Idaho is home to about 800 native bee species, and most of them are solitary. They do not live in a colony, like honey bees and bumble bees—in instead each female creates her own nest. Most solitary bees nest in the ground, but many nest in pre-existing cavities, such as hollow reeds or holes left behind by wood-boring beetles. Some species are active in the spring, while others are not active until summer. In several instances, solitary bees are better pollinators than honey bees, and a few species, such as alfalfa leafcutting bees, alkali bees, and blue orchard bees, are managed as commercial pollinators.

The blue orchard bee is an important pollinator of fruit and nut trees, and can be managed in backyard or large commercial settings. "How to Manage the Blue Orchard Bee as an Orchard Pollinator," by Jordi Bosch and William Kemp discusses using blue orchard bees to pollinate fruit trees. Also, a list of resources for acquiring blue orchard bees and blue orchard bee nest materials will help in promoting this bee.

Information about commercially managed solitary bees can be found on the USDA-ARS Bee Biology and Systematics website. Excellent resources exist if you would like to learn more about native bees.

- The Xerces Society is a great source of information about bee conservation
- eXtension.org has a lot of useful information about native bees
Your Time

BY TONY MCCAMMON

As we head into spring, please keep a record of your hours, miles traveled, preparation time, money spent, and the type of work done. Each hour should fit nicely into one of these three categories: learning (ex. MG conference), teaching (ex. instructing youth), and serving (ex. working in a community garden or serving on a MG committee). Opportunities for you to contribute your time in these areas are listed below — some are already planned and can be an excellent springboard for those who do not yet have something to do. The volunteer recording sheet to use for your hours can be found on our website at www.hortmagic.org on the Master Gardener Page under the “Reporting” section or by clicking here.

I would like badges to be worn while you are serving as a UI MG volunteer and shirts to be worn, when appropriate. Those of you who have not picked up your new badges (Pamela Tucker, Lois Rohay, Melody Asher, Denise Ford, Michael McBride, Poo Wright, and Kathie Stewart) may contact me or stop by my office when you are in town and pick them up. Shirts are available for $17 in my office.

Learning

DIAGNOSTIC TRAININGS

Diagnostic Trainings in an office near you! Remember, all Master Gardeners must complete this training EACH year.

- Rupert (Minidoka) Extension Office
  April 22nd from 2-5 pm
- Burley (Cassia) Extension Office
  April 24th from 2-5 pm
- Twin Falls Extension Office
  April 29th and May 1st from 2-5 pm
- Jerome Extension Office
  May 6th from 2-5 pm

If you live in a county not listed above, please contact me at the Twin Falls County Extension Office at (208) 734-9590 or via email at tonym@uidaho.edu to schedule a time with me in your local county office.

EVENTS

- “Spring Into Spring” classes on April 26th, 1:00—2:45 pm, hosted by Moss Greenhouse
- Magic Valley MG conference on May 10th, 9 am -3 pm at the TF County Extension Office
- Idaho State Master Gardener Conference on June 28th, all day at BYU-Idaho Rexburg
Teaching

EVENTS

- Bug Class for kindergarteners with Tony on April 18th, 10:30-noon and 2:15-3:15 pm
- “Spring Into Spring” classes hosted by Moss Greenhouse on April 26th, 1:00-2:45 pm
- Progressive Garden Dinner May 30th, 5:00-8:00 pm (*I need a Coordinator and Homes to welcome us)

ACTIVITIES

- Write Articles for our Facebook page, newsletter and/or newspaper
- Create a demonstration site
- Work with your local library, garden center, church group, or civic club to organize one or a series of classes taught by Master Gardeners.

Serving

PROJECTS

- Blitz Build with Habitat for Humanity, June 11-13th
- Volunteer to head up a committee for the Association
- Volunteer on a Fair Board, Tree Board, HOA, or other community committee
- Minidoka County Fairground Planting Project
- Diagnostic Clinic Extension Office Coordinator
- Organize a beautification project at your church, park, or community building

CALENDAR

April

18  TF MG Association Meeting — CSI Greenhouse
19  Moss Greenhouse Tour (MGs only)
22  Diagnostics Training — Rupert and Burley
26  Gardenwise Training — Rupert Co-op (must wear badges)

May

6    Diagnostics Training — Jerome, Shoshone, Gooding

Mini-Cassia MG Association Meeting

9-10  Plant Sale — CSI Greenhouse, 8:00 am — 5:00 pm
10   MG Spring Kickoff Day
20   TF MG Association Meeting
30   Progressive Garden Dinner and Tour

June

3    Mini-Cassia MG Association Meeting, 2:00 pm at Rupert Ext. Office — “Fertilization”
11-13 Blitz Build Habitat for Humanity
17   TF MG Association Meeting
28   MG Statewide Conference — Rexburg, Idaho
Billbugs
BY TONY MCCAMMON

What are they?

Billbugs (Sphenophorus spp.) are a type of weevil or so-called ‘snout beetle’ due to the shape of their heads. There are about 50 species present in the U.S., but only five are a concern in home lawns (bluegrass, hunting, Denver / Rocky Mountain, lesser, and Phoenician). Adult billbugs are small (1/4 – 3/8 inch) insects with rather non-descript color markings that are grey to black, but sometimes reddish-brown. Billbug larvae are white, legless grubs that can be the same size as the adults and have brown heads.

Overwintering adult billbugs become active in the spring when soil temperatures warm to 65°F. Soon, the mated female inserts her eggs into a hole she has created in a stem of the preferred grass species. The eggs hatch, and the larvae tunnel up and down the stem as they feed. At some point, they will become too big to fit inside the grass stem and drop to the ground where they continue feeding on grass crowns and roots. It is at this point that significant damage can occur to the lawn and is readily apparent during periods of limited rainfall, when the damaged grass cannot outgrow the billbug feeding damage. The larvae move deep into the ground to pupate and emerge in late August – September as adults. The adults overwinter in thatch, soil crevices, worm holes, under bark mulch and leaf litter, or other sheltered locations to repeat the lifecycle the following year. The hunting and Rocky Mountain billbugs also have larvae that can overwinter, causing damage in the spring and early summer.

Why should I be concerned?

Billbugs may be small in size but their large numbers can devastate a lawn.

Damage first becomes apparent in late June – August, with the arrival of hot, dry weather. The damaged lawn looks drought-stressed. Although billbugs rarely fly, they spread by walking from an infested lawn to a neighboring lawn. Billbug damage is often mistakenly attributed to other causative agents such as disease, white grubs, chinch bugs, or greenbugs (aphids that infest grasses).

Are billbugs the culprit?

Check damaged areas of the lawn using the tug test – simply grab the grass and pull up. If the stalks break easily at ground level and the stems are hollowed out or packed full of a sawdust-like material (frass), billbugs are the culprit. To be sure it is billbugs, take a sample of the turf with a portion of soil and look for the small larvae. They can usually be found feeding in the thatch or top inch of soil. And next spring, be alert for adult billbugs as they wander across sidewalks and driveways in the late afternoon. Billbug adults can also be seen walking in the late summer as they look for overwintering sites.

How do I treat?

Adult billbugs have a hard, armor-like exterior that does not absorb insecticides readily. And billbug larvae are hard to reach because they spend most of their time protected inside the grass plant or under the thatch. Applying the right product at the right time is crucial to success!
**LATE APRIL - EARLY JUNE** (Preventative Treatments)

Imidacloprid (*Merit®*) Systemic Insect Killer will provide residual control. Recommended imidacloprid rates for effective billbug control should be between 0.3 to 0.4 lb a.i. per acre.

**EARLY MAY - MID JUNE** (Laval Control)

At this time, it is likely the adults have mated and the females have deposited their eggs. The best way to control billbugs now is by a systemic product that will move into the grass plants, such as imidacloprid (*Merit®*). These products contain a chemical that moves into the grass plants to kill the young developing larvae.

**MID JUNE - EARLY JULY**

If you did not apply one of the “preventative treatments” mentioned above to control the number of adults that overwintered or their first larvae, chances are damage to the lawn has already occurred. Make a curative treatment with a soil-active insecticide such as carbaryl, malathion, trichlorfon and beta-cyfluthrin. Lightly water in with < 1/2” of water to move the active ingredient into the soil to kill the larvae. It is important to understand that a curative approach may not be as effective — the larvae may be deeper in the soil and more difficult to reach with the residual insecticides, and the grass will need some time to repair any damage that may already have occurred.

**What else can I do?**

The very best thing you can do for your lawn is to be observant of changes that occur. If you notice these small, rather non-descript beetles in the grass, take a few of them to your local extension office for confirmatory identification. Once identified, you can determine what corrective actions to take before there is a serious problem in your lawn.

Practice good cultural controls – apply the right amounts of fertilizer and water, and aerate the lawn to prevent thatch build-up. Replant severely damaged areas with perennial ryegrass and/or fescue grass. They contain endophytic fungi, which produce compounds that will deter or kill the billbugs.
Native Plant Spotlight

BY TONY MCCAMMON

Name

Common Name | Balsam Root
Botanical Name | Balsamorhiza Sagittata
Family | Asteraceae

Habit

Clumping, basal vegetation, flowering stems, generally leafless, and 6 - 32 inches tall. Multiple rays of disk shaped yellow flowers bloom in spring.

Habitat

Valleys, foothills and canyons. Elevation 4,500 - 10,000 feet. The communities where this plant is present consist of coniferous forest, aspen forest, pinyon-juniper, and shrub steppe. Found on southern slopes in fine to coarse textured soils.

Native American Uses

Medicinally this plant served many purposes, mostly revolving around disinfecting and cleaning wounds cuts and bruises. Although, other uses insist it had internal healing power as well—healing stomach aches, colds and sore throats, and toothaches. The young shoots also had sedative properties and could be used as a sleeping pill if large amounts were eaten.

Leaves were used for salads. Roots were eaten raw or cooked. A staple for many tribes consisted of the seeds. They were ground into flour for cakes or bread. Root pitch was chewed by Idaho natives as gum. Roots were used in the ceremonial rites for the runner of the Buffalo. The Runner had the responsibility of herding the buffalo to the tribe’s buffalo jump. The runner would submerge himself in the smoke of the smudge of the plant roots, which would allow him to run more than 20 miles a day. Leaves were also wrapped on young boy’s feet to practice walking silently and carefully in the woods.
Permaculture Tour

BY TONY MCCAMMON

The University of Idaho Master Gardeners from around the Magic Valley visited Onsen Farms in the Buhl Valley on April 9th. The Permaculture farm is striving to create a sustainable farm, using techniques from around the world. The farm acts as a food hub for the local community and as an educational mecca for those seeking environmentally friendly and sustainable growing methods. The tour was very educational, and we discussed topics such as:

- The insects giving them trouble and the methods they are using to control them;
- The Miracle mile and the abundance of natural resources over which they have stewardship;
- The benefits of Aquaponics;
- Harvesting solar and water energy; and
- Protecting the season extension high tunnels from wind.

Overall, we enjoyed the abundance of education and expertise from James Reed and his crew. If you are looking for a great place to serve on sustainable research, I am sure James is open to some Master Gardener involvement on the farm.
The Magic Valley Master Gardener Association is based in Twin Falls, Idaho. If you would like to register with us, please contact Tony Brand at (208) 420-3052. The Twin Falls Association meets regularly on the third Tuesday of each month at 12 noon in the Twin Falls County Extension Office. The Mini-Cassia Association meets on the first Tuesday of each month from 2-4pm, and you need to contact Dan Blauer (208) 312-4333 if you would like to register in that area. Both Associations are well-organized and have great leadership! The speakers and tours have been wonderful and are certainly well worth your time and dues. Besides...we all have a common thread: GARDENING!