

# Maple syrup from New Jersey: You got a problem with that?

March 25 2024, by Wayne Parry

---



Ryan Hegarty, assistant director of Stockton University's Maple Project, touches a tap he just placed into a red maple tree at the university's Galloway, N.J. campus on Feb. 21, 2024. The university is using a federal grant to examine the feasibility of establishing a maple syrup industry in southern New Jersey, where the predominant maple trees yield half as much sugar as those in New England, which produces most of the nation's syrup. Credit: AP Photo/Wayne Parry

Welcome to New Jersey, known around the world for Tony Soprano, Turnpike tolls, chemical plants, and ... maple syrup?

If a university in the southern part of the state has its way, the sticky sweet brown stuff you put on your pancakes might one day come from New Jersey.

It's part of an effort to use a species of maple tree common to southern New Jersey that has only half as much sugar as the maples of Vermont, the nation's maple syrup capital. The idea is to see if a viable syrup industry can be created in a part of the state better known for casinos and its vast forest of pine trees.

Backed by \$1 million in grants from the U.S. Department of Agriculture, Stockton University is in its fourth year of producing syrup from the 300 acres (120 hectares) of maples surrounding it.

"You should never tell a New Jerseyan, 'It can't be done,' because we live for the challenge," said Judith Vogel, a mathematics professor and director of the Stockton Maple Project. "There were a lot of obstacles to be overcome in bringing maple syrup production to south Jersey, but the work has been fun, and the results have been very sweet."

The key to the project is utilizing some underdog trees that are not in the same class as the sugar maples typical of Vermont. Although there are some sugar maples in the northern part of New Jersey, Stockton is located in southern New Jersey, about 16 miles (26 kilometers) northwest of Atlantic City, where red maples are more common.



A bottle of maple syrup produced by Stockton University's Maple Project sits on an outdoor table at the university's Galloway, N.J. campus on Feb. 21, 2024. The university is using a federal grant to examine the feasibility of establishing a maple syrup industry in southern New Jersey, where the predominant maple trees yield half as much sugar as those in New England, which produces most of the nation's syrup. Credit: AP Photo/Wayne Parry

Although maple syrup has been made in New Jersey since the state was populated mainly by Native Americans, who shared their knowledge with settlers, no large-scale industry took hold, particularly in the state's south.

Red maples like those in Stockton "are not highly sought-after because the [sugar content](#) is significantly lower, about 1% coming from a red maple versus about 2% for a sugar maple," said Ryan Hegarty, assistant director of the Maple Project.

The general rule of thumb is that it takes about 40 gallons (150 liters) of sap from sugar maples of the Vermont variety to make one gallon (3.8 liters) of syrup, Hegarty said. For red maples, you need at least 60 gallons (more than 225 liters) of sap because more water needs to be removed in the process of making syrup.

That is accomplished by using a high-pressure membrane to separate sugar and water molecules. That enables sap that came out of the tree at 1% sugar to enter the cooking process at 4%, an important efficiency if a new industry is to be established using sub-optimal trees.



Judith Vogel, left, and Ryan Hegarty, right, discuss maple syrup produced by Stockton University's Maple Project in Galloway, N.J. campus on Feb. 21, 2024. The university is using a federal grant to examine the feasibility of establishing a maple syrup industry in southern New Jersey, where the predominant maple trees yield half as much sugar as those in New England, which produces most of the nation's syrup. Credit: AP Photo/Wayne Parry

Charlize Katzenbach has been making maple syrup for 35 years at her Sweet Sourland Farms in Hopewell, New Jersey, about 80 miles (130 kilometers) northwest of Stockton. When she first started making syrup in the 1980s, New Jersey was a hard sell.

"No one would buy it," said Katzenbach, who advised Stockton on setting up its program. "They'd say, 'I get my syrup from Vermont; this can't be any good at all.'"

But years of perseverance, and a growing desire for locally produced food, helped carve out a small niche for New Jersey maple syrup.

In 2022, New Jersey produced 1,817 gallons (6,878 liters) of it, worth \$88,000, according to the state agriculture department. By contrast, Vermont produces half of the nearly 6 million gallons (22.7 million liters) of [maple syrup](#) sold each year in the United States, worth about \$105 million, according to the federal agriculture department.



Maple syrup bubbles in a cooker on Stockton University's Galloway, N.J. campus on Feb. 21, 2024. The university is using a federal grant to examine the feasibility of establishing a maple syrup industry in southern New Jersey, where the predominant maple trees yield half as much sugar as those in New England, which produces most of the nation's syrup. Credit: AP Photo/Wayne Parry

Allison Hope, executive director of the Vermont Maple Sugar Makers Association, said those federal figures are believed to be an undercount, with the real total somewhat higher.

Another challenge is the climate in southern New Jersey, which tends to be warmer than that of New England. That affects when and how the sap flows.

"You need below-freezing nights, then you need above-freezing daytime temperatures" to ensure a good flow of sap, Hegarty said.

At Stockton, that usually begins around the second week of January, when participants use cordless drills to bore tiny holes into the trees and place metal taps into which the sap flows. A vacuum-powered hose system helps the sap along and carries the liquid to collection buckets at twice the rate of just letting it drip out without assistance.

The trees are not harmed by the tapping. Hegarty likens the process to a human giving blood, which is replenished and the entry wound quickly heals.



Judith Vogel, director of Stockton University's Maple Project, tastes sap from a red maple tree at the university's Galloway, N.J. campus on Feb. 21, 2024. The

university is using a federal grant to examine the feasibility of establishing a maple syrup industry in southern New Jersey, where the predominant maple trees yield half as much sugar as those in New England, which produces most of the nation's syrup. Credit: AP Photo/Wayne Parry



Ryan Hegarty, assistant director of Stockton University's Maple Project, speaks near the cooker at the university's Galloway, N.J. campus on Feb. 21, 2024. The university is using a federal grant to examine the feasibility of establishing a maple syrup industry in southern New Jersey, where the predominant maple trees yield half as much sugar as those in New England, which produces most of the nation's syrup. Credit: AP Photo/Wayne Parry





Steam rises from maple syrup in a cooker at Stockton University's Galloway N.J. campus on Feb. 21, 2024. The university is using a federal grant to explore whether it is feasible to establish a maple syrup industry in southern New Jersey, where the predominant maple trees yield half as much sugar as those in Vermont. Credit: AP Photo/Wayne Parry



A bucket of sap bubbles as it is collected at Stockton University's Galloway, N.J. campus on Feb. 21, 2024. The university is using a federal grant to examine the feasibility of establishing a maple syrup industry in southern New Jersey, where the predominant maple trees yield half as much sugar as those in New England, which produces most of the nation's syrup. Credit: AP Photo/Wayne Parry



Ryan Hegarty, assistant director of Stockton University's Maple Project, prepares a tap for a red maple tree at the university's Galloway, N.J. campus on Feb. 21, 2024. The university is using a federal grant to examine the feasibility of establishing a maple syrup industry in southern New Jersey, where the predominant maple trees yield half as much sugar as those in New England, which produces most of the nation's syrup. Credit: AP Photo/Wayne Parry



Judith Vogel, director of Stockton University's Maple Project, speaks in a maple grove at the university's Galloway, N.J. campus on Feb. 21, 2024. The university is using a federal grant to examine the feasibility of establishing a maple syrup industry in southern New Jersey, where the predominant maple trees yield half as much sugar as those in New England, which produces most of the nation's syrup. Credit: AP Photo/Wayne Parry

Coming straight out of the tree, the sap tastes like water. Only after it is cooked in a wood-fired device called an evaporator does the sugar content soar. Then the color turns brown, in the same way that a white marshmallow turns brown near the heat of a campfire.

So far this year Stockton has collected over 4,000 gallons (15,000 liters) of sap from 400 trees, and expects to produce 55 gallons (200 liters) of

syrup, "which would be a great year for us down here in south Jersey," Hegarty said.

Stockton's syrup is darker and richer than commercially sold syrup, and has an oh-so-slightly smoky taste from the [cooking process](#). The university is already using the syrup in its food service program to create new flavors of salad dressing and barbecue sauce, and also sells it at farmers' markets.

In the project's next round of funding, Stockton will seek partnerships with the food industry and regional schools to introduce its syrup more widely.

"Our syrup in New Jersey is as good as anybody's anywhere in the world," Katzenbach said. "It's good, it's local and it tastes great."

© 2024 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: Maple syrup from New Jersey: You got a problem with that? (2024, March 25) retrieved 27 April 2024 from <https://phys.org/news/2024-03-maple-syrup-jersey-problem.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--