



INDIANA'S 2018 MAPLE PRODUCTION

After the 2018 maple syrup season, DNR Division of Forestry sent 213 questionnaires to all known maple syrup producers in Indiana. This year, we sent 79 questionnaires electronically. Like anything new, there were bugs to work out. So, thank you for your patience, and please accept our apologies for any inconvenience. Seventy-eight individuals responded, resulting in a 37 percent response rate, compared to last year's 51 percent.

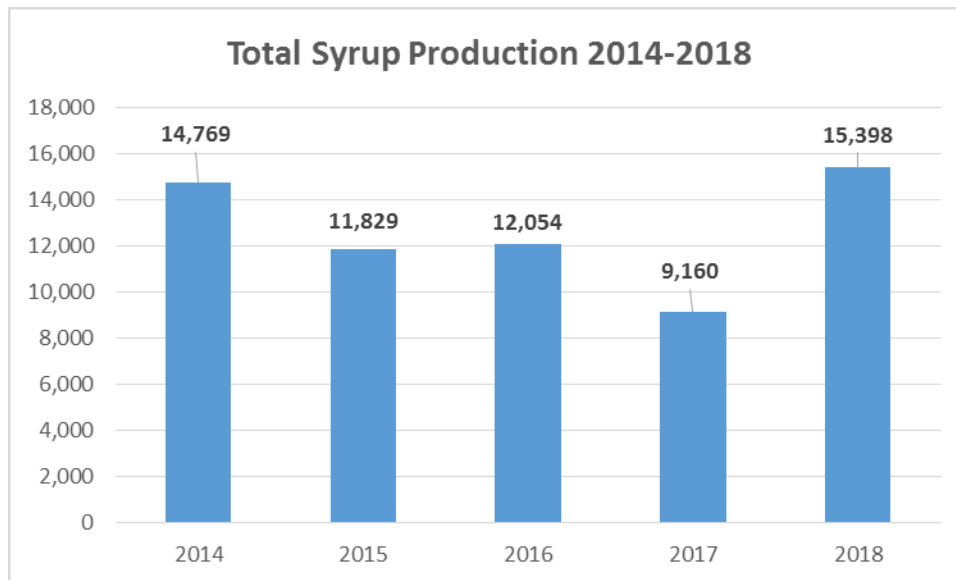
The Division of Forestry would like to thank the Indiana Maple Syrup Association (IMSA) for assistance and partnership in completing the 2018 survey. For the past five years, IMSA has paid postage for mailing surveys to producers. Partnerships are essential to projects like this. Learn more about joining IMSA and about maple syrup production in general at indianamaplesyrup.org. They are a great organization.

To compare similar climatic regions, results were broken down into two major regions. The dividing line was U.S. 40, bisecting the state into a northern region, which returned 66 questionnaires, and southern region, which returned 12.

General production statistics

Of producers who responded to the questionnaire, 87 percent produced syrup in 2018 compared to 79 percent in 2017. Ten producers from the southern region and 57 producers from the northern region reported production in 2018.

The state's total syrup production was 15,398 gallons, compared to just 9,160 in 2017. Ten large producers accounted for 59 percent of production. Northern producers accounted for 13,758 gallons. Southern producers generated 1,640 gallons. The graph below reflects the total number of gallons produced each year, starting in 2014.



Fifty-nine counties have at least one active maple syrup producer. Elkhart County reported the most of any county with 35 sugar camps. Parke County had 12, and Marshall County reported 11. Kosciusko County was once again the home to the largest sugar camp in the state. Putnam County had the second-largest camp, and Elkhart County the third largest.

Season length

The overall state average for opening date was Feb. 6 and the closing date was March 21. Regionally, the average opening dates were Feb. 6 for both the north and south. The average closing date was March 23 for the north and March 21 for the south.

Sap requirements

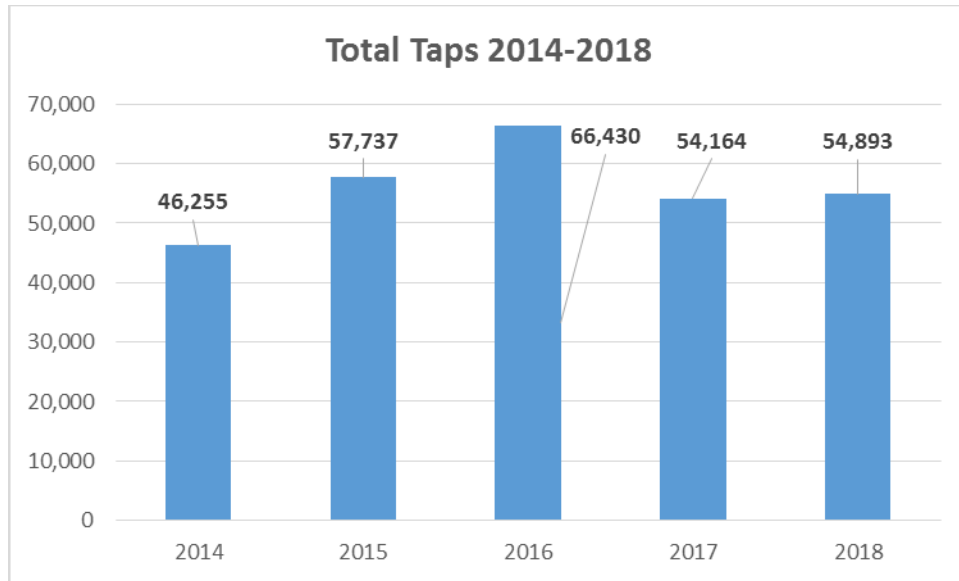
The average amount of sugar water (sap) needed to produce a gallon of syrup was 49 gallons in the north and 50.4 gallons in the south. The state average was 49.2 gallons.

These numbers are comparable to those reported in 2017, although some camps reported between 60-80 gallons of sugar water to produce a gallon of syrup. A variety of reasons or a combination of reasons may have caused this — warmer weather at the end of the season, an increased number of soft maple taps, and increased stress on tapped trees in the summer. Using these figures, we can estimate that approximately 757,581 gallons of sugar water was collected in 2018.

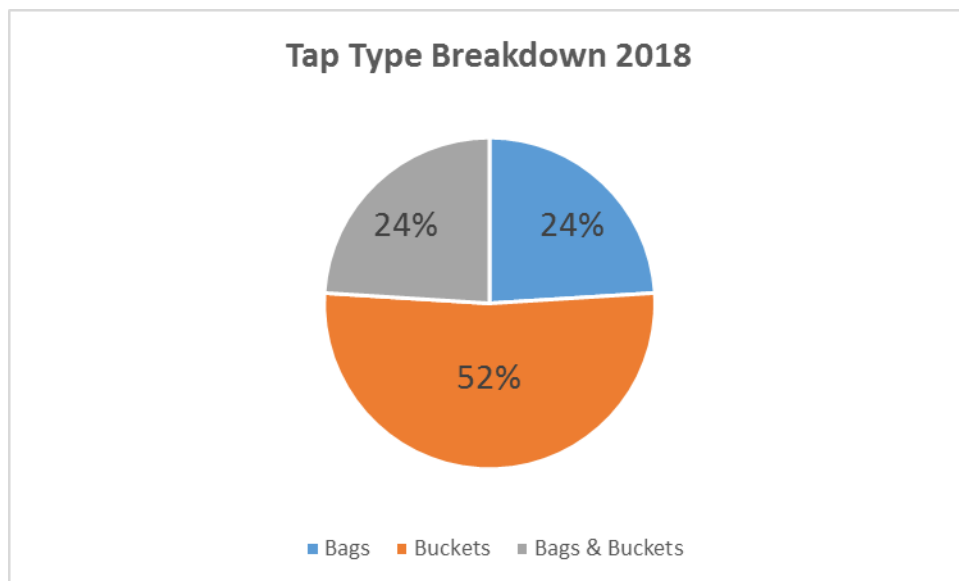
The reported average amount of sap needed in 2018 to produce a gallon of syrup may not be wholly accurate. Some producers do not maintain accurate records of sap inflow. For those camps that produced syrup in 2018, the average amount produced per camp was almost 230 gallons, compared to 127 gallons per camp in 2017. Although the majority of the sugar water was produced at the producer's own sugar bush(es) in 2018; producers did purchase more than 179,000 gallons, an astounding 87 percent higher than 2017.

Collection methods

Indiana producers set 54,893 taps in 2018 (almost identical to 2017). Producers using only buckets for sugar water collection accounted for about 28 percent of the state's syrup production. A total of 19,461 buckets were used in 2018. Indiana maple syrup producers used an average of 453 buckets in their collection operations. The graph below represents the total number of taps used each year from 2014 to present.



Buckets remain the most popular way to collect syrup, regardless of region. The largest single producer using buckets hung 3,000 buckets in the northern region and 80 buckets in the southern region. The pie chart below shows the number of producers per type of tap used in 2018.



The total number of bags decreased significantly from 13,531 in 2017 to almost 7,100 in 2018. That being said, the number of producers using plastic bags increased from 24 to 33 in 2018. Many of these producers also used buckets and or tubing. Producers using only bags set, on average, 432 taps. One producer set 3,000 taps, using only bags. Those using only bags for sap collection accounted for 984 gallons in 2018, compared to 388 gallons in 2017. On a regional basis, those using plastic sap collection bags were split nearly evenly between the two regions. In the north, 11 producers using 1,903 bags collected 691 gallons of syrup. In the south, five producers using only plastic bags collected 293.5 gallons and set 3,402 bags for collection.

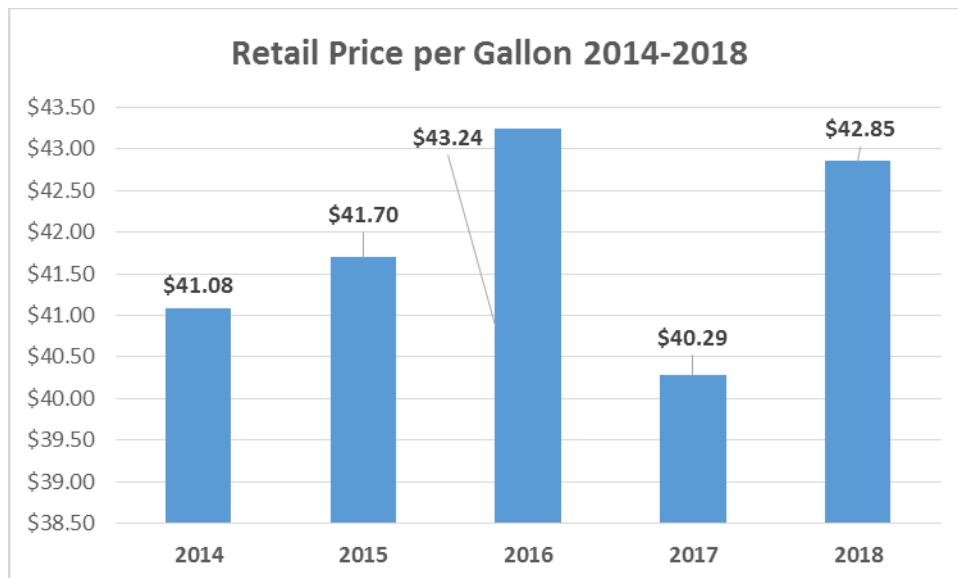
The number of producers using tubing for sugar water collection is increasing as terrain, dollars and results allow. Statewide, 15 producers (14 from the northern region and one from the southern region) used an estimated 223,152 feet (42 miles) of tubing for collection in 2018. Those using tubing produced 6,365 gallons of syrup.

Syrup prices

The statewide average price received for a retail gallon of syrup was \$42.85 in 2018, a 6-percent increase from 2017 (\$40.29). Only one survey from the south contained a cost-per-gallon report, and that was \$48 per gallon. Northern producers averaged \$42.64 per retail gallon.

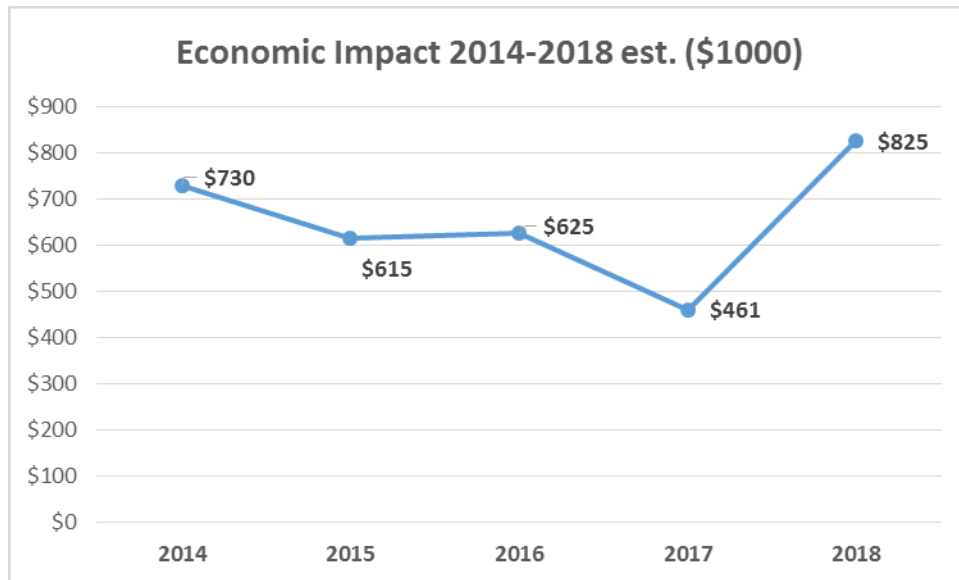
The average statewide price received for a quart of retail syrup was \$13.88. More producers returned surveys this year with information about pricing per pint than in past years. The state average per retail pint was \$8.22.

The statewide wholesale average gallon price was \$38.33; however, only three surveys were returned with wholesale gallon pricing. The graph below depicts the average price per retail gallon of syrup for the past five years.



Economic impact

Statistics gathered via our 2018 questionnaire most likely do not reflect the true income generated from Indiana's producers. The estimated statewide reported syrup income for 2018 (multiplying the average price-per-gallon by reported production) is \$659,804. 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 almost \$825,000. Assuming this figure to be realistic, the average dollar return per tap hole is \$15.03. That figure is much higher than the \$8.51 reported in the 2017 maple syrup producer's survey. The graph below shows the estimated economic impact for maple syrup production during the past five years.



Limiting factors

Sales do not appear to be a limiting factor for Indiana maple product producers. Instead, the inability to produce enough syrup due to unfavorable weather and/or short tapping seasons was the greatest impediment to making a profit.

Prime tapping conditions are below-freezing temperatures in the evening followed by a fairly fast thaw in the morning, which normally allows for good sap flow. For the past two years, conditions were well below average. But, we saw a rebound in 2018. According to those who commented on the season: 51 percent said this season was above average; 35 percent rated it as average; and 14 percent said it was below average. Much better weather lasting longer periods was reported for the 2018 season across the state.

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 2018 were reported to be well above average.

Where Indiana syrup ends up

Overall, most of the produced syrup is sold at a retail level. Of those reporting production, almost 39 percent 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.

A sincere thanks

Sincere thanks to all the maple producers for their prompt questionnaire responses. We 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, too.