### Seasonal APPLE Calendar

## Jan-Feb/Dormant Season

- Visit trees as often as you can. Once a week should do. You are looking for Vole, Rabbit, and Deer damage. If you see Vole damage at the base of the tree, make sure to get guards put on and stomp down the snow around the base of the tree so as to destroy their tunnels for at least a little while.
- Start visualizing how you will be pruning your trees. Tie ribbons on the branches you think you will be removing. This will buy you some time to be sure that's the one your pruning off. After a few times, your 'pruning eye' will be able to take over for you and it will come so much easier when the time is right to prune, which is after the danger of below zero weather. Usually the last half of Feb. your pretty safe to begin. Take note that if you have many trees to prune and would otherwise run out of time, you may begin well before below zero weather is over. Begin with the more mature trees first, save the younger trees for last.

#### **March/Dormant Season**

Start pruning if you haven't done so yet. A strong frame of scaffolding branches is what we're after here. You want as much sunlight as possible to reach the inside the framework of the tree. When you accomplish this, then you will have automatically increased the airflow (drying breezes)to go thru the tree. When pruning you will begin to see things like diseased and dead wood. Your eyes will lock right on these things with time and you will be able to identify quickly what the problems are that you WILL run into. Don't fuss too much over cutting the wrong branch, trust me a year from now it won't make a bit of difference.

 Dispose of diseased wood and any mummified fruit. Most of the clean prunings can just get cut up into little pieces and left to be recycled under the tree. Bigger limbs can be chipped up and used under the tree to decompose over time.

## April

- Things are really going to start rolling along now so pay attention to whats going on out there ok.
- You may have to consider spraying a dormant oil or unadulterated NEEM on the trunks and branches to smother out any over wintering eggs from pest insects. I don't usually do this myself, however many find that they have to. UPDATE: As of 2021, I have been spraying Neem as a dormant oil.

- If you hadn't completed composting from last fall, get it done now.
- You will also consider planting trees at the end of the month or first part of May to get them growing and established before the next dormant season comes about.

### May

- Begin to train limbs of younger trees to increase crotch angles. This will
  encourage fruit buds and much stronger branches to support the crop load in the
  future. Do this by placing limb spreaders in the tree to brace the limb away from
  the trunk
- Tent Caterpillars. Remove the nests when you see them, and be sure to add Bt (Bacillus thuringiensis)to the spray tank.
- Remove tree guards

#### **Bud-Break**

A fairy dusting of Boron every few years in the orchard.

#### Quarter-inch Green

The following is a portion of a recipe for a more holistic spray mixture founded by Michael Phillips, a holistic orchardist who happens to be right up most folk's alley. It is fairly simple, yet very effective so long as you are willing to allow a more natural setting which is most beneficial.

Spray Recipe for NEEM and Liquid Fish per gallon of water

- -1.25 TBSP. Neem
- -1/2 tsp. Natural dish soap
- -2.5 ounces liquid fish (Schaffers is what we use)

If adding Effective Microbes- per gallon

- -1.5 ounces Effective Microbes
- -1 ounce Blackstrap Molasses

A Seaweed Extract is part of this recipe and would be inculded for an added effect. We can provide smaller quantities of this for you, fitting to your application without you having to purchase a whole box of it.

- The <u>First</u> spray tank with liquid fish (Schaffers), NEEM Oil not the Hydrophobic Neem from the local garden center (we carry the good stuff), and if you have access to, then mix in Effective Microbes w/ molasses. This mix will wake the beneficial fungi and smother out foliage eating pests in their egg stage. If no Effective Microbes, don't worry none, do the Liquid fish and NEEM at the least. When I first started this, I had to work my way into this to try it.
- Organic fertilizer will go around the dripline of the trees

## Pink Stage

- A <u>Second</u> spray tank with (same as above), to be used on the newly formed leaves that will be unfurling at this point. Any thing left on the ground from the previous year, like leaves that are still present will get sprayed also to help them decompose. We don't want scab infested leaves to be laying around.
- Any evidence of bud moth larvae on unfurling leaves, leaf rollers, add the Bt to the spray tank.
- If you have used Effective Microbes/Moleasses, you have protected the leaves from any early Apple Scab to this point, if you are following along here.

#### Bloom

 Enjoy this beautiful time of year, as there is no turning back now. One thing to note is Fireblight infections can require a spray during this time. For a smaller amount of spray, a product called Revitalize can be tried, to protect surfaces from bacterial infections.

#### Petal Fall

- A <u>Third</u> spray tank with liquid fish, NEEM, and Effective Microbes (if you have some) is sprayed on the canopy of the tree and developing baby apples. This can be done slightly early just before all the petals are all off.
- Kaolin Clay or Diatomaceous Earth is sprayed on now for Curculio problems.
   This needs to be repeated every 6 days or so for about 3 weeks. It can wash off with rain so keep that in mind.

• Watch for Fireblight infections and prune out if you can.

## **First Cover Spray**

- A <u>Forth</u> spray with liquid fish, NEEM and Effective Microbes(if you have some)
- Still going with Kaolin Clay or D. Earth here if Curculio pressure is high
- Thinning apples within 5 weeks after petal fall is what I strive for. Sometimes I don't make it.
- Include Bt or Spinosad (backyard orchard spinosad will be available as 'Captain Jack's') This is for Codling Moth

#### June

- Collect any dropped apples. If any are infected with insects like Curculio and Codling moth, they get destroyed
- The last half of June I will hang Red Sphere traps with tangletrap for the Apple Maggot Fly. These will be put on the earliest ripening varieties, moving to the mid-season ones by the end of July.
- I like to scythe the grass now and leave it lay as a mulch layer. Myself, my wife Janeen and son Mark each have our own scythes. Get them from Botan at One Scythe Revolution.
- Speaking of grass, one might start thinking of beneficial and supporting plants to plant in amongst the trees. Comfrey, Chives and the like. Albrecht's Nursery & Orchard can get you started on this...

# July

- Normally I will stop any Kaolin Clay sprays. I've been using Diatomaceous
  Earth instead of the Clay to repel Japanese Beetles. They can be a handful,
  no dought about that. Mixing Captain Jack's and Diatomaceous Earth, using
  NEEM at times. Am still wieghing out using Kaolin Clay here..
- Can alternate Captain Jack's, Bt, and NEEM for controlling moth's. Smother
  the eggs. I use NEEM primarily, and I'm not right on the money as far as
  timing goes, but if I can, I try to spray every 2 weeks now.
- Leafhoppers, these fellers can cause a ruckus with newer or younger trees primarily. I use Neem to deter and Liquid Fish to help the tree come back some and hopefully have time left for growing new terminal shoots that have been damaged.

## August

- If Apple Maggot Fly pressure is there, also 2<sup>nd</sup> generation Codling Moth, I'll be sure to use Bt or Spinosad (Captain Jack's)
- Scythe grass under the trees again, use as mulch.
- The first part of August, provided the terminal buds have set, Summer pruning of water sprouts and any major pruning can be done at this time.
   Good way to see what will allow more light in and ripen fruit nicer
- Pick up early dropped apples
- Harvest early apples
- If deer pressure is heavy in your area, meaning Bucks rubbing the trunks of the trees, then get tree guards in place early.

## Sept-Oct/Harvest

- Harvest, harvest, and harvest barrels full of apples!
- Gather up any Red Sphere Traps
- Remove limb spreaders
- Add compost in a haphazardly way. This means in a manner of lacking any obvious principle of organization.
- Tree guards should be in place

#### **Nov-Dec**

 Now half the leaves should be off the trees, I will spray NEEM and liquid fish on everything. This will help decompose leaves with scab.

Avoiding strict and timely calendar sprays would be certainly advised if you can do so. It is understood that if you only have a few trees, that losing that crop could be everything you have. Monitoring what is happening amongst the fruit trees and learning all you can about the pests and diseases in your area will help you find out where they are at their weakest.

In young fruit trees, not of age to yet bear fruit, what is most impactful to us in our orchard is Obliqued banded Leafrollers (right in the beginning of the season), aphids (especially if I have too much vegetative growth), Potato Leafhoppers (don't seem to bother our older trees much), and those doggone Japanese Beetles.

What we watch for when the trees are coming into their fruiting years and that impact the apple itself is the Plum Curculio (a weevil), Codling Moth, and the Apple Maggot Fly (stand underneath your apple tree in the first part of July and you will see them).

Aside from Fireblight, what we need to watch for is Apple Scab and Cedar Apple Rust. To know how good I am doing to combat Apple Scab, I monitor the McIntosh and the Fameuse Snow Apple trees. They both are my most susceptible to Apple Scab apples. Apple Scab Magnets they are.

Getting cultivars of apple that have a natural disease resistance built in goes a long ways in combating apple diseases. It is most difficult to have a single cure all for both insect pests and diseases, but knowledge and timeliness can also go along way for having a most successful season.

This is only the birth of your knowledge here. As you learn what you need to do for spraying, you may incorporate a product called Sea90, Seaweed Extract, Copper, and Sulfur. Hopefully you won't need Copper and Sulfur and not use these in your spray mix.

Diatomaceous Earth, when called for, can be mixed in at 3 cups per gallon of water.

Using Sea90 and Seaweed Extract, you would for sure being using the Effective Microbes and molasses.

After all, if you've come this far, you might as well keep going.

Any of the OMRI listed pesticides like Bt and Spinosad (Captain Jack's), you will follow their directions for mixing.