

Nature's Painted Landscape

Fall is a great time of year to hike at the Arboretum. You can see nature preparing for winter. During your hike today, see how many of these trees that help paint the landscape you can find.



Black Hills Spruce



Honey Locust



Ponderosa Pine



Black Walnut



Bur Oak



Cottonwood



Maples



Nannyberry

The Chemistry of Fall Colors



Chloro-Filled

Some plants, called evergreens, have special adaptations in their leaves that allow them to keep their chlorophyll and remain green all year. For example, pine trees have long, thin "needle" leaves that are filled with a resin that resists freezing and covered with a wax that helps prevent water loss. Since evergreens can protect their chlorophyll from winter conditions, they do not need to shed their needles every fall. How many different types of evergreens can you find?

Hidden Hues

As chlorophyll disappears, the pigments responsible for making leaves turn yellow (xanthophyll) or orange (carotene) are revealed. Because these pigments were already in the leaf and were just masked by the darker green chlorophyll, the yellow and orange hues of fall remain fairly constant from year to year. See how many different-shaped yellow and orange leaves you can find during your hike today.



Sugary Saps React

When days shorten, a barrier (abscission layer) forms between the leaf stem and branch, trapping sugars in the leaf. These sugars react with bright sunlight producing a sappy-sugary substance called anthocyanin.

Anthocyanins are responsible for the brilliant red colors we see every fall. The intensity of the fall's red colors varies dramatically depending on weather. The most vibrant autumn reds are produced when dry, sunny days are followed by cool, dry nights.

TRACK your hike at
kidsinparks.com
and get **FREE** prizes!



Thanks for joining us on the trail today! Visit our website to find more TRACK Trail™ adventures near you!

The next generation of stewards will help preserve the world's plants, animals, natural lands and our heritage. What will you do to make a difference?



Kids in Parks...

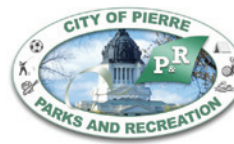
Providing a network of fun-filled adventures that get kids and families active outdoors and connected to nature.



City of Pierre Arboretum TRACK Trail Partners



HEALTHYSD.GOV
Live Better. Grow Stronger.



Kids in Parks Founding Partners



Finding Fall Foliage



Let's find some leaves with fall colors. Finding surprises in nature is fun!