One of the most important things to keep in mind when harvesting sweetpotatoes is that the roots of the sweetpotato are alive. The roots require sufficient oxygen to survive, even in storage. Changes in the environment, such as temperature and relative humidity, will affect the shelf life of the sweetpotato. Keeping these facts in mind will help you make good management decisions for your sweetpotato crop.

Sweetpotatoes are usually stored in nonrefrigerated commercial or farm warehouses. This method of storing offers the primary advantage of orderly marketing several months after harvesting. After they are harvested, sweetpotatoes should be cured. Do not wash sweetpotatoes before curing or storing them. Curing promotes the healing of cuts and bruises that occur during harvesting and handling. It also protects the roots from many storage diseases and excessive shrinkage while starches are being converted to sugars and other flavor components. Curing the roots increases the post-harvest life of the sweetpotato. To cure roots, hold them at 85 degrees F with 90 to 95 percent relative humidity (RH) for 4 to 7 days.

After curing, reduce the storage temperature to 55 to 60 degrees F at 80 to 85 percent RH. Most properly cured sweetpotato cultivars will keep satisfactorily for 4 to 7 months at this temperature and RH. Due to the sweetpotato’s tropical origin, roots will incur chilling injury if held at temperatures below 54 degrees F. Short periods at temperatures as low as 50 degrees F need not cause alarm, but after a few days at 50 degrees F or shorter periods at lower temperatures, sweetpotatoes may develop discoloration of the flesh, internal breakdown, off-flavors and hard core when cooked, and increased susceptibility to decay. Temperatures above 60 degrees F stimulate development of sprouts (especially at high humidity), pithiness, and internal cork (a symptom of a viral disease) when the virus is present.

Sweetpotatoes are usually stored in bulk bins or slatted crates. Palletization of crates and use of pallet boxes facilitate handling. Some of the newer storage facilities equipped for palletized handling have separate curing and storage rooms. Sweetpotatoes can be cured in palletized field boxes in a room designed to provide recommended conditions for curing. After curing, the sweetpotatoes can be carefully moved by forklift to rooms in which storage conditions are maintained continuously. Refrigeration is now used in some large sweetpotato storages to extend the marketing season into warm...
weather, when ventilation alone will not maintain low enough temperatures.

Sweetpotatoes are usually washed and graded, and sometimes waxed, before being shipped to market. Consult Extension publication ANR-680, “Sweetpotato Grader’s Guide,” for details on sorting and grading sweetpotatoes. Roots should be treated with a fungicide to reduce decay during marketing. Consumer packaging of sweetpotatoes in film bags or overwrapped trays is done mainly to aid marketing and should not be done before storage. The shelf life of washed and fungicide-treated roots in consumer packs is only 2 to 3 weeks. Weight loss of roots during marketing is much less in perforated film bags than it is in mesh bags.