

AUTUMNAL EQUINOX

When day of blue is matched by night of umber,
The earth forewarns us of approaching slumber.
With each new twilight,
squirrel, bat and fox
Observe the passing of
the equinox.



Hurry in your ranging and your forage!
Hurry, gather, feast and find your courage!
So gentle now the nights, and warm the moon,
But frosty nip of winter will be soon.

On every walk we pass tremendous oak.
Their branches laden with a feast for folk
Whose tails must be more bushy and cheeks fatter
To guard against the coming winter
weather.



The leaves rustle, and acorns fall around;
The crunch of autumn trampled on the ground.



The oak leaves with rounded lobes used for the coloring pattern came from a White Oak (*Quercus alba*).

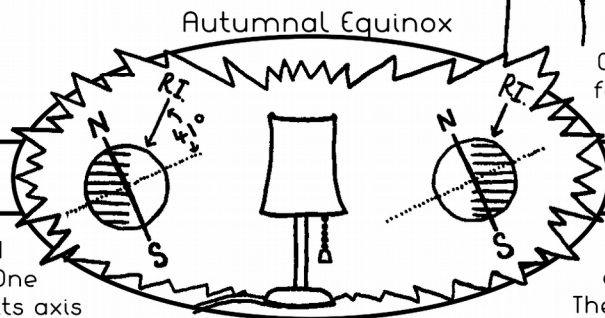
"Squirrel" originally comes from Greek and means "shadow-tailed." There are five kinds of squirrels found in this region: gray squirrels, flying squirrels, red squirrels, chipmunks and woodchucks.

The commonly seen Eastern Gray Squirrel (*sciurus carolinensis*) is a scatter-hoarder, hiding food in many small caches and making thousands of caches each season. Gray squirrels are crepuscular (more active during early and late hours of the day), and they do not hibernate. They build a nest, or drey, in the fork of a tree and line it with moss, thistleweed, dried grass and feathers.

Gray squirrels are among the few mammals that can descend trees head-first because their hind feet can turn so that the claws grip backwards.

As tree dwellers, squirrels eat a range of food found in wooded areas. When acorns are ripe in September and October, they can be seen eating and hiding as many as they can, but they have adapted to human food sources too. Squirrels raid bird feeders, vegetable gardens and even garbage cans.

One of these city squirrels has found a candy bar.



One orbit of the earth around the sun takes one year. One rotation of the earth around its axis takes one day. The earth's axis is tilted at a fixed angle of 23.5°; consequently, different parts of the earth are more exposed to the intensity of the sun's rays at different times of the year.

In June, when our half (the northern hemisphere) is tipped toward the sun, our days are longer, and the sunlight we receive is the most intense. In RI, the longest days last just over 15 hours. Long days of direct sun lead to the heat of summer. Six months later, when our hemisphere is pointed away from



the sun, short days (about 9 hours) of weaker, indirect sun lead to the cold of winter. The effect is noticeable here, but it becomes dramatic in the far north.

In mid-November, Barrow, Alaska has its shortest day of about 1 hour. After that, from roughly November 19 until January 22, Barrow experiences one very long night. Six months later there is a corresponding "day" in Barrow that lasts just as long!

If you visit a region near the equator, the days and nights are roughly equal in length- no matter what time of year. Twice a year- in September, and again in

March, the whole world experiences equal days and nights. These global 12 hour days, the equinoxes, occur when the direction of the earth's travel in orbit is parallel to the tilt of its axis.

In the North, the autumnal equinox is usually September 20 or 21, and it is also the first day of autumn.

You can use a lamp in a darkened room to visualize how each hemisphere falls into shadow as the earth orbits the sun. Hold a skewered orange (earth) at fixed angle (axial tilt) and move it in a circle around the lamp (sun). Put a sticker slightly less than halfway up from the orange's "equator" and you will have a rough idea of where RI is on the earth's surface. Spin the orange on the skewer once to watch a "day" pass.

Now eat the orange- you need that vitamin C to get through the winter!