

Here's the completed receiving pit and tunnel foundation at Gold-Eagle's new site near Wesley. The millwrights are shown here installing the receiving equipment. A concrete crew is forming the foundation for a load-out bin and scale, while geopiers are being installed in the background.

**LOCATIONS** 

Eagle Grove 448-4775 800-873-1797

-Feed Mill-

515-448-5392 800-722-3966

Thor

378-3314 866-210-9734

Goldfield 825-3161

825-3161

Renwick 824-3214 888-824-3214

Hardy 824-3221 866-210-9733

**Livermore** 379-1843 888-576-1843

Corwith 583-2462 888-581-2462

Wesley 679-4272 866-212-3890

**Titonka** 928-2272 866-203-9656

# **Watch the Future of Gold-Eagle Take Shape**

By Brad Davis General Manager



They say timing is everything. The timing couldn't be better for Gold-Eagle to invest in a new truck wash adjacent to our feed mill in Eagle Grove this summer, along with an expansion at our Wesley location.

Biosecurity is essential for the success of our feed customers and ultimately for Gold-Eagle. While we've had a truck wash for nearly 20 years, it's time to upgrade. We began planning for the truck wash project long before the avian influenza outbreak hit our area this spring. Gold-Eagle's board and management started discussing a new truck wash when the swine industry was struggling with porcine epidemic diarrhea virus (PEDV) nearly two years ago.

The state-of-the-art complex we're building will contain two complete truck wash systems. Each of the new wash systems can complete a wash and chemically disinfect a truck every eight to nine minutes. Precision nozzles in the floor of the wash will assist in the process and help insure a consistent application and ensure that truck underbellies

and inside wheel wells are thoroughly cleaned. The computerized system will also document that the wash and/or disinfection occurred and what time it took place.

The new truck wash will be unique in Iowa and will be completed late this fall. We'll keep you posted as this project takes shape.

#### See what's new at Wesley

Crews are making progress on the new grain complex at Wesley. Mother Nature challenged our construction timeline as we were unable to do any dirt work last fall, but we have been able to catch back up this spring with everyone's extra effort.

We're building an entirely new facility on a greenfield site that will be a tremendous improvement for the Wesley area. The new complex will be used for corn and includes a computerized, 20,000-bushel-per-hour unloading system, three truck scales, and tower grain dryer. The project will be completed this summer and will be operational by this fall. It will free up our storage assets in Wesley so they can be used for soybeans at harvest.

We look forward to updating you on these investments being made in order to serve you better.

We appreciate your support of Gold-Eagle.

## Meet Brady Hess, Merchandiser

We're pleased to introduce Brady Hess, our new merchandiser. Brady joined CORN, LP and Gold-Eagle Cooperative this spring and has been hard at work



in the Goldfield grain merchandising office.

# Q: What led you to a career in agriculture?

A: I grew up on a grain farm in southwest lowa by Avoca. My dad was also a grain elevator manager in the area.

# Q: What education and experience do you bring to your new role?

A: I earned my business administration degree from the University of Nebraska in 2002 and my master's in business administration from Washington University in St. Louis, MO, in 2008. I worked with Bunge for five years, followed by a year in regional management for the Scoular Company in Omaha. For the next couple years, I worked in Omaha for Singapore-based Enerfo, which originated soybeans for end-users in Indonesia. Joining Gold-Eagle and CORN, LP has given me the opportunity to work with multiple commodities in a fully-integrated operation.

#### Q: How can I contact you?

A: You can get ahold of me at 800-825-3331, or bhess@goldeaglecoop. com. If you're in the area, stop by and say hello. I'd like to get to know more of you and look forward to working with you.

**Editor's note:** Brady and his wife, Stacey, stay busy with their 19-month-old twin daughters, Hayden and Kendall.

# Save with Summer Grid Sampling

There's still time to get your grid sampling done before heavy canopy. Did you know you can save \$1 per acre by sampling now instead of this fall?

Another big advantage by sampling now is that you'll receive your results in plenty of time to make a fall fertilization plan with your Gold-Eagle field marketer. When you're finished with harvest on a particular field, simply give us a call and implement the plan you created this summer. This will save you about two to three weeks of precious time in the hectic fall season, when you probably want to start tillage as soon as possible.

#### Get on the four-year plan

It's wise to grid your fields every fourth year to get an updated set of recommendations. Spread your grids out by doing one-fourth of your fields yearly. This will also spread out your investment in the grids.



By Bruce Burns Eagle Vision Precision Farming Services



I encourage you to figure your grid expense into your fertility plan, rather than viewing grids as an add-on. Most of the time, grids reveal areas where the higher-producing ground is lower in fertility and the lower-producing ground is higher in fertility. Why?

The main reason is that we are pulling off so many nutrients year after year and are not replacing as much as we should be on the higher-producing areas. On the flip side, the lower-producing areas are not removing nearly as many nutrients, so levels have been building through the years.

Grid samples are a key step to finetune your nutrient management. Gold-Eagle uses some of the most powerful software to produce the best recommendations in the industry. Combine this with our knowledge of your fields to maximize your return on investment.

Contact your Gold-Eagle salesperson to line up your summer grid sampling today. ◀

# Pick Lists Make Data Collection Easier

Want to make precision ag data collection simpler? Use pick lists.

We can help you put your farm and field names, along with your herbicides, seed hybrids/varieties, or whatever you would like to see into most brands of monitoring systems that have this capability. Pick lists like this make collecting data much easier for you, since you'll be able to select from a drop-down list of what you're planting, harvesting, fertilizing, or spraying.

Contact Bruce Burns at Gold-Eagle at 515-605-5113 (office), 515-851-5043 (cell), or bburns@goldeaglecoop.com to assist you with data processing and the monitor import/export service. We appreciate your business. ◀



With the spread of avian influenza, many of you are asking if GE-Max Nutrients will have chicken litter to sell this fall. I don't know at this point.

The barns where we get the litter were hit by avian influenza this spring. While several thousand tons of litter will need to be removed and stockpiled from these buildings, we're not sure if those tons will be available for whatever reason. At some other poultry sites affected by bird flu, the litter has been incinerated, buried, composted, or is in some state of limbo. We'll keep you posted as we learn more about the poultry litter situation.

Avian influenza has also caught my attention because there are so many other unknowns. Since I majored in biology in college, my curiosity prompted me to research the disease. Here's what I've learned from www.thepoultrysite.com:

- Influenza in birds is highly contagious and can cause severe illness and death in domestic species like chickens and turkeys.
- Avian influenza is caused by type
   A influenza viruses. The disease is
   carried by many wild bird species,
   including migratory waterfowl like
   ducks and geese. These carriers
   show few, if any, signs of the disease.
- Symptoms of avian influenza include cyanosis (purplish-blue coloring) of the wattles and comb, a swollen

face, respiratory distress with nasal discharge, depression, reduced feed consumption, lack of coordination or paralysis, green diarrhea, and a drop in egg production.

- There are many subtypes of the influenza type A virus. The virus has two types of proteins that project from the surface of the virus. These proteins are called Hemaglutinin (H) and Neuraminidase (N). There are multiple forms of the Hemmaglutinin and Neuraminidase protein designated by numbers such as H1, H5, N1, N2, etc. The avian influenza virus that's affecting the chickens and turkeys is classified by the H5N1 and H5N2 subtypes.
- The virus is also classified by pathogenicity (the ability to cause disease in domestic chickens). There are two types of pathogenicity: low and high. Low pathogenic viruses usually do not cause illness, while highly pathogenic viruses spread rapidly and cause high mortality in poultry. The H5 and H7 viruses have the ability to change from low pathogenic to high pathogenic.
- The route of infection is probably oral, but possibly respiratory. The incubation period is three to five days. Transmission occurs through direct contact with secretions from infected birds, especially feces. The disease can also be spread by waterfowl, equipment, clothing, travel between farms, and through drinking water.

- Some studies show that the virus will transmit through the air.
- The virus is moderately resistant and can live considerable lengths of time outside the host, especially in cool temperatures.
- The virus can survive four days in water at 71 degrees Fahrenheit. It can survive more than 30 days at 32 degrees. It can even survive three hours at 133 degrees.
- Prevention of the disease includes good hygiene, quarantine, all-in/ all-out production, and minimizing contact with wild birds. Vaccination is not normally recommended, because vaccinated birds remain carriers if exposed to the infection. During outbreaks, flocks are euthanized. The situation also requires correct disposal of carcasses, cleaning, disinfection, isolation, and 21-day interval to re-stocking. There really isn't any treatment for avian influenza.

#### Higher egg prices ahead

In the United States, there are 303 million laying hens that produce 89 billion eggs a year. The average person in the United States consumes 263 eggs each year.

lowa is the largest producing state with 58.3 million layers. By early June, nearly half have been euthanized, and the disease continues to spread. The bottom line? The price of eggs is going up. ◀

# **Navigating the Perfect Storm**

By Duane Madoerin Merchandising Manager



Avian influenza. Plentiful near-term supplies of grain. An average to good crop coming on. All these factors are potentially creating a perfect storm in the grain markets.

The trade has digested the U.S. Department of Agriculture's (USDA) recent reports and forecasts for the 2015 crop—with some surprises. Ending stocks for global supplies of soybeans in 2015 are projected to be higher than most estimates, despite rising disappearance. The U.S. 2016 ending soybean stocks at 475 million bushels weren't a surprise but were at the high end of estimates. This also reminds traders it's tough to start a bull market when supplies are plentiful.

USDA's supply and demand numbers for corn offered no surprises, with corn for ethanol at 5.2 billion bushels for the 2015 crop, feed/residual at 5.3 billion bushels, and 2015 corn exports forecast at 1.9 billion bushels, up 4% from this year.

World feed grain inventories are large. China maintains the highest price support for corn in the world (30% over world values). They also hold the largest ending stocks (5.9 billion bushels) and are projected to account for 47% of the global ending stocks in 2016.

#### China's rejections compound the issue

China rejected U.S. corn imports on the basis of an unapproved GMO in an attempt to keep lower-priced foreign corn from adding to government stocks. Cheap grain sorghum, barley, and distillers dried grains (DDGs) became substitutes, however. China also used the GMO issue to restrict U.S. DDG imports and recently rejected a shipment of

U.S. grain sorghum based on finding a "fungus." They also rejected a cargo of Australian sorghum due to finding one grain of Johnson grass seed. This rejection of sorghum will only add to the corn surplus challenges.

#### **World bean supplies remain plentiful**

USDA also quietly revised world soybean supply and demand going back at least three years, with a net result of cutting 130 million bushels (over 5%) from 2015 beginning soybean stocks on the world balance sheet. The major cuts were in Argentina, and USDA offered no explanation.

Despite these cuts to Argentina's soybean inventory and projected 2015 world soybean production about unchanged from this year, global ending bean stocks in 2016 will be a record high 30.5% of usage.

#### Tracking trends in acreage estimates

History suggests that acreage estimates will differ from intentions reported in March. In the 19 years from 1996 (the first year that farm policy allowed for more planting flexibility) through 2014, the final estimate of corn planted acreage exceeded the estimate of March planting intentions in seven years, in a range of 308,000 to 3.073 million acres.

Acreage was less than intended in 12 years, in a range of 32,000 to 1.917 million acres. The direction (although not magnitude) of the change was correctly signaled by the June estimate in 13 years and incorrectly signaled in six years. The final estimate of planted acreage of corn exceeded the June acreage estimate in only five years, in a range of 47,000 to 750,000 acres. In the other 14 years, the final estimate was below the June estimate in a range of 28,000 to 2.014 million acres.

#### Trade is bracing for a big crop

The first corn crop condition report of the year rated 2015 as the third best year in the last 10 years, as of late May. Very

# Fertilizer Offers a Pleasant Spring Surprise

By Stu Pannkuk Agronomy Sales Manager



Seems like no two springs are quite the same, and this season brought its own share of surprises.

We got plenty of moisture in Gold-Eagle's trade territory this spring, which

made it more challenging to apply herbicides in a timely manner. By late May, there were some fields where Mother Nature didn't allow a herbicide to be applied before the soybeans emerged, so a different strategy was required to control the weeds. Getting corn fields sprayed on time was also tricky, due to narrow application windows before the weeds got too big.

One thing that went much smoother

than I expected was our spring anhydrous ammonia season. Sales were excellent. When you consider all the NH3 that had to be applied this spring, I would have bet at times we would run out. To my knowledge, we maintained supply, and no customers had to wait.

We also had strong sales of liquid nitrogen and have many side-dress tons to apply. I'm also pleased that Gold-Eagle had record spring sales for dry fertilizer.

little of the crop was classified as poor to very poor. Ohio had none of its crop in this category, while lowa, Michigan, North Dakota, Pennsylvania, and Wisconsin had just 1% of their crop rated poor to very poor. Indiana and Minnesota only had 2% in this category, while Colorado, Illinois, and Kentucky had just 3 percent rated poor to very poor.

Numbers were also low in this category for North Carolina and Tennessee (4%), Missouri (6%), Nebraska and South Dakota (7%), Texas (8%), and Kansas (9%).

Combined with the emerging El Nino conditions (which make a Midwest drought less likely), the trade is already bracing for a big crop. Nobody seems to be horribly disappointed about the condition of their crop, but nobody is saying this is their best looking crop, either. There have been a lot of wet conditions, and nobody is 100% certain about how it will play out.

The 2015 crop forecasts all point to little or no need for higher prices, since inventories remain plentiful here and abroad. There's a lot of weather uncertainty ahead, but current corn, soybean, meal, and wheat prices near or at multi-year lows offer little to no risk premium. Meteorologists now say there's a 90+% certainty of a moderate-to-strong El Nino pattern developing. That can be good for most U.S. crop areas but not for Australia and Indonesia.

Corn basis is also under pressure as the avian flu continues to decimate poultry flocks in the area.

#### We're here to help

While we've taken this market down so far, you'd think we'd bounce back soon. However, we've got to find the bottom first. If you have grain marketing questions, we're here to help. Contact merchandiser Darren Fritz at our Goldfield location at 800-825-3331. We appreciate your business.

#### **Anhydrous Upgrade Coming Soon**

Gold-Eagle's board of directors has approved \$2.5 million to upgrade our anhydrous ammonia toolbars and nurse tanks. Watch for more details in our next newsletter.

While the fall fertilizer season was cut short, I was still surprised, given commodity prices.

It's good to see more growers understanding that you can't shortchange nutrients for your crop and expect the high yields that are necessary to help maintain profitability.

#### Rainfast Time

If you're using a pesticide that's not on this chart, call your Gold-Eagle agronomist, and we'll get that information to you.

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PRODUCT	RAINFAST
Aatrex	1-2 hours
Abundit Extra	6 hours
Anthem/Anthem ATZ	1 hour
Aproach	1 hour
Armezon	1 hour
Atrazine	1-2 hours
Authority XL/Elite/Assist	1 hour
Buccaneer 5 Extra	1-2 hours
Buccaneer Plus	1-2 hours
Cadet	4 hours
Callisto 4SC/Callisto GT	1 hour
Callisto Xtra Enhanced	4 hours
Capreno	1 hour
Cobalt/Cobalt Advanced	when dry
Cobra	1/2 hour
DiFlexx	4 hours
Durmax/Durango DMA	2 hours
Enlite	1 hour
Evito	1/4 hour
Flexstar/Flexstar GT 3.5	1 hour
ForeFront HL	2 hours
ForeFront R&P	4 hours
Fortix	2 hours
Fusilade DX	1 hour
Govern	when dry
Halex GT	1 hour
Headline EC/Headline AMP/Headline SC	1 hour
Hero EC	1 hour
Impact	1 hour
Laudis	1 hour
Liberty	4 hours
Marvel	1 hour
MCP Amine	4 to 6 hours
MCP Ester	4 hours
Milestone	2 hours
Prefix	when dry
Priaxor	when dry
Pursuit Quilt/Quilt Xcel	1 hour
	when dry 1 hour
Raptor Realm Q	4 hours
Remedy Ultra	4 hours
Resolve Q	4 hours
Roundup PowerMAX	1-2 hours
Roundup WeatherMAX	1/2 hour
Rowel/Rowel FX	1 hour
Select Max	1 hour
Solstice	4 hours
Status	4 hours
Stratego YLD	1 hour or when dry
Thunder/Thunder Master	1 hour
Tordon 22K	2 hours
Touchdown Total	1/2 hour
Verdict	1 hour
Volunteer/Clethodim/Shadow	1 hour
2,4-D Amine	6-8 hours
2,4-D Ester	1-3 hours

<sup>\*</sup> Disclaimer: This information is presented in good faith for your reference. This information does not take the place of the product label. Always read and follow label directions.

## **Don't Miss Answer Plot Field Days**

By Chris Petersen, Seed Sales Manager

Who says there's no free lunch? There is when you attend the free Answer Plot® programs in our area this summer. This is also a great opportunity to learn about timely, local agronomic issues with corn and soybeans. The Answer Plot field days are scheduled for:

• Vincent: July 9 and Aug. 21

• **Britt:** July 16, Aug. 25

These events typically run from 9 a.m. to noon and provide both local and statewide updates on corn and soybean plant health issues, herbicide trials, yield trials, micronutrients, and more. The seed genetics we supply from DEKALB®, Asgrow, CROPLAN®, Mycogen® Seeds, and NK® are represented at the Answer Plots. Plus, representatives from leading companies like Monsanto, Syngenta, and Dow are on hand to answer your agronomy questions.



Not only are these events scheduled to avoid the heat of the day, but tents and chairs are provided so you can learn in a comfortable environment. The Gold-Eagle team always learns a lot at these events, and we hope you can join us this summer.

Contact your local Gold-Eagle salesman for the specific times and agendas of this year's Answer Plot field days. We'd love to have you join us. Also, log onto *AnswerPlot.com* for videos and other agronomy resources.

### **Save the Date!**

There's a lot of interest in the new Enlist™ Weed Control System. With tolerance to a new 2,4-D and glyphosate, this advanced herbicide and trait system promises to deliver exceptional weed control without changing the way you farm.

The Enlist system, which Dow Agro-Sciences hopes to have licensed by this fall, will be featured at Mycogen® Seeds Diamond Showcase field days near Ankeny on July 14, 15, and 16. Learn from industry experts during an interactive, field-based tour about the latest technologies for crop protection, seeds, and traits. You'll also have an opportunity for one-on-one discussions on how to apply this information to your operation.

If you attend one of these meetings, you'll receive a \$500 incentive toward

future purchases of Dow AgroSciences crop protection products or Mycogen Seeds. Let your Gold-Eagle salesman know if you'd like to attend and share a ride.

# Latham Seed-2-Soil Field Day Slated for Sept. 18 We also encourage you to attend the

We also encourage you to attend the Latham Seed-2-Soil Field Day 2015 on Sept. 18 at Latham Hi-Tech Seed's headquarters in Alexander. This is the second year they've offered this field day, which will cover agronomic issues from the 2015 growing season, Latham's corn hybrids and soybean varieties, and other timely topics. Last year, for example, they had a speaker from Illinois talk about drones, or unmanned aerial vehicles (UAVs).

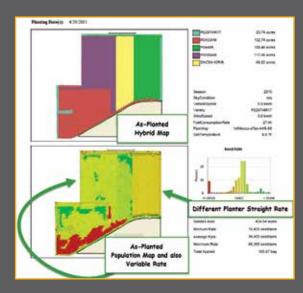
Contact your Gold-Eagle salesman for more details.

# **Bring 2015 Planting Data for Processing**

Data is vital to help you grow more bushels per acre. Gold-Eagle Co-op Eagle Vision Services can help boost your profit potential by importing your precision ag data into our system and processing the information for you.

This includes any 2015 planting data that you may have collected, plus any other harvest data that you may have on storage (thumb) drives, cloud services, or your computer hard drive.

Contact Bruce Burns at Gold-Eagle at 515-605-5113 (office), 515-851-5043 (cell), or bburns@goldeaglecoop.com to discuss what you have. Then, you can either bring your data to your local Gold-Eagle salesperson, or we can stop by and assist you with getting your planting or harvest data from your storage devices to our mapping program. We look forward to hearing from you.



# Behind-the-Scenes Biosecurity Keeps Livestock Safe

Protecting livestock from the spread of disease takes a team effort. Gold-Eagle takes biosecurity seriously by:

- Disinfecting our driveways that lead into the feedmill daily.
- Spraying and disinfecting our loadout bays daily.
- Educating our feed truck drivers about biosecurity protocols.
- Wearing disposable booties on each farm to prevent the spread of disease.

In the last 18 months, we've gone through more than 50,000 pairs of booties, \$2,000 of Lysol for cab disinfecting, and more gallons of concentrated disinfectant than we can count!

We've also invested in technology to enhance biosecurity. Our comput-

By Brian Kelley Feed Department Manager



erized dispatch program shows all our truckloads for the day. As soon as the feed is loaded, the computer sends an alert if the truck needs to be washed and disinfected before the truck is dispatched. Also, we have GPS on our trucks so we know where they are at all times. This is just a small list of the many things we do.

We do all this on a regular basis, not just when there's a disease outbreak. We've invested a lot of time and resources to protect our customers, large and small, and maintain Gold-Eagle's feed business. Thanks for your support. ◀



# Watch for Gold-Eagle's New Website

This summer we're transitioning to a revamped website. This will be a great improvement and is designed to offer you the timely information you need. Stay tuned at www. goldeaglecoop.com.



## El Nino is Good for Farmers

By Chris Petersen Seed Sales Manager



El Nino is back, which tends to bode well for our crops. If El Nino continues to strengthen (and forecasters expect that it will), this could lead to below-normal temperatures and above-normal precipitation in our area.

One thing that's different this time is that El Nino formed later in the year, rather than in the winter like usual. We don't know exactly what that means, but we do know that El Nino tends to create mild, low-stress growing conditions for crops. Keep an eye on what happens with El Nino, which tends to lead to abovetrend yields.

#### Monsanto/Syngenta deal

Another thing to watch this summer is the deal that Monsanto is trying to make with Syngenta. In late May, news reports noted that Monsanto was trying to line up buyers for assets worth up to \$8 billion before making a fresh takeover bid for Syngenta.

Monsanto said it plans to divest Syngenta's seed and genetic traits businesses, as well as some overlapping chemistry assets, to win regulatory approval for a takeover of its Swiss rival. Syngenta already has rejected a \$45 billion offer, but Monsanto continues to pursue a deal.

Syngenta officials said they did not agree that a sell-off of its seeds business would be sufficient to appease regulators. "The regulatory hurdles are more challenging than implied by the announcement," a Syngenta spokesman said in a statement.

While it's not clear how this deal will end up, there will likely be no immediate impacts to growers.

#### GOLD-EAGLE COOPERATIVE

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# **Plan Ahead for Fungicides**

By Stu Pannkuk, Agronomy Sales Manager

It sounds like growing conditions this summer might be right for fungicide applications. Chemical manufacturers are still offering rebates for fungicide purchases.

Besides controlling diseases, fungicides can boost plant health due to an increased efficiency of carbon assimilation, nitrogen fixation, and water utilization. Improved plant health can also translate into larger ears of corn with more kernels around, extended grain

fill, plants that stay green longer for more growth, stronger stalks that are more resistant to lodging, faster harvest times, and increased yield potential.

Benefits in soybeans include larger beans, fuller pods, better pod retention, improved root health, and higher yield potential. In fact, studies have shown a 4.3-bushel-per-acre yield advantage in soybeans treated with fungicide. We're ready to help find the right solutions for your acres. Please contact your local Gold-Eagle agronomist if you have any questions concerning pre-harvest intervals, maximum growth stages when herbicides can be applied, rotation restrictions, and herbicide-insecticide interactions.

We appreciate your business and look forward to working with you this summer. ◀

#### **FUNGICIDES**

PRODUCT NAME	AVERAGE RATE/ACRE	LABELED FOR CORN	LABELED FOR SOYBEANS	ACTIVE INGREDIENT
Domark®	4 oz.	no	yes	tetraconazole
EVITO T®	5 oz.	yes	yes	fluoxastrobin/tebuconazole
FORTIX®	5 oz.	yes	yes	fluoxastrobin/flutriafol
Headline AMP®	10 oz.	yes	no	pyraclostrobin/metconazole
Priaxor <sup>®</sup>	4 oz.	no	yes	pyraclostrobin/fluxapyroxad
Quilt Xcel®	10.5 oz.	yes	yes	azoxystrobin/propiconazole
Stratego® YLD	4 oz.	yes	yes	trifloxystrobin/prothioconazole

#### **INSECTICIDES**

PRODUCT NAME	RATE (FL.OZ./A)	RE-ENTRY INTERVAL	PRE-HARVEST INTERVAL	CHEMISTRY CLASS
Baythroid®	2.0-2.8	12 hours	45 days	pyrethroid
Cobalt®	13 to 26	24 hours	30 days	organophosphate/pyrethroid
Hero <sup>®</sup>	4 to 10.3	12 hours	21 days	bifenthrin/pyrethroid
Leverage 360	2.8	12 hours	21 days	neonicotinoid/pyrethroid
Lorsban™ 4E	16 to 32	24 hours	28 days	organophosphate
Mustang® Maxx	3.4 to 4.3	12 hours	21 days	pyrethroid
Warrior II®	0.96 to 1.6	24 hours	30 days	pyrethroid