

# Fall Color

## HOW IT HAPPENS

*It all starts with spring's longer days and rising temperatures. New growth begins.*

### SPRING

← New stems emerge

← Last year's overwintered buds begin to open.

*In summer, sun triggers CHLOROPHYLL to make food in leaves.*

### SUMMER

Next year's leaf buds already set by late June.

We see green.

This year's leaves open fully.

Chlorophyll changes CO<sub>2</sub> + H<sub>2</sub>O into sugar.

*In fall, days shorten and food production stops; chlorophyll breaks down. As green fades, other pigments are revealed.*

### FALL

**XANTHOPHYLLS:**  
We see yellow.

**ANTHOCYANINS:**  
We see red and purple.

**CAROTENOIDS:**  
We see orange.

**TANNINS:**  
We see brown hues,  
like oak leaves.

*Best fall color*

cool nights  
+  
plenty of sun  
+  
no drought



wind + hard rain + frost =  
leaves drop before color can peak

