

Got GPS Toys? Put Them to Work!

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Maybe you were one of those fortunate few that 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 start of corn and soybean planting offers an opportunity for georeferencing (mapping) potential yield limiting factors now before you get going on some serious planting.

- 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 drowners? 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.

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 gozillion factors that influence the yield of corn and

soybean, the combinations 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:

- Assorted brands of pocket PCs:
 - www.mobileplanet.com
- Field mapping & scouting software:
 - www.farmworks.com (Farm Site Mate™)
 - www.esri.com/software/arcpad (ArcPad™)
 - www.starpal.com (HGIS Starpal™)
- WAAS-enabled DGPS receivers for pocket PCs:
 - www.farmworks.com (Navman™ DGPS receiver for Compaq iPAQs™)
 - www.teletype.com (WorldNavigator™ DGPS receiver for pocket PCs)
 - www.trimble.com (full size and handheld DGPS receivers)
 - www.garmin.com (handheld DGPS receivers)
 - www.magellangps.com (handheld DGPS receivers)

The usual disclaimer: The inclusion or exclusion of products, brand names, or Web sites in this article should not be construed as anything other than a representative list that could be used to assemble a portable GPS-enabled mapping/scouting system and does not constitute endorsement or lack thereof by Purdue University or its Extension Corn Specialist!

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

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