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In Honor of Earth Day, Cattle are Upcyclers.

Cattle are upcyclers! Cattle have a unique four-chambered stomach, the largest chamber being the rumen, which helps them get the nutrients they need from parts of fruit and vegetable plants that humans don't consume or can't digest—like carrot tops, almond hulls or grasses. These leftovers are often mixed into their feed, along with other grasses or hay like alfalfa and grains like corn. Cattle are acting as "upcyclers" in our food system by upgrading human inedible material or food waste into high-quality protein and essential micronutrients.

For example, in Wisconsin, about 62,000 acres are dedicated to potato production, which results in almost 1.3 million tons of potatoes annually. Culled potatoes, or those that do not meet prescribed appearance standards for supermarket use, are instead incorporated into properly balanced feed rations for cattle.

Taking into account all water from farm to fork, it takes 614 gallons of water for every pound of edible, consumed beef produced in the U.S. Approximately 95 percent of this water is for irrigation of crops used for feeding cattle. The water cattle use for drinking represents around 1 percent of the total water used in beef production. Irrigation practices used by farmers continues to improve, which means each drop of water is used more efficiently to sustain plants, and less is lost to evaporation or to run off.

Keep in mind that water used for raising beef is not "used up." The water cycle we all studied in elementary school still works. Water percolates into aquifers, it runs down streams into lakes and oceans, it evaporates and returns as precipitation, and cattle pastures provide land to filter this water and return it to the ecosystem.

Farmers and ranchers are dependent on the land and fully appreciate the importance of conserving the resources and benefits these areas offer all of us!

Range and pasture lands are located in all 50 states. Livestock grazing is the primary use of 27 percent of all U.S. land including grassland, pasture and rangeland.

Often, the land cattle graze on is not suitable for growing other food products. Livestock grazing can be used as a tool to lower wildfire risk by controlling the amount, height and distribution of grasses and forage that fuels wildfire.

To honor the farmers and ranchers who make environmental stewardship a priority on their farms and ranches, the beef community created the Environmental Stewardship Award Program in 1991. The annual award

highlights the nation's finest cattle farmers and ranchers who serve as leaders and models for good stewardship practices. There have been nearly 160 regional operations in 33 different states recognized through the program. The judges base their choices on the nominee's management of water, wildlife, vegetation, air and soil, along with leadership abilities and the sustainability of the business.

In addition to rewarding environmental stewardship, the program also provides fellow farmers and ranchers with concrete examples and proven ideas that can be useful to enhancing conservation efforts on their own farm and ranching operations. Learn more here: http://environmentalstewardship.org/

Everything on Earth requires the use of natural resources like land, energy and water—it's what we do with those resources that is most important. Today, beef is produced using fewer resources than ever before.

But conservation is never complete; farmers and ranchers will continue to work hard to feed a growing population, while, at the same time, working to reduce water use, care for the land, and protect the environment.