



Earthly Elements

"Helpful Information From The Trenches"

Issue 2

Summer Edition

June 2004



Vacation Time!

Yeah, I wish! Since there is no rest for the weary here goes! This month, the info is a bit heavy, however, I'm covering some important issues. First up is the article on nutrition for your soil. Last issue we talked about the types of soil there are. This month I'll tell you what can be done to help improve the soil you have. Next up, we lighten things up with a piece on "How to use Art in the Garden". The longest article involves my personal experience & research of the potentially deadly Baldface Hornet & what to do if **YOU** get stung.



Natural Nutrients

by Justin Hancock

What Plants Need To Survive

Plants, like other living things need nutrients to keep growing. Although most fertilizer packages list three plant nutrients—nitrogen, phosphorus, and potassium (N-P-K, in that order) there are many more. Here's what the most important ones do:

Nitrogen spurs on leafy growth. Given too much nitrogen, some plants will not flower; given too little, plants may have pale-green or yellowish older leaves.

Phosphorus encourages good blooming and root development. Too little phosphorus causes stunted plant growth and purplish younger leaves.

Potassium is directly involved in photosynthesis (the process of converting sunlight to energy). It also encourages disease resistance and sturdy stems. Without enough potassium, a plant may have yellowish or spotted older leaves.

Calcium encourages strong cells and root growth. Environmental conditions, such as heat or drought, may make it difficult for some plants to absorb calcium. If plants don't get enough calcium, they may drop blossoms, show yellow edges on young leaves, or have curled leaves.

Sulfur is necessary for the formation of chlorophyll (the green pigment in plants that converts light to energy). It promotes healthy



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ing hundreds of extremely painful, potentially deadly (if stung in the face, head or neck) stings at one time. Stinging involves the injection of a protein venom that causes pain and other reactions.

Hornets, wasps, and bumble bees can sting multiple times because they're able to pull out their stinger without injury to themselves, meaning that the stinger is not left in your skin. Below are some tips that you should consider if you do get stung.

General First-Aid for Bites and Stings

1. Wash bite/sting area well with soap and water.
2. Place an ice pack or cold compress on the wound intermittently (15 minutes on and 15 minutes off). Never place ice directly on the skin.
3. Elevate and rest the wounded area to decrease swelling. **DO NOT USE HEAT!**
4. If a tetanus vaccination has not been given within the last five to seven years, consult a physician.
5. Normal reaction: within minutes a small red area appears at the site of injury, gradually surrounded by a whitish and a reddish flare. A welt or raised area forms that may itch, be hot to touch, and feel irritated. These symptoms usually subside in a few hours except from the bites or stings of a few creatures.
6. Look for and observe signs of a severe allergic reaction such as wheezing, difficulty breathing or rapid, severe swelling, abdominal cramps, vomiting, dizziness, chest tightness, hoarseness, or blue discoloration to lips. If these signs occur, go to an emergency room or consult a physician *immediately*.
7. Victims especially at risk for complications are children under three years of age, heart, diabetic, elderly or debilitated patients as well as persons with allergies. Multiple stings/bites,

especially to the neck and head, can be serious and even deadly.

Consult a physician *immediately*.

8. Do not handle biting or stinging creatures. However, when possible, save the specimen for later identification. Small creatures can be killed by dropping in scalding water or freezing without changing their appearance. Emergency rooms do not like **LIVE** specimens! Identification may be important for treatment and for predicting diseases these creatures may carry.

Gardener Gatherings

Places to Go & Things to Learn



What & Where

Trailwood Garden Club
Annual Garden Walk
June 22th (Noon to 4 P.M.)
call 734-459-7146 for ticket information

Canton Garden Club
Annual Garden Walk
June 26th (10 AM to 4 P.M.)
call 734-455-8283 for ticket information

Gardens of Northville
Annual Garden Walk
July 7th (10 A.M. to 4 P.M.)
call Gardenviews at 248-380-8881
for ticket information

Great Lakes Bat Festival
August 7th (10 A.M. to 10 P.M.)
at the Cranbrook Institute of Science
call 1-800-276-7074 for ticket information

Contact us at 734-416-0866 or earthen-

US braces for cicada swarm



Americans are bracing themselves as billions of cicadas begin to emerge from a 17-year slumber underground to swarm several US states for the next few weeks.

Americans from Maryland to Indiana will have to fend off clouds of cicadas, insects with transparent wings, black bodies and red eyes which dig themselves out of the ground every 17 years to mate before dying.

The insects, which make a deafening buzzing sound as they reproduce, have begun to emerge in massive numbers.

Late on Monday in Bloomington, Indiana, "cicadas started emerging from the ground by billions," Keith Clay, a professor of biology at Indiana University, said in a news conference here today. "They are highly synchronised to come out together," he said. "There is definitely a strong fear factor among some people with this emergence of periodical cicadas," Mr Clay said, joking that it was reminiscent of Alfred Hitchcock's thriller "The Birds" in which the animals inexplicably begin attacking people.

But scientists have assured the deeply bug-averse that the cicadas are harmless insects solely interested in mating and laying their eggs for the next three weeks only to vanish again until 2021.

Cicadas "don't bite, and they don't attack people," Mr Clay said.

But while scientists are looking forward to this intriguing event, many Americans are dreading the swarm that will cover cars with squashed cicada carcasses, drive pets wild as they gorge themselves on the insects and give outdoors activities a distinctly wilder edge.

The states of Indiana, Kentucky and Ohio are expected to have the highest density of cicadas. They also appear in Illinois, Michigan, Tennessee, New Jersey, Missouri, Georgia, New York, Pennsylvania, Virginia and Maryland. They have also begun to appear in the US capital.

Despite their large numbers - there could be trillions of them in Indiana alone - the cicadas usually cause little damage to trees and smaller plants. While some orchards will be affected, Clay is not predicting a disaster.

Any damage caused by the cicadas happens when the females use a razor-sharp appendage to slice branches and twigs open so they can insert their fertilised eggs. The eggs, about the size of a grain of rice, hatch about four weeks later - in early June - just as the cicadas reach the end of their life cycles. The larvae then drop and burrow into the ground with help from their front legs searching for roots.

Scientists are interested in studying the insects' impact on forests.

"It is a rare opportunity to examine the ecological consequences" of this phenomenon, Clay said.

The cicadas contribute to soil aeration, and their presence is a sign of good environmental health, specialists say. But why the insects appear only every 17 years remains a mystery.