The modern materials industry is built on the backs of billions of animals who are raised for their skin, fur, or feathers every year. These animals have complex emotional lives and the ability to feel pain, and yet, they are treated as a commodity in a system that optimizes for cost-reduction over animal care. As a result, the animals used to supply everyday materials suffer painful lives and deaths that no one would wish on an animal. This kind of suffering is unnecessary and unconscionable, but it’s often overlooked: brands feel as though there are no suitable alternatives, and even many animal advocates consider animal-derived materials to be byproducts of the meat industry and therefore fail to address this problem directly.

In fact, material production is a key profit driver for industrial animal agriculture, and the inhumane practices of factory farming cannot be eradicated without addressing materials. Leather is the second most profitable product of a cow, and in the case of fur, silk, and exotic skins, the animal material itself is the most profitable product. Making progress in the materials industry is necessary for us to enter a post-animal economy.

**Animals as Materials: The Facts**

**Leather: 1.4 Billion Animals Annually**

The vast majority of the animals used for leather production are raised on factory farms and feedlots, where they are poorly treated and deprived of natural social bonds and behaviors. For instance, calfskin – a high-dollar item – is made from young animals raised for veal who are not permitted to move or interact with their mothers from the time of birth to their early death.

**Fur: 1+ Billion Animals Annually**

Animals raised for their fur spend their entire lives in cramped and often unsanitary conditions. There are few regulations around the slaughter of fur animals, giving producers leeway to favor cheap methods over animal welfare. In China, where the majority of fur is produced, it is common practice to skin animals alive due to the belief that blood flow makes the skinning process easier.

1.[https://www.ams.usda.gov/mnreports/nw_ls441.txt#:~:text=The%20average%20value%20of%20hide,down%200.58%20from%20last%20year](https://www.ams.usda.gov/mnreports/nw_ls441.txt#:~:text=The%20average%20value%20of%20hide,down%200.58%20from%20last%20year)
Down: 840+ Million Animals Annually

The feathers and down in the average comforter come from one of two sources: A bird that has been slaughtered for meat, or a bird that has been painfully live-plucked. Live plucking has been dubbed so inhumane that it has been outlawed in the U.S. and several European countries. However, live plucking remains an all too common practice on factory farms in the major down-producing countries, including Poland, Hungary, and China. China alone produces about 80% of the world’s down and feathers, so what is permissible there is in essence permissible for the industry writ large².

Wool: 367+ Million Animals Annually

While sheep are not killed for their wool, they are harmed in its production. Sheep are genetically modified to produce more wool than they would in nature, which can lead to serious health problems from excess skin moisture and overheating. Shearers are often paid by volume, not by the hour, incentivizing workers to deprioritize animal welfare for the sake of efficiency. In this system, injuries are the norm, not the exception. Some wool production still involves “mulesing,” a practice in which chunks of skin are removed from animals’ backsides, often without painkillers.

Exotic Skins: 2.5 Million Animals Annually

Animals like snakes, lizards, and crocodiles raised for their skins are routinely skinned alive and left to die, which, due to their slow metabolisms, can take multiple hours. The irregularity of skin shape and quality also leads to significant waste, meaning that it can take up to four crocodiles to make a single bag. In the U.S., reptiles are excluded from the Animal Welfare Act, so there are no prohibitions against inhumane treatment.

Silk: 1 Trillion Animals Annually

The most common method for extracting silk involves boiling the animals alive in their cocoons. Silk worms are not killed for their silk in “Ahimsa” production methods; however, because they have been bred for silk production instead of optimal quality of life, they have deformed, non-functional wings and are only capable of struggling to move for the short week or so that they can remain alive. While research on insect sentience and nociception is still evolving, there’s no need to enact harm on this scale when we have better alternatives.

² https://www.theguardian.com/world/2016/jan/14/winter-coat-ethically-produced-down-goose-feathers