Starting Vegetable Seeds Indoors

A few weeks ago, I spent a day with my grandfather. The economy came up in conversation and he told me much of what his family had to do to survive during the depression. Besides raising livestock and vegetables, the family harvested and sold black locust tree seed from neighbors' houses that would later be grown for windbreaks in the Midwest to help alleviate the dust bowl conditions. Additionally, they filled an unfilled niche by raising peanuts and popcorn that they traded to the local market in return for other goods.

Similarly, I have noticed local residents becoming concerned they may have to resort to similar efforts to survive the rough economy. One thing that has been especially popular is having vegetable seeds on hand in case they are not available at local stores. While having the seeds is part of the battle, knowing how to start them to get a good harvest is also especially important. An example of this is the tomato plant. If you directly planted these seeds in your garden, you most likely would not get a good harvest due to our short growing season. Garden centers traditionally start them between six to eight weeks before the average last frost. With a little investment and effort, you can start many vegetables from seed that are traditionally planted as transplants. Local garden centers carry needed supplies such as flats, soils and seed. They also often carry indoor florescent growing systems for starting seeds.

Another option is to build your own using inexpensive forty-eight inch florescent shop lights and PVC irrigation pipe or wood as a frame to suspend the lights. Research at the USU Crop Physiology Laboratory has shown that it is not necessary to use special grow lights, although fluorescents should be used in place of incandescent bulbs. Incandescent light bulbs produce too much heat that can damage plants. Even small growing systems can be made using a simple compact florescent bulb and down-turned lamp. Lights should be suspended six inches or less from the tops of the flats. It is helpful to then raise the lights as the seedlings grow.

Inexpensive timers can be used to regulate when the lights turn on or off. When seeds are still germinating, excess light is not needed. As soon as the plants start to emerge it is best to give them as much light as possible, usually anywhere from 14-18 hours a day. Systems can also be left on all the time, but for some plants like spinach and lettuce, this can promote early and undesirable flowering. Potting soil should not be allowed to dry out at all until most seed is germinated. While seeds are still germinating, a spray bottle can be used to mist the soil and avoid disrupting the seeds. After germination, some sprouts benefit from drying out between irrigations, but often daily watering is needed. Starting seeds indoors can be a fun and easy challenge. The key to success is to make sure that the plants have plenty of light and water. Contributions to this article were made by horticulture assistant, Elizabeth Braithwaite.