

Testimony

on behalf of the

National Cattlemen's Beef Association

with regard to

“Reducing Emissions While Driving Economic Growth: Industry-led Initiatives”

submitted to the

United States Senate
Committee on Environment and Public Works
Subcommittee on Clean Air and Nuclear Safety

Mike Braun, Chairman

submitted by

Todd Wilkinson

Co-Owner

Redstone Feeders, LLC

Co-Owner

Wilkinson Livestock LLC

Policy Division Vice Chairman

National Cattlemen's Beef Association

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**National Cattlemen's
Beef Association**

Good morning, Chairman Braun and Ranking Member Whitehouse. My name is Todd Wilkinson. I am involved in a cow/calf operation with my son and am part-owner of a commercial feedyard with my brothers in De Smet, South Dakota. Redstone Feeders finishes cattle after their time on pasture. Over the years, every step in the beef supply chain has taken steps, with the help of valuable research, to intentionally increase efficiency while simultaneously reducing our environmental footprint. Thank you for the opportunity to testify before the subcommittee today.

Farmers and ranchers face increasing pressure from consumers to be socially responsible, while balancing existing needs to remain environmentally conscious and economically viable. According to the U.S. Environmental Protection Agency, direct emissions from beef cattle represent just two percent of our country's greenhouse gas emissions. The United States has some of the lowest greenhouse gas emissions from the cattle industry – 10 to 50 times lower than cattle sectors from other countries around the world. Our low emissions are not accidental— America's cattle producers work hard to implement new technologies and practices that reduce our environmental impact, while simultaneously increasing efficiency. But this evolution and innovation only comes with freedom to research, experiment, and implement. Climate policies that *unfairly* target cattle producers fail to recognize the positive role of cattle and beef in a healthy, sustainable food system. Rather than adopting misguided policies that threaten the viability of farmers and ranchers, we want to shift the conversation. American beef production and consumption is a climate change solution.

Cattle graze on over 660 million acres in United States – nearly one third of our nation's continental land mass. This acreage not only feeds cattle but also naturally sequesters carbon, a benefit compounded by ruminant grazing. Grazing builds deep root systems in prairie grasses, which improve soil health. Healthy soils retain more water, sequester more carbon, and increase the resiliency of our ranches.

Methane emissions from cattle are part of the natural methane cycle. Cattle consume grasses and then emit methane, through belches, as part of the ruminant digestive process. Within 10 years, more than 90% of that methane combines with oxygen in the atmosphere and converts to CO₂. The CO₂ is then absorbed by grasses via photosynthesis, those grasses are eaten by cattle, and the process starts over. Methane has no long-term impact on the climate when emissions and oxidation are in balance. And this balance has been maintained for centuries: the buffalo population that roamed prior to the European settlement is estimated to be near equal to today's cattle population. The U.S. cattle population has not contributed to a significant increase in methane emissions and, according to the USDA's Agricultural Research Service, is not a significant contributor to climate change.

While cattle are an incremental contributor to America's overall greenhouse gas emissions, our industry works to become more efficient every day, partly through managed grazing systems. My operation developed a grazing management plan with the Department of Agriculture's Natural Resource Conservation Service (NRCS) which guides our implementation of a rotational grazing system. Rotational grazing creates the opportunity for cattle to intensely graze pastures, thereby

compounding carbon sequestration benefits. Additionally, systematic grazing allows producers to naturally decrease weed and invasive species growth. The grazing management plan is just one example of the many conservation tools that cattle producers have at their disposal.

Over generations, if cattle producers have learned anything, it's that there is no "silver bullet" solution – no one size fits all approach. Grazing management plans provide an excellent example. While increased soil health is a top priority for every cattle producer, so is the protection of wildlife habitat. In many areas today, ranches are the last natural area, protecting wildlife from being completely squeezed out by urban encroachment. A variety of wildlife species, from large ungulates to small pollinators, benefit from the open spaces uniquely provided by working ranches. Preserving large, unbroken landscapes is critical to habitat conservation and the ultimate success of local wildlife. When ranchers are regulated out of business, these vast lands are often divided and sold in small parcels, greatly impeding species' migratory habits. Wildlife depend on the work that we do to maintain water sources, foster robust forage production, and keep landscapes intact. Cattle producers consider every potential factor (animal welfare, carbon sequestration, wildlife benefits, water quality, etc.) when making any decision on their operation. A grazing management plan does not directly translate to "intensive rotational grazing," but instead means that every producer should implement a suite of practices that best fits the needs of their operation, their cattle, and their environment.

Beyond improving the land, cattle ranchers utilize various technologies to increase cattle efficiency, thereby improving our carbon footprint. Through genetic testing, we determine which of our bulls has superior traits to enhance meat quality, feed efficiency, and growth—in addition to mothering ability, docility, fertility and calving ease. Efficiency traits directly affect beef sustainability; an animal that reaches harvest faster and produces a high-quality meat product will have a lower overall environmental impact. The first predictors of a cow's breeding potential in the 1980s were simple: the weights of each animal were taken and used them to predict their mature size and the mature size of their calves. Today, producers can take a DNA sample to predict genetic calving capability. Currently, we see micro-level improvement, but over the years, increased herd efficiency will lead to macro-level progress.

The American cattle herd is unmatched in its ability to upcycle waste and byproducts. "Upcycling" is the concept of using discarded materials to create a higher value product. In addition to cattle's ability to turn inedible grass into a nutrient dense protein product, cattle also upcycle other byproducts when they move from the pasture to the feedyard. Ninety percent of what cattle consume during their time at the feedyard is human-inedible. At Redstone Feeders, cattle upcycle a by-product of ethanol production called distillers grain. Previously, this product was discarded at a landfill, but beef nutrition researchers found that it could be fed in measured quantities to cattle, providing a new source of protein. Beef nutritionists began helping producers formulate rations to use this new resource instead of discarding it as waste. Distillers grain provides protein to cattle, uses the corn by-product to efficiently feed animals, thereby preventing the creation of additional greenhouse gases. Distillers grain is just one example. There are many by-products that are fed to cattle to enhance their diet in a safe and efficient manner, including potato peelings,

bakery trimmings, and even by-products of chocolate. Do you remember the news story about the truck load of discarded Skittles candy that was taken to a dairy farm to be used as feed? Some people questioned why we would feed candy to cows, but a cow's rumen is filled with specialized bacteria that needs a variety of sugar to live and be able to digest the grass and plant material she eats. Skittles can be good for cows when fed in a balanced diet, and better still those discarded candy pieces didn't end up in the trash! According to the USDA's Office of the Chief Economist, food waste is the single largest component going into municipal landfills, driving landfills to their position as the third largest source of methane emissions. Cattle's ability to upcycle byproducts significantly reduces our landfill and food waste emissions.

Ranchers continually work to improve the health and well-being of their animals, implementing new technology whenever possible. Antibiotics are an important technology used to maintain cattle health, allowing animals to utilize feed and water resources efficiently. A sick animal takes longer to gain weight and reproduce, creating a larger net environmental footprint. Additionally, the addition of FDA-approved growth promotants to an animal's diet improve overall environmental impact, both directly and indirectly. Ionophores are feed additives which improve feed efficiency and reduce methane emissions by improving rumen bacterial fermentation. Used effectively, growth promotants assist in not only further reducing the cattle industry's carbon footprint, but also water, fertilizer, and feed use. These technological enhancements are vital to increasing efficiency and therefore environmental impact of the nation's cowherd. This technology allows us to produce the same amount of beef today that we were producing in the 1970's with 33 percent fewer animals.

In an effort to assist producers in taking incremental steps toward increasing their economic viability and decreasing their environmental footprint, NCBA was a founding member of the U.S Roundtable for Sustainable Beef (USRSB). USRSB is a multi-stakeholder organization which aims to demonstrate and improve beef sustainability. The USRSB is the product of previous failed attempts to define "sustainability" in the beef industry, the result of which were ineffective, top-down approaches that left cattle producers disinterested and disenfranchised. USRSB changed this. It began from a discussion on how we, as members of the beef value chain, can directly and measurably impact sustainability. The Roundtable brought together a broad swath of stakeholders-cattle ranchers and feedyards who comprise the majority of the membership; retailers like McDonald's, Arby's, Wendy's; beef packers and processors; and environmental non-governmental organizations and universities. USRSB is unique from previous beef sustainability efforts because it is anchored by the institutional knowledge of America's cattle producers. USRSB recently released its Framework for Beef Sustainability and is encouraging operations all along the beef value chain to measure their individual impact of key areas in sustainability: Water Resources, Land Resources, Air & Greenhouse Gas Emissions, Efficiency & Yield, Animal Health & Wellbeing, and Employee Safety & Wellbeing.

Cattle producers lead the conversation when it comes to environmental sustainability – USRSB is just one example. The USRSB Framework allows our industry to highlight not only our advances in recent generations, but also opportunities for improvement. It demonstrates our commitment to

doing right by the land, responsibly raising animals, caring for the people who raise beef, and making money to support our families and the next generation of beef producers.

Cattle producers across the nation continuously work to improve our operations with technical assistance from USDA and land grant universities. USDA-NRCS not only provides technical assistance to farmers and ranchers who wish to implement conservation practices, but cost-share funding through its Environmental Quality Incentives Program (EQIP) and Conservation Stewardship Program (CSP). The benefit of technical assistance is its personalized approach: local NRCS employees work with agricultural producers to implement a suite of conservation practices best suited to fit the individual needs of each operation. Many of the solutions supported by NRCS' Conservation Technical Assistance are the product of land grant university research and extension. Cover Crop research is a perfect example. While cover crops have been used by generations to limit soil erosion and increase carbon sequestration, these benefits grow exponentially when producers utilize seeds that are the most compatible with their soil type and regional climate. Soil type varies significantly across the United States, but also across individual states, or even on one farm. Thanks to advances in cover crop research, producers are able to achieve the greatest benefit from their conservation practices. Voluntary conservation practices, supported by research and implemented by producers with technical assistance, are the key to increasing efficiency and resilience.

The U.S. cattle industry is proud of its history as stewards of our nation's natural resources. The industry takes very seriously its obligation to protect the environment while providing the nation with a safe and affordable beef supply. Cattle producers are America's original conservationists, and we work hard every day to ensure that we can pass our operations on to the next generation. My family, and the entire American cattle producing community, is committed to remaining environmentally, economically, and socially sustainable for generations to come.