the side of a hill in a group might catch up on a lot of gossip, but unless they break up, they won't find anything more than a single pair of eyes might see. A disciplined search pattern is the most effective ridgewalking method, but like in the army, it requires a single, dictatorial leader to work.

A good technique is to give each ridgewalker in the group a parallel "lane" (or a contour on a hillside) to follow. The distance between lanes will depend upon the density of the undergrowth; it must be close enough not to miss anything but spread out enough to cover a lot of territory. On a hillside, it's easier to see outcrops from below, so keep looking uphill. Try to stay abreast of one another, so that territory is not missed or overlapped because someone got too far out ahead. Definitely stay in sight of one another. When someone stops to check out a hole, everyone else should stop or slow down. Don't abandon your lanes (or get off your contours) to go see what's there.

Where the area or hillside is wider than your lanes, your phalanx will need to execute a U- turn. When making a U-turn to, for example, the uphill side, the person in the highest lane on the way out should be in the lowest lane on the way back. That way, he or she can make sure no territory is overlapped or missed on the return walk.

Ownership is 90 Percent of the Search

Landowner relations rule in the East, where most land is privately owned. But in ridgewalking, asking permission has other advantages. The author has often had landowners describe pits or holes to him when he was asking permission to look around. Once a landowner even got out his bulldozer to help open a cave! Beware, though, that what the average landowner considers a cave is often nothing less than an entrance the size of Carlsbad's. Landowners often will not think to mention crawlway-sized holes.

He Who Forgets the Search Is Destined to Repeat It

Having found a cave entrance, and having determined that it is worthy of returning to later, the ridgewalker must record its location so that he (or anyone else!) can find it again. The same may be true of other karst features (i.e., springs or sinking streams) which the local cave guru asks to have located.

Recording a cave location is more difficult than it sounds. A dot on the USGS 7.5-minute quadrangle topographic map is a good starting point, but it is usually not enough. Take a bearing on a prominent point, like an isolated building or road crossing. Even better are two bearings at approximately right angles to each other, which allows you to use triangulation to pinpoint the location after you get home.

Don't forget to write down a description of the location in words, too. How far from and on which side of the fence? How far in elevation from the top or bottom of the Hill? In heavy woods, scrubby brush, or an open field? (But be careful on this one; once after finding a cave entrance in the woods, the author returned a month later to discover that the area had been clearcut in the interim.)

In addition to its location, write down a description of the entrance itself. The author has often found several entrances where ridgewalkers had described a cave. Without a description, no knows which is which. Is the entrance at a sinkhole, a rock outcrop, or a sinking stream? How high and wide is the entrance?

The controversy regarding "secret" caves has good arguments on both sides. My argument is this: If you do not record your find, someone else eventually will and will take credit for it. (Ask the people at WVACS.)

If you do not record your find, it does not help speleology a bit. You are selfish. I do not mean that you must publish, but rather that the results be recorded somewhere. Nowhere is better than with the local cave guru, along with a brief mention in a local grotto newsletter. Those who have a real need to know will then be able to find out.

Even if you do not find any caves, your ridgewalking is not a failure. You have ruled out an area for caves. Don't make future cavers waste their weekend in the same futile search. Tell the local cave guru where you looked. Publish your results, even negative results, in a local grotto newsletter. But if you do find a cave, you will have had the greatest thrill known to cavers. Good luck!

These suggestions added by Evelyn Bradshaw

To Bring, or Not to Bring

You would be bored if I told you to bring sensible hiking stuff, like water, sturdy shoes, appropriate clothing, etc. So I won't. Instead, here are some other things you might take ridgewalking:

A field notebook, to record your discoveries
A geologic map, discussed previously
A compass, discussed later
A very bright flashlight, to look into dark holes
A GPS receiver
Long sleeves and long pants, even in the summer. This gives you one less excuse to avoid checking out holes surrounded by briars. (Also a tick repellent like Deep Woods Off might be a good idea).