

INSIGHTS

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PLANTING ISSUE

MESSAGE FROM THE PRESIDENT

If your Ag Leader unit spends most of the year on the shelf, waiting for harvest, you may be cheating yourself.

Yes, I know every farmer has at least one very specialized piece of equipment that does only a single job, such as a combine or planter.

But your PF3000™ or PF3000™ Pro isn't specialized. It's not a once-a-year tool. For the cost of the time it takes you to 1) order a couple of new cables, 2) hook up those cables, and 3) learn a new procedure, you'll gain a wealth of additional information all year long.

Is your Ag leader unit currently hibernating in your office or shed? Wake it up; put it in your planter tractor. Flip it on and take it with you in your truck. It knows how to do much more than measure yields. Turn your Ag Leader monitor loose and watch it work for you in all seasons.

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Spring 2002

From One Ag Leader To Another:

Here's How to Really Get Your *Money's Worth*



Al Myers
President

You receive this newsletter because you own one or more Ag Leader products or you have shown an interest in receiving information on Ag Leader products.

That's good if you are an owner, but if you aren't using that system all year for maximum versatility in your farming operation, that's not so good.

If your investment in Ag Leader Technology® is currently parked in your office or your shed, I'd say you're not getting full value from the dollars you spent. We build versatility into our units, so you can reap maximum return.

Tim Woods knows that better than most. He's put our technology through the hoops on his Arkansas farm. See page 2 of this newsletter to find out what works for Tim and see how he computes the financial payback from year-round use of his PF3000™ Pro.¹

It's likely you already have the main components

I'm not suggesting you buy more pieces. Especially if you own a PF3000™ with GPS or a PF3000 Pro, you're already equipped to find all kinds of answers. No, I'm not suggesting you should add more technology. I'm encouraging you to take another look at how

you currently use your Ag Leader unit. This time of year, stop seeing a monitor and start envisioning a tool for guiding, recording, and sizing up your agronomic practices.

If you have the PF3000 with add-on GPS or the PF3000 Pro and you've invested in our SMS Basic™ software or other mapping software, you can create as-applied maps of your fertilizer and chemical applications.

That way, you'll be able to keep track of what you planted and where you planted it. You can even map seeds per acre while you're planting, without an additional controller. (See Mike Olson's Planter Q&A on page 3. He tells you how to map using a shaft-speed sensor.) You can also be making prescription maps to vary rates of fertilizer and chemicals automatically. (For a list of compatible controllers, please visit our Web site www.agleader.com.)

Tim Woods never gets tired of finding ways to make technology earn its keep on his farm. As you read what he has to say on the next page, you might think of more ways to get the most from your investment in our products. His ideas may bring up a question. Or you may wonder whether you need another piece of the puzzle before you can move up to the next level of precision farming. Don't neglect to get our Technical Support staff involved. They can discuss ways to build on your current investment by upgrading. Call 515-232-5363 ext. 1. ■

¹PF3000™, PF3000™ Pro, and SMS™ Basic are trademarks of Ag Leader Technology.

AG LEADER IN ACTION:

Using Technology Creatively Makes His Operation Better

When **Tim Woods** of Corning, Ark., bought his PF3000™ Pro and GPS, the support staff at **Ag Leader** gave him what he feels was the very best advice. “They told me to use it and be creative,” says Tim. “That’s what I’ve tried to do by incorporating the Pro into all aspects of my operation. I want to get the most bang for my buck.”

At times, Tim’s neighbors have come around just to watch him put precision farming technology through its paces. Other farmers have told him they’d never thought of using the technology the way he does. “The coolest thing,” Tim explains, “is when the light bulbs come on and you realize all the ways you can make this technology work for you year-round.”

Tim doesn’t use technology simply for the thrill of coming up with new ideas. At every turn, he’s seen real economic benefit and improved efficiencies from the procedures he’s implemented. Here are some of the key areas where Tim knows precision farming techniques have paid off for him.

Drainage and tillage

Tim says, “I knew there were inconsistencies in my fields. Using the yield monitor data I was able to validate my suspicions and translate those into real financial gains. Drainage was a big issue for me. The data I gathered proved it was time to take deep tillage more seriously, and I’ve gone back to that procedure in some fields.” As result, Tim is seeing better yields in his corn, soybean, wheat, and rice fields.

Soil sampling

Tim also uses the PF3000 Pro to do grid sampling. “I see the most variability in pH,” he says. “The time spent grid sampling has paid for itself because I now know where to concentrate my efforts and my dollars to improve fertility.”

Working with Ag Leader’s SMS™ Basic software, Tim plans to move on to the next dimension of precision farming in his operation: he wants to create application maps and do his own lime spreading. He’s confident he’ll reap an economic benefit that will more than pay for the additional equipment he’ll need.

Planting

Tim bought a Rawson Accu-Rate drive system that now runs his planter in conjunction with his PF3000 Pro. In his center pivot irrigation fields, Tim lowers his seeding rates on the corners where there is little moisture. Using the Rawson system and his PF3000 Pro, he can automatically lower his planting rates when he enters these corners. Tim states, “I can

confidently say I have regained half the price of the drive system on a single 165-acre field through the lower seed costs in the non-irrigated corners of the field and the associated higher yield on those dryland corners.”

Another benefit is that his planter runs smoother and he sees improved seed flow since he added the Rawson unit and removed all the chains. “I thought this improvement would help only in corn,” he adds. “But it’s amazing how much difference it’s made in planting overall. And I enjoy planting more.”

In addition, all the time he’s planting, Tim depends on the PF3000 Pro to monitor and keep records of what he’s planting and where. He uses that data to make as-planted maps to compare planting techniques with harvest results.

Spraying

“I mounted a Lightbar in my Spray Coupe to work with the PF3000 Pro and provide guidance,” Tim says. “In the past two years, using that setup, I’ve seen a 7 to 10 percent reduction in the amount of chemicals I apply.”

Tim can limit the amount of herbicide he applies because he’s not worried about skips or overlaps in his spray pattern. “I broadcast Command® herbicide for preemergence grass control in rice. With this product, good weed control is possible, but there is a real danger of severe crop damage anywhere you over-spray,” Tim states. “Using the Lightbar, I don’t have to worry about skips and overlaps, all the while monitoring and mapping with the Pro so I can see where I’ve already sprayed and where I still need to go.”



Tim Woods with his Cyclo-Planter and Rawson Drive.

Harvest

“I don’t know how you can place a value on information,” Tim says, looking back on his years in precision farming. “Yet, just being more attentive and using yield data, I’ve seen an 8 to 11 percent yield increase in wheat and a 4 to 6 percent yield bump in rice.”

Tim started out thinking he could use technology to affect yields on every one of his 2,200 acres. As he’s accumulated yield data, he’s come to realize there are places in fields where he can’t do anything more than he’s already doing. Now he concentrates on the top-yielding areas and doesn’t expend valuable resources trying to pull the bottom up.

Using Ag Leader equipment, Tim has been able to build a living history for his farm through the data he is collecting in all aspects of his operation. “The information I am collecting is opening my eyes to all sorts of new possibilities to improve my farming operation,” Tim concludes. ■

Visit Our Web Site for a List of Compatible Controllers – www.AgLeader.com

ASK AG LEADER:

Your Planting Season Questions Answered



Mike Olson
Tech Support
Supervisor

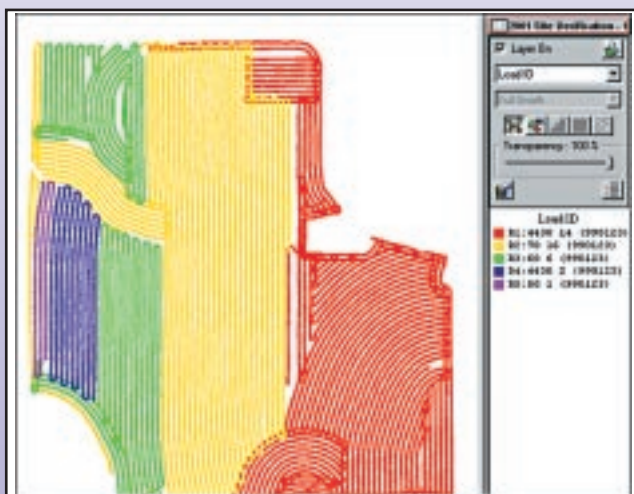
Q. *Is there a new update for the PF3000™ or the PF3000™ Pro?*

A. We're releasing version 4.2 of our PF3000 and PF3000 Pro this spring. Features of this version include a swath-based on-screen

map, simplified application rate setup, and a coverage map that stays on the screen for as long as you're working in the same field. Another new feature will enable the Pro to calculate the area of the field after your first pass. Please visit our Web site to download the latest version for your monitor.

Q. *How do I create a map to show where I planted different varieties?*

A. Put the PF3000 in Site Verification Mode. The field names you used during harvest should already be there. Identify the loads as the names of your various seed varieties; when you start planting a different variety, just switch loads. In our SMS™ software, each variety (load) will appear as a different color on your map.



Here's how your as-planted map will look in SMS Basic™

Q. *What additional equipment do I need to map varieties?*

A. You may need nothing more than a way to get power to the monitor. Then, you can use GPS as your speed source and use the internal area-count switch as an on/off switch. Or, you can mount an external implement switch that will automatically turn your area counter on when the planter is down and off when your planter is up.

Q. *Can I collect planting data and make maps if I don't have a controller on my planter?*

A. Yes, you can. Add a shaft-speed sensor so you can record and map the actual seeds per acre planted. Your monitor will count the revolutions from the shaft speed sensor. Simply program the PF3000 to display the number of seeds planted per shaft revolution.

Q. *How do I map tile lines with my PF3000 monitor?*

A. Use the PF3000 in Site Verification mode to map tile lines. You simply turn the area count switch on when you want to map a particular line, and then turn it off when you move to the next tile line. (Tip: If you have different tile sizes in the field, use a different load for the different tile sizes. Just name the load with the size of the tile. When you create your tile map in SMS, different tile sizes will appear in different colors.)

Q. *What setup is required in order to use my PF3000 for monitoring or controlling seed and fertilizer rates?*

A. To operate the majority of controllers with the PF3000, all you'll need is a single serial cable (see our Web site for a list of compatible controllers). With that simple addition, you'll be able to map the actual rates you apply as well as variably control rates, if you want to. If your controller does not have a serial port or is not compatible with our PF3000, we can tee into a flow meter connection. Using that connection, you will not be able to control the unit but you will be able to record what you applied.

Q. *How can I tell if my PF3000 and my controller are communicating with each other?*

A. If you hooked up your system using a serial cable, turn your booms on, then off—to see if your swath width changes on the monitor. (Note: you do not need to be applying at this time.) If you are hooked up using a tee-cable, you should be able to view the actual rate on the monitor, once you actually begin applying.

Continued on Page 4

You can lease our number-one precision farming system for only \$2.57 per acre per year.*

With only 10% down and no payment until November 5, you'll pay for your system in five years. You'll get the PF3000, our GPS 31000, our 32MB Flashcard memory, and SMS™ software.

Contact your dealer or call 515-232-5363, ext. 3.

**Lease cost in this example is based on 750 acres. U.S. ONLY.*

PLANTING SEASON QUESTIONS ANSWERED

Continued from Page 3

Q. *What could cause the actual rate on my PF3000 to be different from the actual rate displayed on my controller?*

A. Most likely there is an incorrect monitor setting. Run through your **Quick Reference Sheet** and double-check all settings. If you misplaced your Quick Reference Sheet, visit our Web site to download one or contact our Tech Support department.

Q. *How can I make my PF3000 start and stop counting acres automatically while I'm spraying if I'm not using a serial cable?*

A. With the addition of a *boom tee-cable*, you can tee into the *center boom solenoid control valve*. Then the area counter should turn on and off whenever you activate the boom switch.

Q. *I'm ready to add guidance to my operation. Which Ag Leader system is right for me?*

A. Ag Leader's NEW **EZ-Guide™²** Lightbar is designed for growers and custom operators who need a simple and affordable, straight-line guidance option. It's also great for producers who desire a second GPS source in their operation. The more advanced **Lightbar** is designed for those who need contour guidance as well as straight-line guidance. The advanced Lightbar also has more headland

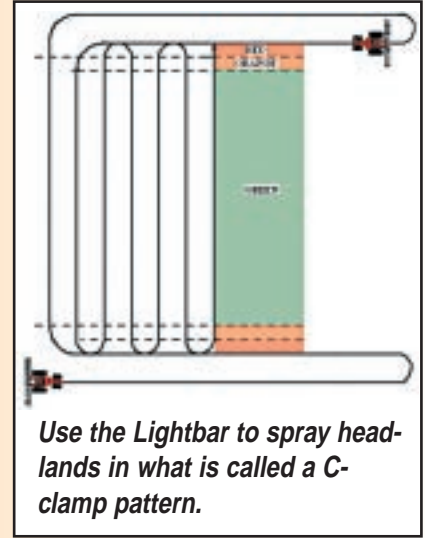
patterns to choose from.

Q. *Do the Ag Leader Guidance options have a look-ahead feature?*

A. Yes, both Ag Leader Lightbars have a look-ahead feature, which shows you where you're headed if you stay on your current path. It indicates steering adjustments needed to prevent mistakes. Our look-ahead feature also adjusts according to your ground speed. Generally we recommend using 1 second look-ahead if you will be driving 0–5 mph, 2 seconds at 5–10 mph, and 3 seconds at 10–15 mph.

Q. *Can I make two headland passes while I'm using the Lightbar for guidance?*

A. Yes, the advanced Lightbar enables you to spray along a headland type called a *C-Clamp*. A C-clamp pattern allows two guided passes on your headlands before you spray the field.



Looking for guidance?

If you're considering a Lightbar to keep your machinery on track as you till, spray, or seed, remember you don't have to start from scratch. Do you already own a PF3000™ or PF3000™ Pro? Then you can add one of our guidance-capable GPS units such as the GPS 3050, the GPS 3100, or the GPS 4100. And you can add full Lightbar functionality to your existing system.

Our Lightbar offers you a choice of straight-line and contour guidance, with several different headland pattern options. In addition, the complete system can provide real-time coverage mapping, so you can control and record application rates simultaneously.

On the other hand, say you don't want to do any application mapping or control. You don't have GPS capability but you still want to stay on track, out in the field. You might want to consider our new EZ-Guide™² stand-alone system.

EZ-Guide is one of the most cost-effective and uncomplicated systems on the market. It's designed to be multifunctional. Use it this spring and summer, and then when harvest comes, transfer the EZ-Guide receiver to your combine for yield mapping. Actually you might also want to use the Lightbar in your combine too. It could be a big help when you run a wide head in dusty conditions or in the dark. ■

²EZ-Guide™ is a trademark of Trimble Navigation Limited.

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