

# Beef Industry Sustainability

Understand how the beef sector feeds into the three pillars of sustainability.

The following information is reported by Sarah Place, Ph.D., who presented at the educational forum during the 2019 American Hereford Association Annual Membership Meeting and Conference. A downloadable version can be found at [Hereford.org/marketing/hereford-sales/sales-catalog-resources/](https://www.hereford.org/marketing/hereford-sales/sales-catalog-resources/) with permission to share in your print and digital content. **HW**

## Myths vs. Reality

### Environmental Stewardship

**MYTH:**  
Cattle harm the environment.

**REALITY:**

**2%** of emissions

Beef cattle in the U.S. contribute about 2% to total U.S. emissions levels and less than 0.5% globally.



Between 1910 and 2015, the U.S. population grew from 90 million to 321 million, while the number of cattle per person decreased by 58%.

**20%** of beef worldwide

As a result of genetic progress, animal husbandry and management, the U.S. supplies 20% of the world's beef using the **least** amount of resources.



Grain-finished cattle release less methane because of their high-concentrate diets and spend less time on feed. The majority of U.S. beef is grain-finished and with declining cattle numbers, less methane is released into the atmosphere.

**33%** deduction in emissions

The U.S. beef industry's footprint decreased by 33% between 1910 and 2015 while still producing the same pounds of beef per person with less resources.

### Economic Viability

**MYTH:**  
Cattle waste resources.

**REALITY:**



Beef cattle consume human inedible forages made from sunlight and carbon dioxide and convert them into a nutritious feed source with twice the protein content.

**1/3** of land can't be cultivated

One-third of the land area in the U.S. is uncultivable. Cattle harness solar energy from forages that if left ungrazed, would be more susceptible to wildfires.



For every 100 pounds of human food that comes from crops, about 37 pounds of byproducts are generated globally, which can be used in livestock feed.

**27** billion pounds of beef

Of the feed resources needed to produce the 27 billion pounds of beef each year in the U.S., 82% come from forage.



Plant-based protein generates byproducts, which are almost completely used as feedstuffs for livestock, therefore incorporating livestock into the plant-based protein supply chain.

### Social Responsibility

**MYTH:**  
Red meat is unhealthy.

**REALITY:**



USDA data reports Americans eat the same amount of beef per capita now as they did 100 years ago, which does not support increased cases of diseases, such as Type II diabetes and obesity.



Humans require the 10 dietary essential amino acids which make up animal proteins. Plant-based proteins contain amino acids, but not all dietary essential amino acids in one sitting.



Without animal proteins, the U.S. would not be able to produce enough plant-based foods to fulfill the dietary micronutrient requirements of the growing population.

**B12** deficient without beef

If humans only consumed plant-based protein, people would be overfed on a caloric basis but malnourished on a vitamin and mineral basis.