

# CHAOS

# Charlottesville Orchid Society

[www.cvilleorchidsociety.com](http://www.cvilleorchidsociety.com)

September 2013

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## ***2013 Board and Committee Members***

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**Corresponding Secretary**

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**Publicity Committee**

CJ Besanson

Larry Eicher

**Photography**

Stella Erickson



# *President's Message*

Greetings to all members as we begin our fall-winter season of 2013. I have had great feedback from the orchid field trip that members attended in July; I'm only sorry I myself could not make it. Even so several varieties of native plants were observed including the purple fringed orchid. Now we know what they look like and can be on the look out for other native plants in our area, thanks to the efforts of people like Lonnie Murray. Daria, our CHAOS secretary, brought along a guest Zohra Siddiqui, to the field trip and I received a very nice note from her.

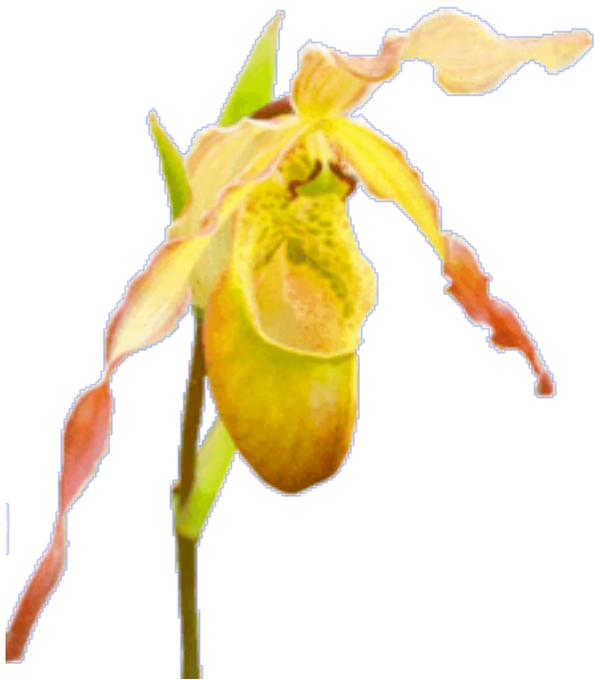
"Many thanks for allowing me to take part in your field trip. The drive was most pleasant, Lonnie was most informative and whoever arranged the weather was very clever, too. The orchids were a real treat - without the experts to tell me I would not have recognized it - or the phlox. How good it is to know that the natural beauty of Virginia is being preserved by kindly stewards. Thank you again and good luck to you all. Zohra."

We in CHAOS helped in the conservation of this site and we should be all proud of our past efforts to conserve this native habitat. Thanks to all who attended the field trip and hopefully we can do something like this again if you wish.

Remember that September 8 Sunday is our meeting date at the Church of Our Saviour. We will be having "one of our own", Thomas Voytilla give another interesting and informative presentation on how to grow semi-hydroponic orchids. Tom has used this method very successfully so plan to attend and learn how he makes orchid grow so well.

It's not too early to think about helping CHAOS by volunteering to become a member of the Board for 2014. Elections will be coming up soon and Leon Blumreich is part of our nominating committee. Please do consider lending your support to CHAOS by sharing in the work of this local orchid society. Due to new and other commitments facing me next year I will not be able to continue as president past 2013 so there will be openings at all levels. Let Leon know if you have interest in any of the various board positions. Thank you.

*Larry Eicher*



The Charlottesville Orchid Society is pleased to present the following orchid education opportunities for its members and interested visitors at the Church of Our Saviour, 1165 E. Rio Road, Charlottesville, Virginia at 2:00PM, generally on the second Sunday of each month, unless otherwise stipulated. Everyone is welcome. All events are free. Light refreshments, orchid competition, educational information on orchids and plants for sale are features of each monthly event.

### *Opportunities for Member Sales*

October 25-26 Annual Fall Show & Sale at Snow's Garden Center

December 8 Holiday Pot Luck and Awards Celebration

January 12 Roundtable Discussion of Successes and Problems with Orchids

# 2013-14

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<b>September 8, 2013</b> 2:00 pm	<b>Thomas Voytilla, The Orchid House</b> The Culture and Mechanics of Growing Orchids in Semi-Hydroponics
<b>October 13, 2013</b> 2:00 pm	<b>Charles Garrett</b> Native Orchids of Virginia
<b>November 10, 2013</b> 2:00 pm	<b>Geraldine Powell, The Orchid Gallery</b> Cool Growing Orchids
<b>December 8, 2013</b> 3:00 pm	<b>CHAOS Holiday Social</b> Members bring pot luck and a table decoration or corsage including orchids. Members can bring plants for sale.
<b>January 12, 2014</b> 2:00 pm	<b>Roundtable Discussion of Member's Orchid Problems, etc.</b> Members can bring plants for sale.
<b>February 9, 2014</b> 2:00 pm	<b>Jeff Morris</b> TBA
<b>March 9, 2014</b> 2:00 pm	<b>Hal Horwitz</b> Orchids of Israel
<b>April 13, 2014</b> 2:00 pm	<b>Tom Mirenda, Smithsonian Institute</b> TBA
<b>May 4, 2014</b> 2:00 pm	<b>Molly Brennan, Brennan Orchids</b> Phalaenopsis Bright Spring Color
<b>June 8, 2014</b> 2:00 pm	<b>Picnic at Member's House</b> Repotting session - Members can bring plants for sale.

# Meeting Information

## June Show Table Results

### Hobby 1

- 1st** CJ Besanson, Paph liemianum  
**2nd** CJ Besanson, Unknown Phal

### Hobby 3

- 1st** Larry Eicher, Paph Somer Isles x philippinense var. album  
**2nd** Alba Shank, Brs Datacosa  
**3rd** Larry Eicher, C Fuchsia Doll  
**HM** Larry Eicher, Ctna Why Not

### Super Hobby

- 1st** Dudley Miller, Den anosum  
**2nd** Dudley Miller, Max tennifolia  
**3rd** Dudley Miller, Enc atropurpureum

### Professional

- 1st** Jeff Morris, Bulb veitchianum  
**1st** Jeff Morris, Stan tigrina 'Glory of Mexico' AM/AOS  
**2nd** Jeff Morris, Paph Dollgoldi  
**3rd** Jeff Morris, Bulb tingabarinum  
**HM** Lee and Neale Merriman, Phal Ox Prince 'Ox 1480'

## Running Totals 2013

### Hobby 1

Anne Hobsan	50
CJ Besanson	38
Eleanor Matano	3

### Hobby 2

Leon Blumreich	48
Jim Nemer	38
Daryn Norton	37
Diane Bradshaw	30
Pam Howie	15
Melanie Murguia	5
Pam Bortz	5

### Hobby 3

Larry Eicher	218
Alba Shank	18

### Super Hobby

Dudley Miller	92
Brenda Steigman	69
Paula Berardi	6

### Professional

Jeff Morris	431
Lee and Neale Merriman	155
Tom Voytilla	19

## September 8th Meeting

### Thomas Voytilla The Orchid House

#### "Culture and Mechanics of Growing Orchids Semi-Hydroponically"

Speaker will be bringing plants for sale. To pre-order, please contact:

[www.theorchidhouse.org](http://www.theorchidhouse.org)  
(434) 315-4115

*Thomas Voytilla has been raising orchids since 1998. Soon after he discovered his passion for them, he learned of the semi-hydroponic growing method. He has now refined this growing technique with experience to bring its advantages and ease to all orchid lovers, both novice and experienced.*

*He and his wife live in rural southern Virginia and have spent the last several years bringing their business to the public. They raise their orchids from flask/plugs and now have a large variety of mature plants well-established in the semi-hydroponic system.*

# July Field Trip

## Wild Fringed Orchids

On July 27, 2013, a number of CHAOS members met with Lonny Murray and Jeff Morris for a field trip to southern Albemarle County, where wild fringed orchids were in bloom on private property. In the past, CHAOS provided financial support to the landowner in an effort to ensure that the area with these native orchids was preserved. This was our first visit to the location.

The orchids were in bloom! Eastern Prairie Fringed Orchids (*Platanthera*) are native to Virginia, and tend to grow in bogs or meadows. It is a tall-standing orchid, perhaps 18 inches high, with beautiful pale lavender to pink fringed petals. One of the blooming plants that we saw required a trek through mud and weeds, but others were along the edges of the underbrush and easy to see. In addition to the orchids, Lonny educated us about another bog plant, the buttonbush (*Cephalanthus*), which was in bloom, and pointed out ferns and other plants of interest in the area.



Eastern Prairie Fringed Orchid



Many thanks to Lonny and Jeff for heading our expedition, and also to the landowner, who graciously cleared walking paths for us, and seems to have a genuine interest in preserving the environment favored by this very-beautiful native orchid.

- ***Daria Kiselica***

*Photo Credits to Daria Kiselica and Stella Erickson*



American Orchid Society

Education, Conservation, Research

## Monthly Checklist for September and October

### Cattleya

Despite the shortening days and lowering angle of the sun, September can still be one of the hottest months. Water and fertilizer need to be in balance with heat and light. The alert grower will notice, however, that his or her plants are beginning to slow down a bit. Growths are maturing, and the sheaths are giving the promise of the next six-months' bloom. Check plants for potting needs for the last time this season. Any in dire need should be potted, even some that may be on the cusp, as there is just enough of the growing season left to allow the plants to establish before the days start to get really short and cold.

This is the month for purples derived from *Cattleya labiata* breeding to flower. If you are short on flowers, look into this group. There is nothing that can quite match this type for beauty and fragrance. They are easy to grow, too.

**Plants summered outdoors should begin to be prepared to be brought back into the winter growing area. Clean the plants up and be on the lookout for any pests they may have picked up during the summer. Treat as necessary.**

### Cycnoches

This little-known and under-appreciated genus, which can have male or female flowers, is at its best in the autumn. Two of the spectacular varieties are *Cycnoches loddigesii*, with its large brown flowers resembling a prehistoric bird, and *Cycnoches chlorochilon*, the swan orchid. This last one has large, fragrant green flowers. The biggest problem, culturally, will be red spider mite infestations that require immediate attention. Plants are quite seasonal, requiring heavy watering in the growing season and then a drier dormant winter season.

### Cymbidium

Summer can be the most rewarding season for cymbidiums. Growths should be coming strong now. The leaves of the new growths are best when they are broad and fairly stiff. The color should be a light green to nearly yellow. Early flowering varieties should be showing flower spikes, so move the plants into a cooler area with lower light. For mid-season varieties, lower the dosage of nitrogen to assist in spike initiation.



*Cycnoches chlorochilon*, the green swan orchid

## **Dendrobium**

This is a good season for hybrids of the *Dendrobium phalaenopsis* and *Dendrobium canaliculatum* types. Both are capable of putting on tremendous shows of long-lasting flowers. Fertilize with a low-nitrogen formula to promote the best flowers. *Dendrobium phalaenopsis* can get tall and top heavy, suggesting an attractive and heavy container would be appropriate for this type.

## **Rhynchostele bictoniensis**

Both *Rhynchostele bictoniensis* and its hybrids bloom in this season. *Rhynchostele bictoniensis*, formerly known as *Lemboglossum*, *Odontoglossum*) is a showy species from Mexico that has three different color forms: sulphureum (green with white lip), album (brown with white lip) and roseum (brown with a pink lip). It is a vigorous grower with tall inflorescences of many flowers, and imparts to its progeny (as seen in Odcdm. Bittersweet and Odm. bicross) ease of culture, warmth tolerance and eye-catching patterns. They make a prime candidate for odontoglossum beginners and advanced alike.

## **Paphiopedilum**

Standard, green-leaved paphiopedilums begin to show their bloom sheaths this month. Late-season heat waves can blast these early sheaths, so be observant about proper cooling and air circulation. As with the rest of your plants that may have been summered outdoors, it is time to prepare for their move inside. Clean each plant and implement pest-control practices. Repotting, if necessary, is appropriate.

## **Phalaenopsis**

The bulk of this season's growth is being ripened this month, with growers in cooler climates seeing the first emerging inflorescences. Some night heating may be necessary in the cooler areas. Begin to watch watering more carefully, and reduce feeding proportionately with reduced watering needs. An extra dose of phosphorus and potassium, such as a bloom-booster or high-acid-type fertilizer, is beneficial.

## **Rossioglossum grande**

Once known as *Odontoglossum grande*, this is a spectacular orchid with six to eight flowers up to 8 inches across. Often known as the tiger orchid, it has bright golden yellow flowers heavily marked with chestnut brown barring. The plants are beautiful with a grey-green cast to the foliage, which is borne on succulent pseudobulbs. It prefers hot and wet summers with cooler, even down to 40 F, dry winters. Grow under filtered light. Watch for snails and slugs that eat the flowers, pseudobulbs and leaves.



*Rossioglossum grande* shows off its large, dramatic flowers.

***The AOS thanks Ned Nash and James Rose for this essay.***



American Orchid Society

Education, Conservation, Research

## Fungus Gnats

**Paul J. Johnson, Ph.D.**

Insect Research Collection

Box 2207A, South Dakota State University

Brookings, SD 57007

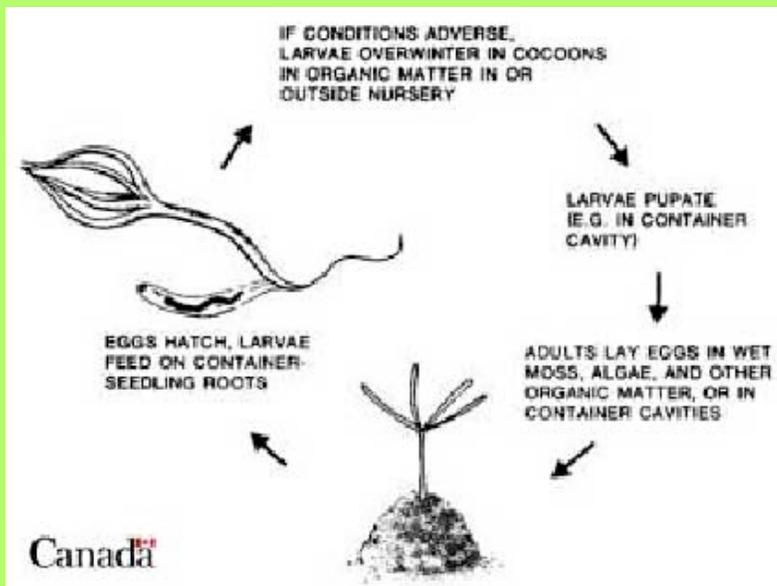
Slightly modified from the December 2000 issue of the Newsletter of the South Dakota Orchid Society

Orchid growers are reputed to pamper their plants excessively. However, over-watering and over-fertilizing are two symptoms of a "mothering" of plants that can be deadly. Most natural species orchids are adapted to harsh and low nutrient conditions, with roots in well drained media, if covered at all. Given this the use of potting media is used not for nutrition as with most plants but to help provide moisture in the artificial environments of the home, office, or greenhouse, as well as temporary support while roots are growing. Media breakdown through time is related to watering and fertilizing, and is a significant problem for the majority of cultivated orchids. The more decayed the media then the less breathable it is for the orchid's roots. Interestingly, there is an insect that can be used as an indicator of poor orchid care, even though they are commonly considered pests. Probably all orchid growers have at least some of this insect in their plant collection, namely, fungus gnats. Fortunately, for orchid growers, these little flies are usually mere nuisances, only..



### Biology

The common fungus gnats in the hobby orchid collection are small (ca. 1.5-3.0 mm), long-legged, long-antennaed, delicate flies with dark bodies and one pair of dusky-grey to black wings. Insect taxonomists place these small flies into the family Sciaridae (pronounced: "sy-are-ee-day"), with the common name "dark-winged fungus gnats." This taxonomy helps discriminate them from a wide diversity of related gnats that feed on fungi. [Gnats are simply small flies, most of which do not bite!] As with most other insects with four life stages (i.e., egg, larva, pupa, adult), it is the larva or maggot that does most of the feeding. Adult fungus gnats do not bite and are absolutely harmless to people and pets. Fungus gnats are widespread and very common insects.



Adult dark-winged fungus gnats fly in search of fungi. The females lay their tiny white eggs in moist to wet soil. When the eggs hatch, the slender translucent-white maggot with a distinctive shiny black head feeds on fungal growths and measures about 4-5 mm in length when mature. After about 2 weeks, depending on temperature and moisture, the maggot transforms into the pupal stage, then emerges a few days later as an adult fly. The entire life cycle takes about a month.

As the name indicates these flies are associated with fungi. But, why are they so common around potted plants? Well, it is not because they are feeding on your plants, usually! They are common because their larvae are feeding on the fungi growing in potting media that is too moist or wet, is warm, and in media that is decaying quickly. In other words, it is the over-watering and over-fertilizing of your plants that brings out the best in these cute little flies. Fungus gnats are more abundant in older and moister potting media that is rich with fungi. Organic potting materials will decay faster with higher levels of fertilizers because nitrogen also feeds the fungi and other decay organisms.

Usually, the maggot feeds only on fungal growths. However, larvae will also feed on seedlings, dying and rotting tissues such as roots, and will rapidly devour a leaf resting on the surface of moist potting media. Feeding on roots of seedling orchids has been observed, possibly due to a combination of sterilized media, high moisture, stressed plants, and lack of fungi for the maggots.

### Detection

Adult fungus gnats are usually the first life stage to be seen of these insects. The adults are active on the surface of the potting media, often running along the edge of the pot. They fly readily and are often found at windows. Yellow sticky cards, the kind used for whiteflies and aphids, are excellent for monitoring adult fungus gnats.



Check for larvae by watching for declining plants, then or otherwise unpotting the plant and examining the media for white to translucent, slender bodied, black headed maggots. These will usually be clustered around decaying roots and rhizomes, and fungy clumps of media.

## Management and Control

Fortunately, fungus gnats are usually easily managed and can be kept in check in most orchid collections. Yellow sticky cards sold for monitoring and control of aphids and whiteflies are excellent for trapping fungus gnats. These cards are so effective when there are only a few flies that there is no need to use any insecticide on these flies. However, often female gnats will fly little so sometimes it is useful to cut strips of the cards and insert these strips into a pot to capture more of the females. Larvae are easily controlled by adjusting watering and ensuring that your orchid media is not overly decomposed and is draining well. This may require frequent repotting if you use a heavy watering regime.

The following points will help control fungus gnats:

1. Repot your plants on a regular basis and use mixes containing materials such as charcoal and coconut (fibre or chunks) that are slow to decay, or inorganic components such as perlite;
2. Do not keep the media constantly wet and if possible allow the media to dry between waterings, especially the upper inch or so of media.
3. Keep fertilizer to the minimum needed for the plant and adjusted to the potting media used.

Should these cultural methods not be effective or the collection be large, then alternative treatments may be warranted. However, the use of insecticidal drenches for controlling the maggots is not recommended, except as an absolutely last resort. Severe infestations of large collections may be best treated with biological control methods. The use of bacteria, nematodes, and predatory mites is highly effective in greenhouses and may work in large collections.

Bacterial treatment is most effective against the young larvae early in the cropping cycle and uses *Bacillus thuringiensis israelensis* is sold under the trade name of Gnatrol™ for greenhouse use. This type of *B.t.* affects only true flies (Order: Diptera) and is different from the *B.t.* used for caterpillars in the garden. The *B.t.* causes paralysis of the maggots gut, stopping feeding and killing the maggot. Gnatrol™ is applied as a soil drench to thoroughly wet the soil of pots, flats, beneath benches, or other sites of infestation. It is only effective for about 48 hours so 2-3 applications may be needed with heavy infestations. Use of Gnatrol™ is not recommended with simultaneous use of fertilizers or fungicides containing copper or chlorine. It will not affect the adult fungus gnats.

Parasitic nematodes are also useful for controlling fungus gnats. They enter the insect's body and multiply inside the host insect. While feeding they release a bacterium that is toxic to the host. The nematodes complete their life cycle within a few days so large numbers of infective stage nematodes are produced that will continue to search for new hosts. These beneficial nematodes can be applied as a drench to the growing media and to soil under the benches. Two common species available for greenhouse use are *Steinernema carpocapsae*, sold as ScanMask™, and *Steinernema feltiae*, sold as Nemasys™.

Finally, a small predatory mite, *Hypoaspis miles* also attacks fungus gnat larvae. These mites are usually sprinkled over or mixed into the potting media before planting. This mite is long-lived, will usually persist as a scavenger on dead insects while continuing to seek fungus gnat maggots, and will also feed on thrips pupae and other pests.

Chemical control of fungus gnats is diverse, but always a temporary remedy. Adults may be eliminated with any insecticide spray for flying insects, though this is decidedly a temporary fix and will not affect those adults emerging after the spray has settled. Good control of fungus gnats requires removal of the larvae, hence the high value of environmental management, i.e. adjusting water schedules and repotting. Chemical control of larvae is best done with drenches of carbaryl, permethrin, imadichlopid, diazinon, malathion, and other common pesticides, and even isopropyl alcohol. However, and again, these are only temporary solutions as the flies will reinvade the pots once the chemical residue is degraded and the potting media remains wet and decaying.

# Charlottesville Orchid Society



*Join us for a **CHAOS** Meeting !!!*

CHAOS invites you to join us as our Guest because you enjoy orchids!

## **What's in it for you:**

- Speakers who address multiple topics of interest related to orchids and growing them
- A show table that allows you to see (and smell!) blooming orchids grown by our members, AND discussion by experienced orchid growers about how those orchids grow and thrive
- Networking with friendly and welcoming people who enjoy orchids and plants, and grow orchids in their own greenhouses or in homes
- Frequent options to purchase beautiful orchids to grow yourself
- A raffle in which you may win an orchid plant for as little as \$1.00
- The option of joining our organization as a member yourself

**When:** Usually the second Sunday of each month, September through June, at 2:00PM. Check our website (<http://cvilleorchidsociety.com/>) to confirm a date.

**Where:** Church of Our Savior, 1165 E. Rio Road, in the main church hall. Plenty of parking is available.

*Hope to see you at our next meeting !*