



Put-in-Bay Garden Club Home Consultation

By Jody Frimel, Peggy Leopold, Susan Hildebrandt, & Roberta Greene

Jean Hilt Gardens

The following is a list of Jean's questions and our answers.

Question: What organic products for insects and disease can I use in my garden?

Answer: For common insects such as aphids, leafhoppers, thrips, etc., the most effective organic spray is a Rotenone-Pyrethrin spray (Bonide makes a concentrate). You use 1½-2 teaspoons per gallon of water in a sprayer. You can use this on all edible crops as well. A solution of powdered sulfur works very well for spider mites, which is a big problem on this Island. Sulfur also works very well for powdery mildew and other common funguses. The solution recipe is as follows: 2 tablespoons powdered sulfur, 2 tablespoons insecticidal soap (you can use Dawn if you don't have insecticidal soap) to 1 gallon water. In both cases, spray the top and undersides of leaves. For Japanese Beetles the most long term solution is Milky Spore powder. It is a bacterium that is lethal to Japanese Beetle grubs (the grubs stay in the soil and feed on grass roots and other garden plant roots) Once applied, it is effective for up to 3 years.

Question: Why are the bottom leaves on my Rudbeckia 'Goldsturm', browning?

Answer: Angular leaf spot of rudbeckia (Black-Eyed Susan) is most common on the cultivar 'Goldsturm'. It begins at the base of the plant and moves up. Angular leaf spot is caused by a bacterium. Organisms overwinter in infected debris in the garden. Plants are rarely killed, but plants can look unsightly by early fall. To help prevent this problem; collect and dispose of old foliage in the fall to help prevent early infection, provide good air circulation and avoid overhead watering, apply a copper-based fungicide. Camelot O is a brand of organic copper based fungicides.

Question: Why are the leaves on my Hibiscus yellowing?

Answer: Hibiscus leaves turn yellow and drop from the plant due to stress. Stresses that can cause yellow leaves on hibiscus include: Not Enough Water, Too Much Water, Too Hot, Too Cold, Too Much Direct Sunlight, Too Little Sunlight, Insects, Particularly Spider Mites, Too Windy, Improper Nutrition, and Overuse of Pesticide. You would have to determine which stress it is (your plant, Jean, does not have Spider Mites). Yellow leaves are not the worst thing in the world. Sometimes the situation will correct itself, other times you need to correct the stressful condition. The hibiscus will do its part by reacting to the improved condition by no longer dropping leaves and often by re-growing new ones to replace any that were lost.

Question: Why were there no blooms on some of my Hydrangeas this year?

Answer: The old-fashioned versions of the bigleaf hydrangeas, did not bloom this year because of the cold winter. Those plants bloom on old wood, which means they made their flower buds last summer, and those buds froze this past winter. Let them leaf out and you can just enjoy the foliage while the plant spends the summer creating fresh flower buds that should bloom NEXT year...all depending upon what kind of winter we have. The newer re-blooming hydrangeas – like the popular 'Endless Summer' variety – should flower fine, because they bloom on new growth.

Question: A green worm was eating my parsley plants. What should I do?

Answer: "Parsley Worms" are striped caterpillars that are actually the larval stage of the black swallowtail butterfly. So parsley is actually the "host" plant for this butterfly. Worm control on parsley is fairly simple, if you really desire their eradication. They can be hand-picked and disposed of. Insecticides such as Sevin will kill

off the caterpillars but Sevin also kills our important pollinators. Although parsley worms are voracious eaters, the benefit of attracting a future pollinator (and a stunning one at that) may outweigh your need to eradicate them. Perhaps you could plant a few more parsley plants in a pot on your deck and leave the parsley in the garden for the parsley worms. Healthy plants will usually recover from the foliage loss and parsley worms will not sting or bite humans.

Question: How do I transplant Euphorbia (Spurge)?

Answer: Lift and divide the mother plant into sections and replant each division. One note of caution: spurge stems, when cut or bruised, exude a milky sap that can be irritating to skin and especially to the eyes. So when you're pruning or deadheading, protect your hands with rubber gloves, and either wear goggles or be careful not to get spurge juice anywhere near your eyes.

Question: When and how do I prune my "Bloomerang" lilac bush?

Answer: Bloomerang lilac reblooms on new growth, and light pruning and fertilizing encourages lots of that. Just after this dwarf flowering shrub blooms, Bloomerang should be lightly pruned. It can also be deadheaded, which allows the plant to divert its energy into growth instead of seed ripening.

Question: What plants can I place around my new walkway?

Answer: You have several perennial plants already that you can use in this space. There are hosta's and ferns that can be divided and used on the left side of the entry at the foundation of the house. There are coral bells, daylily's, Euphorbia, Shasta daisy and butterfly weed that can be divided from other gardens and used to create a new garden along the walkway. Of course, you can always add new and different sun-loving perennials this fall or next spring to this new garden.

Christine Ontko Fulton Gardens

The following is a list of Christi's questions and our answers.

Question: Why are my hibiscus leaves turning yellow on only one of my plants?

Answer: We answered this question above for Jean Hilt, however, in Christi's case, her one hibiscus plant has spider mites. Use the powdered sulfur solution mentioned above, on this plant.

Question: My two gardens near the arbor and side entrance are a mess. What can I do to clean it up and make it beautiful yet keep it simple to maintain?

Answer: The garden area near the arbor is too sunny for the hosta's that are there. Dig up the hosta's and transplant them in a shadier spot under the arbor. Use this area to expand your vegetable garden. The existing garden between the side entrance and the arbor can be re-designed to reflect health and harmony, which is what you're trying to promote at your retreat. We would suggest you should dig out the large prickly Barberry bush and replace it with a *Dwarf Witch Hazel* shrub (used as an antiseptic, astringent, antibacterial on skin) or a *Dwarf Elderberry Bush* (Elder blossoms have been used for centuries to heal and soften skin. They are edible too!). Or, if you want to keep the garden symmetrical... you could replace it with a hydrangea, like the one you have in the opposite corner. At the other end of the garden we suggest you dig up the hosta (transplant it in a shadier area) and perhaps plant an old-fashioned rose bush, *Rosa Rugosa*, which is very fragrant and produces large rose hips (aids in repair of skin and is high in Vitamin C). In between, there are several healing plants that would work for this area, adding color and fragrance, too. The following is a list, along with their healing uses:

Calendula-Extracts from the golden petals of this flower soothe the skin, reduce inflammation, and heal burns, sunburns, acne, eczema, and skin abrasions.

German Chamomile- Chamomile is a calming and healing herb that can be used for both skin and hair and tea.

Lavender (which you already have)- shown to help speed the healing of cuts, burns, and abrasions. Also used in many cosmetics and lotions.

Echinacea- Medicinal purposes for colds and flu but also for healing skin

Comfrey- Used as a toner or in creams and lotions. Growing tip: Comfrey can be a bit of a pest in the garden due to its tendency to self-seed. Fortunately there is a sterile variety available called Bocking 14. NOTE:

Comfrey should not be ingested. It is toxic to the liver.

Thyme- Recent studies have shown that Thyme is more effective at clearing acne than over the counter treatments using Benzoyl Peroxide. Also, all thymes are edible. Lemon Thyme would add color and fragrance.

Yarrow- An infusion of the leaves and flowers can be used as an astringent toner, helping remove oil, improve skin tone, and reduce inflammation.

Sage- Helps to cleanse oily skin, you can also use it as a hair rinse. Garden sage is edible, also.

Other plants that would be nice in containers (because they are either invasive or not hardy) include:

Lemon Balm- Use an infusion of the leaves as a toner or for use in creams and lotions. It is also edible.

Aloe- The gel inside its leaves can be used to calm and repair skin damaged by sun and heat as well as reduce inflammation.

Peppermint- Mint is a stimulator of the mind and body. It encourages circulation to the skin. It cleanses and freshens the air.

An added feature that would pull the theme of this garden together and educate your guests at the same time, is to have plant markers identifying each plant. You might even want to include their uses.

Question: Why are the newer leaves on my hydrangea yellowing?

Answer: Bigleaf hydrangea is susceptible to iron chlorosis. Because, iron becomes less available as pH increases, iron chlorosis is most likely to be found on plants growing on high pH soil like we have here on the Island. Lowering soil pH through application of aluminum sulfate or mulching with acid organic materials like pine bark is a long-term solution for iron chlorosis.

Question: How and when do I prune my Spirea bush?

Answer: Most flowering shrubs, including spireas can be pruned after flowering to reduce height and maintain the desired shape. Spireas can be severely pruned and will grow and flower again.

Question: The old vines of my wisteria look dead. Are they? What should I do about it?

Answer: Yes, the old vines are dead that are on top of the arbor. It would be best to trim them all off, however that would be a very difficult and labor intensive job. You can leave them and allow the new growth to grow over them and consider the old vines as “part of the arbor structure”.

Question: Behind the deck I have a struggling Barberry and mint I have planted in the ground. Any suggestions for this area?

Answer: You may want to consider digging up what you have there. One, because it is a partially shady area and the sun loving plants are struggling and two because mints are invasive. You expressed interest in having a lot of mint, but you may regret later having planted such an invasive plant in the ground as opposed to keeping it in a pot or several pots. An option would be to plant *Lady's Mantle*, a chartreuse flowering, partial shade loving plant (also found to firm the skin and decrease the size of pores). Its scalloped leaves catch rain or dewdrops, making them look dusted with jewels.



USE THIS FORM FOR HOME GROUNDS AND GARDENS

Visit our website to download a copy of the Sampling Instructions sheet which includes a description of routine, and optional soil tests offered. Send your sample(s), completed submission form and payment to the address listed above. Enclose check payable to UMass for \$10 for each sample plus additional fees for optional tests requested below.

Main contact:	Send copy to:	Method of receiving results <input type="checkbox"/> US Mail (please include \$2 for postage & handling) <input type="checkbox"/> E-mail
Name:	Name:	
Business Name:	Business Name:	
Street Address:	Street Address:	
City, State, and Zip	City, State, and Zip	
Phone:	Phone:	
E-mail address:	E-mail address:	

LAB # (Leave blank)	Sample ID (You create this)	Approx. area represented by sample (sq ft. or acres)	Crop Code, limit of 3 (See reverse side of this form)	Routine analysis (\$10.00)	Organic matter (\$5.00)	Soluble salts (\$5.00)	Nitrate (\$5.00)
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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				<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Office Use Only	
Received	Due
Check#	PO#
Cash	

Order Total \$ _____

Crop Codes

Lime and nutrient recommendations are provided on your test report specifically for the crop code(s) you identify on your soil sample submission form and are based on the analytical results for your sample. Crop Codes for home grounds and gardens are listed below. Select the crop code that best describes your management objectives.

Home Lawns

Description	Crop Code
Lawn-Establishment.....	HA1
Lawn-Maintenance	HA2

Home Gardens, Trees and Shrubs

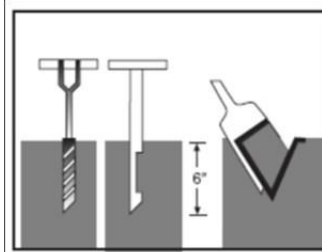
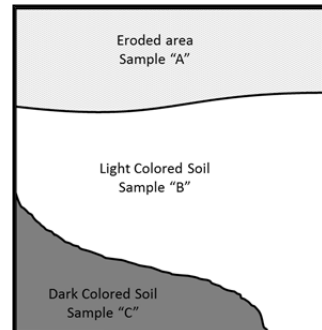
Description	Crop Code
Flowers, Roses, & Herbs.....	HB3E
Home Vegetable Garden (mixed).....	HB1
Home Blueberries-Establishment.....	HD1E
Home Blueberries-Maintenance.....	HD1M
Home Brambles-Establishment.....	HD2E
Home Brambles-Maintenance.....	HD2M
Home Strawberries-Establishment.....	HD3E
Home Strawberries-Maintenance.....	HD3M
Home Grapes, American Varieties-Establishment.....	HD4E
Home Grapes, American Varieties-Maintenance.....	HD4M
Home Grapes, European Varieties-Establishment.....	HD5E
Home Grapes, European Varieties-Maintenance.....	HD5M
Deciduous Trees, Shrubs & Vines-Establishment.....	HC1E
Deciduous Trees, Shrubs & Vines-Maintenance.....	HC1M
Needleleaf Trees & Shrubs-Establishment.....	HC2E
Needleleaf Trees & Shrubs-Maintenance.....	HC2M
Acid-loving Trees, Shrubs, & Groundcover-Establishment.....	HC3E
Acid-loving Trees, Shrubs, & Groundcover –Maintenance.....	HC3M



Soil Sampling Instructions

The most critical step in soil testing is collecting the sample. It is important that you take the necessary steps to obtain a representative sample; a poor sample could result in erroneous recommendations.

The first step is to determine the area that will be represented by the sample. Soil physical appearance, texture, color, slope, drainage, and past management should be similar throughout the area. It may be helpful to draw a map of the property and identify areas where you will collect samples. Using a clean bucket and a spade, auger, or sampling tube collect 12 or more subsamples to a



depth of six to eight inches (four to six inches for turf) from random spots within the defined area. Avoid sampling field or plot edges and other non-representative areas. Avoid sampling when the soil is very wet or within six to eight weeks after a lime or fertilizer application.

Next, break up any lumps or clods of soil, remove stones, roots, and debris, and thoroughly mix subsamples in the bucket. Once the sample is thoroughly mixed, scoop out approximately **one cup** of soil and spread on a clean sheet of paper to air-dry. A fan set on low will help speed the drying; do not apply heat. **Do not submit wet soil samples to the lab.**

Place approximately **one cup** of your dry sample in a plastic zip-lock bag. Label each zip-lock bag with your sample ID (you create this: limit of 5 characters) and complete the submission form.

Complete all information on the sample submission form (found on our website). Provide your contact information, including a phone number and email address, under "Main contact." If you would like a copy of your results sent to anyone else, include their contact

information under "Send copy to." Enter your Sample ID using the same five characters you labeled your samples with. Please include the approximate area represented by each sample. This information is useful to the lab and will be reported with your results. A rough approximation is adequate (i.e., +/- 1000 square feet for turf or +/- one acre for row crops).

Be sure to specify a Crop Code for each sample; without a Crop Code, the lab cannot provide lime and nutrient recommendations. Crop codes are listed on the second page of the submission forms. Finally select any optional tests you would like in addition to routine soil analysis. A brief description of these is provided below.

Send your sample(s), completed submission form and payment to the address listed on the front. Enclose check payable to UMass with your order. Please include \$2 for postage and handling if you would like your results sent by US Mail.

Soil Test Descriptions & Fees

Routine Soil Analysis

Standard fertility test: \$10.00

Includes pH, acidity, Modified Morgan extractable nutrients (P, K, Ca, Mg, Fe, Mn, Zn, Cu, B), lead, and aluminum, cation exchange capacity, and percent base saturation. Recommendations for nutrient and pH adjustment are included with results.

Optional Additional Soil Analysis

Soil organic matter: \$5.00

Measurement of soil organic matter by loss on ignition at 360° C. This measure is useful for evaluating soil quality and nutrient supplying capacity. A measure of soil organic matter is also required to determine the effective rate for certain herbicides.

Soluble salts: \$5.00

Measure of electrical conductivity of a 1:2 soil:water extract. This test is used to determine if salinity levels are high enough to limit plant growth. Sources of soluble salts in Northeastern soils include fertilizers, animal manure, compost, runoff from surfaces treated with de-icing salts, and poor quality irrigation water.

Soil nitrate: \$5.00

Measurement of nitrate nitrogen (NO₃-N) using an ion specific electrode. Due to the inherent variability of soil NO₃-N in our climate, these results are not directly used to make nutrient recommendations. However, under certain conditions this test may provide useful information for nutrient management.

