Indiana Department of Natural Resources
Division of Forestry

INDIANA'S 2016 MAPLE PRODUCTION

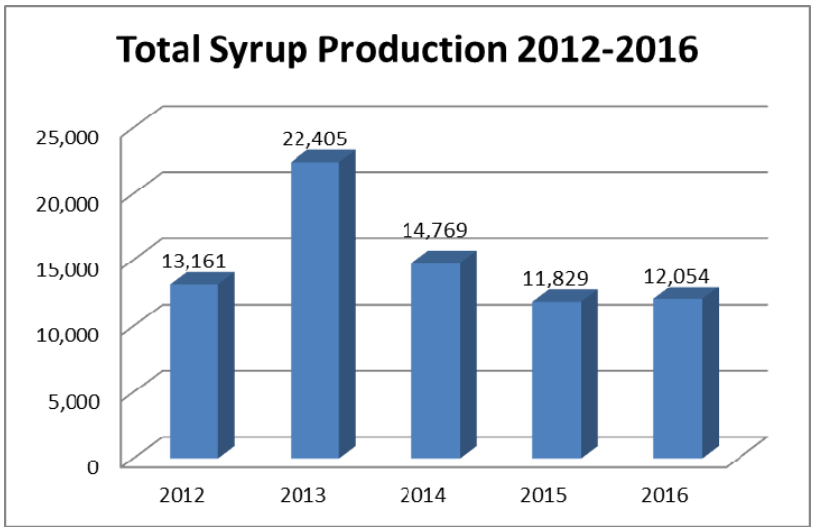
Shortly after the 2016 maple syrup season, 143 questionnaires were sent to all known producers of maple syrup in Indiana. A total of 75 individuals responded, a 52% response rate, which was lower than the 61% rate in 2015.

THANK YOU to the Indiana Maple Syrup Association (IMSA) for its assistance and partnership in completing the 2016 survey. For the past four years, IMSA has covered the postage for mailing the surveys to producers. In today's world of shrinking budget, partnerships are essential to completing projects like this.

For the sake of comparison of similar climatic regions, the results were broken down per two major regions. The dividing line chosen was U.S. 40, bisecting the state into a northern region, which returned 62 questionnaires, and southern region, which returned 13.

Of the producers who responded to the questionnaire, 89% produced syrup in 2016, which was higher than the 80% who reported producing syrup in 2015. A total of 12 producers from the southern region and 56 producers from the northern region reported production in 2016.

Ten large producers accounted for 56% of the states' total syrup production of 12,054 gallons. After a record year in 2013 (22,405 gallons), this year's production, although considerably lower than that of previous years, was 2% higher than the 2015 total. Northern producers accounted for 10,982 gallons. Southern producers generated 1,072 gallons. The graph below reflects the total number of gallons produced each year, starting in 2012.



There are 38 counties in the state that have at least one active maple syrup producer. Elkhart and Parke counties reported having nine sugar camps, the most in any one county. Marshall County had six, and several counties had three. Kosciusko County was once again the home to the largest sugar camp in the state. Elkhart County had the second-largest camp, Putnam County the third largest.

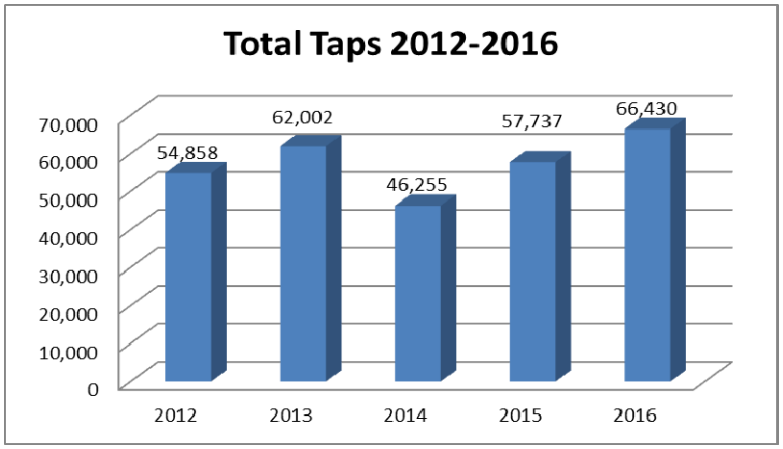
The overall state average for opening date was Feb. 9, and the closing date was March 11. Regionally, the average opening dates were Feb. 11 and Feb. 1 for the north and south, respectively. The average closing date was March 11 for the north and March 9 for the south.

The average amount of sugar water (sap) needed to produce a gallon of syrup was 48 gallons in the north and 49.1 gallons in the south. The state average was 48.1 gallons of sap to produce a gallon of syrup. These numbers were higher than those reported in 2015. Using these figures, we can estimate that approximately 577,386 gallons of sugar water was collected in 2016.

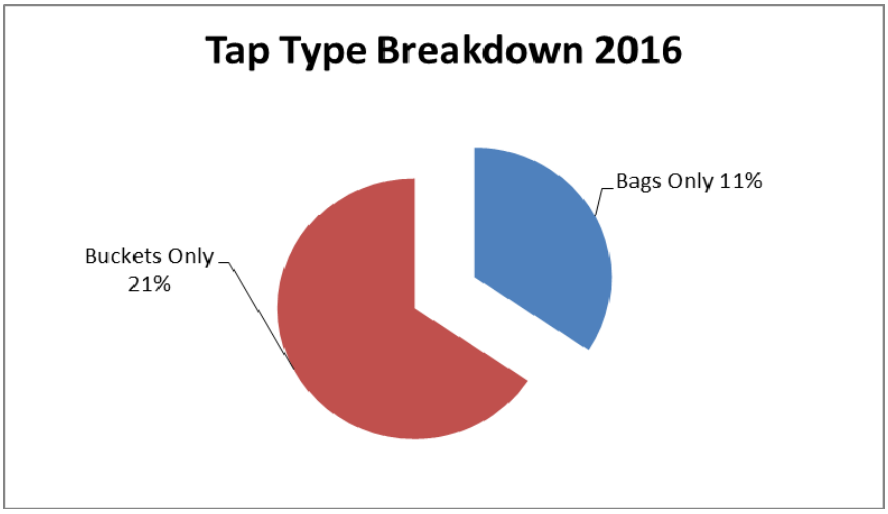
The reported average amount of sap needed in 2016 to produce a gallon of syrup may not be wholly accurate. Some producers do not maintain accurate records of sap inflow. For those camps that produced syrup in 2016, the average amount produced per camp was 177 gallons. This figure is consistent with the 176 gallons per camp reported in 2015. Although the majority of the sugar water was produced at the producer's own sugar bush(es) in 2016, producers did purchase 30,049 gallons from others. That amount was significantly less than the 115,637 gallons reported in 2015. Perhaps some camps chose not to buy additional syrup. It’s also possible that those producers who normally buy additional syrup did not return a survey.

Of the 66.430 taps set in 2016 (a 2% increase from 2015 and the highest since 2011), about 35% of the state's syrup production was accounted for via producers using only buckets for sugar water collection. A total of 20,164 buckets were used in 2016. Statewide, the amount of sugar water collected solely by buckets accounted for total

syrup production of 7,817 gallons. The 33 Indiana maple syrup producers used an average of 415 buckets in their collection operations. The graph below represents the total number of taps used each year from 2012 to present.



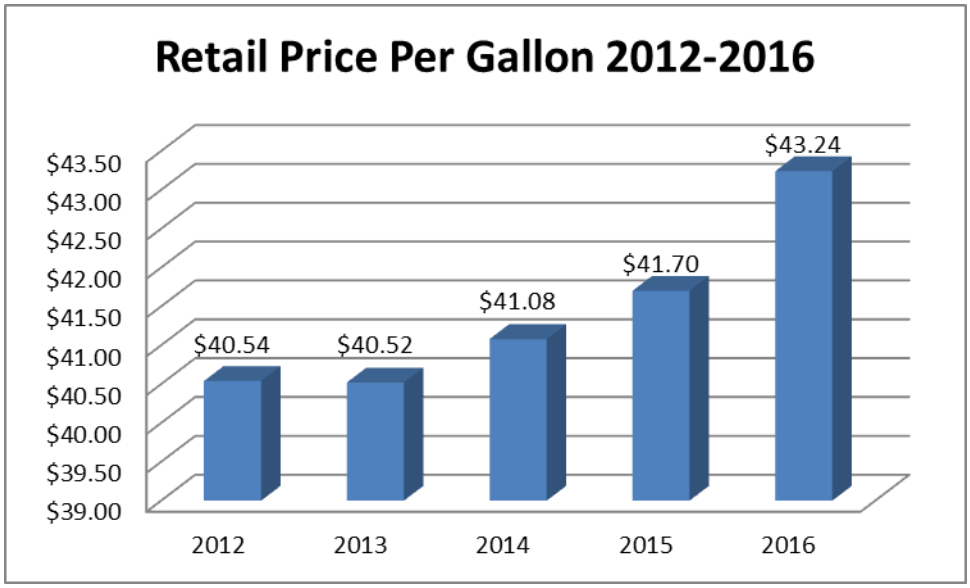
Buckets continue to remain the most popular way to collect syrup, regardless of region. The largest single producer using buckets hung 3,200 buckets in the northern region and 200 buckets in the southern. The pie chart below shows the number of producers per type of tap used in 2016.



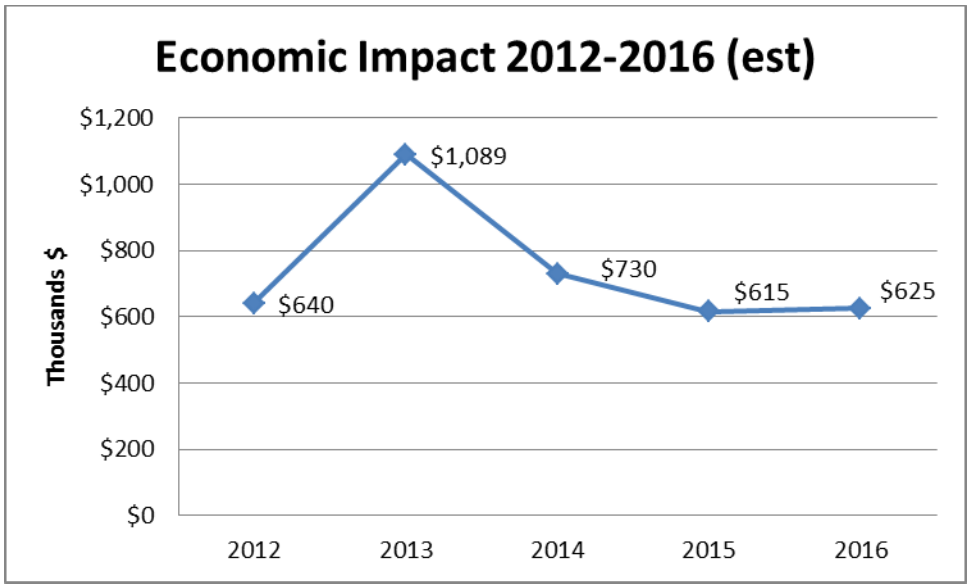
The use of plastic bags decreased in 2016 to 18,873 compared to 14,212 in 2015. A total of 21 producers used plastic collection bags in 2016. Many of these producers also used buckets and or tubing as well. Producers using only bags to collect sap set, on average, approximately 635 taps. One producer set 5,500 taps, using only bags. Those using only bags for sap collection accounted for 597 gallons in 2016. On a regional basis, those using plastic sap collection bags were split nearly evenly between the two regions. In the north, nine producers using 1,289 bags collected 327 gallons of syrup. In the south, four producers using only plastic bags collected 295 gallons and set 6,520 bags for collection.

A number of producers use tubing for sugar water collection ~~and~~ are slowly changing to plastic bags as terrain, dollars and results allow. Statewide, 21 producers (20 from the northern region and one from the southern region) used more than 92,000 feet (17 miles) of tubing for collection in 2016. Those using tubing produced 4,432 gallons of syrup.

The statewide average price received for a retail gallon of syrup was $43.24, higher than the $41.70 for 2015. The average price per retail gallon in the south was $46.00 (only two surveys from the south contained price data). Northern producers averaged $42.87 per retail gallon. The average statewide price received for a quart of retail syrup was $14.85. More surveys were returned this year with information about pricing per pint than in the past few years. The state average per retail pint was $8.65. The statewide wholesale average gallon price was $438.45. The graph below depicts the average price per retail gallon of syrup for the past five years.



The statistics gathered via our 2016 maple syrup production questionnaire most likely do not reflect the true income generated from Indiana's producers. The estimated statewide reported syrup income for 2016 (multiplying the average $/per gallon by the reported production) is $521,214.00. However, if one appreciates the quantity that was consumed via the producers' family, given away, or simply not reported, the calculated dollar figure may well grow, conservatively, to more than $625,000. Assuming this figure to be realistic, the average dollar return per tap hole is $9.42. That figure is slightly less than the $10.65 reported in the 2015 maple syrup producers survey. The graph below shows the estimated economic impact for maple syrup production during the past five years.



Sales do not appear to be a limiting factor for Indiana maple product producers. Instead, the inability to produce enough syrup due to the unfavorable weather and/or short tapping seasons was the greatest impediment to making a profit. Prime tapping conditions center on below-freezing temperatures in the evening followed by a fairly fast thaw in the morning, which normally allows for good syrup flow. This year was almost unanimously reported to be one of the worst seasons since we began reporting syrup production. According to those who commented on the season, only 1% said this season was above average, 15% rated it as average, and 84% said it was below average. The main reasons reported were too short of season and consistent unseasonably warm March temperatures.

Overall, most of the produced syrup is sold at a retail level. Of those reporting production, 33% of respondents said that at least a portion of their production is given away or consumed domestically. Of course, these same producers tend to be smaller in scope and production. Packaging preferences show the majority favoring retail sales in gallon containers. Fewer producers favor quarts. The remainder sold syrup in smaller units. A few producers offer maple sugar, creams, candies, cookies, etc., but apparently these maple products do not account for substantial percentages of any one producer's sales.

We are all aware that each sugar bush has unique characteristics and that no two bushes produce alike. Although Indiana is a relatively small geographic area, the variation in weather is significant, as evidenced by prior years. As reported earlier, conditions in 2016 were reported to be significantly below average.

A total of 42 respondents stated they would like to be listed in the Indiana maple syrup producers brochure. As time and funds permit, we hope to prepare an updated brochure. Additionally, we believe it would be beneficial to have "Indiana generic" maple syrup articles on hand for reporters and other media come February 2017.

Sincere thanks to all the maple producers for their prompt questionnaire responses. I have updated our maple database and will continue to be a contact for Indiana maple products. ***Please remember the data compiled in this report is only as good as the data received. To be able to more accurately report maple syrup production figures, we'll continue to need a high response rate.*** Although our time is limited for personal visits to your operation, we do welcome your calls and inquiries on all facets of maple production. Special forest products such as maple syrup contribute substantially to the income of many people in rural areas while offering wholesome therapy at the same time.