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What different kinds of weather are best for Maine blueberry production?

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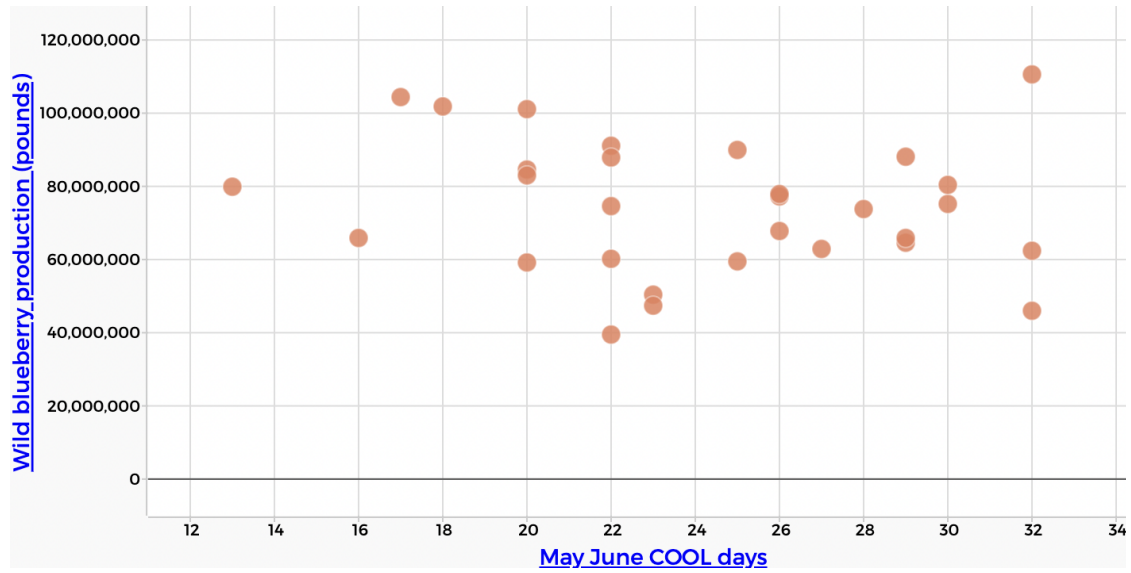
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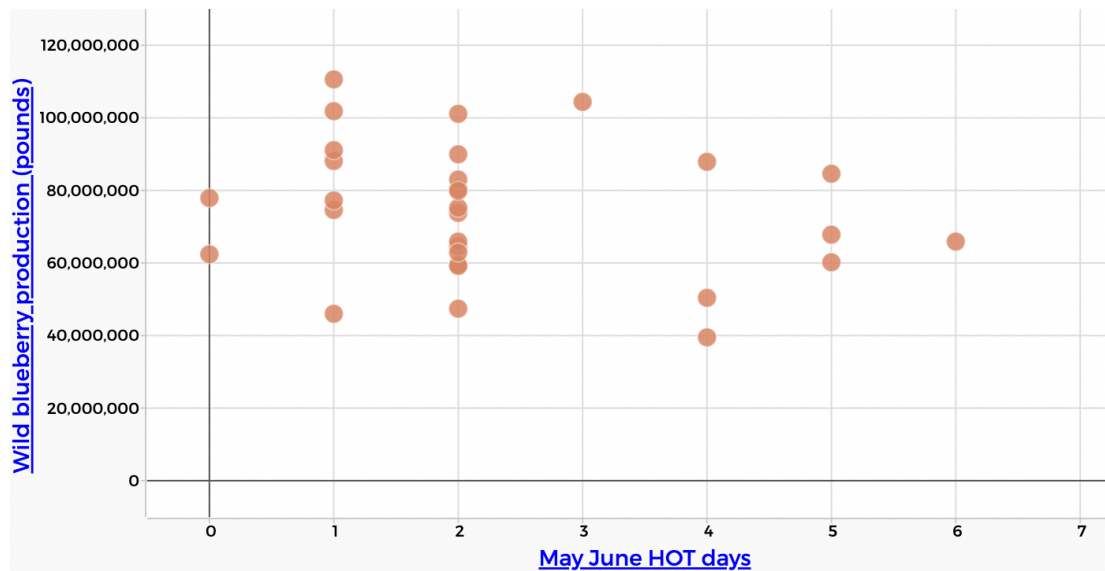
What different kinds of weather are best for Maine blueberry production?

By: Grace M. & Lydia P.

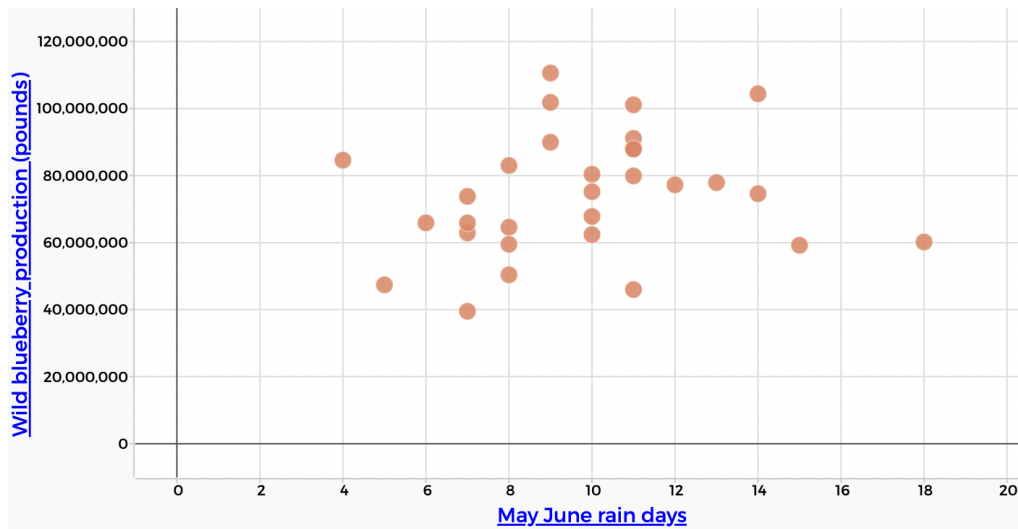
What different kinds of weather are best for Maine blueberry production? Blueberry production has always been an important faction in Maine's economy. I wonder if blueberry numbers are affected by the fluctuating temperatures and weather patterns we have been experiencing in recent years. The information in our graphs covers the days between May 15 and June 15 from 1991-2021, with precipitation in Grand Lake Stream, Washington County, Maine collected by Maine Climate Office, Climate Change Institute, University of Maine; the days between May 15 and June 15 with temperatures higher than 80 degrees F in Grand Lake Stream, Washington County, Maine. The days between May 15 and June 15 with temperatures below 50 degrees F in Grand Lake Stream, Washington County, Maine. As well as pounds of Wild Blueberries harvested in the State of Maine from 1989-2020, reported by commercial growers and compiled by New England Agricultural Statistics (NASS). This data is appropriate for answering our question because it is about how blueberry production is affected by different weather conditions, which is the basis of our question. While we can't reliably predict or influence the weather, it could be beneficial to know what kinds of conditions blueberries thrive in to have a better understanding of them, and possibly recreate those conditions.



This graph shows the number of cool days compared to the number of pounds of wild blueberries produced.



This graph shows the number of hot days compared to the number of pounds of wild blueberries produced.



This graph shows the number of rainy days compared to the number of pounds of wild blueberries produced.

The data may be a bit hard to read, as there are many varied points, but I believe that cooler climates that have around 12 rainy days a season are best for Maine blueberry production. The graphs we have put above show that there are higher numbers of blueberry production when there are higher numbers of cool days and lower numbers of hot days. This correlates with what we know about bumblebees; they come out more when there are fewer hot days, giving them more time to pollinate the blueberry flowers. Science Daily states that in temperatures below 77-80 degrees Fahrenheit bumblebees fly better, making it easier for them to spread pollen. But the number of blueberries harvested has been decreasing, having the lowest year ever in 2020. Global warming has created drastically higher temperatures, for both hot and cold days, making it harder for the blueberries to grow and be pollinated. The blueberries may be able to adapt, increasing production, and if not they will continue to decrease.

Citations:

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