

## Houseplants Steal the Show

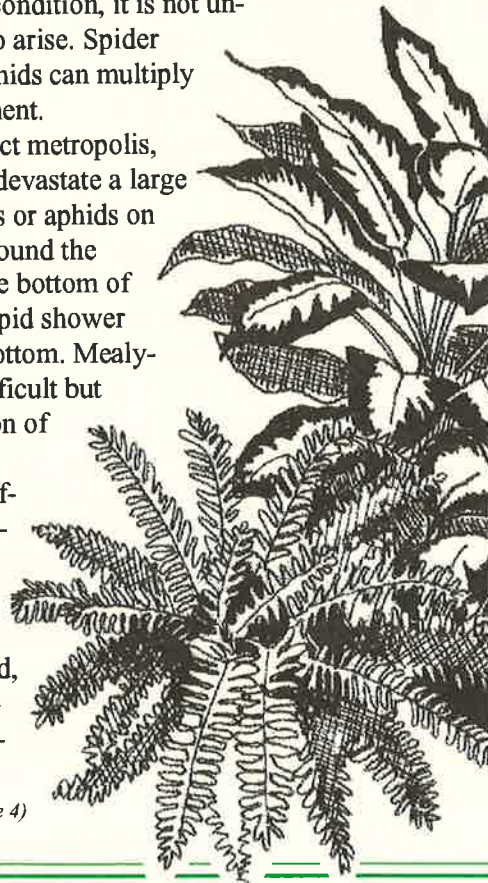
**H**ere we are in January. The holidays are over. The winter solstice has passed, and the days are slowly lengthening. In two months, the garden will rouse from a long winter's slumber. It's a great time to inspect your houseplants and to add a few to your collection. Although the weather outside may be freezing, you will find many beautiful plants available in our greenhouses. In fact, some of the most beautiful flowering plants bloom during the winter since the bud production of many tropical plants is induced as a result of the longer days. Cyclamen, cinerarias, gloxinias, cymbidiums, and phalaenopsis, to mention a few, form dramatic highlights when viewed against the dreary background of winter.

Before considering new acquisitions, however, inspect your existing houseplants. Trim off dead stems, leaves or leaf tips. Make certain that all plants have waterproof saucers which allow you to water thoroughly without worrying about overflow—most plants like to alternate between thorough soakings and completely or almost completely drying out. And, last but not least, take each of your houseplants to a well lit area and check for insect pests. The dry air during the winter months can stress plants by keeping leaves in a state of high transpiration (moisture loss). In this condition, it is not unusual for large populations of pests to arise. Spider mites, white flies, mealybugs, and aphids can multiply quickly in the winter indoor environment.

If you should find a growing insect metropolis, just relax and start "debugging". To devastate a large population of spider mites, white flies or aphids on a houseplant, pull a plastic bag up around the base of the pot and clasp it around the bottom of the plant. Then, treat the plant to a tepid shower and rinse it thoroughly from top to bottom. Mealybugs, on the other hand, are more difficult but will usually succumb to an application of horticultural oil at the recommended strength. Both of these methods are effective and eliminate the need for pesticides. Our experts in the houseplant department will gladly help you if more serious problems arise.

Now that your plants are trimmed, cleaned and feeling good about themselves, determine whether they are receiving the proper amount of light.

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## Organic Corner IPM



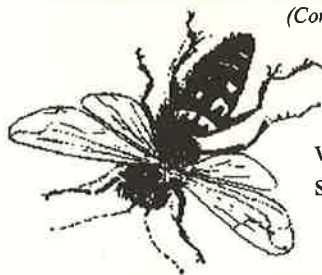
**T**o many people the letters IPM sound like a new computer technology, but to nurserymen and farmers, IPM sounds like the future. IPM stands for "integrated pest management". It is a method of controlling or managing "pests" (any unwanted creatures, vegetation, or diseases) using methods which have the least disruptive impact on the environment.

Even before the development of integrated pest management, humans were managing pests to create a more comfortable environment for themselves. Prior to the development of agriculture some 10,000 years ago, nomadic humans probably picked, swatted, and squashed bothersome foes. The first civilizations found that certain chemicals, such as sulfur, mercury, and arsenic, controlled pests and that planting crops during insects' "off-peak" stages increased yields. Moreover, with the development of the microscope during the Renaissance pe-

*(Continued on page 2)*

### Inside This Issue

IPM Basics	2
Behnke Florist	3
Rainforest Safari	3
Meet: Karen Upton	3
Garden Recipe	4



(Continued from page 1)

riod, scientific understanding of the insect world grew considerably. Over the following 500 years, scientists discovered

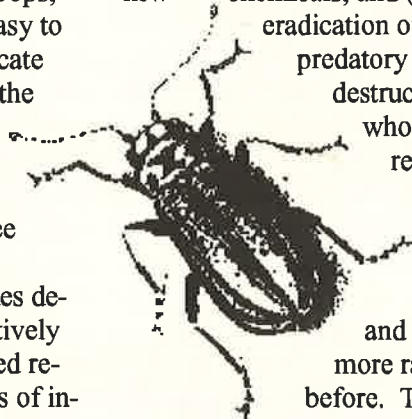
which environmental factors made pests less "pesty". For example, they found that certain predatory insects were natural enemies of the destructive insects. And together, the use of biological controls and organic insecticides dominated the agricultural world until the advent of DDT.

During World War II, the soldiers who lived in less than hospitable conditions in Europe and the Pacific were plagued by pests. To aid the troops, scientists developed DDT, an easy to use insecticide that would eradicate insect foes quickly. Soon after the success of DDT, scientists began to work on other similar insecticides. Unfortunately, very few scientists would foresee their potential problems.

The new breed of insecticides developed in the 1940's were relatively easy to use and quickly presented results. Soon after, older methods of in-

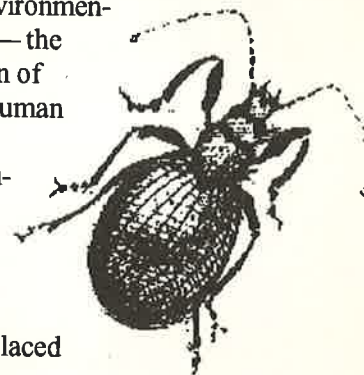
sect control became obsolete. The gardener's new objective was an "insect free" garden. Homeowners easily mixed chemicals in a sprayer and followed the recommended spray schedule, whether there were insect problems or not. However, no one was prepared for what came next. The insect world launched a counter attack.

Since early in the 20th century, scientists had been aware of insects' abilities to become resistant to natural insecticides, but they never imagined to what extent this resistance could develop. Because insects breed and grow at such fast rates, two major problems with the new insecticides became apparent: (1) target populations would become resistant to the new chemicals; and (2) with the eradication of beneficial,



predatory insects, the destructive insects who developed resistance could feed on the healthy vegetation and multiply more rapidly than before. Together with

the insect problems scientists also encountered environmental problems—the contamination of waterways, human tissues, and food. Eventually some chemicals were banned, but too often they were replaced with others.



In the late 1970's, after some serious incidents of poisoning, scientists began working on a program to manage pest problems safely. This program was actually a continuation of work started in the 1950's by a small group of scientists who studied insects to discover effective and economical biological controls. Developed in the 1970's into the "integrated pest management" or IPM program, it has become a safe alternative to the over use of chemicals.

The aim of IPM is to decrease destructive pest problems through the methods least disruptive to the environment. This method of management does not rule out the use of chemicals completely, but it considers them a last resort. To understand the best method

(Continued on page 3)

## Some IPM Basics for the Homeowner

**(1) Understand the plants in your garden.** Are they annuals, perennials, biennials, woody shrubs, deciduous, evergreen, and/or herbaceous? When should they be fed, watered or pruned? What is the area like (drainage, weather, sun, shade)? A healthy plant is your best defense.

**(2) Identify the main pests** (don't forget diseases) that cause the most significant problems and the damage that they inflict.

**(3) Identify the environmental factors that LIMIT the pests ability to do damage** (natural enemies, temperatures, moisture, removal of overwintering, breeding sites such as leaves).

**(4) Consider using methods that suppress the pests**

**naturally.** Avoid broad impacts on the environment.

Introduce a new natural enemy; destroy breeding sites and refuges; use mechanical controls such as sticky tapes or handpicking; introduce a natural pathogen (ex: milky spore for grubs); use sex lures; enhance the environment to encourage natural enemies (ex: add bird houses); plant newer resistant varieties of plants.

**(5) Find out when the pest is most vulnerable** during its life cycle and what method is least disruptive and most effective.

**(6) Watch the environment.** Check for changes in the plants that would indicate new pests or environmental changes. Have your neighbors done anything that would affect your yard?





# Behnke's Gardening Tips

## January

Assess garden and note any changes to be made in the upcoming season. Research to decide on appropriate additions.

Start paperwhite narcissus for indoor enjoyment in 4 to 6 weeks.

Peruse seed catalogs and make plans for vegetable gardens and flower beds.

Make wreaths or table decorations. Use dried flowers, berries and leaves left from last year's garden.

Build birdhouses and nesting boxes for spring.

Spread sand or ashes (not salt) on icy walks and drives.

Use Christmas tree boughs to protect tender plants.

Make a commitment to feed the birds. Black oil sunflower seed provides more oil for their feathers (which helps to repel the cold).

Prune grape vines and berry bushes as needed.

## February

During periods of unseasonably warm weather, remember to water outdoor plants.

Sow annual seed indoors.

Cuttings taken from many houseplants will root especially well now.

Spray fruit trees and ornamentals with dormant oil when the temperature is above freezing, and will remain so for at least 24 hours.

Clean, repair or replace gardening equipment.

Tired of the barren, frozen view? Plant a terrarium. You can create a lush, tropical paradise in miniature. And, children love to populate such gardens with all sorts of slimy creatures!

Cut forsythia branches and place them in water in a cool, bright room. The blossoms will open weeks ahead of schedule.

## March

Sow warm season vegetables indoors.

Transplant dormant shrubs and trees.

Divide summer-blooming perennials.

Sow cool season veggies, such as lettuce, peas, etc., outdoors.

Plant grapevines, berry bushes, rhubarb and asparagus plants.

Apply pre-emergent weed preventer on lawns and flower beds.

### Mid-March

Prune winter damaged hedges and roses.

Cut back ornamental grasses.

Start fertilizing trees, shrubs, groundcovers, berries, grapes and established perennial beds, including rhubarb and asparagus.

### Late March

Prepare annual beds.

## April

Plant bare-root or container-grown roses.

Divide fall-blooming perennials.

Transplant groundcovers.

Plant strawberries and cool season annuals.

Shear or mow damaged groundcovers.

Fertilize bulbs. Remove spent flowers from early bloomers, but leave the foliage! Allow the leaves to ripen (yellow) before removal. This will allow the bulbs to store nourishment and insure a good bloom next year.

### Mid- to Late April

Apply a second application of pre-emergent weed preventer on lawns.

Begin hardening off annual seedlings.

Spray new foliage on trees to attack freshly hatched gypsy moths with *Bt* (*Bacillus thuringiensis*, an insect pathogen non toxic to humans).

Call Behnke's for more information: (301) 937-1100

# 20 Free Seminars

by Behnke Nurseries • Winter 1995

## Saturday, February 4:

- 1 Going Native 10 AM**  
*Joan Feely, National Arboretum*  
An introduction to the diversity of native plants from our region by a local expert.
- 2 Parking Lot to Parterre 1PM**  
*Lucy Coggin, William Paca Garden*  
Discover a colonial garden jewel on two acres in the middle of historic Annapolis.

## Sunday, February 5:

- 3 Dwarf Evergreens for Home Gardeners 10 AM**  
*Sue Martin, National Arboretum*  
The unusual and the commonplace offer desirable and interesting qualities for the garden.
- 4 Integrated Pest Management 1 PM**  
*Nancy Bechtol, Smithsonian Institution*  
Learn to use alternate methods of pest control and reduce the use of harmful chemicals.

## Saturday, February 18:

- 5 Beautiful Grapes and Bountiful Berries 10 AM**  
*Jon Traunfeld, Home and Garden Information Center*  
Decorative landscaping with the tasty bonus of fresh fruit.
- 6 Rockgardening: From the Ground Up 1 PM**  
*Don Humphries, Green Springs Park*  
Your guide to rockgardening success from site preparation to plant selection.

## Sunday February 19:

- 7 The Complete Shade Garden 10 AM**  
*Diane Lewis, Brookside Gardens*  
A year in the shady garden unfolds and blossoms before our eyes.
- 8 Gardening for Winged Friends 1 PM**  
*Lynette Scafidi, Brookside Nature Center*  
Choose plants which attract delightful butterflies and birds to your garden.

## Saturday, March 4:

- 9 Discovering Brookside Gardens 10 AM**  
*David Vismara, Director, Brookside Gardens*  
Get acquainted with one of our areas best public gardens.
- 10 "Japan: Textures and Contrasts" 1 PM**  
*Judy French, Lecturer and Consultant*  
Judy shares her knowledge of japanese horticulture, architecture, and culture acquired during her many visits to Japan.

## Sunday, March 5:

- 11 Elements of Garden Design 10 AM**  
*John Donofrio, John Donofrio Design Group*  
How to plan a garden that suits your property, and your lifestyle.
- 12 The Garden in Fall and Winter 1 PM**  
*Phil Normandy, Brookside Gardens*  
Even after the flush of spring and summer, the garden can be a place of wonder.

## Saturday March 18:

- 13 Borrowing Ideas from English Gardens 10 AM**  
*Anne Brooks, Floral Designer*  
Capture some of the charm inherent in British gardens.
- 14 From Border to Bouquet 1PM**  
*Jeff Fetterhof, Brookside Gardens*  
Transform your garden's bounty into lovely bouquets and centerpieces.

## Sunday March 19:

- 15 Gardening: A Natural Approach 10 AM**  
*Bill Wolf, Necessary Trading Company*  
Learn the techniques of chemical-free gardening that really work.
- 16 Blending Heritage Roses into Your Garden 1 PM**  
*Holly Shimizu, U.S. Botanic Gardens*  
Low maintenance heritage roses add old-fashioned charm to any garden.

## Saturday, April 1:

- 17 A Perennial Primer 10 AM**  
*Andre Viette, Andre Viette Farm and Nursery*  
An entertaining and informative look at perennial gardening.
- 18 Perennials: The Latest and Greatest 1 PM**  
*Andre Viette, Andre Viette Farm and Nursery*  
Andre's passion for new varieties will spark ideas for your garden.

## Sunday, April 2:

- 19 The Evening Garden 10 AM**  
*Peter Loewer, Horticulturist and Author*  
Flowers and fragrance from dusk till dawn.
- 20 A Moveable Palette 1 PM**  
*Judy Johnson, Brookside Gardens*  
Mini-gardens in attractive containers brighten house and garden year round.

Please phone us to reserve your seat(s): (301) 937-1100

Seminars are held at our Beltsville Location: 11300 Baltimore Ave. (U.S. 1), 2 miles North of Exit 25, Capital Beltway



(Continued from page 2)

or methods to employ, one must first understand the "creatures" (both animal and vegetable) that live within a "community" or area and their relationships to each other. Next, a good program should be developed.

Generally, most IPM programs are developed by trained environmentalists who work around economically valuable crops or gardens, but, due to its environmentally friendly appeal, IPM programs are becoming available to the public though many garden maintenance firms. However, if you enjoy working in the garden, you can cultivate your own IPM program. Sometimes the biological controls may not work well, especially during periods of stress. If chemicals must be used, you should seek the advice of a professional who is knowledgeable about the IPM program.

Good sources of information are in your area: your local county extension agent, the Cooperative Extension Service Home and Garden Information Center at 1-800-342-2507, and professional garden center personnel—your questions are always welcome at the Behnke Nurseries Garden Shop. These professionals can suggest the least toxic, most effective sprays (there are many organic sprays) that cause the least disruption to the environment. Always read the bottles thoroughly, and ask about the pests most vulnerable stages. And, don't forget your most valuable tool—the knowledge you collect over the years. **Watch your garden! Keep a journal!** Record weather cycles, when certain pest problems occurred and what they looked like, methods that worked best to reduce problems, and any other notes you may need. It won't take long before you are skillfully managing your garden's pest problems—safely.

—Susan O'Hara

Primary information source:  
*Introduction to Integrated Pest Management*  
by Mary Louise Flint and Robert Vanden Bosch

## Did you know...

that Behnke's has a Florist Shop? It is located in the north building just beyond the azalea area and is filled with a wonderful selection of fresh, dried and silk flowers, baskets, containers, balloons, greeting cards, floral supplies, and decorated plants.

You can pop in and choose from our selection of ready made arrangements, wreaths and wall decorations, pick up your supplies to make your own, or have our talented designers create something special just for you. Our selection of fresh cut flowers is the best in the entire area. We also make gourmet and snack food baskets and we can send your wire orders anywhere in the world through our FTD connection.

So next time you need flowers, give us a call. Our specially trained customer service representatives will be happy to assist you. And, of course, you'll have Behnke's quality assurance.


**Behnke's Florist Shop**  
**(301) 937-4032**

VISA AND MASTERCARD ACCEPTED.

## Meet: Karen Upton



Karen joined our sales staff twenty-two years ago with a newly earned degree in Ornamental Horticulture from the University of Maryland. She spent her first thirteen years in the Houseplant department before being transplanted to our Largo location where she co-managed retail operations. Karen came back to Beltsville in 1993 to manage Customer Service. Karen is married to Chris Upton, a former Behnke employee, and they have two sons, Max and Pete.



If your kids are going *wild* this winter, send them on a **Rainforest Safari**

During this free 1 hour tour, 6 to 10 year olds will visit our houseplant greenhouses, receive information (painlessly) from our guides about tropical plants, meet the animal inhabitants and end up with a project they can take home.

Two tours are offered on Sunday, Feb. 12, 1995: 12 noon and 3PM. Tour size is limited, so reserve a spot early—call (301) 937-1100.

Also planned for 6 to 10 yr. old kids—a free seminar: **What's Growing On In My Garden?**

Sunday, March 12, 1995: noon and 3PM (two sessions). Kids will transplant seedlings to take home. We'll supply everything, including inspiration for your budding gardener! Class size is limited, so call early—(301) 937-1100



## Garden Recipe

### Dog's Breath Chili

—courtesy of Dr. Marc Cathey

- 1 pound lean ground beef
- 1 small onion, chopped
- 1 teaspoon salt
- 1-2 teaspoons chili powder
- 1 bay leaf
- 1 tsp. Worcestershire sauce
- 1 (16 oz.) can tomato sauce
- 1 (16 oz.) can tomato paste
- 2 (16 oz.) cans kidney beans, drained
- ½ jar (16 oz.) jar PACE picante sauce
- Dried Tobasco peppers, chopped
- Tobasco sauce

In a skillet, break up beef with a fork and brown lightly. Pour off the fat and set the meat aside. Lightly brown the onion in the same skillet. Combine the beef, onion, salt, chili powder, bay leaf, Worcestershire sauce, tomato sauce, tomato paste, kidney beans, and picante sauce in a big pot. Cover and cook slowly over low heat for 2 to 5 hours. Add chopped dried peppers and Tobasco sauce to taste. Stir periodically. Serve with crackers, plenty of chopped onions and grated sharp cheese.

(Houseplants from page 1)

This step is a little tricky and may require some research and experimentation. Generally speaking, foliage plants with large leaves will be happy in a bright room with no direct sun. The cast-iron plant, the snake plant, and the Chinese evergreen will tolerate quite dim locations. Plants which are grown for their flowers usually need more light—so put them where they will receive some direct sun through a window. When considering a new houseplant, think about the location and limit your choices to suitable plants.

Once you find proper homes for your plants, they may need nourishment. Almost all houseplants are grown in “soil-less” mixes. Generally, these mixes are defined by the absence of “dirt”, silt, and mineral matter, which contain naturally occurring nutrients. For this reason, it is important to feed houseplants regularly with a complete fertilizer, such as, Miracle-Gro, Peter’s, or Schultz-Instant (to name only a few). Try to fertilize every month when plants are in active growth, but several missed feedings will cause no ill effects.

After all is said and done, winter is a time for houseplants to “steal the show”. The season is especially wonderful for African violets, which do not like extremely hot weather. All they need is an eastern, southern or western exposure. The same goes for the lovely orchids phalaenopsis and cymbidium. Both will bloom for at least six weeks, or, more likely, for several months. Gloxinia, streptocarpus, and lipstick vine are three members of the African violet family which can be maintained and brought into bloom easily in a barely sunny window. Furthermore, if you have a cool room or windowsill, you might want to try a cyclamen, cineraria, pocketbook plant, freesia, indoor azalea, camellia, or gardenia to brighten up the area.

When the outdoor garden lies dormant, devoted gardeners, undaunted, turn to the indoor landscape. Hope springs eternal in the tiny buds, the reaching branches, the fragrant blossoms. So, if you find yourself in the midst of a mid-winter funk, come in out of the cold, wander through our greenhouses, and treat yourself to something that you have never grown before!

—Chris Upton

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