

WIND CAVE RESURVEY GUIDELINES

History

Wind Cave currently uses survey data that was collected starting in 1934 to the present. Over the course of that time, survey standards and equipment have changed dramatically. However, just because a survey was done long ago does not mean that it is bad, and likewise just because a survey was done recently does not mean that it is more accurate. The park has established survey standards to help ensure that the data being gathered today is accurate, useable, and will not have to be redone in the future.

Currently, we are not redoing surveys simply because they do not meet today's standards. Instead we are focusing on replacing data containing blunders or missing information, since that is a much greater problem. Survey standards have changed dramatically over the years leaving us with miles of survey not meeting the higher standards of today. Standards will continue to evolve as new information and technology becomes available. We cannot nor should not resurvey the cave each time this happens.

Getting started

To begin a resurvey project, trip leaders must first obtain permission and a designated area from the Physical Science office. Do not take it upon yourself to start resurveying something before obtaining permission. We have already determined which surveys need to be redone and for what reasons.

Be sure that you have a current line plot, map of the area, and copies of the original survey notes. Keep in mind that the map and line plot may not look quite like it does in the cave. After all there is a reason that you are resurveying it!

Resurveying is also a great way to discover leads. You are welcome to survey any leads that you find, but we request that you first complete the resurvey. Stick to the objective of the trip, keeping in mind that the leads will be there when you return. The exception to this is when you find dead-ends or other tie-ins that you can accomplish in one to three shots. Go ahead and do these as you resurvey, otherwise there is a good chance that they will never get done.

Pick a project that you can complete. Do not select a survey that is 50 stations long if you cannot spend the time to complete it. There are surveys of all lengths that need to be redone. Pick one that suits your time frame. You do not need to finish it in one trip, but you need to be able to commit the time needed to complete the project, regardless if it takes one trip or four trips.

Resurvey trips are classified as work trips and therefore can only be done during normal office hours (8am to 4:30pm M-F) and on the regularly scheduled caving weekends (1st and 4th weekends) and Tuesday (1st Tuesday).

In Cave

Although you need to follow the exact passage that the original survey did, you do not need to use the exact same station locations. It is not a bad idea to do so but you might find that the old stations do not work for you. They may be hard to read the instruments from, the shot may pass side leads, or they may be impossible to find. Set stations as you normally would.

We will inform you as to what survey designation you should use. It might be the same as the original or it might be different. Be sure to know this before going into the cave.

Unless you use the exact same station location and designation, remove the old label and station marker, be it carbide, Mylar, or anything else.

Since you are not the initial survey or exploration team, you may not name passages or rooms that have been previously surveyed, nor change any current or former names that already exist for that area.

You will need to do inventory just as if it were a new survey.

Tie-ins

It is crucial that you tie in any survey that is currently tied to the survey that you are resurveying. This may require you to resurvey the 1st station of that side survey or to simply record what old station the new tie-in station replaces. This of course includes the starting and ending points. It is not necessary that you do so exactly like the original survey did, as long as the surveys are tied together. You might be able to do so more efficiently than the original survey.

When you are done for the day and have not finished resurveying the entire survey, it is critical that your last shot ties in the remainder of the old survey. Do not leave it hanging! The easiest way to accomplish this is to have your last survey station be the same as one of the original stations.