

THE GEO-SAMPLER

geotechnics
geotechnical and
geosynthetic testing

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Welcome to the autumn edition of the GeoSampler. The issue that breaks out the old favorite sweatshirt and wonders to itself how a sweatshirt could shrink that much just sitting in the closet all summer. The issue that feels a little like touch football on Saturday afternoon and then feels it even more on Sunday morning. The autumn issue, conjuring up the scent of mulled cider. The issue that celebrates the annual fireworks show that is the fall foliage in all its glory. And, of course, our opportunity to wish you a joyous and colorful fall season.

IT'S NOT EASY BEING GREEN

Why Leaves Change Color

From the SUNY College of Environmental Science and Forestry

The Splendor of Autumn Every autumn we revel in the beauty of the fall colors. The mixture of red, purple, orange and yellow is the result of chemical processes that take place in the tree as the seasons change from summer to winter.

During the spring and summer, the leaves have served as factories where most of the foods necessary for the tree's growth are manufactured. This food-making process takes place in the leaf in numerous cells containing chlorophyll, which gives the leaf its green color. This extraordinary chemical absorbs from sunlight the energy that is used in transforming carbon dioxide and water to carbohydrates, such as sugars and starch.

Along with the green pigment are yellow to orange pigments, carotenes and xanthophyll pigments which, for example, give the orange color to a carrot. Most of the year these colors are masked by great amounts of green coloring.

Chlorophyll Breaks Down But in the fall, because of changes in the length of daylight and changes in temperature, the leaves stop their food-making process. The chlorophyll breaks down, the green color disappears, and the yellow to orange colors become visible and give the leaves part of their fall splendor.

At the same time, other chemical changes may occur, which form additional colors through the development of red anthocyanin pigments.

Some mixtures give rise to the reddish and purplish fall colors of trees such as dogwoods and sumacs, while others give the sugar maple its brilliant orange.

The autumn foliage of some trees show only yellow colors. Others, like many oaks, display mostly browns. All these colors are due to the mixing of varying amounts of the chlorophyll residue and other pigments in the leaf during the fall season.

Weather Affects Color Intensity

Temperature, light, and water supply have an influence on the degree and the duration of fall color. Low temperatures above freezing will favor anthocyanin formation producing bright reds in maples. However, early frost will weaken the brilliant red color. Rainy and/or overcast days tend to increase the intensity of fall colors. The best time to enjoy the autumn color would be on a clear, dry, and cool (not freezing) day.

usa-fallfoliage.com's

Top Ten Places to View Fall Foliage

The Foxfield Inn - Charlottesville, Virginia
Cliff Park Inn - Milford, Pennsylvania
Hermann Hill Vineyard and Inn -
Hermann, Missouri
Red Rooster Inn -
Glenwood Springs, Colorado
Lodge on Apple Pie Ridge - Alto, Georgia
Four Columns Inn - Newfane, Vermont
Hillside Inn - Ephraim, Wisconsin
Berry Springs Lodge - Sevierville, Tennessee
Good Medicine Lodge -
Whitefish, Montana
The Victorian by the Sea - Camden, Maine

If love is blind,
why is lingerie so popular?



Juris Prudence

The following are questions and answers from actual trials:

Q: Are you sexually active?

A: No, I just lie there.

Q: What gear were you in at the moment of the impact?

A: Gucci sweats and Reeboks.

Q: What was the first thing your husband said to you that morning?

A: He said, "Where am I, Cathy?"

Q: And why did that upset you?

A: My name is Susan!

Q: Is your appearance here this morning pursuant to a deposition notice sent to your attorney?

A: No, this is how I dress when I go to work.

Q: You were not shot in the fracas?

A: No, I was shot midway between the fracas and the naval.

Q: Doctor, before you performed the autopsy, did you check for a pulse?

A: No.

Q: "Did you check for blood pressure?"

A: No.

Q: Did you check for breathing?

A: "No."

Q: So, then it is possible that the patient was alive when you began the autopsy?

A: No.

Q: How can you be so sure, doctor?

A: Because his brain was sitting on my desk in a jar.

Web Site Updates.
www.geotechnics.net



US Army Corps
of Engineers.

TREES SAY "CHEESE"

How to take great foliage photos

Even with a point-and-shoot camera, you can take terrific photographs of the autumn colors, keeping these tips in mind.



Think Fast. Fast film, that is. Use 400-speed color print film, since the lenses of most point-and-shoots are fairly slow. A fast film helps you on those less-than-bright days

and the quality and sharpness of modern 400-speed print films is outstanding.

Go Deep. Try to add a sense of depth to your landscapes. When shooting the distant hills of color, include a closer tree, or other object in the foreground.

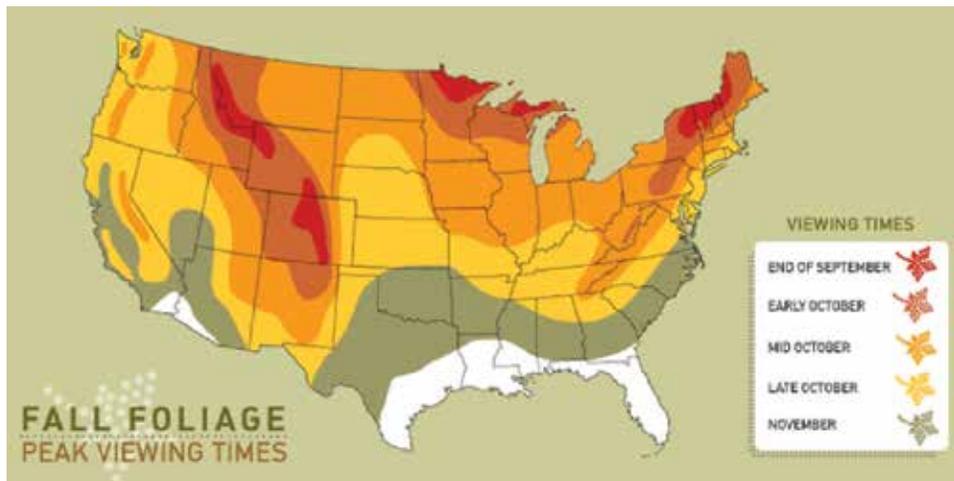
Size Matters. Show scale by occasionally including an object that can visually depict how large a landmark is in real life. Choose a man-made object or another person to show just how big (or small) something is.

Think Macro. Don't forget the macro setting on your camera. Most point-and-shoot cameras have a close-up setting (many times indicated by a tulip symbol on the controls). Bringing your camera as "up close and personal" as its minimum focusing distance will allow you a whole dif-

ferent type of foliage photo to enhance the large landscapes.

Cloudy Skies? Don't worry. You can get great shots even if the sun isn't out. As long as you're not insistent on having blue sky in your photos, the light available from overcast or even rainy days can give you a host of colors with a nice even contrast. On especially dark days, one of the new 800 or 1000-speed films might be advisable.

Handy tips courtesy of mainefoliage.com.



Our two facilities serve projects across the country.

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