

COLLAB HOUR



Weekly Webcast
for Members

Brewing Efficiency in the Post-COVID Era

*Can you still be innovative while cutting costs and increasing efficiency?
In a word, Yes.*



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COLLAB HOUR





Discussion Items

- Historical Perspective
- Squeezing more revenue out of every batch
- Eliminating Hop Creep
- Increasing shelf life
- Case Histories

COVID-19 &
Brewing...
in Historical Context

Searching for a Historical Context

Sudden changes in outlook immediately reflected in the Stock Market, a visible measure of fear and panic – the real economy is slower, longer



The Great Depression (1929)

The Great Recession (2008)

The 2020 Pandemic



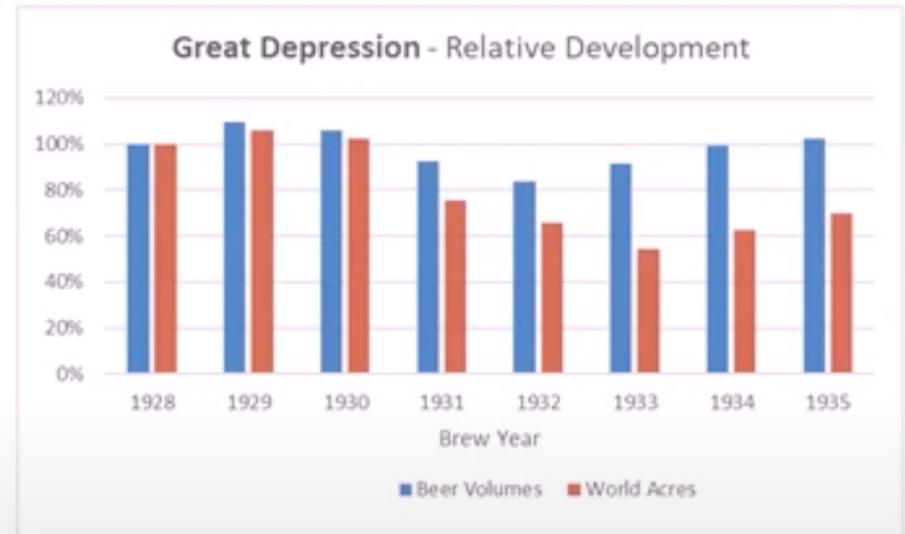
Thank you Alex Barth, CEO Barth-Haas
American Hop Convention 2021
Merchant Panel



Historical Context: THE GREAT DEPRESSION

Crisis Impact on World Beer Volumes & Hop Acreage

- Decline in beer volumes over 3 years by over 23% (1929-1932)
- World Hop acreage over same period declined by 38%
- Over the 4-year period, world acreage dropped by half
- Recovery in acreage lagged beer growth
- It took until the 1970's to regain same acreage level
- The Great Depression drove production efficiencies – higher yields, lower cost per unit



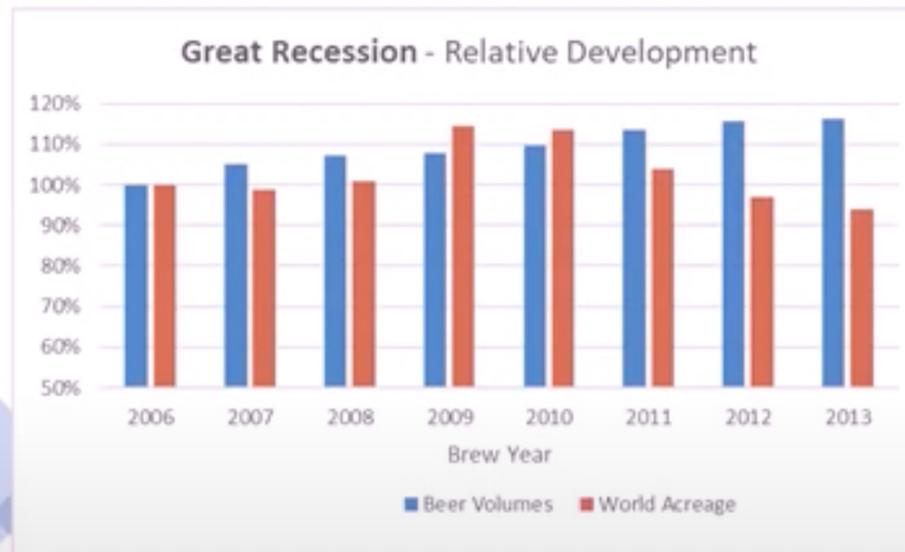
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After the Great Depression, it took until the mid-1970s to regain the same level of acreage.

The Great Depression drove production efficiency.

Historical Context: THE GREAT RECESSION

Crisis Impact on World Beer Volumes & Hop Acreage



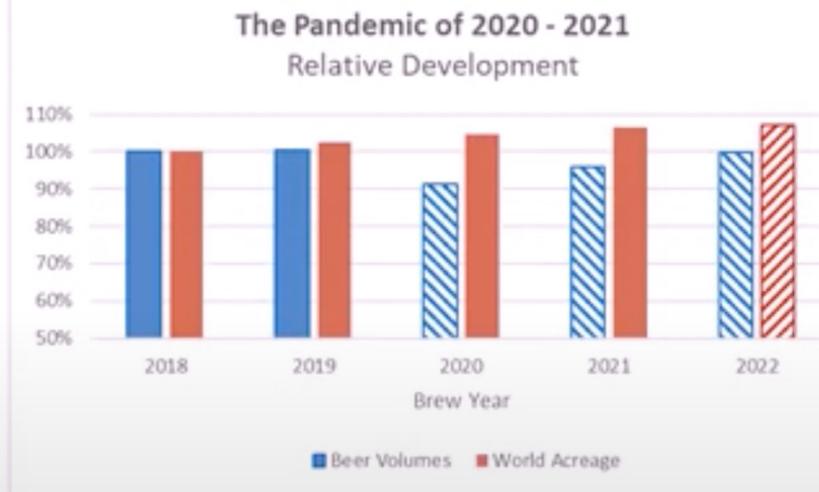
- The Great Recession did not reduce beer volume (some countries did suffer), but precipitated a drive for efficiency, cost reduction
- World acreage adjustment at first slow but then significant (particularly in US)
- Recovery in acreage driven by hop forward, flavorful beers, changing the varietal composition of the industry

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More recently: the Great RECESSION. More efficient use of alpha by changing recipes.

Historical Context: THE PANDEMIC RECESSION

Crisis Impact on World Beer Volumes & Hop Acreage



- Brewing volumes recovery likely over three years
- Crop 2019 serves Brew Year 2020 – acreage / production outpaced curtailed demand
- Crop 2020 serves Brew Year 2021 – it will not absorb all produced hops (still depressed demand)
- How will the world hop industry respond with crop 2021?

Coming out of the Pandemic Recession, what will happen?
History tells us that it is another time of brewing efficiency.

What helped the hop industry recover from the Great Recession?

IPAs, hop-forward flavorful beers.

- Did the Pandemic affect all breweries equally? No.
- What will help the impacted breweries recover from the Pandemic Recession?
- Finding BREWING EFFICIENCIES will have an impact.

Efficiency
Opportunities
We Have Seen



Two ways to make more money.

- Cut costs
- Increase Revenues
- *And don't forget about long-term sustainability*

The complication in the post-COVID era: HOP-FORWARD BEERS

Yield Loss

The more hops you use, the more beer you lose.

Hop Creep

DO₂, diacetyl formation, out of spec beers, “hop burn”, and more bad stuff

Bigger Hop Bill

Avg hopping rate is already 11x more than big commercial brewers. Add costly proprietary hops.

The complication in the post-COVID era: HOP-FORWARD BEERS

Me-Too Beers

More than 9,000 US breweries think they have the best IPA, or the best whatever.

Shelf-Life

Hop flavor that “falls off a cliff”

Freight & Storage

The more hops you use, the more it costs to move it and store it.

Introducing a Solution

Each one of those 6 Pain
Points can be solved with
Hopzoil®



HOPZOIL®

An Independent
View



Jerry Sciote
**Lone Tree Brewing
Company**
Colorado





Case Histories

Efficiency Category:

- 1) *Increase Revenue*
- 2) *Eliminate Problems*



Objective: Differentiate new HAZY DIPA in a competitive market

Result: Sales are double previous Imperial IPA

Comment: Hopzoil is a convenient tool. Hopzoil beers do not have dry-hop “hop burn” or experience Hop Creep



Case Histories

Efficiency Category:

- 1) *Increase Revenue*
- 2) *Reduce Costs*



Objective: Create a flagship IPA that stood out from the pack

Result: Beer quickly became flagship brand, and won Bronze at GABF

Comments: Distinct fresh hop note that last longer than just pellets (extends shelf life). Have had success with reducing pellet amounts, as well as boosting aromas on underwhelming hop combinations



HOPZOIL

Case Histories

Efficiency Category:

1) *Reduce Costs*
(increase Shelf Life)



Objective: Looking for a way to increase hop profile that allowed for increased longevity (shelf life) in the can.

Result: More robust & longer lasting hop profile. Allows beer to taste better longer

Comments: Easy drinking, smooth taste quickly became our #1 seller



Sustainability.

- No fossil fuels for kiln drying hops.
- Steam Distillation more efficient use of fuel (contained).
- No petroleum-based solvents used in process
- Less fossil fuels to ship (lighter, smaller package)
- Biomass is composted back into soil.
- Reduced storage energy costs. (Do not freeze. Store at room temp)

Sustainability also cuts costs.



**Costing
Worksheet...
A Valuable Tool**

Enter your
actual data

	Per Batch / BOTTLES/CANS FORMULA	Per Batch / BOTTLES/CANS FORMULA
	<i>Example #1</i>	<i>Example #2</i>
Batch Size (BBLs)	15	30
	X	X
Dry Hopping Rate / lbs per BBL	1.72	2
	=	=
Dry hop pellets used (pounds)	26	60
	X	X
Hop Pellet Cost/Lb (varies by variety) <i>Assumes a proprietary variety</i>	\$16.00	\$15.00
	=	=
Dry Hopping Pellet Cost total	\$412.80	\$900.00
	+	+
Freight (avg. UPS cost/lb)*	\$0.68	\$0.50
<small>* assumes 220 lbs to KC, MO (middle of US), including insurance</small>		
Estimated Freight Cost	\$17.54	\$30.00
Dry Hop Pellets/Hard Input Costs	\$430.34	\$930.00

Net Difference Using Hopzoil

Total Dry Hop Pellets / Hard Input Costs	\$430.34	\$1,058.40
Soft Costs/Increase in SHELF LIFE	Variable	Variable
Savings - % Reduction in Dry Hop Pellets	\$284.03	\$1,058.40
Hopzoil Input Costs/Batch	\$188.48	\$679.35
Net Gain/Taproom Sales	\$1,532.52	\$6,075.00

Net Difference / PER BATCH **\$1,628.07** **\$6,454.05**

Calculate your
increased
revenue per
batch

*Go ahead...put a "WOW" in your
beer, while making your
Beancounters really happy.*

PUTA **WOW** IN YOUR **BEER!**



THANKS!

To learn more, and to request a complimentary sample of Hopzoil, Email us at:

info@hopzoil.com



HOPZOIL