United States Live Animal Trade: Analysis of Imports, Exports, Numbers and Values

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Report Preamble

The present document is meant to highlight the findings of the Humane Party in its analysis of the live animal trade industry, imports, exports, number of animals and value (in $) for the United States. The present report analyzes the number of animals 'traded', and includes: horses, cows and calves, pigs, sheep, goats, chickens, ducks, turkeys, geese and 'other' animals (buffalo, camels, alpacas, llamas, rabbits, bees, reptiles and primates). The report documents the value ($) of each category of animal 'traded' as well as a breakdown of the animals and values with the United States' largest trading partners (countries).

Bias

There is an ethical obligation to disclose the bias of the preparers and analyzers involved in this report. The Humane Party aims and fights to free all animals from abuse, exploitation, and property status. It is in the Humane Party's interest that the results of this report support its goal insofar as possible. All members involved in this investigation, analysis, and report have acted at the margins of this bias, striving for their judgement to remain unaffected by said bias.

Sources

The sources used for this report include data from The USDA Economic Research Service, International Trade Centre Statistics, Food and Agricultural Organization of the UN, academic journal articles, animal agriculture industry data and protection organization findings.

Keywords

United States, Animals+trade, Imports, Exports, Farming

Disclaimer & Purpose

Disclaimer

For the purpose of this report, only data concerning those animals who were documented in the sources above was utilized, including:

- Horses (incl. mules, burros, asses, ninnies)
- Cows and calves
- Pigs
- Sheep
- Goats
- Chickens, turkeys, ducks, geese
- Buffaloes
- Beehives (bees)
- Camelids (camels, alpacas, llamas)
- Rabbits & hares
- Reptiles (turtles)
- Primates

To conduct this analysis, the Economic Transition Team (E.T.T) used the most current data available (2016) from limited sources. When data was found that was prior to 2016 (i.e. value or number of animals), it was either used as such, or the numbers were extrapolated to give a realistic estimate for 2016. In both instances they were properly cited in the *exhibits.*

Purpose

The purpose of this report is to put together for the first time in one place the vast United States live animal trade industry data. It is meant to highlight the number of animals from all species of animals who are both exported from and imported to the United States. The report also seeks to document the more than $3.5 billion U.S. industry that is the live animal export and import trade and to draw attention to the countries in which this trade is occurring. Furthermore, this report cites the differences in transportation times, methods and effects on the well-being of the traded animals.

This analysis is meant to provide relevant information in a simplified manner for internal and external parties interested in the subject as well as for all stakeholders.

Conclusions

After reviewing all sources of data, it is concluded that the United States is one of the leading countries in the world in the live animal trade industry. In total the live animal trade industry for the U.S. exceeded $3.544 billion and 'traded' 119,070,845 animals in 2016. In many cases the United States exported the same animals whom they imported, resulting in unnecessary trade of individual species.

While the majority of exported animals—48,876,730 (52.7%)—in 2016 went to two countries, Canada and Mexico, the remaining 43,896,810 (47.3%) animals were exported to over one hundred additional countries on six continents.

While almost all imported animals—26,076,982 (99.2%)—in 2016 came from two countries, Canada and Mexico, the remaining 220,323 (0.8%) animals were imported from over 100 additional countries on six continents.

In both cases, Canada (43.2% of exported and 95.6% of imported animals) was The United States' main trading partner.

However, the live animal trade industry in the United States is not merely value generated with numbers of animals moved. It is the exploitation of the lives of individual species of animals. The route can be long, stressful and perilous for these sentient beings. The animals, whether imported or exported, are subjected to lack of rest, water, feed, and space and to unsanitary conditions. They can experience high mortality rates, due to adverse weather and extreme high and low temperatures.

The United States sets a limit of time—28 hours by land or 36 hours by sea—where an animal

can go without food, water and rest. Canada, the country from which The United States imports almost all (95.6%) of its animals, allows 36 hours for pigs, horses and poultry, 48 hours for goats, sheep, cows and buffaloes, and 72 hours for baby chicks of all species to be without food, water or rest.

In comparison, The European Union, with whom the U.S. trades in some capacity, requires that all animals may be transported a maximum of 14 hours without food and water, horses only eight, and pigs must have access to water during the entire duration of their journey.

Findings

Exports

- The United States exported 92,773,540 animals in 2016
- The United States is the #7 exporter of live animals by value ($778.77 million)

Relating to numbers of exported animals

Of the animals exported it was found that:

- 82,402,903 (88.8%) were chickens, ducks, turkeys and geese), many of whom were baby chicks
- 10,000,000 (10.8%) were turtles, mostly red-eared sliders, but also soft-shell and snapping turtles

Additionally, the United States exported:

- 152,908 horses, of whom more than 142,000 were sent to Mexico and Canada for slaughter
- 69,485 cows and calves
- 51,712 sheep
- 48,018 pigs
- 7,335 goats

From data prior to 2016 it was concluded that the United States also exported:
rabbits, buffaloes, and camelids (camels, alpacas and llamas)

The top five countries the United States exported to were:

- Canada 40,089,232 animals (43.2%)
- Mexico 8,787,498 animals (9.5%)
- European Union member countries 2,849,966 animals (3.1%)
- South Korea 2,461,233 animals (2.7%)
- China 2,101,533 animals (2.3%)

Relating to exported value ($)

The highest value category of exported animals were:

- Horses $424,847,030 (54.6%)

This figure appears to be mostly from horses for racing, where Kentucky exported $195 million worth.

- Chickens, ducks, turkeys and geese $172,994,973 (22.2%)
- 'Other' animals $91,329,000 (11.7%)
  Which would include: buffaloes, reptiles, camelids, rabbits and bees
- Cows and calves $77,717,000 (10%)

Imports

- The United States imported 26,297,305 animals in 2016
- The United States was the #1 importer of live animals by value ($2.765 billion) in 2016

Relating to numbers of imported animals

Of the animals imported it was found that:

- 18,750,242 (71.3%) were chickens, ducks, turkeys and geese
- 5,668,734 (21.6%) were pigs
- 1,708,482 (6.5%) were cows and calves

Additionally, the United States imported:

- 29,180 primates (mostly the macaques species)
- 22,526 buffalo
- 16,530 horses
- 14,272 sheep
- 6,951 goats

From data prior to 2016 it was concluded that the United States also imported:

- Rabbits and bees

The top two countries the United States imported from were:

- Canada 25,130,699 (95.6%)
- Mexico 946,283 (3.6%)

Relating to imported value ($)

The highest value categories of imported animals were:

- Cows and calves $1,619,817,941 (58.9%)
- Horses $589,568,000 (21.3%)
- Pigs $312,927,165 (11.3%)
- Primates $67,834,000 (2.5%)

Relating to the well-being of exported animals during transportation

From the USDA, Animal and Plant Health Inspection Service branch final rule on *Exportation of Live Animals, Hatching Eggs, and Animal Germplasm from the United States* (2016):

- Animals can be transported to the embarcation facility for 28 hours without rest, food or water.
- Animals can go without food and water for 36 hours on their export sea voyage
- All ocean vessels for export must be certified; however, high livestock mortality rates do occur due to unforeseen and adverse weather conditions
- All transporters of livestock by water are required to file a report five business days after the voyage and must document high livestock mortality losses; however, the rule does not require operators to inform APHIS of serious injuries or illnesses.

In the *Guidelines for the Humane Transportation of Research Animals*, Chapter 3, "Good Practices in the Transportation of Research Animals":

> Most animals react to the experience of being transported by becoming anorexic and adipsic. The stressful experiences of a novel environment, movement of the transportation vehicle, and food and water sources that differ from those in the animal's previous environment for logistical reasons inhibit food and water consumption. However, animals lose weight more rapidly when transported than they would normally during the same period without feed and water. That consequence implies that transportation is stressful for reasons beyond the lack of feed and water.
>
> A main issue of concern during transportation is an animal's psychological experience. Changes in multiple sensory experiences will be perceived as stressful, even under the best of conditions, for two major psychological reasons: the transportation experience is not part of the normal routine, and the animal has no control of the situation. Stress during transportation is unavoidable.

Relating to the well-being of imported animals during transportation

When the United States imports from other countries, the rules are set by the individual countries that are exporting the animals.

In the *Health of Animals Regulations Canada*, Section 148, "Food and Water for Animals in Transit":

> No person shall confine in a railway car, motor vehicle, aircraft or vessel:
> (a) equines, swine or other monogastric animals for longer than 36 hours, or
> (b) cattle, sheep, goats or other ruminants for longer than 48 hours.
> Without feed, water and rest.
> (3) No person shall confine chicks of any species without food or water for longer than 72 hours from the time of hatching.

In the European Union's council regulations on the protection of animals during transport, Chapter V, "Watering and Feeding Interval, Journey Times and Resting Periods":

> (b) Pigs may be transported for a maximum period of 24 hours. During the journey, they

must have continuous access to water;
(c) Domestic Equidae may be transported for a maximum period of 24 hours. During the journey they must be given liquid and if necessary fed every eight hours;
(d) All other animals of the species (bovine, ovine and caprine) must, after 14 hours of travel, be given a rest period of at least one hour sufficient for them in particular to be given liquid and if necessary fed. After this rest period, they may be transported for a further 14 hours.

In *Road Transport of Farm Animals: Effects of Journey Duration on Animal Welfare*, by Nielsen et al. (2010):

> Although animal transport of long duration is more likely to compromise animal welfare than shorter journeys, it is important to recognise that it is not journey duration *per se* but the associated negative aspects, which are the cause of the observed welfare issues. Factors such as extreme temperatures and lack of food, water and rest are all exacerbated by length of exposure, and thus journey duration.

In *Heat Stress: A Major Contributor to Poor Animal Welfare Associated with Long-haul Live Export Voyages*, by Caulfield et al. (2014):

> Heat stress is a major contributor to the mortality of live animals on voyages that can be as long as 21 days from Australia to the Middle East for cows and sheep. Furthermore, The production of ammonia, particularly by degradation of urine (especially with sheep shipments, where pens are not cleaned during the voyage), could further reduce animals' ability to dissipate heat via increased respiratory rate. This is because elevated concentrations of ammonia impair normal respiratory function. Such concentrations of ammonia (in some cases as high as 59 ppm) have been recorded in animal pens during live sheep voyages.

Exhibit A
Live animal exports numbers and value ($)

Animal	***Canada***	***Mexico***	***European Union***	***Brazil***	***China***
Horses,Mules,					
Burros	36,020	105,889	7,763	257	365
Value $	$38,311,082	$51,881,615	$171,091,000	$2,458,711	$801,024
Cattle & Calves	37,292	28,775	79	81	8
Value $	$29,640,409	$40,582,741	$91,933	$136,268	$10,500
Pigs	2,561	19,131	1,631	474	1,160
Value $	$1,429,716	$4,549,211	$353,934	$253,653	$244,083
Sheep	112	13,366	204	21	0
Value $	$23,992	$995,897	$11,413	$2,990	$0
Goats	*787*	*1,210*	*0*	*0*	*0*
Value $	*$42,773*	*$65,764*			
Poultry	39,990,291	8,317,917	1,622,509	114,112	0
Value $	$55,411,675	$23,823,578	$4,461,900	$313,061	$0
Baby Chicks	*30,058,372*	*6,803,060*	*1,288,286*	*114,112*	*0*
Value $	*$44,286,552*	*$22,356,641*	*$3,542,786*	*$313,061*	*$0*
Other Poultry	*9,931,919*	*1,514,857*	*334,223*	*0*	*0*
Value $	*$11,125,123*	*$1,466,937*	*$919,114*	*$0*	*$0*
Other Animals	22,169	301,210	1,217,780	0	2,100,000
Value $	$39,563,000	$3,106,000	$18,024,000	$0	$5,795,000
Buffalo (2013)					
Buffalo (est. $)					
Beehives (2013)					
Beehives (est. $)					
Camelids (2013)					
Camelids (est. $)					
Rabbits					
& Hares (2013)	*29,000*				
Rabbits (est. $)	*$700,000*				
Reptiles (2012)		*300,000*	*1,200,000*		*2,100,000*
Total Numbers	**40,089,232**	**8,787,498**	**2,849,966**	**114,945**	**2,101,533**
Total Value $	**$164,422,647**	**$125,004,806**	**$194,034,180**	**$3,164,683**	**$6,850,607**

Exhibit A (con't)

India	***South Korea***	***Japan***	***Other Countries***	***Totals (All Countries)***
40	558	2,016	n/a	**152,908**
$230,219	$15,618,940	$56,443,886	$88,010,553	**$424,847,030**
333	0	2	2,915	**69,485**
$333,117	$0	$5,500	$6,916,532	**$77,717,000**
0	8,450	982	13,629	**48,018**
$0	$1,496,122	$383,782	$4,986,499	**$8,710,501**
0	0	0	38,009	**51,712**
$0	$0	$0	$2,126,604	**$3,160,896**
0	*0*	*0*	*5,338*	***7,335***
$0	*$0*	*$0*	*$181,567*	***$290,104***
0	1,352,225	421,140	30,584,729	**82,402,923**
$0	$3,718,620	$1,158,135	$84,108,004	**$172,994,973**
0	*1,350,499*	*420,049*	*n/a*	*40,034,378*
$0	*$3,713,873*	*$1,155,135*	*n/a*	*$75,368,048*
0	*1,726*	*1,091*	*n/a*	*11,783,816*
$0	*$4,747*	*$3,000*	n/a	*$13,518,921*
n/a	1,100,000	1,100,000	4,200,000	**10,041,159**
$2,539,000	$2,709,000	$4,588,000	$15,005,000	**$91,329,000**
				196
				$255,000
				n/a
				$6,252,000
				955
				$414,000
				29,000
				$700,000
	1,100,000	*1,100,000*		*10,000,000*
373	**2,461,233**	**1,524,140**	**34,844,620**	**92,773,540**
$3,102,336	**$23,542,682**	**$62,579,303**	**$201,334,759**	**$778,766,735 #7**

Exhibit B

Live Animal Imports Numbers and Values ($)

Animal	***Canada***	***Mexico***	***European Union***	***Brazil***	***China***
Horse, Mules, Burros	6,895	3,240	6,201	193	1
Value $	$28,676,198	$4,328,090	$506,768,000	$8,842,097	$30,000
Cattle & Calves	765,436	943,043	0	0	0
Value $	$1,034,959,680	$584,858,261	$0	$0	$0
Pigs	5,668,671	0	63	0	0
Value $	$312,904,194	$0	$22,971	$0	$0
Sheep	14,272	0	0	0	0
Value $	$1,218,895	$0	$0	$0	$0
Goats	*6,951*				
Value $	*$422,105*				
Poultry	18,566,073	0	128,319	55,850	0
Value $	$51,056,770	$0	$352,878	$153,586	$0
Other Animals	102,401	n/a	513	n/a	18,167
Value $	$60,717,000	$758,000	$39,229,000	$239,000	$46,201,000
Buffalo (2016)	*22,526*				
Buffalo (est. $)	*$41,447,840*				
Beehives (2013)	*209*				
Beehives (est. $)	*$18,240,000*				
Rabbits & Hares (2013)	*56,700*		*300*		
Rabbits (est. $)	*$1,877,070*		*$9,930*		
Primates (est. 2016)					*18,167*
Primates (est. $)					*$46,201,00*
Totals	**25,130,699**	**946,283**	**135,096**	**56,043**	**18,168**
Total Value $	**$1,489,954,842**	**$589,944,351**	**$546,372,849**	**$9,234,683**	**$46,231,000**

Exhibit B (con't)

Other Countries	***Totals (All Countries)***
n/a	**16,530**
$40,923,615	**$589,568,000**
3	**1,708,482**
$0	**$1,619,817,941**
0	**5,668,734**
$0	**$312,927,165**
0	**14,272**
$0	**$1,218,895**
	6,951
	$422,105
0	**18,750,242**
$0	**$51,563,234**
11,013	**132,094**
$42,419,000	**$189,563,000**
	22,526
	$41,447,840
	209
	$18,240,000
	57,000
	$1,887,000
11,013	*29,180*
$21,633,000	*$67,834,000*
11,013	**26,297,305**
$83,342,615	**$2,765,080,340 #1**

Sources

Caulfield, Malcom P., Cambridge, Heather, Foster, Susan F., McGreevy, Paul D. 2014. "Heat stress: A major contributor to poor animal welfare associated with long-haul live export voyages." *The Veterinary Journal* 199:2 pp. 223-228.

"Council Regulation (EC) on the protection of animals during transport and related operations." Office Journal of the European Union. http://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX:32005R0001 (accessed February 28, 2018).

"Exportation of Live Animals, Hatching Eggs and Animal Germplasm from the United States: A Rule by the Animal and Plant Health Inspection Service on 01/20/2016." Federal Resgister: The Daily Journal of the United States Government. https://www.federalregister.gov/documents/2016/01/20/2016-00962/exportation-of-live-animals-hatching-eggs-and-animal-germplasm-from-the-united-states (accessed February 28, 2018).

"Foreign Agricultural Trade of the United States." United States Department of Agriculture: Economic Research Service https://www.ers.usda.gov/data-products/foreign-agricultural-trade-of-the-united-states-fatus/calendar-year/#By (accessed February 21, 2018).

"Good Practices in the Transportation of Research Animals." *Guidelines for the Humane Transport of Research Animals.* National Academies Press (US). 2006. https://www.ncbi.nlm.nih.gov/books/NBK19637/ (accessed February 28, 2018).

"Health of Animals Regulations." Canada Justice Laws Website. http://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._296/page-17.html#h-82 (accessed February 28, 2018).

"Live animals". Food and Agricultural Organization of the United Nations: FAOSTAT. http://www.fao.org/faostat/en/#data/TA (accessed February 21, 2018).

"Live Bison Exports to the United States". Canadian Bison Association. https://www.canadianbison.ca/resources/resources/data-and-statistics/trade (accessed February 21, 2018).

"Livestock and Meat International Trade Data." United States Department of Agriculture: Economic Research Service. https://www.ers.usda.gov/data-products/livestock-and-meat-international-trade-data/livestock-and-meat-international-trade-data/#Monthly%20U.S.%20Livestock%20and%20Meat%20Trade%20by%20Country (accessed February 21, 2018).

Mali, Ivana, Vandewege, Michael W., Davis, Scott K., Forstner, Michael R.J. 2014. "Magnitude of the Freshwater Turtle Exports from the US: Long Term Trends and Early Effects of Newly Implemented Harvest Management Regimes." *PLoS ONE* 9(1). e86478.

Nielsen, B.L., Dybkjaer, L., Herskin, M.S. 2011. “Road transport of farm animals: effects of journey duration on animal welfare.” *Animal* 5:3, pp. 415-427.

“Rabbit Farming-The Canadian Encyclopedia (2012).” Rabbit Advocacy Animal Matters. http://www.rabbitadvocacy.com/rabbit_farming_the_canadian_ency.htm (accessed February 21, 2018).

“State Exports from Kentucky.” United States Census Bureau. https://www.census.gov/foreign-trade/statistics/state/data/ky.html (accessed February 28, 2018).

“The Trade in Live Reptiles: Exports from the United States,” The Humane Society of the United States. http://www.humanesociety.org/assets/pdfs/wildlife/exotics/reptile_trade_export.pdf (accessed February 21, 2018).

"Trade Map-International Trade Statistics." International Trade Centre. https://www.trademap.org/tradestat/Country_SelProductCountry_TS.aspx?nvpm=1 (accessed February 21, 2018).

"U.S. Primate Import Statistics for 2013." International Primate Protection League. https://www.ippl.org/gibbon/blog/u-s-primate-import-statistics-2013/ (accessed February 21, 2018).