

**What is the carbon footprint and economics per volume of beef of grass fed vs conventionally finished beef?**

While on the faculty at Washington State University, animal scientist Jude Capper, PhD, conducted several studies on the sustainability of beef production. In one study, she compared the environmental impact of conventional (grain finished), natural and grass-fed beef production systems.

She found that increased productivity in the conventional system reduced the cattle population required to produce a given volume of beef. The conventional system required only 56.3 percent of the animals, 24.8 percent of the water, 55.3 percent of the land and 71.4 percent of the fossil fuel energy required to produce an equal volume of beef in the grass-finished system. The carbon footprint per volume of beef was lowest in the conventional system, intermediate in the natural system and highest in the grass-finished system.