Common Threats Facing Small Growers

*threats have been separated into 'complete' and 'partial' loss events. Also, see how they apply to our unique situation.

'Complete loss Events' (potential of)

Flooding

Certain areas are prone to flooding and especially with today's erratic weather events. Those in a flood plain may find themselves kayaking through their fields in worst case scenarios.

In our case:

The produce will be grown on relatively high ground where there is no risk of flooding.

Contamination

A Big reason for this style of food production is to grow produce that is free of harmful chemicals. Assuming a plot starts out free of toxins, there are still a few ways that toxins could end up in the produce. One way is chemical drift. Believe it or not, it is somewhat of a common practice to rain herbicide/pesticide down from helicopters above large monocultures. As you can imagine, the spray could very easily be taken by the wind and contaminate a neighboring vegetable plot. Another way is through contaminated soil amendments e.g., compost, manure, etc. One last way is through water. Runoff and especially flood water can carry toxins with them. Irrigation water could come from an aquifer that is contaminated with high amounts of bad things.

In our case:

Chemical drift: I don't think I have helicopter spraying neighbors, but this is something I will stay on the lookout for.

Toxins in amendments: I plan to use a lot of compost. Some will be purchased from the <u>Ann Arbor Compost Center</u> and some I will make myself from local materials. For example, when taking manure from a nearby horse farm, the horses could have eaten hay grown in a field that a new herbicide product was used on. The herbicide would be present in the manure and if not composted fully, could end up wreaking havoc on the vegetables.

Toxins from water: Again, high ground provides an advantage here and the irrigation water comes from a deep well, about 200 feet, which is a good thing.

'Partial Loss Events'

Unfortunate weather

The schedule in this line of work is almost completely determined by the weather. When to till, when to seed, when to cultivate, when to harvest. A wet spring, summer drought, or late frost can have a great impact on the growing season.

In our case:

Wet conditions in spring: This could be an issue as we're dealing with heavy soil that takes a long time to dry out. Could push back the first harvests of the year.

Drought: I have the ability to irrigate, so I'm not concerned about drought.

Late frost: I like to be on the cautious side when it comes to getting warm season crops like tomatoes and peppers in the ground. We should be OK here.

Pest and animal pressures

Pests, large and small, are no fun for the gardener. Pesticides provide an easy way to eliminate the small ones, but for obvious reasons, I won't make use of them except for BT (<u>Bacillus thuringiensis</u>). BT is a bacterium that targets caterpillars (used for cabbage and tomato worms) and is allowed under Organic regulations. I will only use BT as necessary. My main plan for dealing with pests is to provide food for a wide variety of insect and lepidoptera species by planting every 6th row with native plants. I see two ways to grow a crop successfully: Either create a sterile environment leaving only the essential elements for growth or create an environment that's diverse enough to self-regulate and maintain proper checks and balances so that no one species gets out of control. We'll be attempting the second approach. As for the larger pests like deer, rabbits, groundhogs, and moles. There is no shortage of them in the area and I plan to put up a 7-8ft fence that extends underground.

Poor management

At the end of the day, regardless of the circumstances, it's my job to get the seeds in the ground on time and harvest fast enough to fulfill the promise made.