

- Global Warming Potential (GWP): The Global Warming Potential (GWP) was developed to allow comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (CO<sub>2</sub>). The larger the GWP, the more that a given gas warms the Earth compared to CO<sub>2</sub> over that time period
- Life cycle analysis (LCA): a methodology used to investigate environmental issues throughout the life cycle of a product
- Enteric fermentation: microbial fermentation that takes place primarily in the rumen and secondarily in the hindgut of a cow. This process produces methane as a byproduct
- AFO: The U.S Environmental Protection Agency (EPA) defines AFOs as enterprises where animals are kept and raised in confined situations. AFOs congregate animals, feed, manure and urine, dead animals, and production operations on a small land area. Feed is brought to the animals rather than the animals grazing or otherwise seeking feed in pastures, fields, or on rangeland
- Concentrated Animal Feeding Operation (CAFO): A CAFO is another EPA term for a large concentrated AFO. A CAFO is an AFO with more than 1000 animal units confined on site for more than 45 days during the year. Any size AFO that discharges manure or wastewater into a natural or man-made ditch, stream or other waterway is defined as a CAFO, regardless of size.
- Cow-calf operation: a part of beef production where farmers raise breeding stock and calves. Calves stay at the operation until they are weaned and then are typically sold to go to backgrounding
- Backgrounding: the intermediate stage of beef production where cattle are typically raised on a 40:60 concentrate to forage diet until they are sent to the feedlot. Note that concentrate and forage levels in diet may vary depending on producer preference
- Feedlot: last stage of typical beef production systems where cattle are fed high energy diets with a 90:10 concentrate to forage diet until they reach appropriate weight for slaughter. Note that concentrate and forage levels in diet may vary depending on producer preference
- Grass-fed beef: Grass and forage shall be the feed source consumed for the lifetime of the ruminant animal, with the exception of milk consumed prior to weaning. The diet shall be derived solely from forage consisting of grass (annual and perennial), forbs (e.g., legumes, *Brassica*), browse, or cereal grain crops in the vegetative (pre-grain) state. Animals cannot be fed grain or grain byproducts and must have continuous access to pasture during the growing season. Hay, haylage, baleage, silage, crop residue without grain, and other roughage sources may also be included as acceptable feed sources. Routine mineral and vitamin supplementation may also be included in the feeding regimen.
- Hot carcass weight (HCW): the weight of the animal immediately after slaughter

- Eutrophication potential: the amount of phosphates and reactive nitrogen leaving the system and potentially entering the water cycle