

## Gardening techniques can extend growing season

ITHACA, NY — Home gardeners who aren't quite ready to end their gardening activities for the year — or do without fresh, home-grown vegetables — can expand the late growing season with some simple gardening techniques.

"Most late crops won't be as bountiful as those earlier in the season, of course, but with some care it is possible for gardeners to enjoy cool-weather vegetables as late as November and December," says Roger A. Kline, a vegetable crop specialist for Cornell Cooperative Extension. "The secret is to provide some protection for them."

Warm-weather crops can't be kept growing once the weather turns cooler, but they can be protected from an early frost and therefore can produce vegetables through the early autumn. Kline recommends covering the plants with a blanket or other thick fabric to keep the frost off them and to help keep heat from the soil around the plants.

Overhead irrigation can be used for protecting warm-weather crops such as tomatoes, squash, and cucumbers from frost. When a frost is predicted, the plants must be sprinkled continually with water, starting before dawn and continuing for two or three hours after dawn. As it freezes, the water releases heat energy that protects the plants from frost.

"Even if plants are not killed by frost, there will probably be some

tissue damage," Kline says. "It may show up as darkened lesions or pitted surfaces after the crop has been harvested. Eventually, the colder days and lack of sun will prevent the plants from gaining any new growth."

Cool-weather crops such as lettuce, spinach, broccoli, and peas can be kept growing later than warm-weather crops. Ambitious gardeners can have home-grown salads even when there is snow on the ground, if they plan ahead, according to Kline who is in the department of vegetable crops in the New York State College of Agriculture and Life Sciences at Cornell University.

Late crops should be planted by the end of July until mid-August. Don't seed them at the last minute; cool-weather crops should be well-developed by the time the first frost hits. During shorter days and cooler weather, most crops require two or more additional weeks to develop than they do when growing during warmer weather.

Carrots, leeks, and beets can be protected from frost by mulching them heavily to insulate them from cold and to retain soil heat. Lettuce, cabbage, parsley, and spinach can be kept growing under plastic tunnels that provide mini-greenhouse environments for them.

"Plastic won't protect against a heavy frost, though," Kline warns. "For insulation, they'll need to be protected with a blanket or straw

mulch, too." A grow-box, with wood sides and glass top, will keep crops growing longer, if the sides are slightly buried and the top shuts tight to prevent heat loss.

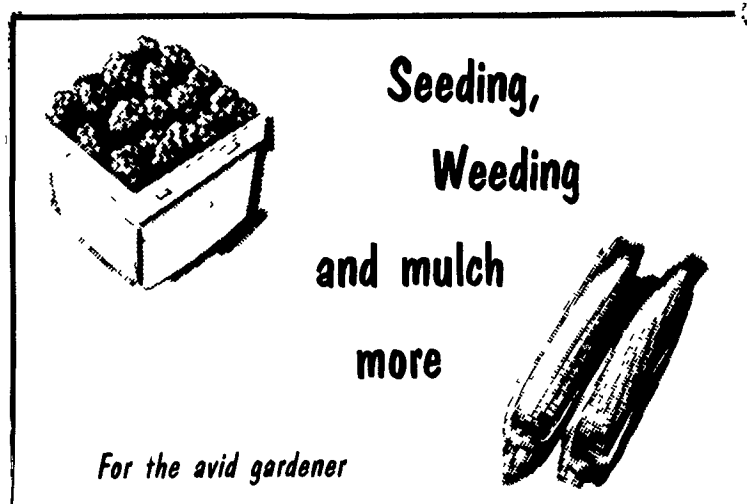
Peas, especially those that are tolerant of powdery mildew and root rot, make an excellent fall crop.

Fall is also a good time to get a head start on next year's growing season by testing the soil pH to see if lime is needed. Manures can be added and cover crops grown, but fertilizer shouldn't be added until the spring.

Try mounding the soil into hills 18 inches across and 8 inches high. In spring, these mounds will warm up and drain quicker, and be ready for planting two or more weeks ahead of the rest of the garden.

For early spring salads, try sowing spinach seed in September. Mulching the young plants has not always produced favorable results; its benefit for spinach is questionable. The spinach will be ready to eat in April or May.

Garlic, for example, develops larger bulbs when planted in fall and harvested in mid-summer, Kline says.



Seeding,  
Weeding  
and mulch  
more

For the avid gardener

What could be more pleasant on a hot summer day than relaxing in the cooling shade of an arbor or a clump of trees surrounded by colorful flowers? This enticing image is just one of the reasons why more and more gardeners are finding shade gardens desirable.

Before selecting young plants to color your shade garden, the experts at Bedding Plants, Inc., and educational group that provides information on flower and vegetable gardening, suggest that you take a moment to evaluate your growing conditions. While a large group of annuals will grow in a partially shaded area, only a few will tolerate a relatively heavy shade. Plants may have to com-

pete with the roots of the trees they will be grown under, and the soil may be very dry there also.

For the greatest success, create a high, more open shade by pruning away some of the trees' lower branches. If you have choice in flower bed location, select a spot that receives morning sun and afternoon shade. Where tree roots are a problem, seen especially under maple trees, you may want to consider slightly raised beds or gardening in flower pots plunged into the ground. When preparing the soil, add extra organic matter to overcome the dry soil problem by increasing water retention potential, and, for best results, be sure the shade garden is in reach of the garden hose.

The intensely colored, easy to grow impatiens is the flower most chosen for the shade garden. Both the fibrous and tuberous rooted begonias are also popular for shady conditions. What the coleus lacks in flower appeal it more than makes up with its multi-colored leaves in a variety of shapes, scallops and textures.

Besides these three favorites, don't overlook some of the other annuals that grow and flower in a partially shaded garden. These include monkey flower (mimulus), balsam, wishbone flower (torenia), browallia, lobelia, baby-blue-eyes, nicotiana, salvia, ageratum and forget-me-not.

## Sewing expert offers fashion update

NORRISTOWN — Marjorie Arch Burns, one of the nation's leading authorities on Home Sewing and Fashion, will present a one-day seminar on Thursday, August 23, at Strawbridge & Clothier

Auditorium, Plymouth Meeting Mall.

The seminar, sponsored by the Montgomery County Extension Service, will run from 10:30 a.m. to 4 p.m. Cost for the day is \$12 and registration is required. Lunch is not included in the fee.

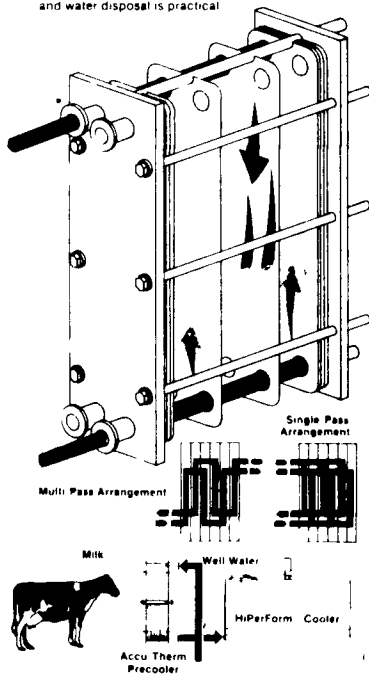
Burns has authored ten books on sewing and fitting and is considered by many to be the number one authority on sewing in America today. For further information, contact the Extension Office at 277-0574.

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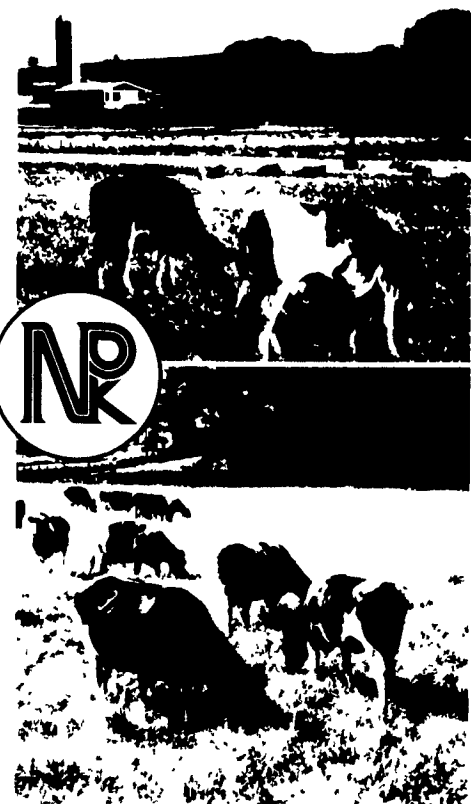
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