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What is animal husbandry in zoos

Our behavioral breeding program is rooted in behavioral science. This means that we strive to integrate science-based practices into our program at all levels, including training, enrichment assessment, animal training consultation and coaching, behavioral assessment, and animal care problem solving. Behavioral analysts bring an experience in basic (laboratory) and applied (practical) operant learning, experience in translating scientific principles from behavior to practical applications, and continuous contact with advances in the field of behavioral analysis. Behavioral breeding professionals provide practical animal training and enrichment with a variety of species, coaching experience and collaboration with animal care personnel, and continuous contact with advances in the field of animal care. Having a behavioral analyst in our team allows us to combine this area of expertise with the strengths of our behavioral breeding professionals in several ways. The science-to-practice connection, evident in the application of behavioral analysis to other areas of practice (e.g. education, workplace safety, etc.), provides a model for evidence-based practice. In these areas, professionals continually use recent research findings to develop new ways to change behavior, and then assess the success of those efforts using methods similar to those used in research. For this collaborative process to be effective, scientists and professionals must be connected to each other in a way that facilitates frequent and fruitful exchanges of current findings. Science is constantly changing. The scientific literature, which consists of peer-reviewed journal articles and books, is self-based as new discoveries and advances are made, questions are answered, and new questions arise. Maintaining a connection to science can allow professionals to incorporate these advances into their practical strategies. We look forward to fostering state-of-the-art behavioral breeding practices while maintaining a close connection with advances in behavioral science. More information: The science of behavioral history. Ashleigh Bell Environmental enrichment aims to stimulate captive animals mentally and physically, mainly through changes in the environment of animals. Enrichment techniques can involve the use of odor, noise, novelty and objects that require manipulation. A common technique is to hide food inside an enclosure stimulate the animal's natural foraging behavior; replicating how a wild animal would spend long periods actively searching for food. Management, selective breeding and care of farm animals by humans Livestock feed corral in Colorado, USA Raising chickens intensely for meat in a fattening house, raising U.S. animals is the branch of agriculture related to animals that are raised for meat, fiber, milk , eggs or other products. that's what daily care, selective breeding and livestock rearing. Breeding has a long history, beginning with the Neolithic revolution when animals were first domesticated, from around 13,000 a. C., announcing the agriculture of the first crops. At the time of early civilizations such as ancient Egypt, cattle, sheep, goats and pigs were grown on farms. Major changes took place in Colombian exchange when Old World cattle were brought into the New World, and then in the 18th-century British Agricultural Revolution, when livestock breeds such as Dishley Longhorn cattle and Lincoln Longwool sheep were quickly improved by farmers like Robert Bakewell to produce more meat, milk and wool. A wide range of other species such as horse, water buffalo, flame, rabbit and guinea pig are used as cattle in some parts of the world. The cultivation of insects, as well as aquaculture of fish, molluscs and crustaceans, is widespread. Modern livestock is based on production systems adapted to the type of land available. Subsistence agriculture is being replaced by intensive animal agriculture in the most developed parts of the world, where for example cattle are kept in high-density pens, and thousands of chickens can be raised in broiler or battery houses. On poorer soils, as in the highlands, animals often maintain more widely, and can be allowed to roam widely, forging themselves. Most cattle are herbivores, except pigs and chickens that are omnivores. Ruminants such as cattle and sheep are adapted to feed on grass; can be fed outdoors, or can be fed in whole or in part with rations richer in energy and protein, such as pelletized cereals. Pigs and poultry cannot digest cellulose in fodder, and require cereals and other high-energy foods. Etymology The verb for the husband, which means carefully managing, derives from an older meaning of husband, which in the fourteenth century referred to the ownership and care of a home or farm, but today means the judicious control or use of resources, and in agriculture, the cultivation of plants or animals. [1] Farmers and ranchers who raise livestock are considered to practice animal husbandry; in modern times, large agricultural enterprises that rely on mass production and advanced technology have largely replaced individual farmers as the leading producers of food and animals in developed countries. History Additional information: History of agriculture Birth of breeding Main articles: Neolithic revolution and domestication of animals La of ruminants, like these fat-tailed sheep in Afghanistan, provided nomads throughout the Middle East and Central Asia with a reliable source of food. The domestication of livestock was driven by the need to have food on hand when hunting was unproductive. The desirable characteristics of a pet are that it should be useful for the you should be able to thrive in your company, it must reproduce freely and be easy to care for. [2] Domestication was not a single event, but a repeated process in several periods in different locations. Sheep and goats were the animals that accompanied nomads in the Middle East, while cattle and pigs were associated with more settled communities. [3] The first wild animal to be domesticated was the dog. Half-wild dogs, perhaps starting with young individuals, may have been tolerated as scavengers and vermin killers, and being naturally packet hunters, were predisposed to be part of the human herd and join the hunt. Prey animals, sheep, goats, pigs and cattle were progressively domesticated early in the history of agriculture. [3] The pigs were domesticated in Mesopotamia around 13,000 a.m. C.,[4] and the sheep followed, sometime between 11,000 and 9,000 bc. C. [5] Cattle were domesticated from the wild auroras in the areas of modern Turkey and Pakistan around 8.500 BC. C. [6] A cow was a great advantage for a villager, as it produced more milk than its calf needed, and its strength could be put into use as a working animal, pulling a plow to increase crop production, and drawing a sled, and later a cart, to bring the products home from the field. Feather animals were first used around 4,000 a.m. C. in the Middle East, increasing agricultural production immeasurably. [3] In South Asia, the elephant was domesticated for 6,000 years. C. [7] Fossilized chicken bones dated 5040 bc. C. have been found in northeastern China, far from where their wild ancestors lived in the rainforests of tropical Asia, but archaeologists believe that the original purpose of domestication was for the sport of cockfighting. [8] Meanwhile, in South America, the flame and alpaca had been domesticated, probably before 3,000 a.m. C. like beasts of cargo and for their wool. Neither was strong enough to pull a plow that limited the development of agriculture in the New World. [3] Horses occur naturally on the steppes of Central Asia, and their domestication, around 3,000 a.m. C. in the Black Sea and Caspian Sea region, was originally a source of meat; use as herd animals and for horseback riding followed. Around the same time, the savage was being domesticated in Egypt. The camels were domesticated shortly after this,[9] with the Bactrian camel in Mongolia and the Arab camel becoming beasts of cargo. Around 1000 a. C., caravans of Arab camels were joining India with Mesopotamia and the Mediterranean. [3] Civilizations Milking cattle in ancient Egypt in ancient Egypt, cattle were the most important cattle, and sheep, goats and pigs were also maintained; poultry, including ducks, geese and pigeons were caught in nets and bred on farms, where they were forging to the force with dough to fatten. [10] The Nile provided an abundant source of fish. The meli bees from were domesticated from at least the Old Kingdom, providing honey and in Ancient Rome, all known cattle in ancient Egypt were available. In addition, rabbits were domesticated for food in the 1st century BC. To help get them out of their burrows, the kitten was domesticated as the ferret, its use described by Pliny the Elder. [12] Medieval shepherd breeding with sheep in woven obstacle feather. Medieval France. Fifteenth century, MS Douce 195 in northern Europe, agriculture including livestock went into decline when the Roman Empire collapsed. Some aspects such as animal grazing continued throughout the period. By the 11th century, the economy had recovered and the countryside was again productive. [13] The Domesday Book recorded every plot of land and every animal in England: There was not a single skin, not a dirt yard, no, besides ... not even an ox, not a cow, not a pig left, that was not established in [the king's] writing. [14] For example, Earley's royal mansion in Berkshire, one of the thousands of villages recorded in the book, had in 1086 2 fishing areas worth [paying taxes of] 7s and 6d [every year] and 20 acres of meadow [for cattle]. Forest to [feed] 70 pigs. [15] Improvements in livestock in the medieval period in Europe went hand in hand with other events. Improvements to the plow allowed the ground to be tilled at a greater depth. The horses took over from the oxen as the main suppliers of traction, new ideas were developed about crop rotation and the cultivation of winter fodder crops gained ground. [16] Peas, beans and vetches became common; increased soil fertility through nitrogen fixation, allowing more livestock to be maintained. [17] Colombian Exchange Main article: Colombian exchange Exploration and colonization of North and South America led to the introduction into Europe of crops such as maize, potatoes, sweet potatoes and cassava, while the main livestock of the Old World - cattle, horses, sheep and goats - were introduced to the New World for the first time along with wheat, barley, rice and turnips. [18] Main article of the Agricultural Revolution: British Agricultural Revolution The Lincoln Longwool breed was improved by Robert Bakewell in the 18th century. Selective breeding of desired traits was established as a scientific practice by Robert Bakewell during the British Agricultural Revolution in the 18th century. One of his most important breeding programs was with sheep. Using native material, he was able to quickly select for large sheep, but thin bones, with long, shiny wool. The Lincoln Longwool was improved by Bakewell and in turn the Lincoln was used to develop the later breed, called New (or Dishley) Leicester. It was hornless and had a square, fleshy body with lines Straight. [19] These sheep were widely exported and have contributed to numerous modern breeds. Under his influence, English farmers began raising livestock for use like beef. The long-horned heifers crossed paths with the Westmoreland bull to create the Dishley Longhorn. [20] Semi-natural and unfurere pastures formed by traditional agricultural methods in Europe were managed by grazing and mowing. Since the ecological impact of this land management strategy is similar to the impact of natural disturbances such as a wildfire, this agricultural system shares many beneficial characteristics with a natural habitat, including the promotion of biodiversity. This strategy is declining in Europe today due to the intensification of agriculture. The mechanized and chemical methods used are causing biodiversity to decrease. [21] Breeding More information: Livestock systems More information: Agriculture - Livestock production systems, and intensive animal-rearing Herdwick sheep in an extensive hill-breeding system, Lake District, England Traditionally, animal husbandry was part of the subsistence farmer's way of life, producing not only the food the family needed, but also the fuel, fertilizer, clothing, transport and draft energy. Killing the animal for food was a secondary consideration, and whenever possible its products, such as wool, eggs, milk and blood (by the Farmhouses) were harvested while the animal was still alive. [22] In the traditional system of transhumance, people and livestock moved seasonally between fixed summer and winter pastures; in the mountainous regions the summer grass was in the mountains, the winter grass in the valleys. [23] Animals can be kept extensively or intensively. Extensive systems involve animals wandering at will, or under the supervision of grazing, often for their protection from predators. Livestock in the western United States involves large herds of livestock that graze widely on public and private lands; [24] Similar cattle stations are found in South America. Australia and elsewhere with large areas of land and low precipitation. Similar livestock systems have been used for sheep, deer, ostriches, emu, flame and alpaca. [25] In the Highlands of the United Kingdom, sheep become the autumn lands in spring and graze the abundant unteilled mountain herbs, being taken to lower altitudes by the end of the year, with supplementary feeding provided in winter. [26] In rural areas, pigs and poultry can get much of their nutrition from the sweep, and in African communities, hens can live for months without being fed, and still produce one or two eggs a week. [22] Pigs in an intensive system, Midwestern United States At the other end, the most developed parts of the world, animals are often handled intensely; dairy cows can be kept in zero grazing conditions with all their fodder brought to them; cattle can be kept in high-density pens; [27] Pigs can be housed in heated buildings and never go outdoors; [28] Poultry can be raised in barns and kept in cages as birds under controlled lighting conditions. Between these two extremes, semi-intensive farms are produced, often familiar where pasta cattle were for much of the year, silage or hay is made to cover the times of year when the grass stops growing, and fertilizers, feed and other inputs are introduced into the farm from the outside. [29] Main feeding article: animal feed Cattle around an outdoor feeder Animals used as livestock are predominantly herbivores, the main exceptions are pork and chicken that are omnivores. Herbivores can be divided into concentrated selectors that selectively feed on highly nutritious seeds, fruits and young foliage, grazers that feed mainly on grass, and intermediate feeders who choose their diet from the full range of plant material available. Cattle, sheep, goats, deer and antelopes are ruminant; digest food in two steps, chewing and swallowing in the normal way, and then regurgitating the semi-digested cud to chew it again to extract as much value as possible from the food. [30] The dietary needs of these animals are mainly met by eating grass. Herbs grow from the base of the leaf, allowing it to thrive even when grazed or cut a lot. [31] In many climates the growth of the herb is seasonal, for example in the warm summer season or tropical rains, so some areas of the harvest are reserved to be cut and preserved, either as hay (dry grass), or as silage (fermented grass). [32] Other forage crops are also grown and many of them, as well as crop residues, can be silaged up to fill the gap in livestock's nutritional needs in the scarcity season. [33] Cattle feed pellets from Extensiva pressed clay animals may fully survive in fodder, but more intensely maintained livestock will require energy and protein-rich foods in addition. Energy is mainly derived from cereals and by-products of cereals, fats and sugar-rich oils and foods, while proteins can come from fish or mealmeal, dairy products, legumes and other plant foods, often by-products of vegetable oil extraction. [34] Pigs and poultry are not ruminant and unable to digest cellulose in grass and other fodder, so they feed entirely on cereals and other high-energy foods. Ingredients for animal rations can be grown on the farm or purchased, in the form of pelletized compound food products or in cubes specially formulated for different classes of livestock, their stages growth and their specific nutritional needs. Vitamins and minerals are added to balance the diet. [35] Farmed fish generally feed on pelletized foods. [35] Main Breeder: Animal breeding Farm animal husbandry rarely occurs spontaneously, but is administered by farmers in order to promote traits considered desirable. These include hardness, fertility, docility, maternity skills, rapid growth rates, low food consumption per unit of growth, growth, body proportions, higher yields and better fiber qualities. Undesirable traits are selected as health and aggressive defects. [37] Selective breeding has been responsible for large increases in productivity. For example, in 2007, a typical fattening chicken at eight weeks of age was 4.8 times heavier than a bird of similar age in 1957.[36] When, despite these precautions, animals continue to become ill, they are treated with veterinary medicinal products, by the farmer and veterinarian. In the European Union, when farmers treat their own animals, they are required to follow the guidelines for treatment and record the treatments given. [38] Animals are susceptible to a number of diseases and conditions that can affect their health. Some, such as classical swine fever[39] and shaking[40] are specific to one type of population, while others, such as foot-and-mouth disease affect all animals with hooves. [41] When the condition is serious, governments impose regulations on import and export, stock movement, quarantine restrictions and reporting of suspected cases. Vaccines are available against certain diseases, and antibiotics are widely used when appropriate. Antibiotics were routinely added to certain compound foods to promote growth at one time, but this practice is now thwarted in many countries due to the risk that it may lead to antibiotic resistance. [42] Animals living in intensive conditions are

particularly prone to internal and external parasites; more and more sea lice are affecting salmon grown in Scotland. [43] Reducing livestock parasite loads results in increased productivity and profitability. [44] Family cattle: ink and watercolor drawing of a corral with cow, horse, pigs and chickens, 1869 governments are particularly concerned about zoonoses, diseases that humans can acquire from animals. Wild animal populations can harbor diseases that can affect domestic animals that can acquire them as a result of insufficient biosecurity. An outbreak of the Nipah virus in Malaysia in 1999 dates back to pigs that became ill after contact with flying foxes that eat fruits, their faeces and urine. The pigs to their passed the infection to humans. [45] H5N1 bird flu is present in wild bird populations and can be transported over long distances by migratory birds. This virus is easily transmissible to domestic poultry, and humans living near them. Other infectious diseases affecting wild animals, farm animals and humans include brucellosis, tuberculosis and trichinosis. [46] Species range Main articles: Livestock, Types, Aquaculture - Species Groups, and Entomophagy There is not a single universally agreed definition of which species are livestock. Widely agreed types of livestock include cattle for beef and dairy, sheep, goats, pigs and poultry. Several other species are sometimes considered cattle, such as horses,[47] while poultry is sometimes excluded. In some parts of the world, cattle include species such as buffalo, and South American camels, alpaca and llama. [50] Some authorities use much broader definitions to include fish in aquaculture, micro-ranchers such as rabbits and rodents as guinea pigs, as well as insects from mealychea bees to crickets bred for human consumption. [51] Cutting a Merino Sheep for Its Wool Products Main Article: Animal Products Animals are raised for a wide variety of products, mainly meat, wool, milk and eggs, but also including sebum, isinglass and rennet. [53] Animals are also maintained for more specialized purposes, such as producing vaccines[54] and antiserum (containing antibodies) for medical use. [55] When forage or other crops are grown alongside animals, manure can serve as fertilizer, returning minerals and organic matter to the soil in a semi-closed organic system. [56] Dairy Main Branches article: Dairy farming A modern rotary milking parlor, Germany Although all mammals produce milk to nourish their young, the cow is predominantly used worldwide to produce milk and dairy products for human consumption. Other animals used to a lesser extent for this purpose include sheep, goats, camels, buffaloes, yaks, reindeer, horses and donkeys. [57] All these animals have been domesticated over the centuries, being bred by such desirable characteristics as fertility, productivity, docility and the ability to thrive under prevailing conditions. While in the past, livestock had multiple functions, modern breeding of dairy cows has resulted in specialized Holstein Friesian animals producing large amounts of milk economically. Artificial insemination is widely available to allow farmers to select particular traits to suit their circumstances. [58] While in the past, cows were kept in small herds on family farms, grazing pastures and being fed hay in winter, today there is a tendency towards larger herds, more intensive systems, silage feeding and zero grazing, a system where grass is cut and the cow is carried, which is housed all year round. [59] In many communities, milk production is only part of the purpose of maintaining an animal that can also be used as a loading beast or to draw a plow, or for the production of fiber, meat and leather, with manure used for fuel or for improving soil fertility. Sheep and goats can be favored for dairy products in climates and conditions that do not suit dairy cows. [57] Meat The Hereford is a resilient breed of cattle, now bred in many countries around the world. Main articles: The meat industry, cattle, sheep farming, pig husbandry and cuniculture meat, mainly from farm animals, is an important source of dietary proteins worldwide, with an average of about 8% of man's energy intake. The actual rates consumed depend on local preferences, availability, cost and other factors, with cattle, sheep, pigs and goats being the main species involved. Cattle generally produce a single offspring annually that takes more than a year to mature; sheep and goats often have twins and these are ready to be slaughtered in less than a year; pigs are more prolific, producing more than one litter of up to about 11[60] piglets each year. [61] Horses, donkeys, deer, buffaloes, llamas, alpacas, guanacos and vicunas are grown for meat in several regions. Some desirable traits of meat-raised animals include fertility, hardiness, rapid growth rate, ease of management and high food conversion efficiency. About half of the world's meat is produced from animals grazing in open ranges or in closed pastures, the other half is produced intensely in various factory farming systems; they are mainly cows, pigs or poultry, and are often bred indoors, usually at high densities. [62] Poultry battery hens, Brazil Main article: Poultry, kept for its eggs and meat, include chickens, turkeys, geese and ducks. The vast majority of laying birds used for egg production are chickens. Methods for maintaining layers range from free-range systems, where birds can roam as they will, but are housed at night for their own protection, through semi-intensive systems where they are housed in barns and have hangers, garbage and some freedom of movement, to intensive systems where they are kept in cages. Battery cages are arranged in long lines on various levels, with external feeders, drinkers and egg collection facilities. This is the most economical and labor-saving method of egg production, but has been criticized for animal welfare reasons, as birds are unable to exhibit their normal behaviors. [63] In the developed world, most poultry raised for meat are raised indoors in large sheds, with automated equipment under environmentally controlled conditions. Chickens bred in this way are known as broiler chickens, and the genetics have meant that they can be cultivated up to the weight of sacrifice within six to seven weeks of hatching. Newborn chicks are restricted to a small area and given extra heating. The litter on the ground absorbs the droppings and the occupied area expands as they grow. Power and water are automatically supplied and lighting is controlled. Birds can be harvested several times or the entire shed can be cleared at once. [64] A A the breeding system is generally used for turkeys, which are less resistant than chickens, but take longer to grow and often move to separate fattening units to finish. [65] Ducks are particularly popular in Asia and Australia and can be killed at seven weeks under commercial conditions. [66] Aquaculture freshwater fish farming, France Main article: Aquaculture Aquatic organisms including fish, molluscs, crustaceans and aquatic plants and involves some kind of intervention in the breeding process to improve production, such as regular planting, feeding, protection of predators, etc. Agriculture also implies individual or corporate ownership of the population being cultivated. [67] In practice it can take place at sea or in fresh water, and be extensive or intensive. Entire bays, lakes or ponds can be dedicated to aquaculture, or the cultivated animal can be held in cages (fish), artificial reefs, racks or ropes (shellfish). Fish and prawns can be grown in rice paddies, either arriving naturally or being introduced, and both crops can be harvested together. [68] Fish hatcheries provide larval and juvenile fish, crustaceans and shellfish, for use in aquaculture systems. When large enough, these are transferred to culture tanks and sold to fish farms to reach the crop size. Some species commonly bred in hatcheries include shrimp, prawns, salmon, oysters and scallops. Similar facilities can be used to breed species with conservation needs to be released into the wild, or hunting fish for waterway repopulation. Important aspects of breeding in these early stages include breeding population selection, water quality control and nutrition. In nature, there is an enormous amount of mortality at the nursery stage; farmers try to minimize this while maximizing growth rates. [69] Crickets bred for human consumption, items from Thailand Main: Beekeeping, Entomophagy and Sericulture Bees have been held in hives since at least the First Dynasty of Egypt, five thousand years ago.[70] and man had been harvesting honey from nature long before that. Fixed comb hives are used in many parts of the world and are made of any locally available material. [71] In the most advanced economies, where modern strains of national bees have been selected for docility and productivity, several hive designs are used to remove combs for honey processing and extraction. Apart from honey and wax they produce, honey bees are important pollinators of wild crops and plants, and in many places hives are transported through the countryside to aid in pollination. [72] Sericulture, the breeding of silkworms, was first adopted by the Chinese during the Shang dynasty. [73] The only commercially grown species is domesticated silk. When he turns his each larva produces an extremely long and thin silk thread. The larvae feed on mulberry leaves and in Europe, only one generation is normally bred every year, as it is a deciduous tree. In China, Korea and Japan, however, two generations are normal, and in the tropics, several generations are expected. Most silk production occurs in the Far East, with a synthetic diet used to breed silkworms in Japan. [74] Insects are part of the human diet in many cultures. [75] In Thailand, crickets are cultivated for this purpose in the north of the country, and palm weevil larvae in the south. Crickets are kept in pens, boxes or drawers and feed on commercial food from pelletized poultry, while palm weevil larvae live in cabbage palms and sago palm trees, limiting their production to areas where these trees grow. [76] Another delight of this region is bamboo caterpillar, and the best breeding and harvesting techniques are being studied in semi-crickets habitats. [76] Effects Environmental Impact Main Articles: The environmental impact of livestock and the environmental impact of meat production Livestock production requires large areas of land. Livestock has a significant impact on the global environment. It is responsible for between 20 and 33% of the world's freshwater consumption,[77] and livestock, and the production of feed for them, occupy about a third of the earth's ice-free land. [78] Livestock production is a contributing factor to species extinction, desertification,[79] and habitat destruction. [80] Animal agriculture contributes to the extinction of species in various ways. Habitat is destroyed by clearing forests and converting land to grow feed crops and animal grazing, while predators and herbivores are frequently attacked and hunted due to a perceived threat to livestock benefits; for example, animal husbandry is responsible for up to 91% of deforestation in the Amazon region. [81] In addition, livestock produce greenhouse gases. Cows produce about 570 million cubic meters of methane per day,[82] representing between 35 and 40% of the planet's total methane emissions. [83] Livestock is responsible for 65% of all human-related emissions of the powerful and durable nitrous oxide of greenhouse gases. [83] As a result, ways of mitigating the environmental impact of animal husbanding are being explored. Strategies include the use of manure biogas,[84] genetic selection,[85][86] immunization, rumen defatation, outer competence of methanogenic archaea with acetogens,[87] introduction of methronic in rumen,[88][89] diet modification and grazing management, among others. [92] Certain dietary changes (as with Asparagopsis taxiformis) allow a reduction of up to 99% in ruminant greenhouse gas emissions. [94] Main article on animal welfare: Animal welfare Since the 18th century, people have concerned about the welfare of farm animals. Possible wellness measures include longevity, behavior, physiology, reproduction, freedom of disease and freedom of immunosuppression. Animal welfare rules and laws have been created around the world, broadly in line with the most widespread position in the Western world, a form of utilitarianism: that it is morally acceptable for humans to use non-human animals, provided that unnecessary suffering is not caused, and that the benefits to humans outweigh the costs to livestock. An opposite view is that animals have rights, should not be considered property, are not necessary to use and should never be used by humans. [98] Live animal exports have increased to meet the growing global demand for livestock as in the Middle East. Animal rights activists have been heard in the transport of animals over long distances; one result was the ban on live exports from New Zealand in 2003. [100] In the culture Opening the budget; – or – John Bull giving his pants to save his bacon[note 1] by James Gillray (d. 1815) Since the 18th century, farmer John Bull has represented the English national identity, first in the political satire of John Arbuthnot, and soon after in caricatures by James Gillray and others, including John Tenniel. He likes food, beer, dogs, horses and field sports; it's practical and up to the ground, and anti-intellectual. [101] Farm animals are widespread in children's books and songs; the reality of livestock is often distorted, softened or idealized, giving children an almost entirely fictional account of agricultural life. Books often show free happy animals to roam the attractive field, an image completely at odds with the realities of impersonal and mechanized activities involved in modern intensive agriculture. [102] Dressed in pigtails in Beatrix Potter's 1913 *Beatrix Potter the Tale of Pigling Bland* Pigs, for example, appear in several of Beatrix Potter's little books, such as *Piglet in A.A. Milne's Winnie the Pooh* stories, and something darker (with a touch of animals going to slaughter) like *Babe in Dick King-Smith's The Sheep-Pig*, and like *Wilbur in E. B. White's Charlotte's Charlotte*. [103] Pigs tend to bear joy, good humour and innocence. Many of these books are completely anthropomorphic, dress farm animals in clothes and have them walk on two legs, live in houses and perform human activities. [102] The children's song *Old MacDonald Had a Farm* describes a farmer named MacDonald and the various who keeps, celebrating the noises that everyone makes. [104] Many urban children experience breeding animals for the first time on a pet farm; in Britain, about five million people a year visit a farm of some kind. This presents some risk of infection, especially if children handle animals and then do not wash their hands; a strain of *E. coli* infected 93 people had visited a British interactive farm in an outbreak in 2009. [105] Historic farms such as those in the United States offer farms and a carefully curated version of agriculture to those willing to pay for it.[106] sometimes giving visitors a romantic image of a pastoral idyll of a time not specified in the pre-industrial past. [106] See also Agronegocios Dairy Industry of Animal Science in the US Dairy Industry Food vs Feed Zootechncis Wildlife farming Notes - Both the name Bull and the reference to bacon indicate the archetypal farmer. Reference quotes from Merriam-Webster's Collegiate Dictionary -Clutton-Brock, Juliet (1999). *Natural History of Domesticated Mammals*. Cambridge University Press. 1–2. ISBN 978-0-521-63495-3. a b c d e History of animal domestication. *History world*. Retrieved 3 June 2017. Nelson, Sarah M. (1998). 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