

# CONSTANT INNOVATION

We believe that meaningful, productive change- solving problems- only comes by looking at challenges and opportunities from new angles & exercising curiosity.



## Selecting the Right Oil

Selecting the right oil and lubricants for your can help improve performance and extend the life of your engines.



## #WEARECVA

People is one of Central Valley Ag's core values. We believe in the inherent worth of people.



### SmartFirmer™

This January, Precision Planting announced some of their new products that will be coming out in the future.

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### RD Events

Save the Date for Central Valley Ag's upcoming RD Events.

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## FROM THE BOTTOM UP

written by Mike Zwingman, RD Manager



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# FROM THE BOTTOM UP - NITROGEN & WATER

In the next growing season, we are going to start to build a system of how to employ these technologies that are right for every operation.

It isn't a secret that Keith Byerly and I have been mostly focused on two things in the past year or so, and that is working with you on extracting the maximum amount of crop per drop of water or per pound of nitrogen possible. Regardless of the technology, whether it be crop modeling, imagery, in-field sensors, or even variable rate technology; the path isn't completely (or in some cases even remotely) clear on how to get there. This is problem number one.

I wish I had a dollar for every time I've heard, "let's keep the end in mind" when companies talk about product development, but then when I look around the room I don't see anyone that represents the

end present. In developing these technologies, our industry hasn't done a great job of involving the grower in the adoption of implementation of these technologies. This is problem number two.

About a year ago Keith and I were talking about these very problems and how it applies to the CVA grower; we decided something, maybe everything had to change. Last month that change started to happen as we brought a group of growers together to talk about how new tools, practices, and technologies could fit into their operations and what proof or experience they would need to have to get them to adopt a some or all of the options that are right for them.

In the next growing season, we are



## Article Written by Mike Zwingman

CVA Agronomy RD Manager | 402.728.5600

going to start to build a system of how to employ these technologies that are right for every operation. With the help of this group of growers, we are going to talk about the advantages, constraints, performance and return on investments of the tools we are looking at bringing on board right now. In software development this is what is called a live build, we are going to work in real time with instant feedback on what future services Central Valley Ag should offer, and how we should offer it to the rest of the CVA customer.

We will be sharing more of the learnings from this group, talking about some of the strategies that we are testing out as we progress through the growing season. You will also be able to see strategy

implementation for yourself at one of the RD Summer Series events in August this year. The goal is to fail early, fail fast and recover quickly so when we go to a larger offering of what future services are, we have a higher success rate, and faster adoption of tools that help you manage your nitrogen and water efficiency better improves your profitability.

If we are going to fail, we fail fast and recover quickly. Then when we go to a greater offering of what our future services are, we will have a higher success rate. Faster adoption of these tools will help you manage your nitrogen and water efficiency to ultimately improve your profitability.

# SMARTFIRMER™

## SMARTFIRMER™

You can easily transition to game-changing SmartFirmers when they become available for purchase in 2018.



## Article Written by Keith Byerly

CVA ACS Manager | 402.337.0910

This January, Precision Planting announced some of their new products that will be coming out in the future. One of the innovations I am most excited about is called SmartFirmer™. The idea behind the SmartFirmer™ is pretty simple, we take the concept of a seed firmer, and we add sensors to it. In the case of SmartFirmer™, that technology is the ability to measure Soil Moisture, Organic Matter, and Residue. That's great and all, but what does it mean to you?

So let's take a look at the ability to measure soil moisture first. I call this a moment-in-time measurement. This measurement seems to me that it would be useful in two ways. The first is that when you pull into your field, having an idea of the soil moisture at your seeding depth is a great answer to a long-standing question. Every year I am asked, "What is the ideal seeding depth?". There is only one correct answer. The right answer is the depth that provides our seed with adequate moisture to germinate, and also protect it from temperature fluctuations. Often, we just set our planter a 2" or 2.5" and we plant there for the season. The SmartFirmer gives us a real-time readout to know what our moisture situation is and giving us a tool to use to set depth provides confidence. And then for our irrigated farmers, when we finish, we can look at the map for our field and make a quick decision about if we will need to irrigate to get the seed to germinate.

Then there is the ability to sense residue. If these sensors can read residue and tell you how much is in the furrow, then we will have a much better idea of the adjustments we need to make. Better seed to soil contact will help eliminate delayed emergence and poor root growth early in the plant's life. "I believe measuring the residue in the furrow will shine some light on different methods for tillage and incorporating residue," says Cory Muhlbauer,

agronomy lead at Precision Planting.

But then there is the other side, and that is Organic Matter. While OM can vary a lot within your field, in any spot, it's pretty stable. If I get a reading for a spot today, I feel pretty good about that value still being the same 5 or 8 years from now. When we soil sample, we test for Organic Matter, but samples a spaced out several feet. Using a SmartFirmer lets us get a much higher resolution to our OM map. That means we have a better layer for building Prescriptions. With better data comes improved VR Nitrogen prescriptions, better Zone Maps, and inputs for our Seeding Maps that go beyond variable rate and help us with hybrid placement. Don't get me wrong; this is not a magical map that will replace other maps. But it is an excellent layer that improves resolution and gives us better data.

For those of you with the 20/20 SeedSense operating system and Precision Planting's row control modules already on your planters, you can easily transition to game-changing SmartFirmers when they become available for purchase in 2018. They're made to fit exactly the way the company's Keeton firmers fit, the only difference being a small electrical harness that needs to be attached. Updating 20/20 SeedSense to be able to handle the new technology should only take a few minutes.

This new technology is still 14 months away from being on your farm. We are in the Beta phase this year, and we hope to have it on our RD planter this season. But it is exciting technology that will impact how we operate in the future. There is no doubt it will change and improve before we get it on our farms. But, I want you to begin to think about how this tech could impact us. It will give us another tool in our toolbox. The challenge now is drawing up the blueprints, so we know what to build when we get our new tools.

# STAY INFORMED

The CVA blog at [cvacoop.com](http://cvacoop.com) provides Agronomy Updates each week. Our experts provide articles and videos with relevant information on R&D and insights on the latest technology in Precision Ag. Visit our website or follow us on social media to stay informed.

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# SAVE THE DATE!

More details about these events will be distributed as we get closer to the dates listed below.



● **August 3, 2017**  
Bellwood, NE

● **August 8, 2017**  
Cuba, KS

● **August 10, 2017**  
Randolph, NE

# #WEARECVA Abby Simonsen

People is one of Central Valley Ag's core values. We believe in the inherent worth of people. Our people are the engine of value creation; our imagination, determination and dedication are essential to success. We are committed to providing an environment that is safe and fosters personal growth and development. Our people embrace the Cooperative Spirit to deliver value to our members. Our people are employees, volunteers, moms and dads, sisters and brothers. Our people are CVA. We are CVA.



## CORE VALUES

At CVA, we have a strong belief system that is communicated openly with our employees & customers. We believe that our core values are words to live by.



**ABBY SIMONSEN**  
VOLUNTEER EMT. SMALL TOWN GIRL.  
HACCP COORDINATOR, OAKLAND, NE.



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# SELECTING THE RIGHT OIL

## Article Written by Kane Kuehl

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People rely on their vehicles to keep their lives and businesses in motion. Any unforeseen engine issues or repairs can quickly become costly and inconvenient. Selecting the right oil and lubricants for your business, personal and recreational vehicles can help improve performance and extend the life of your engines.

It's typically understood that selecting the correct lubricants is important for proper equipment and vehicle maintenance. But knowing which lubricant product is the right fit for each piece of equipment can be challenging, especially if you have numerous makes, models, and engine types to consider – like most fleet operators and farmers. The excess of options can quickly become overwhelming and time-consuming if you try to decipher them all yourself. The lubricant experts at CHS aim to take a lot of the guesswork out of the equation with the Cenex® Equipment Lookup Tool, making it simple to match the right lubricants to thousands of vehicles and pieces of equipment.

Simply visit the **Equipment Lookup Tool** (<http://chs-cenex.ewp.earlweb.net/>) and conduct a quick model search, or select your equipment using the drop down lists, and you're on your way. Whether you need engine oil for your excavator or transmission fluid for your truck, a reliable recommendation is just a few clicks away, saving you time and confirming a lubricant that's right for your vehicle.

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The tool is also mobile-friendly, so you can find answers on the go. For farmers and business owners with many pieces of equipment, it ultimately saves you time having all of that information in one place. You may also reference your owner's manual to cross-check information and confirm manufacturer recommendations.

The Equipment Lookup Tool can also be used for personal and recreational vehicles; it covers almost all cars, trucks and agriculture equipment, as well as off-road and construction vehicles.

To use the tool visit the link below or visit [Cenex.com](http://Cenex.com) to search for it. Don't see your vehicle in the tool? Contact me at 712-540-3596, and I will find the information for you.

Visit the Equipment  
Lookup Tool at  
<http://chs-cenex.ewp.earlweb.net/>

