

Running Out of Rainy Day Jobs?

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If there is a bright side to the persistent rains of the past 7 days or so, I suppose it's that many growers have been able to work on those rainy day jobs they've been procrastinating on since the beginning of this planting season. By now, though, there's probably a lot of thumb twiddling going on as storms continue to rumble through the state, further delaying the completion of corn and soybean planting.

Maybe you were fortunate enough to have received some GPS toys from Santa this past Christmas. Perhaps he left you a new pocket PC outfitted with a WAAS-enabled DGPS receiver and some nifty field mapping software? Maybe these new GPS toys helped you justify the purchase of that new ATV so that you could map a few field boundaries while you cruise around the farm?

Now that you've mapped the boundaries of every field on your farm (and maybe your neighbor's fields, too) with these toys and grid soil sampled down to the nearest half acre, what else is there to do with these high-priced high-tech gadgets? The current delay to the finish of corn and soybean planting offers an opportunity for georeferencing (mapping) potential yield limiting factors now while you're waiting for the fields to dry out.

- Got ponded areas or seriously wet spots in your fields? Map those boundaries for future tile drainage decisions or for future crop scouting activities.
- Got large patches of Canada thistle or other nasty perennial weeds popping up everywhere? Map the boundaries for future site-specific herbicide applications (what we used to call spot spraying.) Annotate those mapped boundaries with ratings of the severity of the weed problem so that you can prioritize your spraying schedule.
- Got tile blowouts or sinkholes from recent goose drownders? Map those spots so that you remember where they are when you get around to fixing them or to help you avoid them with the tractor and planter when you plant that field.
- Got distinct areas of wonderfully green winter annual weeds that have been attracting every black cutworm (BCW) moth in the country this spring? Map those areas for future site-specific monitoring of BCW larvae feeding activity on the corn that will eventually be growing in those fields.

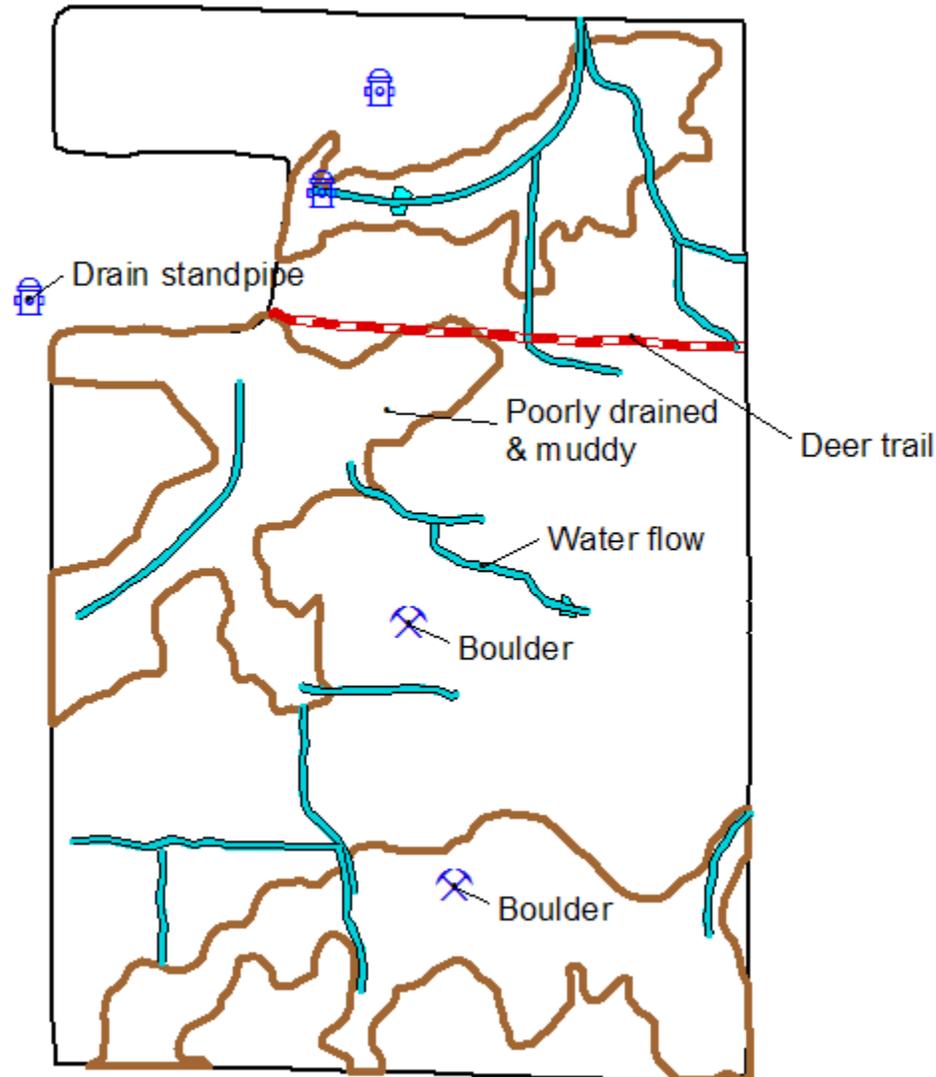


Fig. 1. Example of mapping a 56-ac field for features of possible interest relative to subsequent yield data interpretation, including boundaries of muddy areas, drain standpipes, boulders that need to be removed, areas where water flowed during rainstorms, and deer trails. Source: RLNielsen, 2006, Purdue Univ.

Once you've mapped these yield limiting factors, don't stop for the season. Put these GPS-enabled mapping and scouting devices to work throughout the year as other yield limiting factors develop.

Successful yield map interpretation depends on more than just soil maps and intensive soil nutrient sampling. There are a gazillion factors that influence the yield of corn and soybean, the combinations and spatial locations of which change every year. Successful site-specific crop management depends on site-specific identification of as many of these yield-limiting factors as is humanly possible.

Online Sources of Information:

If Santa did not bring you any handheld GPS toys, the following Web sites may help you choose some for yourself.

Handheld PDAs:

- PDA reviews <http://www.mobiletechreview.com/>
- PDA reviews <http://www.brighthand.com/>
- Online purchase: <http://www.mobileplanet.com/>

GPS hardware for handhelds:

- GPS reviews: <http://www.gpspassion.com>
- Online purchase: <http://www.semsons.com/gpshardware.html>
- Online purchase: http://www.mobileplanet.com/d_gps.asp

Some field mapping & scouting software for handhelds:

- Farmworks: www.farmworks.com
 - Farm Site Mate™ for handheld use
 - Farm Site™ for desktop use
- ESRI ArcPad™: <http://www.esri.com/software/arcgis/arcpad>
- HGIS Starpal™: www.starpal.com
- SST Stratus™: <http://www.sstsoftware.com/stratus.htm>

Disclaimer: The preceding Web sites are intended for informational purposes only. Inclusion on or exclusion from the list of Web sites mean absolutely nothing relative to whether I support, condone or otherwise recommend particular GPS hardware or software.

Don't forget, this and other timely information about corn can be viewed at the Chat 'n Chew Café on the Web at <http://www.kingcorn.org/cafe>. For other information about corn, take a look at the Corn Growers' Guidebook on the Web at <http://www.kingcorn.org>.

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