ORGANICALLY GREEN
HORTICULTURAL SERVICES

Summer Newsletter, 2016

Fireflies!

On summer nights, children look to the sky for nature's fireworks- fireflies. Also called lightning bugs, these blinking insects are actually neither bugs or flies but beetles. Fireflies are in the family *Lampyridae*- from the Greek *lampein*, meaning to shine- in the order of *Coleoptera*, winged beetles.

Worldwide there are over 2,000 species of fireflies and according to www.firefly.org "Many species thrive in forests, fields or the margins between them. Some live in more arid areas, but they typically follow the rainy season. Fireflies are found all over the world, from North and South America to Europe and Asia.

Most firefly species have one thing in common: standing water. They live near ponds, streams, marshes, rivers and lakes, but they don't need a lot of water to get by. Vernal pools and small depressions that hold water during firefly mating season can all provide the habitat fireflies need. Most firefly species live at the margins where forest or field meet water."

Most female fireflies lay their eggs underground- there are a few aquatic species- and the larvae feed on such prey as snails, slugs or worms. After becoming adults, scientists aren't completely sure what they feed on, possibly nectar, pollen or nothing at all because their life cycle is so short. However, there are a few species that are cannibalistic. The cannibalistic fireflies mimic flashing patterns attracting other mating fireflies to their doom.

How fireflies actually produce their flashing is through dedicated light organs in their abdomen. They intake oxygen and it combines with chemical compounds such as luciferin, luciferase and ATP to create their bioluminescence. Their flashing emits 100% light, making them the most efficient lights in the world! In comparison an incandescent bulb only gives off 10% light with the other 90% being lost to heat.

Also the pattern of flashing can sometimes be specific to the species, with color varying from yellow, green, orange and light red. There are even a few species of fireflies that can collectively sync their flashing, although again science is unsure of the exact reason behind this strategy- possibly to collectively attract mating females.

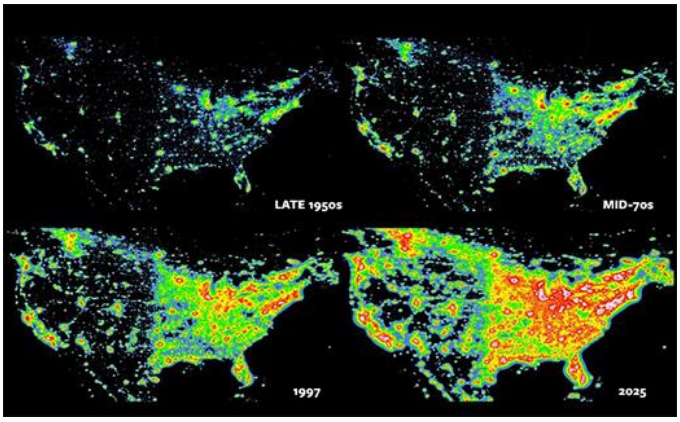
Sadly, the overall firefly population is diminishing worldwide and although not scientifically proven, it is believed to be due to

development and light pollution. According to www.firefly.org:

"The problem is that in America and throughout the world, our open fields and forests are being paved over, and our waterways are seeing more development and noisy boat traffic. As their habitat disappears under housing and commercial developments, firefly numbers dwindle. Logging, pollution and increased use of pesticides may also contribute to destroying firefly habitat and natural prey.

Human traffic is believed to disrupt firefly habitat as well. While scientific studies have only been done for the past few years, there's plenty of anecdotal evidence in areas that were once full of fireflies—and much of it goes back generations. Some areas once had so many fireflies that they profited from running firefly tours in marshes and forests—but since human traffic has increased, firefly populations have gone down.

Human light pollution is [also] believed to interrupt firefly flash patterns. Scientists have observed that synchronous fireflies get out of synch for a few minutes after a car's headlights pass. Light from homes, cars, stores, and streetlights may all make it difficult for fireflies to signal each other during mating—meaning fewer firefly larvae are born next season.



Where fireflies once had uninterrupted forests and fields to live and mate, homes with landscaped lawns and lots of exterior lights are taking over. The reduction of habitat and the increase in lighting at night may all be contributing to make fireflies more rare."

In order to help our flashy friends there are a few things you can do:

1. Turn off outdoor lights at night: this helps reduce mating disruption.
2. Allow leaf litter and/or dead logs to accumulate: While not aesthetically pleasing around your swimming pool, there may be an area you can designate to help create a firefly habitat.
3. The last option for helping fireflies is related to standing water. They are found in marshy areas or areas where there is a small depression of standing water. (Note: Due to recent events related to mosquitoes and the viruses they carry, this may not be a suitable option as standing water also allows mosquitoes to breed.)

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The Organically Green Team hopes you enjoy the last lazy days of summer!

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"Heaven is under our feet as well as over our heads."

-Henry David Thoreau

Organically Grown

Open-Faced Tomato Sandwiches with Creamy Cucumber Spread

Ingredients:

- 1 (8-oz.) pkg. cream cheese, softened
- 2 cucumbers, seeds removed, diced (about 2 cups)
- 1/4 cup finely chopped red onion
- 2 1/2 teaspoons chopped fresh dill
- 2 1/2 teaspoons chopped fresh mint
- 2 teaspoons fresh lemon juice
- 1 teaspoon white wine vinegar
- 1 teaspoon kosher salt, plus more for serving
- 1/2 teaspoon black pepper, plus more for serving
- 6 Texas Toast slices or other thick white bread slices, toasted
- 1 1/2 to 1 3/4 lb. assorted fresh tomatoes (about 3 large), cut into 1/2-inch-thick slices
- 2 tablespoons extra-virgin olive oil
- Thinly sliced chives

Preparation:

1. Stir together cream cheese, cucumbers, red onion, dill, mint, lemon juice, vinegar, salt, and pepper in a medium bowl until well combined.

2. Spread about 1/4 cup of the cucumber mixture onto each slice of the toasted bread. Top each with 2 to 3 tomato slices, and drizzle each with 1 teaspoon olive oil. Sprinkle tomatoes with chives, salt, and pepper. Serve immediately.

Note: We recommend using certified organic ingredients, when available, in all recipes to maximize flavors and nutrition while minimizing your risk of exposure to pesticides, chemicals and preservatives.

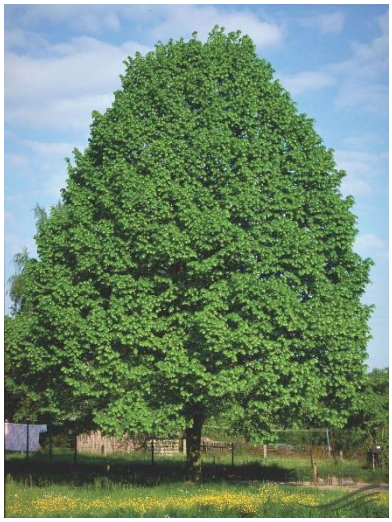
Plants for the Summer!

Autumn Fern
(Dryopteris erythrosora)

- Perennial; 12-24" tall x 18-24" wide
- New fronds are coppery-pink maturing to shiny dark green
- Prefers consistently moist soil & part-full shade
- Will spread slowly over time

- Tolerant of difficult growing sites and soils (Urban, pollution, adaptable to pH)
- Tolerates hedging

Littleleaf Linden
(Tilia cordata)



- A deciduous medium to large tree (50' to 60' tall) with ovate to gum-drop mature shape.
- Prefers full sun to light shade and moist, deep, fertile, well-drained soils.
- Blooms in late June and early July but not showy; very fragrant (attracts bees).

Potentilla/Bush Cinquefoil
(Potentilla fruticosa)

- A small, dense deciduous shrub with a rounded habit; 1' to 4' tall with an equal or greater spread
- Prefers full sun and is soil adaptable
- Covered with yellow, buttercup flowers from June until the first frost
- Slow growth rate but easy to grow/transplant
- To keep dense round habit, remove canes during winter or cut to ground
- Many cultivars/ flower colors available

Services for 2016:

We offer the following services to help increase the enjoyment and beauty of your property:

Tree / Shrub:

- Shrub & Tree Spraying / Fertilization Programs
- Integrated Pest Management
- Soil Restoration
- Plant and Soil Stimulation Program
- Deep Root Feeding
- Root Growth Enhancement
- Mature Tree Restoration
- Air Spading
- Radial Trenching
- Vertical Mulching
- Anti-Desiccant Spraying
- General Tree and Shrub Maintenance Removal

Turf:

- Lawn Renovation
- Fertilization
- Overseeding
- Core Aeration
- Estate / Property Purification

Organic Pest Control:

- Flying Insect
- Deer / Geese
- Rodent Repellent
- Organic Tick & Flea Control