

# HARVEST *of the* MONTH


Seasonal snacks from garden to classroom

## SEPTEMBER 2015 – Blackberries

CSG uses our **Educational Roots (RootEd)** frame to design lessons for our gardens.

The four core areas of RootEd are intended to enhance academic learning and include: cultivating gardening skills, providing experiential learning opportunities, promoting health and fitness, and nurturing social & cultural development.

### Trivia Question and Blackberry Facts

 **QUESTION:** “This fruit grows in the woods, by the roadside, and in fields. Its stem has thorns to protect the small, sweet fruit from animals that enjoy eating it. The color of this fruit is also part of its name.”

 **FACTS:**

- Blackberries are a wild plant that is now cultivated by humans to produce plants with sweeter berries, larger berries, and even plants with thorn-less stems.
- Blackberries are in the Rose Family of plants, easily identified by their flowers with five petals and many stamens. Blackberry stems also have thorns like their relative the rose.
- Blackberry leaves can be dried and used to make tea that is high in vitamin C and great for boosting the immune system.

### Garden Lessons and Activities

#### **Habitat Needs – Science 1.5a, 2.5b, 3.10b, 4.5d**

**Background:** An animal’s habitat is its need for food, water, shelter, and space. Blackberries create habitat for many birds by forming dense thickets for shelter and producing sweet berries for food.

**Lesson:** Have students spend 5 minutes sitting quietly anywhere in the garden to observe the types and behaviors of birds they see. Ask students what they observed (have them describe the color or appearance if they don’t know bird names). Some common garden birds are robins, cardinals, sparrows, juncos, crows, and vultures. Then, discuss the habitat needs of these birds (food, water, shelter, and space), and have the students look for examples in the garden of each as you go over them.

**Extension:** Discuss how human activities affect bird habitat. Find examples of this impact on the school site (grassy lawns that used to be woods, creeks that dried up from overuse, etc).

#### **Preventing Erosion – Science 2.8d**

**Background:** After a patch of ground is disturbed, and as the ecosystem works to rejuvenate, the plants growing on the site change. Plant succession begins with small herbs and grasses, then come shrubs and small trees, and eventually large canopy trees will grow again. Blackberries are an important part of plant succession as a small shrub with a dense root system that stabilizes the soil and prevents erosion while the larger canopy trees take their time to grow and occupy the site.

**Lesson:** Have students look at plants in each stage of succession. Look at grasses and small herbs, always reaching into the garden fence and pathways: examine their tendency to spread out as they maximize sunlight use in places where other plants aren’t already growing. Then look at shrubs and small trees, often found on the edges of woods and fields: notice the height of these plants, and observe their woody (brown) stems that stand tall year round, instead of the vegetative (green) stems of grasses and herbs that die back in winter. Shrubs and small trees also have dense, deep root systems that more effectively stabilize the soil and prevent erosion compared to the shallow roots of herbs and grasses. Finally, look at canopy trees (black locust, sycamore, red maple, and tulip poplar are common around schools): observe the differences in how they grow and how their height and shade affect the plants growing below them. Also discuss the structure of their root system compared to herbs, grasses, shrubs, and small trees.