

BeeWhere gains ground as neonic regulations appear on the horizon

A new phone app designed to address pollinator protection in the field is coming online just as state agencies consider tightening regulations around bees and pesticides and as state and federal lawsuits begin mounting.



In 2017, a coalition of stakeholders led by the California Association of Pest Control Advisers (CAPCA) and the County Agricultural Commissioners and Sealers Association (CACASA) began the BeeWhere initiative as a way to streamline communication about pesticide use between beekeepers and applicators. It works by updating farmers, pest control advisors and other pesticide applicators when beehives are present. The California State Beekeepers Association and the Almond Board of California have also been involved in the effort. The program launched a web-based mapping tool in early 2019.

“Enhancing communication between all users and protecting pollinators is critically important and BeeWhere is a mode to improve that,” said Sandy Elles, executive director of CACASA, in an interview with *Agri-Pulse*.

The portal provides an easier path for beekeepers to also meet the legal requirement for registering hives with the state. The industry has seen a lack of compliance with registrations since the original laws were passed in the 1980s. The state has also not been monitoring when beekeepers themselves use insecticides to protect hives from red imported fire ants, varroa mites and other deadly pests.

In July 2019, the program launched a free phone app called BeeCheck. It allows registered growers to access hive locations, contact beekeepers and send 48-hour notifications before applying products. This saves time in faxing or calling the local ag commissioner’s office during business hours to find out if any beekeepers put in a request for notifications.

The number of hive registrations was low to start. Pest control advisors, ag commissioners and staff from CDFA's Bee Safe program ramped up outreach efforts and training sessions for the beekeepers remaining in the state over the summer. Those beekeepers began returning to the state in late fall for the next almond bloom. Now the number is up to 1,800 registered beekeepers covering about 650,000 honeybee colonies, according to CAPCA CEO and President Ruthann Anderson.

It's huge compared with what we had," she told *Agri-Pulse*.

The same number of hives are temporarily transported into the state each year to pollinate over 900,000 acres of almonds, a value of about \$5 billion. California also has an estimated 740,000 domestic colonies – a gap the coalition and the California Department of Food and Agriculture are racing to close. With registration numbers rising, outreach efforts have also shifted back to the applicators to ensure they are performing the bee checks.

The program has come a long way in building trust between the grower and beekeeper communities, a relationship growing more strained as commercial bee populations steadily declined over the last decade. With real-time tracking, the tool provides more accountability for both sides and provide valuable information as regulatory agencies continue to evaluate the neonicotinoid, or neonics, class of insecticides, which has been blamed for the colony collapse phenomenon.

The Department of Pesticide Regulations is currently planning to adopt new mitigation measures on four prominent neonics by July. The new restrictions could impact nut, winegrape, citrus and berry growers. DPR issued a risk determination in 2018 that triggered the two-year deadline for adopting new regulations. That evaluation was based on bee toxicity and residue studies in pollen, nectar, and leaves from a selection of agricultural orchard and row crops.



CAPCA CEO and President Ruthann Anderson at its annual conference in September

The U.S. EPA took a different approach to its studies on those neonics and is expected to issue its final risk assessments soon. A lawsuit, meanwhile, led the EPA to cancel 12 neonic products in May. The Center for Food Safety also led a separate lawsuit in September against the US Fish and Wildlife Service over a decision to allow neonics to be used on national wildlife refuges.

In June, the California Fish and Game Commission opened up a new front in bee protection. It voted to advance a petition by environmental groups to list four native species of bumblebees under the California Endangered Species Act. The Department of Fish and Wildlife is undergoing a scientific review process to determine if the bees meet threatened status for classification. A coalition of farm groups filed a lawsuit in September contesting the commission's decision, arguing the listing would harm the farming community. The department will deliver its assessment to the commission by June.

The European Union, which has often inspired California's pesticide regulations, instated a moratorium on the use of three neonics in 2013 in an effort to protect bee health. DPR also has a moratorium on any expansion on the use of neonics.

The state is also placing more enforcement, along with penalties, on beekeepers. A law passed in 2018 through Assembly Bill 2468 will levy fines of up to \$1,000 on beekeepers who fail to register or update hive locations. A revision to that measure, passed through AB 450 in October, pushes the start date for that enforcement back to 2021.

The BeeWhere portal, however, arose as a more collaborative approach to the issue, avoiding the years-long cycle of regulation and litigation.

“Collaboration is always a positive effort,” said Elles. “In this case, we’ve had great input from beekeepers, from growers, from PCAs and from our state partners at (CDFA and DPR).”

Seven questions for Western Growers' Dennis Nuxoll

Dennis Nuxoll is the vice president of federal government affairs for the Western Growers. He spoke with *Agri-Pulse* recently on the top issues the fresh produce association is facing in 2020.



Western Growers represents more than half of the nation’s fruits and vegetables and three-quarters of all the tree nuts. Its members operate in more than a dozen states and several foreign countries, though their base farm must be in California, Arizona, Colorado or New Mexico.

The conversation was edited for brevity.

1. What are the top priorities for Western Growers this year?

We look forward to an active 2020.

We finished 2019 with both the vote on immigration in the House and then the vote on trade. We expect both to be hot topics this year as well.

On trade, we want to see if we can capitalize on phase two for both Japan and the China deal.

With respect to Japan and trade more generally, one of the things that we are most interested in is SPS (sanitary and phytosanitary) standards. We tend not to have as many problems on tariffs

In the Japanese market for years, you get the product in there and it just sits on the dock, because they're inspecting it for some pests or disease that doesn't exist. That is going to be the focal point and why we're actually excited about Japan phase two.

The President has said he wants to do bilaterals because he thinks he can get more. Well we want more than was done in (the Trans-Pacific Partnership, or TPP) on SPS. We actually want to start solving problems. TPP was setting up a better process to solve problems. We supported TPP and wanted to pass TPP, but we're here three years later and we don't have TPP.

There'll be a version of that for China. We don't know yet whether we'll have the opportunity to do that. But if there is, that would be our focus. It's also our focus in South Korea. Our tree nut guys have also had those problems in Europe.

On immigration, we plan to capitalize on the historic House vote. It's the first time since 1986 that the House of Representatives has passed an immigration bill that helps the agricultural sector.

We are in a full-on crisis mode on labor, across multiple sectors within agriculture – certainly the produce sector, the dairy sector, all of indoor ag. Most of my guys for example, are 30-40% light on their crews. The labor crisis is real and it is shutting farms down. We are going to push the Senate to the wall to do something next year on immigration, because we all have this that same crisis.

2. What's next for food safety?

We have reoccurring food safety issues. That is a topic we have been engaged on since the spinach outbreak in 2006.

Part of the problem is we have millions of people being served fruits and vegetables. For 99.9% of them, there are no problems. But the 1% is a big deal. We all strive to be perfect, but we don't operate in a lab setting.

One of the things we want to do is work with FDA to accelerate traceback and exclude clean, healthy product more quickly.

We have done better. In 2018, we had the Thanksgiving romaine outbreak. There was a similar timeframe in 2019, but it was more limited and we were able to identify it was from Salinas. The bags all have stickers now that tell you where they were grown.

3. What are you watching with water issues?

We have been very supportive, for example, of a bipartisan bill in the Senate that (Colo. Sen. Cory Gardner and Calif. Sen. Dianne Feinstein) have done on water. We would like to see that bill pushed forward. We're working to get an equivalent bill in the House off the ground as well.

That may have a nexus with the reauthorization of the Water Resources Development Act this year. That is an opportunity to tackle some of these water needs that not just all four of my states but the entire western United States experiences. The Colorado River Basin, for example, is projected to hit some of those threshold peaks that require mandatory cuts in water. That is expected either this year or next.

We think the Drought Contingency Plan will help with that. But we are right on the edge.

For the last two years, we've actually had enough water in the west. But about five years ago, it was more important than immigration. We didn't need the labor because we didn't have water to actually plant crops

4. How has Western Growers been engaging in the tech space?

We are thinking about research proposals for the Farm bill implementation.

We run a research incubator in Salinas with 60 small companies. We're networking with our farmers to test out technology. We have a venture capital fund. When we identify promising companies, we're able to get them to scale. And then we have another research center with the University of Arizona that identifies mature technologies and how they can be applied to agriculture.

We're a couple years into the Farm Bill and that'll be a big push. There are a couple programs we helped nurture in the Farm Bill. Now it's really the time to push.

We made a decision about five years ago that we're going to spend some of our own money to make sure the research is focused on the needs that we have as producers.

5. What are the latest challenges with traceability?

We have pushed (the Food and Drug Administration) fairly aggressively.

We had Frank Yannis (the FDA deputy commissioner of food policy and response) talk to our board. Our board members told him our producers have scanning technology where you can identify which field coordinate a bag of kale was harvested on. We do not understand why the FDA can't figure out how to trace this back. Yannis said they have to integrate all this technology and set standards.

Last year on Thanksgiving, we lost a billion dollars. We want to figure out ways to accelerate that stuff down that curve.

The other thing we are always interested in is that last mile. When that product leaves our possession, one of the questions to be asked is if that information is being preserved up the chain.

6. What are your thoughts on the water standard for the Food Safety Modernization Act?

We actually think the FDA has done a fairly good job on water. Not all of our ag associations agree.

They have acknowledged they don't understand the space. They have had field hearings galore around the country and multiple evolutions of the standard

We think the standard should be customized. You can't use the same standard for lettuce and citrus. It does need to be customized for the risk profile of specific crops.

In the research space, there is an interesting intersection. Right now, the only thing you can really use to clean water is chlorine. If we use chlorine to clean all of our irrigation water for the next 10 years, and that water is spread out in our fields, what does that do to the soil composition of the field. We probably need to be thinking through other technology FDA will accept that cleans water and gets rid of E. coli, salmonella, listeria, etc.

USDA will be involved in that I suspect, as well as land grant universities. EPA will be involved, because you have additives sprayed out into the environment. Then FDA will have to acknowledge whatever product we're choosing has the efficacy to actually eliminate that.

So that is actually a complex problem. One of many in this food safety space.

7. How are your grower members describing the economic outlook?

The trade uncertainty is certainly impactful, China especially and India as well.

Vegetable crops tend to be on the lower end on the export scale to those countries. Fruits and tree nuts tend to be more actively exported to those locations. The fruit sector had widespread negative impacts as a result of the tariff wars, which are hopefully over. The tree nut sector was also very negatively impacted. My pecan guys, for example, are devastated and bleeding as a result of China. Several other countries grow pecans and we have been replaced.

California grows about 80% of all almonds. So, we have been impacted. We think there's been transshipments going on, but it's not entirely clear. When Hong Kong becomes the number five exporter of almonds on Earth, that seems a little odd.

In 2018, a number of my growers in the tree nut sector said to me they were slowing some of their tree replacements. I did not hear guys talking about getting rid of trees. We actually cut trees during the drought in California five or six years ago.

If this had gone into year three, I think we would have seen people actually scale back a little bit in the orchard sector because of trade.

But on other sectors the domestic economy is going well. There's a reason the produce aisle is the first thing in the grocery store: It's the most profitable center.

Ag looks to Trump for regulatory relief, new WOTUS, in 2020

Trade remains the top concern for American agriculture heading into 2020, with looming uncertainty about whether the Chinese will make promised increases in commodity purchases, and whether President Donald Trump will provide another round of trade assistance to U.S. producers.

But with a presidential election looming, the Trump administration is under the gun to roll out a series of major regulatory changes, including a new "waters of the U.S. rule" and a speedier approval process for biotech crops, that could have impacts on U.S. agriculture for years to come.

The list of regulatory measures due in 2020 that will affect the agriculture and food industry also includes two additional rules tightening eligibility for the Supplemental Nutrition Assistance Program.



President Donald Trump

Congress still has unfinished business heading into this year, including final approval of the U.S.-Mexico-Canada Agreement and a new biennial water projects authorization bill as well as the government's annual spending bills. And farm groups are pressuring Congress to do something to alleviate growing farm labor costs.

But the window for Congress to get much done this year will close quickly as the campaign season heats up, starting with the Iowa presidential caucuses on Feb. 3.

Paul Schlegel, vice president of public affairs for the American Farm Bureau Federation, said the legislative process will likely slow as the field of Democratic presidential candidates narrows and lawmakers look toward November. "We would want to get stuff done sooner," he said.



Paul Schlegel, AFBF

Meanwhile, USDA is expected to announce soon whether it will provide the third tranche of trade mitigation payments under the administration's 2019 Market Facilitation Program. Then, the question is whether there will be a 2020 MFP. The administration has given no indication of when that decision could be made.

Here is a more detailed look at what's ahead in Congress and the Trump administration this year:

REGULATORY FRONT

New WOTUS expected soon

A new rule replacing the Obama-era definition of what wetlands and streams fall under the jurisdiction of the Clean Water Act is widely expected to be finalized early this year.

The final WOTUS rule was sent to the White House Office of Management and Budget for review on Dec. 5. Administration officials have a meeting scheduled Feb. 6 with the American Chemistry Council to discuss the rule. But the rule's release could come before that, said Scott Yager, environmental counsel for the National Cattlemen's Beef Association. "All signs point to the new water rule being finalized this month. It's possible that it takes longer and happens in February."

Regardless of when it is released, there will certainly be continued court fights over the rule for years to come. Two lawsuits were filed late last year following the publication by EPA and the Army Corps of Engineers of a separate rule that repealed the 2015 rule issued by the Obama administration.

The repeal rule, which took effect Dec. 23, revived 1986 regulations that were in place before the 2015 rule was finalized.

Administration wants to speed gene edited crops to market

OMB also is reviewing a final USDA rule that would provide the first major update to federal regulations for biotechnology in more than three decades. The department has been struggling

for years with how to streamline its regulatory process for biotech plants in order to accelerate the commercialization of gene-edited crop traits.

The rule proposed last year by the Animal and Plant Health Inspection Service was broadly criticized by industry interests. Biotech companies said it didn't go far enough and would still slow the commercialization of many gene-edited products. But groups representing grain traders, food processors and restaurant chains told USDA the changes could lead to trade disruptions and undermine consumer confidence.

EPA, meanwhile, sent a proposed rule to OMB last week to revise its regulations for crops that contain their own pesticides. Corn and cotton crops already are commonly engineered to contain a bacterium toxin known as Bt.

In a description of the rule, EPA said it would deal with "newer technologies" and exemptions from pesticide registration requirements. The rule also would provide tolerances or tolerance exemptions for residues in or on food commodities.

FDA proposing new produce water standards

The Food and Drug Administration is reworking regulations for water that is used to irrigate fruit and vegetable crops that are commonly eaten fresh. FDA officials said in a blog post Tuesday the proposed new standards would be released this year. FDA earlier delayed implementation of water regulations issued by the Obama administration under the Food Safety Modernization Act.

"FDA experts are now working on a rulemaking to propose an approach that offers flexibility and addresses the practical challenges of implementing some of the agricultural water requirements across the diversity in farm types, water sources, and water uses," the officials wrote.

USDA presses ahead with SNAP cuts

Regulations that will make it harder for states to get waivers from SNAP work requirements for able-bodied adults will take effect in April. USDA is finalizing additional rules that will effectively lower income eligibility limits in many states and change the way that utility expenses are used to calculate SNAP benefits.

The most controversial of the additional proposals would rewrite categorical eligibility provisions that allow people to automatically receive SNAP benefits if they receive any benefits or services through the Temporary Assistance for Needy Families program. In many states, the service consists of as little as a brochure or hotline referral. The effect of the provisions is to allow families to qualify for SNAP with incomes up to twice the federal poverty line. Children in those households are also automatically eligible for free school lunches.

Some 36.3 million people received SNAP benefits in September, the latest month for which data is available. Enrollment has been falling steadily for several years as the economy has improved. Average annual enrollment peaked at 47.6 million in 2013.

CONGRESS

USMCA, water projects among congressional priorities

Work on the USMCA implementing bill should be wrapped up soon. The only question is when the final Senate vote will be. That depends on how soon House Speaker Nancy Pelosi sends impeachment articles to the Senate, because that issue will take precedence over the USMCA vote, said Senate Finance Committee Chairman Chuck Grassley, R-Iowa.

Meanwhile, there are several reauthorization bills in various stages of development, including legislation for child nutrition programs and the Commodity Futures Trading Commission. But those issues have languished for years, unlike water projects reauthorization, an issue that has had more bipartisan support in recent years.

A new two-year water projects bill is due to be passed by the end of the year to replace the 2018 measure. The top priority for agriculture interests is to change the way waterway projects are funded to accelerate replacement of existing locks and dams.

Under current law, inland waterway improvements must get half their funding from the Inland Waterways Trust Fund, the revenue of which comes from a 29-cent-per-gallon tax on barge fuel. The other half comes from the general treasury.

The Waterways Council, which represents shipping interests, and the American Soybean Association, are asking Congress to require 75% of the funding to come from general revenues versus 25% from the IWTF. "If constrained to a 50-50 cost share, many of the IWTF projects will not even begin construction in the next 20 years," the soybean association said in a letter to lawmakers last summer.

The House Transportation and Infrastructure Committee has a hearing on the reauthorization measure this week.

Child nutrition, USDA nominees stalled in Senate

The Senate Agriculture Committee has plenty of unfinished business this year as Chairman Pat Roberts, R-Kan., prepares for his retirement. His to-do list includes a reauthorization of child nutrition programs, but he told *Agri-Pulse* this week there is still no agreement with the committee's Democratic side on what should be in the legislation.

Meanwhile, Sen John Kennedy, R-La., continues to block final Senate votes on committee-approved USDA nominees over his concerns about how the Trump administration is handling ethanol policy.

Roberts said he has so far been unable to persuade Kennedy to release his hold on the nominees including Mindy Brashears, who was nominated to be undersecretary for food safety and Scott Hutchins, picked to be undersecretary for research, education and economics. Both are serving in acting deputy positions.



Three USDA nominees (L to R: Mindy Brashears, Naomi Earp and Scott Hutchins) await Senate confirmation.

Even as those nominees remain stalled, the White House sent another nomination to the Senate this week, that of Brandon Lipps to be undersecretary for food, nutrition and consumer services. The nomination is likely to be particularly controversial because of the administration's ongoing efforts, led by Lipps, to cut the cost and size of SNAP.

Senate Ag also could consider a House bill to expand the authority of the CFTC, but a bipartisan measure approved last fall by the House Agriculture Committee has not received a floor vote yet. The CFTC's last reauthorization bill expired in 2013.

USMCA schedule hangs on impeachment

The U.S.-Mexico-Canada trade agreement is headed for easy approval on the Senate floor, but the uncertainty surrounding the impeachment process could mean farmers and ranchers will have to wait several more weeks for that final congressional vote.

"I expect that USMCA will receive nearly unanimous support ... when the full Senate takes it up, hopefully very soon," Senate Finance Chairman Grassley told reporters ahead of the committee's 25-to-3 vote on Tuesday to approve the USMCA implementing bill. Approval by the full Senate will send the measure to President Donald Trump for his signature. The big question is when that will happen.

"Impeachment remains a wild card with scheduling the full Senate vote on USMCA," Grassley said.

The House of Representatives voted to impeach Trump last month, and as soon as the two articles of impeachment — abuse of power and obstruction of Congress — are transmitted to the Senate, the Senate has to concentrate solely on them before any other business.

House Speaker Nancy Pelosi, in an apparent effort to give Senate Minority Leader Chuck Schumer leverage in his demands that witnesses be called during a Senate trial, has not yet sent over the articles.

That could give the Senate the opportunity to hold a vote on USMCA if it acts quickly.

"If the articles of impeachment don't come up, I'd say by next week for sure," Grassley said about a vote on USMCA. "But if articles of impeachment do come up, it could be the end of the month."



Sen. Chuck Grassley, R-Iowa

Still, it may not be that simple. Technically, at least three Senate committees — Commerce, Banking and Environment and Public Works — also have jurisdiction over USMCA. That means those committees could hold up the process, but Grassley said he believes that's unlikely.

"Ultimately, timing is up to Leader McConnell and when Speaker Pelosi decides to send over the articles of impeachment," Grassley said.

And now McConnell is telling reporters that he won't be pushed into having witnesses at the trial — at least initially. McConnell says he has enough support from GOP senators to begin a trial without the witnesses Democrats are demanding.

Pro-USMCA lawmakers and ag groups continue to press the Senate to vote on the implementing bill.

“I commend Chairman Grassley for his leadership in building support for this agreement in the Senate, and I encourage swift action on the Senate floor so we can send this agreement to the President’s desk as soon as possible,” said Texas Rep. Kevin Brady, the top Republican on the House Ways and Means Committee. “It’s time to bring this deal across the finish line so we can bring North American trade into the 21st Century.”

The U.S. dairy and poultry sectors are expected to be two of the biggest winners in USMCA, and wine producers also stand to benefit.

Canada agreed under the pact to increase U.S. access to its tightly controlled domestic market through new tariff rate quotas for milk, cheese, cream, skim milk powder, butter, ice cream, whey and other dairy products. Canada will also abolish two of its dairy pricing systems, which U.S. producers say result in flooding the international market with skim milk powder. Canada also will set up new tariff rate quotas for U.S. poultry and eggs.

“Dairy’s gains under USMCA would be substantial — an estimated \$528 million in increased revenues over the agreement’s first six years, as well as protection for common cheese names and enforcement mechanisms to ensure repeal of Canada’s problematic Class 6 and Class 7 milk price schemes,” said Jim Mulhern, president and CEO of the National Milk Producers Federation.

U.S. wine producers and exporters will also be winners under USMCA, scoring fairer treatment in one Canadian province. British Columbia does not allow U.S. wine to be sold on regular grocery store shelves, relegating it to be displayed in a separate “store within a store” that is physically separated from the main retail outlet, but that is set to end with implementation of USMCA.

China makes big push for biotech

China, with a recent announcement that it will approve 192 domestically developed genetically engineered biotech seed traits, is taking what may be a big step in the country’s evolution of acceptance for genetically modified crops, but it remains unclear if the move will translate into major gains for the biotech and farming sectors there and in the U.S.

While U.S. government officials are scrambling to understand the significance of the actions, U.S. tech and agriculture experts are already hopeful the first new domestic approvals in a decade portend a breakthrough in wider Chinese acceptance.

“Certainly, it’s a massive effort by the Chinese government to support ... biotechnology and to help their domestic companies and universities,” said Matt O’Mara, director of international affairs for the Biotechnology Innovation Organization (BIO). “There’s a lot to be seen yet and the process still needs to play out.”

But the approvals are not happening in a vacuum. China, according to Trump administration officials, has also agreed in the “Phase One” trade deal to improve the way it approves new biotechnology traits.

China is also making a propaganda push to try to convince its population that genetically modified plants are safe to eat.

“There is no need to worry that the genes in food will change human genes or pass them on to future generations,” the Chinese Ministry of Agriculture and Rural Affairs proclaimed in a newly released publication.

“All of this is a good sign that maybe they’re ready to step up to the plate and make their approval process transparent and timely,” said Veronica Nigh, an economist for the American Farm Bureau Federation. “It’s a big deal.”

For U.S. biotech companies and the farmers who want to plant the latest seed technology, China has long been a major obstacle. Chinese approval is effectively a requirement for any crop that is sold internationally, but the country’s opaque approval system adds years to the acceptance process. That translates into billions of dollars in losses for biotech seed companies that don’t want to commercially release new products until China signs off on them.



Veronica Nigh, AFBF

“(U.S.) farmers know there’s better technology out there than they currently have access to, so if China were to start approving biotech traits in a way that makes more sense, it should mean that U.S. farmers will have access to technology much faster than we’ve grown accustomed to,” Nigh told *Agri-Pulse* in an interview.

As it stands now, China refuses to even begin considering a foreign trait for import until it has received complete approval elsewhere in the world, like the U.S. or Brazil. China also requires lengthy field tests to be completed in China for foreign traits that will never be commercially cultivated there.

According to BIO, before the recent announcements, there were six products pending final approval (which have been pending approval for nearly five years) and seven products in the field-testing stage.

“At the end of the day, the systemic change we want to see should benefit both sides,” O’Mara said.

The Obama administration tried with no success for years to convince China that it needed to make its biotech approval process transparent and efficient because the reform would be equally beneficial to the budding Chinese industry, but China’s process has only gotten more onerous and time-consuming in recent years.

“The regulatory regime under which new GE events are reviewed in China underwent numerous changes in 2017 and 2018, evolving into a more onerous, less science-based system,” USDA Foreign Agricultural Service concluded in a recent assessment.

The new, tighter restrictions on safety and labeling passed in 2018 were especially troubling, FAS said. New field trials and duplicative studies were mandated in virtual secrecy. The World Trade Organization was not informed and no comments were solicited from stakeholders.

But grumblings from within China’s domestic biotech sector were growing as companies and universities invested billions of dollars into new products that seemed like they would never get to market. China’s State Council released a Five-year Plan for National Science and Technology Innovation that promised the commercialization of new cotton, corn and soybean traits. Up until now, China seemed not to be on track for the 2020 commercialization goal.

But that changed last week. The Chinese Agriculture Ministry issued the broad swath of “biosafety certificates” and announced that, for the first time, it would accept public comment. Just the fact that the public was being brought into the process is a major new development that shows exciting change, said Nigh.

“That’s something we’ve been asking them to do for years — be more transparent and accept comment from all over the world,” she said.

Another key development is the fact that China is considering commercialization for corn and soybean traits. Most of the 192 approvals are for cotton varieties, but there are two new corn traits on the list as well as a soybean trait developed by the Shanghai Jiaotong University.

While these developments appear to be progress, it’s still early and there’s no guarantee the biosafety certificates will translate into approval for commercialization. On paper, China has approved biotech cotton, papaya, tomatoes, sweet peppers, petunias and poplar trees. Commercialization has been allowed only for papaya and cotton.

Still, there is reason for some optimism, O’Mara said: “You’ve got to start somewhere, and maybe we’re getting there.”

Feds side with Monsanto in Roundup cancer case

Monsanto is receiving help fighting a multimillion-dollar verdict awarded for exposure to its flagship herbicide, Roundup, from an unusual source: the federal government.

The U.S. Department of Justice has filed a brief in the company’s appeal of a \$25 million verdict in federal court to Edwin Hardeman, a California man who claims exposure to Roundup caused his non-Hodgkin lymphoma. A six-person jury awarded him \$80 million, including \$75 million in punitive damages, which was reduced by U.S. District Judge Vincent Chhabria to comply with Supreme Court precedent restricting the size of punitive damage awards.

Monsanto, bought by Bayer in 2018, also is appealing two other verdicts in state court.

Bayer lauded the government’s and other parties’ involvement. In a statement, the company said, “We are encouraged that the U.S. government, several states, and many other parties chose to

offer the court their legal perspectives on the key issues in our appeal. The number and stature of these parties speaks clearly to the importance of the issues in dispute in this case to a diversity of interests including governments, health care providers, farmers, and manufacturers.”

Other *amicus* briefs in support of Monsanto's appeal were filed by the states of Nebraska, Idaho, Louisiana, North Dakota, South Dakota, Texas, and Utah; the California Medical Association, California Dental Association, and California Hospital Association; the U.S. Chamber of Commerce and Pharmaceutical Research and Manufacturers of America; Genentech, and CropLife America.

The federal government does not often get involved in such matters, says attorney Clay Massey of Alston & Bird in Atlanta. “You rarely, if ever, see a regulatory body get involved in a tort action between private parties to advocate a position on the outcome of an issue between those parties,” he said.

Its participation here shows the “confidence EPA has in its determination that glyphosate is not putting people at risk of cancer,” as well as in its "determinations regarding glyphosate warning requirements. It likely also illustrates the EPA’s recognition of the importance of glyphosate to the farming industry.”



Clay Massey, Alston & Bird

The current administration is "more willing to participate in defense of a manufacturer such as Monsanto who is facing liability for complying with its regulations," Massey said.

DOJ focused on one particular aspect of the case, which concerns the label required by the Federal Insecticide, Fungicide, and Rodenticide Act. Like Monsanto, which filed its [brief](#) in the 9th Circuit Court of Appeals a week before, the United States contends that FIFRA preempts states from coming up with their own labels.

“Roundup is registered under FIFRA and its EPA-approved label does not contain a cancer warning,” the government said in its brief. “The United States has a strong interest in preserving Congress’s express delineation of federal versus state authority,

which ensures that the federal government can establish and maintain nationally uniform requirements for the labeling and packaging of pesticides.”

Hardeman was awarded \$80 million by a six-person jury that found Monsanto liable on failure to warn, negligence and design defect claims.

But “EPA has consistently approved the sale of glyphosate without a cancer warning and has stated that including such a warning on the label would render the product misbranded,” Monsanto said in its brief. Therefore, “any state-imposed cancer warning would be in addition to or different from federal requirements, and is expressly preempted.”

“Although FIFRA does not prevent a state from making the violation of federal labeling requirements a state offense and imposing separate sanctions, states cannot impose distinct labeling requirements,” the government said.

In August, EPA expressly prohibited glyphosate products in California being labeled as carcinogenic. Under Proposition 65, the state had adopted the conclusion of the International Agency for Research on Cancer that glyphosate is “probably” carcinogenic to humans, but EPA said any products so labeled would be deemed misbranded.

In its brief, CropLife America pointed to economic costs of not being able to use glyphosate. At the same time, it pointed out, EPA has not “identif[ied] any human health risks from exposure to any use of glyphosate.”

“A state law requirement that glyphosate manufacturers warn of carcinogenicity when there is none — i.e., an “excessive” warning — would have deleterious real world economic and health effects on the public.” CropLife said in its brief. “A cancer risk warning would discourage the widespread use of glyphosate with a resulting loss of crop yields and other benefits from use.”

Monsanto and its *amici* also argued a 2005 Supreme Court decision relied upon by the district court does not mean what the district court said it means. In *Bates v. Dow Agrosciences*, which involved peanut farmers’ claims that a Dow pesticide harmed their crops, the high court said FIFRA does not preempt state-law tort claims. Monsanto and its supporters say the decision applied only to “efficacy” claims, which are not evaluated by EPA, and not health-based claims.

“EPA has ... concluded that glyphosate’s labeling should *not* contain the warning that state law here purportedly requires, making clear that that state-law requirement is preempted” under FIFRA, Monsanto said.

The federal government argued the *Bates* decision means “a state may impose different or additional remedies — or bar or restrict a pesticide use entirely — but it may not impose different or additional labeling requirements.”

Bayer stock is up slightly since the government filed its brief on Dec. 20. After jumping about 5% to \$20.68/share to Dec. 26, the stock had settled to \$20.18 by the close of business Jan. 6.

Crop insurance kept farmers afloat during a tough year

It’s over.

That’s the good thing for many farmers and ranchers who were hit with too much rain or harsh weather conditions in 2019. Last year will go down in the record books as another big year for crop insurance, providing much-needed assistance to growers who either couldn’t plant a crop or who had a crop destroyed during the growing season.

It’s not the biggest year that crop insurance has helped fill the void — that was 2012 when indemnities topped \$17.4 billion — but the numbers across the country are still substantial.

Farmers paid premiums of about \$3.8 billion to insure almost 380 million acres in 2019. By year-end, crop insurance companies paid out almost \$7.6 billion to cover losses, and the numbers are expected to grow as all claims are finalized.

Thirty-three counties had crop insurance indemnities of over \$25 million last year. **South Dakota was most severely impacted, with farmers and ranchers in 15 of the state’s 66**

counties receiving crop insurance indemnities of over \$25 million. Farmers in the county with the largest losses, Hutchinson, received over \$63 million in indemnities.

But damages occurred far and wide. **Farmers in California’s San Joaquin County, home of some of the nation’s most high-value crops and the largest portion of the state’s cherry crop, had just over \$39 million in indemnities.** Across the state, cherry growers paid over \$14.4 million in premiums and received over \$62.7 million in indemnities.

“In the midst of all of the other chaos taking place during planting season this year — ad hoc assistance passage, another trade aid announcement, unprecedented weather — the one thing a farmer could take to the bank was that he had prevent plant coverage that would provide an indemnity in a timely manner — even if he couldn’t get a crop in the ground,” noted Tara Smith, federal affairs vice president of the Crop Insurance and Reinsurance Bureau. “Crop insurance provided that peace of mind.”

Here’s a list of the counties receiving crop insurance indemnities of at least \$25 million by the end of 2019, according to RMA.

State	County	Crop Ins. Indemnity Over \$25 million
Arkansas	Jackson	\$25,684,132
California	Fresno	\$29,286,459
	San Joaquin	\$39,002,961
Ohio	Hardin	\$27,214,346
	Wood	\$36,539,069
Michigan	Lenawee	\$29,328,255
Missouri	Carroll	\$25,060,007
Minnesota	Lincoln	\$26,812,580
	Lyon	\$31,971,236
	Murray	\$28,116,621
	Nobles	\$25,242,990
	Polk	\$26,945,482
North Dakota	Cavalier	\$25,080,733
	Dickey	\$32,534,804
	LaMoure	\$32,988,113
South Dakota	Beadle	\$49,695,267
	Bon Homme	\$29,133,793
	Brown	\$38,717,757
	Charles Mix	\$38,713,031
	Clay	\$26,653,774
	Douglas	\$28,242,220
	Hand	\$36,527,993
	Hanson	\$29,902,633
	Hutchinson	\$63,054,136
	Kingsbury	\$34,575,358
	Lake	\$27,612,653
	Lincoln	\$26,851,885
	McCook	\$41,592,942
	Spink	\$46,439,808
	Turner	\$41,051,730

Texas	Floyd	\$32,649,088
	Hale	\$37,953,384
	Lamb	\$25,731,829
Source: RMA/USDA		

Outcome-based pricing aims to reduce farmers' financial risk

A recently developed pricing model is making its way into the seed industry and one company is hoping it will be another tool for farmers to offset financial risk at a time when weather, trade, and commodity price uncertainty are plaguing the market.

Bayer Crop Science is continuing a 2019 pilot program again this year on outcome-based pricing. The model bases prices for the company's products on a perceived value of how they performed during the growing season. It's a more fluid pricing structure than traditional models, which have based prices on overhead costs necessary to make and market the products.

Think of outcome-based pricing like a flex-lease agreement, or a risk-sharing agreement between a farmer who rents crop ground from a landowner.

The farmer and company would agree on a base price for the seed at time of when the seed is purchased. If the yield from the crop at harvest is below what is expected, the farmer gets a refund. If the yield is higher than expected, the farmer would pay an additional premium reflecting the better yield.

“It’s all around choice,” Bayer Crop Science’s Chad Bilby said at a recent Farm Foundation forum. “We see this as another choice farmers can have in how they want to purchase seed or if they want to mitigate risk.”

But Bayer also sees this as a beneficial model to drive incremental sales. Mike Stern, head of Bayer's digital farming efforts and the Climate Corporation, referenced that potential outcome in a [December presentation](#), the slides of which were posted online. His presentation also included survey results showing 74% of farmers would be "more likely to purchase a product with outcome-based pricing," and half of producers said they would be "likely to switch brands."

Bilby said Bayer continues to get feedback from farmers about the pilot pricing model. One farmer participating in the program is Ben Riensche of Blue Diamond Farming Company from Jessup, Iowa.

“On one hand I can see this intuitive trade-off,” Riensche told *Agri-Pulse*. “By buying a bundle of goods from one manufacturer for a sliding price scale — small payments if it’s a small harvest, larger payments if its large, could be a good way to de-risk the system.”

He sees benefits of reducing input costs but is aware of potential downsides with the program. Riensche noted the model could be a way of “inviting the fox into the chicken coop,” allowing companies to obtain yield data from the farmer to make the program work.

Farmers have long been concerned about others handling their yield data. However, Bilby noted the farmer owns the data and Bayer would be using the data with the producer’s permission.

Joe Young, president and CEO of Growers Edge Financial, feels the model will be a way to get newer technology onto the farm faster and help farmers improve cash-flow.

“It’s all about being exceptionally transparent,” Young said. “It’s about farmer-specific data, with their consent ... with other types of data into the platform and it’s the drive of data that is really what turns this into magic on the farm.”

One of Bayer’s challenges is working to gain the farmer’s trust that it isn’t skewing the pricing system.

“No farmer isn’t going to believe that the house isn’t going to win,” Riensche said. But he said weather will be the biggest factor needed to be taken into consideration with the pricing model.

Take, for example, 2019. Heavy rain and snow washed out fields, delaying harvest into December for northern states like Michigan and Wisconsin. North Dakota came nowhere close to completing corn harvest, barely reaching 30%. All told, it was a prime example of how weather can cause planting and harvest problems for many farmers.



Ben Riensche, Blue Diamond Farming Company

Young said interest in the pricing model is not just coming from ag tech providers but farmers themselves.

He said providers continue to try to cut through the noise of companies boasting to farmers about their products, while farmers want another tool to improve cash flow on their operation as well as their bottom line.

“I think it can work,” said Chad Hart, an extension economist at Iowa State University. “There’s a potential market here ... I don’t think everybody is going to flip to this, but I think it is going to be one of those menus of choices.”

Hart noted younger and more tech-savvy farmers may buy into this model more quickly than more traditional farmers, as cash flow tends to be the utmost concern as they look to reduce input costs.

He predicted it will take a few years for interest in the model to build up.

“When I think about flex-leasing on the land side, it took 10 years to build up to a 15-20% market share,” Hart said.

When you think about ag tech, he said, 10 years ago just a few farmers had yield monitors in their combines but now, almost everyone does. The biggest question moving forward will be how much data and information the farmer is willing to share, Hart added.

News Briefs:

EPA Science Advisory Board criticizes WOTUS proposal. The Environmental Protection Agency’s and Army Corps of Engineers’ proposed changes to the definition of “waters of the United States” (WOTUS) in the Clean Water Act “decreases protection for our

nation's waters and does not support the objective of restoring and maintaining 'the chemical, physical and biological integrity' of these waters," as stated in the CWA, EPA's Science Advisory Board said in comments released Dec. 31. The board, whose members are scientists outside the agency, said EPA's latest proposal "neglects established science pertaining specifically to the connectivity of groundwater to wetlands and adjacent major bodies of water." In particular, EPA did not take into account findings regarding "watershed systems and processes" in EPA's 2015 Connectivity Report. The proposal's "departure ... from EPA-recognized science" also threatens to weaken protection of the nation's waters "by failing to protect ephemeral streams and wetlands which connect to navigable waters below the surface," the SAB said in its eight-page critique. Those changes do not have "a fully supportable scientific basis" and have the potential to introduce "substantial new risks to human and environmental health." "There is no scientific justification for excluding groundwater from WOTUS if spring-fed creeks are considered to be jurisdictional," the board said. "The chemical or biological contamination of groundwater may lead to contamination of functionally connected surface water." Ag groups have pushed for a simplification of WOTUS through the Trump administration's rulemaking, saying a producer should be able to visually detect if they have a navigable water from their vehicle rather than through more advanced means. EPA has sent the final version of its WOTUS rule to the Office of Management and Budget for review, where it has been the subject of numerous meetings requested by environmental and industry groups, including the American Farm Bureau Federation and Natural Resources Defense Council. EPA and the Army Corps of Engineers are expected to publish the rule this month, according to EPA's regulatory agenda. NRDC attorney Jon Devine, who attended a Dec. 18 meeting at OMB, said he saw "no indication that the administration intends to change course from abandoning decades-old protections for water bodies."

New ARS bee research lab opens at UC Davis. A new USDA honeybee research lab has opened at UC Davis. USDA's Agricultural Research Service says the Harry H. Laidlaw Jr. Honey Bee Research Facility will focus on developing technology to improve colony survivorship through long-term studies of multiple stress factors. The new facility supports the hiring of two new researchers, Arathi Seshadri and Julia Fine, members of the Invasive Species and Pollinator Health Research Unit, "whose mission is to develop and transfer integrated biologically based approaches for the management of invasive species and the improvement of pollinator health," according to an announcement from UC Davis. "The research team collaborates with federal, university, non-governmental and industry partners conducting research to improve honeybee survival and beekeeping sustainability in California and nationwide," the announcement added. Harry H. Laidlaw Jr. was an ARS entomologist and UC Davis professor who was considered the "father of honeybee genetics."

Farm Hands West: Teplitzki joins the Produce Marketing Association

Max Teplitzki has joined the Produce Marketing Association as the new chief science officer. Teplitzki most recently worked at the National Institute of Food and Agriculture as the acting director of the food safety and nutrition divisions.

The California Fresh Fruit Association has hired **Caroline Stringer** as its new director of trade. She comes to the Association from the Pacific, Gas & Electric Company's Public Affairs Division. She has also served as the senior specialist on global, technical and regulatory affairs for the California Almond Board. She started with the Association on Monday.

Zak Laffite is the new president of Wonderful Citrus, succeeding **David Krause**. Laffite previously served as the chief sales officer. Krause first joined the company when it was named Paramount Citrus. He has been president of the company for 20 years, and will move to a newly created role of adviser to Stewart Resnick, chairman and president of The Wonderful Co.

C.H. Robinson has promoted **Michael Castagnetto** to president of the Robinson Fresh division. He succeeds **Jim Lemke** who retired earlier the year 2019. Castagnetto has been with C.H. Robinson since 2005 and has held various leadership roles throughout his career including sourcing manager at Food Source, general manager of the tropical and dry vegetable categories, director of global supply and vice president of global sourcing.

Don Peracchi has stepped down as president of Westlands Water District's Board. **Daniel Errotabere** has been elected to succeed Peracchi. Errotabere previously served as Westlands' President from 2002 through 2005, and began his second term as President of Westlands on January 1, 2020. Peracchi has served as a Director of Westlands since 2008 and was elected President in 2011. He will remain on the Board of Directors.

Joe Barsi has been named president of California Giant Berry Farms. He succeeds **Bill Moncovich**, who will continue as CEO. Barsi has been chief operating officer since March 2018, when he rejoined the company. He was with California Giant from 2005 to 2012, and was vice president of business development when he left to be president of Tradin Organics U.S.A. He then was president of Enzafruit Products Inc. before rejoining California Giant.

Matt Keeling, a civil engineer, has been named the new executive officer of the Central Coast Regional Water Quality Control Board. He will succeed **John Robertson**, who will retire in the spring of 2020. Keeling has served as the assistant executive officer since August 2018, and will step into his new role April 1.

The Kroger Co. has elected **Karen Hoguet** to the company's board of directors. She is elected to serve until Kroger's annual meeting of shareholders in June 2020. At that time, she will stand for election by the shareholders. Hoguet served as the chief financial officer of Macy's Inc. from October 1997 to July 2018.

The California Farm Bureau Federation presented its former administrator, **Rich Matteis**, with its distinguished service award at the 101st CFBF Annual Meeting in Monterey. Matteis retired in March after serving as CFBF administrator since 2007. He began his career as manager of the Santa Clara and Alameda County Farm Bureaus and as a CFBF field representative. In addition to the award to Matteis, CFBF presented the distinguished service award to longtime San Benito County Farm Bureau board member **Al Bonturi**.

Lauren Bloom now serves as the district director for Rep. Katie Porter, D-Calif.

Tammy Sulli has retired after 34 years working for the California Department of Food and Agriculture. She most recently worked in the division of measurement standards. Throughout her career, she worked in several other divisions including animal health and food safety services, human resources, and the executive office.

California's Department of Food and Agriculture veterinarian **Katie Flynn** has received the American Association of Equine Practitioners President's Award. The award is given to

individuals for contributions beneficial to the health and welfare of horses. Flynn serves as the chair of the AAEP Infectious Disease Committee and has developed a number of new and important vaccination guidelines and biosecurity educational opportunities.

The board of directors of the FMC Corporation has elected **Mark Douglas** as president and chief executive officer, effective June 1. Douglas has served as president and chief operating officer of FMC since June 2018. **Pierre Brondeau** will continue to serve as chairman and CEO through May 31. Brondeau will then become executive chairman and remain a member of the Board of Directors.

Mike Tomko has joined the American Farm Bureau team as the new director of communications. He previously worked 18 years at WBFF Fox45, most recently as a news director. **Cole Staudt** also joins the communications team as the media relations specialist. Staudt previously worked on the Hill as the communications director to Rep. Brian Fitzpatrick, R-Pa.

Caren Wilcox has been tapped to lead the U.S. Hemp Growers Association, a new farmer-directed hemp trade association. Wilcox has previously held executive roles at Hershey, USDA and the Organic Trade Association.

George Siemon has stepped down as Organic Valley's CEO. Siemon helped start the cooperative in 1988. Organic Valley's board of directors has appointed **Bob Kirchoff** as interim CEO. Kirchoff has worked as the chief business officer since 2016.

After nearly four decades of directing the Center on Budget and Policy Priorities (CBPP) **Robert Greenstein**, founder and president, has stepped down from the helm on Dec. 31. The board of directors are currently searching for a new president to begin this month. Greenstein established CBPP in 1981 and has served as its chief executive ever since. Before this, Greenstein worked at the Senate Agriculture Committee as a congressional research service specialist helping to shape the 1970s changes to food stamps. He also served as the administrator of the Food and Nutrition Service under President **Jimmy Carter**, helping to design the 1977 Food Stamp Act, the Carter Administration's largest anti-poverty achievement.

Bob Schachtel, a produce industry veteran, died at the age of 75. Schachtel had worked for Expo Fresh LLC for the last 25 years. He was born in Brooklyn, NY in 1944, and at the age of two, his family moved to Boca Raton, FL where his father worked as a fishing guide. It was also in Florida where Schachtel began his produce career, joining his first wife's family business. His career allowed him to travel across the country, where he eventually wound up in Southern California. A celebration of life event for Schachtel is scheduled for 1 p.m. Jan. 11 at the Southwestern Yacht Club, San Diego, Calif.

Best Regards,

Sara Wyant

Editor

Copyright Agri-Pulse Communications, Inc. All rights reserved. Reproduction or distribution in any form is prohibited without consent from Editor Sara Wyant, Agri-Pulse Communications Inc., 110 Waterside Lane, Camdenton, MO. 65020. Phone: (573) 873-0800. Fax: (573) 873-0801. Staff: Managing Editor

Spencer Chase; Executive Editor Philip Brasher; Senior Trade Editor Bill Tomson; Associate Editor Steve Davies; Associate Editor Ben Nuelle; Associate Editor Hannah Pagel; Associate Editor Brad Hooker; Contributing Editor Jim Webster; Contributing Editor Ed Maixner; Director of Marketing: Allan R. Johnson; Administrative Assistant: Sandi Schmitt; Marketing Manager: Jason Lutz; Circulation Manager: Paige Dye; Marketing Consultant: Tom Davis. A one-year subscription (48 issues) is \$727.00. To subscribe, send an e-mail to: Sara@Agri-Pulse.com, or visit: www.Agri-Pulse.com.