

Extending the Growing Season

Some of the best of the cold-hardy crops benefit from protection by frames or cloches. In the fall these include lettuce, spinach, immature overwintering European cabbages, and the leafy Asian brassicas. Very early spring plantings of peas, lettuce, carrots, beets, spinach, turnips, potatoes, and members of the cabbage family can all be advanced about a month by the use of glass. A bit later on, seed beds for leeks and annual flowers can be covered to advantage, and frames can be used during the summer on heat-loving crops such as tomatoes, peppers, and melons.

Most Americans think of a cold frame as the high-walled sort, popular in continental climates, that remain in a fixed spot in the garden. While these are good for starting flats of hardy plants or hardening off tender ones, they are not really suited to gardening year-round in a maritime climate. During a mild fall, it is important to leave cold frames holding lettuce and spring cabbages open. Light levels in November and December are quite low, and if days are warm, covered plants will put on too much weak and sappy growth. If a hard freeze comes in late December or early January, the plants will be too tender and succumb to frost, even with the covers back on. If you live in a very cold area, it is a good idea to have some old rugs or mats to place on the frame during very hard freezes. A thick hay mulch will work too. Old books on frame gardening say that most venting should happen from the top of the frame or cloche to avoid draft over the plants. Another aspect of frame growing is the importance of watering. Many frames completely exclude rain. Fall plantings are not in as much danger, since they usually have bigger root systems, and the soil is wet by the time they are covered. Almost all frames will need some form of guying, or fastening against the wind. There are many different types of frames and cloches.

Walls and Terraces

The easiest place to create a warm microclimate is a south-facing wall or terrace. Either can have an old window frame leaned against it to shelter plants. A disadvantage of walls is that after the spring equinox they lose light as the sun begins to rise and set to the north. This makes walls best for the low-growing, quick winter annuals such as corn salad, lettuce, spinach and some tender herbs such as rosemary.

Cloches

The word "cloche", which comes from the French for "bell", originally referred to the bell-shaped jars that were used as hot caps to put over tender plants early in the year to protect them from frost. The term expanded in meaning to include many different sizes and shapes of glass structures for protecting plants in a row. Other types of cloches include fiberglass cones, bottles, and corrugated fiberglass.

Caterpillars, Pods, and Pup Tents

In the early '80s, the National center for Appropriate Technology tested and publicized various types of cold frames. While many of the new cold frames are ingenious, none of them are as useful and simple as the old types.

Old Window Frames

If you have a source of old wood or aluminum window sashes, you can use them to construct frames. They are cheap, easy to put together, modular, stable when guyed, and easily vented. These frames will take crops through some of the coldest winters.

Dutch Lights

In the nineteenth century, French, and then Dutch, market gardeners evolved very practical and inexpensive modular structures for frame gardening. Except for floating row covers, they are probably the best thing around for commercial producers.

Hot Beds

A hot bed is any kind of large cold frame with a manure-filled pit under it. The manure decomposes and in the process generates heat and carbon dioxide, both useful to the plants in the bed. Horse manure is the best to use, as it provides the longest lasting, most even heat.

For further reading on frames and cloches you might consider:

- *Organic Gardening under Glass*, by George and Katy Abraham
- *Gardening Under Cover*, by William Head
- *Basic Book of Cloche and Frame Gardening*, by Wilfred Edward Shewell-Cooper

Reference: *Winter Gardening in the Maritime Northwest: Cool Season Crops for the Year-Round Gardener*, by Binda Colebrook.