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Pumpkin Lovers Face Slim Pickings, Thanks to Climate Change

More rain has hit the pumpkin harvest in the U.S.

ClimateWire

By Niina Heikkinen and ClimateWire | October 8, 2015 |

Pumpkin lovers, it's time to stock up.

Poor growing conditions and significantly lower-than-normal yields of processing pumpkins used for baking mean that the popular canned pumpkin brand, Libby's 100% Pure Pumpkin, may be in short supply in the coming months—just in time for the holiday season.

Yields of the pumpkins were low enough that Paul Bakus, president of corporate affairs at Nestlé Corp., which owns Libby's, urged shoppers to take immediate action.

"If you want to have a Libby's pumpkin [pie] for Thanksgiving or Christmas, get your pumpkin now," he said.

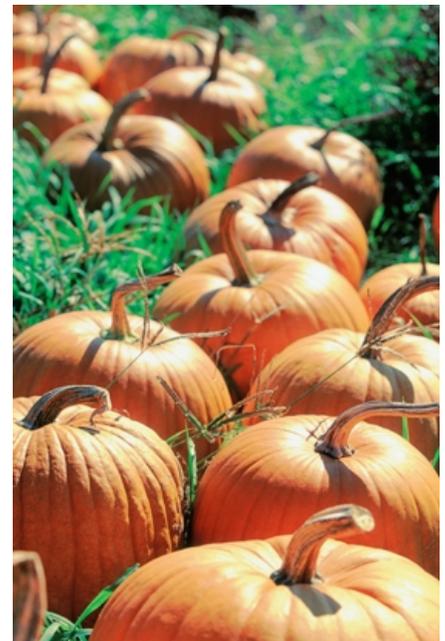
He explained that this year's harvest is about half of what it has been in previous years. That means a potentially big impact for last-minute shoppers, because Libby's supplies about 80 percent of global demand for the holiday baking staple. The lower yields don't affect ornamental pumpkins used for jack-o'-lanterns.

This year, Illinois, where Libby's grows all its processing pumpkins, was hit hard by an exceptionally wet June that dumped a record 9.42 inches of rain, according to data from the National Centers for Environmental Information in Asheville, N.C. Normally, the average rainfall for the month is less than half that, at 4.09 inches.

"Out of 121 years of data, that is easily an all-time record," said Brad Rippey, a Department of Agriculture meteorologist with the Office of the Chief Economist.

To Bakus, this year's losses signal more than just an unluckily wet year.

"I firmly believe that the reason for this is because of climate change," said Bakus. "We have never seen growing and harvesting



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conditions like this in the Midwest. This is a fundamental business impact, and this is just one example of how we're being impacted across not only the United States but also globally."

State climatologist links conditions to rising temperatures

Weather data appear to support Bakus. Over the past century, Illinois has seen a 10 percent increase in precipitation, along with increases in heavier rain events. Within the past decade, from 2005 to 2012, the state has experienced either very wet conditions or drought, according to Jim Angel, a state climatologist for the Illinois State Water Survey, part of the Prairie Research Institute at the University of Illinois, Urbana-Champaign.

"We're fairly certain that's tied to climate change. The hard part is figuring out the impact of these weather events. We're also in this era of more variability, with a record wet spring and record dry August, and that makes it much harder to plan for when you have some years that are very dry and some that are very wet," he said.

Three of Illinois' top four wettest years have happened since 2010. The record was set in 2011, with the third- and fourth-wettest years occurring in 2013 and 2015, respectively, according to Rippey.

"If we look at April-May-June, there's a very clear trend toward wetter springs," Rippey said.

He added that the heavy spring rainfall could have also been impacted by this year's El Niño, which started unusually early in the year. Rippey pointed out that the state's second-wettest year (1957) also coincided with an El Niño-onset year.

What this wetness means for pumpkin growers in Illinois over the long term is harder to predict than for staple crops like corn and soybeans, Angel said.

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"We don't have a very good handle about how specialty crops could be affected by climate change; I think that conversation is just starting," Angel said.

This year's heavy rainfall came during the critical growing period, limiting the number of pumpkins that developed, according to Roz O'Hearn, Nestlé's corporate and brand affairs director.

Wet conditions do more than limit growth, they can also create an environment ideal for the spread of potentially devastating plant diseases like phytophthora blight and downy mildew, said Mohammad Babadoost, a plant pathologist and extension specialist at UI Urbana-Champaign.

According to Babadoost, pumpkins do best in really warm and dry conditions during the summer. Those that do survive the wetter weather tend to be smaller and be of poorer quality because of higher water content in the flesh.

"We started the season very wet, there was rain after rain, it was a very muddy situation," he said.

Babadoost's own research plots were planted late and had to be replanted four times because of rainy weather that continued into the middle of August.

A shortage of holiday pies?

The last time that Nestlé had a truly bad harvest of processing pumpkins was in 2009. That year, a good crop of pumpkins grew, but rainfall in the Morton, Ill., area (where Libby's pumpkins are grown) saturated fields so much that tractors couldn't go onto the fields to harvest the crop, according to O'Hearn.

"Tractors would be buried in mud up to their hubcaps, we'd send in larger tractors to tow the smaller ones and too would become mired

in the mud. And as the pumpkins sat in the saturated soils, their quality began to degrade," she said in an email.

Ten days before Thanksgiving, Nestlé issued a press release warning customers that they could "face a problem" finding Libby's canned pumpkin as they prepared for the holiday. Nestlé shipped all but six cans before Thanksgiving.

This year, initial crop reports suggested that they would lose about a third of their crop due to the heavy rain, but that figure was later increased to half of this year's crop. Harvest started in August and ended this week, earlier than usual because of the low yields, she said.

"We believe we'll have enough pumpkin to meet the needs presented by the fall holidays. We're carefully managing our distribution across the country and to our retailers through allocation. However, we won't have much 'reserve' stock—if any at all—to carry us into the new year," O'Hearn wrote. "Once we ship the remainder of the 2015 harvest (most likely by mid-November), we'll have no Libby's pumpkin to sell until Harvest of 2016."

So far, regional grocery chains Giant Food LLC and Harris Teeter Supermarkets Inc. have not experienced any shortages in Libby's 100% Pumpkin, but as Thanksgiving approaches, O'Hearn expects to see canned pumpkin rapidly vanishing from store shelves.

"I've advised family and friends that they may want to buy the pumpkin required for their holiday recipes soon," she said.

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