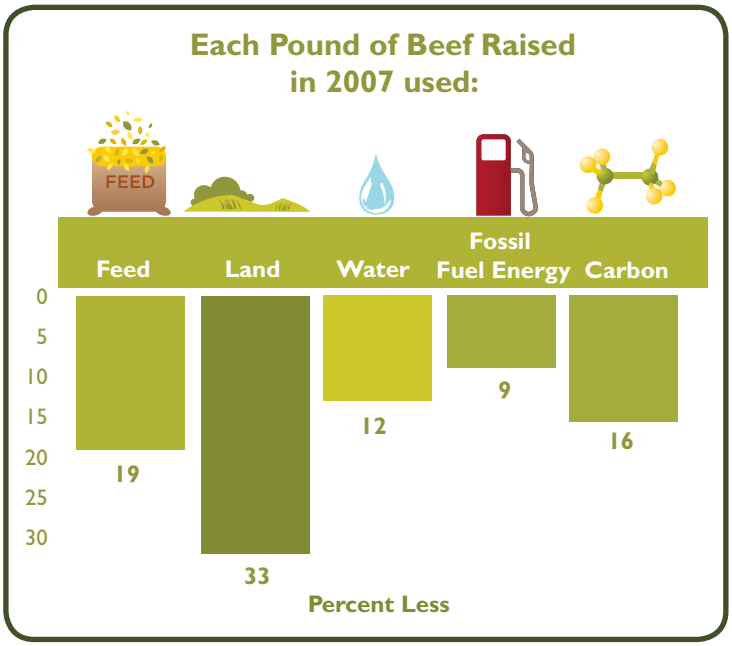
Beef's Shrinking Environmental Footprint | fact sheet

New research published by Dr. Jude Capper in the *Journal of Animal Science* shows that beef's environmental footprint is shrinking. Each pound of beef raised in 2007 (compared to 1977) used:

- 19 percent less feed;
- 33 percent less land;
- 12 percent less water; and
- 9 percent less fossil fuel energy;

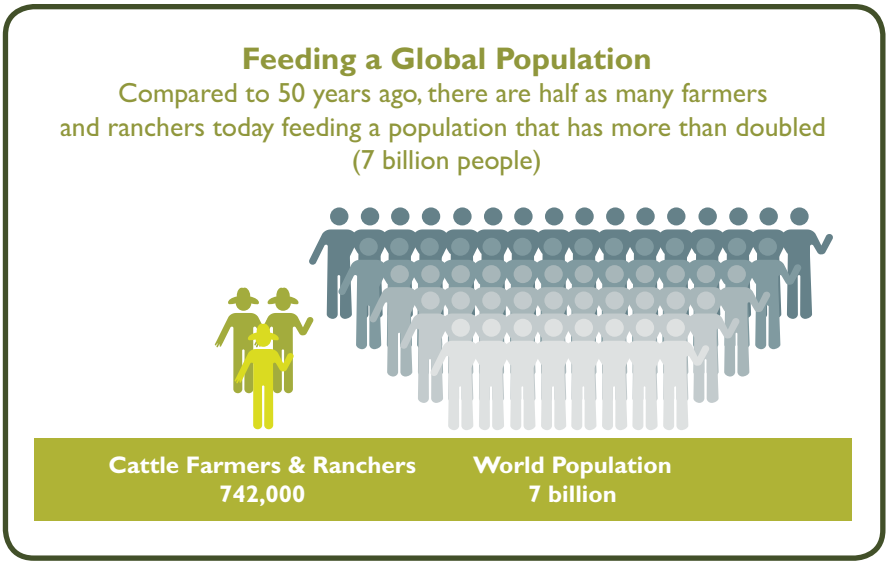
The carbon footprint of beef was reduced by more than 16 percent from 1977 to 2007.[1]



Raising Beef is Environmentally Sustainable

With the world population officially hitting 7 billion people earlier this year and projected to reach 9.5 billion by 2050[2], farmers and ranchers must continue to find ways to sustainably feed a growing world population using fewer natural resources.

- According to Capper's research, improvements to the way cattle were raised and fed in the U.S. between 1977 and 2007 yielded 13 percent more total beef from 30 percent fewer animals. More beef from fewer animals maximizes resources like land and water while providing essential nutrients for the human diet.
- The United Nations Food and Agriculture Organization (FAO) projects in 50 years, the world population will need 70 percent more food. Seventy percent of this food must come from efficiency-improving technologies.[3]
- U.S. cattlemen raise 20 percent of the world's beef with 7 percent of the world's cattle, making the United States a leader in raising sustainable beef.[4]



Learn more at: www.ExploreBeef.org

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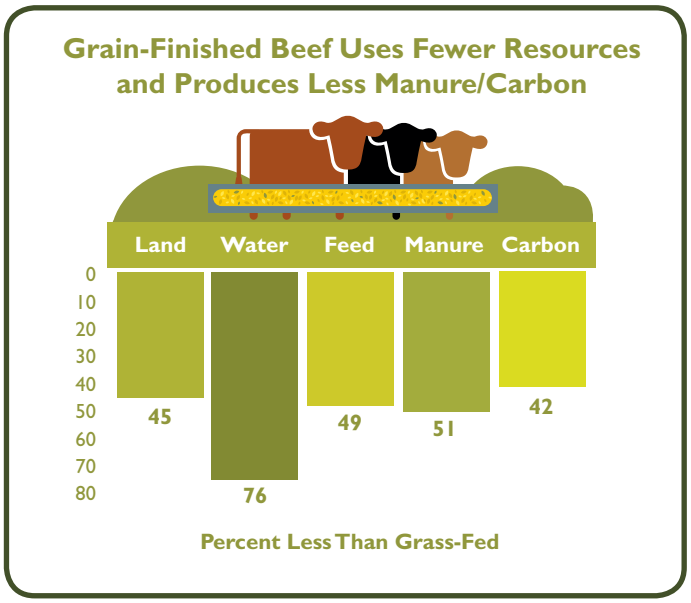
Reducing Environmental Inputs

According to Capper's research, much of the reduction in beef's carbon footprint is due to raising cattle on grass pasture then finishing them on an optimal, balanced diet of grasses, grains and other forages in a feedyard.

- According to previous research conducted by Capper, it takes 226 more days for grass-finished cattle to reach market weight than grain-finished cattle.[5] More days on grass may mean greater environmental impact.
- Each pound of grain-finished beef requires:
  - 45 percent less land;
  - 76 percent less water; and
  - 49 percent less feed;

  And generates:
  - 51 percent less manure; and
  - 42 percent fewer carbon emissions.



Food to Feel Good About

There are a variety of beef choices such as grain-finished, grass-finished, natural and certified organic beef to choose from. Cattle farmers and ranchers make smart use of the diverse natural resources, like water and land, available in their local areas to produce nutritious, safe and delicious beef that they're proud to serve to their own families.

- Beef is environmentally and nutritionally efficient. Each serving today requires less land, water and energy than in the past while providing 10 essential nutrients to your diet.
- All choices of beef are excellent or good sources of 10 essential nutrients and there are 29 cuts of beef that meet government guidelines for lean.
- Several of the key nutrients in beef, specifically iron and choline, are known to be lacking in the diets of many Americans, especially women and children.
- Research shows beef offers several health benefits including heart health, muscle development and weight management.

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[1] J.L. Capper, The environmental impact of beef production in the United States: 1977 compared with 2007. J ANIM SCI 2011, 89:4249-4261. http://jas.fass.org/content/89/12/4249.full.pdf+html

[2] United Nations Population Fund, www.unfpa.org/public/home/news/pid/8769

[3] Food and Agriculture Organization of the United Nations. (2009). How to Feed the World in 2050. FAO, Rome, Italy. http://www.fao.org/docrep/012/ak542e/ak542e00.htm

[4] USDA National Agricultural Statistics Service, 2011.

[5] J.L. Capper, The environmental impact of conventional, natural and grass-fed beef production systems. Greenhouse Gases in Animal Agriculture Conference, 2010.

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