Ghosts And Things: Agriculture And Animal Life By Tony Weis

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Tony Weis's "Ghosts and Things: Agriculture and Animal Life" examines the rapidly changing relationship between domesticated animals, wild animals, agriculture, and global environmental transformation. The central argument is that these changes are often undervalued even though they affect biodiversity, land, climate, food systems, and the moral relationship between human beings and other species. The title captures two opposite but connected trajectories. Many wild animal populations are disappearing from altered landscapes, leaving ecological "ghosts," while a small number of domesticated species are multiplying in enormous numbers and are treated increasingly as standardized, interchangeable "things" within industrial production. (Weis, 2018; Weis, 2013)

The contrast is not simply between nature and farming. Agriculture has become one of the most powerful forces shaping animal life on Earth. Expanding cropland, pasture, feed production, roads, settlements, hunting access, and commodity markets transform habitats and determine which animals survive, which are displaced, and which are bred in billions. Weis's analysis asks readers to place animals at the center of environmental politics rather than treating them as secondary consequences of economic development. The future of biodiversity and the future of food are connected because both depend on how land, labor, grain, oilseeds, and animal bodies are organized.

Wild Animals as Ecological "Ghosts"

The first major section of the work concentrates on wild animals living in modified, shrinking, and fragmented environments. A landscape may still appear green while having lost much of the animal life that once gave it ecological complexity. Large mammals, birds, amphibians, reptiles, fish, and insects can decline long before a species is formally declared endangered. The idea of "ghosts" therefore refers not only to extinction but also to ecological absence. Animals may survive in small isolated populations while no longer performing the same functions in seed dispersal, predation, grazing, pollination, nutrient movement, or food webs.

This perspective challenges conservation approaches that focus only on the last individuals of a rare species. Preventing extinction is essential, but severe population decline among species not officially considered threatened can also alter ecosystems. A bird may remain globally common while disappearing from large regions because of habitat loss or pesticide use. A predator may survive in protected reserves while becoming functionally absent from surrounding landscapes. By the time a species reaches the highest legal threat category, ecological damage may already be widespread.

Defaunation

Weis connects this decline with the concept of defaunation, a term used in conservation biology to describe the loss of animal abundance, diversity, and ecological function. Defaunation is comparable to deforestation, but it can be less visible. A forest without its former animals may look intact to a casual observer. Hunting, habitat fragmentation, pollution, invasive species, climate change, disease, and agricultural conversion can progressively empty it. (Dirzo et al., 2014)

The original essay emphasizes major losses among non-domestic vertebrates, but the concept also extends to invertebrates whose decline affects pollination, soil formation, decomposition, and aquatic systems. Measuring defaunation requires more than counting species. Researchers examine population size, geographic range, body-size distribution, genetic diversity, and ecological interaction. A species represented by a few isolated groups is not equivalent to a widely distributed and abundant population.

Defaunation also affects human communities. Many Indigenous and rural societies depend on animals for food, cultural practice, knowledge, and relationships with land. The disappearance of wildlife can reduce nutrition, alter livelihoods, and weaken cultural continuity. Conservation should therefore avoid treating animals as separate from human history and social justice.

Agricultural Expansion and Desertification

The original discussion places defaunation within the expansion of agriculture and growing land degradation. Cropland and pasture occupy a large share of habitable land. When forests, savannas, wetlands, and grasslands are converted, animals lose feeding areas, migration routes, breeding grounds, and shelter. Roads and fences divide remaining habitat and increase access for hunting or extraction. Water diversion and chemical runoff extend agricultural effects beyond the farm boundary.

Desertification does not mean that every agricultural landscape literally becomes a desert. It refers to degradation in drylands through vegetation loss, soil erosion, reduced water retention, salinization, overgrazing, and climatic stress. Poorly managed livestock and cropping can reduce ecological productivity and make both wildlife and farming more vulnerable. However, agriculture is not uniform. Agroecological practices, rotational grazing, diversified farms, habitat corridors, soil restoration, and protection of water can reduce damage. Weis’s argument is directed primarily at systems that expand production by simplifying ecosystems and externalizing environmental costs.

European Imperialism and Animal Frontiers

The original essay links present patterns with the beginning of European imperialism. Colonial expansion reorganized land, labor, animals, and trade across continents. Settlers introduced livestock, crops, property systems, fences, and hunting practices while displacing Indigenous communities and transforming ecosystems. Animals were classified as commodities, pests, game, labor, symbols, or obstacles according to colonial economic goals.

Livestock frontiers often moved with territorial conquest. Cattle and sheep helped settlers claim land and replace existing ecological and social relations. Predators were killed because they threatened herds, while wild herbivores were displaced by pasture or fences. Colonial markets also expanded demand for ivory, skins, feathers, meat, and live animals. The modern separation between "productive" domestic animals and "wild" animals requiring protected spaces developed within this history.

Recognizing the imperial dimension matters because environmental damage is not produced by abstract humanity equally. Particular states, corporations, landowners, and consumers have exercised more power over land and animal life. Conservation policies can repeat colonial relations if they remove local communities from protected areas while leaving larger commercial pressures unchallenged.

Animal Frontiers and the Modern Conservation Movement

The original essay examines animal frontiers and their relationship to conservation both symbolically and strategically. Early conservation campaigns often focused on charismatic animals threatened by hunting or habitat conversion. Protecting elephants, tigers, rhinoceroses, whales, and other highly visible species helped build public support for parks and wildlife law. These animals became symbols of wilderness and the need to restrain exploitation.

Species-centered conservation has achieved important successes, but it can also narrow priorities. Protecting one famous animal may not preserve the full ecosystem, and resources may be directed away from less visible species. A reserve created for wildlife can also harm people if local land rights and knowledge are ignored. Modern conservation increasingly recognizes the need for landscape connectivity, community participation, Indigenous stewardship, and attention to cumulative pressures.

Weis's use of "ghosts" encourages conservation to act before only a symbolic remnant remains. It asks whether landscapes contain viable and interacting animal communities rather than merely whether one species has avoided legal extinction.

Poaching, Black Markets, and Animal Trade

The original discussion also identifies poaching, black markets, relocation, and breeding networks as major conservation challenges. Illegal wildlife trade supplies products, pets, traditional medicine, luxury goods, meat, and private collections. High prices can make rare animals more attractive to traffickers, creating a cycle in which scarcity increases commercial value.

Enforcement is necessary but not sufficient. Trafficking networks operate through poverty, corruption, organized crime, consumer demand, and weak governance. Local hunters may receive a small part of the final value while bearing the greatest legal risk. Effective policy requires demand reduction, livelihood alternatives, border cooperation, financial investigation, and protection for rangers and communities.

Captive breeding and relocation can support recovery in some cases, but they are not simple replacements for habitat protection. Animals bred in captivity may lose behaviors needed in the wild, while moving them can spread disease or create conflict in receiving areas. Commercial breeding may also provide cover for laundering animals taken from the wild. Each intervention requires careful scientific and ethical evaluation.

Domesticated Animals as “Things”

The second major section of Weis’s work turns from disappearing wildlife to the expanding populations of a small number of domesticated species raised for human use. Chickens, pigs, cattle, and other livestock exist in numbers shaped by industrial demand rather than ecological carrying relationships. Their bodies are selected for rapid growth, high milk or egg output, feed conversion, uniform size, and compatibility with mechanized systems. The term “things” refers to the reduction of living animals to units of production with little control over movement, reproduction, social life, or death.

This does not imply that every farmer treats animals without care or that all forms of domestication are identical. Human societies have lived with animals through herding, mixed farming, transport, companionship, ritual, and labor for thousands of years. Weis’s criticism focuses on the scale and organization of industrial production, where animals can become invisible inside long supply chains. Consumers encounter packaged meat, milk, or eggs without seeing breeding, housing, transport, slaughter, waste, or worker conditions.

The History of Domestication and Animal Labor

The original essay begins this section with the long history of domestication and the importance of animal labor. Animals have helped plow fields, transport people and goods, provide manure, control

vegetation, and support food and textile production. Their contribution was central to agricultural societies and the growth of cities. Relationships could involve dependence, familiarity, care, coercion, and slaughter simultaneously.

Industrialization changed these relationships by replacing some animal labor with machines while expanding animals as food commodities. Tractors reduced reliance on draft animals, but fossil-fuel energy and global feed systems allowed livestock populations and meat consumption to increase. Animals moved out of everyday public life and into specialized facilities, reducing direct contact between consumers and production. (Food and Agriculture Organization of the United Nations, 2023)

This historical change is important because industrial livestock is not merely an enlarged traditional farm. It is connected with genetics, pharmaceuticals, automated feeding, climate control, refrigeration, global trade, financial investment, and concentrated processing. The animal becomes one component within a technical and economic system.

The Industrial Grain-Oilseed-Livestock Complex

A central concept in Weis's analysis is the "industrial grain-oilseed-livestock complex." Large quantities of maize, soybeans, and other crops are grown to feed animals. This links meat, dairy, and egg production with fertilizer, pesticides, machinery, land markets, shipping, feed mills, processing companies, and commodity traders. Livestock consumption therefore affects land far from the place where animals are housed or products are eaten.

Feed production can drive deforestation and habitat conversion, especially where soy or maize expansion is connected with global animal agriculture. It also uses water, energy, and nutrients. Animals convert only part of feed energy and protein into human-edible products; the rest supports metabolism or becomes waste. Different species and production systems have different efficiencies, but the general result is that high levels of animal-product consumption require substantial agricultural resources.

Oilseeds connect animal agriculture with vegetable oil and processed food markets. Crushing soybeans produces both oil and protein-rich meal, making the industries interdependent. It is therefore difficult to assign one environmental impact to one product in isolation. The complex operates as a connected system whose profitability depends on multiple outputs and policies.

Environmental Effects of Industrial Meat and Dairy

The original essay refers to the damaging effects of industrial meat and dairy production on communities and the environment. Major concerns include greenhouse-gas emissions, manure pollution, nutrient runoff, air quality, water use, antibiotic resistance, land conversion, and biodiversity loss. Ruminants produce methane through digestion, while manure and fertilizer release methane and

nitrous oxide. Feed cultivation and pasture expansion contribute to carbon loss where natural ecosystems are converted.

Concentrated manure can exceed the capacity of nearby land to absorb nutrients. Runoff may contaminate rivers and contribute to algal blooms and low-oxygen zones. Communities near large animal facilities may experience odor, air pollutants, truck traffic, and water concerns. These burdens often fall disproportionately on low-income or marginalized populations.

Environmental effects differ among systems. Well-managed grazing can maintain some grasslands and recycle nutrients, while poorly managed grazing can degrade soil and habitat. Mixed farms can integrate animals with crops, whereas highly concentrated production separates feed, animals, and waste across long distances. Weis's framework encourages attention to scale, density, and political economy rather than treating every animal product as identical.

Animal Welfare and Moral Concern

Calling animals "things" raises an ethical question about sentience and control. Many farmed animals can experience pain, fear, stress, comfort, social attachment, and motivation. Housing systems that prevent movement, nesting, rooting, grazing, maternal care, or other strongly motivated behaviors can cause suffering even when animals remain productive.

Welfare standards may improve space, handling, transport, veterinary care, and slaughter practices. These reforms matter, but Weis's argument asks whether the total scale of production can be made compatible with meaningful animal lives. Faster growth and higher output can create health problems that minor facility improvements do not solve. Ethical evaluation must consider breeding goals, lifespan, social behavior, and the animal's entire experience.

Different moral frameworks reach different conclusions. Some defend humane use of animals while opposing unnecessary suffering; others argue that treating sentient beings as property is inherently unjust. The essay's main contribution is to make animal experience visible within environmental debate rather than requiring one final philosophical answer.

Workers and Communities

The industrial animal system also affects human labor. Slaughterhouse, processing, farm, transport, and feed workers may face repetitive injury, dangerous machinery, chemical exposure, biological hazards, low wages, and psychological stress. Rapid production lines can place safety and animal welfare under the same pressure because slowing down to handle an animal carefully may conflict with output targets.

Rural communities can become economically dependent on a small number of corporations. Contract

farmers may carry debt and production risk while companies control breeding stock, feed, technical requirements, and purchasing. Concentration can reduce local decision-making and make it difficult for smaller diversified farms to compete. A just transition in food systems must consider farmers and workers rather than placing the entire responsibility on individual consumers.

Political and Individual Solutions

The original essay notes that earlier discussions of animal consumption often emphasize political and individual solutions. Individual choices—reducing meat consumption, avoiding waste, selecting higher-welfare products, or eating more plant foods—can reduce demand and express ethical values. However, consumers act within prices, availability, income, culture, time, and marketing. Personal responsibility cannot replace structural change.

Political solutions include environmental regulation, animal-welfare law, labor protection, antitrust enforcement, support for diversified farming, research, public procurement, dietary guidance, habitat protection, and transition assistance. Agricultural subsidies and trade policies shape which foods are cheap and which systems expand. Governments can support farmers who reduce pollution, protect habitat, improve welfare, or shift production.

Food policy should also respect cultural and nutritional diversity. Animal-source foods may play important roles where plant alternatives are limited, pastoral systems are adapted to local ecology, or communities possess strong cultural relationships with herding and fishing. The strongest case for reduction concerns excessive consumption and highly resource-intensive industrial systems, not a universal assumption that every society has the same options.

Rethinking Meat Production and Consumption

Weis argues that meat production and consumption require fundamental rethinking. The question is not simply whether meat is personally desirable. It is how much is produced, through which systems, with what feed, on whose land, under what labor conditions, and at what cost to animals and ecosystems. A small reduction in consumption across a large affluent population can have greater environmental effect than extreme change by a few individuals.

Rethinking also means challenging the idea that rising meat consumption is an automatic sign of development. Diets can improve through adequate protein, calories, micronutrients, sanitation, and healthcare without reproducing the most resource-intensive patterns of wealthy countries. Public policy can make legumes, grains, vegetables, fruits, and nutritious prepared foods affordable and accessible while supporting culturally acceptable dietary change.

Interspecies Relations and Environmental Politics

The fundamental objective of “Ghosts and Things” is to foreground nonhuman creatures and interspecies relationships in the analysis of environmental transformation. Climate, land, agriculture, and biodiversity debates often treat animals as numbers—livestock units, endangered populations, yields, or emissions. Weis asks what these systems mean for the lives of animals and for human relationships with them.

This perspective changes environmental priorities. A project cannot be evaluated only by carbon emissions if it also destroys habitat or intensifies suffering. A protected area cannot be judged successful only by tourist revenue if wildlife populations remain depleted. A food system cannot be called sustainable solely because production is efficient if it depends on severe labor exploitation or animals bred into chronic illness.

Interspecies ethics also challenges the separation between wild and domestic animals. Feed expansion that supports livestock can remove wild habitat; predator killing protects herds; pollution from farms affects aquatic life; and climate change alters both. The ghosts and the things are produced by the same political economy.

Conclusion

Tony Weis’s “Ghosts and Things” presents two connected transformations in animal life. Wild species are declining, disappearing, or becoming functionally absent from landscapes shaped by agriculture, imperial history, trade, hunting, and habitat loss. At the same time, a small number of domesticated species are multiplying within industrial systems that reduce living animals to standardized units of meat, milk, eggs, labor, and profit.

The first half of the analysis highlights defaunation, agricultural expansion, conservation priorities, poaching, and the historical construction of animal frontiers. The second examines domestication, the grain-oilseed-livestock complex, industrial production, environmental damage, animal welfare, workers, and communities. Together, they demonstrate that biodiversity protection and food-system reform cannot be separated.

The work calls for a more sustainable and peaceful world in which nonhuman life is not treated as invisible. Achieving that goal requires individual reflection, but it depends especially on political action, agricultural reform, habitat protection, labor rights, and changes in the scale and organization of animal production. The title’s moral force lies in making readers see what modern landscapes conceal: the animals who have vanished and the animals whose enormous presence has been reduced to a commodity.

References

Dirzo, R., Young, H. S., Galetti, M., Ceballos, G., Isaac, N. J. B., & Collen, B. (2014). Defaunation in the Anthropocene. *Science, 345*(6195), 401–406.

Food and Agriculture Organization of the United Nations. (2023). *Pathways towards lower emissions: A global assessment of the greenhouse gas emissions and mitigation options from livestock agrifood systems*.

Weis, T. (2013). *The ecological hoofprint: The global burden of industrial livestock*. Zed Books.

Weis, T. (2018). Ghosts and things: Agriculture and animal life. *Global Environmental Politics, 18*(2), 134–142.

World Wildlife Fund. (2024). *Living Planet Report 2024*.