MANAGING YOUR INGREDIENT SUPPLY CHAIN

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Country Malt Group
Malt Industry Trends

- Malt is a commodity made from Barley.
- Barley is a boutique crop.
- Barley is the only Commodity Grain that must be kept alive.
- Malting barley is the best (low protein) barley.
- Weather damaged barley is sold as Animal Feed and competes with GMO corn.
- Every Barley Farmer is also a wheat, corn or canola seed farmer. Corn now grown in Canada.
- Barley’s Growing Region continues to shrink.
Malt Vendor Trends

- **World Malt Price** is determined by Europe.
- **Micromaltsters** – Specialty Malts could be viable. Base malt would be too expensive.
- **Two one-stop-shop Vendors:**
  - Country Malt Group (Domestic & Imported)
  - BSG Craftbrewing (All Imported incl. Canada)
- **Ownership and Partnerships** between malting companies and distribution companies.
- **Likely more competition** in the future. Short term could lower prices. Long term could kill production plants and that could lower production and reduce competition.
Every farmer’s field is its own microclimate.
The same barley variety grown at altitude vs. dry field vs. irrigated must be malted separately.
Maltster wants uniform germination.
Brewers have easiest job: Take a uniform raw material and be creative with it.
Malsters have difficult job: take widely divergent crops and turn out a consistent uniform product.
Hop farmers are families.
Families hitting harvest infrastructure limits.
- Picker
- Stripper
- Dryer/kilns
- Baler
- Pelletizer
To add acres, must double infrastructure.
Contracts needed to get bank loans.
New Zealand seems happy as is.
Ingredient Sourcing

- Malt & Grains
- Hops
- Water
- Yeast
- Spices
- Unusual ingredients (coffee, pumpkin)
- Brewing Salts
- Other ingredients (kettle additions & finings)
Types of Malt & Grains

- **Bagged Malt**
  - US Malt – 50 lb bags (*pre-milled option*)
  - Imported Malt – 55 lb bags (*pre-milled option*)
  - Totes – 2,000 lb (ton)/2,200 lb (metric tonne)

- **Bagged Flaked/Rolled Grains**
  - US Grains – 25 or 50 lb bags
  - Imported Grains – 55 lb bags

- **Bulk Malt**
  - Pneumatic truck (10,000-48,000 lb deliveries)
  - Silo needed (12,000 – 60,000+ lb silo)
  - Container bulk to Alaska for tilt chassis delivery
Plan for Growth - Scalable?

- **Domestic vs. Imported Malts**
  - Future: Bagged vs. Totes vs. Bulk
- **Local Malt/Vendors (US or Canada)**
  - Speed of Deliveries
  - Delayed by border crossing
  - Variety of offerings (two roasters in N.America)
- **Imported Malt (Europe, C.America, S.America)**
  - Lead time includes: Logistics (14-23 weeks lead time)
    - Order is scheduled for production...
    - Production scheduled for bagging...
    - Bags loaded on shipping containers...
    - Containers loaded on ship with other containers, etc...
Get to **know your suppliers**.

Fast growth impossible without a good supply pipeline and good **supplier relationships**.

Learn to **forecast your growth**:
- Know your customers & forecast demand
- Forecast overall sales
- Forecast breakdown in beers/products
- Forecast raw material and packaging needs
- Order in plenty of time
- Adjust raw materials if you can’t forecast easily
Know Yourself

- Are you well organized and plan your production weeks/months ahead?
- Are you a procrastinator and make decisions at the last minute?
- Are you always at the mercy of your marketing department or your distributor, and need to make changes to your beer production plans?
- Do you have limited onsite storage for grain, and need to order ingredients just-in-time?
Malt Contracting

- **Bulk Contracting** - Need to Know:
  - City & State of Brewery (Portland vs. San Diego)
  - Annual projected bulk malt needs (250,000 lbs)
  - Size of Silo (60,000 lbs) (Malt = 32 lbs/cu. ft.)
  - Size of Deliveries (1/2 truck = 24,000 lbs)
  - Malt wanted (Pilsner, 2-Row, Pale)
    - Secondary Silo could be Munich for example
  - Projected month of transition

- **Tote Contracting** – Domestic vs. Imported.

- **Bag Contracting** – Currently only for Organic.
Hop Contracting

- **Required** to ensure supply.
- **Minimum contract requirements:**
  - From 88 lbs mix-and-match per year/contract
  - To full pallet of all one hop, shipped together.
- **Contracts ensure sustainable pricing.**
  - Helps avoid spikes up or down (2007-2008).
- **Contracts encourage farmers** to plant, maintain, grow, harvest & process.
- **Contracts allow farmers** to get the bank loans to expand infrastructure and therefore acreage.
Is your recipe Scalable?

If you insist on using a rare, trendy or new hop, are you contracted enough to ensure your supply to cover your projected growth?

What is your back up plan if:
- If you can’t get enough of that hop?
- If you are over-contracted and need to sell your excess?
- If you change your recipe and need a different hop?

Hops are not as easy to substitute as malt is.
Your water can make your beer unique.
Get information from your water district.
Water adjustment could include additions
Or water adjustment may require R/O.
Some leases include water (a bonus!).
Yeast

- Decisions:
  - Liquid yeast or
  - Dry yeast (better than it used to be)
  - Multiple suppliers for both
- Keep your yeast handling simple (limit your yeast varieties)
  - Can get very expensive
  - Is it scalable?
- In 2007: Planned six week shipments save 10%.
Spices & Unusual Ingredients

- Your one-stop shop malt suppliers
- Restaurant suppliers
- Warehouse stores like Costco
- Specialty spice shops
- Farmers
- Coffee Roasters

- Ask yourself: Is this Scalable?
Brewing Salts & Other

- List could include:
  - Gypsum, CaCO3, CaCl, Epsom Salt
  - Diatomaceous Earth or Filter Sheets
  - Irish Moss or other Kettle Coagulants
  - Gelatin, Isinglass or other Tank Finings
  - More

- Direct from manufacturer = full pallets
- Your one-stop-shop malt vendor
Questions?
Women: join Pink Boots Society
Everyone: buy a Unite Pale Ale!

INTERNATIONAL WOMEN’S
COLLABORATION BREW DAY
SATURDAY, MARCH 8TH