In-Depth Interviews with Organic Farmers/Gardeners on Vashon

Michael Laurie, October 20, 2017

The Ultimate Goal of the Interviews

We have been researching and educating on the risks of toxic pesticides and safe alternatives for a number of years. We have found that one of our products is key to our educational efforts: our "Green Garden Products and Methods That Really Work". It is, just like the name says, a guide to the best green products for a number of garden pests and diseases. Not only are they green, but they really work. We have determined which ones really work by three methods. First, we have used them in our large home garden or in our clients' gardens. Second, we have seen which products get the best reviews on Amazon.com. Third, we have learned through interviews which products and methods work best for organic gardeners and farmers on Vashon.

We have been using the "Green Garden Products and Methods That Really Work" in our educational efforts with community organizations, tabling at events and the farmers' market, in the schools, with retailers, and to guide the writing of articles.

We believe that providing customized versions of this guide to retailers will help them quickly recommend green alternatives to shoppers.

The interviews we carried out this year were the third set of interviews we completed. We also carried out similar interviews in 2006 and in 2014.

The Questions Asked in 2017

- What green gardening products or methods do you use that you know work well to address problems with
 - 1. moss -
 - 2. animals
 - 3. disease
 - 4. insects
 - 5. non-insect pests (slugs)
 - 6. weeds
- What new things have you done that are working well that maybe others may not know about?
- What are areas where you have problems that are not totally solved?

- Which companies or suppliers do you think are great?
- Which supposed green solutions have not worked so well for you?
- How much of your control is based on things like building healthy soil, compost, mulch, diversity of plants, cover crops, rotating crops in location and time, and more?
- Which plants have you found to be easier to grow around here and which are more challenging?
- What do you think about a ban on pesticide sales on Vashon, ornamentals or everything?

Organic Farmers/Gardeners Interviewed

- 1. Ken Miller, a long time organic gardener and biochar expert.
- 2. **Jen Keller** An organic farmer; Pacific Crest Farm
- 3. **Lisa Hasselman** An organic farmer, Forest Garden Farm
- 4. **Linda Lotus** long time organic gardener and farmer
- 5. **Diane Emerson** long time organic gardener, Emerson Gardening Services
- 6. Michelle Crawford Long time organic farmer and plant starts grower, Pacific Potager
- 7. Mary Robinson Long time organic farmer
- 8. **Rob Peterson** long time organic farmer, Plum Forest Farm
- 9. **Hedy Anderson** Part time farmer for 11 years, Shoulder to Shoulder Farm Collective

Responses Given

When a number is given before the response, it indicates the number of people interviewed who included that answer in the interview.

What green gardening products or methods do you use that you know work well to address problems with:

Moss

- 2: Baking soda on or peels it off by hand or with a rake.
- 4: Sweep/carefully scrape off roof only
- Their roof cleaner claims moss does not hurt roof. She thinks you might hurt roof more by attempts to clean moss off.
- o Used to use Moss-off on roof but now there is no tree shading roof so no moss

Animals

- Deer
 - 9: fencing, Outside fence put protective metal cages around plants.
 - 2: Let people hunt deer.

Deer repellants including Deer Scram – you sprinkle it on ground and it lasts 4 – 6 weeks. Also tubes of garlic oil that you hang on plants and they are supposed to work

Racoons

4: Use electric wire or fence or net when food raccoons like is ripe, or to protect chickens.

2: live traps and kills

Have a Dog.

Sleep outside when key plants are ripening.

Raccoons dig in beds looking for worms, so don't water late in day which brings worms to surface and attracts racoons.

Worm bins with heavy lids.

Lock chickens in at night.

Shot one.

Wrap trees with linoleum

Rodents

4 people used traps, either electrocution, snap, live trap, or a homemade system with a ramp up to a bucket of water with peanut butter on lid floating in water. Rodents fall in and drown.

2: reduce and remove food and habitat near house; Combined several compost piles and made one pile. Stopped feeding birds.

Well-sealed compost/worm bins

Keep seed and feed in rodent proof room

Pellet rifle

Keep Cats

Sonic Repeller in house – you need several.

Organic approved Agrid rat pesticide

D-CON

o Birds

7: Bird netting.

Birds don't eat the thornless blackberries which ripen later in the season and she thinks this is because they are so big they are hard for birds to handle, plus there are so many other Himalayan blackberries available then.

Disease

- 2: Try to choose things that suit the climate and the spot
- 2: Crop rotation
- 2: Good air circulation
- 2: Yank and burn diseased plants: pull and replant
- Plant tea made from comfrey, nettles, and horsetail
- White rot in alliums eliminate plants
- Drip irrigation limits disease.
- Prune foliage on some plants like tomatoes

- Club root don't know solution
- o Verticillium wilt moved plants, get them out of the greenhouse, rotate plants
- Rust, powdery mildew. They use crop rotation, space plants to get enough air flow, and when plants are hit remove them to a compost pile farther away where they throw diseased plants. Occasionally spray with neem oil – seems to work.
- Downy mildew in basil, tried wider spacing and varieties that are less susceptible and it has worked.
- Run chickens in blueberries in winter and he thinks that helps with mummy berry, as does Weed barrier under blueberries.
- Had garlic disease a few years ago. But started with new disease free seed in new spots and it is working now.

Insects

- 5: Aphids look for them and hose down or squish; have used cayenne mixture on aphids but water is just as good, or soapy water. Also neem oil, trap plants like fava, and diatomaceous earth for aphids
- 4: Remay, floating row cover for young brassicas, also helps with flea beetles, cabbage loopers and cabbage maggots. Carrot rust fly – grow carrots and parsnips under remay
- 2: Remove insects by hand.
- Cabbage worms, capture and knock off.
- o Compost tea from nettles, comfrey, and horsetail helps with all kinds of insects
- Sanitation is a primary method of control. This year picked wormy apples and either ate or put in bucket of soapy water to kill worms.
- Plums Put fallen plums in soapy water
- Try to put chickens with plants to hopefully get larvae
- Trying to learn insect lifecycles
- Plum tree 1 had leaf miner and she sprayed it with neem oil
- Flea beetles, controlled by flame weeder. As soon as flea beetle damage was seen on mustard she flame weeded paths and eventually no more flea beetles.
- Allow deer access to fallen apples to control apple maggot.
- Encourage birds and beneficial insects.
- Spotted wing drosophila, not sure what to do.
- Cabbage moth –sometimes kids collect them with nets.
- Wasps sometimes build nests and they try to knock them down. One person is very allergic to wasps and he uses a toxic spray. They make use of Apis, a homeopathic medicine that they take if bitten to reduce and stop body from getting a bad reaction and it works very well.
- Ants in planting areas but diatomaceous earth works well.

Slugs

- 5: Hand pick and throw in the forest, drop in soapy water
- 2: Snakes eat slugs. Encourage them

- o 2: Sluggo.
- Biochar on the soil surface to stop slugs.
- Chickens
- Ducks
- Beer traps early in the season
- o Starts seeds in a cold frame or heated area and then slug damage is not as harmful
- Encourage other natural predators like ground beetles and carnivorous slugs. Ground beetles like mulch. Let some carnivorous slugs survive - they are the ones with the stripes.
- Put copper tape around raised beds, pots, and others.
- Put down boards or plastic plant cells they hide under them; pick up during the day and get slugs.

Weeds

- 7: Dig them out, hand weed, pull before they flower
- o 4: Mulch.
- 4: Flame weeds, especially when weeds are small
- 4: Landscape fabric on walkways, or plant into it, but pull it up for winter because voles come. Move it around. Clean and flip the landscape fabric over.
- o 2: Eat some weeds like miner's lettuce, lambs quarters, dandelions, and others.
- 2: Weed whack or cut down the weeds outside the planting beds, and along edges
- 2: Cover crops
- Occultation tarps, silage tarps black on one side and white on other side. Place white side down and black side up after tilling. Best to water first and then lay tarp. Then wait 2 3 weeks, weeds germinate and then suffocate.

What new things have you done that are working well that maybe others may not know about?

- Compost Tea: Put comfrey leaves, nettle, and horsetail in a barrel and weighs them down. Then cover the barrel and after a few months get dark liquid fertilizer out the bottom to dilute and use.
- Makes biochar from blackberries and wood waste. Then put the biochar in the compost pile.
- Food for beneficial Microbes: formula is made up of 4 parts biochar, 1 part azomite rock dust, 1 part worm castings and ½ part of flour.
- Silage tarps real game changer that works well.

- Tiller small tiller tills 2 3", helps with better germination
- Flame weeder
- Sawtooth shovel for blackberry roots.
- Deer Scram great and it lasts a long time
- Use Bio life organic fertilizer in soilless mix for starting seeds
- Linoleum wrapped around trees to keep out raccoons
- They farm collectively. Several families farm 1 acre together. About 4 hours/week. Share harvest and work. They have a few CSA subscribers but most of the food goes to their families. They each pay out \$400 \$500/year. Work Feb. Oct. but harvest year-round. Provide most of veggies for their families. This year they started the idea of rotating the manager each month and it is working well.

What are areas where you have problems that are not totally solved?

- o 3: Weeds, nothing is totally solved
- 2: Aphids He should pull plants sooner at the end of the year.
- 2: Apple maggot -heard about big bag of floating row cover type cover for whole tree sold as kale protector – wants to try it.
- Soil fertility learning the different soil conditions that different plants prefer.
- Fertilizer applications not sure of best rates
- Worms in fruit
- Deer because they eat plants outside fence. Need more deer proof plants
- Tree and vine roots that suck nutrients and water which makes it hard for other things to compete
- Shade from trees.
- Spotted wing drosophila is problem and hopes that biodiversity will eventually do it in.
- They had a problem for 10 years in getting carrot seeds to germinate. What finally worked was to plant them in good soil that is wet. Plant in 1" divots and cover soil. Don't water until seeds sprout up and that has worked.

Which companies or suppliers do you think are great?

- 2: Johnnies seeds is good because they often have innovations before others.
- o 2: Peaceful Valley soil amendments
- 2: Country Store on Vashon

- 2: Down to Earth fertilizers
- A.M. Leonard for tools and supplies
- Concentrates Northwest in Portland for soil amendments, good prices.
- Cow manure from Smith Brothers because it does not have a lot of weed seeds like horse manure.
- Dripworks for irrigation equipment
- Dubois Bird netting
- Fedco organic and heirloom seeds
- Gary Klein Black Lake Organics
- Greenhouse mega-store
- Horse manure from on-island people
- MConky's Staples, ground covers
- Premier One Electric net
- Steubers good landscape cloth
- Territorial
- VIGA (Vashon Island Grower's Association) Participate in bulk order for cover crops

Which supposed green solutions have not worked so well for you?

- o 3: Sluggo
- 2: Red sticky balls for apple maggots kill too many other insects and because it was too much work
- Beer traps for slugs no great success
- Coffee grounds around carrots didn't stop insects
- Diatomaceous earth did not stop insects well
- Neem oil not great success
- Rodent control green options did not work well
- Solarization with clear plastic because tried to do it in areas without enough sun, in the forest.
- Used copper spray to prevent blight but stopped for ethical reasons

How much of your control is based on things like building healthy soil, compost, mulch, diversity of plants, cover crops, rotating crops in location and time, and more?

- 5: Building healthy soil is the core of their approach. Builds soil through adding rock dust, biochar, wood chip mulch, compost, and even Mt. St. Helens ash. They are "soil farmers that is the heart of it all" for them. 2 farmers spend a lot of time on creating really good compost with animal manures and crop waste. Native forest got a lot of nutrients from salmon so he puts a lot of kelp and sea products into the garden. Mostly the whole thing for him is soil, mulch, diversity
- o 3: All of above is key to what several organic farmers do to avoid pests and disease.
- Cover crops including vetch/rye/clover.

- o 50% of the effort is this. Rest of time spent weeding
- Having a very balanced system is key. I was getting manure that was heated really high in compost and I think it killed most of the life in it.

Which plants have you found to be easier to grow around here?

- 8: salad greens, Komatsuna, an Asian green was specifically mentioned
- 3: beans.
- 3: berries.
- 3: kale.
- 3: lettuce
- 3: peas.
- 2: chard
- 2: onions,
- 2: Peppers in greenhouse or hoop house
- 2: potatoes,
- 2: tomatoes in ground
- 2: tomatoes in hoop house

Angelica

Beets

Blueberries

Brassicas

Broccoli

Cabbage

Calendula

Carrots

Celeriac

Cucumbers

Cut flowers

Fennel

Garlic

Mustards

Nasturtiums

Native plants

Oca

Sweet woodruff

Winter and summer squash

Zucchini

What do you think about a ban on pesticide sales on Vashon, ornamentals or everything?

All 9 people interviewed: Great idea because pesticides are not needed and they are harmful. Time for a ban on glyphosate, 2, 4-D, and neonics. That would go a long way to helping

protect our water, salmon, pets, children, future, and us. We need to understand the microbes in the soil.

Lessons Learned for Garden Green

Many of the answers were expected. But some provided new insights into green products and methods that we will research further, or immediately adopt in our information.

Research further:

- 1. Raccoons dig in beds looking for worms, so don't water late in day which brings worms to surface and attracts raccoons
- 2. Wrap linoleum around trees to protect from raccoons
- 3. Homemade system for rodents with a ramp up to a bucket of water with peanut butter on lid floating in water. Rodents fall in and drown.
- 4. Organic approved Agrid rat pesticide
- 5. Birds don't eat the thornless blackberries which ripen later in the season. This may be because they are so big they are hard for birds to handle, plus there are so many other Himalayan blackberries available then.
- 6. Spray a tea made from comfrey, nettles, and horsetail to reduce disease and insects
- 7. 'Trap plants' for aphids. One mentioned is fava bean
- 8. For people allergic to bee stings, use Apis, a homeopathic medicine that they take if bitten to reduce and stop body from getting a bad reaction and it works very well.
- 9. Biochar on soil surface to stop slugs
- 10. Starts seeds in a cold frame or heated area and then slug damage is not as harmful
- 11. Starts seeds in a cold frame or heated area and then slug damage is not as harmful
- 12. Research the following suppliers:
 - o Johnnies seeds is good because they often have innovations before others.
 - Peaceful Valley soil amendments
 - Cow manure from Smith Brothers because it does not have a lot of weed seeds like horse manure.
 - Dubois Bird netting
 - Fedco organic and heirloom seeds
 - Gary Klein Black Lake Organics
 - Greenhouse mega-store
 - MConky's Staples, ground covers
 - Premier One Electric net
 - Steubers good landscape cloth

- 13. Research Komatsuna, an Asian green highly recommended
- 14. Every person interviewed supported a ban on the key toxic pesticides used on Vashon Island. This is encouraging, and warrants more effort.

Immediately Adopt in Our Handouts and Presentations:

- 1. To reduce rodents: Combine several compost piles and make one pile.
- 2. Keep seed and feed in rodent proof room
- 3. To prevent slug damage: Start seeds in a cold frame or heated area, rather than outside in the soil
- 4. Put down plastic plant cells slugs like to hide under them even better than boards; pick up during the day
- 5. Food for beneficial Microbes in the soil: formula is made up of 4 parts biochar, 1 part azomite rock dust, 1 part worm castings and ½ part of flour.
- 6. For weeds, use occultation tarps, aka silage tarps black on one side and white on other side. Place white side down and black side up after tilling. Best to water first and then lay tarp. Then wait 2 3 weeks, weeds germinate and then suffocate. "A real game changer that works well."
- 7. Use Bio life organic fertilizer in soilless mix for starting seeds. The beneficial microbes encourage seed sprouting and root growth.
- 8. Cow manure from Smith Brothers because it does not have a lot of weed seeds like horse manure does.
- 9. Focus on good Soil, mulch, and diversity as the keys to healthy plants without the need for pesticides