

Podcast 3

Small Farm Practices

Thinning mounded rows of beets in a small field at Veggies for All in Unity Maine, these beets will eventually go to the county's food bank. On the rows, there is no irrigation system, and the soil sees no pesticides or fertilizers. This is a kind of farming that is more naturally susceptible to diseases, poor harvests, or other environmental factors that may limit yield. Accepting of this, the beets are still thinned and as much harvest as possible is brought to the food bank. Another field at Colby's farm covers beets with cloth row cover and uses drip tape to water the beets, returning a slightly higher yield to Waterville's food bank. If anything, it is true that small farms are diverse: they often grow a variety of foods, and in diverse and unique methods. This podcast discusses different practices of small farms so that people new to gardening or farming can understand a sample of the diversity of the methods and practices in small farming. The particular methods that will be discussed are: no/low till methods, permaculture, and integrated pest management.

No or low till farming is when a farmer does not till their land. There are benefits to this, largely being that it limits erosion from runoff of loose soil in heavy rains or winds and that it preserves mycorrhizae, the fungus and bacteria, that can help foster a healthy plant. Drawbacks of incorporating a no till method is that it is more labor-intensive, and increases risk of fungal diseases, as well as increasing the proportion of weeds (Greentumble, 2016). Even despite these drawbacks, if you properly manage the section you choose to not till, choose appropriate crops, and develop a rich, loamy soil, no till methods can be very successful. Because of feasibility issues, farms like Colby's gardens and Veggies for All in Unity, still till the soil at least once a year.

Colby's garden does, however embrace ideas and methods of permaculture. Permaculture is a relatively new practice and demonstrates the interrelatedness of farming and life, defined by "the development of agricultural ecosystems intended to be sustainable and self-sufficient." It originates from the blend of two words "permanent" and "agriculture"(Google Dictionary, 2017). In Maine, Portland's 'Resilience Hub' works to "build resilience at the household, and community levels" at the intersection of food systems, the economy, and people through events, service, or projects (Resilience Hub, 2017). Permaculture is based on a wide-ranging foundation of ideas, but you'll often see permaculture models, gardens, or groups as integrating life and food in an interrelated, sustainable design. Colby's garden employs ideas of permaculture in the way that we practice companion planting, which is planting some plants with others that are beneficial to it, or in the way that we treat the garden as a community space, bringing people together across generations, experiences, or backgrounds.

In addition to permaculture, Colby's garden also practices methods of Integrated Pest Management, referred to as IPM. IPM is an approach to pest management that relies on a four-tiered approach of: 1) setting action thresholds, 2) monitoring and identifying the pests, 3) prevention, and 4) controlling the pest. This can take form of introducing ladybugs to eat aphids, putting up row cover, or spraying pesticides, all within consideration of the degree of infestation (EPA, 2017). For example, just after planting your lettuce, you might put a light cloth row cover over your lettuce seeds in order to prevent flea beetles or aphids from eating the leaves, making them look less appealing, and less healthy. This is a prevention measure, and if we did not take this prevention measure, then the lettuce might be susceptible to stunted growth or lack of

appeal to consumers because of their small gunshot-hole appearance. If we saw flea beetles on lettuce leaves, then we might introduce a predator of them, like ladybugs, and if that doesn't work, then we may resort to using pesticides. For every change in treatment, we would pass a threshold, setting conditions to be met to move onto the next treatment or stop treating. Prevention is, of course, optimal, but if not possible, then controlling using natural means, like introduction of ladybugs for aphids, is preferred, and then the use of non-natural means, like chemical pesticides, is acceptable if there are no other alternatives. What sets this apart from organic practices is that it includes organic prevention methods and control methods, but also allows, in extreme cases, for the use of synthetic chemicals (EPA, 2017). Colby's organic garden is organic, but uses these ideas of Integrated Pest Management to practice pest prevention and treatment. To learn more about IPM, go to COFGA's website, linked in the description of the podcast.

In the rows of beets at Veggies for All in Unity Maine, or in the rows of beets in Colby's farm, there are seen and unseen factors that support the past and ongoing existence of these beets. Seen at the immediate moment are plants and dirt, and if there happens to be row cover or irrigation on those plants and dirt. Unseen is the methodology behind the care of the beets, the past treatments to the beets, and the ways that those beets or that area has helped to make an impact not only on the environment, but also the people who benefit from the food grown. Next time you see a row of corn in a field, or a farmstand on the side of the road, think about the possible story of the methodology of its care and development, helping to inform the present existence of the corn as you see it.

Works Cited

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