

Nature Notes

A weekly round-up of useful information we explore the natural wonders around Nolan Catholic High School.

October 31, 2019

Will candy corn help save the world?



Candy corn was created in the late 1800's, and originally called "chicken feed" because most people of that time did not consider corn to be "people food."

<https://www.history.com/news/candy-corn-invented>

<https://www.candyusa.com/candy-types/candy-corn/>

<https://tasteforlife.com/living/baby-kids/what-to-know-about-confectioners-glaze>

<http://www.madehow.com/Volume-4/Shellac.html>

Indirectly, yes! Candy corn, a traditional American sweet, causes polar reactions. People either love it or hate it with a passion. While digging into the history of candy corn, I found a strange but fascinating connection between this controversial confection, nature, and a possible solution to plastic use in the United States.

Candy corn is made up of sugar, corn syrup, honey, food coloring, oil, salt, binders and Confectioner's Glaze, also called shellac. Shellac is not a food product. It is an excretion of the tiny Lac bug of Southeast Asia. Female lac bugs eat tree sap and secrete a sticky substance that helps them stay on the tree while they lay eggs. People harvest the branches, separate the excretion from the bugs and trees with alcohol, and process the excretion into the glaze that helps preserve many fresh foods and candies we find in grocery stores. (Think apples, jelly beans, and Milk Duds.)

Because shellac comes from insects, and insects are inevitably harmed/killed in the process of harvesting it, shellac poses a huge problem for companies that want to appeal to strict vegetarian markets. Finding alternatives to shellac led researchers to develop an *edible* film from whey protein that could eventually be used to replace not only shellac, but also plastic wrap and containers used to increase food shelf life. This is a great article for more information on the research: <https://www.scientificamerican.com/article/getting-insect-varnish-off-chocolate/>

Who would have thought that American candy corn relates to Asian ecosystems? Seeing the interconnectedness of our world on a social level reminds us that the same loving God created the lac bug, the vegetarian, the scientist, and George Renninger (the guy who invented candy corn in the first place).

Good Reads

<https://news.wisc.edu/conservationist-reminds-us-aldo-leopold-still-relevant-today/>

A while back, we explored an Aldo Leopold essay. Not only are his essays still relevant today, I think the ideas he explains strongly echo themes found in the Pope's encyclical, [Laudato Si](#).

The truly liberating answer to the problem of children's immersion in technology is not just a more responsible use of the technology; it is to give them something better to love.

St. Jerome Institute, taken from The Educational Plan of St. Jerome Classical School

Courtyard Adventures

Like a blanket for the plants, straw mulch on the raised beds will help the plants stay protected this winter, and break down into nutrients for the plants next spring.



Please remind your students that they can use the courtyards during passing periods.

Remember, I'm available to help with activities and lesson plans if you want to get your students outside but don't know where to start. Email or come by my office anytime.

Please, do not use any markers other than the chalk markers on the outdoor

chalkboard. We have some nearly permanent words on the board right now due to dry erase markers. It is taking me quite a bit of time to get those off. If you need chalk markers, they are available in my office anytime (right by the teacher boxes in room D22). Your cooperation is greatly appreciated!

Where to find Emily next week

Monday 9:30-2

Tuesday out of office

Wednesday 9:30-4

Thursday 8:30-4

Friday- noon to 4 at SEAS

Outdoor Learning Headquarters

In the office immediately to the left of the teacher boxes in room D22.

Please come by anytime! Let's chat about how we can work outdoor learning into your lesson plans!

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