Leather Learning Series: Part One
The Inherent Sustainability of Leather

Stephen Sothmann, President, Leather and Hide Council of America

Kerry Senior, Director, Leather UK

Egbert Dikkers, Chair, Leather Naturally

Tuesday, April 14th, 2020

Welcome!

Welcome to Part One of the Textile Exchange Leather Learning Series: *The Inherent Sustainability of Leather!*

Join us for Parts Two and Three this summer:

- Part Two: Cattle Farming (Date TBD)
- Part Three: Leather Production (Date TBD)

Speakers

Stephen Sothmann – *President, Leather and Hide Council of America*

Kerry Senior – *Director, Leather UK*

Egbert Dikkers – *Chair, Leather Naturally*

Leather Impact Accelerator (LIA)

DCF protocol	Animal Welfare benchmark	Leather Production benchmarks	Impact Incentives	Claims framework	Traceability guidelines

The primary goal of the Leather Impact Accelerator is to accelerate positive impacts in the leather industry through widescale adoption of minimum level of best practices.


LEATHER AND HIDE
COUNCIL OF AMERICA
Stephen Sothmann
President

We have an ethical duty to use leather

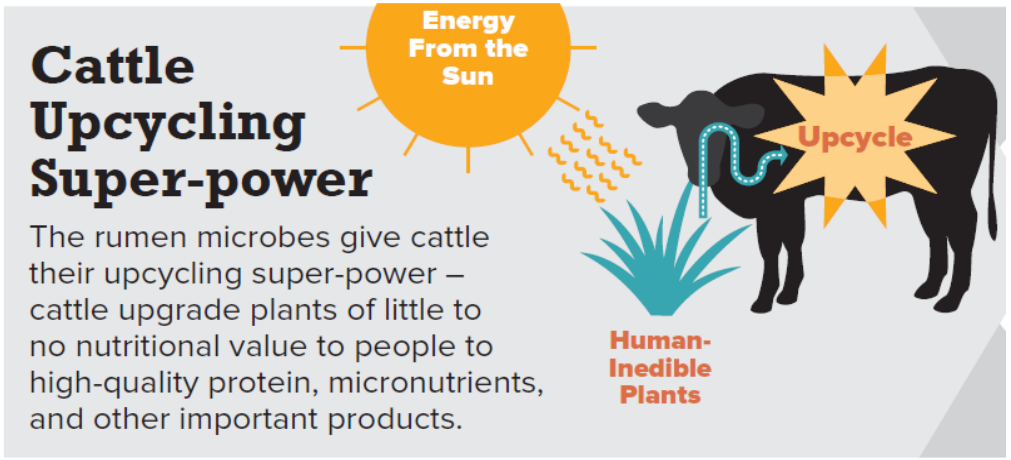
- Leather is a byproduct of food production.
- Society has an ethical duty to use Leather.
- Sadly, this beautiful, natural resource is being wasted.

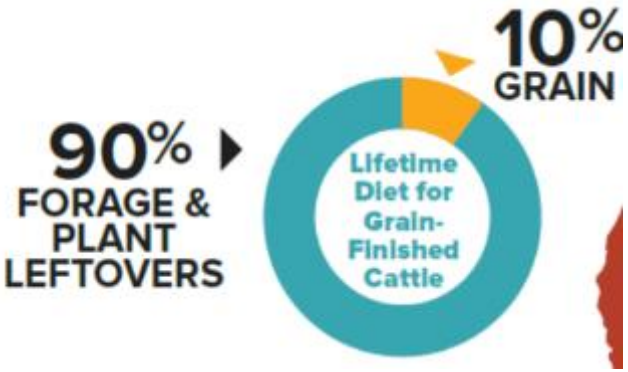
Leather & Hide Council of America

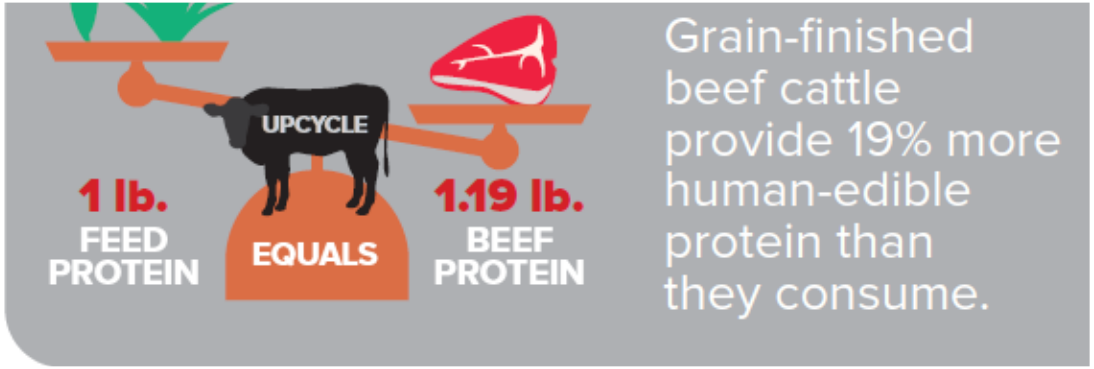
- Industry trade association
- Established 1919
- Recent Merger
- The global voice of the U.S. hides, skins and leather industry

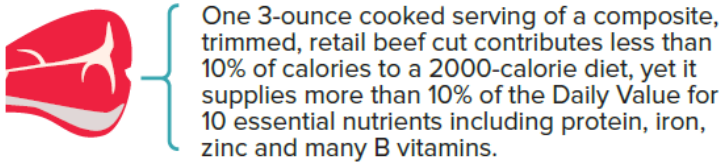
Leather is a byproduct of food production

Why do we eat beef?









- Ruminants, such as cattle, are natural upcyclers.
- Ruminants produce protein for human consumption from plants <u>we cannot eat</u>.

Fun Fact: in the 1500s there were an estimated 60 million head of bison in North America

Images Source: Cattlemens Beef Board/Beef Checkoff

Typical U.S. Cattle Lifecycle

Cow-calf

DIET } Grass
Other Human-inedible Plants

DURATION } 6 - 10 Months

Stocker/backgrounder

DIET } Mostly Grass
Other Human-inedible Plants

DURATION } 2 - 6 Months

Finishing

DIET } Grain
Other Human-inedible Plants

DURATION } 4 - 6 Mos. Grain
- Or -
6 - 10 Mos. Grain

Image Source: Cattlemens Beef Board/Beef Checkoff

Beef: The basics

Cow/Calf and Stocker/Backgrounder Phase

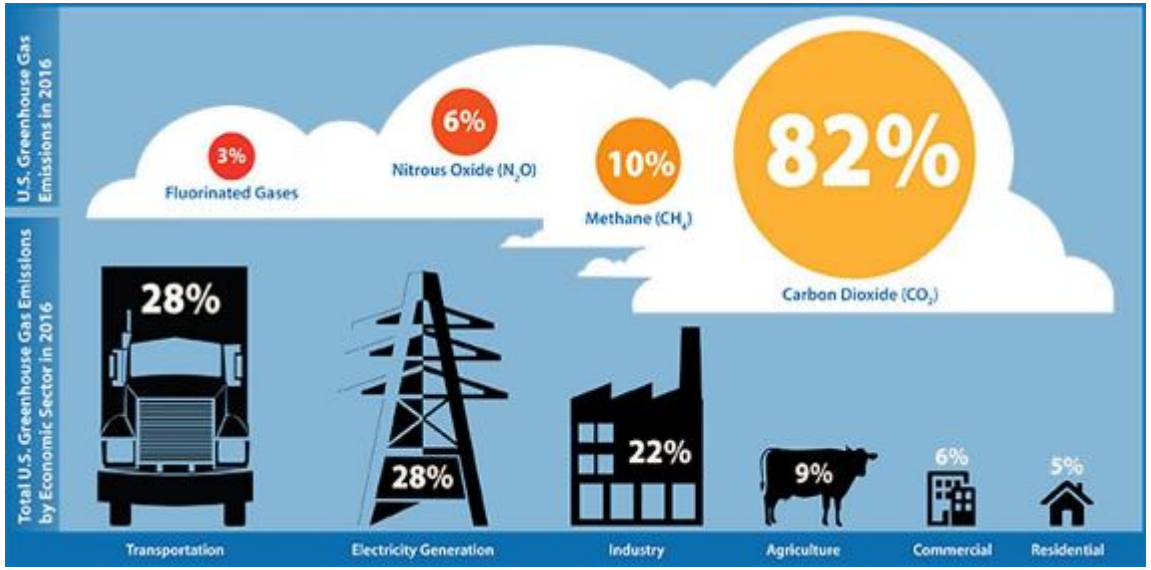
8 – 16 Months Average

Finishing Phase

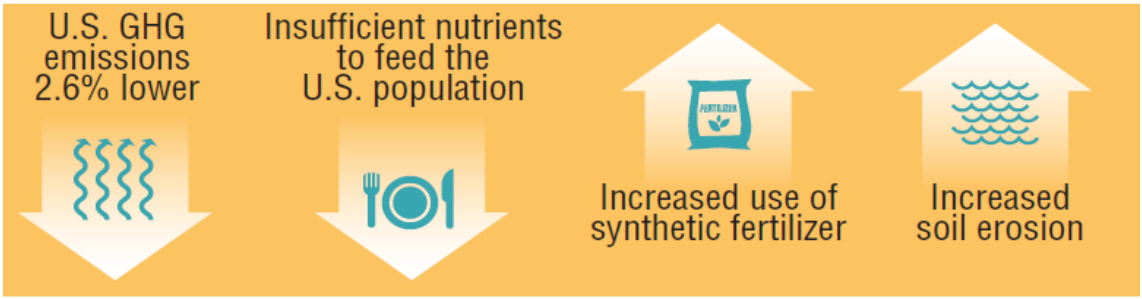
4 – 6 Months Average

Image Source: Public Image Stock

Greenhouse gases: Don't blame the cows



What if the US went 100% vegan?



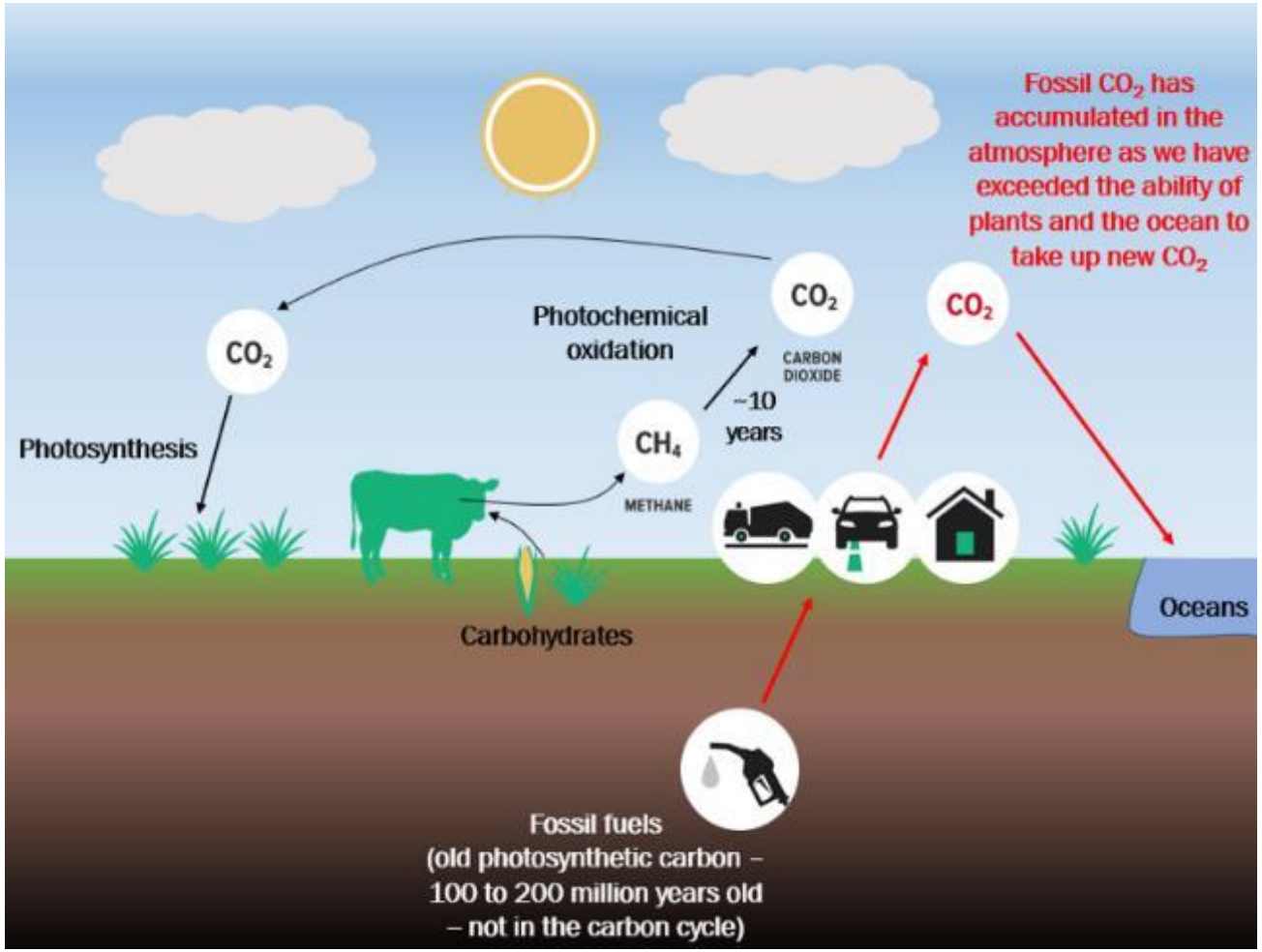
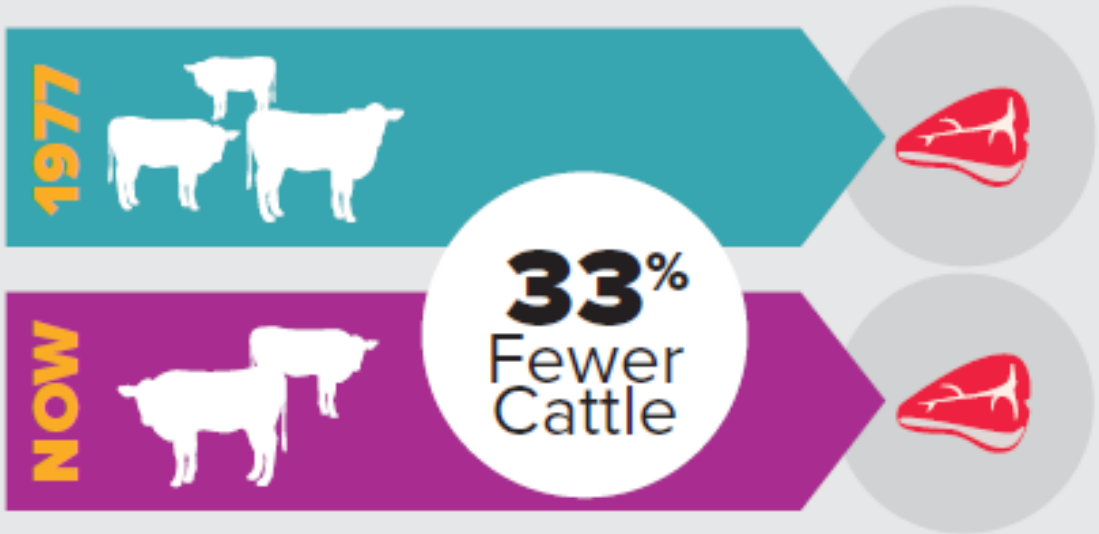


Image Sources: US EPA; Beef Magazine; Beef Checkoff

Same Beef, Fewer Cattle

Compared to 1977, today's beef farmers and ranchers produce the same amount of beef with 33% fewer cattle.



How'd they do it?

- Better Animal Health & Welfare
- Better Animal Nutrition
- Better Animal Genetics

Total US Cattle Herd

1977: 122 million head

2019: 95 million head

Total US Cattle Slaughter in 2019: 33 million head

Image Source: Cattlemens Beef Board/Beef Checkoff

Leather is a byproduct

NW_LS441
Des Moines, IA Mon, Mar 23, 2020 USDA Market News

USDA BY-PRODUCT DROP VALUE (STEER) FOB CENTRAL U.S.
The hide and offal value from a typical slaughter steer(1) for today was estimated at 8.16 per cwt live, unchanged when compared to Friday's value.
FOB CENTRAL U.S.
TODAY'S CALCULATIONS FOR BY-PRODUCT VALUE (STEER)

	Lbs	Price	Change Prv/Dy	Value
Steer hide, butt brand/Pc	4.94	32.00	-	2.29
Tallow, edible (2)	1.20	32.75	-	0.39
Tallow, packer bleachable	4.50	25.25	-	1.14
Tongues,Swiss #1 0-3%,exp	0.24	370.00	-	0.89
Cheek meat, trmd	0.32	147.50	-	0.47
Head meat	0.13	100.00	-	0.13
Oxtail, selected	0.24	340.00	-	0.82
Hearts, reg, bone out	0.38	65.00	-	0.25
Lips, unscalded	0.13	182.00	-	0.24
Livers, slcted, export	0.96	22.00	-	0.21
Tripe, scalded edible	0.65	83.00	-	0.54
Tripe, honeycomb bleached	0.15	150.00	-	0.23
Lungs, inedible	0.47	5.63	-	0.03
Melts	0.14	6.75	-	0.01
Meat & bone ml 50% blk/ton	3.70	155.00	-	0.29
Blood meal 85% blk/ton pnh	0.60	750.00	-	0.23
Totals:	18.75			8.16
Dressed equivalent basis (63% dress):				12.95

(1) Typical slaughter steer weighs 1,400 pounds

Definition: by·prod·uct

/ˈbīˌprädəkt/

an incidental or secondary product made in the manufacture or synthesis of something else.

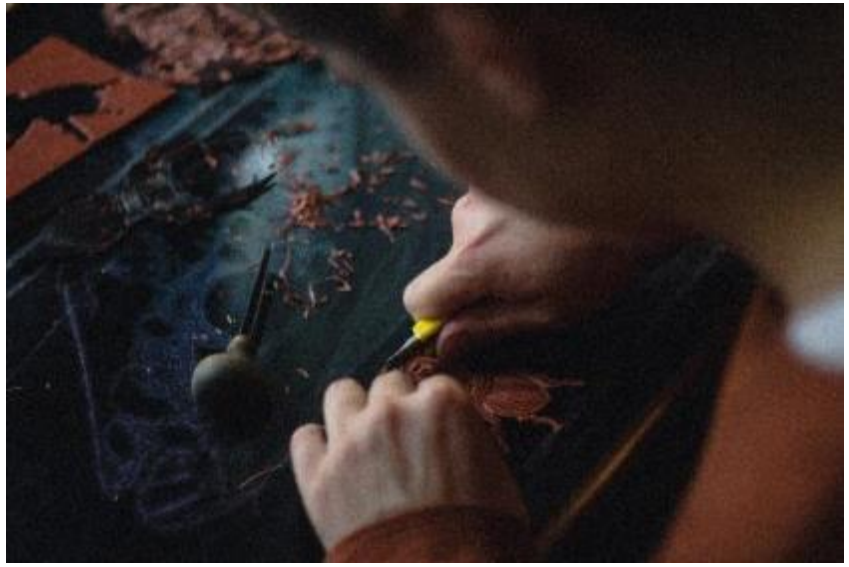
Source: USDA AMS Daily Drop Credit Report

We Consume Beef and Dairy. We Need it.

We have a Duty not to be Wasteful.

We Must Use All Parts of the animal. Every Byproduct.

Especially Leather.



Sadly, due to the rise of plastic synthetics, leather and hides are now being *wasted*.

We're failing in our ethical duty.

We are being wasteful

33 Million

In 2019, the U.S. processed more than **33 million head of cattle** for food.

In 2019, **27.5 million hides** were used in domestic or global leather production.

27.5 Million

5.5 Million

WHAT DO THESE FIGURES TELL US?

In 2019, an estimated **5.5 million (17%) U.S. cattle hides** failed to enter into the leather supply chains.

WHAT DOES THIS MEAN?

Most of those 5.5 million cattle hides were either destroyed or discarded in landfills.

These 5.5 million hides could instead be used to produce leather for:

— 99 million pairs of shoes
— 110 million footballs
— 2 million sofas

WHY?

The rise of synthetics, the vast majority of which are **made from plastics and other non-renewable sources**, has caused a shift away from utilizing hides to produce natural, sustainable, real leather products.

Stephen Sothmann
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www.USLeather.org

leather UK

The Real Sheepskin Association

Part of leather UK

Who are Leather UK?

- Trade association for the UK leather industry, covering raw materials to finished product
- Members of the European association, COTANCE
- Hold secretariat for the International Council of Tanners
- Links to Worshipful Company of Leathersellers and other liveries
- Work with UKFT, BFA, HCA, Leather Naturally, ICLT at UoN, MiB and others
- Kerry Senior - Director

Overview

- What is leather and what isn’t
- The truth about tanning
- Dispelling some of the myths about leather

What is leather?

"Hide or skin with its original fibrous structure more or less intact, tanned to be imputrescible. The hair or wool may, or may not, have been removed. It is also made from a hide or skin that has been split into layers or segmented either before or after tanning"

Source: *British Standard Glossary of Leather Terms (BS 2780) (1983)*

What is not leather?

- Reconstituted leather fibre, e.g. leather fibre board, Eleather

- Plant-derived materials, e.g. Pinatex, ‘mushroom’ or ‘apple’ leather’

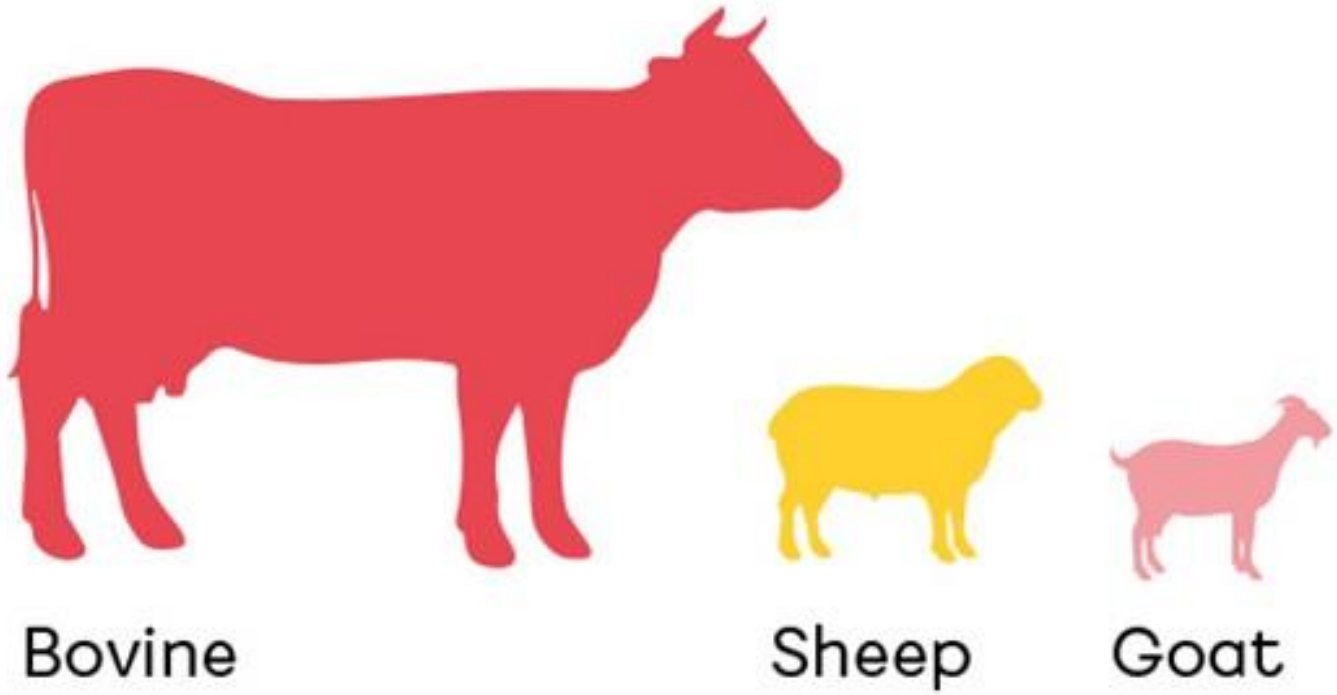
- Plastic! Pleather, ‘vegan leather’ ‘synthetic leather’, leatherette; all made from PU, PVC, etc.

- Lab-grown collagen, e.g. Zoa

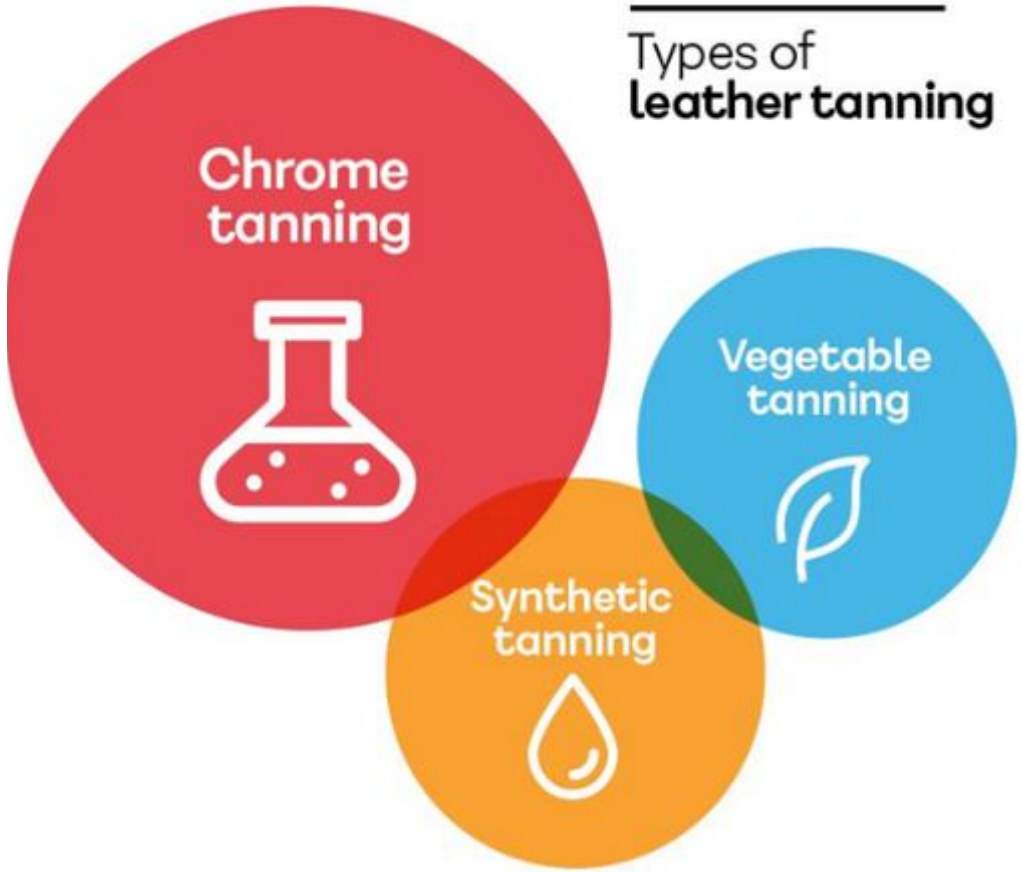
The truth about tanning

Key factors for leather manufacture

Species



Tannage



MEN WOMEN NEW GIFTS ABOUT US JOURNAL CONTACT

FREE PERSONALISATION & GIFT WRAP CODE: GENERATION

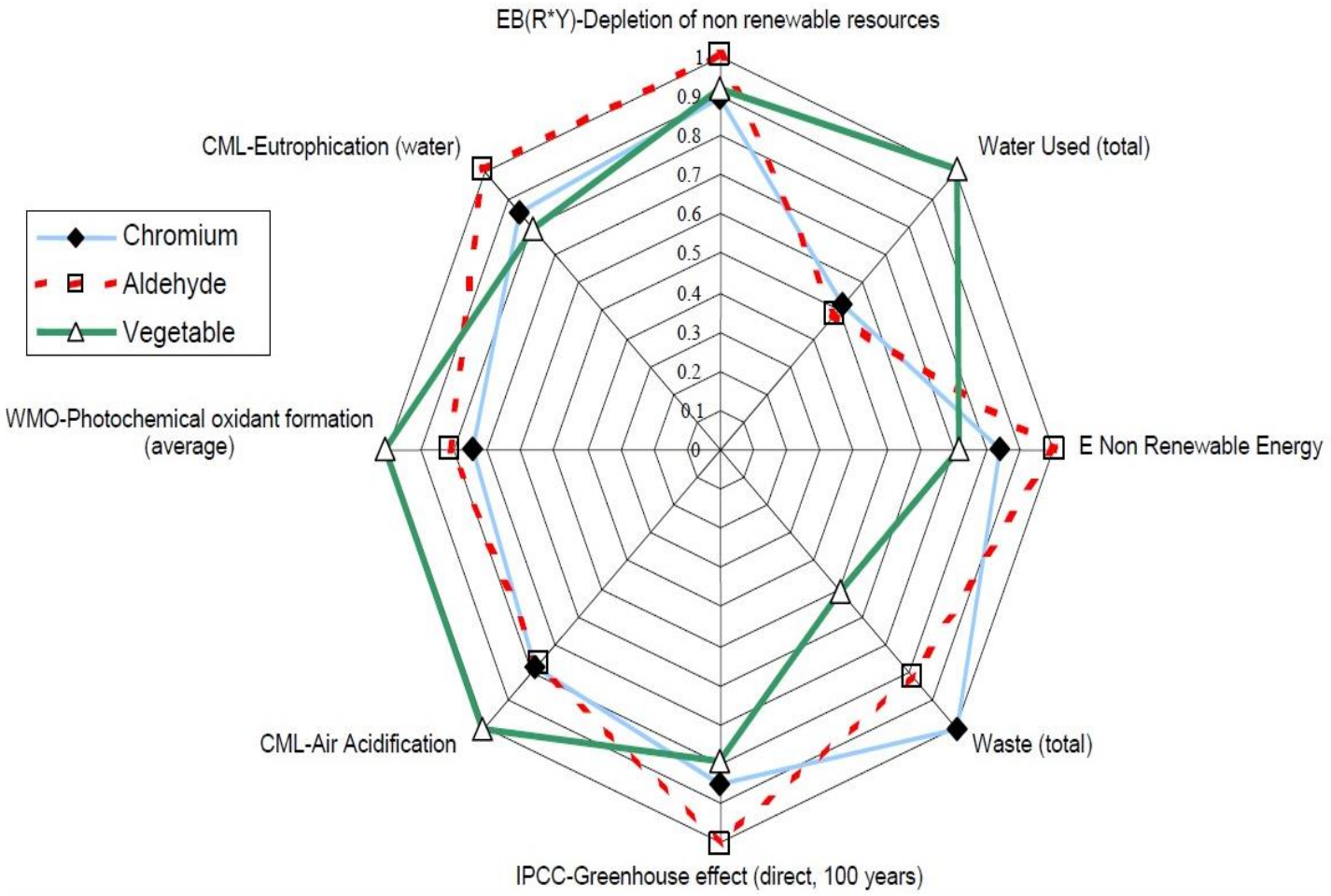
JOURNAL SHARE

Homepage » Why Vegetable Tanned Leather Is The Most Environmentally Friendly

WHY VEGETABLE TANNED LEATHER IS THE MOST ENVIRONMENTALLY FRIENDLY

At [redacted] we source the finest vegetable tanned leather in the world. Its rich, authentic finish is desirable amongst the most refined. With sustainability an increasingly hot topic within fashion, we shine a light on why vegetable tanned leather is the most environmentally-friendly in the industry…

Tannage - choice



- There is no difference in the overall environmental impact of the most common tannages
- What are you making?
- Which type of leather will work best?
- All tannages are chemicals
- All can be used well or badly
- Don’t greenwash!

Some myths about leather

Claim - Meat & leather are drivers of climate change

Books

Jonathan Safran Foer: why we must cut out meat and dairy before dinner to save the planet

Animal products create more greenhouse gas emissions than the entire transportation sector, but we don't want to confront this inconvenient truth: our eating habits are a problem

Jonathan Safran Foer

Sat 28 Sep 2019
08.00 BST

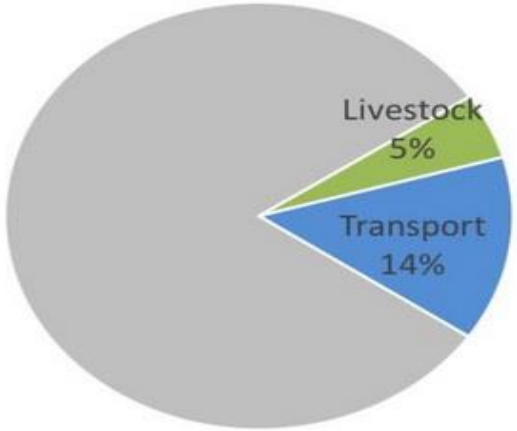
3027

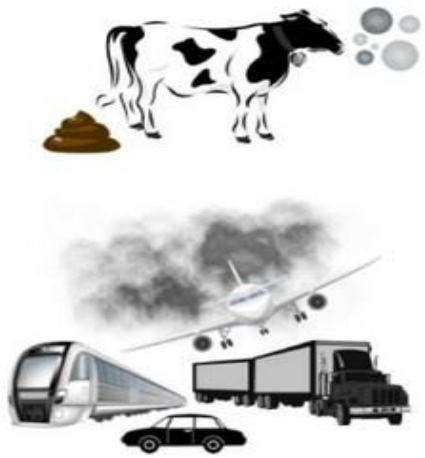
▲ Photograph: Graeme Robertson/The Guardian

Apples & pears?

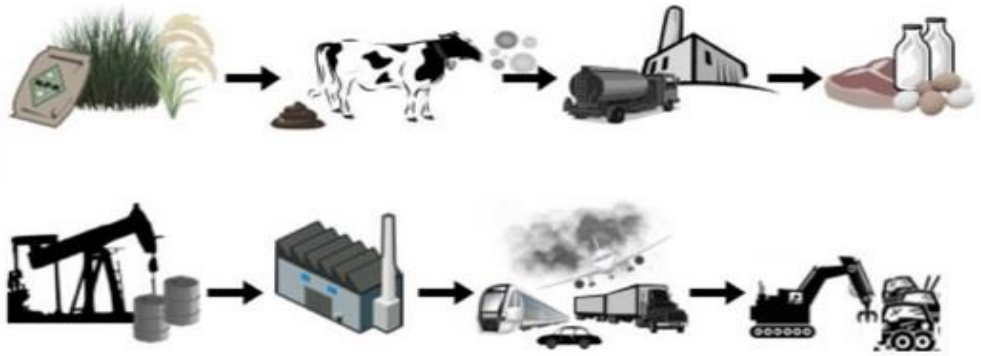
- Comparison is not ‘like-for-like’
- Whole lifecycle for livestock(14.5%) vs direct emissions (fuel in use) for transport (14%)
- Direct emissions for livestock are only 5%
- Livestock do contribute to GHG but reality is complex and nuanced
- (source: FAO/IPCC)

Direct emissions
(IPCC sectorial approach)





Life cycle emissions



Claim – Tanners are using hazardous and carcinogenic chemicals to tan leather

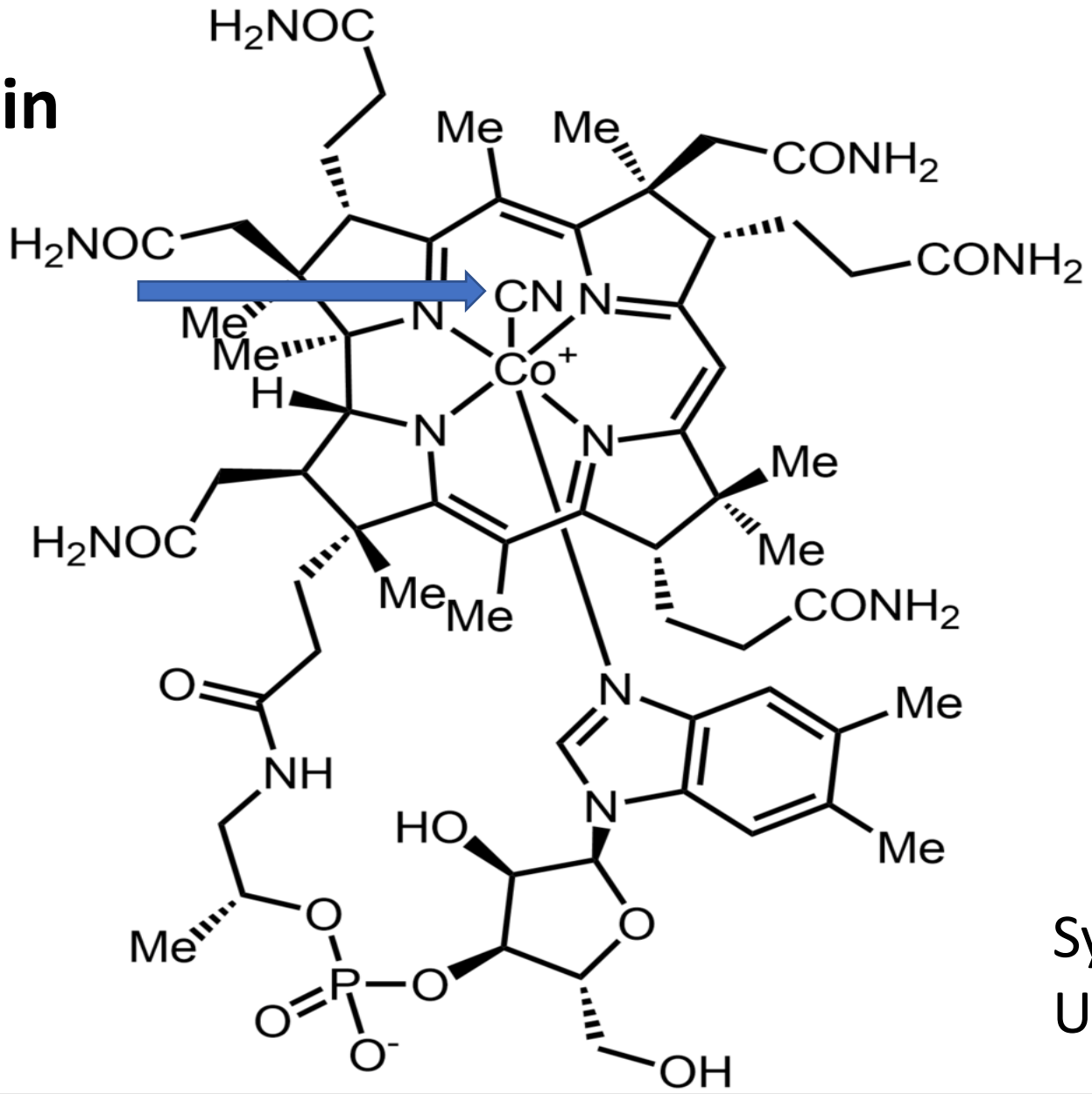
‘Mineral salts, formaldehyde, coal-tar derivatives, cyanide-based dyes and other dangerous substances are routinely used during the tanning process.’ (source: PETA UK website)

Cyanide?

- Emotive term
- Refers to chemicals that contain the cyano-molecule
- Can be extremely toxic
- However, also present in a number of organic chemicals

H-CN

Cyanocobalamin



Synthetic vitamin B12
Used in supplements

Minerals salts?

- Tanners do use mineral salts
- Sodium chloride is important in the tanning process
- Also nice on chips

- Other uses of mineral salts include:
  - Antacids
  - Food production
  - Keeping you alive

Claim - It takes over 17,000 litres of water to produce one kilogram of leather

TRUE

But…

Figure comes from 'A Global Assessment of the Water Footprint of Farm Animal Products' (Mekonnen & Hoekstra, Ecosystems (2012) 15: 401–415)

Table 1. continued

Animal products	Farming system	China			India			Netherlands			USA			Weighted average			
		Green	Blue	Grey	Green	Blue	Grey	Green	Blue	Grey	Green	Blue	Grey	Green	Blue	Grey	Total
Cheese	Grazing	7,812	540	633	5,857	535	171	2,826	263	160	5,470	355	438	5,371	293	241	5,905
	Mixed	4,432	742	1,055	4,267	666	320	2,130	214	111	2,878	307	435	3,903	463	377	4,743
	Industrial							2,471	227	124	2,196	315	493	5,078	500	406	5,984
	Weighted average	4,581	732	1,036	4,377	657	310	2,283	219	121	3,196	310	439	4,264	439	357	5,060
Leather (beef cattle)	Grazing	14,300	266	0	25,195	310	0				21,290	657	658	20,905	535	240	21,680
	Mixed	11,719	377	91	15,743	593	140	11,883	947	765	14,185	681	856	16,701	644	453	17,799
	Industrial	9,677	904	1,093	12,068	1,505	842	4,530	513	259	3,287	497	614	9,487	805	763	11,056
	Weighted average	11,323	515	352	15,103	777	280	6,067	589	369	14,450	658	819	15,916	679	498	17,093

- 93% of water consumed is ‘Green’ water (soil moisture)
- Also known as rain
- Importantly, green water is absorbed, and returned to the atmosphere, by plants. It doesn’t not contribute rivers or aquifers
- ‘Blue’ or fresh water consumption is only 679 litres (3.9%) of the total
- Production of nuts uses 1367 litres of blue water per kilogram production
- Most vegetable production uses less blue water than beef but products have a lower nutrient density

Most importantly…

- The leather industry is subject to the same regulations as every other industry
- Great steps being taken to improve efficiency and sustainability, e.g. in the UK, Scottish Leather Group has reduced the CFP of its leather by 85% in last 15 years and chemical companies are developing new bio-based chemicals with reduced environmental.
- Changing expectations of brands and consumers is driving improved performance and transparency
- It’s not perfect but it is improving all the time.

LEATHER NATURALLY

Leather fits perfectly in the Circular Economy!

So,why try to copy leather?

Egbert Dikkers – Textile Exchange – Webinar 2020.04.14

Leather has Long History and is Cool Material Today

Leather has a history of approximately 5.000 years and still cool today!

Ancient Egyptian sandals …

Leather is a Sustainable Material

Leather is Produced Responsibly

Leather is Produced Responsibly

- Tightly controlled manufacturing processes, including waste handling are audited

- Traceability of leather is a key focus of the industry

- Strict regulations in chemicals via the ZDHC MRSL

Brands Can Drive Change!

an invitation to…

- invest in learning about leather, value the material and thus drive sustainability;
- buy leather from certified leather manufacturers;
- request ZDHC MRSL approved chemicals;
- educate the consumer about the sustainability & value of leather products.

Take Consumers Seriously, Label Correctly

How I was fooled with plastic,

thinking I bought leather car seating

Leather is a Unique Material!

Leather is:

- Sustainable
- Luxurious
- Strong
- Durable
- Comfort
- Repairable
- Longevity

So Why Copy Leather?

Leather offers:

- a historic heritage and is still a cool material today;
- good alternative for a huge pile of wasted hides & skins → Circular Economy;
- largely manufactured under tight audit programs;
- a story to be shared with consumers;
- unique material characteristics.

Contact us for More Information about Leather

@leathernaturaly!

LeatherNaturally!

LeatherNaturally!

Leather_naturally

www.leathernaturally.org

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Thank you!

TextileExchange
Creating Material Change

TextileExchange.org