

Nature Notes

September 12, 2019

A weekly round-up of useful information as you and your students explore the natural wonders around Nolan Catholic High School.

Question of the Week:

How do trees know when to shed their leaves?



Answer:

A huge thank you to Jack King for teaching me about this! I always assumed trees losing leaves correlated to temperature changes. However, it's not that simple, and the trees actually are responding to several environmental cues. The most important one is the increased time of darkness as the days get shorter. This cues the tree to stop sending nutrients to the leaves (chiefly chlorophyll, which is why the leaves change color.) The tree slowly blocks off the leaf from the branch. This process is called abscission (which comes from the same Latin root word as that of "scissors." The root word, scindere, means "to cut.") Abscission helps the tree to conserve resources, and the lack of leaves protects trees from wind damage in the winter.

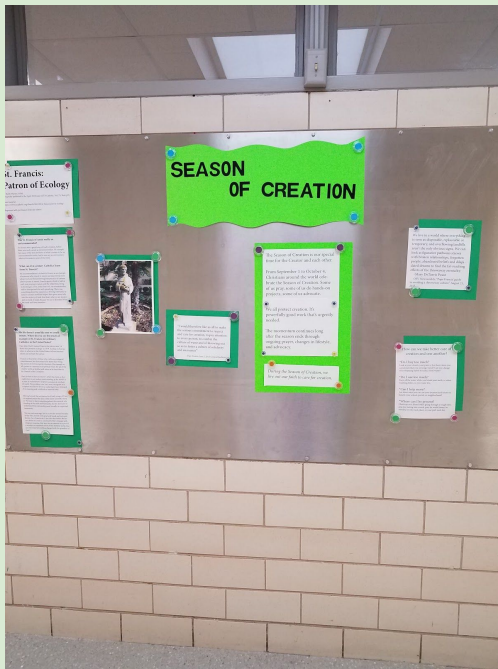
<https://www.sciencefocus.com/nature/why-do-trees-lose-their-leaves/>

<https://www.quora.com/How-do-trees-know-when-to-shed-leaves>

Highlights

I hope you've noticed the bulletin board in B hall between the courtyard corridors. September 1-October 4 is the official "Season of Creation". This is a season celebrated by Christians of many different denominations, and encouraged by Pope Francis.

It's a time to pray and reflect on our impact on the



earth, and what it means to be stewards of creation. There's an article on the board about St. Francis, patron saint of Ecology, that is SO GOOD, I got permission from the editors to reprint it completely. (It's also linked below if you'd prefer to read from your computer.) During the Season of Creation, we are called to re-examine our impact on the world around us. Can we give up plastic grocery bags, or disposable straws for this one month?

<https://www.uscatholic.org/church/2010/09/st-francis-patron-ecology>

But we can choose to create a community that's charged with religious meaning, that sees the sacraments as a part of a broader sacramental vision of the material world, that sees the material world as charged with the grandeur of God.

-Keith Warner, OFM

Courtyard Adventures

It has been truly amazing watching you all bring your unique gifts and ideas to the courtyard. I loved going out and seeing four different classes using them simultaneously. We had art, photography, chemistry and theology all exploring truth, goodness and beauty in different ways. And as the days get cooler, it will get even better!

When you're out with your students, please take pictures and share them with me. We're in a unique moment of Nolan history, and someday it will be so fun to look back on how the courtyards have grown.



(photo of AP Biology students courtesy of Dr. Hubbard)

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.

Where to find Emily next week

On campus:

Monday 9-10, noon-2:30

Tuesday 8:30-10:30, noon-2:30

Wednesday 8:30-3:30

Thursday 8:30-2:30

ebreclaw@nchstx.org

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!

Personal cell: 682-438-2393