Survey of Maple Producers about Climate Change

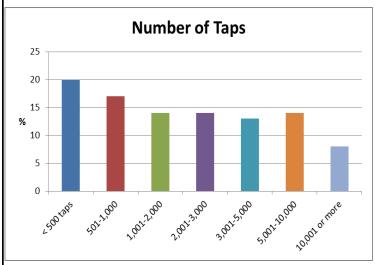




Maple producers in the Northern Forest of Vermont and New York, an area that spans 6 counties in Vermont and the Adirondacks of New York, were surveyed in 2014 about their perspectives on climate change. Of the 264 completed questionnaires, 178 were from Vermont and 86 were from New York. Respondents were 94% male and 6% female. Ages ranged from 18 to 88, averaging 61 years.

Below are responses to selected survey questions. For the complete report, visit www.esf.edu/for/kuehn/ reports.htm or contact Lisa Chase at Lisa.Chase@uvm.edu or 802-257-7967.

Q: How many taps are currently part of your operation?



In 2014, the average maple producer made 1,337 gallons of syrup, while the maximum made by a single producer was 32,500 gallons.

The average respondent sold 46% of their product in bulk, 42% as retail, and 12% as wholesale—with smaller producers more likely to sell retail. Businesses with under 500 taps sold the majority of their maple products by retail (71%), while those with over 10,000 taps sold the majority of their maple products in bulk (72%).

Q: Which of the following have affected your maple production business in the last five years?

Factors affecting businesses n=252	Percent of respondents
Harder to predict when to tap	39 %
Increased wind damage to trees	39 %
Tapping earlier than usual	38 %
Ice damage to trees	29 %
Changes in snow cover	26 %
A decline in the health of their maples	21 %

Maple producers in both states reported similar factors affecting their businesses. Ice damage, however, affected more producers in Vermont.

Q: What are your plans for your maple business during the next five years?

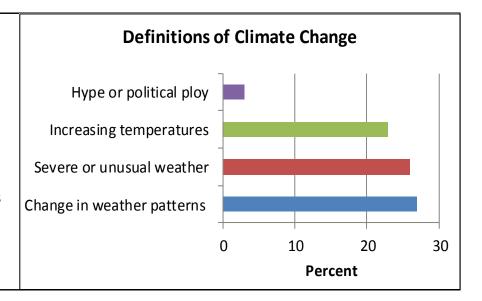
Maple producers are generally optimistic about the future of their businesses, with over half planning to expand taps or products. Only 10% were considering retiring, closing or selling their business, while 42% planned to keep their businesses as is and 18% planned to pass on their business.

Plans of maple producers over the next five years, n=258	Percent of respondents
To increase the number of taps I have	48 %
To keep my business as is	42 %
To give my business to my children	18 %
To expand the products I sell	18 %
To retire, sell, or close my business	10 %

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Q: In your own words, write in your personal definition of "climate change."

The most frequently mentioned definitions were a change in weather patterns, severe or unusual weather events or storms, and increasing temperatures. Only 3% of respondents indicated that climate change is a political ploy or hype. In total, 17 different definitions were identified.



Q: Do you have any concerns related to climate change and its potential impact on your business in the future?

Concerns about Climate Change n=234	Percent of respondents
No concern	42 %
Weather damage to sugar bush	14 %
Change in season timing	13 %
Tree health	11 %
Shorter season	10 %
Reduced sap flow	10 %

Less than half of respondents said that they have no concerns related to climate change. The other 58% of respondents identified 12 different concerns. The top 5 are listed in the table above. Q: What types of changes to your maple production business do you think might be needed in the future in response to climate change?

Over 70% of survey respondents are already making modifications. Nearly one-quarter said that they are tapping earlier, and 14% have added vacuum tubing to increase production. Some producers are considering installation of new technologies in the future and are taking measures to improve tree health, such as conservative tapping and thinning their maple bush to encourage tree crown development.

Changes in Response to Climate Change, n=221	Percent of respondents
None	29 %
Tap earlier	24 %
Added vacuum system	14 %
Tap as soon as the season starts	9 %

Source: Perceptions of Maple Producers towards Climate Change by Diane Kuehn, Lisa Chase, and Thomas Sharkey Online at www.uvm.edu/tourismresearch and www.esf.edu/for/kuehn/reports.htm



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State University of New York
College of Environmental Science and Forestry