The Arrival of Fall

Birds are heading to the tropics, squirrels are hoarding acorns, and baseball season has just come to a climactic end. Autumn is here in the Rock River Valley. A quick glance around and you can’t help but notice the transformation. One of the most spectacular changes, especially evident in the northeast and northern Midwest parts of the United States, is the fall foliage.

In forests around the world, deciduous trees have revealed another side of themselves. The greens that dominated the spring and summer were replaced by the reds, oranges, and yellows of fall. Deciduous trees drop their leaves every fall in preparation for winter, and their death is a beautiful sight to behold. The colors in plant leaves are determined by three pigments: chlorophyll, carotenoids, and anthocyanins. Plants use chlorophyll to produce food through photosynthesis. It is responsible for the green color and is found within the chloroplast of plant cells. Carotenoids are also in the chloroplast; they provide the bright gold, yellows, and oranges found in hickories, poplars, and sugar maples, respectively. Anthocyanins are produced in the fall and are responsible for the bright reds of red maples, sumacs, and Virginia creepers, as well as the dark crimson of the red oak and scarlet oak trees.

How do trees know when it’s time to stop producing chlorophyll and eventually drop their leaves? The most critical and unchanging factor is length of day. As winter draws near, the days become shorter. As the sun sets earlier in the day, trees produce less chlorophyll, and the green color of the leaves fade. The drop in daily temperature also promotes changes in leaf color. Carotenoids and anthocyanins withstand the short days and colder temperatures; thus the reds, oranges, and yellows can be seen in the fall. Soil moisture can also affect fall foliage. Leaves will appear dull if the soil is too damp or too dry. Sunny warm days and crisp chilly nights promote anthocyanin production, and also make the carotenoids even more brilliant.

As winter sets in, deciduous trees cut off sap flow to their leaves, letting them drop to the forest floor. Nutrients are recycled back into the soil. The tree survives the winter on stored sugars and waits for spring. Then, as the days lengthen and temperatures rise, new leaves grow and the life cycle continues. We are coming to the end of our fall foliage season in northern Illinois. Get out and explore while there are still leaves on the trees, and look at the leaves on the forest floor. See how many trees you can identify, letting the fall colors be your guide.

Sources: Illinois Department of Natural Resources- http://www.dnr.illinois.gov/
Six new staff members join the Taft Outdoor Education team this year. Visitors can expect to see a familiar face or two in new roles as well!

Meet the Taft Staff of 2010-2011

Clockwise from top left: Tom Wallenfeldt, Shawna Reilly, Robin Clancy, Sara Harris, Allison Palser, Autumn Foutch, Andy Haka, Becky Paulson, Kyle Rauch, Melanie Costello

Sara: Loves teaching Orienteering & Initiatives; enjoys hanging out with friends, reading, listening to music, & making crafts; has a B.A. in History from Illinois State University.

Tom: Likes teaching about Pioneering & Native Americans. He loves to play music, particularly percussion. He has a B.S. in Recreation, Parks, & Tourism Administration & a B.A. in History from Western IU, Macomb.

Autumn: Would teach Forest Ecology all day if she could; enjoys historical reenacting, finger-painting, & roller-skating while not at Taft; holds a B.S. in Fisheries & Wildlife from Michigan State.

Andy: Would teach Orienteering & Water Ecology all day. His hobbies include visiting state capitals, snowboarding, & Battlestar Gallactica. He holds a B.A. in Physics from UW - Madison.

Robin loves Pioneering & Birding at Taft. Her interests include public history, knitting, & reading. She earned a B.A. in History from the University of Toledo.

Kyle’s favorite class to teach is Forest Ecology. He enjoys rambling in the woods, naturalizing, rock climbing, kayaking, playing the guitar, live music, all things sports, & good books. He holds a B.A. in Geography from Bloomburg University in Pennsylvania.

Allison: Loves teaching Forest Ecology, Geology, & Birding; her interests include astronomy (particularly the lunar cycle), herbalism & naturopathy, raptors, books, cooking, writing, roller derby, & bicycles. She has a B.A. from Rocky Mountain College where she majored in Environmental Science, History, Political Science, & Philosophy & Religious Thought.

Allison: Loves teaching Pioneering & Survival Skills. She has no hobbies, as she has two young daughters. She earned a B.S. from U of Minnesota, Mankato, & an MSEd from Northern Illinois University.

Becky’s favorite class to teach is Orienteering. She enjoys being outside, reading, & spending time with friends & family. She went to UW - Eau Claire where she majored in Biology & minored in Environmental Science.


Tom: Likes teaching about Pioneering & Native Americans. He loves to play music, particularly percussion. He has a B.S. in Recreation, Parks, & Tourism Administration & a B.A. in History from Western IU, Macomb.

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Andy: Would teach Orienteering & Water Ecology all day. His hobbies include visiting state capitals, snowboarding, & Battlestar Gallactica. He holds a B.A. in Physics from UW - Madison.

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Taft’s Frequent Flyers


As the days get shorter and temperatures drop, large numbers of birds get ready to head south to a climate where food is more plentiful during the winter. Forty to sixty percent of North America’s migrating birds travel along the Mississippi River corridor. They may not have to worry about checked baggage fees, but these birds are traveling light and flying far.

During the months of September, October and November, you can expect to see greater numbers of hawks, geese, warblers, and sparrows flying over northern Illinois. These birds must find food, shelter and water along the way during their long migration south. This means that the forests, feeders and water sources at Taft are important resources for birds migrating through. You can help by adding native plants, bird seed and a bird bath to your gardens and yards. This will provide shelter, food and water to migrating birds.

For more information on all things birds, check out The Cornell Lab of Ornithology site: www.birds.cornell.edu/

Sources: The Nature Company Guides: Birding. by Joseph Forshaw, Steve Howell, Terence Lindsey, and Rich Stalcup

**FALL SIGHTINGS**

**Birds:**
- Ruby-throated Hummingbird
- Tufted Titmouse
- Turkey Vultures
- White-breasted Nuthatches
- White Pelicans
- Wild Turkey Flocks with young

**Animals:**
- Groundhogs
- Little Brown Bats
- Opossums
- Raccoons with young
- White-tailed Deer with young
- Frogs & Toads
- Garter Snakes
- Suckers & Catfish
- Honey Bee Hive
- Monarch Butterflies
- Wolf Spiders with young
- Writing & Funnel Web spiders

**Fungus & Flowers:**
- Elegant Stinkhorn, Giant Puffballs, Chicken of the Woods,
- Jack o’ Lantern mushrooms, Turkey Tail fungus, Fly agaric
- Goldenrods, Asters, Sunflowers, Milkweeds, Jewelweeds, Nettles

**Animals:**
- Blue Jays
- Bald Eagles
- Barred Owl
- Belted Kingfisher
- Canada Geese
- Cardinals & Catbirds
- Chickadees
- Downy Woodpecker
- Goldfinches
- Great Blue Herons
- Mississippi Kites
- Red-Tailed Hawks
- Blue Jays
- Bald Eagles
- Barred Owl
- Belted Kingfisher
- Canada Geese
- Cardinals & Catbirds
- Chickadees
- Downy Woodpecker
- Goldfinches
- Great Blue Herons
- Mississippi Kites
- Red-Tailed Hawks
Teacher Tidbits:

Grants are available to help with some of the costs associated with your trip to Lorado Taft. The following are some grants that we know of and their application deadlines:

Environmental Education Association of Illinois Mini-grants, October 31, 2010
http://www.eeai.net/minigrant.htm

Illinois Department of Natural Resources Biodiversity Field Trip Grants, January 31, 2011
http://dnr.state.il.us/education/CLASSRM/grants.htm

Walmart Store and Sam’s Club Giving Programs, Applications accepted February 1-December 31
http://walmartstores.com/communitygiving/238.aspx

Target Field Trip Grants, Applications will be accepted again starting August 1, 2011
http://sites.target.com/site/en/company/page.jsp?contentId=WCMP04-031880

Zero Food Waste Hall Of Fame!

Everyone who comes to Lorado Taft works hard to reduce their food waste. We would, once again, like to acknowledge those schools who reached the promised land of zero ort in the past semester:

- St. Francis De Sales
- Elgin Academy (6th grade)
- St. Thomas of Villanova
- Gates Elementary
- Latin School

Congratulations & Remember:

Taft Times Contributors

Shawna Reilly, Sr. Education Program Specialist: design & editing

Kyle Rauch, Education Program Specialist: Fall Foliage feature article

Robin Clancy, Education Program Specialist: Taft’s Frequent Flyers article