



P.O. Box 1229 • 1000 N. Columbia Ave. • Connell, WA 99326

Tri State Seed Co Spring Newsletter

I turned 65 last month just before Christmas. I have announced my retirement from Tri State Seed Co at the end of this year. At this point in my career I have become a bit more conservative in many ways, my opinions on political issues have become a lot more realistic, my views on agriculture have become more focused, and I just don't deal well with people that don't understand that farmers are the only professionals they really need three times a day.

If you will allow me to editorialize just a bit – there is a serious issue developing in the US regarding wheat quality. As I travel to other parts of the world for the industry and personal business, I continue to hear concerns from our customers about the functional quality of wheat originating from some ports in the US. Thankfully the PNW has actually been increasing the end use quality of wheat we ship to the Pacific Rim. Unfortunately, many other parts of the country are about to experience a significant loss in market share if they don't reverse this trend. Some of the issue is fundamental to our system. Growers want variety developers to breed wheat with higher yields. In many places in the country this has happened without the commensurate emphasis on quality that should be part of the breeding strategy. As Andrew Ross, the wheat quality lab professor at Oregon State University said, "It's not rocket science, its grain surgery." Breeders have breeding targets. They have the ability to bias their parental lines toward those exhibiting higher end use quality attributes. This takes work, and money. It is hard to do because it slows down the process. But eventually you end up releasing varieties with good yield and quality attributes. The real point here is you end up with satisfied customers that are willing to pay you money for high quality wheat. This is a very healthy thing for our industry. If the Midwest doesn't get the vision pretty soon they will create a market deficit in the DNS and HRW demand overseas for higher quality grain. This is a marketers dream. Since 46% of Minnesota and N. Dakota's spring wheat come through our ports, and a fair percentage of HRW, I think we would be really happy to fill that void when their customer cries foul. Fortunately for us, Mike Pumphrey our spring wheat breeder has already selected for quality attributes in his program. The aggregate functional quality of Washington, Idaho and Oregon DNS is first class and is already experiencing high demand by Pacific Rim buyers. You hear me preach about quality all the time, well, another part of the country is just about to find out why!

It looks like we may be about to pull out of the drought. Our precipitation is almost up to normal, if you count September 1st as the beginning of the crop year. Commodity prices are as low as we have seen them in recent history and many crop input prices don't indicate they will be softening much this spring. What is a guy supposed to do? How do I survive until commodity prices get back to a level I can make a living? Here's what we think you should do ------

Cut Your Biggest Expense

We have always advocated that you thoroughly evaluate all your expenses for growing a crop. Start with your biggest expense and work your way down. Number one on my list is fertilizer; I bet it is close to the top of yours also. Here are ten things to consider this coming year:

- Band the Non-Mobile Nutrients. Whether you are a dryland farmer or an irrigated guy, the same rules apply. Nitrogen, boron and sulfur can move around in the soil pretty well. Phosphorus, potassium, zinc, and most nutrients can't. You might save 10% by banding your nitrogen, but banding the non-mobile nutrients can easily save you 30% or more. The primary reasons why banding saves you money are the roots can find it easier and these nutrients are less likely to tie up when they are banded.
- The First Half Of Your Fertilizer Bill Typically Provides the Best Return. So if you really need cash flow, think about applying a lower rate unless you are really in a deficit situation. Just remember that sooner or later you are going to have to replace what the crop takes out. If you are farming the same land every year that means you may have to dig deep next year.

- Make Sure the Fertilizer is Available When the Crop Needs It. So in a dry year if you need nutrients a little deeper in the soil profile, do you really think a spring application is the answer? I think not! You better be applying that fertilizer in the fall so next May when the wheat says it needs nitrogen for protein, it better be there or you know what happens next Mr. Discount comes to visit.
- If You Use Liquid Products Keep the In Furrow Rate Low. If you need 20 to 30 gallons per acre and decide to put it in the furrow it could be enough to burn the seedling, especially if it is a high salt product like 10-34-0-0. Better to consider a 2" separation below and to the side of the seed piece.
- Start Pulling Your Own Samples. In my opinion, if you can walk and chew gum you can do this. Use your smart phone, or get an app to do it, and locate your grid points and go to it. The boys at Ag Ph.D have a great I-phone ap. Pulling your own samples can save you thousands of dollars each year.
- Get a Complete Soil Test. I know this sounds a little crazy, but investing \$10 in micronutrients might return you more money than spending \$50 on something you are already sufficient in. I have seen this work on alfalfa many times. A micro pac application like Ample ZSB foliar applied before first and after second cutting can make you a lot of money. Your soil test will tell you. I was laughed at by one fertilizer supplier for taking a 3 foot soil test on an irrigated field until I found 180#'s of Nitrogen in the third foot.
- **Apply Your Own Fertilizer.** The pay back is enormous. We have been doing this on our own farm for years and have saved a pile. Now we are in control of what gets applied and where.
- Use Variable Rate Technology. Why would you apply fertilizer at the same rate to all of your ground when you know some places in the field need more and some need less. So put more on where you need it and less on where you don't. Yield mapping is a good way to start the process, but grid sampling is the only way to dial it in. You irrigated guys should be using strip till and banding everything. Listen to me, this is not hard, it pays you money.
- Don't Put More On Ground That Won't Hold It. In several parts of the state there are conservation programs that will pay you to split apply fertilizer. This practice minimizes soil leaching and volatilization. If you have good soil test data you will know what parts of each field need each individual element and which do not. Pick which form of Nitrogen gives you the least risk and greatest return. Find out what your CEC (cation exchange capacity) is because that will determine your soil's fertilizer holding capacity. In a year where fertilizer prices are holding constant pre-paying is a good way to lower your per acre costs and at the same time average some income.
- Learn How To Read Your Own Soil Test. If you don't know how there are plenty of programs and people that will show you how. If you are actually spending tens of thousands of dollars on fertilizer on blind faith and depending on someone else to give the exact perfect information to maximize your yield and profits, I have a seed plant to sell you. Get real and work from the neck up for awhile, shouldn't you be the one in control of this huge investment? (1)
- (1) From the Ag PhD newsletter Jan,2016

Can I Cut My Herbicide Rate?

Many of you already know Tri State Seed Co handles both fertilizer and chemistry products. Primarily these are for our existing customers to help them remain competitive. This marketing effort on our part is pointed directly at the self-serve market, those of you that have made the commitment to roll your own fertilizer and do your own spray work. The most common question we receive is "Can I Cut My Herbicide Rate?"

The short answer is, "Maybe." In some cases you may very well need a higher rate. We think you should consider these factors before making any decisions.

- Susceptibility. If your herbicide is great on a particular weed, then your ability to cut the rate is much improved. On the other hand, if you're dealing with a difficult to control weed, you probably need to bump your rate up to the higher end of the label.
- **Weather.** All herbicides perform best when they are actively growing. If you have had temperatures in the 70 and 80 degree range during the last few days, that's great. If you have good soil moisture and good humidity that's even better. Most herbicides perform poorly when the weather is too cold or too hot or when the weather is too wet or too dry.

- **Weed Size.** Most weeds are easiest to kill when they are very small. By that I mean less than one inch tall. The bigger weeds get the higher dose it usually takes to control them.
- **Spray Coverage.** If you are using drift reduction nozzles you are creating bigger droplets. That's great for keeping your product from moving off target, but the downside is reduced spray coverage compared to flat fan nozzles. Many herbicides move well in plants, but if you don't get as much herbicides into the plant as you need to, you will not have a lethal dose to control that weed.
- More Concentrated Droplets. This is not true for all herbicides. But with products like Roundup I actually prefer less water in many cases. When you have the same amount of herbicide in two different tanks, but one has far less water that means that each droplet you spray will now be more concentrated. If you have waxy-leaved plants or very small plants where you can only get a little bit on them before your sprain runs off, the net result of using less water means those concentrated droplets deliver more herbicide into the plant.
- **Spray Adjuvants.** Some spray adjuvants can improve herbicide performance dramatically, but they may burn your crop. For example, MSO (Methylated Seed Oil) helps weed control with many herbicides because it allows the herbicide to better penetrate through waxy leaf cuticles. If you want less leaf burn you may go with NIS (Non Ionic Surfactant) in some situations, but the weed control usually suffers slightly.
- Tank mix Partners. Some herbicides have antagonism when mixed together. This is common when combining grass and broadleaf products. For best results using lower rates, spraying separately is generally the way to go.

As you can well surmise, there are a lot of factors that go into this decision. If you are trying to save \$1.00 per acre by cutting a rate below the recommended label it is probably not worth the effort. If you are trying to save \$10.00 per acre I encourage you to visit with a qualified agronomist so you can thoroughly understand why you may want a lower rate. We can get by with lower rates in many cases, but everything is usually perfect i.e. weather, temperature, coverage, weed size etc. when we make the decision to go that direction. Saving \$5.00 on the herbicide and losing \$20.00 on yield doesn't go too far, but if you can save \$5.00 an acre and not give up any yield, that's a home run. (2)

Headline Fungicide (BASF) - Alfalfa

I mentioned we would include some of our observations we found most interesting, and profitable. There is going to be a lot of alfalfa in the market place early this year, why should you risk having anything but the finest quality. BASF has a label for alfalfa at a rate of 6 to 9 oz/ac and it looks good. The target pathogens here are leaf spots and stem blights. The increased plant health benefits and subsequent increased yield and feed values make this a no brainer especially on first cutting which tend to by heavy anyway. Headline is especially effective on spring black stem. The fields we saw were in southern Idaho. This application is clearly correlated to the Columbia Basin because we have even heavier first cutting hay than they do most years. The measured yield difference was 15.9% on first cutting. On this field that meant .34 tons/ac. If you assume \$220/ton hay, that amounts to \$68.00 return for an investment of about \$25/ac including application. But wait --- The returns just keep coming. Second cutting was 9.4% better than the untreated control and third was 2.4% better than the control and fourth was 4.7% better. The cumulative return on investment was .62 tons/ac in Rupert Idaho over four cuttings. That means an additional \$106.26/ac. This application was applied to 4-6 inch alfalfa before first cutting only. Call us and we will send you the pictures.

Ample ZSB Chelated Micro-nutrient Foliar

If you really want to look like a genius this year, go ahead and put on the Headline fungicide we mentioned above and add the Ample ZSB. Ample is a well-balanced micro-nutrient blend designed to supplement the deficiencies normally occurring in alfalfa. I just had two growers from Ritzville come in today and say they planted Trifecta 2 alfalfa, used Headline and micros and cut 9.3 ton/acre. In Ritzville!! Everything tested well also. It does not take rocket science to understand that for every ton of alfalfa removed certain micro-nutrients are also removed, not just Nitrogen, Phosphorus and Sulfur. Here is the list:

Nitrogen – 51 lbs; Phosphate – 12 lbs; Potassium – 49 lbs; Sulfur- 5.4 lbs; Magnesium – 4.5 lbs; Calcium – 19 lbs; Copper – 0.01 lbs; Manganese – 0.05 lbs; Zinc – 0.04 lbs; Boron – 0.05 lbs; Iron – 0.21 lbs.





RETURN SERVICE REQUESTED

We recommend applying Ample before first and after second cutting when the alfalfa is 4-6 inches tall. The application rate is $\frac{1}{2}$ gallon by ground, $\frac{3}{4}$ gallon by air, and 1 gallon by chemigation. This program will definitely improve the longevity of your crop. Call us for current pricing – last year's pricing is still in effect. Micro-nutrients don't just appear out of thin air – think about it. If you have any doubts about what I just said, call us and we will take a petiole of your alfalfa just to see where you are deficient. You don't put fertilizer on a crop before you take a soil sample do you? Well, some of you do... I guess that's the point huh! And some people wonder why they don't make money.

Bullet Points

- If you need liquid fertilizer this spring for stream jetting or just as a carrier for herbicides call us, we can definitely help you with delivered pricing.
- Non GMO alfalfa seed will once again be a tough buy so if you are needing seed please let us know so we can reserve yours now. No prepayment is necessary, just a signed contract for delivery in 2016 and that will do the job.
- We are actively seeking spring wheat seed acres; if you have ground available please let us know. We need both red, white and club acres.
- We will have a great supply of herbicides this spring, wheat corn or alfalfa. Huskie, Priaxor, Beyond, LV-4 and 6, Starane Ultra and Starane Flex, great pricing on Glyphosate, fungicides like Headline, all the majors plus the generics. If you roll your own or fly most acres call us before for a recommendation.
- The CRP program is taking new applications; the grass supply is desperately low and completely dependent on new crop production. Expect pricing to climb rapidly if the feds buy any natives to accommodate the 10M acres nationally that burned this year. Order now, no down payment and reserve what you need for 2016-17.

Thanks for your continued support; we look forward to serving your businesses.

 Dana Herron
 Craig Teel
 Michael Dixon
 Margaret Krug
 Nathan Robbert

 509-546-1300
 509-528-4851
 509-302-3100
 509-234-2500
 509-234-2500