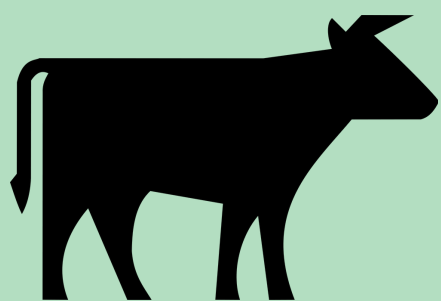


BEEFING UP SUSTAINABLY: BEEF CATTLE'S EFFECT ON THE ENVIRONMENT



12 YEARS

Biogenic methane (i.e., methane from a cow) lives in the atmosphere for 12 years at which point 80-90% is removed by oxidation.

When discussing global warming, cattle are often compared to other greenhouse gas contributors such as cars. Comparing these two is not beneficial because the burning of fossil fuels produces a different type of gas than cattle produce.

METHANE VS CO2

One molecule of methane (CH₄) is the equivalent to 28 molecules of CO₂ over 100 years.

CONTINUING EFFORTS

Beef producers, scientists, and advocates are continually working to make their industry and individual operations more effective and sustainable.

DIETARY ADJUSTMENTS

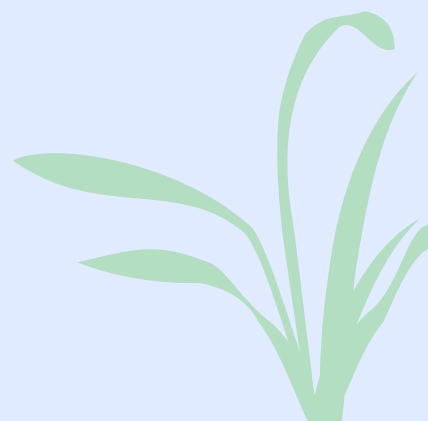
Research continues to be done to identify ways that cattle's dietary intake can low the amount of methane emission. Some feedstuffs that have mitigated methane production included seaweed, essential oils, and more!

GRAIN VS. GRASS

Whether the cattle are grain-finished or grass-finished, both can be accomplished sustainably. Notable differences between these two production styles include land use, amount of concentrates, amount of time on grass.

NOT JUST SUSTAINABLE, REGENERATIVE

Cattle have been identified as an important part of regenerating soil quality and grassland ecosystems. Cattle help push needed nutrients (i.e., organic matter) back into the soil, and graze plants, both native and invasive species, to keep them in a growth phase. Most ecosystems need some form of environmental interaction to thrive; this includes fire, rain, grazing animals, pollinators, and more.



More Resources

<https://podcasts.apple.com/us/podcast/dr-frank-mitloehners-research-on-cattle-and-climate-change/id1484363256?i=1000487312780>

<https://clear.ucdavis.edu/explainers/why-methane-cattle-warms-climate-differently-co2-fossil-fuels>

https://www.hpj.com/livestock/can-beef-really-be-part-of-a-sustainable-food-system/article_d796d860-2dba-11ec-be14-5b2d2f769324.html

<https://www.beefitswhatsfordinner.com/raising-beef/beef-sustainability>

<https://www.noble.org/regenerative-agriculture/6-soil-health-principles-for-regenerative-cattle-ranches/>