

# What's Growing in the garden?

Germantown Hills School Garden Newsletter

September 4, 2007

## What's Blooming Now...

<i>What?</i> .....	<i>Where?</i>
Hydrangeas.....	Shade Garden
Knockout Roses.....	Herb Garden & Bulb Garden
Wave Petunias.....	Herb, Butterfly, Blue & White Gardens
Russian Sage.....	Herb Garden
Yarrow.....	Herb Garden & Butterfly Garden
Black Eyed Susans.....	Butterfly Garden & Prairie Garden
Black Eyed Susan vine.....	Butterfly Garden & Prairie Garden
Coneflowers.....	Butterfly Garden & Prairie Garden
Butterfly Bushes.....	Butterfly Garden
Sedum.....	Butterfly Garden
Dahlias.....	Butterfly Garden
Mums.....	Bulb Garden
Purple Fountain Grass.....	Bulb Garden
New England Asters.....	Blue & White Garden
Nepata (Catmint).....	Blue & White Garden
Ageratum.....	Blue & White Garden
Sweet Eyed Susan.....	Blue & White Garden
Heliopsis (Sunflowers).....	Prairie Garden
Mexican Hat.....	Prairie Garden
Dwarf Fountain Grass.....	Prairie Garden
Northern Sea Oats.....	Prairie Garden
Little Bluestem.....	Prairie Garden
Prairie Dropseed.....	Prairie Garden
Sunflowers.....	Vegetable Garden
Marigolds.....	Vegetable Garden



### Mums

The chrysanthemum was first cultivated in China as a flowering herb and is described in writings as early as the 15th Century B.C.

As an herb, it was believed to have the power of life. Legend has it that the boiled roots were used as a headache remedy; young sprouts and petals were eaten in salads; and leaves were brewed for a festive drink.



### Sunflowers

Sunflower leaves are phototropic and will follow the sun's rays with a lag of 120 behind the sun's azimuth.

This property has been shown to increase light interception and possibly photosynthesis.

The sunflower head is not a single flower (as the name implies) but is made up of 1,000 to 2,000 individual flowers joined at a common receptacle.



### Little Bluestem

Bison avoid mature Little Bluestem plants, they don't like the tall spiky stalks that emerge in the fall and continue on well into the next growing season. Bison prefer the fresh young growth at the base of the plant. Native Americans would set fire to the prairie because they knew that the fire removed these stalks. Bison would graze the new growing little bluestem. Thus, they could attract bison to an area by burning.

**Teachers:** if there is a particular plant or plant project you would like to be involved in, please let us know. We are always looking for ideas for the newsletter.

**Please help! We need volunteers to feed the fish and fill the bird feeders and birdbath.** We would like to have classrooms sign up to be responsible for maybe a week or two at a time or for a month or for the whole school year. These jobs require very minimal time. Feeding the fish can be a daily fun task just until the fall temperatures drop the water temps below 50 degrees, so it isn't too long. Then you begin feeding them again when the water warms up in May. Filling the birdfeeders needs to be done about once every couple of weeks - depending on the number of birds we have visiting the garden (remember the birds are also eating our flower seed heads). The birdbath only needs to be filled when it is empty. If you would like your students to be involved in this, just e-mail Linda or Cathy.



**Ruby-throated Hummingbird  
(Male)**

***Prepare to be Invaded!***

***The hummingbirds are coming!  
The hummingbirds are coming!***

Well, it may not have quite the historical ramifications of Paul Revere's little ride through New England, but the hummingbirds' yearly migration is no less dramatic.

Waves of these amazing little birds are already surging southward, answering an irresistible and ancient call to wing their way back to Mexico and Central America.



**Ruby-throated Hummingbird  
(Female)**

It's estimated that more than seven million Ruby-throated Hummingbirds return to the Tropics each winter, along with six million Rufous, three million Broad-tailed, and millions of other individuals of various species.

So, just how many are visiting your backyard during the peak of migration? A lot.

Bird banding studies indicate that, with very few exceptions, the hummingbirds visiting your feeders on any given late summer day are completely replaced by a new wave of migrants within 24 hours.

To estimate the number of hummingbirds using your feeders, multiply times five. For example, if you see 10 hummingbirds at your feeder at one time, you will have about 50 passing through your yard that day.

***Now, that's a lot of mouths to feed***

***Ruby-throated Hummingbirds***

*(Archilochus colubris)*

The Ruby-throated Hummingbird is the only hummingbird that you will see in central Illinois. Ruby-throats are intensely inquisitive and thus easily attracted to feeders, where males in particular typically display aggressive territoriality toward rival hummers, other birds, and even insects such as bees, butterflies, and sphinx moths.

***Nest:*** Courtship is apparently very brief, if it exists at all, and once mated the female raises the young alone. The walnut-sized nest, built by the female, is constructed on a foundation of bud scales attached to a tree limb with spider silk; lichens camouflage the outside, and the inside is lined with dandelion, cat-tail, or thistle down. The nest will stretch to contain the growing nestlings, and may sometimes be reused (rebuilt) the following year.

***Young:*** Two white, pea-sized eggs are laid two or three days apart, which the female will incubate from 60 to 80 percent of the day for 12-16 days. Reports of the duration of the nestling phase vary from 14 to 31 days, the wide range possibly varying with the availability of food; 18-23 days is normal. When they leave the nest, the chicks are considerably larger than their mothers: they may weigh 4.5 grams, while poor Mom is down

to only 2.5 g after the stress of raising them. After leaving the nest, fledglings are fed by their mother for about 10 days. It is thought that Ruby-throats live as long as 12 years, but the average is probably 3-5 years.

***Physical Description:***

Average length: 3.5 inches (8.9 cm)

Average weight: 1/8 ounce (3.1 g)

Body temperature: 105°-108°F (40.5°-42.2°C)

Wing beats: 40-80 per second, average about 52

Respiration: 250 per minute

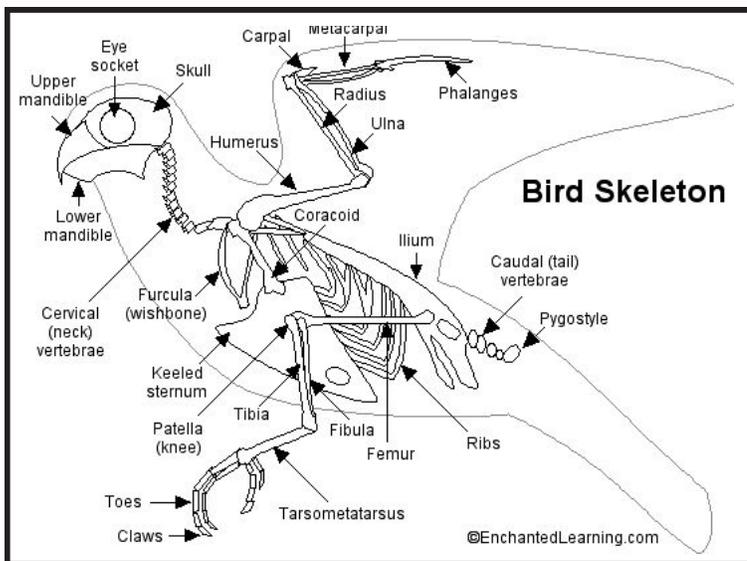
Heart rate: 250 beats/min resting; 1200 beats/min feeding

Flight speed: 30 mph (48 kph) normal; 50 mph (80 kph) escape; 63 mph (101 kph) dive

***Distribution and Migration:***

Ruby-throats breed throughout eastern to midwestern North America, from southern Canada to the Gulf of Mexico. Most winter in Mexico, Central America, and on Caribbean islands.

***Sources:*** Bob and Martha Sargent, Stokes Guide to Bird Behavior, Audubon Society Field Guide to North American Birds (Eastern Region)



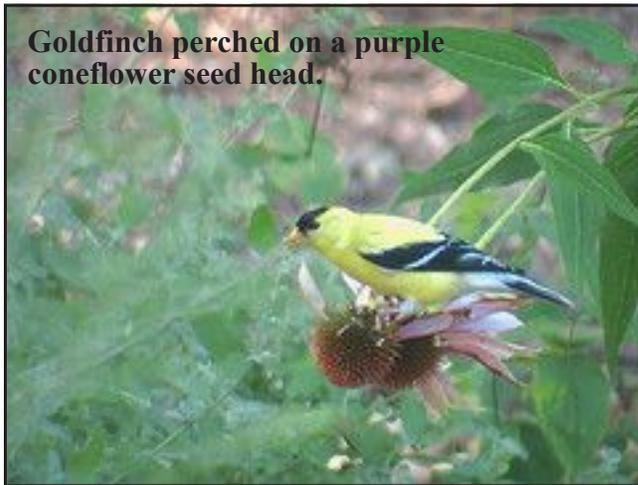
**Birds have a lightweight skeleton.**  
 Most of the bones of flying birds are thin and hollow; some have internal struts or trusses (cross walls) that make them very strong. (Some flightless birds, like penguins, have solid bones.) The keel-shaped sternum (breastbone) is where the powerful flight muscles attach to the body. Birds have a smaller total number of bones than mammals or reptiles. This is because many of their bones have fused together, making the skeleton more rigid. Birds also have more neck (cervical) vertebrae than many other animals; most have 13 to 25 of these very flexible neck vertebrae (this helps them groom their feathers). Birds are the only vertebrate animals to have a fused collarbone or a keeled breastbone.

**Why don't we cut down those tattered looking coneflowers?**

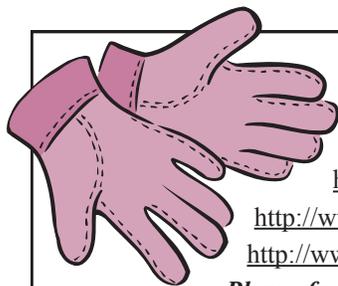
Have you noticed that many of the flowers are fading and looking a bit tattered? If you walk around the garden, especially the bird garden and the butterfly garden, you will see lots of seed heads. These seed heads are the remnants of the summer flowers. They may look a bit tired, but we will not cut them down until next spring.

The birds will appreciate the additional food from the seed heads throughout the winter. Goldfinches are already enjoying our purple coneflowers, asters, goldenrod, and heliopsis. Many songbirds enjoy the seeds of our native plants in the prairie garden; such as little bluestem, prairie dropseed, blazing stars, black-eyed Susan and Indian grass. We should see birds on the huge sunflower seed heads also.

We will also use commercial birdseed to supplement natural foods in the landscape. Bird feeding is an easy way to bring birds within viewing range. Note that we have placed two different types of bird feeders, one at each end of the garden. This way you should be able to see the birds from the big windows all winter.



**Goldfinch perched on a purple coneflower seed head.**



**Websites and Resources**

- <http://birding.about.com/library/blbabybirds.htm>.....What to do if you find a baby bird
- <http://birding.about.com/library/weekly/aa080100a.htm>.....Incubation time of types of birds
- <http://www.biglearning.com/treasurebirds.htm>.....Bird info and additional links
- <http://www.birds.cornell.edu/AllAboutBirds>.....general bird information
- <http://www.birds.cornell.edu/AllAboutBirds/attracting/feeding>.....How to attract birds to your feeders

*Please feel free to contact either Cathy or Linda with your garden questions and comments. We encourage you to use the garden as the valuable educational resource that it can be.*