

# MASS MEAT CONSUMPTION, HUMAN RIGHTS, AND ANIMAL WELFARE: AN ALTERNATIVE APPEAL TO LIMITATIVE FEDERAL LEGISLATION

“The animals of the world exist for their own reasons. They were not made for humans any more than black people were made for white, or women created for men.” -Alice Walker<sup>1</sup>

## I. INTRODUCTION

Alice Walker’s quote reflects the heart of a sensitive issue behind humankind’s presumptuous entitlement to unbridled access to animals for meat.<sup>2</sup> Historically, arguments against the mass consumption of meat have typically focused on animal cruelty or human health risks.<sup>3</sup> Lately, however, researchers have begun to acknowledge negative effects of large-scale meat production on human rights and the environment.<sup>4</sup> Un-

---

<sup>1</sup> ThinkExist.com, [http://thinkexist.com/quotation/the\\_animals\\_of\\_the\\_world\\_exist\\_for\\_their\\_own/220889.html](http://thinkexist.com/quotation/the_animals_of_the_world_exist_for_their_own/220889.html) (last visited March 16, 2010).

<sup>2</sup> See Keith E. Sealing, *Attack of the Balloon People: How America’s Food Culture and Agricultural Policies Threaten the Food Security of the Poor, Farmers, and Indigenous Peoples of the World*, 40 VAND. J. TRANSNAT’L L. 1015, 1023 (2007).

<sup>3</sup> When this paper refers to “meat,” it includes beef, chicken, pork, broiler meats, crustaceans, seafood, and other edible meats. Later in the paper, however, the author might use “meat” and “livestock” interchangeably.

<sup>4</sup> See generally Sealing, *supra* note 2; Terrence J. Sorg, Comment, *Global Hunger, a Doubling Population, and Environmental Degradation: Justifying Radical Changes in U.S. Farm Policy*, 6 IND. INT’L & COMP. L. REV. 679 (1996); Roger Segelken, *U.S. Could Feed 800 Million People with Grain that Livestock Eat, Cornell Ecologist Advises Animal Scientists*, CORNELL U. SCI. NEWS, Aug. 7, 1997, available at <http://www.news.cornell.edu/releases/Aug97/livestock.hrs.html>; Alex Kirby, *Hungry World ‘Must Eat Less Meat’*, BBC, Aug. 16, 2004, available at <http://news.bbc.co.uk/1/hi/sci/tech/3559542.stm>; FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED STATES (“FAO”), *Livestock’s Long Shadow: Environmental Issues and Options*, 148-49 (2006) [hereinafter *Livestock’s Long Shadow*]; Augusta Molnar et al., WHO CONSERVES THE WORLD’S FORESTS?: COMMUNITY-DRIVEN STRATEGIES TO PROTECT FORESTS AND RESPECT RIGHTS, *Forest Trends*, at 10 (July 19, 2004), available at <http://www.rainforestcoalition.org/documents/ForestTrends-WhoConserves2007-23.pdf>.

fortunately, these findings lack legal force for curbing meat production and importation, which consumption necessarily entails. Since Congress, along with the vast majority of state and local governments, has failed to limit mass meat production and importation<sup>5</sup>—which involves what some might arguably define as animal torture on several levels<sup>6</sup>—for the sake of animal welfare, perhaps this Comment’s human-rights approach may better prompt federal legislative action.

Even if Congress decided to pass a bill that would limit mass meat production and importation, one serious impediment to such an act rests in the cornerstone of American economics: namely, free market capitalism.<sup>7</sup> Moreover, problems associated with mass meat production, on a global scale, revolve around an age-old social inequity, where the privileges of the rich detrimentally affect society’s impoverished.<sup>8</sup> Here, rich countries’ mass meat-eating privileges impinge on the global poor’s access to food and water; the more wealth a country has, the higher its rate of meat consumption, which negatively impacts the poor, landless, and female-headed households of the world more than other groups.<sup>9</sup>

The U.S. has a responsibility as one of the richest and most meat-consuming nations of the world<sup>10</sup> to develop strategies to limit the negative effects of mass meat consumption on human rights and the environment. As a leader in world economics, one possible strategy that the U.S. can develop is a top-down approach. A top-down approach would require Congress to place a cap on the amount of meat that the United States produces and imports, which is a “quick” fix to some serious problems that the mass meat industry causes. Another possible strategy is a bottom-up or a consciousness-raising approach, where the impetus lies with consumers to limit their meat purchases. The bottom-up approach would satisfy those who argue that change should occur only as a result of supply and demand adjustments; the less people demand, the less manufacturers will supply, and the problems will fix themselves. Both approaches, however, are flawed to some extent.

---

<sup>5</sup> My research has led me to a void in the law. See discussion *infra* Parts II and III.A.

<sup>6</sup> See Answers.com, <http://www.answers.com/topic/torture> (last visited March 17, 2010); discussion *infra* Part III.B.2.

<sup>7</sup> See Sorg, *supra* note 4, at 714.

<sup>8</sup> See, e.g., Mike Ion, Guardian.co.uk, Tories Are Still the Party of Privilege, <http://www.guardian.co.uk/commentisfree/2010/jan/27/tories-party-privilege-inequality-labour> (last visited March 17, 2010).

<sup>9</sup> FAO, Hunger on the Rise, <http://www.fao.org/newsroom/en/news/2008/1000923/> (last visited Feb. 2, 2010); FAO, Dramatic Changes in Global Meat Production could Increase Risk of Diseases, <http://www.fao.org/newsroom/en/news/2007/1000660/index.html> (last visited Feb. 20, 2010).

<sup>10</sup> See discussion *infra* Part II.A.

For starters, the top-down approach would likely take years to implement because the legislative and administrative processes are slow.<sup>11</sup> Also, the largely meat-eating public<sup>12</sup> would probably decry that a meat cap infringes on fundamental freedoms to choose what one eats. Further, markets that deal in meat would undoubtedly suffer since the limit would strike at the heart of those businesses. The bottom-up approach, though, seems likewise unfeasible because the American public enjoys the fact that when it craves a burger, it can get one nearly anytime and anywhere.<sup>13</sup> Thus, relying purely on a consciousness-raising method would seemingly take a long time before one could calculate any significant impact.

This Comment seeks to discover and fully develop the prospects for legal restrictions—whether local, state, or federal—on the mass production and importation of meat. It also addresses how mass meat consumption impacts, among other things, human rights through food source dilapidation and environmental harms that result from water depletion. While states and cities—though few—have enacted anti-animal-cruelty statutes that may limit or eliminate the public’s access to certain meat products, the federal government has passed no such legislation.<sup>14</sup> In other words, though animal cruelty seems a satisfactory reason in and of itself for states and local governments to legislate processes that directly constrain individuals’ presumed freedoms to access and consume meat, the federal government has failed to demonstrate that animal welfare is a sufficient reason to limit mass meat production or importation.<sup>15</sup> Perhaps if animal cruelty will not move Congress to act, human rights violations will.

To clarify, this Comment does not argue that the United States government should force vegetarian diets on the people. Such paternalism

---

<sup>11</sup> For example, Bill AB12, a bill to change the Welfare and Institutions Code in certain respects relating to foster children, was first introduced on December 1, 2008. The Bill was first read in the Senate on February 4, 2010. California Fostering Connections to Success Act, AB12, 111th Cong. (2010), *available at* <http://app.capsearch.com/bills/bill/49892>.

<sup>12</sup> See discussion *infra* Part II.A.

<sup>13</sup> For instance, the rural town of Lincoln, Nebraska has 322 burger-providing businesses in or near the town, and in El Centro, California, one can find a burger at 92 locations in or near the town. To duplicate these results, perform a Google search for “burgers in Lincoln, Nebraska” and “burgers in El Centro, California.” Click on the first listing. Then limit the cuisine to “hamburgers.” Google.com (last visited Feb. 22, 2010); see also <http://www.lifeintheusa.com/food/hamburgers.htm> (last visited Feb. 22, 2010).

<sup>14</sup> ANIMAL LEGAL DEFENSE FUND, Animal Bill of Rights, <http://www.aldf.org/article.php?list=type&type=148> (last visited March 17, 2010).

<sup>15</sup> See *id.*

would probably devastate the economy if the government failed to enact a meat ban in slow stages, which might anger the public and run counter to the tenets of capitalism and consumer choice. In essence, an all-out ban on meat would appear “un-American.”

Nevertheless, a human-rights approach to the problems of mass meat consumption is, to say the least, a worthwhile idea, and the United States must do something to curb the environmental and social injuries that mass meat consumption causes. Part I identifies the United States as a mass meat-consuming nation and establishes that mass meat-consumption affects human rights domestically as well as internationally. Part II explores different legal problems with limiting the sale and manufacturing of food, even if such limits are enacted for ethical reasons. However, this Comment will demonstrate that the U.S. could legitimately cap mass meat production and importation through the public trust doctrine and international instruments. Finally, the conclusion proposes that the federal government—not state and local governments—should impose a cap on meat production as well as importation, which would repair domestic and international harms that mass meat consumption causes.

## II. HAMBURGERS & HARMS

The federal government attempted to legislate the humane treatment of animals when it enacted the Animal Welfare Act (“AWA”) under the power of the Commerce Clause in 1966.<sup>16</sup> The AWA provides that Congress considers the animals covered within the statute as part of interstate or foreign commerce, and Congress used its commerce power to: (1) ensure that people treat animals used in scientific experimentation, exhibition, or at home as pets humanely, (2) “assure the humane treatment of animals during transportation in commerce,” and (3) permit animal owners to recover damages in the event of theft.<sup>17</sup> However, the AWA specifically excludes farm animals from protection against certain cruelties that researchers inflict upon animals for science,<sup>18</sup> and this exclusion

---

<sup>16</sup> See U.S. CONST. art. 1, § 8, cl. 3; 7 U.S.C. § 2131(1)-(3).

<sup>17</sup> 7 U.S.C. § 2131(1)-(3).

<sup>18</sup> 7 U.S.C. § 2132(g) (defining animal as “any live or dead dog, cat, monkey (nonhuman primate mammal), guinea pig, hamster, rabbit, or such other warm-blooded animal, as . . . used, or is intended for use, for research, testing, experimentation, or exhibition purposes, or as a pet; *but such term excludes* (1) birds, rats of the genus *Rattus*, and mice of the genus *Mus*, bred for use in research, (2) horses not used for research purposes, and (3) other farm animals, such as, but not limited to livestock or poultry, used or intended for use as food or fiber, or livestock or poultry used or intended for use for improving

likely exists for the market's benefits in meat and science, as industries. Though factory farms in the United States raise and slaughter millions of animals under some of the most sanitarily deplorable and inhumane conditions imaginable,<sup>19</sup> the federal government has not deemed the welfare of these animals a sufficiently egregious act to warrant substantive attention, let alone effective legislation.<sup>20</sup> Perhaps Congress would reconsider factory farm harms if it realized that mass meat consumption affects not only animal welfare but also human rights to an alarming extent.

### *A. The United States as a Mass Meat Consumer*

Access to meat in the United States, with very little exception, appears unlimited and unabashed. In 2002, the per capita worldwide consumption of meat equaled just over 87 pounds.<sup>21</sup> That same year, the per capita consumption of meat in developed countries amounted to over 176.5 pounds, and in high-income countries, over 206 pounds.<sup>22</sup> The United States surpassed all of these statistics in 2002—the same year—at a per capita meat consumption rate of a whopping 275.136 pounds.<sup>23</sup>

In 1998, the United States was the second largest consumer of broiler meat per capita in the world.<sup>24</sup> In 2005, the United States Department of Agriculture (“USDA”) estimated that, on average, each American consumed 219 pounds of non-seafood meat during that year alone.<sup>25</sup> In

animal nutrition, breeding, management, or production efficiency, or for improving the quality of food or fiber”) (emphasis added).

<sup>19</sup> See photos and the counter of slaughters per second, for example, at ANIMAL RIGHTS CONCERNS, *Animal Slaughter, Abuse and Cruelty. Behind the Screens*, <http://www.animalsuffering.com/animal-cruelty.php> (last visited March 16, 2010).

<sup>20</sup> SONIA WAISMAN ET AL., *ANIMAL LAW: CASES AND MATERIALS* 308 (Carolina Academic Press 3d ed. 2006) (1999) (“There is a surprising lack of legislation in the United States setting even the most basic standard for the treatment of billions of animals who are raised for food.”).

<sup>21</sup> FAO, *FAOSTAT on-line statistical service* (FAO, Rome, 2004), <http://web.archive.org/20080804085818/http://faostat.fao.org> (last visited Oct. 10, 2008) [hereinafter *FAOSTAT*]; EarthTrends.wri.org, [http://earthtrends.wri.org/searchable\\_db/results.php?years=2002-2002&variable\\_ID=193&theme=8&cID=190&ccID=9,11](http://earthtrends.wri.org/searchable_db/results.php?years=2002-2002&variable_ID=193&theme=8&cID=190&ccID=9,11) (last visited Oct. 10, 2008); Metric Conversions.org, <http://www.metric-conversions.org/weight/kilograms-to-pounds.htm> (last visited Oct. 10, 2008).

<sup>22</sup> *FAOSTAT*, *supra* note 21; EarthTrends, *supra* note 21; Metric Conversions.org, *supra* note 21.

<sup>23</sup> *FAOSTAT*, *supra* note 21; EarthTrends, *supra* note 21; Metric Conversions.org, *supra* note 21.

<sup>24</sup> U.S. DEP'T OF AGRIC. (“USDA”), <http://www.fas.usda.gov/dlp2/circular/1998/98-03LP/tables/table50.pdf> (last visited Oct. 31, 2008).

<sup>25</sup> HUMANE SOCIETY OF THE UNITED STATES (“HSUS”), <http://www.hsus.org/web-files/PDF/farm/Per-Cap-Cons-Meat-1.pdf> (last visited Oct. 31, 2008); HSUS,

2004, Americans consumed slightly less, at 216 pounds of non-seafood meat per person.<sup>26</sup> According to the USDA, in 2007, over nine billion chickens, 34.4 million cattle, 109 million hogs, and nearly 265 million turkeys were slaughtered in the U.S. for consumption.<sup>27</sup> The United States was the third largest consumer of seafood in the world in 2003, and during 2005, Americans consumed, on average, 69.1 pounds of seafood.<sup>28</sup>

The United States produces, exports, and imports meat every year.<sup>29</sup> In 2007, the U.S. consumed 28.1 billion pounds of beef and produced 26.42 billion pounds of beef, 5.4 percent of which the U.S. exported to other nations.<sup>30</sup> This means that, in 2007, the United States imported just over 11 percent of its beef. American meat consumption touches other parts of the world; our choices affect human lives and rights domestically as well as abroad.

The United States is both a leading and a massive meat-consuming nation.<sup>31</sup> This Comment will demonstrate that (1) meat consumption at the American rate harms the environment, human health, water resources, and animals and (2) legal instruments exist in the United States that would legitimize limits on meat production and importation.

### B. Human Rights

Mass meat consumption affects human rights on local and international levels because livestock consumes food fit for human consumption;<sup>32</sup> in other words, the food that livestock eat—cereal grains, upon

---

[http://www.hsus.org/farm/resources/pubs/stats\\_meat\\_consumption.html](http://www.hsus.org/farm/resources/pubs/stats_meat_consumption.html) (last visited Oct. 31, 2008).

<sup>26</sup> HSUS, <http://www.hsus.org/web-files/PDF/farm/Per-Cap-Cons-Meat-1.pdf> (last visited Oct. 31, 2008); HSUS, [http://www.hsus.org/farm/resources/pubs/stats\\_meat\\_consumption.html](http://www.hsus.org/farm/resources/pubs/stats_meat_consumption.html) (last visited Oct. 31, 2008).

<sup>27</sup> HSUS, [http://www.hsus.org/web-files/PDF/farm/slaughter-charts\\_all-species.pdf](http://www.hsus.org/web-files/PDF/farm/slaughter-charts_all-species.pdf) (last visited Oct. 31, 2008); HSUS, [http://www.hsus.org/farm/resources/pubs/stats\\_slaughter\\_totals.html](http://www.hsus.org/farm/resources/pubs/stats_slaughter_totals.html) (last visited Oct. 31, 2008).

<sup>28</sup> NATIONAL MARINE FISHERIES SERVICES, [http://www.st.nmfs.noaa.gov/st1/fus/fus05/08\\_perita2005.pdf](http://www.st.nmfs.noaa.gov/st1/fus/fus05/08_perita2005.pdf) (last visited Oct. 10, 2008).

<sup>29</sup> See FAO, Intergovernmental Group on Meat and Dairy Products, Committee on Commodity Problems, 19th Session, <http://www.fao.org/DOCREP/MEETING/004/Y7022E/y7022e00.htm>.

<sup>30</sup> USDA ECONOMIC RESEARCH SERVICE, <http://www.ers.usda.gov/news/BSECoverage.htm> (last visited Nov. 21, 2008).

<sup>31</sup> See *supra* footnotes 21-28.

<sup>32</sup> Ed Ayres, Will We Still Eat Meat?, TIME, Nov. 8, 1999, <http://www.time.com/time/printout/0,8816,992523,00.html>; Sealing, *supra* note 2; WORLDWATCH INSTITUTE, United States Leads World Meat Stampede, July 2, 1998, <https://www.worldwatch.org/node/1626>.

which much of the world depends for food<sup>33</sup>—serves to fatten up food for the rich in the form of filet mignon while much of the world starves for lack of the same cereal grains.<sup>34</sup> Although eating, say, a hamburger will likely disturb nothing beyond an individual's health, the process of producing that same hamburger affects human rights because it diverts human food to animals for grazing,<sup>35</sup> creates health hazards through diseased fecal concentration of farm animals,<sup>36</sup> and depletes potable water sources via environmental injury through runoff and seepage into rivers, streams, and groundwater.<sup>37</sup> The interconnectedness among food scarcity, environmental degradation, and water depletion constitutes a notable overlap.<sup>38</sup>

### 1. Food Resources

One example of ways in which mass food production increases hunger lies in the all-American burger. One pound of beef requires seven pounds of feed grain,<sup>39</sup> which takes 7,000 pounds of water to grow.<sup>40</sup> Thirty-six percent of the world's grain goes to feed livestock and poultry,<sup>41</sup> while nearly 70 percent of all cereal grains in the U.S.—wheat, corn, and other grains fit for human consumption—feed herds of livestock.<sup>42</sup> Vegetable sources, including the grains now used on animal feed, can provide adequate protein for humans.<sup>43</sup> While free-market economists may note that business schemes to increase capital for the

---

<sup>33</sup> “Wheat, rice, maize (corn), millet, and sorghum provide nearly all (70%) the food energy (calories) and up to 90% of all protein consumed by the world's people. Cereal grains are humankind's major food, contributing more than two-thirds of the world production of edible dry matter and half of the world's protein.” U. OF MICH., Human Appropriation of the World's Food Supply, [http://www.globalchange.umich.edu/globalchange2/current/lectures/food\\_supply/food.htm](http://www.globalchange.umich.edu/globalchange2/current/lectures/food_supply/food.htm) (last visited March 16, 2010).

<sup>34</sup> FAO, *Hunger on the Rise*, <http://www.fao.org/newsroom/en/news/2008/1000923/> (last visited Feb. 2, 2010) [hereinafter *Hunger on the Rise*]; see WORLDWATCH INSTITUTE, *supra* note 32.

<sup>35</sup> Ayres, *supra* note 32; Sealing, *supra* note 2.

<sup>36</sup> *Livestock's Long Shadow*, *supra* note 4, at 148-49.

<sup>37</sup> Sorg, *supra* note 4, at 714.

<sup>38</sup> See discussions *infra* for support to the claims in this paragraph.

<sup>39</sup> Ayres, *supra* note 32; Sealing, *supra* note 2.

<sup>40</sup> Ayres, *supra* note 32.

<sup>41</sup> WORLDWATCH INSTITUTE, *supra* note 32.

<sup>42</sup> *Id.*

<sup>43</sup> Ayres, *supra* note 32.

world's poor would result in buying power for cereal crops, hunger is not simply a result of poverty; hunger causes and perpetuates poverty.<sup>44</sup>

Ideally, the cereal grains that livestock consume could be distributed through some sort of economic mechanism to the world's least privileged as a way to nearly eliminate hunger. Hunger and malnutrition cause nearly 60 percent of global deaths each year.<sup>45</sup> Presently, 923 million people worldwide suffer from undernourishment.<sup>46</sup> If the United States stopped feeding grain to cattle but, instead, traded the grain so that impoverished people could eat it, that grain alone could feed nearly 800 million people and would boost the U.S. economy by \$80 million a year.<sup>47</sup> Although markets are negatively affected when customs, such as mass meat consumption, become obsolete, it is not a far stretch of the imagination to assume that new conventions and markets in technology can more than make up for the financial hit of limiting the meat industry. The Food and Agriculture Organization of the United Nations ("FAO") Assistant Director-General for Economic and Social Development explained that, ironically, hunger increased as "the world grew richer and produced more food than ever during the last decade."<sup>48</sup>

Participants in the 2004 World Water Week in Stockholm concluded that a business-as-usual meat model proves unsustainable because meat requires far more water per pound than grains.<sup>49</sup> The Executive Director for the Stockholm International Water Institute expressed, "The bottom line is that we've got to do something to reduce the amount of water we devote to growing food today."<sup>50</sup>

## 2. Domestic Disease: Pfiesteria<sup>51</sup>

*Pfiesteria piscicida* is a microscopic, animal-like cell—more specifically, a single-cell toxic dinoflagellate<sup>52</sup>—that fishermen and researchers

<sup>44</sup> Smita Narula, *The Right to Food: Holding Global Actors Accountable Under International Law*, 44 COLUM. J. TRANSNAT'L L. 691, 698 (2006); Hunger on the Rise, *supra* note 34.

<sup>45</sup> Narula, *supra* note 44.

<sup>46</sup> Hunger on the Rise, *supra* note 34.

<sup>47</sup> Segelken, *supra* note 4.

<sup>48</sup> Hunger on the Rise, *supra* note 34. Not so surprisingly, hunger has hit women-headed households harder than male-headed households. *Id.*

<sup>49</sup> Kirby, *supra* note 4.

<sup>50</sup> *Id.*

<sup>51</sup> Also spelled *Pfisteria* or *Pfesteria*.

<sup>52</sup> U. OF NC, The Fuss Over Pfiesteria, <http://web.archive.org/web/20080513233358/www.unc.edu/depts/cmse/science/pfiesteria.html> (last visited Nov. 28, 2008) ("Dinoflagellates are neither plants nor animals, although they may sometimes



have discovered in response to massive fish kills.<sup>53</sup> Scientists have implicated livestock waste in fish kill outbreaks resulting from diseases like *Pfiesteria*, which cause memory loss, confusion, disorientation, speech impediments, and acute skin burning in humans exposed to contaminated water.<sup>54</sup> Unlike other dinoflagellates and algal toxins that cause harmful red tide, *Pfiesteria* emits no color when it attacks, making it undetectable to the naked eye in water supplies.<sup>55</sup> *Pfiesteria* outbreaks tend to occur during warmer months, when nutrient levels are high, oxygen levels are low, and “only in areas where salt waters and fresh waters mix, such as estuaries, sounds, and rivers near the coast,”<sup>56</sup> which explains why states like North Carolina present an ideal environment for the disease. Specifically, the nutrients that scientists link to *Pfiesteria* outbreaks include phosphorus and nitrogen,<sup>57</sup> and the FAO as well as the Environmental Protection Agency (“EPA”) suggest that livestock waste causes increased phosphorus and nitrogen levels in water.<sup>58</sup> If the government limited mass meat production in the United States, at least to the extent that megafarms could no longer exist, it would reduce concentrated fecal amounts and, hence, the nutrients that cause *Pfiesteria* outbreaks.

### 3. Environmental Degradation and Water Depletion

The government should set forth its best efforts to preserve water as a valuable, life-sustaining element. Freshwater constitutes the world’s drinking water and irrigation water, but only 2.5 percent of the Earth’s water is freshwater.<sup>59</sup> However, since 70 percent of the world’s freshwater is trapped in glaciers, permanent snow, and the atmosphere, only 0.75

---

appear like one or the other (*pfiesteria* is as predatory as any animal, but it can also photosynthesize like a plant after dining on algae).”).

<sup>53</sup> George Parsons et al., *The Welfare Effects of Pfiesteria-Related Fish Kills: A Contingent Behavioral Analysis of Seafood Consumers*, 35 AGRIC. RES. ECON. REV. 348, 348 (2006); N.C. DEP’T OF HEALTH AND HUMAN SERVS., Epidemiology, *Pfiesteria*, <http://www.epi.state.nc.us/epi/oe/pfie.html> (last visited Nov. 28, 2008) [hereinafter EPIDEMIOLOGY IN NC]; VA. DEP’T OF HEALTH, What You Should Know about *Pfiesteria* and Virginia’s Waters, <http://www.vdh.virginia.gov/epidemiology/DEE/Waterborne/Pfiesteria/> (last visited Nov. 28, 2008); Fuss Over *Pfiesteria*, *supra* note 52.

<sup>54</sup> Ayres, *supra* note 32; Fuss Over *Pfiesteria*, *supra* note 52.

<sup>55</sup> MID-ATLANTIC SEA GRANT PROGRAMS, *Pfiesteria* and the Harmful Algae Blooms in the Mid-Atlantic, <http://www.pfiesteria.seagrant.org> (last visited Dec. 8, 2008).

<sup>56</sup> Parsons et al., *supra* note 53, at 348; EPIDEMIOLOGY IN NC, *supra* note 53; Fuss Over *Pfiesteria*, *supra* note 52.

<sup>57</sup> U.S. ENVIRONMENTAL PROTECTION AGENCY (“EPA”), Exercise IV. Nutrients in the Water, [http://www.epa.gov/owow/nps/nps\\_edu/hysteriax4.html](http://www.epa.gov/owow/nps/nps_edu/hysteriax4.html) (last visited Nov. 28, 2008).

<sup>58</sup> *Livestock’s Long Shadow*, *supra* note 4, at 148-49.

<sup>59</sup> *Id.* at 125.

percent of the world's total water comprises usable freshwater.<sup>60</sup> Freshwater is, therefore, a scarce resource worldwide.

Agricultural expansion accounts for the world's leading cause of deforestation<sup>61</sup> and water pollution in the U.S.<sup>62</sup> Rising demands for meat constitute the largest force in agriculture's expansion.<sup>63</sup> Much of the world's agricultural expansion occurs in water-stressed regions that are home to over 2.3 billion people.<sup>64</sup> As the global community diverts more water to raising pigs and fowl, instead of producing crops for human consumption, millions of wells run dry.<sup>65</sup> "India, China, North Africa[,] and the U.S. are all running freshwater deficits, pumping more from their aquifers than rain can replenish."<sup>66</sup>

In 1999, livestock in the United States produced 130 times more waste than people did; for instance, one hog farm in Utah generated more sewage in a year than the entire city of Los Angeles.<sup>67</sup> Fertilizer run-off from chemicals on U.S. megafarms threaten groundwater and, hence, food quality and drinking water.<sup>68</sup>

Of course, water degradation threatens not only domestic waters, where the U.S. raises most of its meat, but also waters abroad. Large companies, like McDonald's, have farmed soybeans meant for livestock feed to satiate the western world's appetite for burgers illegally on deforested land in the Amazonian rainforest, which eliminates canopy and contributes to water shortages through evaporation.<sup>69</sup> Ironically, villagers in a country like Brazil, who face land desertification and, thus, lack water resources due to deforestation,<sup>70</sup> also risk flash floods because the rainforest canopy no longer exists to catch, absorb, and evenly distribute

---

<sup>60</sup> *Id.* at 125-26.

<sup>61</sup> WORLD RAINFOREST MOVEMENT, What Are Underlying Causes of Deforestation?, <http://www.wrm.org.uy/deforestation/indirect.html> (last visited Oct. 10, 2008); Ayres, *supra* note 32.

<sup>62</sup> Sealing, *supra* note 2, at 1028; see *Livestock's Long Shadow*, *supra* note 4, at 126.

<sup>63</sup> Ayres, *supra* note 32.

<sup>64</sup> *Livestock's Long Shadow*, *supra* note 4, at 126.

<sup>65</sup> Ayres, *supra* note 32.

<sup>66</sup> *Id.*

<sup>67</sup> *Id.*

<sup>68</sup> Sorg, *supra* note 4, at 714.

<sup>69</sup> Molnar et al., *supra* note 4, at 10; Michael Astor, *Greenpeace: McDonald's harming the Amazon*, U.S.A. TODAY, April 6, 2006, [http://www.usatoday.com/tech/science/2006-04-06-mcdonalds-amazon\\_x.htm](http://www.usatoday.com/tech/science/2006-04-06-mcdonalds-amazon_x.htm); Forests.org, *McDonald's Linked To Rainforest Destruction*, <http://forests.org/archive/general/macfore.htm> (last visited March 17, 2010); see RAINFOREST COALITION, *FACTBOX – What's So Bad About Deforestation?*, June 11, 2007, <http://www.rainforestcoalition.org/documents/ReutersWhatssobadaboutdeforestation.pdf> (last visited Nov. 28, 2008).

<sup>70</sup> RAINFOREST COALITION, *supra* note 69.

rainfall.<sup>71</sup> If the government were to limit mass meat importation, it could result in less rainforest desertification because the demand for grazing land for livestock would decrease.

### III. LEGAL INSTRUMENTS THAT SUPPORT LIMITATION

One way to significantly reduce the collection of harms of mass meat production is to place a limit on the amount of meat that the United States produces. However, a cap on meat production would do very little, substantively, if not paired with a limit on the amount of meat that the U.S. could import. The FAO recommended that, if the government placed no limits on meat production or importation, or if the U.S. meat-eating population grew to the projected extent, “the environmental impact of [meat production] must be cut by half, just to avoid increasing the level of damage beyond its present level.”<sup>72</sup> The FAO assumed a “business-as-usual” backdrop for its recommendations, but, at the same time, it also recognized that the business-as-usual paradigm will lead to environmental disaster.<sup>73</sup> Limits on meat production and importation would undoubtedly increase the costs of meat in order to sufficiently compensate farmers.<sup>74</sup> This means that the privilege of the wealthy would continue in that only wealthier groups could consistently afford meat. The inevitable consequence to the poor amounts to fewer meat purchases per year. However, poorer persons would nevertheless have plenty of food to eat—after all, all humans can survive on a vegetarian diet. Yet, a vegetarian diet would not be forced on poorer persons because they could still purchase meat, even if less frequently due to higher meat prices.

#### *A. States/local governments: Foie Gras, Prop. 2, and the Dormant Commerce Clause*

Since the AWA specifically excludes federal governance over farm animals, by default, states retain control over farm animal treatment.<sup>75</sup>

---

<sup>71</sup> *Id.* This is not to say that water reclamation schemes could not help rainforest regions. It is only that this particular problem is entirely preventable in the first instance.

<sup>72</sup> *Livestock’s Long Shadow*, *supra* note 4, at xx and 275-76.

<sup>73</sup> *Id.* at 275-76.

<sup>74</sup> See Juliette Jowit, *Why Eating Less Meat Could Cut Global Warming*, THE OBSERVER, Nov. 11, 2007, available at <http://www.guardian.co.uk/environment/2007/nov/11/food.climatechange>.

<sup>75</sup> U.S. CONST. amend. X; *United States v. Sprague*, 282 U.S. 716, 733 (1931) (“The Tenth Amendment was intended to confirm the understanding of the people at the time

Some states and local governments have exercised their control and outlawed the manufacture and/or sale of foie gras—a fatty duck or goose liver delicacy or pâté—for the purposes of guarding these birds against inhumane treatment.<sup>76</sup> Even though consumer demands for foie gras have increased, the following eight state legislatures have brought civil and/or criminal anti-foie gras bills before their Houses and Senates, though none has yet enacted such laws: Connecticut, Hawaii, Illinois, Massachusetts, New York, New Jersey, Oregon, and Washington.<sup>77</sup> The common theme throughout each anti-foie gras bill, both proposed and passed, is to secure the “ethical treatment of animals” and “prohibit the inhumane treatment” of birds used for foie gras.<sup>78</sup>

Similarly concerned with the humane treatment of animals raised for food, California voters passed Proposition 2, the Prevention of Farm

---

the Constitution was adopted, that powers not granted to the United States were reserved to the States or to the people.”).

<sup>76</sup> See, e.g., CAL. HEALTH & SAFETY CODE §§ 25981-25982 (Deering 2009) (banning the production and sale of foie gras as of July 2012); CHICAGO, ILL., MUN. CODE §§ 7-39-001 (2006), available at <http://www.banfoiegras.com/pdf/ChicagoFoieGrasOrdinance.pdf> (following California’s lead, banning the sale of foie gras, and stating, “Birds, in particular geese and ducks, are inhumanely force fed . . . [t]he process that is required to produce this so-called delicacy is totally unacceptable and I [Alderman Joe Moore] want to make this dish both unpopular and unavailable . . . WHEREAS the media has shed light on the unethical practices of the care and preparation of the livers of birds . . . inhumanely force fed . . . all food dispensing establishments . . . shall prohibit the sale of foie gras.”) (repealed by Chicago, Ill., Ordinance 2008-2041 (May 14, 2008)). The production of foie gras involves farmers shoving a metal pipe down geese’s throats two to three times a day for weeks on end in order to force-feed the birds for foie gras mass production, and this process often begins when the birds are only four months old. *Lovenheim v. Iroquois Brands*, 618 F. Supp. 554, 556 n.2 (D.D.C. 1985) (case regarding a shareholder’s proposal to ban a company’s foie gras importation if a committee discovered that production caused birds undue distress, pain, or suffering); Susan Adams, *Legal Rights of Farm Animals*, 40 MD. B. J. 19, 21 (2007). Farmers accomplish the placement of the metal pipe by forcing the birds’ wings in a brace and stretching out their necks. *Lovenheim*, 618 F. Supp. at 556 n.2. As a result of force-feeding, the birds experience “painful bruising, lacerations, sores, and even organ rupture” and can swell up to ten times their normal size due to disease, which inhibits their ability to walk or move. Adams, *supra* at 21. The farmers then place an elastic band around the birds’ throat to disable the birds from vomiting up the large quantities of mashed corn product in their stomachs. *Lovenheim*, 618 F. Supp. at 556 n.2. The AWA does not protect any kind of bird and “only applies to farm animals used in animal testing for non-agricultural research.” Adams, *supra* at 20.

<sup>77</sup> Alexandra Harrington, *Not All It’s Quacked Up to Be: Why State and Local Efforts to Ban Foie Gras Violate Constitutional Law*, 12 DRAKE J. AGRIC. L. 303, 306-09 (2007).

<sup>78</sup> *Id.* at 308-09 (explaining that Chicago’s ban sought to ensure the “ethical treatment of animals,” while Connecticut’s legislative intent aimed to “prohibit the inhumane treatment of birds in the production of certain food items”).

Animal Cruelty Act (“Prop. 2”), in November 2008.<sup>79</sup> Prop. 2 provides that no person shall prevent any egg-laying hen, pregnant pig, or calf raised for veal from turning around freely, lying down, standing up, and fully extending its limbs.<sup>80</sup> The purpose of the act “is to prohibit the cruel confinement of farm animals.”<sup>81</sup> Like anti-foie gras statutes, Prop. 2, for all practical purposes, limited the capacity of the production of animals-for-food based on nothing more than a sense of ethics.

For now, states may enjoy their police powers in restricting and regulating meat production because Congress has not yet exercised its commerce powers to usurp states’ rights relative to farm animal treatment.<sup>82</sup> Livestock caps could mirror the legislative intent behind foie gras bans and Prop. 2, and maybe the limits would succeed. Legally, however, if the federal government took away states’ abilities to govern farm animals, foie gras bans, livestock caps, and even Prop. 2 would not survive a Constitutional challenge because states and local governments may not pass laws that interfere with interstate or international commerce.<sup>83</sup>

If Congress were to regulate the production, importation, or sale of meat, it would simultaneously prevent states from placing caps or bans on meat because such state action would violate the Commerce Clause.<sup>84</sup> While individual states could no longer regulate the purchase or sale of goods like foie gras, states might retain the right to regulate foie gras manufacturing, so long as the product would never end up in interstate commerce.<sup>85</sup> However, Congress may still regulate local foie gras production to the extent that it might substantially affect the economics of interstate commerce.<sup>86</sup> In *Wickard v. Filburn*, 317 U.S. 111 (1942), the defendant violated the Agricultural Adjustment Act of 1938, which Congress enacted under the Commerce Clause, when he raised more wheat than the Act allowed.<sup>87</sup> The defendant argued that he did not intend to sell the extra wheat but to consume it, so the excess wheat did not violate

---

<sup>79</sup> CAL. HEALTH & SAFETY CODE §§ 25990-25994 (Deering 2008), available at <http://www.voterguide.sos.ca.gov/text-proposed-laws/text-of-proposed-laws.pdf#prop2> (effective Jan. 2015).

<sup>80</sup> *Id.* §§ 25990-25991.

<sup>81</sup> *Id.* § 25990.

<sup>82</sup> See 7 U.S.C. § 2132(g).

<sup>83</sup> U.S. CONST. art. I, § 8, cl. 3 (“The Congress shall have power . . . [t]o regulate [c]ommerce with foreign [n]ations, and among the several [s]tates, and with the Indian [t]ribes.”) (emphasis added).

<sup>84</sup> See *id.*; Harrington, *supra* note 77, at 314-15.

<sup>85</sup> See generally *Kidd v. Pearson*, 128 U.S. 1 (1888).

<sup>86</sup> See generally *Wickard v. Filburn*, 317 U.S. 111 (1942).

<sup>87</sup> *Id.* at 114.

the Act because it would never enter the stream of interstate commerce.<sup>88</sup> Nevertheless, the Supreme Court found that the defendant had violated the Act because his extra wheat amounted to an aggregate effect on interstate commerce; if people may raise their own wheat, they will not purchase from other farmers.<sup>89</sup>

While meat production could possibly remain a local manufacturing endeavor, under *Wickard*, Congress may reach even intrastate foie gras production.<sup>90</sup> Like the Court's concern regarding the aggregate effects of wheat overgrowth in *Wickard*,<sup>91</sup> individuals who produce foie gras might elect to not purchase foie gras in the market, which would affect costs and, thus, interstate commerce. The idea that large producers of foie gras, beef, pork, chicken, fish, or broiler meat would enter the market for local, non-interstate or international trade purposes, seems economically far-fetched. At any rate, if state regulation of meat went so far that Congress felt the need to regulate farm animal treatment, then state governance over meat production and meat sales would violate the Constitution under the Commerce Clause.<sup>92</sup> Likewise, state or local caps on any future meat production, sale, and/or importation would violate the Commerce Clause, especially under *Wickard*.<sup>93</sup>

Similar to the legislative intent behind the Commerce Clause, international trade treaties, like the North American Free Trade Agreement ("NAFTA"), create barrier-free trade.<sup>94</sup> States and local governments' limits on mass meat production might interfere with international trade, which would undermine federal authority and the United States' obligations under various trade treaties.<sup>95</sup> Therefore, though mass meat limits may, at first blush, appear best-suited for state and local decision-makers, who tune into their constituents' concerns, states run the risk of Congress stripping them of regulation powers. This would threaten laws that states and cities have already enacted, like Prop. 2 and anti-foie gras statutes. The availability for the federal government to use its commerce powers to constrain states' authority to ban or cap meat requires analysts to focus on Congress. However, any federal focus must look beyond animal wel-

---

<sup>88</sup> *Id.*

<sup>89</sup> *Id.* at 129.

<sup>90</sup> *See id.*

<sup>91</sup> *See id.* at 114.

<sup>92</sup> *But cf.* Harrington, *supra* note 77, at 315 (arguing that the only situation in which states could regulate anything in interstate commerce arises where the acting state perceives a threat due to the product at issue).

<sup>93</sup> *Wickard*, 317 U.S. at 129.

<sup>94</sup> Harrington, *supra* note 77, at 315.

<sup>95</sup> *See id.* at 315-16.

fare to human rights, since farm-animal welfare has thus far failed to warrant adequate federal action.

### *B. Federal government*

The federal government may more appropriately regulate meat production and importation because the Constitution grants Congress exclusive interstate and international commerce trade and regulatory powers.<sup>96</sup> Domestically, the public has an interest in keeping its waters safe from pollution and diseases like *Pfiesteria*.<sup>97</sup> Although the states maintain police powers regarding the general welfare of their citizens,<sup>98</sup> the federal government also has an interest in assuring that large bodies of water—i.e., the Atlantic Ocean—that do not belong to one state or another remain free from diseases, particularly those that could harm humans. Internationally, the government must comply with treaties that recognize fundamental human rights that American mass meat consumption effectively thwarts, such as the rights to food and potable water.

#### 1. The Public Trust Doctrine

The federal government could legitimately impose a limit on meat production under the public trust property rights doctrine.<sup>99</sup> The Romans initially developed the public trust doctrine on the premise that “certain common properties such as rivers, seashores, forests[,] and the air were held by Government in trusteeship for the free and unimpeded use of the general public.”<sup>100</sup> The Romans distinguished between privatizing general public property and interests that ought to be reserved for the benefit of the public.<sup>101</sup> The Romans privatized the former but not the latter.<sup>102</sup>

Under the public trust doctrine, governments should ensure that water—as a “gift of nature”—is “freely available to everyone, irrespective of . . . status . . . rather than . . . permit [its] use for private ownership or commercial purposes.”<sup>103</sup> While the doctrine used to govern only navi-

---

<sup>96</sup> See U.S. CONST. art. I, § 8, cl. 3.

<sup>97</sup> See discussion *supra* Part II.B.2.

<sup>98</sup> See *Carolene Products Co. v. Evaporated Milk Ass'n*, 93 F.2d 202, 204 (7th Cir. 1937).

<sup>99</sup> See Erik Swenson, *Public Trust Doctrine and Groundwater Rights*, 53 U. MIAMI L. R. 363, 363 (1999).

<sup>100</sup> *Perumatty Grama Panchayat v. Kerala*, Kerala H.C. ¶ 13, Dec. 16, 2003; Swenson, *supra* note 99 (The public interests at issue relative to the Roman Empire were navigation and fishing.).

<sup>101</sup> *Perumatty Grama Panchayat*, Kerala H.C. ¶ 13.

<sup>102</sup> *Id.*

<sup>103</sup> *Id.*

gable waters, recently, courts have recognized its applicability to groundwater because public interests are just as dynamic as water itself; interests change, and courts have expanded the doctrine according to the public's needs.<sup>104</sup>

California has similarly recognized that states must maintain water for the benefit of the greater community.<sup>105</sup> In *National Audubon Soc. v. Superior Ct. of Alpine County* (the "Mono Lake" case), 33 Cal.3d 419 (Cal. 1983), which reached the California Supreme Court in 1983, the National Audubon Society sued the City of Los Angeles Department of Water and Power ("Department") in order to enjoin the Department from legally diverting water from four non-navigable streams to which the Department had an appropriation permit.<sup>106</sup> The National Audubon Society argued that the Department's appropriation had decreased water levels at Mono Lake, increased lake salinity, and increased the risk of harm to migratory birds because the island that they used to reside on had become a peninsula, so predators entered the area and killed the birds.<sup>107</sup> Further, the Department's legal water appropriation led to a 33% surface-area decline, which limited access to the lake and diminished "scenic value."<sup>108</sup> The court found in favor of the National Audubon Society and recognized that states have a duty to regulate water use for the community's general benefit.<sup>109</sup>

*Mono Lake* effectively expanded the public trust doctrine to cover more than navigable waters and established that governments "may not grant vested right to public waters."<sup>110</sup> Since California recognized the public's interest in the aesthetics of Mono Lake and the protection of migratory birds, and even though the regulation of water rests with the states, the federal government could plausibly enforce the public trust doctrine in the interest of protecting polluted domestic water that spans many states, especially since water pollution from farm animal waste runoff affects potability and creates toxic *Pfiesteria* in many U.S. regions.<sup>111</sup> The public has a greater interest in access to safe water that

---

<sup>104</sup> See Swenson, *supra* note 99, at 364-65. Swenson argues that the "public nature" of water supports why property rights are not absolute. However, it is the dynamic nature of water that lends to a public nature of water, not the other way around.

<sup>105</sup> See generally *Nat'l Audubon Soc. v. Superior Ct. of Alpine County* (the "Mono Lake" case), 33 Cal.3d 419 (Cal. 1983).

<sup>106</sup> See Swenson, *supra* note 99, at 370.

<sup>107</sup> *Id.*

<sup>108</sup> *Id.*

<sup>109</sup> *Id.* at 369.

<sup>110</sup> *Id.* at 371.

<sup>111</sup> Regions include North Carolina, Virginia, Maryland, Delaware, New Jersey, and New York. Mid-Atlantic Sea Grant Programs, *supra* note 55.



mass meat production threatens than it does in the enjoyment of scenery and migratory birds because water sustains life in basic ways that aesthetics do not. Therefore, the federal government should follow California's example and limit a legal right—the right to unlimited meat—for the benefit and public trust of the people—the right to safe drinking water and groundwater used for growing human food.

Because one can infer that the public trust doctrine does not cover non-domestic harms, one must further examine whether other legal avenues adequately address international environmental injuries resulting from mass meat production, like deforestation, world hunger, and drinking water depletion.

## 2. The Commerce Clause

Article I, section 8(3) of the Constitution grants Congress the power to regulate commerce among the several states to assure survival of a non-fragmented government and to prevent interstate rivalries.<sup>112</sup> In *United States v. Lopez*, 514 U.S. 549, 563-67 (1995), the Court held that Congress may regulate channels, instrumentalities, persons, and things, even intrastate, so long as they either substantially, economically impact or nationally, cumulatively affect interstate commerce.<sup>113</sup>

Congress has used the powers of the Commerce Clause in broad ways to further governmental as well as political interests that have nothing to do with controlling a marketed product. For instance, Congress passed the Civil Rights Act of 1964 through the power of the Commerce Clause, as the Supreme Court discussed in *Heart of Atlanta*, 379 U.S. 241 (1964).<sup>114</sup> The Court explained that “the determinative test of the exercise of power by the Congress under the Commerce Clause is simply whether the activity sought to be regulated is ‘commerce which concerns more States than one’ and has a real and substantial relation to the national interest.”<sup>115</sup> If Congress can regulate race-based discrimination through its commerce powers because the prevention of racism was a national interest and because people travel interstate, Congress could also regulate meat production and importation because protecting people from

---

<sup>112</sup> See U.S. CONST. art. I, § 8, cl. 3.

<sup>113</sup> *United States v. Lopez*, 514 U.S. 549, 563-67 (1995); see also *The Daniel Ball*, 77 U.S. 557 (1870); *Houston E. and W. Tex. Ry. Co. v. United States* (the Shreveport case), 234 U.S. 342 (1914); *Nat'l Labor Relations Bd. (NLRB) v. Jones & Laughlin Steel Corp.*, 301 U.S. 1 (1937); *United States v. Darby Lumber Co.*, 312 U.S. 100 (1914); *Wickard v. Filburn*, 317 U.S. 111 (1942); cf. *United States v. Morrison*, 529 U.S. 598, 612 (2000).

<sup>114</sup> See generally *Heart of Atlanta Motel v. United States*, 379 U.S. 241 (1964).

<sup>115</sup> *Id.* at 255.

coming into contact with dangerous diseases like *Pfiesteria* and fulfilling our international obligations to ensure that humans have food and potable water, which livestock uses up to a large extent, is a national interest.

Most livestock and all other meat, at the very least, affect interstate commerce. All types of livestock travel throughout the United States, and many animals incur the following injuries as a result: stress, bruising, trampling, suffocation, heart failure, heat stroke, serious sun burn, bloat, poisoning, predation, dehydration, exhaustion, broken legs, or even death.<sup>116</sup> Several methods of livestock transport exist, such as rail wagon, truck, road motor vehicle, on hoof (“trekking”), and stacked in crates on trucks.<sup>117</sup> Therefore, the Commerce Clause grants Congress the authority to regulate livestock, and under *Wickard*,<sup>118</sup> this includes livestock produced completely within a state, as well as imported livestock, due to the aggregate effects on interstate commerce.<sup>119</sup>

### 3. NAFTA

The North American Free Trade Agreement (“NAFTA”) is an agreement among the United States, México, and Canada that eliminated or reduced tariffs on all trade goods.<sup>120</sup> Although NAFTA parties sought to open doors of international trade, countries can limit trade, but only for legitimate reasons already enumerated in the agreement.<sup>121</sup> The party seeking limits on trade must prove that the limits include one of the fol-

---

<sup>116</sup> FAO, Guidelines for Humane Handling, Transport and Slaughter of Livestock, Chapter 6: Transport of Livestock, <http://www.fao.org/DOCREP/003/X6909E/x6909e08.htm> (last visited Feb. 22, 2010).

<sup>117</sup> *Id.*

<sup>118</sup> *Wickard*, 317 U.S. at 111.

<sup>119</sup> No obvious interstate commerce interest necessarily has to exist for Congress to act to prevent animal cruelty because interstate commerce has acted as a means or a method to deal with issues beyond the explicit face of commerce. For instance, in *Heart of Atlanta*, preventing racism—due probably exclusively to the political climate of the times—was the interest, while interstate commerce was the method. See generally *Heart of Atlanta Motel v. United States*, 379 U.S. 241 (1964). Here, animal cruelty or human rights would have to be the interest while interstate commerce would be the method of implementation.

<sup>120</sup> Lee Hudson Teslik, *NAFTA's Economic Impact*, Council on Foreign Relations, Mar. 21, 2008, <http://www.cfr.org/publication/15790>.

<sup>121</sup> North American Free Trade Agreement, Dec. 17, 1992, U.S.-Can.-Mex., 32 I.L.M. 289-397, 605-779 (entered into force Jan. 1, 1994) [hereinafter NAFTA]; Josha Maria Alexandra MacNab, *An Assessment of the Effectiveness of Canada's Bulk Water Export Policy Using British Columbia as a Case Study*, 2 (Simon Fraser University, Report No. 367, 2005), available at <http://ir.lib.sfu.ca/retrieve/757/etd1643.pdf>.

lowing non-exhaustive measures:<sup>122</sup> “environmental measures necessary to protect human, animal or plant life or health;”<sup>123</sup> measures “necessary to protect public morals;”<sup>124</sup> measures “relating to the conservation of exhaustible natural resources;”<sup>125</sup> or measures related to non-conflicting treaties.<sup>126</sup>

Congress could impose limits on livestock importation from México and Canada on numerous grounds. As discussed above, megafarms create environmental degradation via groundwater pollution and fertilizer run-off, which harms humans by contaminating drinking water, encouraging *Pfiesteria*, and infecting the food that farmers spray with polluted water.<sup>127</sup> *Pfiesteria* also harms animals because it kills scores to hundreds of fish in a single fish kill outbreak.<sup>128</sup> Additionally, mass meat consumption arguably increases public immorality because of the horrific ways in which the animals that humans eat are treated and killed, but this seems far-fetched. However, the United States does have an interest in protecting its freshwater, as a rare and exhaustible natural resource.<sup>129</sup> Further, Congress may act on behalf of its international responsibilities under certain treaties.<sup>130</sup>

For Congress to restrict livestock trade under NAFTA, environmental or social ills need to exist solely in the United States and must be linked to livestock. Under NAFTA, Congress could limit meat trade because environmental and social ills like *Pfiesteria*, local deforestation, top soil depletion, and domestic water pollution exist in the United States and are linked to livestock; however, perhaps these ills amount to mere problems of location and administration, in which case the federal government should not limit meat trade under NAFTA.<sup>131</sup> For instance, if the federal

<sup>122</sup> MacNab, *supra* note 121, at 2 (noting that parties must demonstrate that their reasons for seeking restriction are not arbitrary).

<sup>123</sup> NAFTA, Ch. 21, art. 2101 (incorporating the exceptions listed in article XX of the General Agreement on Tariffs and Trade, Oct. 30, 1947, 61 Stat. A-11, 55 U.N.T.S. 194 [hereinafter GATT]).

<sup>124</sup> GATT, art. XX(a).

<sup>125</sup> *Id.* at art. XX(g).

<sup>126</sup> *Id.* at art. XX(h).

<sup>127</sup> See discussion *supra* Part II.B.

<sup>128</sup> Parsons et al., *supra* note 53, at 348.

<sup>129</sup> See WORLD BUSINESS COUNCIL FOR SUSTAINABLE DEVELOPMENT, Water Facts and Trends, 3, <http://www.wbcsd.org/DocRoot/ID1tMGiLZ7NL9mBOL2aQ/WaterFactsAndTrends-Update.pdf> (last visited Feb. 22, 2010); GreenFacts.org, Scientific Facts on Water Sources, <http://www.greenfacts.org/en/water-resources/index.htm#2> (last visited Feb. 22, 2010).

<sup>130</sup> See discussions *infra* Parts III.B.4-5.

<sup>131</sup> See Gwendelwyn Earnshaw, *Equity as a Paradigm for Sustainability: Evolving the Process Toward Interspecies Equity*, 5 ANIMAL L. 113, 131-36 (1999).

government mandated that all hog farms relocate to lands not within 20 miles or so of estuaries, *Pfiesteria* outbreaks might all but diminish. Similarly, if the federal government implemented some of the FAO's recommendations as to sustainable farming and water usage, the United States might not generate so much water pollution. Plus, the U.S. has such wealth that it can address its environmental problems far more easily than economically vulnerable countries that lack the funds, technology, and resources to remedy water pollution.<sup>132</sup> Indeed, the government cannot fix the major human rights issues under NAFTA either administratively or legislatively because the most pressing problems are global.<sup>133</sup> Though many Americans do not typically experience the most egregious global harms, like starvation, chronic thirst, and catastrophic environmental injury, the United States does cause some of this worldwide human suffering through mass meat consumption, which drives the forces of free market capitalism through the drums of supply and demand. To resolve these issues, the U.S. must adhere to its obligations under other international treaties to which the United States is a party.

#### 4. International Covenant on Civil and Political Rights

Under Article VI of the U.S. Constitution, the supreme law of the land includes all treaties to which the United States is a party,<sup>134</sup> unless a provision within a treaty contradicts the Constitution<sup>135</sup> or a subsequent federal statute.<sup>136</sup> On September 8, 1992, the United States ratified the International Covenant on Civil and Political Rights ("ICCPR"), which the Human Rights Committee monitors.<sup>137</sup> Article 1, section 2 of the ICCPR provides:

All peoples may, for their own ends, freely dispose of their natural wealth and resources without prejudice to any obligations arising out of international economic co-operation, based upon the principle of mutual benefit, and inter-

---

<sup>132</sup> See TORD KJELLSTROM ET AL., AIR AND WATER POLLUTION: BURDEN AND STRATEGIES FOR CONTROL, available at <http://files.dcp2.org/pdf/DCP/DCP43.pdf>; Kenneth D. Frederick, America's Water Supply: Status and Prospects for the Future, Consequences Vol. 1, No. 1, Spring 1995, available at <http://www.gcrio.org/CONSEQUENCES/spring95/Water.html>.

<sup>133</sup> See discussion *supra* Part II.

<sup>134</sup> U.S. CONST. art. VI, cl. 2.

<sup>135</sup> Reid v. Covert, 354 U.S. 1, 16-17 (1957) (holding).

<sup>136</sup> Whitney v. Robertson, 124 U.S. 190, 195 (1888) (holding).

<sup>137</sup> OFFICE OF THE UNITED NATIONS HIGH COMMISSIONER FOR HUMAN RIGHTS, *Status of Ratifications of the Principal International Human Rights Treaties*, 11 (June 9, 2004), available at <http://cjei.org/publications/IAWJ%20Conference/NB%20List%20of%20ountries%20and%20treaties%20ratified%20Ratification%20repor.pdf> [hereinafter *Status of Ratifications*].

national law. *In no case may a people be deprived of its own means of subsistence.*<sup>138</sup>

In other words, the actions of one country or peoples may neither cause its own people to go without the fundamental essentials of life nor rob another country's people of their own means of living. Water is basic to all life—plant as well as animal.<sup>139</sup> Humans cannot live longer than one week without water.<sup>140</sup>

The final sentence in the ICCPR article 1, section 2 necessarily entails two actors: the depriver and the deprived.<sup>141</sup> If an ICCPR member is deprived, one of three scenarios must have caused the deprivation. First, the deprived party caused its own deprivation, as the first sentence in article 1, section 2 addresses. Second, another party deprived the injured party. Third, the combination of the first and the second scenarios led to the injured party's deprivation. The ICCPR forbids deprivation in all three circumstances.<sup>142</sup>

Under the ICCPR, the United States must ensure that its actions do not deprive others of their own means of subsistence, including water, under both international law and Article VI of the Constitution.<sup>143</sup> However, in spite of these international obligations, the United States is a leading and massive consumer of meat products,<sup>144</sup> and that fact affects not only animal welfare but also human rights in the forms of hunger, disease, and water depletion.<sup>145</sup> At the very least, the ICCPR binds the U.S. to desist from acting in ways that deprive others of their most basic form of subsistence: potable water. Since much freshwater—potable water for humans—goes to livestock so that wealthy nations like the U.S. may enjoy unbridled meat consumption,<sup>146</sup> mass meat consuming processes necessarily detract from worldwide water access. If the federal government weans the public from an all-you-can-eat presumed entitlement to meat

---

<sup>138</sup> International Covenant on Civil and Political Rights art 1, § 2, Dec. 16, 1966, 999 U.N.T.S. 171 [hereinafter ICCPR] (emphasis added).

<sup>139</sup> Frederick, *supra* note 132.

<sup>140</sup> David Shaw, *The Specter of Water Piracy: The World Trade Organization Threatening Water Security in Developing Nations*, 19 COLO. J. INT'L ENVTL. L. & POL. 129, 130 (2008) (citing Randall K. Packer, How Long Can the Average Person Survive Without Water?, *Scientific American's Ask the Experts*, available at <http://www.scientificamerican.com/article.cfm?id=how-long-can-the-average>).

<sup>141</sup> "In no case may a people be deprived of its own means of subsistence." ICCPR art 1, § 2, Dec. 16, 1966, 999 U.N.T.S. 171.

<sup>142</sup> *Id.*

<sup>143</sup> See U.S. CONST. art. VI, cl. 2.

<sup>144</sup> See discussion *supra* Part II.A.

<sup>145</sup> See discussion *supra* Part II.B.

<sup>146</sup> See discussion *supra* Part II.B.1.

to a more sustainable and limited approach via gradual caps, it could resolve many domestic and international problems as well as fulfill obligations under the ICCPR.

#### 5. U.N. Declaration on Human Rights and the International Covenant on Economic, Social, and Cultural Rights

The U.N. Declaration on Human Rights (“Declaration”) constitutes nothing more, legally, than an announcement—a written goal that has provided the world with a vivid moral compass vis-à-vis inherent and inalienable human rights for sixty years.<sup>147</sup> The Declaration formed the backbone of the ICCPR and the International Covenant on Economic, Social, and Cultural Rights (“ICESCR”), which, together, comprise what international human rights activists refer to as the “International Bill of Rights.”<sup>148</sup>

Article 25, section 1 of the Declaration provides that every person “has the right to a standard of living adequate for the health and well-being” of him- or herself “including food.”<sup>149</sup> Later, the ICESCR codified the right to food in Article 11, which grants both “the right to adequate food and the right to be free from hunger.”<sup>150</sup> Article 11(2)(b) of the ICESCR provides that parties to the covenant must “[take] into account the problems of both food-importing and food-exporting countries, to ensure an equitable distribution of world food supplies in relation to need.”<sup>151</sup>

The United States signed the ICESCR on October 5, 1977.<sup>152</sup> While signatory status does not carry the same obligatory weight as ratification,<sup>153</sup> as a signatory, the United States has demonstrated an interest in the right to food and, hence, should consider ways in which its food choices affect food scarcity in importing and exporting countries. Congress should ensure that the public’s uninhibited access to meat does not cause or perpetuate starvation, let alone hunger. However, assuming that

<sup>147</sup> Universal Declaration of Human Rights, G.A. Res. 217A, at 71, U.N. GAOR, 3d Sess., 1st plen. mtg., U.N. Doc. A/810 (Dec. 10, 1948) [hereinafter Universal Declaration of Human Rights].

<sup>148</sup> Narula, *supra* note 44, at 705; U.N. ASSOC. IN CANADA, Questions and Answers About the Universal Declaration of Human Rights, <http://www.unac.org/rights/question.html> (last visited Feb. 22, 2010); *see* Sorg, *supra* note 4, at 695.

<sup>149</sup> Universal Declaration of Human Rights art. 25, para. 1, *supra* note 147.

<sup>150</sup> Narula, *supra* note 44, at 705-06.

<sup>151</sup> International Covenant on Economic, Social, and Cultural Rights art. 11(2)(b), Dec. 16, 1966, 993 U.N.T.S. 3.

<sup>152</sup> *Status of Ratifications*, *supra* note 137, at 11.

<sup>153</sup> AgoraVox.com, Signing vs. Ratifying, <http://www.agoravox.com/news/international/article/signing-vs-ratifying-5653> (last visited Feb. 22, 2010).

the U.S. would trade the cereal grains that it currently grows for livestock to other nations so that humans could eat these dietary staples, it has so far failed to meet its dedication to the anti-hunger tenets of the ICESCR because mass meat consumption in the United States both directly and indirectly eliminates such grains for approximately 800 million people.<sup>154</sup> Americans' limitless meat consumption devastates human rights because it causes and enables world hunger to varying degrees.<sup>155</sup> In order to rectify this wrong, the U.S. should consider implementing a cap on meat production and importation, and it should also export the cereal grains that megafarmers would otherwise feed to livestock to the countries that are, literally, starving.

### *C. Practice and Policy*

The U.S. has historically limited trade for public health and treaty-fulfillment reasons, regardless of whether the public demanded the regulated or banned item.<sup>156</sup> The overarching policy concerns relative to human rights within the U.S. and abroad should lead Congress to gradually and firmly regulate meat production and importation.

#### 1. Supply, Demand, and Free Riders

Why enact a cap? Why must the government impose on this issue? After all, if people care about the suffering of humans around the world, one thing they can do is simply eat less meat, and the supply will naturally decline, which should result in left-over cereal grains for export to starving nations, right? These questions strike at the very heart of a long tug-of-war between libertarian-type approaches and human rights-type approaches to social problems.<sup>157</sup> The former is an attempt to assure the

---

<sup>154</sup> Segelken, *supra* note 4.

<sup>155</sup> See discussion *supra* Part II.B.1.

<sup>156</sup> See discussion *infra* Part III.C.2.

<sup>157</sup> Libertarianism arose out of classical liberalism, which began in the mid-1600s with John Locke, met its mate in the mid-1700s with Adam Smith, and sealed the deal with John Stuart Mill in the mid-1800s. Jonathan Dolhenty, Classical Liberalism, Libertarianism, and Individualism, <http://www.radicalacademy.com/philclassliberalism.htm> (last visited Feb. 22, 2010). Classical liberalism focuses on individual autonomy while libertarianism takes the view further and demands that the government stay out of all individual affairs. *Id.* Welfare liberalism, an old counter to classical liberalism, provides close to the exact opposite—that the government should care for its people more. *Id.* Human-rights approaches, similarly, take into consideration that legal systems tend to discount individual rights, so the solution to social problems should address rather than ignore individuals in order to promote equity. AUSTRALIAN NATIONAL U., The Potential of Human Rights, [http://epress.anu.edu.au/war\\_terror/mobile\\_devices/ch15s10.html](http://epress.anu.edu.au/war_terror/mobile_devices/ch15s10.html).

public that the market will take care of any seemingly grim situation, while the latter ignores the rights of businesses to profit, or so the story goes.<sup>158</sup> However, the United States is a republic, governed by law in order to protect against factions and the tyranny of the majority.<sup>159</sup>

Bottom-up reasoning—that the people must resolve social inequities by demanding less—leads to what philosophers, economists, and legal theorists term the “collective action” or the “free rider” problem.<sup>160</sup> Consider an example of collective action logic relative to bottom-up reasoning, mass meat consumption, and human rights. If all U.S. citizens agree to improve the human condition domestically, as well as abroad, by restricting meat intake by, for instance, 20%, then to the extent that all participate in the agreement, the world would benefit. However, the world would still significantly benefit if one person or two people decided to skip out on their sacrifice. After all, if two people maintain their same levels of mass meat consumption while the rest limit their intake by 20%, the world will not feel the effects of the two “slackers” or “free riders.” The collective action problem emerges when society recognizes that if everyone reasons in the way of the free riders, no one will make the agreed-upon sacrifice, and the benefits will not follow.<sup>161</sup> Thus, the collective action problem represents the difficulty in relying on voluntary social cooperation to achieve public goods.

Given the difficulties of maintaining social cooperation through voluntary action weighed against the gravity of the social harms at stake, the federal government is warranted in implementing the public trust doctrine

---

<sup>158</sup> As one blogger put it: “There’s a common disposition in a large swaths [sic] of society that making a profit on something is greedy. conducting commerce is crass[,] and that if you’re making money then someone, somewhere, must be loosing money. This Bobo, zero-sum, anti-Protestant-work-ethic is the second pillar of this drive for national servitude, along with the aforementioned ageism. Put politely, this view is fallacious. Put more directly, I have seen more cogent points of view encapsulated in the Tupperware containers that have been pushed to the back of my fridge and left to fester for weeks.” South Bend Seven, Compulsory Volunteering, <http://southbend7.blogspot.com/2008/07/compulsory-volunteering.html> (last visited Feb. 22, 2010).

<sup>159</sup> THE FEDERALIST No. 10 (James Madison), available at <http://www.constitution.org/fed/federa10.htm>.

<sup>160</sup> Stanford Encyclopedia of Philosophy, The Free Rider Problem, <http://www.science.uva.nl/~seop/entries/free-rider> (last visited Feb. 22, 2010).

<sup>161</sup> See *id.*



to achieve domestic benefits and international regulatory schemes to rectify harms. On average, Americans consume 275 pounds of meat per year,<sup>162</sup> which is an incredible amount of meat. It does not seem likely that most Americans will simply give up what they perceive as their meat-eating rights. The federal government, unlike the public, is best equipped to understand the legal, social, domestic, and international significance of mass meat consumption as well as remedy the harm.

One problem with this top-down solution is that limitations will hurt farmers who depend on livestock along with government subsidies for their livelihoods. If the government limits meat production, it must also, thus, permit the prices of meat to rise in order to supplement any financial loss to farmers. However, the higher the price of meat, the fewer low-income persons can afford it. Although this inequity does not parallel global food inequities *vis-à-vis* costs, the domestic inequity would still amount to significant unfairness. While the U.S. poor would nevertheless have access to grains and other food, whereas the global poor do not, it seems unjust to place the burden of global food and water equality on the backs of farmers and the domestic poor. Perhaps the government could enact an equalizing scheme that would pair liberal rations to wealthier individuals with stamps or coupons to poorer persons. With some ingenuity and a spirit of international and domestic food fairness, Congress could ensure that America's poor are not disproportionately burdened.

## 2. Past U.S. limits

The U.S. has implemented limits and bans in the past for various reasons.<sup>163</sup> In 2003, the U.S. lifted a limit that it had placed on the importation of beef from Canada due to health and safety threats from the disease bovine spongiform encephalopathy, or BSE.<sup>164</sup> The United States prohibited seafood imports from China for similar health and safety reasons in 2007.<sup>165</sup> This year, the U.S. will implement a ban on certain classes of hydrochlorofluorocarbons used in common refrigerators that

---

<sup>162</sup> FAOSTAT, *supra* note 21; EarthTrends, *supra* note 21; Metric Conversions.org, *supra* note 21.

<sup>163</sup> See the following footnotes for sources to examples of U.S. limits.

<sup>164</sup> RedOrbit.com, U.S. Lifts Some Canada Meat Import Limits, Aug. 8, 2003, [http://www.redorbit.com/news/general/17300/us\\_lifts\\_some\\_canada\\_meat\\_import\\_limits/index.html](http://www.redorbit.com/news/general/17300/us_lifts_some_canada_meat_import_limits/index.html).

<sup>165</sup> TheFishSite.com, U.S. Urged to 'Properly Deal with' Aquaculture Import Limits, July 2, 2007, <http://www.thefishsite.com/fishnews/4631/us-urged-to-properly-deal-with-aquaculture-import-limits>.

destroy the ozone layer because, under the Montreal Protocol, the U.S. must regulate and phase out ozone-depleting substances.<sup>166</sup>

As discussed, the U.S. has historically limited or banned products in the interest of safety, health, and treaty fulfillment.<sup>167</sup> The above three examples do not sufficiently depict the degree or frequency to which the U.S. has exercised limits on trade items that affect interstate and international commerce. Still, since the United States has exercised its authority to limit trade in the past,<sup>168</sup> it certainly has adequate historical and legal grounds upon which it may restrict meat production and importation.

#### IV. CONCLUSION

Arguing for a meat production and importation cap in the United States is not an easy task, especially since the U.S. has promoted, enjoyed, and pushed free trade for many years. Moreover, the FAO's number one objective of securing a "balanced expansion" in meat production, trade, and consumption—particularly in countries where animal protein deficiency exists—creates even more difficulty to a limitation argument.<sup>169</sup> Nevertheless, evidence supports that one of the last things that impoverished, protein-deficient peoples need is livestock that consumes many times more water and grains than necessary to feed and water the people. Though capitalism functions successfully only to the extent that markets expand, the federal government should limit meat production and importation for two reasons. First, domestically, mass meat production pollutes water that the government should regulate for the interest of the public under the public trust doctrine. Second, the U.S. should fulfill its obligations under the International Bill of Rights and trade the excess grain to peoples that suffer from chronic thirst and hunger due, in substantial part, to an American culture of mass meat consumption. If Congress refuses or otherwise fails to limit meat production and importation, human rights and lives remain in Americans' hands, quite literally, every time Americans consume meat. Each individual should remember that food choices direct the tides of supply and de-

---

<sup>166</sup> EPA, HCFC Phaseout Schedule, <http://www.epa.gov/ozone/title6/phaseout/hcfc.html> (last visited Feb. 20, 2010).

<sup>167</sup> See *supra* notes 164-166 and accompanying text.

<sup>168</sup> See *supra* notes 164-166 and accompanying text.

<sup>169</sup> FAO, Committee on Commodity Problems, Intergovernmental Group on Meat, *Follow-Up to the Guidelines for National and International Action on Rice, Livestock and Meat and Oilseeds, Oils and Oilmeals*, 18th Session, Rome (July 4-5, 2001), available at <http://www.fao.org/DOCREP/MEETING/003/Y0447e/Y0447e00.HTM>.

mand. Individuals should take the first steps to regulate themselves in the hopes that the government will follow.

JESSICA LEIGH ZAYLÍA<sup>170</sup>

---

<sup>170</sup> The author received her Associates in Foreign Languages from Fullerton College, her Bachelors in Women Studies from California State University, Long Beach, and her Juris Doctor from the University of San Diego School of Law. She has published with several other journals and presented papers at many conferences, including those for the Western Society of Criminology, the American Association of Behavioral and Social Sciences, and the National Women's Studies Association. The author wishes to thank Professor Jane Henning for her time and thoughtful comments as well as Professors Jean Ramirez, Lynn Dallas, and Miranda McGowan for their overall support.