

HEMP *what's all the talk about?*



HEMP *what's all the talk about?*



Jerry Whiting

President & Co-founder
LeBlanc CNE, Inc.



*hemp genetics, product
development, research &
education*

HEMP *what's all the talk about?*

Hemp

What's the big deal? Why's everyone talking about hemp? What is it anyway? Isn't it just pot?

And what's with CBD? It's everywhere I turn. Is it real or is it snake oil? Do I need CBD? Where do I get it and is it safe?

I get CBD but it's hempcrete I'm interested in. That and hemp toilet paper. Will I get high from eating hemp seeds or drinking hemp milk? Can I use it instead of wood pellets in my stove?

What about cleaning up radiation and heavy metal? Where can I buy hemp clothing? I read that hemp uses less water than...

HEMP *what's all the talk about?*

Vocabulary

I use the word *cannabis* instead of *marijuana* for historical and political reasons.

Botanically cannabis and hemp are both *cannabis sativa l.*

Cannabis are the drug cultivars with THC (Type 1)

Hemp is non-intoxicating and has <0.3% delta-9-THC. (Type 3)

Cannabis is intoxicating and hemp isn't!

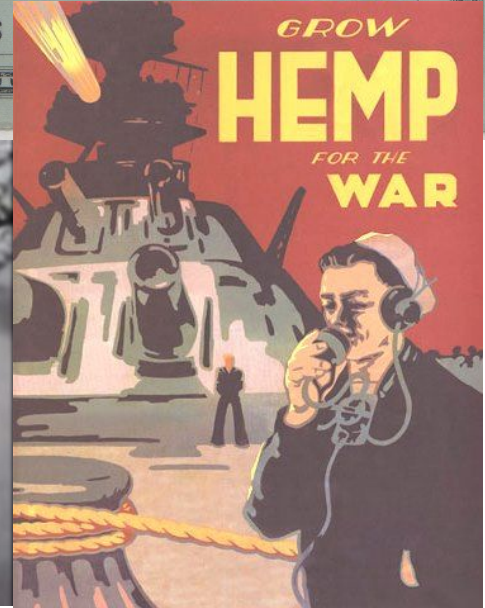
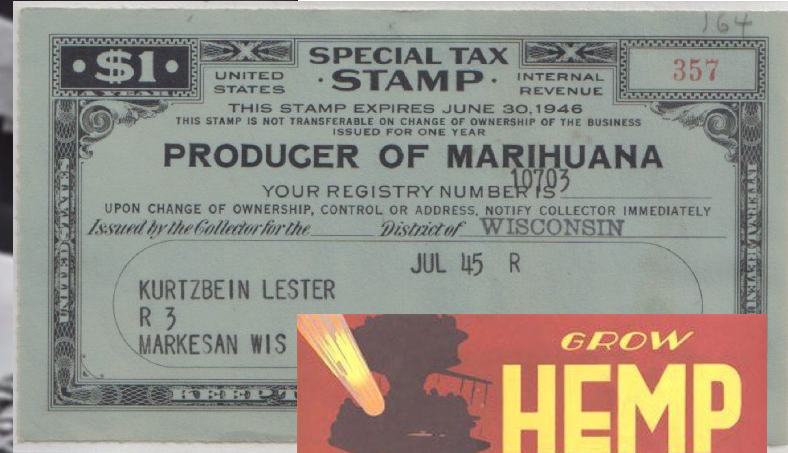
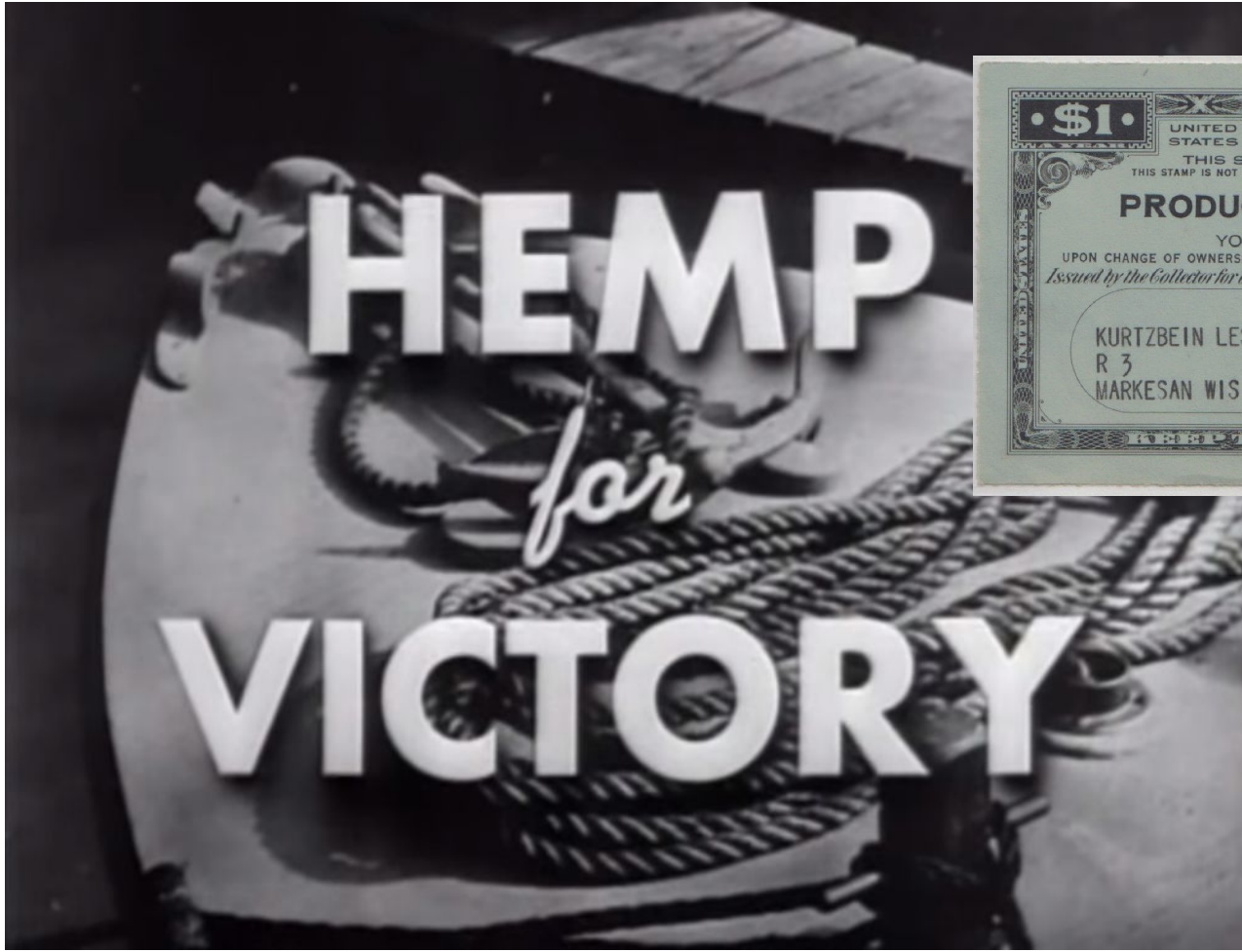
HEMP *what's all the talk about?*

We're not talking about your parents' hemp.

When you say “hemp” many people think you're talking about ditch weed. Weeds you find growing by the side of the road in the Midwest.

Ditch weed is domestic feral hemp that began as Hemp for Victory, a program during WWII the U.S. government instituted. Farmers were encouraged to plant hemp to replace the the hemp fields now occupied by the Japanese. No hemp, no rope for the Navy.

HEMP *what's all the talk about?*



HEMP *what's all the talk about?*

Today's industrial hemp.

After an 80-odd year hiatus, hemp is legal again at the federal level thanks to the Agricultural Improvement Act of 2018, a.k.a. The Farm Bill.

Hemp is now legally defined as *cannabis sativa l.* with less than 0.3% delta-9-tetrahydrocannabinol by dry weight.

Given that Δ -9-THC is the cannabinoid causes intoxication, hemp can't get you stoned. It does however have other cannabinoids, terpenes and other compounds.

HEMP *what's all the talk about?*

Today's industrial hemp.

Modern hemp cultivars have up to 15% CBD including **Cherry Wine, Otto** and **BaOx**. Because they also have high levels of terpenes they smell and taste good, and are almost indistinguishable from cannabis (much to law enforcements dismay).

In 2019 over 17,000 licensed hemp farmers grew more than 250,000 acres of industrial hemp in America. The bulk of this hemp is destined for CBD extraction. Only a small portion is grown for food and barely any for fiber.

HEMP *what's all the talk about?*



HEMP *what's all the talk about?*

Today's industrial hemp.

When the Farm Bill was signed into law December 2018, hemp was rescheduled from Schedule 1 to Schedule 5.

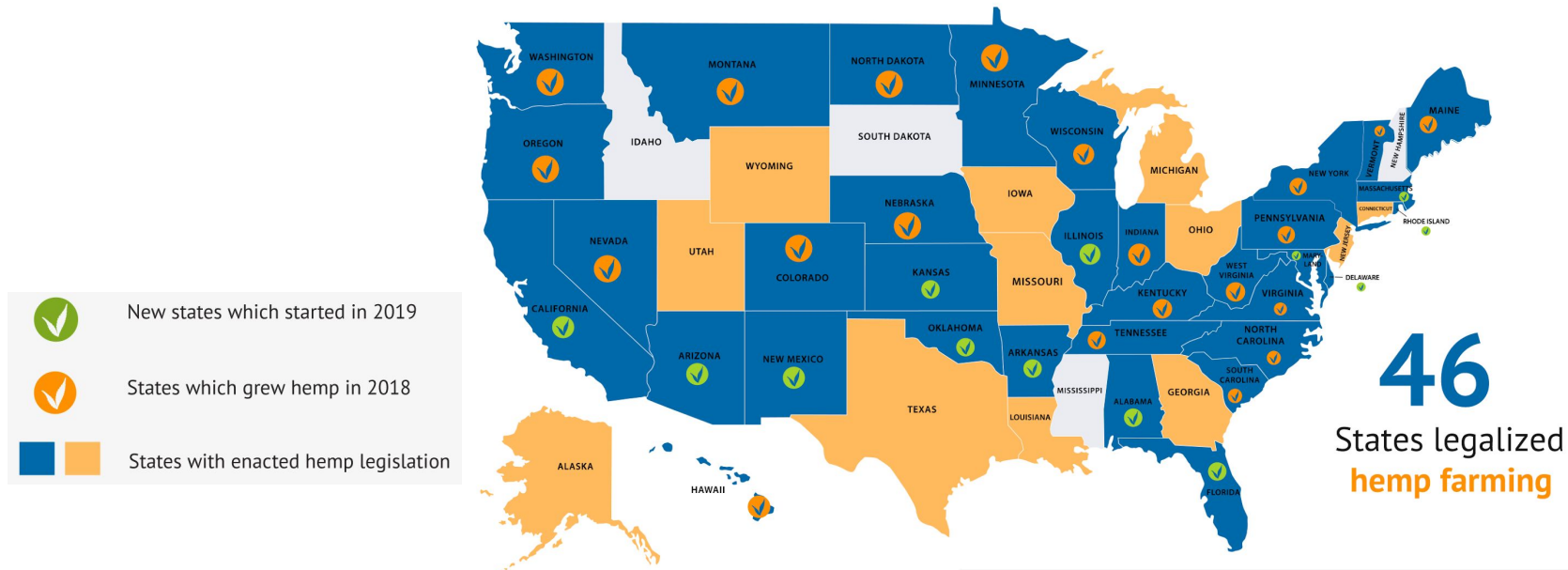
As a result control passed from the Drug Enforcement Agency to the Department of Agriculture and to some degree the Food & Drug Administration.

It's up to the individual states to implement rules and regulations covering the cultivation and processing of hemp.

HEMP *what's all the talk about?*

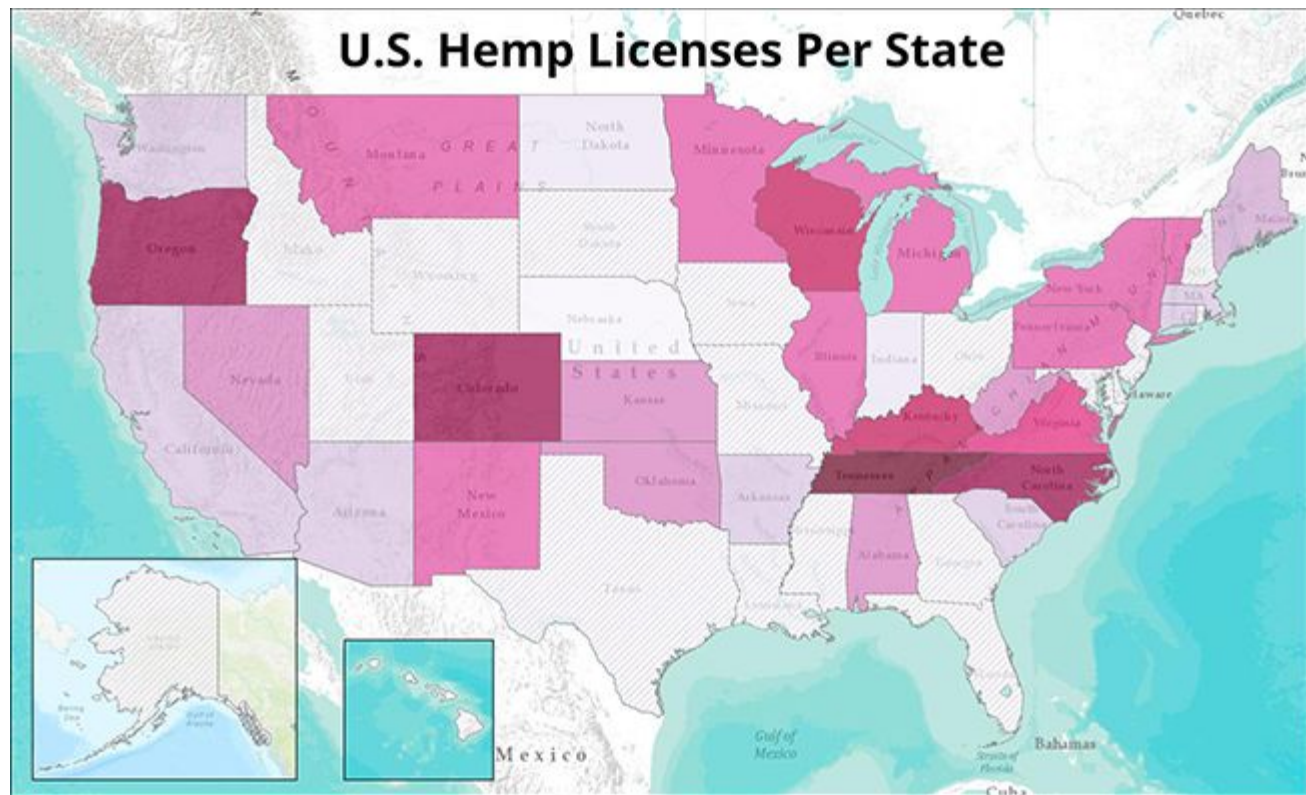


2019 U.S. Hemp License Report

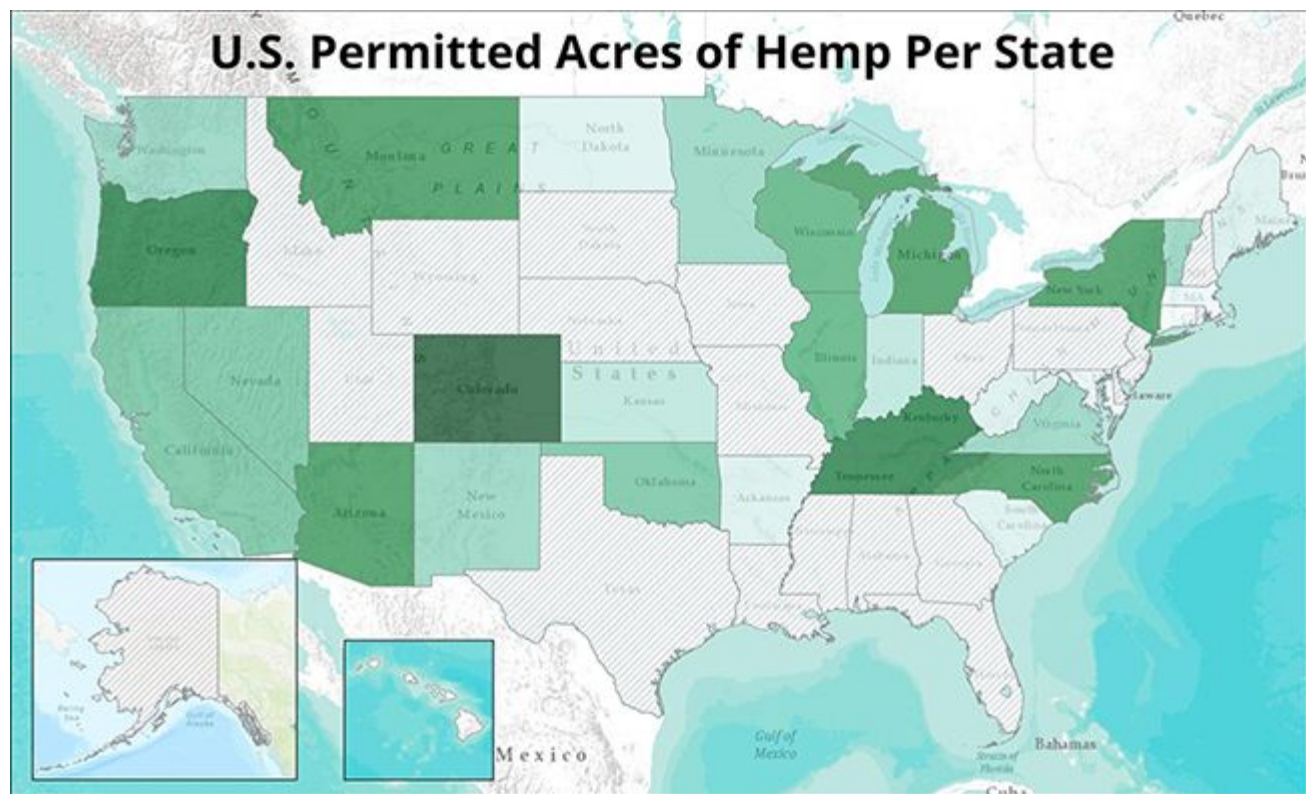


46
States legalized
hemp farming

HEMP *what's all the talk about?*



HEMP *what's all the talk about?*



HEMP *what's all the talk about?*

OK, OK. So where's all this going?

Hemp is now yet-another bulk agricultural commodity. In many ways it's no different than soybeans, corn, and hard winter wheat.

It's legal but there's little business infrastructure. Yet. Hemp needs to take its rightful place in the existing global supply chain.

One day soon hemp will be listed on Chicago Board of Trade and be tracked in the Wall Street Journal.

HEMP *what's all the talk about?*

OK, OK. So where's all this going?

Hemp-based medicines pick up where medical marijuana left off. The adoption of industrial hemp for medicine is more widespread legally than either medical marijuana or recreational cannabis.

We can all agree that hemp is mainstream. It is demystifying *cannabis sativa l.* akin to the salesperson's foot in the door.

The tax revenues from hemp will shape government budgets and spending from here forward.

HEMP *what's all the talk about?*

OK, OK. So where's all this going?

For all the brouhaha behind hemp, at its roots hemp movement is a populist movement.

Case in point: ***Seattle Hempfest***

28 years and still going strong!

www.hempfest.org



HEMP *what's all the talk about?*

OK, OK. So where's all this going?

Because of its populist, activist history hemp is growing outside of the conventional agriculture ecosystem. For example, many early hemp farmers come from the cannabis economy both licensed and non-licensed.

Big Ag isn't a big player in hemp. Oh they want to be but for now they're not a major influence.

Hemp activists come with our own culture. There's every reason to believe this will be true as the hemp industry evolves.

HEMP *what's all the talk about?*

OK, OK. So where's all this going?

Until Big Ag wakes up and enters the market, small farmers have a head start. It's a potential lifeline for small family farms across the country.

Conventional farmers buy almost all of their seeds from the so-called Big 6: BASF, Bayer, Dow Chemical, DuPont, Monsanto, and Syngenta. Every effort should be made to prevent any of them from dominating the hemp or cannabis seed market. Ever.

www.LeBlancCNE.com/Cannabis-Breeders-Rights/

HEMP *what's all the talk about?*

Looking beyond CBD...

Yes, hemp-derived CBD is getting people well, bringing much needed revenue to farmers and bringing *cannabis sativa L.* in all its forms and guises into the mainstream.

We're already seeing other potentially cannabinoids other than Δ -9-THC as well as terpenes being isolated from industrial hemp.

In the end the hemp food and fiber markets will each dwarf CBD. It will take time to build the necessary infrastructure and manufacturing facilities but the demand is there.

HEMP *what's all the talk about?*

Looking beyond CBD...

The vast majority of the hemp grown domestically today is for its CBD content. The whole industry is based on two root cultivars (Otto and Cherry Wine) neither of which is suitable for food or fiber.

These two cultivars represent a mere fraction of the genetic diversity hemp encompasses. Other cultivars will be grown for their medicinal properties but none will address the demand for food and fiber.

HEMP *what's all the talk about?*

Looking beyond CBD...

Hemp grown for fiber or food (seed) is planted much like wheat. It's planted close together, grows uniformly and lends itself to mechanization. Large scale farms will sprout up across the Plains with a new crop that requires less water, fertilizer and pesticides compared to the crops it replaces.

Hemp cultivation will spread organic farming techniques. The market will pay more for organically grown hemp. Farmers will make more money and live healthier as well.

HEMP *what's all the talk about?*

Looking beyond CBD...

Farmers markets / buy local

Community gardens

Seed saver exchanges

Individual breeders

4H & county extension agents

traditional Ag schools

...just like every other *bulk agricultural commodity*

HEMP *what's all the talk about?*

Resources



LeBlancCNE.com/NWLeaf

LeBlancCNE.com/podcast

ProjectCBD.org

