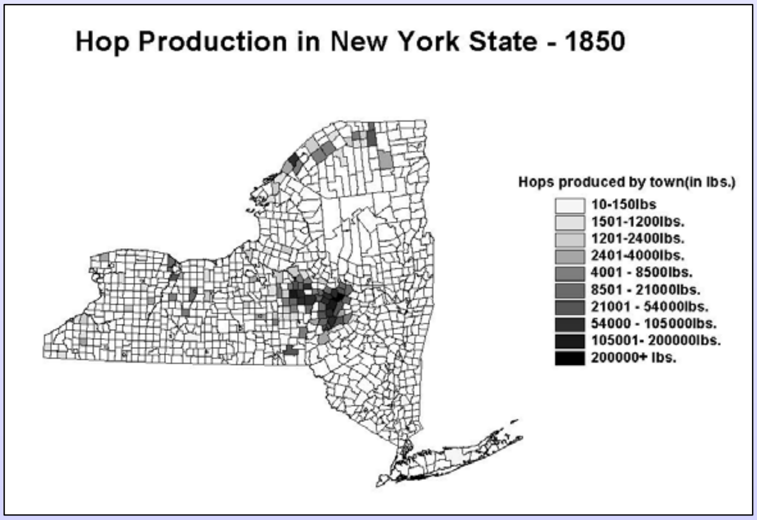
The Market for Northeastern-Grown Hops[1]

A century and half ago, Madison and Otsego counties in New York led the Western Hemisphere in hops production. Good growing conditions and proximity to large urban markets kept hundreds of producers in business. Hop yards and hop barns punctuated an agricultural landscape that also included silk, hemp, and flax production. Plant diseases and eventually Prohibition led to a shift in production of hops to the Pacific Northwest, but in the last couple of years a small but intrepid group of producers in the Northeast have been experimenting with hops return. New vigorous hop varieties, pest control strategies and production technologies may yet permit a small return of commercial hop production in New York and elsewhere in the region. But what about the market?



A survey of microbreweries, brewpubs and regional breweries was conducted in 2002 to learn about potential sales of regionally grown hops in the Northeast. The study was conducted by the Community Food and Agriculture Program in the Department of Development Sociology at Cornell University in cooperation with the Northeast Hop Alliance (NeHA).

Methods

A list of over 400 small (subnational) breweries in the Northeastern United States and Ohio was compiled through exhaustive state-by-state web research. This list was cross-checked with a mailing list provided by *American Brewer Magazine*. Duplicates were eliminated. A questionnaire was drafted by the NeHA board and shared with several brewers for input. The questionnaire (see Appendix 1) was then mailed to all 442 brewers on the list along with a cover letter explaining the study and a self-addressed stamped envelop to return the completed survey to Cornell. Approximately 10 days later a reminder card was mailed to those who had not responded. Due to financial limitations, a second wave of reminder cards was not sent out, nor were phone calls made to nonrespondents.

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Results

The questionnaire yielded 113 useable responses for a response rate of 25.5 percent. Given this response rate and the potential for nonresponse bias, caution should be exercised in generalizing about the whole population of small breweries in the region. As table1 shows, brewpubs and microbreweries constituted the lion's share of respondents (85%).

Table 1. Respondents by Type of Brewery and Use of Hops

Type	# and % of respondents	Mean barrels of beer produced (mean and # of respondents)	Hops used (pounds) (mean and # of respondents)	% using Hop Pellets (responses and % within type)
Multiple type	10 (8.9%)	1,971.4 (7)	917.0 (5)	80.0% (8)
Brewpub	59 (52.7%)	877.0 (51)	572.1 (32)	76.3% (45)
Microbrewery	36 (32.1%)	3,799.7 (31)	1721.0 (21)	71.4% (25)
Regional brewery	7 (6.3%)	46,333.3 (3)	19333.3 (3)	85.7% (6)
Total	**112 (100.0%)**	**3,427.3 (92)**	**1918.6 (61)**	75.7% (84)

There is a significant difference in the volume of beer production and the use of hops by the breweries. It is interesting to note that while microbreweries produced, on average, four times the volume of beer as brewpubs, brewpubs utilize more pounds of hops per barrel of beer than microbreweries (.65 lbs/barrel versus .45 lbs/barrel). Multiple type and regional breweries also had lower hop usage than brewpubs at .47 and .42 lbs/barrel respectively. Three-quarters of the respondents use hop pellets. However, a few microbreweries and brewpubs do use some fresh or whole hops.

The Top 10 Hop Varieties

The respondents reported 37 distinct varieties of hops. Table 2 shows the top-ten hop varieties used by the respondents. Cascade is the leading choice by far, followed by several European hops. However, Tetthanger had the highest mean pounds used. Using a satisfaction rating of 0 to 5, with 0 being the lowest and 5 being the highest, the respondents rated Centenial and Perle somewhat higher than those hops which led in frequency and pounds used. Overall, however, respondents seemed very satisfied with their hop choices.

Table 2. Top 10 Hop Varieties in Use

	Frequency	Pounds used (mean)	Satisfaction rating
Cascade	60 (16.0%)	873.3	4.40
Tetthang	28 (7.5%)	1,441.19	4.25
Hallertau	27 (7.2%)	252.06	4.29
Saaz	26 (7.0%)	212.5	4.33
Willamette	23 (6.1%)	726	4.37

E. Kent Goldings	22 (5.9%)	188.71	4.11
Fuggle	20 (5.3%)	484.43	4.33
Perle	19 (5.1%)	110.08	4.44
Northern Brewer	18 (4.8%)	270.75	4.29
Centenial	16 (4.3%)	251.27	4.60

Interest in Regionally Grown Hops

Over two-thirds of the respondents reported interest in buying regional hops (Table 3). However, most breweries did not see any strong advantage for them in utilizing regionally produced hops. Over one-quarter of microbreweries did indicate that loyalty would be increased.

Table 3. Interest in Regionally Grown Hops

		Percent (and number) of Breweries who perceived an advantage in using regional hops in terms of Sales, Visibility, Profit and Customer Loyalty			
Type	Interest in Regional Hops	Sales	Visibility	Profit	Loyalty
Regional brewery	4 (57.1%)		1 (14.3%)	1 (14.3%)	1 (14.3%)
Microbrewery	27 (75.0%)	6 (17.1%)	9 (25.7%)	6 (17.1%)	10 (28.6%)
Brewpub	38 (65.5%)	9 (15.8%)	13 (22.8%)	6 (10.5%)	15 (26.3%)
Multiple type	9 (90.0%)		1 (11.1%)	1 (11.1%)	2 (22.2%)
Total	**78 (70.3%)**	**15 (13.9%)**	**24 (22.2%)**	**14 (13.0%)**	**28 (25.9%)**

Premiums for Regional Hops

Despite *not* reporting strong advantages of regional hops to their businesses, a majority of breweries, on average, would pay a premium of between 5 and 10 percent for regional hops.

Table 4. Percent Premium Pay for Regional Hops

Type	Mean response* (# of respondents)
Regional brewery	.80 (5)
Microbrewery	1.48 (25)
Brewpub	1.85 (47)
Multiple type	2.00 (8)
Total	**1.69 (85)**

* Codes for this response are: 0 = 0%; 1 = 5%; 2 = 10%; 3 = 15%; 4 = 20%; 5 = 25%

Conclusions

These results support the conclusion that a *potential* market exists for regionally produced hops (perhaps as many as several hundred small breweries in the Northeast and Ohio). Many even reported a willingness to pay a small price premium (between 5 and 10 percent). However, caution is advised since the breweries appear almost universally satisfied with their current hop varieties and suppliers, and with no distinct advantage for regional hops identified in this study, getting them to shift to Northeastern grown hops could prove very difficult.

It is the perception of the investigator that many small breweries may think that they have nothing to lose by experimenting with regional hops (a batch or two). Indeed, the novelty could lead to an initial sales burst. However, in order to carve out a commercially viable niche over the long run, would-be hop producers will still need to produce a relatively large, steady supply of high-quality hops to be competitive, and this has yet to be proven feasible in the region. Until this happens (if ever), it *is* quite possible for small hops yards to build partnerships with small breweries to produce limited batches of specialty beers with Northeastern hops. It is recommended that NeHA consider making the facilitation of these business connections ("niche-hopping") a high priority on its agenda.

Appendix 1.

BREWERY SURVEY: Interest in Northeastern Specialty Hops

Thank you for agreeing to participate in this valuable study! If you are not brewing at this time, or received this questionnaire in error or in duplicate, please note this in the upper right hand corner of this page and return it in the enclosed business reply envelope. If you are currently brewing, please continue to answer the questions below.

1. Check the One which best describes your brewery:

- ☐ 1. Regional brewery
- ☐ 2. Microbrewery
- ☐ 3. Brewpub
- ☐ 4. Other (what?) ________________

2. Please check ALL product categories produced at your business and estimate the volume produced.

Category	Annual Volume in barrels
☐ l. Ales	____ barrels
☐ 2. Lagers	____ barrels
☐ 3. Mainstream beers	____ barrels
☐ 4. Specialty beers	____ barrels
☐ 5. Other:______________	____ barrels
Total Volume	**____ barrels**

3. Generally speaking, how do you distinguish your beers from other microbrews? In other words, what is your niche?

4. Please check the ONE category that best describes your brewery's sales trends over the past three years.

- ☐ 1. Start-up (e.g., began 1 or 2 years ago)
- ☐ 2. Sales are increasing
- ☐ 3. Sales are relatively stable
- ☐ 4. Sales are declining slowly

5 . Please check all the boxes which describe your brewery's trade area.

- ☐ 1. Local (county or adjacent counties)
- ☐ 2. Regional (multicounty area)
- ☐ 3. Statewide

- ☐ 4. Multistate (two or more states)
- ☐ 5. Northeast region
- ☐ 6. National
- ☐ 7. Other ______________________

6. How would you describe the status of your brewery's <u>market share</u> in its trade area?
(Check the appropriate box)

- ☐ 1. Growing
- ☐ 2. Stable
- ☐ 3. Declining
- ☐ 4. Not sure

7. What is your <u>preferred</u> form of Hops? (Check only one)

☐ Pellets ☐ Extract ☐ Fresh/Wholesale ☐ Other: ____________

8. Please fill out the following chart regarding your hops usage:

Hop Type (name)	**Lbs. in 2001**	**Average $/lb. in 2001**	**Form**	**Source**	**Purpose (e.g., flavor, aroma, etc.)**	**Satisfaction ranking* (0-5)**
Example	*300*	*$3.00/lb.*	*Pellet*	*Hops 'R' US*	Aroma	*4*

*Satisfaction ranking: 5=excellent; 4=very good; 3=good; 2=fair; 1=poor; 0=very poor

9. Overall, how would you rate the hops you are currently buying according to the following characteristics?
Satisfaction ranking: 5 = excellent; 4 = very good; 3 = good; 2 = fair; 1= poor; 0= very poor; N/A= Not Applicable

	<u>Characteristic/Feature</u>	**<u>Rank</u>** *(circle **ONE** only)*						
9.a.	Hop quality	N/A	0	1	2	3	4	5
9.b.	Supplier service	N/A	0	1	2	3	4	5
9.c.	Value	N/A	0	1	2	3	4	5
9.d.	Quality of packaging	N/A	0	1	2	3	4	5
9.e.	Quality of bale	N/A	0	1	2	3	4	5
9.f.	Quality of pellet	N/A	0	1	2	3	4	5
9.g.	Convenience of use	N/A	0	1	2	3	4	5
9.h.	Accuracy of lab data	N/A	0	1	2	3	4	5
9.i.	Other: ___________		0	1	2	3	4	5
9.j.	Other: ___________		0	1	2	3	4	5

10. Would you be interested in buying locally grown hops if they were high quality and reasonably priced? *(Circle the best choice below)*

YES NO MAYBE

11. Do you think buying and using a Northeast grown hop would increase your:

11.a.	Sales?	YES	NO	NOT SURE
11.b.	Visibility?	YES	NO	NOT SURE
11.c.	Profitability?	YES	NO	NOT SURE
11.d.	Customer Loyalty?	YES	NO	NOT SURE

12. Of course, regional specialty hops would be produced on a small scale and the costs of production are likely to be higher (even without long-distance shipping). How much more would you be willing to pay for "local" specialty hops over the price of your current hops? *(Circle the best choice below)*

0% 5% 10% 15% 20% 25%+ Not Sure

13. In what state is your main office located? ________________

YOU ARE DONE! Thank you for completing our survey. Please return in the business reply envelope.