



MARKET IMPLICATIONS FOR THE HEMP INDUSTRY WITH THE LEGALIZATION OF MARIJUANA

By Pete Scales –
Owner/Operator of ACI Foods

CANNABIS SATIVA OR CANNABIS INDICA,
COMMONLY KNOWN AS INDUSTRIAL HEMP OR ITS
MORE POPULAR NAME, MARIJUANA, ORIGINATED IN
ASIA MILLIONS OF YEARS AGO

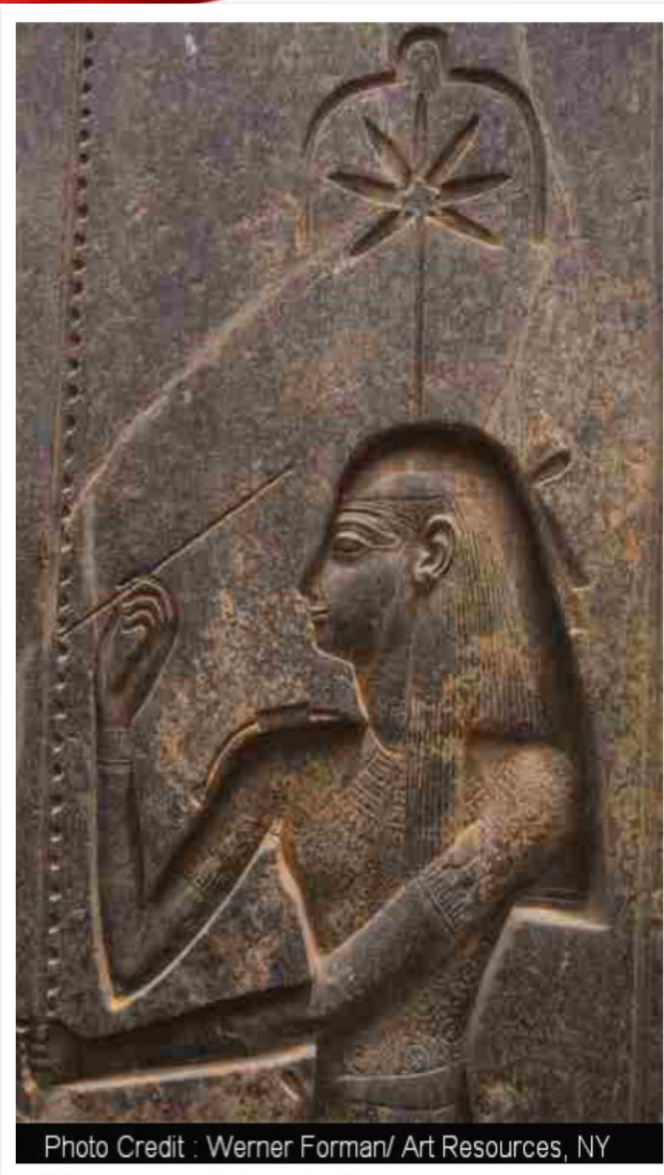


What is Cannabis?

- A) A troublesome ditch weed?
- B) A cornucopia of nutrition and medicine?
- C) A warehouse of structural components/fibers?

Answer - all of the above



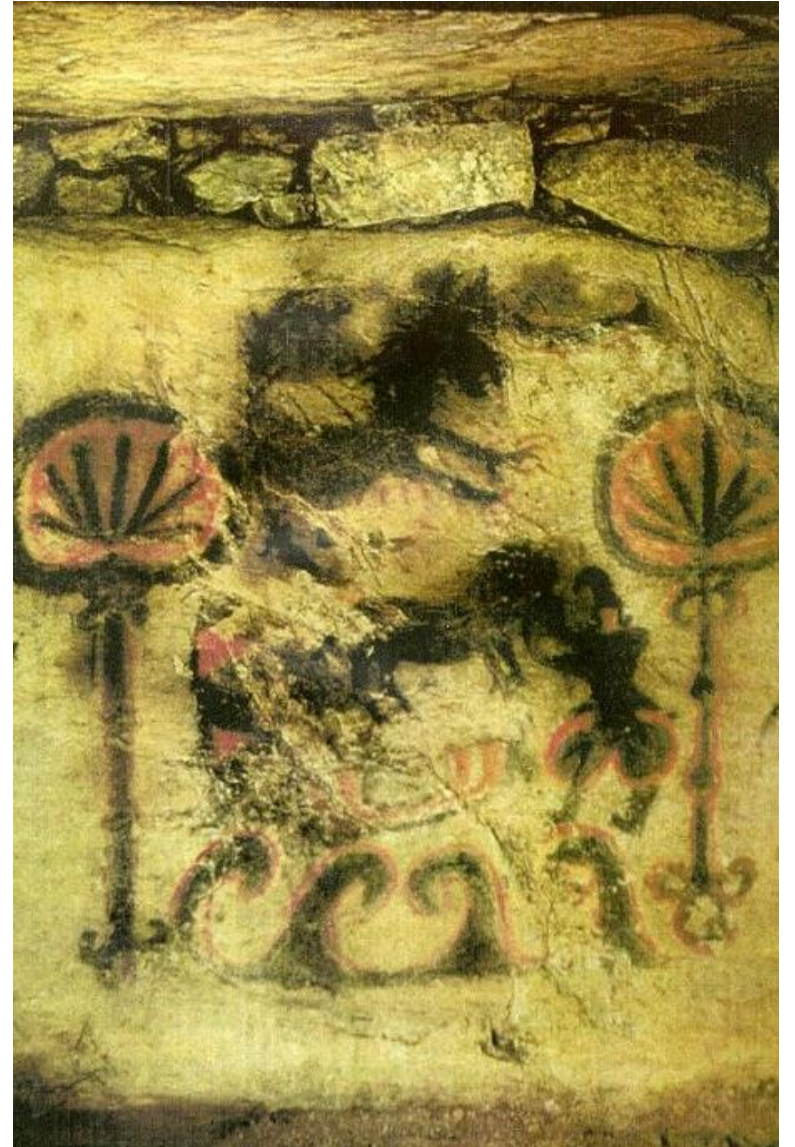


Strong archeological evidence of cultivation and extensive utilization of hemp going back more than 15,000 years.

The ancients used:

- seed for flour or oil
- stalks for fiber
- flowers/leaves as a medicinal warehouse

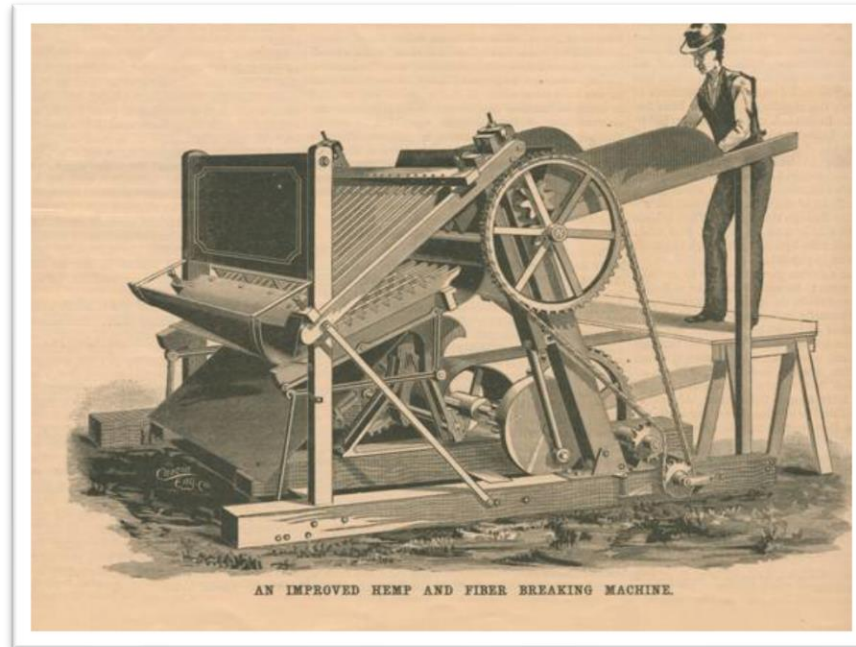
Ancient Cannabis
painting found in a
cave in Kyushu, Japan,
circa 5000 BC.



Hemp Through the Ages

Up to the turn of the twentieth century the economy of entire communities, worldwide, depended on the Hemp version of Cannabis.

Wars were fought to retain access to Hemp supplies.



1937, A YEAR OF INFAMY FOR HEMP

- A cabal of US industrialists - Hurst (lumber baron/publisher), DuPont (chemicals and plastics) and Morgan (oil baron) sought to minimize hemp's natural competitive edge over just about every other product.
- They bullied the US Government, who in turn, cajoled most other governments globally to link hemp to the "dreaded" **marijuana**.
- In a matter of months, hemp industries around the world collapsed.

After 60 Years Hemp makes a comeback - in Canada

In 1997,
Health
Canada
approves
restricted
cultivation of
Hemp



CANADIAN HEMP TRADE ALLIANCE

- Established in 2003
- Not-for-profit industry association
- 361 paid members from across the hemp value chain
 - Farmers, processors, researchers, plant breeders, etc.
 - Members from 9 of 10 Canadian provinces
- Directors elected from the membership



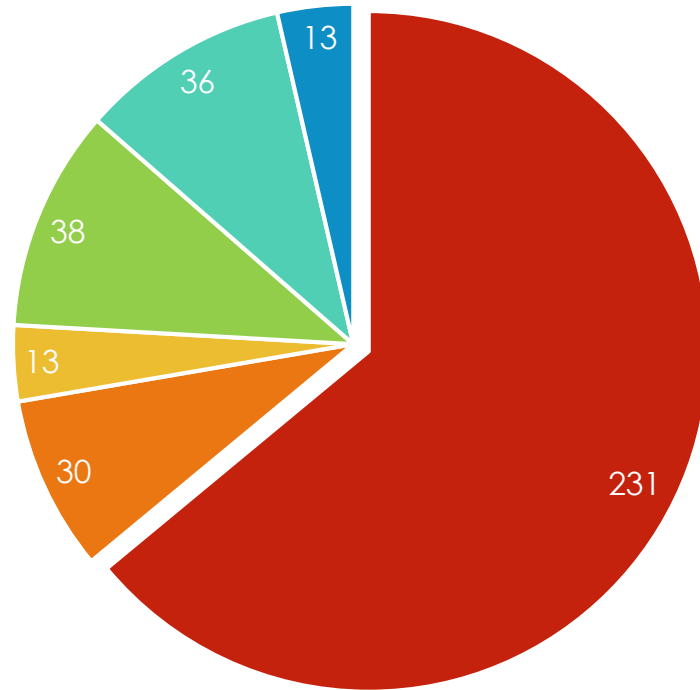
Province	2016 Acres	In Hectares
Alberta	31,954	12,937
Saskatchewan	21,072	8,531
Manitoba	18,026	7,298
All Others	5,249	2,125

CANADIAN HEMP TRADE ALLIANCE VISION

CHTA intends to become the “go to” organization for industry, government, and consumers looking for expertise and insight into hemp Food, Fibre, Feed and Natural Health Products in Canada, creating a \$1 billion industry by 2023.



REPRESENTATION FROM ACROSS THE VALUE CHAIN

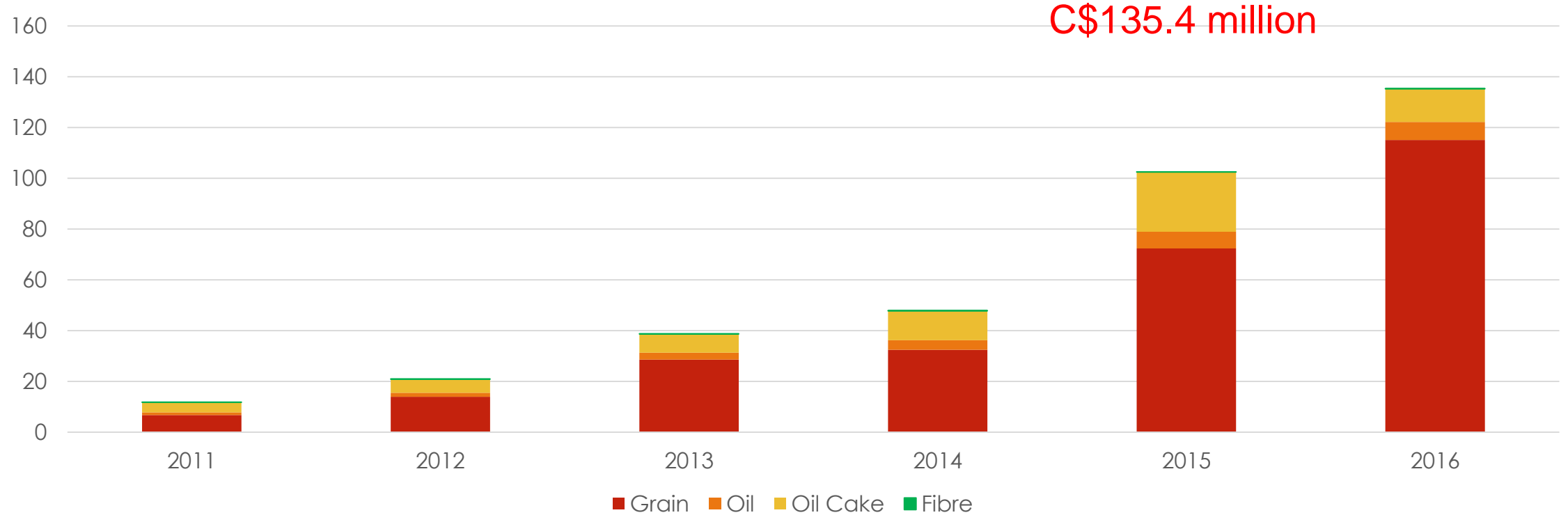


64% of the membership are farmers

- Farmer
- Processor
- Distributor
- Supplier
- New Venture
- Researcher

CANADIAN HEMP EXPORTS 2011-2016

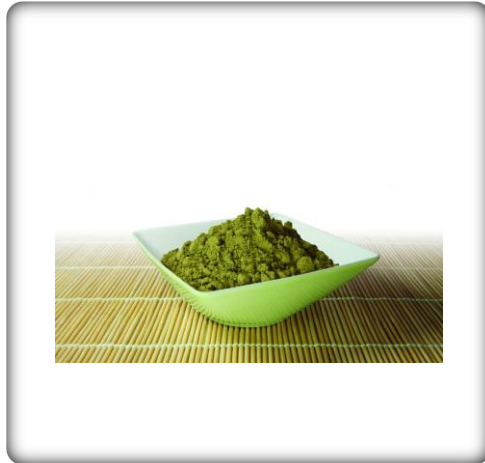
\$C, millions



FOUR MARKET SEGMENTS OF INTEREST

- **Food** – well developed in Canada, and still growing
- **Natural Health Products** – tightly restricted due to current Industrial Hemp Regulation
- **Feed** – need to gain regulatory approvals with CFIA
- **Fiber** – lots of interest, but difficult to generate momentum

HEMP AS A NUTRITIONAL WAREHOUSE



- Hemp Seed Oil
- Hemp Protein Powder
- Hemp Hearts
- Hemp Husks



Nutritionally, hemp is a veritable warehouse of food products:

- Likely the best source of plant-based protein providing upwards of 70% by weight
- Hemp is rich in essential fatty acids, in particular, Omega 6 and Omega 3 in a ratio of 4 to 1 which is nearly perfect for cell health and regeneration
- Highest available cellulose known i.e., edible fiber, soluble and non-soluble alike hemp is a winner
- Loaded with antioxidants
- Hemp has the distinction of being low in carbohydrates

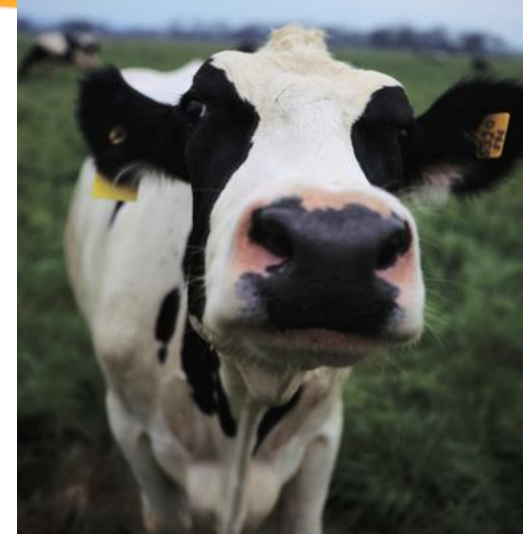
HEMP AS A NUTRITIONAL WAREHOUSE (CONT)



- Nutraceuticals
- Omega Supplements
- Fiber
- Antioxidants
- Protein

NOVEL LIVESTOCK/FEED AMENDMENTS

- Could support a robust livestock industry in Canada
- Hemp prohibited as livestock feed



SIGNIFICANT FIBER SUPPLY

- Hemp straw is primarily a “waste product” in Canada
- Most produced hemp straw is burnt or stockpiled
- Limited processing established to date
- Trying to establish opportunities to use all fractions from straw resource: fibre, hurd AND dust



SIGNIFICANT FIBER SUPPLY (CONT)

- Construction materials
- Composite Plastics
- Textiles
- Nano-conductors
- Automotive Paneling
- Medical Absorbency
- Environmental matting
- Etc.



HEMP IS NOT MARIJUANA!

Well, not really



THE HEMP/MARIJUANA CONUNDRUM

- The CHTA has spent the last 20 years fighting to have the hemp industry recognized as something completely separate from Marijuana industry.
- Bill C-35, (the cannabis legislation) to be enacted July 2018, lumps industrial hemp and Marijuana together into the same classification of “Cannabis”.
- So, two industries in the same plant.

NON MARIJUANA MARKET IMPLICATIONS OF BILL C-35

Implications

- Greenhouse operators
- Vegetable production
- Dairy
- Chicken
- Turkey
- Egg
- Hatching Egg
- Etc

GREENHOUSE OPERATORS

- Municipalities across Canada are taking up to three years to approve cannabis LP's (Licenced processor) applications

Consequence; present green house operations are being bought up, particularly in BC's Fraser Valley

VEGETABLE PRODUCTION

Pros

- Organic acreage will become very sought after
- lots of mulch-----
- Compost
- Construction fiber
- Materials

Cons



DAIRY

Pros

Pro: Feed materials possible

Bio-gas-----

Cons



CHICKEN

Pros

Cons



TURKEY

Pros

Cons

Pros

- Hemp seed husks about to be approved by CFIA as novel feed amendment
- Known that hemp and hemp byproducts are selectively eaten by poultry
- Omega 3 eggs are a distinct result
- Vegetable based protein now available to poultry industry

Cons



HATCHING EGG

Pros

Cons

The background features abstract, flowing waves in shades of red, orange, and yellow, creating a sense of movement and energy. The waves are layered and semi-transparent, giving a dynamic and modern feel to the slide.

THE END – NOW THE FUN REALLY STARTS!

Q & A