Originally published in *Sierra Atlantic* Newsletter of the Atlantic Chapter, Sierra Club Spring 2004, Volume 31, p. 6

"Mad Cow" One More Sign of a Dysfunctional Ag Industry

by Mike Hudak, author of Western Turf Wars: The Politics of Public Lands Ranching

Discovery last December of the first U.S. case of Mad Cow Disease (formally bovine spongiform encephalopathy (BSE)) has focused attention on the role of many beef industry practices in spreading that disease. As such knowledge may prompt one to seek beef produced under conditions less likely to spread BSE, it is prudent to examine whether these methods may still entail unfortunate environmental impacts.

First, though, let's recount just a few beef industry practices that give rise to health concerns. When the Mad Cow story first broke, the infected animal was described as a "downer," an animal too ill to walk or perhaps even stand. Although many animal welfare groups had advocated for the past decade in support of legislation to keep meat from downer animals out of the human food supply, it was not until the discovery of this alleged downer mad cow that the USDA imposed such a ban.

Subsequently though, Dave Louthan, the slaughterhouse worker who killed the cow in question, has stated to the news media that although the cow suffered from a birthing injury she was not a downer in the traditional sense. Louthan tested her for BSE only because he, fearing she would trample cows lying in her path, killed her *outside* the slaughterhouse, an action that triggered mandatory testing by a policy of his employer. The USDA's regulation disallowing downer meat into the human food supply is thus seen as inadequate for accomplishing its purpose.

Of additional concern, several World Health Organization recommendations for protecting consumers from BSE-infected meat have still not been implemented by the USDA. One such recommendation would be, for example, not feeding slaughterhouse waste from cattle to poultry, pigs, horses and fish, then feeding meal made from those animals back to cows. Although explaining how these practices can potentially spread BSE through the human food supply is beyond the scope of this article, the inquisitive reader will find such information in Dr. Michael Greger's thoroughly referenced Internet report.

Greger's article also mentions a study showing that the human form of BSE, Creutzfeldt-Jakob Disease (CJD), may be more prevalent than formerly thought, as many victims of Alzheimer's have been found through autopsy to have had misdiagnosed cases of CJD.

If one is concerned about contracting CJD by consuming BSE-infected beef what are one's options? Certainly the most cautious action would be to avoid consuming beef

altogether. Otherwise one might look for beef labeled "organic," a term governed by USDA regulations that indicate the animal was fed no antibiotics, growth hormones or feed grown using conventional pesticides or fertilizers made with synthetic ingredients or sewage sludge.

Although the organic label insures a BSE-free product for the consumer it does not guarantee the animal was raised in an environmentally sustainable manner, nor even in a manner that is humane. (Such animals, for example, may still be "finished" with corn or other grain whose production may have contributed to depletion of groundwater or required significant water diversion from a stream. Furthermore, just the feeding of grain to a bovine is always detrimental to the animal's health as its digestive system is adapted only to the consumption of grass and similar herbage.)

Similar concern about environmental sustainability applies to production of beef labeled as "grass-fed," a designation that lacks either government or industry definition. Such an animal may have been raised entirely on grass, but in an arid or otherwise fragile environment such as is found in much of the American West. Even in a region of greater annual precipitation, water may have been diverted from a stream to irrigate the animal's pasture, much to the detriment of aquatic life.

To insure that one's organic or grass-fed beef has been produced in a sustainable manner one must be familiar with the conditions of its production. Ideally, one should buy from a local producer who's operation one can inspect. But what environmental impacts should one look for?

Jerome Freilich and co-authors have published an article, "Ecological Effects of Ranching: A Six-Point Critique," in the peer-reviewed journal *BioScience* (August 2003, vol. 53, no. 8, pp. 759–65) that provides a checklist of environmental impacts common to ranching on the Great Plains and in Wyoming. Their criteria, though, are applicable to ranching anywhere, and include such considerations as fragmentation of habitat, spread of exotic weeds, control of problem wildlife, truncation of the food web and impacts on riparian zones. Download their article, then use it as a guide to evaluate your organic or grass-fed beef producer as an environmental steward.