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A National Agricultural Biosecurity Center Newsletter

NABC
National Agricultural Biosecurity Center

IN THIS ISSUE:

Preparedness is key: Producers should regularly inspect livestock for wounds, report any suspicious cases to their state veterinarian or USDA officials, and stay informed through APHIS updates on NWS prevention and response efforts.

BRINGING NATIONAL SECURITY TO AGRICULTURE PRODUCERS IN THE MIDWEST

Located on the Manhattan campus of Kansas State University, the National Agricultural Biosecurity Center, or NABC, is an integral part of the midwest's expanding animal health corridor. The NABC contributes to and accesses a vast network of interdisciplinary research and resources in the areas of animal and plant diseases, foodborne pathogens, environmental changes, food security, emergency management and One Health.

The mission of the NABC is to facilitate prevention and response strategies that address emerging threats to agricultural economies and the food supply in the U.S. and the world.

NEW WORLD SCREWWORM

Why This Matters: While the New World Screwworm (NWS) threat is currently concentrated along the southern border, it has significant implications for the entire U.S. cattle supply chain—including the Midwest. Many Midwestern feedlots and stocker operations rely on Mexican feeder cattle to maintain throughput, especially amid historically low U.S. cattle numbers. The recent suspension of live cattle imports and the looming threat of a parasitic outbreak introduce serious risk to market stability and animal health. For Midwest producers, a potential NWS incursion could mean higher input costs, tighter feeder supply, increased regulatory oversight, and even the risk of infestation in local herds if the pest spreads northward.

The U.S. cattle industry is facing a renewed biosecurity threat due to the re-emergence of New World Screwworm (NWS)—a parasitic fly that was once eradicated—now making its way from southern Mexico and pushing northward toward the U.S. southern border. Once eliminated from the United States in 1966, this parasite is again posing serious threats to cattle and wildlife herds in the border states as containment efforts in Mexico fall short. For cattle producers—especially those in Texas—an NWS infestation could bring significant economic losses, animal suffering and mortality, and increased disruption to the U.S. cattle supply chain.

NEW WORLD SCREWWORM CONTINUED

On May 11, U.S. Secretary of Agriculture Brooke Rollins announced the suspension of live cattle, horse, and bison imports, citing NWS's continued advance toward the United States and an inadequate Mexican response. With the fly now found only 700 miles from the Texas border, federal and state agencies are on high alert. Although there have been no verified reports of the fly in the U.S., climatologists and entomologists suggest it could spread as far north as southern Canada if it were to enter the country.

> "If New World Screwworm breaches the U.S. border, it won't just be a southern issue—it has the potential to affect livestock operations as far north as Kansas, Nebraska, and beyond," said Dr. Sarah Conley, entomologist at the USDA Agricultural Research Service. "With the right climate conditions, it could spread rapidly."

The border suspension is on a month-to-month basis as the U.S. and Mexico continue to monitor the parasite's movement. Over 1 million head of live feeder cattle from Mexico enter the state of Texas annually, and the suspension will significantly impact that supply chain and market prices. The feeder cattle industry is being hit by a double-edged sword—the threat of a parasitic infestation and the pain of a constricted cattle supply from Mexico.

The economic impact of an NWS infestation in the United States would be devastating, particularly in Texas. Economists estimate potential losses of $700 million annually for Texas alone, with nationwide projections exceeding $1.8 billion. These figures do not include the additional costs of eradication efforts, veterinary treatment, and increased production costs that producers would face.

New World Screwworm (Cochliomyia hominivorax) poses a serious threat to livestock because its larvae feed on living flesh—not dead tissue like typical flies. Female flies are drawn to even the smallest open wound, where they lay up to 250 eggs at a time. Once hatched, the larvae burrow into the animal's tissue, consuming it from the inside out. This results in rapidly expanding wounds, a condition known as myiasis, which can lead to death within a week if untreated. Common signs of infestation include a foul odor, excessive licking or head shaking, unusual aggression, and lethargy.

> "The key is early detection. The sooner we find a case, the better chance we have to stop an outbreak before it spreads," emphasized Dr. Alan Ruiz, USDA field veterinarian stationed near the border.

Screwworms are not species-specific. While cattle are their main hosts due to prevalence, the parasite can also infest horses, sheep, goats, pigs, deer, dogs, wildlife, and even humans. NWS thrives in hot, wet climates, making the threat to border states like Texas especially severe.

The female screwworm fly can only mate once—a key factor in successful eradication efforts. Sterile Insect Technology (SIT) was used during past outbreaks and was the primary reason NWS was eradicated from the U.S. in the 1960s. SIT involves releasing sterile male flies to mate with females, resulting in unfertilized eggs that do not hatch. Over time, this causes the population to collapse.

The sole sterile fly production facility in Panama is currently operating at its full capacity of 100 million flies per week. This presents two critical challenges: the flies are nearing the end of their lifespan by the time they reach infested zones, and the volume produced is far below what is needed for effective eradication. By contrast, the successful eradication campaigns of the 1970s relied on two facilities in the U.S. and Mexico that collectively produced 700 million sterile flies weekly.

The Strengthening Tactics to Obstruct the Population of Screwworms (STOP Screwworms) Act is a bipartisan bill that authorizes the USDA to construct a domestic sterile fly production facility. However, if passed, construction would take years and would not immediately bolster current eradication efforts. To support the immediate need, the USDA has invested $21 million to expand a fruit fly production facility in Metapa, Mexico, aiming to produce an additional 60–100 million sterile screwworm flies weekly. Additionally, the USDA has deployed tick riders along the southern border to monitor livestock and wildlife for signs of infestation.

NEW WORLD SCREWWORM CONTINUED

Policy/Action	Details
STOP Screwworms Act	Bipartisan bill introduced to authorize construction of a domestic sterile fly production facility. Still under consideration by Congress.
USDA Emergency Funding	$21 million invested to expand a fruit fly facility in Metapa, Mexico, to increase sterile fly production. Target: 60–100 million additional sterile
Border Import Suspension	As of May 11, live cattle, horse, and bison imports from Mexico are suspended month-to-month to prevent NWS entry into the U.S.
Surveillance Efforts	USDA tick riders deployed along the border to inspect livestock and wildlife. Increased cooperation with Mexican authorities.
Producer Guidance	Livestock owners are advised to inspect animals routinely, treat wounds quickly, and report suspected cases immediately.

While federal and state agencies work to contain the outbreak south of the border, U.S. cattle producers play a critical role in prevention. Routine inspection of livestock for wounds or unusual behavior, prompt treatment of injuries, and careful pest management are key to keeping NWS at bay. Any suspicious cases should be reported immediately to a veterinarian or local animal health authorities. For up-to-date guidance and regional support, producers are encouraged to contact their local extension office, state animal health commission, or the USDA.

THE PORK TRADE

Why This Matters: This issue is particularly important for Midwestern pork producers, who account for the majority of U.S. hog production. The Midwest's dominance means that disruptions in trade or price volatility can have a disproportionate impact on economies throughout the region. In 2023, the U.S. pork industry contributed over $35 billion in total economic output, with a significant portion of that concentrated in the Corn Belt. For Midwest producers, international demand (especially from markets such as China) can be the difference between profit and loss. When exports decline, excess supply pressures domestic prices.

Pork prices are on the rise this year, offering short-term relief for American producers, but the broader outlook for the domestic and international pork trade is complex. Between escalating trade tensions, shifting disease dynamics overseas, and an ever-changing market, the pork industry is going through an intense balancing act.

According to recent USDA forecasts, pork production is expected to rise slightly this year, up 2.7% from 2024. Hog prices are also climbing, estimated to average $71 per hundredweight in the third quarter of 2025, a $6 increase from previous estimates. While producers may welcome the higher prices, livestock economists warn that the gains could be short-lived due to decreased demand from consumers and international trade dynamics.

International trade is of high concern. In retaliation for U.S. tariffs on Chinese goods, China increased its tariff on American pork to 125%. China has historically been one of the U.S.'s largest overseas export markets. Chinese purchases of American pork are down 72% compared to last year, threatening an important revenue stream for the American pork industry, valued at over $1 billion in 2024 alone. Although China recently announced a temporary 90-day tariff reduction to 57%, the industry remains cautious. With ongoing American political uncertainty in regard to trade and tariffs, paired with China's increased investments in domestic production, the U.S. can no longer rely on the Chinese market as it previously has.

Meanwhile, global pork markets are being changed by disease outbreaks. Foot and Mouth Disease (FMD), African Swine Fever (ASF), and Porcine Reproductive Disease (PRD) continue to pop up in parts of

THE PORK TRADE CONTINUED

Europe and Asia. While these diseases have severely impacted local herds and supply chains, they also open the door for U.S. pork to fill some of that supply gap.

The U.S. pig herd has shrunk slightly, but productivity gains are helping offset the decline. A record average of 11.65 pigs per litter was reported earlier this year, and producers are continuing to benefit from better genetics and management practices. Still, export forecasts are down 2.3% from last year, reflecting geopolitical uncertainty and less volume going to traditional buyers.

While the current price spike is good news for now, the coming months will determine if this increase becomes a trend or just a short-lived moment in a volatile global pork market. For producers, staying informed on trade negotiations, maintaining export readiness, and continuing to improve operational efficiency will be key. Input from producers will also be essential as policymakers shape future trade policy and biosecurity protocols that impact the industry's long-term viability.

THE MAHA REPORT

Why This Matters: This issue is particularly important for Midwestern agriculture, where corn and soybean production dominate—and where atrazine and glyphosate are critical tools for weed control. The Midwest produces over 80% of the nation's corn and nearly 85% of its soybeans, making it highly vulnerable to potential restrictions on these herbicides. Beyond crop production, many Midwestern pork and beef producers rely on feed grains grown using these inputs, meaning that any disruption could have ripple effects across the entire regional ag economy. If regulatory proposals stemming from the MAHA report move forward without meaningful input from farmers, Midwestern agriculture could face increased production costs, reduced yields, and uncertainty in an already tight farm economy.

Commissioned by President Trump through a February executive order, the Make America Healthy Again (MAHA) Commission released a report identifying key drivers behind the increase in childhood chronic illness in American children. Led by Health Secretary Robert F. Kennedy Jr., the MAHA Commission, which includes Agriculture Secretary Brooke Rollins and other top government officials, points to poor nutrition, ongoing stress, excessive medical intervention, and environmental toxin exposure—specifically the pesticides glyphosate and atrazine—as the leading causes of this rise. Agricultural groups representing many segments of the industry have spoken out against the MAHA report for singling out these commonly used pesticides and have expressed concern over the impending regulatory proposals expected in August.

The MAHA report highlighted studies linking pesticide use to health disorders in humans and wildlife. Some of the studies that were referenced, however, date back to 1982 and are no longer considered factual. Though the report did not propose immediate regulatory changes, it urged the Environmental Protection Agency (EPA) to conduct further research on the use of pesticides and herbicides, despite the EPA already deeming the mentioned chemicals safe when used as directed. To further complicate the issue, President Trump has dissolved the EPA office that performs such research.

Bayer, the company that manufactures Roundup (which contains glyphosate), has spoken out against the report, claiming that some of the details around pesticides were not fact-based.

> "We believe a fact- and data-driven approach with robust science that follows international gold standards is necessary to support these important initiatives," Bayer commented.

Kennedy, when working as an environmental lawyer, was associated with three lawsuits related to Roundup. Interestingly, anti-glyphosate activists are also concerned about the validity of the report and are urging for more input from the EPA on the pesticide topic.

THE MAHA REPORT CONTINUED

Many agriculture lobby groups are upset that producers and other stakeholders were not invited to be a part of the MAHA Commission or the writing of the report. Lobby groups had warned the Trump administration that criticizing specific farm practices—such as the use of herbicides and pesticides—could impede collaboration on its health agenda and put American food production at risk. Since the report's release, that sentiment has grown even stronger.

> "It is brazenly unscientific and damaging to consumer confidence in America's safe, reliable food system," said the American Soybean Association, strongly rebuking the MAHA report.
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> The National Corn Growers Association echoed that stance, stating the report is "filled with fear-based rather than science-based information about pesticides," and emphasized that "products like atrazine and glyphosate have undergone extensive research and are deemed safe when used as directed."
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> Duane Stateler, President of the National Pork Producers Council, called the recommendations "misguided and detrimental," and added: "Excluding agricultural input undermines the efforts of farmers who provide safe and nutritious protein to Americans."

Policy and regulatory recommendations to address the findings of the MAHA report will be proposed in August. Until then, many in the agriculture sector are calling for scientific integrity and increased ag stakeholder inclusion in policymaking. As the conversation around food, health, and the environment continues, producers stress the importance of evidence-based decisions that protect both public health and the future of American agriculture.

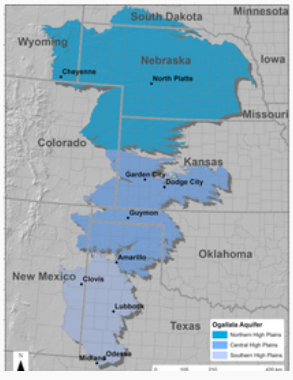
U.S. DROUGHT OUTLOOK

Why This Matters: For Midwestern producers, the growing risk of drought is a critical concern. With 63% of the region already facing dry conditions and a 60% chance of significant drought predicted through the end of the year, corn and soybean yields are under threat. The Midwest accounts for over 80% of U.S. corn and nearly 85% of soybean production, meaning even moderate drought could disrupt national supply chains and impact global markets. For producers, this translates into tighter margins, unpredictable input costs, and increased financial stress heading into harvest.

The latest U.S. Drought Outlook shows complex conditions across the nation, with serious implications for agriculture, water resources, and livestock. Here is the regional breakdown according to the U.S. Drought Monitor:

Midwest: Approximately 63% of the Midwest is currently experiencing dry conditions. Experts predict a 60% chance of significant drought persisting through the remainder of the year, posing a substantial threat to corn and soybean yields. While recent precipitation has improved conditions in some areas, long-term deficits remain a concern. For instance, Iowa and parts of northern Missouri have accumulated precipitation deficits of at least 20 inches over the past four years, with some isolated areas experiencing deficits exceeding 40 inches.

High Plains: 53% of the region is grappling with moderate to exceptional drought conditions. Nebraska is particularly affected, with 87% of the state experiencing drought, leading to challenges in crop production and livestock grazing. Kansas has issued drought warnings in 39 counties, underscoring the widespread nature of the issue.



The Ogallala Aquifer, a critical water source for the region, continues to face depletion and stress. Since major groundwater pumping began in the late 1940s, overdraft from the High Plains Aquifer has amounted to 332 million acre-feet, equivalent to 85% of the volume of Lake Erie. Recharge rates are minimal, and in some areas, the water table has dropped more than 300 feet, leading to concerns about the long-term sustainability of water resources.

U.S. DROUGHT OUTLOOK CONTINUED

South: South Texas has experienced record-breaking rainfall, with San Antonio recording 4.06 inches in a single week, breaking an 85-year-old daily rainfall record. However, this rainfall is insufficient to offset the prolonged drought that has plagued the region since 2022. San Antonio remains 2.25 inches below average for the year and faces a staggering 44.2-inch rainfall deficit since 2022, the largest among Texas cities.

In contrast, areas like Oklahoma, West Texas, and Mississippi continue to experience dry conditions. Despite recent thunderstorms, West Texas remains in severe drought, with Midland County and surrounding areas facing significant precipitation deficits. Reservoir levels are low, with Lake J.B. Thomas at 37.9% capacity and E.V. Spence Reservoir at 15.8%.

The prolonged drought has severely impacted the cattle industry. Texas, accounting for 14% of all U.S. cattle, has seen a significant reduction in cow herd numbers due to limited grazing land, grain feed, and water supply. Nationwide, the U.S. beef cattle herd has declined to its lowest level in 61 years, largely attributed to drought conditions.