REWIND SERIES EPISODE ONE, FARMING.



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For some, leather is just another part of the dairy and meat industry. Episode one of Rewind goes back to the farm to find out more.

To feed the planet we must make the most of our finite land. We need to be efficient and sustainable, to consider biodiversity, ecosystems and the huge challenge of climate change. Cattle grazing makes marginal land, that is not fit for growing crops, into farmland. This more than doubles the amount of land farmed today, playing a vital part in tackling food poverty. It turns inedible grass, fed by rainwater, into protein in Europe, the US and around the world. At the same time, well managed grazing of cows on 'traditional' farmland can mean free natural fertilizer, enhanced biodiversity and better quality soil that can also capture and store carbon - all while turning grass and crop waste into food. But in every system there are real challenges. From methane emissions to the millions of hides that are wasted every year.

Cattle produce methane, which is a contributor to global warming breaking down into CO2 and water, but it is important to know that methane only stays in the atmosphere for 12 years before breaking down. Cattle eat plants which have stored carbon as part of photosynthesis. They then belch methane, returning that carbon to the atmosphere. But that breaks down, converting back to CO2. Which plants can use as part of photosynthesis. This is the methane cycle.

So, if the number of cattle in existence remains constant, the amount of atmospheric methane caused by cattle remains constant. It does not rise and therefore is not a net contributor to climate change. These emissions are called biogenic emissions and are part of nature's cycle.

Cowhides are by-products of the meat and dairy industries. We know this because the value, when sold, is typically 2-5% of a US cow. It is so low that 10-20 per cent are thrown away each year – because disposal is cheaper than processing.

So the very act of using leather cuts waste and is a step towards sustainability. Not only does it save greenhouse gas emissions from landfill, it also reduces the production of fossil fuel-derived plastics and the emissions and pollution they generate when people replace leather with plastic and synthetic materials.

USING MARGINAL LAND TO HELP FEED THE WORLD



Source: Food and Agricultural Organization of The United Nations



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70% of the agricultural land used today is defined as marginal land and is almost exclusively used for livestock grazing. If we stop using animals to turn the grass found there into protein, we lose a huge amount of productive land and a huge amount of food – more than *10% of the world's total.

"The European Union Definition of marginal land is 'land of poor quality with regard to agricultural use, and unsuitable for housing and other uses'" Source: <u>The European Commission</u> / <u>*National Geographic, What the World Eats</u>

If marginal land is taken out of use, we will see more pressure put on current arable land – the remaining 30% – to feed the world. This will create more demand for artificial fertilizers – 50% of the world's fertilizer comes from cattle manure – more demands on water for irrigation and more demands on the soil.

"Cattle eat poor-quality plants that would not nourish humans, turning them into high-quality, lean protein" **Source:** The EAT-Lancet Commission on Food, Planet, Health

"Cows are ruminants and their stomachs are designed to get good nutrients from low-quality vegetation – more than 80% of what dairy cows eat cannot be consumed by humans. They turn low-quality food into nourishing milk."

Source: Clear Center, University of California, Davis

If we don't raise livestock we lose a means of turning inedible plant matter into protein-rich beef or milk. This inedible plant matter ranges from grass to processing the waste from other food types, for example the waste husks from producing soy and almond milk, into food and drink.

"Livestock farming is vital to the economies of many developing countries, providing protein, income and employment."

Source: United States Food and Agriculture Organization

Removing cattle from world farming would have a devastating impact on communities and families, particularly smallholdings in developing countries. It would deny some of the poorest people in the world of a means of making a living.

SETTING THE RECORD STRAIGHT ON METHANE

"NO ADDITIONAL CATTLE MEANS NO ADDITIONAL CO2"

Source: Clear Center, University of California, Davis



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"Methane is not the main cause of climate change. Its environmental effects only last 12 years while C02 stays in the atmosphere for centuries" Source: <u>University of Oxford, Environmental Change Institute</u>

"If cattle numbers stay constant, the volume of methane doesn't grow. The methane that is produced is offset by the methane that breaks down" Source: <u>Clear Center, University of California, Davis</u>

If the number of cattle remains constant, so does the volume of methane they have emitted. Because the methane only remains in the environment for 12 years, new emissions are simply replacing the methane that has broken down.

"Any reduction of cattle's methane emissions over 12 years would result in GLOBAL COOLING" **Source:** <u>University of Oxford, Environmental Change Institute</u>

The volume of methane in the atmosphere would reduce because the methane that breaks down after 12 years would not be replaced.

"The oil and gas sector is the largest human cause of methane emissions in the US." Source: <u>The Climate and Clean Air Coalition</u>

TACKLING WASTE TO TACKLE CLIMATE CHANGE



Source: Leather & Hide Council of America



Cowhides are worth such a low percentage of the overall price of the animal that it is often cheaper to dispose of them by incineration or landfill than to prepare them for leather processing.

"More than 340 million cowhides are produced worldwide as by-products of the meat and dairy industries" Source: Food and Agriculture Organization, United Nations

"By 2050, the world is expected to generate 3.40 billion tons of waste annually, increasing drastically from today's 2.01 billion tons" Source: <u>The World Bank</u>

It is vital that we stop generating so much waste. Not only does it cause general pollution, incineration and landfill generate a huge volume of greenhouse gasses. Waste is the fourth largest emissions generator.

"Hides weighing, on average, 25 kilos generate emissions of around at least 250 kilos of CO2-equivalent if left to go to waste" Source: <u>ReFED</u>

"An estimated 150 million hides are wasted each year. This generates more than 3 billion tonnes of CO2 emissions."

Source: Leather & Hide Council of America

When cowhides are used to make leather, the emissions from its disposal are avoided. This is not accounted for in any established systems for the measurement of the sustainability of materials. That is one of a number of reasons that the Higg Index, once the system used by various pieces of sustainability legislation worldwide, has been discredited.

If you found this of interest, keep an eye out for additional factsheets supporting the remaining episodes, 'Fashion', 'Food', and 'The Future' - to be released each week via chooserealleather.com