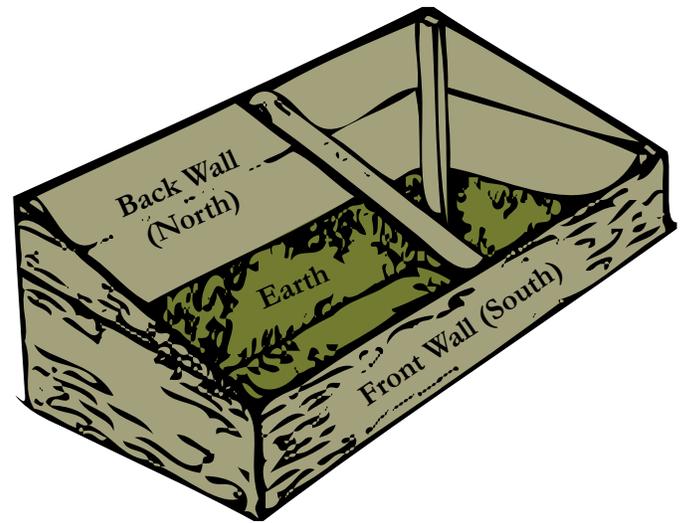




COLD FRAMES

A cold frame is a structure that acts like a small greenhouse that retains heat from the sunlight, keeps out the cold and precipitation, and allows gardeners to extend their growing season by several weeks to a few months. The box-like frame can be wood, straw bales, plastic, or any other material, so long as it is relatively airtight and can easily support the glazing material (glass window, plastic sheet, etc.)



CONSIDERATIONS

The most important thing to remember when using cold frames is the need to monitor temperature. During clear and sunny days, the inside temperature may get to be 100 degrees or more, even if it is still cold outside. Frames need ventilation to keep from cooking the plants inside. It might help to have a soil and air thermometer in place for easy access and monitoring. The frame needs to be closed in the evening to retain heat. During very cold nights, the glazing may need additional insulation in the form of hay bales, old blankets, soil banking, or bags of leaves. During winter, growth will be slowed. Water and fertilize less than normal. Use warm water, not cold hose water. Check soil moisture 1-1 1/2". Since air flow will be restricted inside the frame and there will be more chance for disease, space plants inside the frame more generously than if they were outside. Water only during the day and only when plants need it.

USES

Store pulled onions and overwinter hardier crops like dill and leeks. Store carrots, parsnips, and spinach in the ground. Overwinter semi-hardy herbs inside the

frame. Harden off seedlings inside the frame before transplanting into the garden. Set the frame over garden beds in mid-October to extend lettuces, radishes, and arugula into the winter. Use selected varieties that are tolerant of shade and are cold resistant. During the warmer months, take off the window and use wood lath or a screen over the top to harden off tender transplants or shade cool-season crops (lettuce and spinach) to prevent bolting. You can also germinate cool-season seedlings in pots or flats using this method, as the hot summer sun will keep these seeds from germinating. Start this process about two months before the first fall frost. In late fall, before the ground freezes, replace the window and set in place in your garden bed. Sow cold-hardy seeds in the soil, and allow them to cold stratify over the winter and germinate very early in the spring. These crops will make up your first harvest the following spring!

VEGETABLES FOR COLD FRAMES

Beets, Swiss chard, spinach, carrots, parsley, pars-nip, endive, lettuce, radicchio, cress, kale, kohlrabi, mizuna (mustard), radish, tatsoi, leeks, onions, mache (corn salad), arugula, Chinese cabbage, broccoli raab

HEATING METHODS

During early spring and late fall, you may need to supplement nighttime heating to prevent cold injury to plants in the frame. Try painting the north inside wall (the taller wall of the frame) white to reflect more light and heat. Use cinder blocks or bricks to retain more heat from the day and emit back into the frame at night. Place clear containers of water in the north side of the frame to collect heat and re-radiate into the frame at night.