

Little WIMS tricks to make your life easier

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For the site specific scale, WIMS is a great program! One desktop and one field computer. All of your fields and plants and herbicides will line up exactly the same. But hold on just a minute....what if we get bigger than that? What if all of a sudden you have 6 people out collecting data. Can they all download WIMS and put their stuff on their respective desktops and handhelds? Once again the answer is of course! But it might be useful to take a few cautionary steps before doing so.

Use one specific copy of the database. Have everyone that might get a handheld unit agree on the "Areas" to be included. I like to keep areas big to the CWMA size because I do a lot of the reporting for those CWMA's. It's easier for me to query an area that is a CWMA than to start picking out data from lots of different areas and merging it together. It seems a lot easier to query in a GIS setting than in access....maybe personal preference.

Get all of the herbicides, plants, etc. into the database before you ever connect with your field units. Some newer herbicides like Milestone and new invaders like Mediterranean sage haven't been on the lists previously. It's easy enough to add them later, but adding them at the front end makes it easier in the long run I've found.

Battery power of field units. Depending on what kind of handheld unit you are using, it may be necessary for you to have some extra battery power. I use a Garmin iqueM5. It's battery life is about 2 hours constant use. That isn't very much if you consider we are usually working 8-10 hour days. Therefore, I have cigarette lighter adapters for my field personnel. We try and get 4-wheelers that have cigarette lighters so that we can charge the units if needed. It can also be beneficial to just have an extra battery in your field pack!

What if the battery does die? Is this a bad thing? Yes....but not if you're prepared! When your battery does die, you will probably lose ArcPad from your handheld depending on where you are storing your files....and you can't run WIMS without ArcPad. Trouble if you're in the field. So what if you're in the field and do get your machine charged back up, but don't have your desktop to reinstall ArcPad? The best thing to do is create a backup of your system....in other words, a system restore for your handheld. I use the Sprite backup function on my machines and store it on the Secure Digital (SD) card. Setting this restore point allows us to go back and capture our programs easily in the field. However, you will be queried for your registration number. Not too big of a deal because you can just run in evaluation mode until you get back to the office and get your numbers plugged in. And because you store your information on an SD card or the like, you shouldn't ever lose any of the information you've collected.

Collecting data

Once you have everything working on your field machine, you need to actually grab some data about what you're doing.

Occurrences seem to be easiest to collect from the center of a patch of weeds. Why, because later when you try and walk around said patch, but your lines don't overlap the occurrence, you're in trouble. (I hear this will be fixed with the newest version) Anyway, I train my folks to capture the point from the center or at least where they know they won't have gps error when they walk around or draw the weed patch of an assessment or treatment. One little tip about occurrences is to have your field people get as detailed as possible in the notes section! This doesn't seem too important at the time of data collection, but becomes extremely important for the data manager! I like to have at least the species....abbreviations are fine wt (whitetop) rs (rush skeletonweed), and the location (geographically)....not by the bush.....example would be (wt 50m north of road intersect with Corral Creek.) It seems tedious, but can make life much easier later.

Assessment polygons are pretty straight forward. One thing to consider is instead of walking around and having the gps take the points as you walk, I like to use the function where I take the points. Seems like way less information needs to be stored this way, and I have the quality control in my little stylus. Another thing you could do would be to set your gps to collect points at a little less frequent rate.....say every 3-5 seconds. I have just had better luck collecting the points of the polygons manually.....seems like less crashing.

Treatment polygons are basically the same as your assessments. If you are treating these exactly the same (as far as the polygon) I just draw them in over the assessment. Why walk around the area again?

What constitutes a treatment...a plant, a tenth of an acre, continuous patches? Great question and there are no black and white answers. However, it may be necessary for you to make it black and white and that's exactly what I do. In the field, I call treatments areas that are treated in the same manner with little effort being made to get to the next patch. What this means is if the crew has to move equipment, ie their 4 wheeler 50 m to the next patch, this is another treatment and should be called out as such. If a patch of weeds is not continuous for 10m, but then there is another one, we call this the same treatment because it would be fairly ridiculous to walk over and call this another treatment. You will treat it in the exact same manner....you can see it from patch #1, and it saves time. This may be up to you as to how detailed of information you are wanting to collect, but for most weed work, this should suffice.

Data storage

I like to make sure that at the end of each day we get the data that has been collected backed up in some way. Whether that is having the handheld information synced up with the desktop or simply copying the WIMS folder off the SD card. In some way, data needs to be backed up! With each of my crews, we keep a flash memory stick (thumb drive). These are really nice for transfer of data, but really nice to also have a back up of your WIMS system. I simply copy the WIMS folder onto the memory stick at the end of the day. It is usually about 10-20MB and then it gets replaced every day. Should your field computer crash and burn or you lose a hard disc on your desktop machine....no worries, you're backed up and your data is safe!