

Like Water for the West:  
Why Bison Could and Should Be What's for Dinner

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*“They have their own currents. You could watch a herd  
of running pronghorn swerve like a river rounding  
a meander and see better what I mean. But*

*bison are a deeper, deliberate water, and there will  
never be enough water for any West but the one  
into which we watch these bison carefully disappear.”*

—American Poet William Matthews<sup>1</sup>

I. INTRODUCTION

The Efrahams<sup>2</sup> live on a city street where three of the eleven houses are owned by family members. For the past several years, they have purchased all of their beef from a community supported agriculture farm (CSA)<sup>3</sup> less than seventy-five miles away. As members of the CSA, twice a year they receive the meat of half of a

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1. WILLIAM MATTHEWS, *Herd of Buffalo Crossing the Missouri on Ice*, in *SELECTED POEMS AND TRANSLATIONS 1969–1991* 143 (Houghton Mifflin 1992).

2. For purposes of anonymity, the family's name has been changed.

3. CSAs have become particularly popular in the last twenty years. MATT ERNST & TIM WOODS, UNIV. KY. COOP. EXTENSION SERV., CMTY. SUPPORTED AGRIC. (CSA) 1 (Apr. 2013), available at <http://www.uky.edu/Ag/CCD/marketing/csa.pdf>. Government statistics are lacking as to how many exist, but there are easily more than four thousand CSAs currently in business. *Community Supported Agriculture*, LOCAL HARVEST, INC., [www.localharvest.org/csa/](http://www.localharvest.org/csa/) (last visited Jan. 30, 2013). Generally, these are small- or medium-sized farms that sell fruit, vegetables, dairy products, eggs, or meat. During the winter months, the farmer advertises her product to local consumers, who agree to buy “shares” of the farm's yields in the coming production season. The shareholders pay right away, and this money is used to plant or feed and cultivate the farm's commodity. Then, throughout the summer and fall months, the farmer periodically prepares a box with each consumer's “share” of the farm's yield.

cow,<sup>4</sup> raised on grass and butchered by people they know. Each family member takes a turn unfreezing one of the cuts of beef, and they all enjoy the experimentation of cooking fairly healthy, unusual meals for one another.

Similar to many CSA customers, the Efrahams say they prefer CSA beef to supermarket beef because the facility is local and the cattle are grass-fed. From a personal or community perspective, the close proximity of the CSA is probably its greatest attribute. It means the family can visit the farm,<sup>5</sup> learn from and interact with the people who run it,<sup>6</sup> and have their dollars stay in their own community.

However, that the CSA raises grass-fed cows<sup>7</sup> is of greater importance from health and environmental perspectives, which are the perspectives this Note focuses on.<sup>8</sup> The beef industry norm is to

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4. In this Note, “cow” is used with its non-technical meaning. It refers to the species *Bos taurus* generally, rather than to only those females of that species that have given birth.

5. This depends on the CSA. For example, Jodar Farms in Fort Collins, Colorado, offers a two-hour “open house” every Sunday for its shareholders to visit the farm. Telephone Interview with Aaron Rice, Owner, Jodar Farms (Jan. 31, 2013). Indeed, given the emphasis CSA owners place on interactions with the public, proximity may not be the only reason CSAs are so accessible for farm visits. The owner of Jodar Farms says he works hard to encourage his shareholders to see how the animals are raised, and he enjoys allowing them to gather their own eggs from the hen houses and otherwise become familiar with where their food comes from. *Id.*

6. See, e.g., Marne Coit, *Jumping on the Next Bandwagon: An Overview of the Policy and Legal Aspects of the Local Food Movement*, 4 J. FOOD L. & POL’Y 45, 49–50 (2008) (“One of the reasons most often given [for buying local food] is that consumers appreciate the sense of connection it provides with the place where the food they eat is produced . . . [and] [t]he ability to see the person who grew or made a food product adds a human dimension otherwise missing from our food purchasing.”).

7. More precisely, these cows are “grass-finished.” See *Cross*, *infra* note 9.

8. There is now doubt that primarily eating locally-cultivated food has significant environmental benefits. It was earlier posited that the local foods movement was ecologically sounder than the alternative because of the reduction in transportation exhaust. See, e.g., *Local Food “Greener than Organic,”* BBC NEWS (Mar. 2, 2005), <http://news.bbc.co.uk/2/hi/science/nature/4312591.stm>. However, a recent study at the University of California, Santa Barbara has cast doubt on this belief. David Cleveland et al., *Effect of Localizing Fruit and Vegetable Consumption on Greenhouse Gas Emissions and Nutrition, Santa Barbara County*, 45 ENVTL. SCI. TECH. 4555, 4560 (2011). Researchers found the energy saved at the transportation stage was counteracted by an approximately equal average increase in energy consumption at the production stage. This makes sense when one considers that certain areas of the world are better-suited for growing certain food items. Additionally, transportation makes up only a small percentage of many products’ carbon footprints, so reducing travel distance makes a negligible difference in the total carbon footprint. *Id.* at 4556. This is especially true for red meat, the transport of which accounts for only 1 percent of the total greenhouse gas emissions involved in its production. Christopher L. Weber & H. Scott Matthews, *Food-Miles and the Relative*

finish cattle<sup>9</sup> in a crowded feedlot on a grain diet (usually corn) that makes the cows gain weight quickly.<sup>10</sup> When CSAs and other grass-fed cattle ranches eschew this norm, they produce healthier cows<sup>11</sup> and provide healthier meat for humans.<sup>12</sup> Furthermore, refusing to raise cattle on feedlots is ecologically beneficial, because it reduces the country's dependence on corn<sup>13</sup> and cuts down on the erosion and pollution that occur in highly concentrated feedlots.<sup>14</sup>

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*Climate Impacts of Food Choices in the United States*, 42 ENVTL. SCI. TECH. 3508, 3511 (2008).

9. Finishing is the final stage of beef production, in which the cow is brought up to slaughter weight. NAT'L CATTLEMEN'S BEEF ASS'N, FACT SHEET: FEEDLOT FINISHING CATTLE, available at [http://www.beefusa.org/uDocs/Feedlot%20finishing%20fact%20sheet%20FINAL\\_4%2026%2006.pdf](http://www.beefusa.org/uDocs/Feedlot%20finishing%20fact%20sheet%20FINAL_4%2026%2006.pdf) (last visited Mar. 27, 2014). Even in industrial ranching, all cows are raised on pasture when they are young. See, e.g., Kim Cross, *The Grass-fed vs. Grain-fed Debate*, CNN HEALTH (Mar. 29, 2011), <http://www.cnn.com/2011/HEALTH/03/29/grass-grain.beef.cookinglight/index.html>. It is only when the calf matures and nears the age of slaughter—between one- and two-years-old—that it may be sent to a feedlot and finished on grain. See, e.g., *Raising Cattle: The Stages of Beef Production*, EXPLORE BEEF, <http://www.explorebeef.org/raisingbeef.aspx> (last visited Mar. 17, 2014). The purpose of finishing the cow in this way is to hurry the process with the fattening grain and severe restrictions on their movement. See, e.g., *Grass-Fed vs. "Grain-Fed" Meats*, AM. FARMERS NETWORK, <http://www.americanfarmersnetwork.com/grass-fed> (last visited Mar. 27, 2014).

10. *Know Your Meat*, FRONTLINE, <http://www.pbs.org/wgbh/pages/frontline/shows/meat/safe/know.html> (last visited Mar. 27, 2014).

11. See POLLAN, *infra* note 13, at 77–78.

12. See generally Cynthia A. Daley et al., *A Review of Fatty Acid Profiles and Antioxidant Content in Grass-fed and Grain-fed Beef*, 9 NUTRITION J. 1475 (2010), available at <http://www.nutritionj.com/content/9/1/10> (reviewing studies that found grass-fed beef is lower in cholesterol-raising agents and fat, and higher in precursors for Vitamins A and E and antioxidants).

13. See, e.g., DANIEL IMHOFF, *FOOD FIGHT: THE CITIZEN'S GUIDE TO THE NEXT FOOD AND FARM BILL 17* (2007). Incentivized by federal subsidies, farmers in the United States immensely overproduce corn. MICHAEL POLLAN, *OMNIVORE'S DILEMMA* 52–54 (2006). This makes it extremely cheap, often priced below the cost of production. *Id.* at 67. In turn, the low price has inspired creative engineering of corn-derived products, which can be found in sweeteners and preservatives, like corn syrup, as well as in non-food items, like car fuel. IMHOFF, *supra*, at 18. This ever-increasing list of products creates further demand for corn, which inspires further production. POLLAN, *supra*, at 62. For environmental, health, and even foreign relations reasons, this cycle of overproduction is detrimental to our country and our fellow Americans. IMHOFF, *supra*, at 14–17. For further discussion on the multiple facets and consequences of America's corn dependence, see *id.* at 14–17, 90–92 and POLLAN, *supra*, at 15–119.

14. See generally Debra L. Donahue, *Elephant in the Room: Livestock's Role in Climate and Environmental Change*, 17 MICH. ST. U. C. L.J. INT'L L. 95 (2008). See also *infra* notes 184–85 and accompanying text.

The CSA model carries advantages from the rancher's perspective, as well. Each year it becomes more and more difficult to maintain the profitability of a typical cattle operation—that portion of modern beef production known as a “cow-calf” operation.<sup>15</sup> This growing difficulty is largely due to measures Congress<sup>16</sup> and meat-packers<sup>17</sup> have taken to artificially steady the risky agricultural market and keep the price of beef low at the supermarket. Since the CSA owner deals directly with consumers rather than packers, and the CSA consumer pays a membership fee ahead of the growing season, the CSA owner retains control of his market and mitigates many ranching risks posed by climate and infection.<sup>18</sup> Thus, in some

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15. Mike Boersma, *Remaining Profitable in the Cow/Calf Business*, MINN. FARM GUIDE, [http://www.minnesotafarmguide.com/news/livestock/remaining-profitable-in-the-cow-calf-business/article\\_fb91a4f2-be5b-5241-8e81-edde83fc3ad5.html](http://www.minnesotafarmguide.com/news/livestock/remaining-profitable-in-the-cow-calf-business/article_fb91a4f2-be5b-5241-8e81-edde83fc3ad5.html) (last visited Apr. 3, 2014). Some ranchers like to contrast the steadiness of price in beef with the huge leaps in the price of cars. BETTY FUSSELL, *RAISING STEAKS: THE LIFE AND TIMES OF AMERICAN BEEF* 32 (2009) (“In 1950 a calf was worth \$350 and a truck \$1500. Now a calf’s worth \$400, but the truck’s worth \$40,000.”).

16. With each iteration of the Farm Bill, Congress includes a subsidy program for farmers growing commodity corn. POLLAN, *supra* note 13, at 7. This has made it cheaper to feed cattle corn than grass and has kept beef prices low. POLLAN, *supra* note 13, at 75.

17. Packers are able to keep meat prices steady because of their unique position as controllers of both supply and demand in non-CSA beef production. Before packers process a cow, it is part of the cattle market, rather than the beef market. Packers therefore represent the controlling “demand” in the cattle market. Because packers transform cattle into beef, they also represent the “supply” in the beef market. IMHOFF, *supra* note 13, at 42 (noting that 84 percent of the beef market is controlled by the top four packers). These dual roles enable packers to respond to low beef demand by refusing to buy cattle. Since packers generally own each cow for fewer than ten days, they can react quickly to low beef demand with these refusals and thus avoid devastating losses from having over-bought cattle which cannot be processed and sold. CATTLEMEN’S BEEF BD. EXEC. COMM., *RECOMMENDATIONS ON IMPROVEMENTS TO THE BEEF CHECKOFF PROGRAM* 12 (Jan. 2009), available at <https://www.beefboard.org/library/files/Executive%20Committee%20Recommendations-Checkoff%20Improvements%20Approved.pdf>. Packers’ ability to avoid loss like this allows them to keep prices for beef fairly steady, even when prices for cattle are more volatile. Of course, this steadiness comes at the expense of ranchers. Charles E. Ball, *Cattle Feeding*, TEX. ST. HIST. ASS’N, <http://www.tshaonline.org/handbook/online/articles/aurcw> (last visited Feb. 9, 2013) (describing a period of “frozen” prices on beef during which ranchers lost one to two hundred dollars per head of cattle). When demand for beef is low and packers refuse to buy cattle, ranchers may suffer large losses, as cattle in which they have invested time, feed, and handling expenses die (because of poor diet) or become unqualified for slaughter for some other reason. See, e.g., POLLAN, *supra* note 13, at 78 (noting that cows can only live in feedlot conditions for a short window during which they must be sold or will become a complete loss to their owner). Finally, when packers start buying again, so many cattle are available for purchase that the market price for cattle plummets, and ranchers suffer a third financial blow. Ball, *supra*.

18. Telephone Interview with Aaron Rice, *supra* note 5.

places, CSAs represent an attractive means of both ranching *and* making a profit.

However, the way the American population is distributed limits the ability of many ranches to become CSAs. The Western rangelands, unable to support crops nutritious enough for humans, are among the most efficient places in the country for grazing livestock.<sup>19</sup> Yet most are remote, making the CSA model infeasible.<sup>20</sup> At the same time, CSAs located close to cities are simply too small to keep up with the booming demands of the urban areas.<sup>21</sup>

Given this poor distribution of supply and demand for meat, it makes sense to produce some non-CSA meat on the Western rangelands.<sup>22</sup> Yet, because of the environmental and health tolls taken by beef production in particular, a question remains for both non-CSA ranchers and conscientious consumers: why beef?

Though CSAs and other grass-fed cattle operations certainly avoid the animal-health hazards and environmental travesties wrought by industrial cattle ranching,<sup>23</sup> true environmental integrity will never be achieved while America's love affair with beef continues.<sup>24</sup> More

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19. See Rod K. Heitschmidt, *Ecosystems, Agriculture, Sustainability and Bison*, 74 J. ANIM. SCI. 1395, 1401 (1996), available at [http://www.bisoncentre.com/index.php?option=com\\_content&view=article&id=295&Itemid=144](http://www.bisoncentre.com/index.php?option=com_content&view=article&id=295&Itemid=144) (explaining that while the rangelands cannot support plants nutritious enough to sustain humans, their forages are perfect for ruminants like cattle or bison. In turn, we can eat the meat from these animals and thereby yield nutritious human food from these lands.). *But see* Donahue, *supra* note 14, at 106 (maintaining that the rangelands should not be used for raising meat *or* crops, and suggesting that the best place for livestock to be raised is "near the lands that produce feedcrops," because this "allow[s] for optimal recycling of animal and crop wastes, and reduce[s] the need for synthetic fertilizers").

20. Recall that CSAs are meant to be supported by the local *community* of consumers. Patrons must be located within the community or somewhere close enough to the farm that they can make weekly or monthly trip to pick up their allotments. While the average item of produce in a supermarket has traveled 4,200 miles, CSAs sell only to locals. See, e.g., *Community Supported Agriculture*, CALUMET QUARTER, <http://foodsecurity.uchicago.edu/research/community-supported-agriculture/> (last visited Mar. 27, 2014).

21. See, e.g., Olivia Blanco Mullins, *Communities Supporting Agriculture*, MOTHER EARTH LIVING (Mar./Apr. 2009), <http://www.motheearthliving.com/vegetable-gardening/community-supported-agriculture.aspx#axzz2wS8WgqsB>. A simple Google search reveals countless CSAs advertising ways consumers can add themselves to the waitlists of people interested in becoming members.

22. Meat production is efficient on the rangeland, as long as it is grass-based so as to take advantage of the ruminants' ability to digest lower quality fibers than humans can. See, e.g., Heitschmidt, *supra* note 19, at 1402–03.

23. See *infra* notes 65–67 and accompanying text. See also *infra* notes 183–85.

24. See *infra* text accompanying notes 25–33.

than any other livestock or food animal, cattle ravage the fragile Western ecosystems<sup>25</sup> with their inefficient use of land and water.<sup>26</sup> They contribute to global climate change through overgrazing<sup>27</sup> and the methane they emit through belching and flatulence.<sup>28</sup> People have so intensively bred them for increased productivity on feedlots<sup>29</sup> that they have become fat and stationary and prone to overgrazing certain grasses, which reduces the vitality and biodiversity of their pasture.<sup>30</sup>

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25. Donahue, *supra* note 14, at 109 (citing U.N. FOOD & AGRIC. ORG., LIVESTOCK'S LONG SHADOW: ENVTL. ISSUES & OPTIONS 69 (2006) (finding that because of their arid or semiarid character, most rangelands of the West have been degraded by livestock grazing)); Thomas L. Fleischner, *Ecological Costs of Livestock Grazing in Western North America*, 8 CONSERVATION BIO. 629 (1994) (describing the toll cattle grazing takes on the ecosystems of the West).

26. See, e.g., Van Vuren, *Spatial Relations of American Bison (Bison bison) and Domestic Cattle in a Montane Environment*, 24 ANIMAL BIODIVERS. & CONSERVATION 117, 120, 122–23 (2001) (finding that bison travel farther in a single day than cattle, resulting in “a more even distribution of grazing pressure” and venture a greater distance from water sources than cattle, who tend to congregate near flat streambeds). Bison and other native ungulates are much more efficient. *Id.* See also FUSSELL, *supra* note 15, at 84 (describing a cattle ranch where some sections were “eaten to the ground,” while others were left untouched).

27. Donahue, *supra* note 14, at 99. Grazing reduces the carbon-storage capacity of the soil. *Id.* It has been estimated that “[i]mproving management on 279 million acres of poorly managed . . . rangelands [in the U.S. alone] would sequester 11 million additional tons of carbon annually.” *Id.* at 100 (citing Justin D. Derner et al., *U.S.D.A.-A.R.S. Global Change Research on Rangelands and Pasturelands*, 27 RANGELANDS 39 (2005)). In addition, cattle and global warming work together in a vicious cycle. Both higher temperatures and the propensity of cattle to overgraze contribute to the drying and pulverization of pasture. Donahue, *supra* note 14, at 102. When the cattle continue to trample this dry ground, the dust becomes airborne and can be carried to the snowpack of nearby mountains. *Id.* This deposition of dust gives the snow a lower melting temperature, so that it melts and runs off to lower elevations earlier in the summer. In turn, earlier melting means longer periods of summer without moisture, and the dust forms more readily. *Id.* at 102–03.

28. See, e.g., Leslie Kaufman, *Greening the Herds: A New Diet to Cap Gas*, N.Y. TIMES, June 4, 2009, available at [http://www.nytimes.com/2009/06/05/us/05cows.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2009/06/05/us/05cows.html?pagewanted=all&_r=0). The world's livestock contribute more greenhouse gases to the atmosphere than do all the transportation vehicles combined, accounting for approximately 18 percent of such emissions. Donahue, *supra* note 14, at 98.

29. POLLAN, *supra* note 13, at 77. Animal rights and welfare arguments aside, selective breeding for the maximization of meat production is not inherently bad. Indeed, selective breeding increases efficiency, which in turn reduces total greenhouse gas emissions. HD Blackburn, *Genetic Selection and Conservation of Genetic Diversity*, 47 REPROD. DOMEST. ANIMALS 249, 249 (2012). The real problem with selective breeding is that ranchers have been selecting for potentially unhealthy traits. Instead of breeding for cows who gain weight from grass, ranchers selectively breed for cows who gain weight in feedlots. Doug Gurian-Sherman, *C.A.F.O.s Uncovered: The Untold Costs of Confined Animal Feeding Operations*, UNION OF CONCERNED SCIS. 17 (2008).

30. Van Vuren, *supra* note 26, at 120.

Intensive breeding has also contracted the genetic diversity of cattle themselves,<sup>31</sup> rendering them more susceptible to disease<sup>32</sup> and less adaptable to changes in weather or climate.<sup>33</sup>

The most effective way to correct the environmental and health problems caused by grain-based industrial cattle ranching would be for people to become vegetarians.<sup>34</sup> However, current demand for meat makes it obvious that such a drastic societal shift is unlikely to occur in the near future.<sup>35</sup> As an alternative, this Note envisions a move to bison ranching,<sup>36</sup> deliberately limited to a grass-fed and free-range approach. Bison are less destructive of rangeland ecosystems,<sup>37</sup> more efficiently raised for meat,<sup>38</sup> and healthier to consume when raised conscientiously.<sup>39</sup> Short of eliminating livestock ranching

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31. Blackburn, *supra* note 29, at 249.

32. See generally Derek Spielman et al., *Does Inbreeding and Loss of Genetic Diversity Decrease Disease Resistance?*, 5 CONSERVATION GENETICS 439 (2004) (using fruit flies to demonstrate that loss of genetic diversity reduces a population's resistance to disease to a significant degree).

33. Donahue, *supra* note 14, at 106.

34. Weber & Matthews, *supra* note 8, at E ("Shifting less than 1 day per week's (i.e., 1/7 of total calories) consumption of red meat and/or dairy to other protein sources or a vegetable-based diet could have the same climate impact as buying all household food from local providers."). Vegetarianism and veganism are healthier for people than eating beef, too. See, e.g., Eryn Brown, *All Red Meat is Risky, A Study Finds*, L.A. TIMES, Mar. 13, 2012, available at <http://articles.latimes.com/2012/mar/13/health/la-he-red-meat-20120313> (reporting on a study from the Harvard School of Public Health that found any amount of beef, pork, or lamb products can increase morbidity and mortality of humans).

35. Although the number of vegetarians in the United States is growing, the percentage of the population it represents remains small and relatively stable at about 5 percent. Frank Newport, *In U.S., 5% Consider Themselves Vegetarians*, GALLUP (July 26, 2012), <http://www.gallup.com/poll/156215/consider-themselves-vegetarians.aspx>.

36. In this Note, "Bison" refers to the animal *Bison bison bison*, commonly known as the American Plains bison.

37. Van Vuren, *supra* note 26.

38. See, e.g., *Raising Bison*, TEX. BISON ASS'N., [http://www.texasbison.org/raising\\_bison.htm](http://www.texasbison.org/raising_bison.htm) (last visited Mar. 19, 2014) (noting bison are advantageous over cattle because they do not need barns, they live longer, and they accrue lower veterinary costs because they calve without assistance and are naturally resistant to the common diseases of the West).

39. A variety of studies have attempted to discern the nutritional value of bison meat. See, e.g., D.C. Rule et al., *Comparison of Muscle Fatty Acid Profiles and Cholesterol Concentrations of Bison, Beef, Cattle, Elk, and Chicken*, 80 J. ANIMAL SCI. 1202 (2002) (citing, *inter alia*, J.A. Driskell et al., *Concentrations of Selected Vitamins and Selenium in Bison Cuts*, 75 J. ANIMAL SCI. 2950 (1997); J.A. Driskell et al., *Riboflavin and Niacin Concentrations of Bison Cuts*, 78 J. ANIMAL SCI. 1267 (2000); M.J. Marchello et al., *Nutrient Composition of Raw and Cooked Bison bison*, 2 J. FOOD COMPOSITION & ANALYSIS 177 (1989)). Bison meat is certainly leaner than beef when both animals are raised under similar conditions, and one study

altogether, such “natural” bison ranching is a logical solution to the environmental, health, and economic problems made worse every day by the beef industry.

Because it is still an evolving industry,<sup>40</sup> bison ranching is in the ideal position to be molded into a form that approaches the scale of the modern beef industry, yet still maintains many of the health and environmental virtues of the CSA natural ranching style consumers desire. If action is swift and harnesses the energy of the Efrahams and other conscientious urban consumers, the law can play an active and successful role in the formative process.

In order to understand the form the bison industry should take, it is helpful to be familiar with a form it must avoid. Thus, Part II of this Note examines the strength of the beef industry but also its entrenched problems. It introduces the Beef Research and Information Act, a law that has played a large role in the endurance of beef’s strengths and problems, and whose structure could be imitated for promoting the natural bison industry, instead. Part III describes the vulnerability of the Beef Research and Information Act and notes three ways the Act could be eliminated so as to lessen cattle ranchers’ current market advantage over bison. Part IV makes recommendations for how to structure a proposed Natural Bison Research and Information Act that adapts components of the Beef Research and Information Act, to meet the needs of bison producers while fostering a healthier, more environmentally-sound meat industry. Finally, Part V suggests changes to other laws and policies that must accompany the Natural Bison Research and Information Act if the bison industry is to grow responsibly.

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reported that the harmful type of cholesterol is prevalent in beef while absent from the meat of offspring of a bison and cow. Rule et al., *supra*, at 1203 (citing R.M. Koch et al., *Growth, Digestive Capability, Carcass, and Meat Characteristics of Bison bison, Bos Taurus, and Bos × Bison*, 73 J. ANIMAL SCI. 1271 (1995)). Still, researchers warn that for maximum health benefits, “[r]ange bison production should be emphasized,” because “[t]he feeding regimen for bison production affects the leanness and fatty acid profile of the meat.” Rule et al., *supra*, at 1210.

40. See Whitney Phillips, *USDA Launches First-ever Survey of Bison as Industry Continues to Grow*, FENCE POST (Jan. 8, 2014), <http://www.thefencepost.com/news/9660320-113/bison-industry-carter-dineen> (reporting that the USDA is only now taking steps to recognize the bison industry as a major player in meat production).



## II. GOT POWER? A BRIEF HISTORY OF SUCCESS, STRIFE, AND STREAMLINING IN AMERICAN BEEF PRODUCTION

Americans have never needed to be coaxed into eating beef. Every major European group that settled the New World brought cows with them,<sup>41</sup> and people here have been ranching, roping, and roasting cows ever since. The rugged man tending his herd in the lonely, arid West is a cultural icon of this country: few symbols are as indisputably “American” as the cowboy.<sup>42</sup>

The legend of the American cowboy may explain the personal devotion people feel for beef.<sup>43</sup> However, this legend alone cannot explain the success of the American beef industry. Many other factors have contributed in important ways, including the invention of long-distance transportation, the segmentation of the production process, advancements in medical science, the beef lobby’s influence, and a beef promotion system known as the “checkoff.”<sup>44</sup> A brief history of each of these factors can shed light on the pervasive troubles engrained in the beef industry and the consequences of those troubles for a variety of people and entities. Special attention is given to the checkoff system, because it is the least entrenched of the factors and would be the easiest to eliminate. It would also be the easiest to adapt for positive use in a blossoming bison industry, where

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41. From Spain, in 1493, Christopher Columbus brought the first cows to set hoof in the region. See FUSSELL, *supra* note 15, at 20. The Portuguese brought cattle to their Sable Island colony in Nova Scotia as early as 1518. Ian MacLachlan, *The Historical Development of Cattle Production in Canada 2* (2006) (unpublished manuscript) (on file with the University of Lethbridge), available at <https://www.uleth.ca/dspace/handle/10133/303>. By 1541, the first French cows had arrived in Quebec. *Id.* The first English cows arrived in 1624 with the Pilgrims of Plymouth Bay Colony. FUSSELL, *supra* note 15, at 19. In 1625, the Dutch brought their own specialized dairy cattle. *Id.* at 18.

42. Marshall W. Fishwick, *The Cowboy: America’s Contribution to the World’s Mythology*, 11 WESTERN FOLKLORE 77 (1952) (discussing the legend of the American cowboy and calling the cowboy “the hero type par excellence of twentieth-century America”)

43. For proof of the connection people draw between the cowboy of popular legend and beef consumption, one need simply drive a car for a month or two around the American West. A common bumper sticker reads: “Eat Beef. The West Wasn’t Won on Salad.” See, e.g., *Eat Beef. . . Because the West Wasn’t Won on Salad. . .*, STRANGER IN THE SUBURBS BLOG (Feb. 17, 2012), <http://smalltownstranger.wordpress.com/2012/02/17/eat-beefbecause-the-west-wasnt-won-on-salad/>.

44. See *Beef Checkoff Questions and Answers*, BEEF BOARD, [http://www.beefboard.org/about/faq\\_aboutcheckoff.asp](http://www.beefboard.org/about/faq_aboutcheckoff.asp) (last visited Mar. 19, 2014).

it could be tailored to guide the progression of bison ranching and, hopefully, prevent the mistakes of the beef industry from being repeated by the bison industry.

A true beef “industry”<sup>45</sup> was made possible by rapid long-distance transportation and refrigeration.<sup>46</sup> These developments enabled ranchers to raise calves in rural areas and then move them to urban centers for slaughter. This increased the number of people who could access the beef market<sup>47</sup> and made it possible for them to enjoy their beef without having to live near the sounds and smells of cattle. In addition, transportation and refrigeration relieved farms of the constraints on space imposed by urban surroundings. Today, these advantages have been taken to excessive proportions. Away from the public eye, cattle ranches can become enormous, crowded lots of mud, rather than the green expanses of pasture many people imagine.<sup>48</sup>

A second development from which the beef industry benefited was the compartmentalized business model that sprung from the first and second Industrial Revolutions.<sup>49</sup> Today, the process of turning calves into meat is segmented so that a variety of entities own the same cow at different stages of life.<sup>50</sup> Each stage works independently to maximize production and profitability,<sup>51</sup> thereby increasing the production and efficiency of the whole. However, the segmentation has also led to conflict amongst the varied actors at different stages of the production chain, each of whom has different

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45. This term should be understood as distinct from the small-scale beef production enterprises where a single rancher raises, slaughters, and sells the product to consumers who lived nearby. In this sense, a typical CSA would probably not be included in the term’s scope.

46. See FUSSELL, *supra* note 15, at 21–23.

47. *Id.* at 23.

48. POLLAN, *supra* note 13, at 72.

49. See FUSSELL, *supra* note 15, at 22–24.

50. Today there are normally four stages to beef production in America: cow-calf operation, stocker (pasture-grazing), finishing, and processing or slaughter. See, e.g., CATTLEMEN’S BEEF BD. & NAT’L CATTLEMEN’S BEEF ASS’N, MODERN BEEF PRODUCTION: FACT SHEET 1 (Sept. 2009), available at [http://www.explorebeef.org/CMDocs/ExploreBeef/FactSheet\\_ModernBeefProduction.pdf](http://www.explorebeef.org/CMDocs/ExploreBeef/FactSheet_ModernBeefProduction.pdf) (last visited Mar. 17, 2014).

51. See, e.g., WASH. STATE DEP’T. OF AGRIC., SUMMARY OF MEAT PROCESSING ISSUES IN WASH. STATE 2, available at [agr.wa.gov/FoF/docs/MeatProcessing.pdf](http://agr.wa.gov/FoF/docs/MeatProcessing.pdf) (last visited Mar. 28, 2014) (discussing the different incentives packers and producers have in relation to their portions of beef processing).

levels of access to the market.<sup>52</sup> Packers at the end of the chain now occupy the only stage responsible for marketing beef and collecting payment from those who eat it.<sup>53</sup> In a way, packers serve as a dam in the flow of cattle to consumer, giving them great power to control the price of beef at the expense of producers but not themselves. This has bred distrust of packers on the part of producers.<sup>54</sup>

Third, the modern beef industry owes its tenacity to the high levels of medical science and engineering it has used to its advantage. Modern breeding has made a rapid process of selecting for traits that continually improve productivity.<sup>55</sup> This is achieved through technology that enables breeders to extract, store, and ship the semen of genetically desirable bulls,<sup>56</sup> which is then used to artificially inseminate thousands of female cows around the world.<sup>57</sup>

One of the traits often selected for is the ability to thrive on corn.<sup>58</sup> Because corn is overproduced in America, it is exceedingly cheap.<sup>59</sup> Thus, feeding it to cattle, who quickly gain weight from eating it, is

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52. Stephanie Paige Ogburn, *Cattlemen Struggle against Giant Meatpackers and Economic Squeezes*, HIGH COUNTRY NEWS (Mar. 21, 2011), <http://www.hcn.org/issues/43.5/cattlemen-struggle-against-giant-meatpackers-and-economic-squeezes>.

53. See, e.g., ELANOR STARMER, AGRIBUS. ACCOUNTABILITY INITIATIVE, LEVELING THE FIELD, ISSUE BRIEF #4: HOGGING THE MARKET: HOW POWERFUL MEAT PACKERS ARE CHANGING OUR FOOD SYSTEM AND WHAT WE CAN DO ABOUT IT, 4 available at [http://www.ase.tufts.edu/gdae/Pubs/rp/AAI\\_Issue\\_Brief\\_4.pdf](http://www.ase.tufts.edu/gdae/Pubs/rp/AAI_Issue_Brief_4.pdf) (comparing the meat production process to an hourglass, where producers are represented by the top bulb, consumers the bottom, and meatpackers by the narrow portion separating the two).

54. E.g., Ogburn, *supra* note 52.

55. E.g., Suzanne Sechen, *Developments in New Animal Technologies Show Rapid Advancement: CVM Keeping Pace*, 22 F.D.A. VETERINARIAN NEWSLETTER 1 (2007), available at <http://www.fda.gov/animalveterinary/newsevents/fdaveterinariannewsletter/ucm085008.htm> (describing technologies of cloning, biotechnology, genomics, proteomics, pharmacogenomics, and nanotechnology, all of which are being harnessed to speed up and improve breeding and trait selection for livestock).

56. EDExcel FOUND., ARTIFICIAL INSEMINATION OF CATTLE, available at <http://www.biopics.co.uk/edexcel/biotechnol/artins.html> (last visited Feb. 8, 2013).

57. *Id.* Thousands is not an exaggeration. One Holstein bull's semen has been used to yield over 70,000 daughters in more than a dozen different countries. Blackburn, *supra* note 29, at 250 (citing B.J. Van Doormaal et al., *Genetic Diversification of the Holstein Breed in Canada and Internationally*, 33 INTERBULL BULLETIN 93–97 (2005)).

58. See POLLAN, *supra* note 13, at 68 (“[A]nimals exquisitely adapted by natural selection to live on grass must be adapted by us . . . to live on corn.”). See also Gurian-Sherman, *supra* note 29, at 17.

59. It is so cheap that many corn growers cannot make a livelihood on their crop yield alone but depend on off-farm jobs and government subsidies to commodity crop growers. IMHOFF, *supra* note 13, at 16, 59–62.

the formula for producing slaughter-ready cows very quickly<sup>60</sup> and very cheaply.<sup>61</sup> It is also the formula for seriously poor animal health.<sup>62</sup>

Perhaps fortunately, modern science has also developed antibiotics. Were it not for antibiotics,<sup>63</sup> modern cattle ranching<sup>64</sup> might be made impossible by acidosis<sup>65</sup> and other diseases<sup>66</sup> prevalent in non-nutritional, crowded, and dirty feedlot conditions. In addition, antibiotics are often used on feedlots for non-therapeutic purposes to increase production, as are growth hormones.<sup>67</sup> The cattle

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60. POLLAN, *supra* note 13, at 71.

61. *Id.* at 67–68.

62. *Id.* at 77. Veterinarians warn that a grain-based diet is not sustainable. *Id.* at 78. Among other issues, it can cause a cow to bloat so much that its rumen, one of its stomachs, presses on its lungs, suffocating it. *Id.* at 77–78.

63. Paige Tomaselli & Meredith Niles, *The Road to Reform*, in C.A.F.O.: THE TRAGEDY OF INDUSTRIAL ANIMAL FACTORIES 275, 278 (Daniel Imhoff ed., 2010). Substantially more antibiotics are given to cattle each year than are given to humans. Doug Gurian-Sherman, *The Hidden Costs of C.A.F.O.s: Smart Choices for U.S. Food Production*, UNION OF CONCERNED SCIENTISTS, Sept. 2008, at 6 (“An estimated 70 percent of all antibiotics and related drugs used in the United States are given to food animals to promote faster growth and stave off diseases in highly crowded CAFOs. Often, these animals are given the same drugs used to treat human illness.”). Such widespread use of antibiotics has contributed to drug resistance in certain strains of bacteria that infect both cattle and humans, such as *Salmonella*. *Id.* (“The National Academy of Sciences has estimated that antibiotic resistance from all sources increases U.S. health care costs by at least \$4 billion annually.”).

64. The phrases “modern cattle ranching” and “standard cattle ranching” in this Note refer to non-traditional ranching methods, particularly the use of concentrated animal feeding operations (CAFOs), or feedlots. These methods could also be referred to as “factory farming.”

65. POLLAN, *supra* note 13, at 78. Acidosis is a condition that occurs when a cow’s diet changes drastically to include more carbohydrates, like corn. Lumin Kung Jr., *Acidosis in Dairy Cattle*, UNIV. OF DEL. C. OF AGRIC. & NATURAL RESOURCES, [http://ag.udel.edu/anfs/faculty/Kung/articles/acidosis\\_in\\_dairy\\_cattle.htm](http://ag.udel.edu/anfs/faculty/Kung/articles/acidosis_in_dairy_cattle.htm) (last visited Feb. 1, 2013). The increase in carbohydrates causes the acidity level of the rumen to rise so high that vital bacteria cannot survive. *Id.* Acidosis can lead to diarrhea, laminitis of the hoof, dehydration, and death if left untreated. STEPHEN BOYLES ET AL., OHIO STATE UNIV. EXTENSION, FEEDLOT MGMT. PRIMER, CH. 10: NUTRITIONAL DISORDERS 56, available at <http://beef.osu.edu/library/feedlot/feedlot.pdf> (last visited Feb. 3, 2013).

66. Two of the principal contributors to the poor level of animal health in feedlots, apart from diet, are the high concentration of the animals and poor excrement management. Both of these make it much easier for disease to spread rapidly. Gurian-Sherman, *supra* note 29, at 17.

67. Tomaselli & Niles, *supra* note 63, at 278. Interestingly, Denmark found that when the use of non-therapeutic antibiotics in chickens and pigs was ceased, the human need for therapeutic antibiotics did increase, but the overall need for antibiotics diminished and productivity increased. *Id.* at 278 (citing *Danish Ban on Antibiotics Proves Successful*, FOOD PROD. DAILY (May 5, 2003)). Because of concerns that consuming beef from cattle who were given certain hormones might be harmful to humans, the European Union has banned the beef

industry could not be as productive as it is today without modern science.

A fourth factor contributing to the success of the beef industry in America is lobbying. The mighty National Cattlemen's Beef Association (NCBA) enjoys considerable lobbying power, both with Congress<sup>68</sup> and with the United States Department of Agriculture (USDA).<sup>69</sup> The NCBA has played a major role in the makeup of school lunches<sup>70</sup> and in the configuration of the "Food Pyramid,"<sup>71</sup> insisting beef products deserve a place in the American diet, in spite of scientific evidence to the contrary.<sup>72</sup>

of cows administered any of the following: oestradiol-17 $\beta$ , testosterone, progesterone, zeranol, trenbolone acetate, and melengestrol acetate. *See, e.g.*, U.N. Directorate-General, *Opinion of the Scientific Committee Veterinary Measures Relating to Public Health: Assessment of Potential Risks to Human Health from Hormone Residues in Bovine Meat and Meat Products*, U.N. Doc. XXIV/B3/SC4 (Apr. 30, 1999), available at [http://ec.europa.eu/food/fs/sc/scv/out21\\_en.pdf](http://ec.europa.eu/food/fs/sc/scv/out21_en.pdf).

68. *See, e.g., Here's an Easy One*, N.Y. TIMES, Jan. 15, 2011, available at [http://www.nytimes.com/2011/01/16/opinion/16sun3.html?\\_r=0](http://www.nytimes.com/2011/01/16/opinion/16sun3.html?_r=0) (berating members of Congress for their pandering to farm lobbies). The National Cattlemen's Beef Association has a Political Action Committee that raises funds to "support political candidates who support the U.S. beef cattle industry." *NCBA-PAC—One Mission, One Voice*, NAT'L CATTLEMEN'S BEEF ASS'N, <http://www.beefusa.org/ncba-pac-onemissiononevoice.aspx> (last visited Feb. 4, 2013).

69. *See, e.g.*, Steve Johnson, *The Politics of Meat: A Look at the Meat Industry's Influence on Capitol Hill*, FRONTLINE, <http://www.pbs.org/wgbh/pages/frontline/shows/meat/politics/> (last visited Jan. 20, 2014) (quoting Michael Taylor, head of the Food Safety and Inspection Service arm of the USDA, regarding his surprise at discovering the pre-set speed dials on his office phone: "On the telephone there were two speed dials with names by them. And one was to the American Meat Institute and the other was to the National Cattlemen's Association."). The blog maintained by the National Cattlemen's Beef Association includes constant updates about the Association's efforts regarding bills and regulations that the Association considers to be of concern to its members. BELTWAY BEEF, <http://www.beltwaybeef.com> (last visited Feb. 4, 2013). There are also frequent entries composed by members of Congress expressing their allegiance to the Association's causes. *See, e.g.*, Rep. Kristi Noem, *Looking Forward for Agriculture*, BELTWAY BEEF (Jan. 4, 2013, 10:25 AM), <http://www.beltwaybeef.com/2013/01/looking-forward-for-agriculture.html>; and Rep. Jim Costa, *Costa Calls on Congress to Reform RFS*, BELTWAY BEEF (Dec. 14, 2012, 3:48 PM), <http://www.beltwaybeef.com/2012/12/costa-calls-on-congress-to-reform-rfs.html>.

70. *NCBA: Beef Remains an Important Part of School Lunches*, DROVERS CATTLE NETWORK, <http://www.cattlenetwork.com/cattle-news/latest/NCBA-Beef-remains-an-important-role-in-school-lunches-173329181.html> (last updated Oct. 9, 2012) (describing "the policy side of NCBA" as being "very active" and waging "a lot of fights," so as to persuade the USDA that beef should be "kept on center of plates" in the Healthy and Hunger-Free Kids Act of 2010).

71. *The Nutrition Source: Food Pyramids and Plates: What Should You Really Eat?* HARV. SCH. PUB. HEALTH, <http://www.hsph.harvard.edu/nutritionsource/pyramid-full-story/#References> (last visited Jan. 25, 2013).

72. *See, e.g., id.*

The fifth ingredient in the recipe for beef success is the Beef Research and Information Act,<sup>73</sup> commonly referred to as the “beef checkoff.” The act is the focus of the rest of this Note, because it is the factor most vulnerable to change and most adaptable for use as a promotion tool for bison. Readers may not be familiar with the checkoff by name<sup>74</sup> but have likely encountered the television advertisements bearing the slogan, “Beef. It’s What’s For Dinner.”<sup>75</sup> Those advertisements are funded by the beef checkoff and technically speak on behalf of the federal government.<sup>76</sup> Indeed, in 1985, Congress determined that it was in the national interest to foment the strength of the beef industry, and it enacted the checkoff to do so.<sup>77</sup>

In very basic terms, the checkoff demands a one-dollar “assessment” from the seller every time a head of cattle is sold, including each time a producer sells a cow to another producer down the production chain.<sup>78</sup> This money is then used by a national “Beef

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73. Beef Research and Information Act, 7 U.S.C.A. §§ 2901–2911 (West, Westlaw through P.L. 113-74). This Act is also known as the Beef Promotion and Research Act of 1985 or, in this Note, the “Beef Act.”

74. Many members of the beef industry are not familiar with the checkoff by name. Memorandum from Dan Hoffman, Aspen Media and Market Research, to Lynn Heinze, Vice President of Comm’n Cattlemen’s Beef Board 4 (July 18, 2012) (finding that 14 percent of producers did not recognize the term “checkoff” without prompting, and 10 percent still did not show recognition upon being given a description of the program).

75. For an example of such an advertisement, see CATTLEMEN’S BEEF BD. & NAT’L CATTLEMEN’S BEEF ASS’N, <http://www.beefitswhatsfordinner.com/> (last visited Feb. 4, 2013). The well-known advertising campaign using the slogan “Got Milk?” had similar checkoff origins. Jennifer Williams Zwagerman, *Checking Out the Checkoff: An Overview and Where We Are Now that the Legal Battles Have Quietened*, DRAKE J. AGRIC. L. 149, 150 (2009).

76. The designation of these advertisements as “government speech” is in fact based on the Supreme Court decision of *Johanns v. Livestock Marketing Association*, discussed later in this Note. 544 U.S. 550 (2005).

77. 7 U.S.C.A. § 2901. If it ever was in the national interest to promote beef, evidence available today regarding beef’s health and environmental consequences indicates this is not necessarily the case anymore. See text accompanying notes 23–33 (describing the animal-health and environmental consequences of modern beef production); see also *infra* notes 34 and 186 (describing the negative health effects and widespread consequences of substantial beef consumption).

78. 7 U.S.C.A. § 2904(8)(A). This section reads, “[E]ach person making payment to a producer for cattle purchased from the producer shall . . . collect an assessment and remit the assessment to [a Board created by the act to distribute the funds to organizations for research and advertisements] . . . .” *Id.* A “producer” is defined as “any person who owns or acquires ownership of cattle,” but excludes those whose “only share in the proceeds of a sale of cattle or beef is a sales commission, handling fee, or other service fee.” 7 U.S.C.A. § 2902(12).

Board,”<sup>79</sup> made up of cattle producers and importers,<sup>80</sup> to “develop plans or projects of promotion and advertising, research, consumer information, and [beef] industry information.”<sup>81</sup> Such projects include the “Beef. It’s What’s For Dinner.” commercials, as well as research into new cuts of beef and outreach to restaurants to encourage more beef menu items.<sup>82</sup> The activities funded by the checkoff seem to have had their intended effect, and recent decades have seen an increase in the demand for beef.<sup>83</sup> They represent just one more way the cattle industry has “steaked out” a comfortable place in American culture.

### III. ENDING THE BEEF CHECKOFF

Unlike the contributions transportation, industry segmentation, medical technology, and lobbying influence have made to the beef industry, the checkoff is not an entrenched part of the cattle industry. In fact, the beef checkoff is vulnerable from three different angles: (1) the checkoff order could be terminated based on producer disapproval, through use of a referendum; (2) Congress could repeal the checkoff’s enabling legislation; or (3) in the absence of any action, the checkoff’s advantages could simply diminish slowly until the program becomes so underfunded that it slips into obsolescence.

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79. Officially, “Cattlemen’s Beef Promotion and Research Board.” 7 U.S.C.A. § 2904(1).

80. *Id.* Producer organizations within each state nominate specific producers for positions on the board, which are allocated according to the number of producers in that state. *Id.* Currently there are 106 members of the board. *Who We Are—Cattlemen’s Beef Board*, BEEF BOARD, <http://www.beefboard.org/about/whowere.asp> (last visited Feb. 5, 2013).

81. 7 U.S.C.A. § 2904(4)(B).

82. Zwagerman, *supra* note 75, at 153.

83. *See, e.g.*, Ronald W. Ward, BEEF CHECKOFF PROGRAMS & THEIR IMPACT ON U.S. BEEF DEMAND 38 (June 15, 2009), available at [www.beefboard.org/evaluation/files/Ward%20Study%202009.pdf](http://www.beefboard.org/evaluation/files/Ward%20Study%202009.pdf) (“Model estimates, over the full 22-year period from 1986 through 2008, show the beef checkoff coefficient to be positive and statistically significant . . .”); *see also* Gary W. Williams & Oral Capps, Jr., *Measuring the Effectiveness of Checkoff Programs*, 21 CHOICES 73, 75 (2006) (“Reported BCRs [Benefit-to-Cost Ratios] for checkoff programs typically range from about 2:1 to 10:1.”). *But see* Henry W. Kinnucan et al., *Effects of Health Information and Generic Advertising on U.S. Meat Demand*, 79 AM. J. AGRIC. ECON. 13, 22 (1997) (finding the effects of generic advertising, like that employed by the beef checkoff, to be “uncertain,” due to the multitude of factors that affect consumer demand, such as consumer taste, type of advertisement, and structural change of the industry, which have not been controlled for empirically).

Part of the beef checkoff's vulnerability lies in the fact that it has never enjoyed the full approval of its constituents. Since before its inception, the Beef Act has been controversial.<sup>84</sup> Once enacted, it was challenged in several federal courts of appeal on the grounds that it violated producers' freedoms of speech and association.<sup>85</sup>

In 2005, one of these cases reached the Supreme Court in *Johanns v. Livestock Marketing Association*.<sup>86</sup> The plaintiffs in *Johanns* were specialty beef producers who argued that the checkoff compelled them to finance advertisements that were detrimental to their business interests. Plaintiffs argued the ads "promote[d] beef as a generic commodity, which . . . impede[d] [plaintiffs'] efforts to promote the superiority of [their niche beef products]."<sup>87</sup>

In assessing the challenge, the Court took note that "[t]he [checkoff] program is authorized and the basic message prescribed by federal statute, and specific requirements for the promotions' content are imposed by federal regulations promulgated after notice and comment."<sup>88</sup> The Court also noted that the Secretary of Agriculture had the power to "oversee[] the program, appoint[] and dismiss[] the key personnel, and . . . [exercise] absolute veto power over the advertisements' content . . ."<sup>89</sup> These facts, the Court held, indicated that "from beginning to end," the message was government speech, subject to the government speech doctrine.<sup>90</sup> Since the Court was

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84. See David Bowser, *Early Backer Recalls Checkoff Origin, Insists It's Working*, LIVESTOCK WKLY., INTERNET EDITION, <http://www.livestockweekly.com/papers/98/03/19/whlbowl.asp>.

85. This is because of the exceedingly generic quality of the advertisements, which make no distinction between types of beef. Plaintiffs brought these suits because they believed that their specialty beef products were superior, and that leading consumers to believe all beef was equal would undercut their businesses. See, e.g., *Charter v. U.S. Dep't of Agric.*, 412 F.3d 1017 (9th Cir. 2005); *Orleans Intern., Inc. v. U.S.*, 334 F.3d 1375 (Fed. Cir. 2003); *Livestock Mktg. Ass'n v. U.S. Dep't of Agric.*, 335 F.3d 711 (8th Cir. 2003), *vacated* 544 U.S. 550 (2008); *Goetz v. Glickman*, 149 F.3d 1131 (10th Cir. 1998), *cert. denied*, 525 U.S. 1102 (1999); *U.S. v. Frame*, 885 F.2d 1119 (3d Cir. 1989), *cert. denied*, 493 U.S. 1094 (1990).

86. 544 U.S. 550 (2005).

87. *Id.* at 556.

88. *Id.* at 563.

89. *Id.*

90. *Id.* at 560. This doctrine protects government messages from challenges based on the First Amendment's freedom of speech provision. David S. Day, *Government Speech: An Introduction to a Constitutional Dialogue*, 57 S.D. L. REV. 389, 390 (2012). It also protects schemes for compulsory funding of such messages, for, as Justice Thomas noted in his



convinced that the checkoff advertisements “carried the ‘government’s message,’”<sup>91</sup> it found that requiring the plaintiffs to contribute money to them was not unconstitutional, even if the plaintiffs disagreed with their content.<sup>92</sup>

*Johanns*<sup>93</sup> and the ample litigation leading up to it illustrate the ongoing dissatisfaction among certain producers regarding the checkoff. Although litigation has largely quieted since this important defeat, it must not be assumed the lack of litigation is due to any change in opinion.<sup>94</sup> If anything, the objections asserted by some of the ranchers have become *more* pressing: those engaging in less standard, more sustainable ranching methods have greater reason to resent generalized advertising today, as the trend of conscientious consumerism makes niche farming more profitable.<sup>95</sup>

It is important to remain aware of the feelings of beef producers, because the existence of the checkoff is contingent on their continuing satisfaction. The Beef Act makes this clear by providing:

[T]he Secretary may conduct a referendum on the request of a representative group comprising 10 per centum or more of the number of cattle producers to determine whether cattle producers favor the termination or suspension of the order. The Secretary shall suspend or terminate collection of assessments under the order within six months after the Secretary determines that suspension or termination of the order is

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concurrency, “It cannot be that all taxpayers have a First Amendment objection to taxpayer-funded government speech. . . .” *Johanns*, 544 U.S. at 567 (Thomas, J., concurring).

91. Day, *supra* note 90, at 390.

92. *Johanns*, 544 U.S. at 565. *But see* Mich. Pork Producers Ass’n v. Veneman, 348 F.3d 157 (6th Cir. 2003) (finding the pork checkoff’s messages were not government speech and holding that compulsory funding for those messages was therefore an unconstitutional infringement on plaintiffs’ freedom of speech), *vacated* 544 U.S. 1058 (2005).

93. 544 U.S. 550 (2005).

94. *See, e.g.*, Zwagerman, *supra* note 75, at 172 (“While the litigation may have died down for the present, the tensions underlying the cases remain . . .”).

95. *See, e.g.*, Georgina Gustin, *Demand for Grass-fed Beef is Growing*, L.A. TIMES, Nov. 23, 2012, available at <http://articles.latimes.com/2012/nov/23/business/la-fi-grassfed-beef-20121123>; Jon Nielsen, *Organic Beef Growing in Popularity Among Ranchers, Consumers*, DALL. MORNING NEWS (Aug. 15, 2009, 3:45 PM), <http://www.wfaa.com/news/local/64593837.html>.

favored by a majority of the producers voting in the referendum.<sup>96</sup>

In other words, disgruntled producers can request a referendum on whether to continue the order. If a simple majority answers in the negative, the Beef Act will be terminated.<sup>97</sup>

According to survey estimates,<sup>98</sup> this referendum could be easily ordered today. Fifteen percent of producers disapprove of the checkoff,<sup>99</sup> exceeding the number of producers needed to call for a referendum.<sup>100</sup>

This percentage is still far short of the simple majority required to actually terminate the checkoff. However, potential changes to the act could soon turn the tide. For several years, there has been discussion that the current checkoff amount is inadequate to meet the needs of the program.<sup>101</sup> As the Beef Board Executive Committee put it in 2009:

[T]he assessments we now collect are worth half as much as they [were] in 1986 [when the checkoff began] yet we have 19 percent more beef per animal to promote. Put another way, we would need to collect \$2.38 per animal today to have the same buying power as we did in 1986.<sup>102</sup>

Are producers prepared to pay higher assessments to meet these needs? Two recent studies suggest they are not.<sup>103</sup> For example, a July 2012 survey of 900 randomly-selected producers found that 52 percent did not support an increase in the checkoff amount, even to

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96. 7 U.S.C.A. § 2906(b) (West, Westlaw through P.L. 113-74).

97. *Id.*

98. Memorandum from Dan Hoffman, *supra* note 74, at 2.

99. *Id.* Notably, among those who self-identified as “well informed” about the checkoff, the percentage who disapproved was higher, at 18 percent. *Id.*

100. 7 U.S.C.A. § 2906(b) (2013).

101. See, e.g., Sarah Gustin, *Proposal to Increase Beef Check off Dollars in North Dakota*, KXNEWS, <http://www.kxnet.com/story/24408977/beef-check-off-dollars> (Jan. 9, 2014) (citing increased costs for advertising, education and research, “attacks” from animal welfare organizations, and the smaller number of cattle in the country as the reasons the Independent Beef Association of North Dakota has proposed to double its checkoff fees).

102. CATTLEMEN’S BEEF BD. EXEC. COMM., *supra* note 17, at 1.

103. Memorandum from Dan Hoffman, *supra* note 74, at 7.

two dollars,<sup>104</sup> which is less than what the Beef Board contends it needs.<sup>105</sup> The Beef Board has yet to move on the issue, but on its four-entry list of “Frequently Asked Questions About the ‘Beef Checkoff,’” its website self-consciously includes the question, “What would the Beef Board do with the money if the amount were to be increased?”<sup>106</sup> The Board answered that it would carefully consider how to spend these funds, and that re-introducing the “Beef. It’s What’s For Dinner.” message on television, “increasing [the] foreign market development efforts,” and “others” are possibilities.<sup>107</sup> The Board also assures concerned parties that “producers would have to vote on this change [in the assessment amount].”<sup>108</sup>

Although it may reflect the Beef Board’s internal reservations about raising the rate any other way, the reassurance that producers would have a say in the assessment increase seems to be a misstatement of the law. Congress, not producers or the Board, was responsible for designating the current one-dollar amount in the Beef Promotion and Research Act.<sup>109</sup> Nothing in the act prohibits Congress from changing the value of that amount without producer approval.<sup>110</sup> However, it makes sense that the Beef Board would hesitate to recommend unilateral action to Congress, even though input from the sixty-six producers and organizations who commented on the issue to the Board indicates agreement the amount needs to be doubled (or tripled or even quintupled).<sup>111</sup> If Congress made this change, the 52 percent of producers who object to the increase might exercise their power under the referendum clause, and the checkoff would be terminated, not just underfunded.

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104. Memorandum from Dan Hoffman, *supra* note 74, at 7.

105. CATTLEMEN’S BEEF BD. EXEC. COMM., *supra* note 17, at 1.

106. *Beef Checkoff Questions and Answers*, *supra* note 44.

107. *Id.*

108. *Id.*

109. 7 U.S.C.A. § 2904(8)(C) (West, Westlaw through P.L. 113-74). Congress specified that “[t]he rate of assessment prescribed by the order shall be one dollar per head of cattle.” *Id.*

110. Indeed, nothing in the act indicates the Beef Board or voters could raise the assessment rate in place of Congress. *See* *Johanns v. Livestock Mktg. Ass’n*, 544 U.S. 550, 563–564 (2005) (“Congress, of course, retains oversight authority [over the details of the checkoff], not to mention *the ability to reform the program at any time.*”) (emphasis added).

111. CATTLEMEN’S BEEF BD. EXEC. COMM., *supra* note 17, at 4–5.

Current inaction leaves the beef checkoff proceeding toward eventual producer discontent. For checkoff support to continue, producers must feel that they benefit from its efforts. For the efforts to be satisfactory, checkoff activities must be adequately funded. And to acquire adequate funds, the checkoff must raise the assessment rate. The most recent surveys of producers indicate they largely disapprove of such an increase.

So, the unilateral action of Congress appears to be the most realistic instrument of change. Yet even if Congress does raise the rate, it seems improbable the checkoff will benefit in the end. A raise in the assessment rate risks upheaval and possible termination of the checkoff by referendum of producers opposed to the increase.<sup>112</sup>

If Congress does not act, the current trend is likely to continue. As the checkoff returns smaller and smaller benefits for their dollar, producers will slowly grow more and more unhappy. Then the checkoff will either deflate in utility and become obsolete or be abolished by referendum.

The vulnerabilities of the beef checkoff create the perfect climate in which to promote bison. With a dysfunctional checkoff system, on top of the drawbacks to standard cattle ranching noted above, some ranchers may become fed up with the beef business and find an attractive alternative in bison. Other cattle ranchers might find it economically beneficial to tap into the trendy and lucrative “conscientious” beef markets described above, which would likely raise the percentage of ranchers unhappy with the checkoff’s generic advertisements, too.<sup>113</sup> A disaster, spurred by the climate change that cattle ranching itself aggravated, might make grain-based cattle

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112. See 7 U.S.C.A. § 2906(b). Producers might be especially aggravated because sources like *MyBeefCheckoff.com* have been maintaining that this is not even a possibility. *Beef Checkoff Questions and Answers*, *supra* note 44.

113. It would also help further the environmental and health-related goals of this Note, even if not to the full extent that switching to natural bison ranching would. See *supra* notes 26, 39 and accompanying text.

ranching infeasible<sup>114</sup>—and the underfunded checkoff system would be at a loss to come to their aid.<sup>115</sup>

In fact, regardless of whether any of these scenarios come to pass—regardless, even, of whether the beef checkoff is eliminated—now is a good time to promote bison. Consumers are seeking the next new sustainable and healthy product.<sup>116</sup> Natural bison can be that sustainable and healthy product. If the checkoff no longer artificially disconnects consumer demand from product price,<sup>117</sup> bison promotion will be even more successful. Greater environmental and health benefits can be reaped if the misrepresentation that all beef is created

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114. While the consecutive droughts of 2011 and 2012 were the result of multiple factors, climate change almost undoubtedly played a role. See Brad Plumer, *What We Know about Climate Change and Drought*, WASH. POST WONKBLOG (July 24, 2012 12:08 p.m.), <http://www.washingtonpost.com/blogs/wonkblog/wp/2012/07/24/what-we-know-about-climate-change-and-drought/>. Because of the record-setting temperatures and lack of rainfall in the “Farm Belt,” the price of commodity corn, already rising due to increased demand from ethanol producers, soared in comparison to recent years. *U.S. Drought 2012: Farm and Food Impacts*, U.S. DEP’T AGRIC. ECON. RES. SERVICE, <http://www.ers.USDA.gov/topics/in-the-news/us-drought-2012-farm-and-food-impacts.aspx> (last visited Feb. 5, 2013). Government commodity subsidies make each drought’s impact only temporary, but the impacts are nonetheless felt by producers of grain-fed livestock and their consumers for several months after the event. See *id.* See also Tim Fernholz, *Climate Change Cost You the McDonald’s Dollar Menu*, QUARTZ (Oct. 23, 2013), <http://qz.com/138384/climate-change-cost-you-the-mcdonalds-dollar-menu/> (reporting on various changes to fast food items and prices, caused by repeated draughts). Climate change is predicted to make the droughts more severe and more frequent, so commodity prices and factory farm production costs are likely to rise for multiple years at a time. Plumer, *supra*.

115. It is unclear what the checkoff does to aid producers during economic hardship. However, when asked, a majority of producers agreed that “in times of crisis,” they “are confident the beef checkoff is on their side.” Memorandum from Dan Hoffman, *supra* note 74, at 5. It should also be noted that this author does not wish a disaster on cattle ranchers. Instead, the point is made to emphasize the precarious position producers occupy when they must rely on cheap corn and good medicines for the cows, in order to make any profit at all.

116. See, e.g., DAVID BURROWS, CARBONOSTICS, FOOTPRINT FOCUS: THE PARADOX OF CHOICE 12 (July 2011), available at [http://www.carbonostics.com/pressRoom/GroceryFootprint\\_ParadoxOfChoice\\_2012.pdf](http://www.carbonostics.com/pressRoom/GroceryFootprint_ParadoxOfChoice_2012.pdf).

117. The public health benefit of beef products being more expensive is not conjecture. Price has a significant effect on the type of food Americans eat. See generally Adam Drewnowski & S.E. Specter, *Poverty and Obesity: The Role of Energy Density and Energy Costs*, 79 AM. J. CLINIC NUTRITION 6 (2004). Cheaper foods are selected more frequently than more expensive foods, even when the cheaper foods are known to be less nutritious. *Id.* See also HEATHER SCHOONOVER & MARK MULLER, INST. FOR AGRIC. & TRADE POL’Y, FOOD WITHOUT THOUGHT: HOW U.S. FARM POLICY CONTRIBUTES TO OBESITY 8 (2006), available at [http://www.iatp.org/files/421\\_2\\_80627.pdf](http://www.iatp.org/files/421_2_80627.pdf) (reporting on studies showing a 93 percent increase in consumption of unhealthy snacks when the price was reduced by 50 percent, and an even greater four-fold increase in consumption of fruit and salad when prices were reduced by 50 percent).

equal, and is all “a valuable part of human diet,”<sup>118</sup> is no longer espoused by our government.<sup>119</sup>

#### IV. BEGINNING TO BOLSTER BISON

Checkoffs are neither inherently good nor inherently bad; they raise consumer demand for the products they promote, whether these are responsibly produced or otherwise.<sup>120</sup> In the case of the beef checkoff, the negative consequences to the environment and human health stem from two facts: first, that it promotes factory-farmed meat indiscriminately, and second, that it promotes beef instead of a more healthy and environmentally-friendly meat source.

Thus, this Note proposes a checkoff through a *Natural* Bison Research and Information Act. Only when bison are raised grazing in a non-factory farm setting are they superior livestock to cattle.<sup>121</sup> Because they evolved on the dry Western range,<sup>122</sup> bison need less

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118. 7 U.S.C.A. § 2901(a)(1) (West, Westlaw through P.L. 113-74). “Congress finds that . . . (1) beef and beef products are basic foods that are a valuable part of human diet.” *Id.* While it is arguable that certain beef products are beneficial to the human diet, none are indispensable. All increase the probability of death from cardiovascular disease or cancer. An Pan et al., *Red Meat Consumption and Mortality*, 172 ARCH. INTERN. MED. 555 (2012).

119. Some might view a renouncement of the beef checkoff, and a disavowal of the value-finding that led to it, to be a move that inspires confidence and restores credibility in our government and the notion that it acts “to promote the general Welfare,” rather than its own short-term interests. U.S. CONST. pmbl. This author views the purpose of the government speech doctrine in food contexts as allowing the government to serve as a leader in declaring what is good for its people. Under this view, promoting beef is a misuse of the doctrine.

120. See, e.g., Williams & Capps, *supra* note 83.

121. The potential to do harm to human health is similar for bison raised in feedlots and cattle raised in feedlots. Rule et al., *supra* note 39, at 1210. The environment is also similarly impacted by feedlot bison and feedlot cattle, because the harms to wildlife, biodiversity, water supplies, and atmosphere are more related to the landscaping and waste management techniques of feedlots than to species. See Gurian-Sherman, *supra* note 29, at 3–5 (discussing the harms caused by CAFOs in a manner that is species neutral).

122. See, e.g., *Raising Bison*, CANADIAN BISON ASS’N, [http://www.canadianbison.ca/producer/about\\_bison/raising\\_bison.htm](http://www.canadianbison.ca/producer/about_bison/raising_bison.htm) (last visited Mar. 18, 2014) (“By virtue of their evolution on the plains of North America, bison are well adapted to the extremes of weather and forage quality that nature produces on the . . . prairies.”).

water,<sup>123</sup> require less grain supplementation,<sup>124</sup> and need less man-made shelter and climate control than cattle.<sup>125</sup> This leads to lower energy expenditures in bison ranching. Bison also enjoy a greater variety of forages,<sup>126</sup> and are willing to venture farther from their water sources than cattle are.<sup>127</sup> These attributes, which can only be taken advantage of in a grass-fed ranching setting,<sup>128</sup> mean they do less damage to plant biodiversity and streambeds than cows.<sup>129</sup> Responsible bison ranching that does not repeat the mistakes of the beef industry is the only type of ranching this Note seeks to encourage.

In imagining a Natural Bison Research and Information Act that advances the meat industry reforms discussed in Part I, many things need to be borne in mind. The basic structural components of such an act need to be tailored to the ideal bison industry's best prospects for growth, sensitive to producer well-being, and constitutional. The details of the assessment amount, collection procedure, duration, oversight, and funded activities need to be determined with an eye to environmental, consumer, and producer best interests. It may also be necessary to create incentive programs to accompany the classic checkoff activities, in order to ensure these interests are prioritized.

As a preliminary matter, a bison checkoff should be conscious of its potential to improve the environment and human health. It should focus its advertising campaigns not simply on generic bison but on bison raised on a strictly grass diet with room to roam.<sup>130</sup> The goal of

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123. KRISTIN L. MILLER, USDA NATURAL RES. CONSERVATION SERV., PLANNING FOR BISON GRAZING ON NATIVE RANGELAND 3 (2002), available at [http://efotg.sc.egov.usda.gov/references/public/ne/range\\_and\\_pasture\\_technical\\_note\\_12.pdf](http://efotg.sc.egov.usda.gov/references/public/ne/range_and_pasture_technical_note_12.pdf).

124. *Raising Bison*, *supra* note 122 (“Nearly all the nutritional needs of bison can be met through grazing perennial grasses.”).

125. *Id.* (“Bison readily tolerate the extremes of winter . . . [and] are also well adapted to obtaining their daily water requirements from snow, whereas cattle generally require liquid water in their winter diet.”).

126. Allen Steuter & Lori Hiding, *Comparative Ecology of Bison and Cattle on Mixed-Grass Prairie*, 9 GREAT PLAINS RES. 329, 333 (Fall 1999).

127. Van Vuren, *supra* note 26, at 120, 122–23.

128. Energy savings based on shelter, food and water provisions, and environmental benefits cannot be reaped in the feedlot setting, because feedlots inherently involve man-made structures and careful diet control.

129. *See, e.g.*, Fleischner, *supra* note 25.

130. Potential slogans that capture this vision include, “Bison: the better bovine,” which could be followed in each advertisement by one reason bison is better than beef for people,

these advertisements should be two-fold: to sell more bison, but also to instill in consumers an impression that such conditions are the *norm* for farmed bison. They should make clear that companies imposing contrary conditions on their animals are of lesser caliber and are less deserving of patronage.

In a similar vein, it will be essential that the bison industry not succumb to the segmentation and power imbalances that plague the beef industry.<sup>131</sup> One harm to be avoided is that bison ranchers lose their direct connection with bison consumers,<sup>132</sup> allowing packers artificially to restrict supply to drive up their own profits, while costing producers vast sums of money.<sup>133</sup> To avoid this, bison checkoff funds could be used to construct and operate regional slaughterhouses that process meat on a for-rent basis.<sup>134</sup> Currently, the beef industry's top four packers purchase the cattle they slaughter, then sell the meat to distributors. This configuration has led small producers, who cannot afford to have their animals processed at distant independent slaughterhouses, to contract out<sup>135</sup> to one of those

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ranchers, the environment, or ecosystems. Another, "Bison: at home on the range. Now on the range at home," exploits the romantic image of bison herds in the West, in order to reinforce the notion that that is the natural and preferable method by which to raise them. At the same time, it impresses a modern sentiment by using the term "range" instead of stovetop, and makes cooking bison, not just ordering it at restaurants, seem accessible.

131. For the sake of efficiency, some segmentation is inevitable. The primary evils to be avoided are the factionalism and power inequities between the different segments on the chain from pasture to plate. *See supra* notes 17, 49–54 and accompanying text.

132. A lack of connection was a major source of the plaintiffs' complaints against the pork checkoff. *Mich. Pork Producers v. Campaign for Family Farms*, 229 F. Supp. 2d 772, 776 (W.D. Mich. 2002).

133. Such actions can breed distrust within a meat industry, and inhibit the ability of production to react to demand or price to react to producer supply. *See Ogburn, supra* note 52.

134. Under this model, there would be a triennial census of bison across the country. Once the number of bison being raised in a given region reached a certain threshold, funds from the bison checkoff collected there would be directed to assist in the construction and maintenance of a regional slaughterhouse. Although the slaughterhouse could be privately owned and workers therein privately hired, the owner of the slaughterhouse would not have any ownership or distribution rights in the bison that passed through it. Instead, the bison ranchers would maintain ownership of the bison themselves and "rent out" the slaughterhouse for a period of days or weeks every year; the facility would process only a single rancher's herd during that period. If ranchers wished, they could sell their animals to a marketing company prior to or following this process, or they could market and distribute the meat themselves.

135. Producers "contract out" to a packer or processor by agreeing to raise animals a certain way in exchange for payment for each animal the processor finds usable. *See FOOD, INC.* (Robert Kenner Films 2008) (documenting this method of producing chickens).



four behemoth packers with more readily available facilities, in an attempt to avoid ceasing to ranch altogether.<sup>136</sup> Then, the contracting ranchers must follow the industrial business model of their enormous owner, whose sole interests are increased profit and increased production, rather than husbandry, stewardship, or consumer health.<sup>137</sup> For-rent facilities funded by the checkoff would allow producers to use FDA-approved equipment to process their meat, but leave them beholden only to the conscientious guidelines of a *Natural Bison Research and Information Act* when determining how to raise their herd. In addition, bison checkoff assessments could be imposed on ranchers and slaughterhouses equally.<sup>138</sup> This would be fairer than the beef checkoff's procedure of collecting from packers under only limited circumstances,<sup>139</sup> even though packers are the most immediate beneficiaries of checkoff activities.<sup>140</sup>

Bison ranchers who feel the checkoff system is sensitive to their interests and is working for them might be less likely to challenge that system. Even so, it is essential that any bison legislation avoid the constitutional weaknesses that stirred up controversy around the mushroom, beef, and pork checkoffs.<sup>141</sup> As mentioned in Part III, the challengers of those programs most vehemently disagreed with the overly general messages. In the beef industry, this was a problem because producers who had decided to specialize by raising certain breeds of cattle, or raising only grass-fed cattle, were compelled to contribute to advertisements that did not differentiate between what

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136. WASH. STATE DEP'T OF AGRIC., SUMMARY OF MEAT PROCESSING ISSUES IN WASH. STATE 1, available at [agr.wa.gov/FoF/docs/MeatProcessing.pdf](http://agr.wa.gov/FoF/docs/MeatProcessing.pdf) (last visited June 25, 2014).

137. See FOOD, INC., *supra* note 135.

138. This could be accomplished by maintaining the structure of the Beef Act, where the entity selling the animal pays the assessment, but adding a provision that slaughterhouses also pay the assessment for every cow they process.

139. 7 U.S.C.A. 2904(8)(A) (“[E]ach person making payment to a producer for cattle purchased from the producer shall, in the manner prescribed by the order, *collect* [but not pay] an assessment and remit the assessment to the Board.”) (emphasis added). A packer is assessed a checkoff fee only if it holds a cow for longer than ten days prior to slaughter. See CATTLEMEN’S BEEF BD. EXEC. COMM., *supra* note 17, at 12.

140. See *Mich. Pork Producers*, 229 F. Supp. at 774–75 (involving plaintiffs who felt the checkoff benefited sellers of pork, which was advertised using checkoff funds, but not sellers of hogs, which were not), *aff’d* 348 F.3d 157 (6th Cir. 2003), *vacated* 544 U.S. 1058 (2005).

141. U.S. v. *United Foods*, 533 U.S. 405 (2001) (mushrooms); *Johanns*, 544 U.S. at 550 (beef); *Mich. Pork Producers*, 348 F.3d at 772 (pork).

they viewed as their superior product and the product of their competitors, who could undercut them in price because of their lower production costs.<sup>142</sup> The beef checkoff was saved from invalidation on free speech grounds only because the Supreme Court found that beef checkoff advertisements were government speech.<sup>143</sup> It is likely the bison checkoff this Note proposes, exclusively promoting grass-fed, free range bison, will be an even bigger target for producers whose current corner of the bison market does not match the description of the commercials.<sup>144</sup> As such, it will be essential to ensure there is sufficient government involvement and oversight to make the bison checkoff advertisements qualify as government speech. Precise formulations would be best determined by government entities and producers, but general provisions would most likely mirror the requirements for USDA approval found in the Beef Act and certified as constitutional in *Johanns*.<sup>145</sup>

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142. *Johanns*, 544 U.S. at 556.

143. *Id.* at 560.

144. This is because the narrow focus of the *natural* bison message runs contrary to the way the majority of bison are raised today. *See, e.g., Bison from Farm to Table*, U.S. DEP'T AGRIC. FOOD SAFETY & INSPECTION SERV. (Aug. 2013), available at [http://www.fsis.usda.gov/wps/portal/fgis/topics/food-safety-education/get-answers/food-safety-fact-sheets/meat-preparation/focus-on-bison/CT\\_Index](http://www.fsis.usda.gov/wps/portal/fgis/topics/food-safety-education/get-answers/food-safety-fact-sheets/meat-preparation/focus-on-bison/CT_Index) (answering the question, "How are bison raised?") with, "They are usually given grain during the last 90 to 120 days before slaughter."; SASKATCHEWAN MINISTRY OF AGRIC., BISON FEEDLOT PROD. INFO. 3, available at <http://www.agriculture.gov.sk.ca/Default.aspx?DN=abe87985-4f7c-4038-8665-6293092129de> (explaining that feedlots are "needed" in order to satisfy consumer demand for a "consistent product year-round"). Far from intending to attack producers already using feedlots to produce bison, the narrow scope is meant to guide this evolving industry in a sustainable and healthful direction, before the bad habits of the beef industry become entrenched in the bison industry. For reasons addressed above, this direction would be lucrative for producers, as well as beneficial to the environment and public at large. *See, e.g., Heitschmidt, supra* note 19, at 9 (describing the low efficiency of modern cattle ranching, which yields an energy output [i.e., calories in meat]/cultural input [i.e., human labor, medical treatments, fossil fuels] of between 0.23 and 0.36).

145. *Johanns*, 544 U.S. at 563–64. The Court was especially persuaded by the facts that

[t]he program is authorized and the basic message prescribed by federal statute, and specific requirements for the promotions' content are imposed by federal regulations promulgated after notice and comment. The Secretary of Agriculture, a politically accountable official, oversees the program, appoints and dismisses the key personnel, and retains absolute veto power over the advertisements' content, right down to the wording. And Congress, of course, retains oversight authority, not to mention the ability to reform the program at any time.

*Id.* (footnote omitted).

It would be important to emulate the Beef Act's prohibition against using checkoff funds for lobbying, too.<sup>146</sup> Though the government can compel subsidies for speech germane to its responsibilities to the people, the First Amendment still protects citizens from being forced to support messages that conflict with their "freedom of belief."<sup>147</sup> Lobbying activities that push particular political agendas or endorse certain political candidates are likely to cross this line.<sup>148</sup> To ensure no confusion or suspicion in this arena, no bison trade association should be housed near Bison Board staff offices, and no bison trade association should be permitted to carry out the duties or activities the checkoff authorizes for the Bison Board.<sup>149</sup>

It may also be wise to explicitly attribute the messages the USDA approves to the Bison Board and the USDA.<sup>150</sup> This approach will both stave off producer vexation at being seemingly associated with the message and enlighten consumers as to the message's origin.<sup>151</sup> It

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146. 7 U.S.C.A. § 2904(10). "The order shall prohibit any funds collected by the Board under the order from being used in any manner for the purpose of influencing governmental action or policy, with the exception of recommending amendments to the order." *Id.*

147. *Glickman v. Wileman Bros. & Elliot, Inc.*, 521 U.S. 457, 471 (1997) (quoting *Abood v. Detroit Bd. of Ed.*, 431 U.S. 209, 235 (1977)). The Court in *Glickman* concluded that the speech funded by the fruit assessments at issue there "cannot be said to engender any crisis of conscience." *Id.* at 472. This was in contrast to a previous case where plaintiffs objected to mandatory union dues on the grounds that they disagreed with the *political actions* the union was taking. *Abood*, 431 U.S. at 212–14. The *Glickman* Court explained that "compelled contributions for political purposes unrelated to collective bargaining implicated First Amendment interests because they interfere with the values lying at the 'heart of the First Amendment[—]the notion that an individual should be free to believe as he will . . .'" *Id.* at 472 (quoting *Abood*, 431 U.S. at 234–35).

148. *Mich. Pork Producers Ass'n*, 229 F. Supp. at 777; Zwagerman, *supra* note 75, at 156–57.

149. GEOFFREY S. BECKER, FED. FARM PROMOTION ("CHECK-OFF") PROGRAMS, REPORT FOR CONGRESS 5 (Oct. 20, 2008).

150. The fact that the Beef Act's advertisements were *not* explicitly attributed to the government caused Justice Ginsburg to "resist ranking the promotional messages . . . as government speech." *Johanns*, 544 U.S. at 569 (Ginsburg, J., concurring).

151. Many checkoff-funded advertising campaigns have been attributed broadly to the producers of the checkoff's product, which gives the impression that all producers agree with them. For example, when *Johanns* was decided, "Beef. It's What's For Dinner." commercials were credited to "America's Beef Producers." *Johanns*, 544 U.S. at 564. Current commercials now disclaim, "Funded by the Beef Checkoff" in fine print, but this does not make plain the classification as government speech. *See, e.g., Beef "The Island,"* YOUTUBE (LandOfLeanBeef May 15, 2012), available at <https://www.youtube.com/watch?v=d2Oaizez9HE> (last visited Mar. 12, 2014). The cotton checkoff's commercials are still attributed generally to "America's

might even protect against as-applied constitutional challenges.<sup>152</sup> Besides, in light of the improvements the ideal bison industry promises, there are more than enough reasons for the government to be proud to put its name on messages promoting natural bison.

Like the precise role of federal agencies in the bison checkoff's administration, details such as the assessment amount, the procedure by which funds will be collected, how long the checkoff will be in place, and what activities will be funded are features best worked out through the cooperative efforts of experts like bison producers, Congress, and the USDA.<sup>153</sup> However, some general terms would be advisable, based on lessons learned from previous assessments: (1) Establishment of a Bison Board whose members are nominated by a caucus of regional or state bison producers and confirmed by the Secretary of the USDA. This board would reflect the basic structural elements of the Beef Board, in order to attain the required level of government involvement for the Board to be considered a public entity for purposes of First Amendment challenges;<sup>154</sup> (2) The assessment per head of bison should be a small, fixed amount. This suggestion comes from the USDA itself, which has warned of the

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Cotton Producers and Importers." See, e.g., *Hayden Panettiere—The Fabric of My Life (Official Music Video)*, YOUTUBE (Discover Cotton Apr. 15, 2013), available at [http://www.youtube.com/watch?v=4x6P\\_ismccQ](http://www.youtube.com/watch?v=4x6P_ismccQ) (last visited Mar. 31, 2014).

152. In *Johanns*, the Court warned that producers could make an as-applied constitutional challenge regarding checkoff promotions "if it were established . . . that individual beef advertisements were attributed to [them]." *Johanns*, 544 U.S. at 565. In other words, if the speech was in some way traceable to them, it could be a violation of producers' right not to be associated with speech they found disagreeable. *Id.* The dissenting justices believed failure to credit the government for the messages was dispositive and that "if government relies on the government-speech doctrine to compel specific groups to fund speech with targeted taxes, it must make itself politically accountable by indicating that the content actually is a government message . . ." *Id.* at 571 (Souter, J., dissenting).

153. The fact that checkoff provisions reflected informed government findings and were the result of democratic processes was important to *Johanns*' holding that checkoff advertisements were government speech. *Johanns*, 544 U.S. at 561.

154. The plaintiffs, in a major challenge to the pork checkoff, based part of their constitutional argument on the fact that checkoff funds went to a Pork Board that was virtually indistinguishable from the National Pork Producers Council, the pork equivalent of the NCBA. *Mich. Pork Producers Ass'n*, 229 F. Supp. at 777; Zwagerman, *supra* note 75, at 156–57. This meant that pork producers were being compelled to associate themselves not only with the Pork Board but also with a private trade organization that participated in lobbying and political activities. Zwagerman, *supra* note 75, at 156–57. Such a configuration was unlikely to be protected under the government speech doctrine, and the Pork Board severed its ties with the National Pork Producer's Council as part of a settlement. *Id.* at 157.

legal difficulties and perverse incentives that can arise from tying an assessment rate to the market value of the animal being sold, as was proposed initially for the beef checkoff;<sup>155</sup> (3) The assessment should be paid by the seller and collected by the purchaser in every sales transaction. The purchaser would then remit collected assessments to the Bison Board directly. In the case of transactions for the use of a slaughtering facility, the producer would pay her assessment to the slaughterhouse owner. Upon remitting that assessment to the Bison Board, the slaughterhouse owner would also pay an assessment himself for each bison he processed; (4) The checkoff program should be terminable by referendum. If 10 percent of producers (including slaughterhouse owners)<sup>156</sup> signed a petition to hold a referendum within one year,<sup>157</sup> a referendum would be held.<sup>158</sup> If the referendum resulted in a simple majority of producers (including slaughterhouse owners) voting to discontinue the checkoff, then the checkoff collections and activities would cease and the Board would

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155. S. Rep. No. 94-463, at 11 (1975), *reprinted in* 1976 U.S.C.C.A.N. 1051, 1062-63 (noting that because assessments are collected from producers by subsequent purchasers, a purchaser whose custody of a cow results in the loss of value—i.e., because the cow becomes sick in its care—could pay to the next purchaser a lower assessment than it paid and keep the difference). The assessment should be small to avoid the discontent seen amongst cattle ranchers, discussed above. *See* Memorandum from Dan Hoffman, *supra* note 74, at 7.

156. The largest slaughterhouse owners are included as producers under the Beef Act, because they are “person[s] who own[] or acquire[] ownership of cattle.” 7 U.S.C.A. § 2902(12) (West, Westlaw through P.L. 113-74). However, if the infrastructure provisions outlined in this Note were adopted, this would not be the case in the bison industry. Slaughterhouses would not purchase the bison, but rather would have the limited role of a service facility for bison processing. Nevertheless, slaughterhouses have an interest in the size of the market for the animal they process, and as such, they should be included in bison checkoff assessments and benefits. Under the Natural Bison Research and Information Act, they would explicitly be given a vote in referenda, even though they would not be “producers” of bison, *per se*.

157. In the pork industry, the pork checkoff established the timeframe by which the signatures to the petition must be collected. Pork Promotion, Research, and Consumer Information, 7 U.S.C.A. § 4812(b)(1)(A) (West, Westlaw through P.L. 113-74). Since opinions often change, establishing a timeframe for collecting signatures in a bison checkoff will add assurance that the petition’s signatories are all concurrently in agreement with the petition’s purpose.

158. In the Beef Act, the Secretary of the USDA is given permissive authority to hold a referendum on terminating the order under such conditions. 7 U.S.C.A. § 2906(b) (West, Westlaw through P.L. 113-74). In the interests of accountability and preserving a voice in the matter for those most affected, the duty to conduct the referendum on termination would be mandatory under the Bison Act.

be dissolved within six months;<sup>159</sup> (5) The bison checkoff should include a severability clause to avoid the fate of the pork checkoff, whose advertising scheme was found to violate producers' freedoms of speech and association, resulting in the invalidation<sup>160</sup> of the entire Pork Production, Research, and Consumer Education Act of 1985.<sup>161</sup>

Activities funded by a checkoff are rarely enumerated in its authorizing legislation.<sup>162</sup> Nevertheless, because of the unusually specific motivations behind the proposed bison checkoff, it would be prudent for the legislation to more pointedly outline acceptable uses of checkoff money. In particular, allowable research activities should be better defined. In addition to some of the usual research on new meat products and marketing strategies, the funded research should investigate sustainable ranching techniques, maintenance of animal health and genetic diversity, health qualities of bison meat, and impacts of bison ranching on surrounding ecosystems. Research into expanding gourmet markets internationally would also be worthwhile, since North America is unique in its native bison population and much romanticism surrounds the bison.<sup>163</sup> As mentioned above, funds could also be used to help establish infrastructure for bison transport and processing.<sup>164</sup>

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159. This provision mirrors the corresponding provision in the Beef Act. 7 U.S.C.A. § 2906(b).

160. *Mich. Pork Producers*, 348 F.3d at 157. Eventually, the invalidation of the Pork Act was vacated by the Supreme Court in light of *Johanns*, and the Pork Act survives today. *Mich. Pork Producers Ass'n v. Campaign for Family Farms*, 544 U.S. 1058 (2005).

161. 7 U.S.C.A. § 4801 *et seq.* (West, Westlaw through P.L. 113-74), commonly known as the "Pork Act."

162. For example, the Beef Act vaguely calls for "plans or projects of promotion and advertising, research, consumer information, and industry information." 7 U.S.C.A. § 2904(4)(B) (West, Westlaw through P.L. 113-74).

163. This would be economically lucrative and would increase the amount of bison meat consumed worldwide.

164. It is true that a great deal of money would be necessary to accomplish all of these things; but current checkoff funds are not negligible. In 2006, with only a one-dollar assessment, the beef checkoff collected over eighty-four million dollars in revenue. CATTLEMEN'S BEEF BD., COMBINED STATEMENT OF BEEF CHECKOFF ACTIVITIES FOR THE FISCAL YEARS ENDED DURING 2006, 2005, 2004, & 2003 (NOTE 1) (2007), available at <https://www.beefboard.org/uDocs/state-nationalcheckofffinancials2007.pdf>. Still, it may be impossible to fund all these activities simultaneously. Perhaps a staggered implementation plan could be used. Bison assessments could also be higher than classic checkoff amounts, given the higher average price of bison and lower average "cultural input" (costs like irrigation and transportation of feed corn, and non-therapeutic antibiotics) of natural ranching.

Outside of the authorizing legislation, there are various actions the Bison Board could take to foster the broader goals of the beef-to-bison transition. One strategy might be to create incentives for acting in accord with the goals of the ideal bison industry. A promising approach already in existence is known as “payment for environmental services,” or PES,<sup>165</sup> where ranchers who own their grazing lands or have permits to graze on public land are compensated, perhaps with checkoff funds, for making rangeland improvements. Another possibility is to incentivize open-door policies of ranches by refunding a portion of the assessment money to producers who allow public tours of their facilities. This, along with a prohibition on laws that restrict photographs or other publicity of practices at bison ranches and processing plants, so-called “Ag-Gag” laws,<sup>166</sup> could further encourage transparency and accountability for maintaining good husbandry and stewardship practices. The opportunity might even arise for partnerships between private animal welfare or conservationist entities and bison ranchers, to make implementing these ideal practices more technically and economically feasible.

#### V. MAKING ROOM FOR BISON

The final line of the stanza that begins this Note says it best: if America’s West is to continue to sustain both viable ecosystems and viable ranching businesses, then it is essential that changes be made—that bison be introduced—*carefully*. A bison checkoff like the one described above will benefit our country’s health and environmental wellbeing; but a switch to bison consumption that is unaccompanied by fundamental changes to general meat industry practices will only change the source of our problems and not the problems themselves.

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165. For an interesting discussion on PES, see Donahue, *supra* note 14.

166. Several states have enacted “Ag-Gag” laws that criminalize photographing and recording what goes on in agricultural facilities. One example is Iowa’s criminal statute against “Agricultural production facility fraud.” IOWA CODE § 717A.3A (2012). See generally Dan Flynn, *Five States Now Have “Ag-Gag” Laws on the Books*, FOOD SAFETY NEWS (Mar. 26, 2012), <http://www.foodsafetynews.com/2012/03/five-states-now-have-ag-gag-laws-on-the-books/#.URMrrOi1ktw>.

In fostering a new meat industry, it will be important to exercise foresight as to how other industries will be affected by its growth. Agricultural, animal, and environmental laws will need to be updated to incorporate the new industry and avoid the repetition of past mistakes.

Current laws regarding meat inspection largely neglect to mention bison. For example, the Federal Meat Inspection Act does not include bison in its definition of “meat food product.”<sup>167</sup> This means bison products are not necessarily federally inspected for adulterations or proper labeling,<sup>168</sup> and plants that process bison are not required to comply with the same standards of sanitation nor complete post-mortem examination procedures like processors of beef, pork, or poultry do.<sup>169</sup>

In addition, bison is not listed as a species requiring mandatory ante-mortem inspection for humane treatment at slaughter.<sup>170</sup> Instead, when it comes to stunning and cutting regulation, the federal government considers bison an “exotic” species.<sup>171</sup> Since facilities that slaughter exotics are subject to inspection on only a *voluntary* basis under the regulations,<sup>172</sup> bison today can be treated in a sub-humane manner without repercussions. On the other hand, it may seem that bison are covered by the Humane Methods of Livestock Slaughter Act (HMSA),<sup>173</sup> which also requires certain “humane” practices when slaughtering and handling “cattle, calves, horses, mules, sheep, swine, and *other livestock*” (emphasis added).<sup>174</sup>

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167. See Federal Meat Inspection Act, 21 U.S.C.A. § 601(j) (West, Westlaw through P.L. 113-74) (defining “meat food product” as “any product capable of use as human food which is made wholly or in part from any meat or other portion of the carcass of any cattle, sheep, swine, or goats,” as well as equines, but not including bison).

168. 21 U.S.C.A. §§ 601(m)–(n) (West, Westlaw through P.L. 113-74).

169. 21 U.S.C.A. § 608 (West, Westlaw through P.L. 113-74) (beef and pork facility sanitation); § 604 (2013) (beef and pork post-mortem inspection); § 455 (2013) (poultry ante- and post-mortem inspections).

170. Distribution and Marketing of Agricultural Products Act, 7 U.S.C.A. §§ 1621–1638 (West, Westlaw through P.L. 113-74) (providing for mandatory inspection of only cattle, swine, and lambs).

171. 9 C.F.R. § 352.10 (West, Westlaw through P.L. 113-74).

172. *Id.* §§ 352.10(a)(1), 352.2.

173. Humane Methods of Slaughter Act, 7 U.S.C.A. § 1901 *et seq.* (West, Westlaw through P.L. 113-74).

174. 7 U.S.C.A. § 1902(a) (West, Westlaw through P.L. 113-74). There are two methods generally considered to be humane: either the animal is “rapid[ly] and effective[ly]” “rendered



However, the USDA has not exercised its authority under the HMSA to “designate methods of slaughter and of handling in connection with slaughter” for any “other livestock” animals except goats.<sup>175</sup> This effectively eliminates bison processors from the HMSA’s coverage after all and, again, leaves methods of bison handling and slaughter to processors’ discretion. If bison is to become a common household dish, federal inspection laws and USDA regulations will need to be adapted to ensure it is safe for consumption and that the animals are treated humanely at slaughter. State laws vary in how they classify bison for regulating meat and producers.<sup>176</sup> With the advent of the ideal bison industry, many state laws will need to be revisited as well.

The few federal laws that regulate the welfare of animals during their lives have broad exemptions for all farm animals. Although bison might not fit the traditional prototype of “farm animal,” they fall plainly within the Animal Welfare Act’s understanding of that term, which dooms “farm animals, such as, but not limited to livestock or poultry, used or intended for use as food or fiber” to a complete lack of protection.<sup>177</sup> While this Note does not focus on the welfare of animals for their own sake,<sup>178</sup> it is pertinent that animals treated well are known to yield meat higher in quality in a number of

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insensible to pain” prior to being shackled or slaughtered, or the animal is slaughtered in accordance with kosher practices. *Id.* §§ 1902(a), (b). The USDA is charged with researching and designating the particular processes by which the named animals are to be rendered insensible to pain. 7 U.S.C.A. § 1904 (West, Westlaw through P.L. 113-74).

175. *Id.* § 1904(b); *see also* 9 C.F.R. § 313.30 (1991) (providing that “the slaughtering of swine, sheep, calves, cattle, and goats” is humane when performed using an electric current).

176. For example, some states, like Oklahoma, include bison within the definition of livestock and require both ante-mortem and post-mortem inspections of bison for human consumption. OKLAH. STAT. ANN. tit. 2, § 6-183 (West, Westlaw through 2013). Others make such inspections optional, considering bison either “exotic” species or “game” animals. HAW. REV. STAT. § 159-3 (2012) (classifying bison as “exotic”); D.C. MUN. REGS. tit. 25-A, § 706.2 (2014) (classifying bison as “game”). There are also sometimes inconsistencies within the laws of a single state regarding how to classify bison. *Compare* TEX. AGRIC. CODE ANN., § 2.005 (West, Westlaw through 2013) (deeming bison to be “wild animals” that are “distinct from cattle, livestock, exotic livestock, and game animals”), *with* TEX. HEALTH & SAFETY CODE ANN., § 433.003 (West 2003) (including bison in the definition of “livestock” for its meat inspection statute).

177. 7 U.S.C.A. § 2132(g) (West, Westlaw through P.L. 113-74).

178. For an introductory discussion on animal welfare in the context of raising animals for human use, *see* BRUCE A. WAGMAN ET AL., ANIMAL LAW: CASES AND MATERIALS 419–550 (4th ed. 2009).

respects.<sup>179</sup> Moreover, an important ally of the ideal bison industry will be the romanticism surrounding bison as free-roaming, unencumbered beasts. To truly take advantage of this image and ride the coattails of the conscientious consumer movement, the bison business ought to encourage updates to welfare laws to, at the very least, include bison as protected creatures.<sup>180</sup>

It will also be necessary to proceed cautiously through the thicket of environmental provisions and laws. For example, the current regulations defining “concentrated animal feeding operations” (CAFOs) for purposes of the Clean Water Act do not state what number of bison is sufficient to earn a facility the designation of “CAFO.”<sup>181</sup> This is noteworthy because CAFOs are subject to particular restrictions and pollution controls from which other agricultural operations are exempt.<sup>182</sup> The regulation should be modified to define a bison CAFO as consisting of a very low number of bison. Not only would this help to maximize the amount of pollution control on larger herds, but the prospect of heightened regulation might discourage ranches from growing dense enough to

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179. U.N. FOOD & AGRIC. ORG., GUIDELINES FOR HUMANE HANDLING, TRANSPORT & SLAUGHTER OF LIVESTOCK ch. 2 (Gunter Heinz & Thinnarat Srisuvan eds., 2001), *available at* <http://www.fao.org/docrep/003/X6909E/x6909e04.htm>.

180. The Animal Welfare Act calls for standards on the humane handling, care, treatment, and transportation of non-farm animals. 7 U.S.C.A. § 2143. At a minimum, these include standards regarding “handling, housing, feeding, watering, sanitation, ventilation, shelter from extremes of weather and temperatures, adequate veterinary care, and separation by species where the Secretary finds necessary for humane handling, care, or treatment of animals . . . .” *Id.* § 2143(a)(2)(A).

181. 40 C.F.R. § 122.23 (2012).

182. For example, of all ranching facilities, only CAFOs are classified as “point sources” in the Clean Water Act. 33 U.S.C.A. § 1362(14) (West, Westlaw through P.L. 113-74). Because of this designation, CAFOs must install or employ certain pollution control measures or techniques, and they must apply for permits whenever they wish to build, expand, or make other modifications affecting the amount of pollutants (such as manure) that they discharge. *See, e.g., id.* §1311 (describing special effluent limitations applicable only to point sources). *But see* *Alt v. EPA*, 2013 U.S. Dist. LEXIS 152263 (N.D.W.V. 2013) (holding certain discharge by CAFOs not subject to the Clean Water Act).

pass the threshold into CAFO classification. Non-CAFO ranching is better for people,<sup>183</sup> animal,<sup>184</sup> environment,<sup>185</sup> and country.<sup>186</sup>

In addition, several existing environmental laws and programs could be easily adapted to help keep the bison industry on a positive environmental trajectory. Two good examples are the Wildlife Habitat Incentive Payments (WHIP) program and the Environmental Quality Incentive Payments (EQIP) program.<sup>187</sup> These programs

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183. CAFOs create hazardous working and living conditions for the rural communities in which they are located. *See, e.g.*, Gurian-Sherman, *supra* note 29, at 5 (explaining that in communities surrounding CAFOs, there are not only foul odors but “water contaminated by nitrogen and pathogens, as well as higher rates of respiratory and other diseases”). Moreover, they are breeding grounds for dangerous pathogens. Certain strains of *e. coli*, for example, find nourishing reservoirs in cattle and can survive for months in the food troughs and waste. Jeffrey T. LeJeune et al., *Cattle Water Troughs as Reservoirs of Escherichia coli O157*, 67 APPLIED & ENVTL. MICROBIOLOGY 3053, 3053–56 (2001). If improperly managed, the large amount of waste from these CAFO cattle can find its way into ground water, and irrigations systems for “a vast amount of food.” Michael Pollan, *The Vegetable-Industrial Complex*, N.Y. TIMES, Oct. 15, 2006, available at [http://www.nytimes.com/2006/10/15/magazine/15wwln\\_lede.html?\\_r=0](http://www.nytimes.com/2006/10/15/magazine/15wwln_lede.html?_r=0). What is more, the problem is not limited to cattle CAFOs; bison can be hosts for *e.coli* as well, and the bacteria are transmitted to humans through bison meat just as easily as through beef. *See, e.g.*, Qiongzhen Li & Catherine M. Logue, *The Growth and Survival of Escherichia coli O157:H7 on Minced Bison and Pieces of Bison Meat Stored at 5 and 10° C*, 22 FOOD MICROBIOLOGY 415 (2005). This fact simply bolsters the argument that human health is better protected when bison, too, are raised in non-feedlot conditions.

184. CAFOs are harmful not only to the health of the animals housed there but also to wildlife. CAFO manure and leakages from manure lagoons, which CAFOs often use to comply with the Clean Water Act, have caused “dead zones” in the Gulf of Mexico and Chesapeake Bay, and killed millions of fish. Gurian-Sherman, *supra* note 29, at 52.

185. In addition to methane pollution and dead zones from manure runoff, waste generated at CAFOs, specifically, releases ammonia and contributes greatly to ammonium ion concentrations in the atmosphere. Gurian-Sherman, *supra* note 29, at 4. Ammonia is a respiratory irritant and can be deposited in the ground, reducing the biodiversity of sensitive plant life. *Id.* at 4. Similarly, ammonium ion deposition “contributes to the acidification of some forest soils.” *Id.* at 4.

186. The human health problems to which CAFO products contribute affect the whole nation in the form of medical visits that use hospital resources and taxpayer money for conditions that might have been avoided by a healthier diet. IMHOFF, *supra* note 13, at 114. An unhealthy citizenry can also present a threat to national security as people are in too poor a condition to become soldiers or are more susceptible to disease. *Id.* at 165 (describing the effect of malnutrition on the soldiers of World War II, when 40 percent of draftees were rejected from serving due to poor health). In terms of non-health-related detriments, the proliferation of CAFOs results in an aesthetic loss to America’s countryside, which is inherently valuable but also reflected in property values. Gurian-Sherman, *supra* note 29, at 5 (“One study determined that each CAFO in Missouri has lowered property values in its surrounding communities by an average total of \$2.68 million.”).

187. Information about both of these voluntary programs and others can be found by going to the Natural Resources Conservation Service’s website and using the navigation tabs on the

provide for contract arrangements between farmers or ranchers and the federal government.<sup>188</sup> The government pays the farmers or ranchers for implementing stewardship practices that conserve natural resources and allow ecosystems and wildlife habitats to replenish.<sup>189</sup> Given that natural bison ranching involves only minimal environmental consequences, perhaps ranchers could receive payment under these systems or similar ones simply by switching from cattle to free range, grass-fed bison.<sup>190</sup>

## VI. CONCLUSION

Large-scale, natural bison ranching does not represent the absolute pinnacle of environmental and health-oriented progress. In an ideal world, there might be enough will for and supply of vegetarian options that ranching and animal consumption could cease entirely, replaced by sustainable vegetable cultivation. In a different ideal world, bison and poultry might be raised for human use, but only in small-scale, CSA-style operations, where grass or crops grown on the farm would nourish the animals, and animal waste would nourish the plants, creating a natural and sustainable cycle of production. However, both of these worlds remain distant possibilities. A valuable move in a healthful and sustainable direction can be made

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left of the page. *Financial Assistance: Introduction*, U.S. DEP'T AGRIC. NATURAL RES. CONSERVATION SERV., <http://www.nrcs.USDA.gov/wps/portal/nrcs/main/national/programs/financial/> (last visited Feb. 11, 2014).

188. *Id.*

189. *Id.* Many EQIP dollars go to CAFO owners to assist them in implementing the waste pollution control technologies required of them under the Clean Water Act, rather than to small farmers hoping to implement truly reparative changes to stewardship practices. IMHOFF, *supra* note 13, at 60–61. This surprising allocation of funds was the result of a combination of agribusiness lobbyists and anti-pollution nonprofit groups, who argued that Farm Bill funding is the only way to ensure compliance by CAFOs. *Id.* While compliance is a valid priority, it is not the same thing as a conservation effort, which is what EQIP was designed to encourage. It seems contrary to the purpose of the legislation to use government funds to help private entities meet compliance criteria when, under the Clean Water Act, non-compliance is meant to lead to criminal sanctions. 33 U.S.C.A. §§ 1319(c)(1)–(2) (West, Westlaw through P.L. 113-74); *see also id.* § 1319(d) (defining civil sanctions to include a fine of up to several thousand dollars per day of each continuing violation, with variations depending on the level of intent a violator had).

190. Such expanded coverage would require modifications to these programs and an increase in funding, because the number of farmers interested in participating in conservation programs already greatly exceeds available grants. IMHOFF, *supra* note 13, at 57–58.

today by enacting a Natural Bison Research and Information Act to encourage ranchers and consumers to switch from beef to bison.

The extent to which a Natural Bison Research and Information Act can help to implement and guide this move will depend on a nexus of factors. Bison is growing in popularity everyday, and generic bison production is likely to increase, at least a little, regardless of the existence of a checkoff.<sup>191</sup> However, unless this bison production evolves to emphasize methods consistent with sustainable stewardship practices and the natural bison diet, the benefits to the global environment, human health, and local ecosystems that bison offer will be slight. If bison production becomes another chapter in the story of factory farming, potential benefits to animal welfare and economic wellbeing of ranchers will also be lost. Unfortunately, this chapter has already begun.<sup>192</sup>

In order to re-write it, a Natural Bison Research and Information Act should be developed as soon as possible. It should concentrate on promoting the inherent advantages of raising and consuming free-range bison, as well as researching new ways to maximize and harness those advantages. It should provide for an infrastructure that will allow the industry to grow without repeating the near-sighted, profit-propelled mistakes the beef industry has made. It should be accompanied by changes to other laws, so that bison ranching becomes respectful of the sacrifice of the animals and yields a trustworthy source of meat. If the law can move swiftly in these directions, and if the faltering beef checkoff can be eliminated, a reality of a healthier and more environmentally responsible America could be upon us.

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191. See, e.g., Steve Raabe, *Bison Ranchers Rebuild their Thinned Herds as Consumer Demand Grows*, DENVER POST, Dec. 30, 2011, available at [http://www.denverpost.com/business/ci\\_19642984](http://www.denverpost.com/business/ci_19642984) (reporting that [without any checkoff] consumer demand for bison meat now exceeds bison supply).

192. Most bison on the market today are grain-finished and raised on feedlots. See, e.g., *Bison from Farm to Table*, *supra* note 144; SASKATCHEWAN MINISTRY OF AGRIC., *supra* note 144, at 3.