



INDIANA'S 2020 MAPLE PRODUCTION

After the 2020 maple syrup season, DNR Division of Forestry sent questionnaires to all 200 known maple syrup producers in Indiana, 78 electronically. The electronic form was tweaked from last year to make it more user-friendly. Seventy-eight individuals responded, resulting in a 39 percent response rate, virtually the same percentage as 2019.

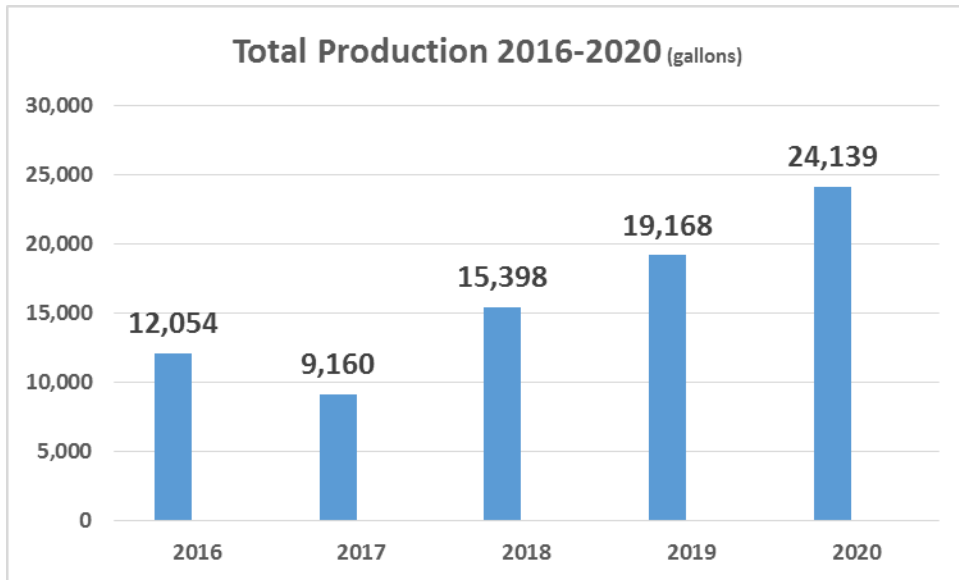
The Division of Forestry would like to thank the Indiana Maple Syrup Association (IMSA) for assistance and partnership in completing the 2020 survey. For the past six years, IMSA has covered the postage costs for mailing surveys to producers. Partnerships are essential to projects like this. Learn more about joining IMSA and maple syrup production at indianamaplesyrup.org. They are a great organization and a wonderful resource for information on producing maple syrup.

To compare similar climatic areas, results were broken down into two major regions. The dividing line was U.S. 40, bisecting the state into a northern region, which returned 70 questionnaires, and southern region, which returned 8.

General production statistics

Of producers who responded to the questionnaire, 70 percent produced syrup in 2020 compared to 83 percent in 2019. Four producers from the southern region and 49 producers from the northern region reported production in 2020.

The state's total syrup production was 24,139 gallons, compared to just 19,168 in 2019, a 20 percent increase. Ten large producers accounted for 75 percent of production. Northern producers accounted for 22,433 gallons. Southern producers generated 1,706 gallons. The graph below reflects the total number of gallons produced each year, starting in 2016.



Twenty-nine counties have at least one active maple syrup producer. Elkhart County reported the most of any county with 20 sugar camps. Marshall had six, and numerous other counties had four. Putnam County was the home to the largest sugar camp in the state and Orange County had the second-largest camp.

Season length

The overall state average for opening date was Feb. 11 and the closing date was March 11. Regionally, the average opening dates were Feb. 12 for the north and Feb. 10 for the south. The average closing date was March 12 for the north and March 11 for the south.

Sap requirements

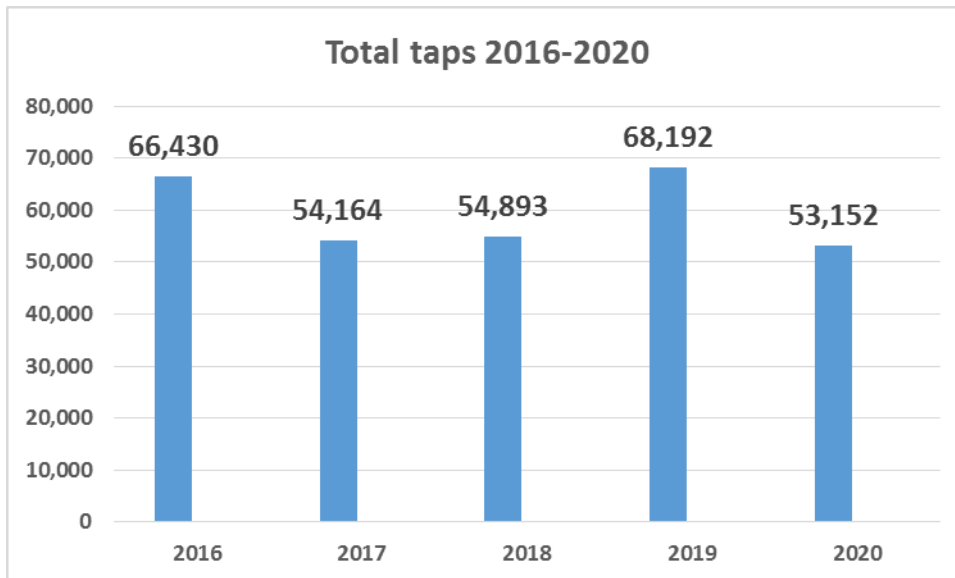
The average amount of sugar water (sap) needed to produce a gallon of syrup was 44.2 gallons in the north and 50.5 gallons in the south. The state average was 44.7 gallons.

These numbers are very close to those reported in 2019, although some southern sugar camps reported as much as 69 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 1,079,013 gallons of sugar water was collected in 2020.

The reported average amount of sap needed in 2020 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 2020, the average amount produced per camp was almost 455 gallons, compared to 274 gallons per camp in 2019. Although the majority of the sugar water was produced at the producer's own sugar bush (es) in 2020; producers did purchase or produce 44,683 gallons for others.

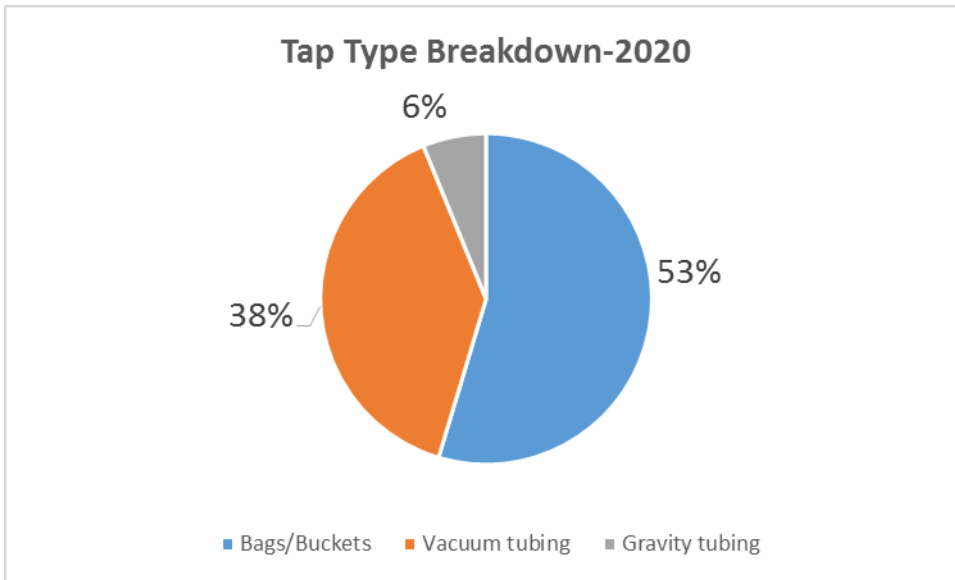
Collection methods

Indiana producers set 53,152 taps in 2020, 22 percent lower than in 2019. 38 percent of that total were taps set on vacuum, 28 percent were on buckets, 25 percent on bags, and 7 percent were on tubing. The graph below represents the total number of taps used each year from 2016 to present.



Although vacuum collection continues to grow, buckets remain a popular way to collect syrup, regardless of region. Producers used an average of 506 buckets. The largest single producer using buckets hung 2,000 buckets in the northern region and 25 buckets in the southern region.

The total number of bags decreased 19 percent from 2019 to 12,986 bags used, as did the number of producers using plastic bags from 28 to 20. One producer utilized 8,000 bags in their operation. Many producers use a combination of buckets, bags, tubing, or vacuum. The pie chart below breaks down the percentage of collection types in 2020.



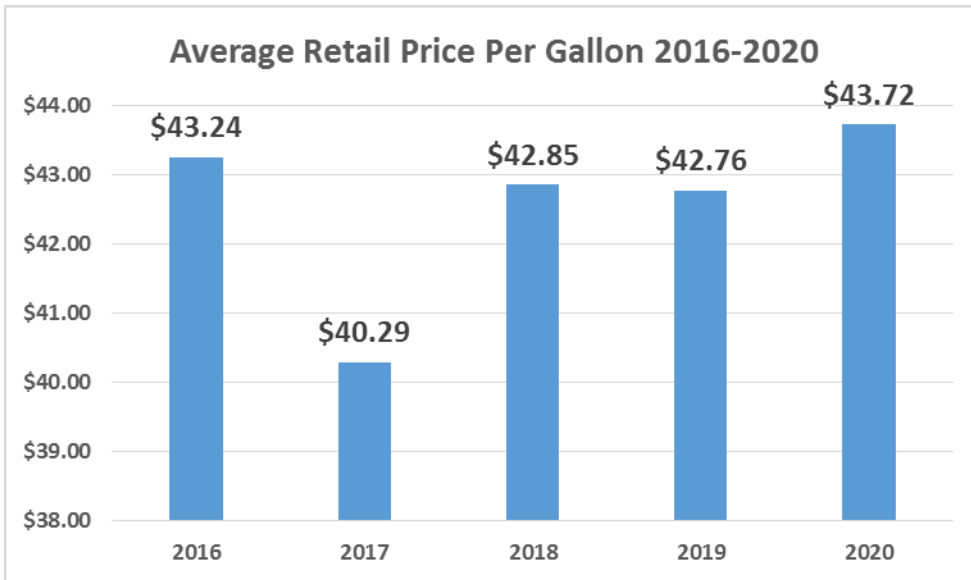
As stated above, the number of producers using vacuum systems for sugar water collection is increasing as terrain, dollars and results allow. Statewide, 19 producers (all from the northern region) utilized vacuum systems as part of their collection operation.

Syrup prices

The statewide average price received for a retail gallon of syrup was \$43.72 in 2020, almost identical to the 2019 price of \$42.76. Only one producer from the south reported a cost-per-gallon, and that was \$45.00 per gallon. Northern producers averaged \$43.68 per retail gallon.

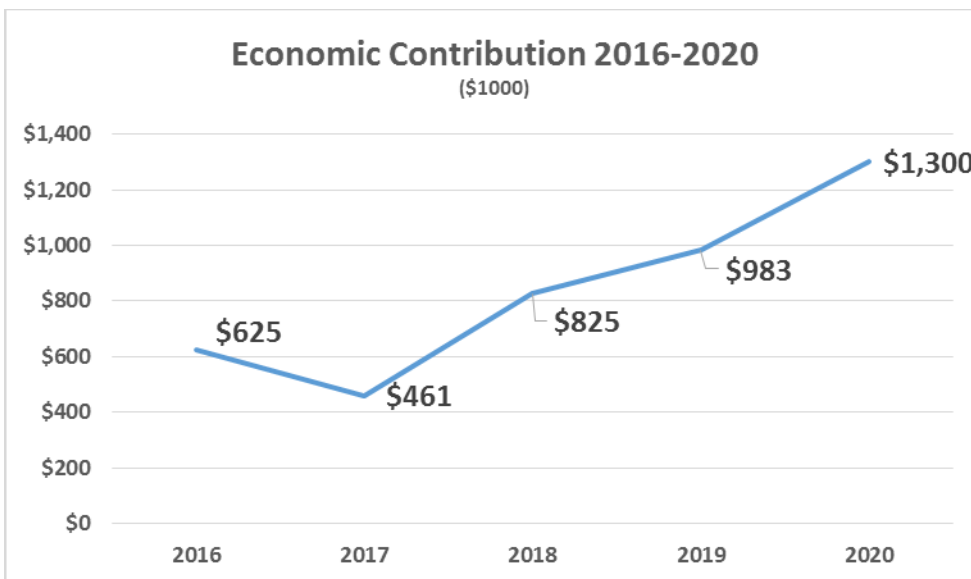
The average statewide price received for a quart of retail syrup was \$13.46. More producers returned surveys this year with information about pricing per pint than in past years. The state average per retail pint was \$8.39 in 2020.

The statewide wholesale average gallon price was \$38.44, but only nine producers reported wholesale pricing for gallons. The graph below depicts the average price per retail gallon of syrup for the past five years.



Economic impact

Statistics gathered via our 2020 questionnaire most likely do not reflect the true income generated from Indiana's producers. The estimated statewide reported syrup income for 2020 (multiplying the average price-per-gallon by reported production) is \$1,055,313. However, taking into account the quantity that was consumed via the producers' family, given away, or simply not reported, the calculated dollar figure may well be, conservatively, almost \$1.3 million. Assuming this figure to be realistic, the average dollar return per tap hole is \$24.45. That figure is significantly higher than the \$14.42 reported in the 2019 maple syrup producer's survey. The graph below shows the estimated economic impact for maple syrup production during the past five years.



Limiting factors

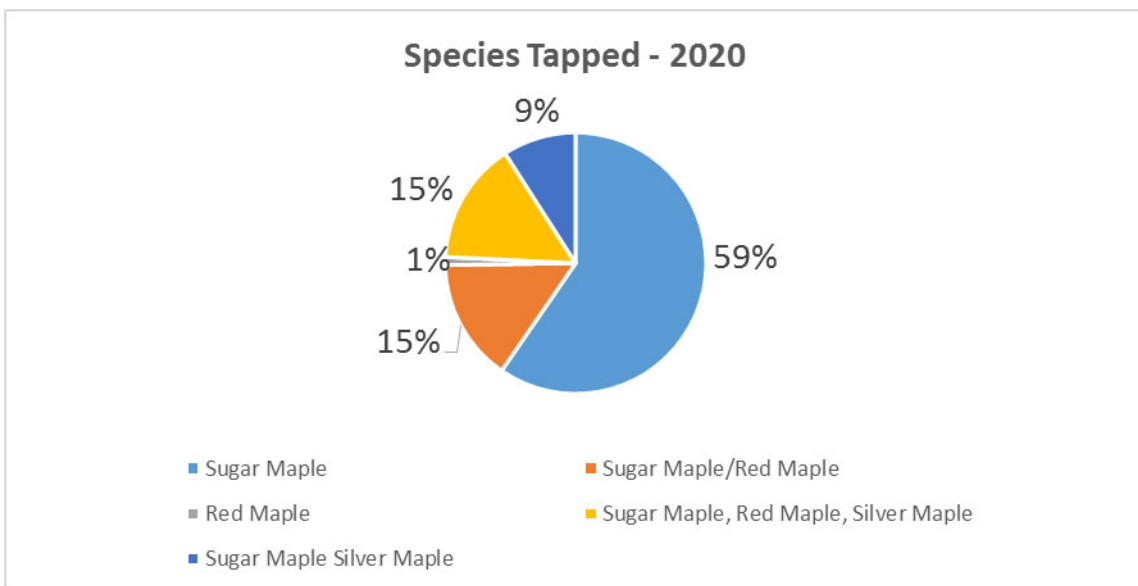
Sales do not appear to be a limiting factor for Indiana maple product producers. Instead, the inability to produce enough syrup due to unfavorable weather and/or short tapping seasons was the greatest impediment to making a profit.

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. 2020 tapping conditions and overall season were average to above average. Of those who commented on conditions/season; 34 percent thought the season was above average, 62 percent said average and only 4 percent thought it was below average. Much better weather for longer periods of time was reported for the 2020 season across the state.

Each sugar bush has unique characteristics and no two bushes produce alike. Although Indiana is a relatively small geographic area, the variation in weather is significant, as evidenced by prior years.

Species tapped and sugarbush management

After talking with producers at the annual IMSA meeting, they asked if the Division could include data on species tapped and whether producers were managing their sugarbush from a silviculture standpoint. The pie chart below reflects the species tapped breakdown in the sugarbush operations. Regarding sugarbush management, 75% of those producers selling their product either retail, wholesale or both actively manage their sugarbush. As our survey continues to evolve, we'll attempt to gather types of management performed.



Where Indiana syrup ends up

Overall, most of the produced syrup is sold at a retail level. Of those reporting production, 7 % 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 time is limited for personal visits to operations, The Division of Forestry welcomes 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 as well.