



Now is a fantastic time to pick up those late season vegetables for off-season availability. There are a few keys components to handling and storing vegetables, that when followed, will help to keep them fresh, often for months. Maturity at harvest time, temperatures, and humidity are important at varying levels for prolonged vegetable freshness. It is important to note that these requirements vary according to the individual needs of the veggies – one common storage area generally does not satisfy the diverse needs of all. First - a couple of don'ts: don't put fruit and vegetables together for storage and don't put any fruit or vegetables in or near an actively used garage – exhaust fumes are very bad for them. Let's talk about some of the more common vegetables and how to handle and store them.

Beets are an annual vegetable easily grown from seed in this area. They can be harvested at any time before the ground freezes and can be used during any stage of development. Very small beet roots are great when eaten fresh but most often they are used in a mature stage. If grown in an unprotected area, harvest should occur prior to the ground freezing solid and before they get to be greater than 3" in diameter. When harvested, beets and tops should be immediately separated at about 1" above the roots. If using the tops for cooking, it is best to do so within a few days as they really don't last much longer in a quality state. If storing the beet roots raw, the optimal temperature is 32 degrees with a 95% humidity level. During storage, check them periodically to make sure that the moisture level is consistently high and the beets remain firm. If any have become soft, remove and discard them. Depending on the variety, most beets will keep for about a month or so.

Carrots are a biennial plant meaning that they have one complete life cycle every two years. The edible roots are harvested during the first year of growth and at a point in development appropriate to variety specifications. In general, most carrots should not be harvested until they reach a diameter of about $\frac{3}{4}$ ". Most carrots will do very well if they are heavily mulched and kept in the ground until after the surrounding ground freezes. When taken out for harvesting, tops should be removed to within an inch above the root. Again, any tops for cooking purposes should be used within a few days of harvest. Temperatures of 32 to 40 degrees with high levels of humidity are essential for good long-term storage. The carrots can be layered in clean sand or lightly moistened moss. Under good storage conditions, carrots will keep for almost half a year.

Onions for storage should be harvested when variety

specific maturity is reached. When picked too young, they do not handle long-term storage. Immediately after harvest, onions should be air dried in a single layer in a warm, well ventilated and dry area for a couple of weeks. Laying them out on clean, dry newspaper will certainly speed this curing process along. When the outside layers have become dry and papery, they are ready for dry, long term storage at 32 to 50 degrees. Any storage containers must be well ventilated – like clean mesh bags. They will definitely keep for months when properly handled. Check often for symptoms of rot or soft tissue – discard anything that is of questionable quality.

Parsnips have the best flavor when harvested after a couple of weeks of very cold, but not freezing temperatures, as the low temps will induce carbohydrates to turn into sugars. This makes the parsnips much sweeter. They can also be stored in the ground, throughout the winter, when mulched well with a few inches of soil. The key to success with this method is to harvest in the spring before the tops re-sprout.

Potatoes can be harvested when very young for immediate use but at that young stage do not store well for long periods of time. If left to mature to varietal specifications, the potatoes will enter a natural dormancy and will keep very well under normal, cool household conditions for a few weeks. When planning a prolonged storage, cure the unwashed potatoes for 10 to 14 days in a dark room at temperatures between 45 and 60 degrees. This curing, in addition to providing optimum long term storage conditions of 35 to 40 degrees with high humidity, will help to keep the potatoes for months. It is important to monitor temperatures, as anything lower than 35 degrees may induce unpleasant sweetness (carbohydrates turning into sugars, again) and will cause internal damage. Higher temperatures shorten the storage life. If exposed to sun, a green coloration will occur signaling a toxic tannin development and should not be eaten. As with all root crops, potatoes should be handled with care as they bruise easily.

Sweet potatoes, as a crop, are grown much further south but can be purchased almost anywhere. When cured properly – air dried and then placed in an area with high humidity and high (85 degrees) temperatures for a couple of weeks – they can then be successfully stored for a few weeks at 55 to 60 degrees. Sweet potatoes bruise very easily and should be checked frequently throughout storage.

Turnips are actually best stored in outdoor areas. They kind of smell as they age and that smell can permeate other food products. They can be covered, while in the garden soil, with straw mulch and harvested as needed through early winter. A bit of cold will sweeten the flavor of these fantastic roots.

Winter squash like acorn, butternut, delicate, Hubbard, and Turk's turban are some of the varieties generally found in this area. For the best quality, harvest should have taken place before the first killing frost. When allowed to mature fully, quality of flavor improves and storage length is greatly increased. Most winter squash (except acorn – which becomes stringy) keep better when cured prior to storage. Curing winter squash is done by exposing the harvested produce to 10 to 20 days of room temperature conditions. This allows the rinds and any imperfections to dry and heal over. Following the curing process squash should be stored in a dry area at 45 to 50 degrees. They will keep for months under cool conditions.

Historically it has been important to human survival, especially in the northern areas, to have enough food “set by” to see a family through an entire year. Pre-car travel was very time consuming and difficult, making shopping a rare occurrence not a daily or weekly ritual - raising most of the food for home consumption was the norm, not a past-time. Well-constructed root cellars provided much needed long-term, non-electric storage for home produce and were an important part of every home. In today's world, it is much easier to find a store with fresh provisions, within thirty minutes of anywhere, than it is to find someone who raises most of their own food. Things certainly do change and we no longer have to have root cellars to get through the non-growing seasons of the year. But, whether we grow or store the vegetables ourselves or purchase them from a quality supplier, it is nice to be able to stay inside on those wicked cold winter days and have immediate access to locally grown food.