

Scientists team up to battle cattle tuberculosis

The agriculture division of Minnesota-based Recombinetics has joined researchers in Ireland and Northern Ireland in employing gene editing and other techniques in a long-term quest to rein in bovine tuberculosis, and perhaps to make people safer from TB as well.

“For us, this is phase one in finding how we are going to make animals resilient and not increase the spread of the disease,” said Tad Sonstegard, Recombinetics’ chief agricultural scientific officer.

Their goal isn’t full TB resistance, which he says is probably not achievable anyway. “Complete resistance means you encounter the bug and you would show no signs of having encountered it,” he explains.

Instead, his team is pursuing an array of ways to develop “resilience,” or enough defense so the host doesn’t get sick. “Their immune system can deal with it and they don’t become big transmitters of the disease,” explains Sonstegard.

Sonstegard and scientists at University College Dublin and Queen’s University Belfast are focusing on a cow’s defense against the bovine tuberculosis (BTB) pathogen because the bacteria continues to attack beef and dairy cattle – plus people and a host of other mammals worldwide. Recombinetics reports global agricultural damage averages about \$3 billion a year.

The World Organisation for Animal Health, known by the French acronym OIE, reports most economically advanced countries, including the U.S., have eradicated or sharply reduced BTB from cattle herds, but it is “prevalent in most of Africa, parts of Asia and of the Americas.” That’s in part because deer and other wildlife can re-infect cattle herds that were BTB-free.

In the U.S., the disease has only affected fewer than a dozen herds annually in recent years, out of more than 900,000, according to USDA’s Animal and Plant Health Inspection Service. A century ago, it was the country’s “most prevalent infectious disease of cattle and swine. ... (causing) more losses among U.S. farm animals . . . than all other infectious diseases combined.” The low incidence in recent years is largely because of eradication efforts that began over 100 years ago and have cost more than \$5 billion in a century, APHIS says.
















Sonstegard said his team focuses on BTB itself but also the macrophage, the very large cell that works in lung passageways to absorb BTB and other pathogens, and the interactions between the BTB bacterium and the macrophage.

Their main goal: “We’ll have a deeper understanding of how the macrophage interacts with the pathogen,” he said. They’ll be selecting cattle, for example, whose macrophages show robust defense against BTB while they also edit cattle genes to improve resilience.

What’s more, he said, advances in their work “will have an impact, I think, on TB infections in humans.” Why? “The way the host’s (immune system) reacts with the bacteria is the same model for humans as it is for cattle. So any information we reveal in cattle can . . . improve understanding of the disease in humans.”

That’s also true for other animals, and “we would think that farmed deer and water buffalo could be targets” for advances his team or others finds in BTB research, he said. But he points out gene editing for such BTB resilience, as with cattle, requires “advanced reproductive techniques” such as cloning and in vitro fertilization in order to deploy genetic advances.”

Weather

DAY		DESCRIPTION	HIGH / LOW	PRECIP	WIND	HUMIDITY
TODAY OCT 22		Sunny	59°/27°	0%	NW 14 mph	44%
TUE OCT 23		Sunny	49°/30°	10%	NE 5 mph	61%
WED OCT 24		Cloudy	50°/40°	10%	SSE 15 mph	63%
THU OCT 25		AM Showers	48°/40°	40%	S 17 mph	88%
FRI OCT 26		AM Clouds/PM Sun	57°/39°	20%	WSW 10 mph	80%
SAT OCT 27		Mostly Cloudy	48°/36°	20%	NW 17 mph	73%
SUN OCT 28		Partly Cloudy	48°/34°	10%	NNW 17 mph	70%
MON OCT 29		Partly Cloudy	47°/33°	10%	NW 11 mph	68%
TUE OCT 30		Showers	44°/32°	60%	W 12 mph	80%
WED OCT 31		Cloudy	41°/33°	20%	NW 10 mph	87%
THU NOV 1		Showers	43°/31°	50%	WNW 16 mph	77%
FRI NOV 2		PM Showers	41°/28°	30%	NW 14 mph	75%
SAT NOV 3		Partly Cloudy	36°/29°	20%	NW 14 mph	76%
SUN NOV 4		Mostly Cloudy	38°/28°	20%	NW 10 mph	70%
MON NOV 5		Partly Cloudy	35°/24°	20%	NNW 12 mph	70%

Latest GAP report sounds hunger warnings for poor countries

Agricultural productivity growth in low-income countries is falling further behind the increase needed to feed their growing populations, and the output of rich nations is insufficient as well, according to the Global Harvest Initiative's annual GAP report.

The U.N. sustainable development goals call for doubling agricultural output by 2050 through productivity growth, but productivity has been rising by just 0.96 percent in poor countries, down from 1.31 percent in 2016 and 1.24 percent in 2017, says the report, released Wednesday in conjunction with the annual World Food Prize events in Des Moines, Iowa.

“If this downward trend continues, farmers in low-income, food-deficit countries (where population growth is rapidly rising) will use more land and water to increase their output, straining a natural resource base already threatened by extreme weather and climate change,” the report says.

Globally, productivity growth is increasing at a rate of 1.51 percent, according to USDA's Economic Research Service, but that is well behind the rate of 1.75 percent that is needed to double agricultural output, according to the Global Harvest Initiative's calculations.

GHI is sponsored by five major agribusiness firms: Corteva Agriscience, John Deere, Monsanto Co. (now part of Bayer), The Mosaic Co. and Smithfield Foods.

GAP stands for global agricultural productivity.

GHI's work draws on advice from 13 consultative partners, including ACDI/VOCA, the Congressional Hunger Center, Conservation International, the Farm Foundation, the Inter-American Development Bank and The Nature Conservancy.

Despite the emphasis on increasing productivity, the report frequently mentions the need to reduce food waste as a way to meet consumer demand: "Productivity alone is insufficient to ensure the sustainability of food and agriculture systems. Reducing post-harvest loss, food waste and economic and climate risks to the value chain need attention and investment."

The report lays out five goals that policymakers and industry need to pursue:

- Increased research and development, including into farming practices that "improve sustainability and resilience."
- Development of science-based and information technologies, from biotechnology to including apps that help consumers learn more about the food and agricultural products they consume.
- Incentives for private sector investment in infrastructure needs, including new roads, waterways, railroads and port improvements.
- New partnerships between local and international private businesses, non-governmental organizations, foundations, multilateral institutions and development agencies. Farmer organizations should be included in the design, management, monitoring and evaluation of the partnerships, the report says.
- New trade agreements and "consistently enforced laws and regulations" that make it easier for farmers to export and consumers to get access to imported products.

The report highlights some of the initiatives of sponsor companies to increase productivity. In Nigeria, a local company called Alluvial has partnered with Deere to lease as many as 300 tractors to 100,000 smallholder farmers at a cost to each producer of about \$100 per growing season.

Large-Scale Loans Drives Ag Lending Activity

The volume of non-real estate farm loans rose sharply in the third quarter. According to the Federal Reserve's Agricultural Finance Book, The total loan volume was up 30 percent from one year ago. Nathan Kauffman, who is a vice president with the Kansas City Fed, says the loan volume is due to the current market environment. "Cash flows are still relatively weak; producers need financing and some seem to be needing it in larger amounts." The number of loans larger than \$1 million nearly doubled and accounted for nearly 40 percent of non-real estate lending during the quarter. Loan delinquency rates on farm loans at commercial banks remained low. Kauffman says the big test for agriculture will be in this fourth quarter. Trade concerns were seen in the second and third quarters, but this is the time of the year when soybean exports typically happen.

USDA trims corn, soybean crop estimates

USDA trimmed its estimates for the corn and soybean crops on Thursday, citing lower yields for corn and a smaller harvested area for soybeans.

Corn production is forecast at 14.778 billion bushels, down 49 million bushels from the September estimate, USDA said today in its monthly World Agricultural Supply and Demand Estimates report. The average national yield is projected at 180.7 bushels per acre, down from the estimate of 181.3 a month earlier.

Nevertheless, "If realized, this will be the highest yield and second-highest production on record from the U.S.," the department said in a separate Crop Production report. Last year's yield of 176.6 bu/a set a record.

Even with a smaller crop, USDA is predicting record corn supplies, citing an increase in beginning stocks based on its Sept. 28 Grain Stocks report. Exports are raised 75 million bushels, to 2.475 billion bushels, "reflecting U.S. price competitiveness and reduced exports for Russia," USDA said in the WASDE. Cash prices will range from \$3 to \$4 a bushel, unchanged from the September estimate.

Soybean farmers will harvest 4.690 billion bushels, down from 4.693 billion predicted in September, according to the WASDE, as a higher national yield is more than offset by a smaller harvested area. The yield is projected at a record 53.1 bushels per acre, up 0.3 bushels from the September forecast. Harvested area is reduced 600,000 acres to 88.3 million. Soybean supplies for 2018/19 are also projected at a record 5.153 billion bushels on higher beginning stocks. With soybean use unchanged, ending stocks are projected at 885 million bushels. The 2018/19 season-average price is forecast at \$7.35 to \$9.85 a bushel, unchanged at the midpoint from last month.

The production estimates for corn and soybeans were both below average trade estimates, corn by about 40 million bushels and soybeans by just over 20 million.

As of Oct. 7, about 34 percent of the nation's corn crop had been harvested, well above the previous five-year average of 26 percent, according to a separate report on Crop Progress released earlier this week. The soybean harvest was 32 percent complete, compared with the previous five-year average of 36 percent.

In other highlights from the WASDE and the Crop Production Report:

WHEAT: Wheat production is raised 7 million bushels to 1.884 billion from the NASS Small Grains Summary, issued on Sept. 28. Projected ending stocks are higher at 956 million bushels but still 13 percent below last year's revised 1.099 billion. The season-average farm price range is unchanged at the midpoint of \$5.10 per bushel and the range is narrowed to \$4.80 to \$5.40.

RICE: Estimated production for 2018-19 is reduced 700,000 hundredweight (cwt) to 218.8 million cwt on lower yields. The all-rice season-average farm price is unchanged at a range of \$11.20 to \$12.20 per cwt with the midpoint at \$11.70.

COTTON: Production is estimated at 19.76 million bales, up from 19.68 million projected in September, with bigger harvests forecast from Texas and Georgia largely offset by lower production in the Carolinas. The estimates do not reflect any effect on the crops from Hurricane Michael.

ORANGES: Florida's orange harvest is bouncing back from the effects of Hurricane Irma last year. The Florida all-orange forecast, at 79 million boxes, is up 76 percent from last season's final utilization, today's Crop Production report said. The U.S. all-orange forecast for the 2018-2019 season is 5.62 million tons, up 43 percent from the 2017-2018 final utilization.

Fall Cattle Run Ramping Up

The fall run of cattle is ramping up at Northern Plains auction markets. Based at Dickinson, North Dakota, Stockmen's Livestock Exchange owner Larry Schnell says one factor that's entered into the current market is recent the recent rain and snow. "It brought a lot of moisture to the feedlot areas, so they're facing mud problems," says Schnell. Due to inclement weather, many auctions had to double up on large runs of cattle. "The supply is much greater than demand, and that will impact the market not in a positive way. There's going to be a big range of prices depending on quality and vaccinations." Moving forward, Schnell expects to run 3,000 to 5,000 head through the ring every sale. In a buyer's market, producers should keep any "out of the ordinary" cattle at home to maximize return. "That would include calves with short ears or tails, any eye blemishes or cripples."

Hurricane Michael devastates Southern crops

USDA and state agriculture officials say Hurricane Michael caused billions of dollars in damage to crops, livestock and aquaculture after slamming into the Florida Panhandle Wednesday with 155 mile-per-hour winds and then plowing a path of destruction through Alabama and Georgia.

"The fall tomato crop in that part of the state was only half in," said Florida Agriculture Commissioner Adam Putnam. "We're looking at the remaining half being a total loss."

Putnam, Georgia Agriculture Commissioner Gary Black, U.S. Agriculture Secretary Sonny Perdue and a team of USDA officials briefed Vice President Mike Pence at USDA headquarters on the damage Thursday afternoon. Putnam and Black dialed in remotely to the meeting.

Cotton, peanuts, pecans, poultry, peppers, tomatoes, squash and dairy producers were some of the hardest hit by Michael's wind and rain.

Georgia is the largest pecan-producing state in the country and farmers will be reeling for years from the damage. Black told an account of a farmer with 1,200 acres of trees. Half of those trees were knocked down and the other half were completely stripped of their nuts.

"Those types of damages to pecan orchards – they're not just an annual loss," said Georgia Farm Bureau spokesman Jeffrey Harvey, who was not part of the briefing. "We've been growing them for many years and those trees are out of production forever."

Perdue, a former governor of Georgia, said it will take farmers who replant their trees 10 years to begin harvesting again.

In Georgia only about 5 percent of the state's pecans, 15 percent of the cotton, 30 percent of fall vegetables and 50 percent of peanuts had been harvested when the storm hit, according to Black. All of the unharvested fields were extremely vulnerable to the storm, which came ashore as a Category 4 hurricane.

It's still too early for overall damage estimates, USDA Chief Economist Rob Johansson told Pence, but it's clear the damage is extensive, especially for cotton. Cotton farmers in the Carolinas lost about 10 percent of their crop after Hurricane Florence hit and the damage is expected to be much worse from Michael, he said.

One source tells *Agri-Pulse* that Georgia, the second-largest cotton producing state, could lose up to 70 percent of its crop.

"For me the cotton crop is as bad as it gets," said Clay Pirkle, a Georgia cotton farmer and state representative. "I was picking three-bale cotton yesterday," he said, referring to a yield estimate. "Today it is gone. Can't tell the difference between what I've picked and what I haven't."

Georgia is also a major vegetable-producing state with about \$1.1 billion worth of production annually and the state's farmers were in the middle of the fall harvest when Michael struck.

"Much of the squash, cucumbers, peppers and tomatoes are being harvested or were just about to be harvested," Charles Hall, executive director of the Georgia Fruit and Vegetable Growers Association, told *Agri-Pulse*.

Poultry got slammed too. A spokesman for the Georgia Department of Agriculture said at least 85 poultry houses were destroyed.

Closing Grain and Livestock Futures

ELEC. CORN (@C)[10]

▶ @CZ18	Dec-2018	369'2	2'2	370'4	365'4
▶ @CH19	Mar-2019	381'6	2'2	382'6	378'0
▶ @CZ19	Dec-2019	401'6	1'6	402'6	398'0

ELEC. SOYBEANS (@S)[10]

▶ @SX18	Nov-2018	860'4	3'6	863'0	855'4
▶ @SF19	Jan-2019	874'2	3'6	876'4	869'2
▶ @SX19	Nov-2019	922'2	4'2	924'4	917'0

ELEC. WHEAT (@W)[10]

▶ @WZ18	Dec-2018	510'6	-4'0	514'2	510'2
▶ @WH19	Mar-2019	530'4	-3'6	533'6	530'4
▶ @WZ19	Dec-2019	575'0	-1'6	577'0	574'2

ELEC. HRW WHEAT (@KW)[10]

▶ @KWZ18	Dec-2018	511'0	-5'2	515'6	511'0
▶ @KWH19	Mar-2019	536'0	-4'6	539'4	535'6
▶ @KWZ19	Dec-2019	591'4	-2'6	592'6	590'4

ELEC. LIVE CATTLE (@LE)[10]

▶ @LEV18	Oct-2018	112.850	0.600	113.050	112.500
▶ @LEZ18	Dec-2018	118.100	1.325	118.400	117.350
▶ @LEG19	Feb-2019	122.250	1.100	122.875	121.875

ELEC. FEEDER CATTLE (@GF)[10]

▶ @GFV18	Oct-2018	155.600	0.950	155.800	155.300
▶ @GFX18	Nov-2018	156.375	2.275	156.875	155.250
▶ @GFF19	Jan-2019	151.075	2.325	151.250	149.750

ELEC. LEAN HOGS (@HE)[10]

▶ @HEZ18	Dec-2018	52.900	1.300	53.425	51.275
▶ @HEG19	Feb-2019	60.100	1.075	60.725	58.775
▶ @HEJ19	Apr-2019	66.275	0.550	66.825	65.425

Taking Ideas to the Market

With a difficult farm economy, there may be opportunities for diversification and entrepreneurship. "The local food movement has had an explosion in interest," said Shannon Schlecht, executive director, Agricultural Utilization Research Institute. Coproducts are another area of strength with the AURI team working with clients to identify new and innovative uses for farm commodities and ag residue. Minnesota AURI can now work in the adjacent states of North Dakota, South Dakota, Iowa and Wisconsin. "Borders don't stop commodity flows and we're excited to create new opportunities for economic development."

Groups petition for longer workday for livestock haulers

Six groups representing various sectors of animal agriculture have petitioned the Federal Motor Carrier Safety Administration to grant livestock truckers an extended workday that could last as long as 16 hours.

The petition, submitted today to the Department of Transportation's FMCSA, requests a five-year exemption from limits on hours of service for truckers and instead would put forth specific limits for livestock-hauling. Haulers would be limited to 15 hours of driving over the course of 16 hours after 10 consecutive hours off duty.

The groups cite concern over limits currently in place: 11 hours of driving, 14 hours on duty that could be used for purposes such as loading and unloading cargo. Those limits, the groups say, "were not drafted with livestock haulers in mind and thus do not accommodate the unique character of their loads and nature of their trips."

The six signatories include the National Cattlemen's Beef Association, Livestock Marketing Association, American Farm Bureau Federation, American Beekeeping Federation, American Honey Producers Association, and National Aquaculture Association.

"Through this petition, we hope to work with DOT to build on our industry's strong safety record and provide haulers with some additional relief from overly-restrictive Hours of Service requirements," NCBA President Kevin Kester said in a statement.

Allison Rivera, NCBA's executive director of government affairs, described the petition as the "culmination of a lot of different efforts. She tells *Agri-Pulse* the suggested work and rest duration periods are based on practices used in Australia. There, truckers can work 15 ½ hours over a 17 hour window. The governing body there is currently working on a framework that could add additional flexibilities over a 72-hour period.

Rivera also defended the livestock industry's safety record on the roads. The petition cites data showing an annual average of more than 384,000 total crashes involving large trucks; a little over 3,000 of those crashes – 0.79 percent of the total – involved drivers working for motor carriers that identified livestock as a type of cargo they would haul.

"We have a very strong safety record, and this petition speaks to fatigue management and continued safety but also plenty of rest," she said.

Ag groups have sought relief from DOT's trucking regulations, particularly after the mandated use of electronic logging devices (ELD) began in December. At the time, DOT offered a 90-day waiver for transporters of ag commodities. In March, a spending deal exempted livestock haulers from the ELD mandate for the remainder of the 2018 fiscal year, which ended September 30. The waiver was extended as part of a continuing resolution that expires in December.

Rivera said the industry will continue to push for a fix through Congress. Sen. Ben Sasse, R-Neb., and Rep. Ted Yoho, R-Fla., have introduced bills to address the issue.

More Farms Certified as Organic

The number of farms certified under USDA's National Organic program increased three percent over the last year. Mercaris, which is a market data and trading platform for the identify-preserve grain industry, issued a report saying organic livestock feed is a key reason for the expansion. The number of certified organic corn operations rose four percent over the past year; the total amount of organic soybean operations is up seven percent. Overall non-GMO acreage declined three percent from last year.

New USDA tools helping rural communities obtain grants and loans

USDA's Innovation Center is making it easier for rural America to qualify for funding from the Office of Rural Development's \$222 billion loan portfolio and \$36.6 billion in fiscal 2018 appropriated funds. It's all part of an administration push to create more rural jobs and boost economic growth.

Rita Clary has no doubts that this new push is paying off. After years of working at the Kansas Rural Water Association and now as assistant program manager with the National Rural Water Association, she says that "If it wasn't for USDA Rural Development (RD), a lot of small (water and wastewater) systems across the United States could not afford to upgrade or rebuild their systems."

Clary says a major advance came when RD launched its on-line RD Apply process. She also welcomes the RD Innovation Center's new Disaster Recovery Team. Sharing her RD funding expertise nationwide as part of this national initiative, Clary is currently working with Puerto Rico's water systems to accelerate its recovery from hurricane damage.

Kansas Rural Water Association wastewater technician Charlie Schwindamann adds that "RD Apply makes it far easier for systems to get funding, streamlining the process." That's critical, he says, because "there's more need than there is funding."

To support the streamlining, Agriculture Secretary Sonny Perdue has prioritized rural issues at USDA. The first major change came in April 2017 when President Trump launched the Interagency Task Force on Agriculture and Rural Prosperity chaired by Perdue. The second came two months later when Perdue appointed Anne Hazlett as assistant to the secretary for Rural Development and launched USDA's new Innovation Center, designed to deliver more support, more efficiently.

As shown by new funding such as an extra \$4 billion that Congress provided and that Hazlett is disbursing for rural water and sewer projects, these actions are paying off.

One beneficiary is Gridley, Kansas, population 324. Clary and Schwindamann helped Gridley get an RD SEARCH grant to help fix wastewater disposal problems. Clary says Gridley may end up with "a million-dollar debt . . . but those people also enjoy small-town USA and they know their wastewater system needs improvement, so they're willing to pay the bill so they can stay in small-town USA."

Yet achieving USDA's rural goals won't come easily or cheaply. That's clear from the Rural Prosperity Task Force's initial report. Perdue warns in the report that "while other sectors of the American economy have largely recovered from the Great Recession, rural America has lagged in almost every indicator."

The task force report goes on to blame "labor-saving productivity" partly for "the steady decline in the employment shares of farming, mining, and manufacturing over the past half century" in rural communities. The report concludes that without substantial growth in demand for farming, mining, and rural manufacturing products, "rapid productivity increases may further depress rural employment in these sectors."

For Hazlett, one way to attack the problem is "to be in the field and learn from people who are on the ground." To accelerate this learning, in June last year USDA created RD's Innovation Center to "share best practices for rural economic development" – as the center is doing now in Puerto Rico.

Just 16 months after launching the Innovation Center, USDA says it's already racking up achievements that include creating:

- The Rural Workforce Innovation Network (RWIN), working with local partners to “develop solutions and tools that meet the needs of rural workers and employers.”
- The Rural Economic Development Initiative (REDI), providing “targeted regional planning assistance” for rural communities to help them get grants and loans and attract private investors.
- OneRD Guaranteed Loan Regulatory Reform, combining complex RD regulations into a single, simpler regulation for RD’s many loan programs to “simplify application processes, incorporate modern lending practices, accelerate loan approval processes, and increase the amount of capital available in rural communities.”
- The Disaster Recovery Team, working with FEMA to improve interagency disaster coordination and recovery to “make sure the unique needs of small and rural towns are represented.”

As Hazlett explains, bringing rural America up to speed with the rest of the U.S. is a complex challenge. Solutions, Hazlett says, clearly call for adequate federal funding but may depend even more on what the Innovation Center is pursuing: new ideas and new locally and regionally focused infrastructure, partnerships, and innovation. She adds that the center’s work on “simplifying our regulations and streamlining our program resources” is aimed at making USDA “a better partner to rural leaders in building prosperity.”

As a close observer of USDA’s rural programs, National Sustainable Agriculture Coalition Policy Director Greg Fogel concludes that Hazlett “is doing a good job” and that “from what we can tell, the money is mostly getting out the door and funding important rural development projects.”

Fogel hopes, however, that House and Senate conferees working on the 2018 farm bill agree to the Senate provision that would require Perdue to upgrade Hazlett, pending Senate confirmation, from her current role as Assistant to the Secretary for Rural Development to Undersecretary for Rural Development. “We still believe that RD needs to be a core mission of the department, and that the mission needs to be represented on the subcabinet by an undersecretary,” he says.

Banker Survey: Farmland Prices Expected To Drop In 10 States

A new survey says farmland prices are expected to continue their decline in parts of 10 Plains and Western states.

The latest Rural Mainstreet survey shows that on average, bank CEOs in the region estimated farmland prices declined by 4 percent over the past 12 months. They expect farmland prices to fall by another 3.2 percent over the next 12 months.

Creighton University economist Ernie Goss says the survey also shows the farm sector is being weakened by negative impacts of tariffs and low agriculture commodity prices.

The overall economic index for the region increased slightly to 54.3 from 51.5 in September. That score still suggests growth because it is above 50, while any score below 50 indicates a shrinking economy.

Bankers from Colorado, Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota and Wyoming were surveyed.

Pheasant Season Opener Brings Hunters Together

Saturday marks the start of pheasant hunting season for non-residents. People traveled from all over to meet up at Al's Dream Pheasant Hunting Preserve in Flandreau for a special weekend tradition.

For hunters it's a great feeling to finally shoot a pheasant.

"Especially with the wind, how it is right now, they're very hard to hit, very fast, so I don't get it very often, but when I do it's a lot of fun," said Seattle Hunter, Luca Scoccolo.

However, when you hunt at Al's Dream Pheasant Hunting Preserve you walk away with more than just a bird.

"Mostly it's the camaraderie, being with other hunters being with good folks that enjoy it. They treat us like family," said Michigan Hunter, Zak Miller.

A trip to Al's Dream often becomes an annual tradition.

"We've been coming back every year for 18 years," said Seattle Hunter, Jerry D'ambrosio.

"It's the way they treated us and made us feel right from the get go on the phone that showed that they really cared about the folks they brought in," said Miller.

These hunters come from all over the United States and Canada. They've all become friends.

"It's a lot of good folks you meet along the way," said Miller.

"Kind of look forward to getting together and we try to coordinate that so we can do that," said D'ambrosio.

It's also become a place for father and son bonding. For the Scoccolo family, they're three generations of hunters.

"We have a small family business back in Seattle so my dad and I usually work together, so this is one of the few things we get to do together that's not work," said Seattle Hunter, Mark Scoccolo.

It's also a special time for Zak Miller and his 95-year-old Father Robert. But even those who aren't related are considered family here.

Hunting season is from October 20th to January 6th. In South Dakota, hunters can take home up to three pheasants a day per person.

South Dakota Expecting Record Corn And Soybean Crops

South Dakota farmers are expecting record corn and soybean crops.

The latest estimates from the federal Agriculture Department projects the state's corn crop at 851 million bushels, up 16 percent from last year.

The soybean crop is forecast at 281 million bushels, also up 16 percent.

The average yield for both crops is expected to be a record.

Sunflower production is forecast to be down 13 percent but sorghum production up 28 percent.

Alfalfa hay production is forecast at up 49 percent from last year's drought-plagued season, with other hay production up 5 percent.

POET CEO says E15 Decision is Good For South Dakota

Soon drivers can fill up on E15 year-round, and the largest ethanol producer in the nation says that'll be good for South Dakota's bottom line. President Donald Trump has directed the EPA to remove current restrictions on E15 so that it may be sold all 12 months.

Right now, you can't get E15 from June to September, but that'll soon change.

"Which makes it easier for fuel retailers to stock it to the pumps and makes it easier for consumers to access it," Senator John Thune, (R) South Dakota, said.

"It's been a long-term fight," Poet CEO Jeff Broin said.

Broin says 1,600 stations in the country currently sell the E15 blend.

"We're going to work hard to grow that very quickly. I think we'll see retailers coming to the table to sell more E15 nationwide," Broin said.

This means more demand, and Broin says that'll create two billion bushels of new corn demand in the next several years. He says that's good for farmers and South Dakota's ag industry.

"You know, helping bring up prices for farmers who are struggling, but it's also great for consumers. Consumers around the country are going to get cheaper fuel," Broin said.

Poet, which is in Sioux Falls, employs 2,000 people nationwide and produces two billion gallons of ethanol annually. Broin says lifting the current restrictions on E15 could grow the ethanol industry even more.

"When ag does well, South Dakota does well," Broin said.

Previously, the EPA has prohibited the sale of E15 between June and September because of pollution concerns. Ethanol producers disagree with that, and Broin says it's the only "truly clean" fuel in the energy industry.

Work to begin on \$46M precision agriculture center at SDSU

Work will soon begin on the \$46 million Raven Precision Agriculture Center on the South Dakota State University campus.

A ground-breaking ceremony is scheduled Saturday afternoon in Brookings. Ground work at the site is to begin this fall, with construction starting next spring.

SDSU offers both a bachelor's degree and a minor in precision agriculture. Dean John Killefer says the 129,000-square-foot facility will foster innovation in agriculture, engineering, and food and environmental sciences.

State lawmakers approved the center earlier this year. Sioux Falls-based Raven Industries donated \$5 million for the project.

A Passion for Picking Corn by Hand

People from all over South Dakota and surrounding states gathered in Flandreau this weekend to take part in an age old farming activity. Before farm machinery, farmers had to pick corn by hand. Every year people relive that history, by seeing how many corn husks they can pick in a race against the clock.

“It use to be quite a big deal across the country but it’s kind of dying out and we want to keep that tradition alive,” said Jim Redder, Host of State and National Hand Corn Picking.

For around 12 years, Flandreau has hosted the State Hand Corn Picking Contest. This year they also hosted the national championship. Many people participate to remember their past, but younger generations get in on the action as well. For 16 year-old Shaila Campbell, corn husking has helped her understand what farmers had to go through.

“Just how the past and the future, how it’s changed it’s made a big difference in everyone’s lives looking at what it was like in the 1800’s using horses and now we’re like using tractors today and GPS and all that,” said Campbell.

It’s also become one of her passions.

“Makes you get out into your community, agriculture. I come from an ag-based family, so it’s a lot of fun,” said Campbell.

She traveled all the way from Illinois to compete in the national competition. It’s something that she’s done for around five years. She’s taken home many titles and she loves how competitive it is.

“It feels pretty good just knowing how much you get and when you find out your weight finding out how much you picked,” said Campbell.

With her whole family cheering her on, Shaila now has one more championship under her belt. She won the National Corn Husking Championship for ages 15 to 20, which isn’t an easy feat.

“Once you start getting to do it your arms start hurting, your wrists are getting really tight and you push on through it,” said Campbell.

So just as the mechanical age has changed the game, corn husking has also evolved. Now it’s like a sport and something to do all for the fun of it.

South Dakota Farmers Still Have a Lot of Crops to Bring In

South Dakota farmers made little progress on the late-season harvest in the past week due to bad weather. The federal Agriculture Department in its weekly crop report says less than a full day was considered suitable for fieldwork. Harvest progress is at 5 percent for the sunflower crop, 21 percent for sorghum, 17 percent for corn and 29 percent for soybeans. All are behind the average pace.