## Greenhouses: what are they good for?

by Crystal Stinson

If you would have asked me years ago what greenhouses are used for, I would have said they are the place you go to buy bedding plants. This past year or two I have learned much more about greenhouses and their potential use in not only starting plants for spring plantings, but for planting directly into and extending the growing season.

When I went to visit Lynn Oliphant's home a couple years ago, what I saw amazed me. It was spring, sometime in early or mid- May and in his greenhouse the tomato and pepper plants were flourishing. I walked into the greenhouse and the temperature inside was warm despite the cooler temperature outside. There was no heat source other than the sun, whose heat was being trapped by the plastic outer covering and warming up the interior of the greenhouse. Lynn had started these tomatoes in January (in cold-frames set up inside the greenhouse), far earlier than I would have thought to start mine, which is in March or April.

The tomatoes were planted directly into the soil in the centre of the greenhouse, and were about 18-24 inches tall.

"By June these plants will reach the top of the greenhouse [which is 7 feet tall]" Oliphant stated.

Lynn claimed that his greenhouse, when combined with a cold-frame (an insulated box with a plastic or glass covering), 20 degrees of frost protection is possible. That means that tomatoes in May and lettuce in December was a reality that his family was enjoying. It also means that from his modest size greenhouse (12 by 24 feet), he can supply his family an entire year worth of tomatoes – plenty of tomato toast sandwiches, soup, pasta sauce, tomato juice, and canned or frozen tomatoes.

When Patrica Hanbidge came to Craik to do two workshops last fall, I learned in more detail how to set up and run a greenhouse without using harmful chemicals to control pests and weeds. Things that I came away from the workshop that will be very helpful for my own greenhouse include:

- \* The importance of light and using a grow-light when starting plants. Also how plants need to be gradually introduced to the harsh natural light outside if they have been raised in a greenhouse. The use of a transplant solution to reduce the shock of being transplanted.
- \* If tomatoes get spindly then just plant more of the stem into the ground and roots will start to grow from the stem.
- \*Soil is composed of minerals (a mix of clay, sand and silt), organic matter, water and oxygen. Soil should be deep, well drained, fertile, sandy loam is best, and organic matter should be added. Adding organic matter is the easiest way to improve the soil.

- \* It is important to check the water supply for alkalinity, hardness, pH, salts, and other trace minerals. Plants have a lower tolerance for salts than we humans do! Rainwater is best.
- \*Everybody should have a cold-frame so they can start things earlier (for fresh lettuce in March, start your plants in February).
- \* You can use a full water barrel to store heat in the greenhouse on the shoulder seasons.
- \*Cinnamon is a natural fungicide and ant deterrent.
- \*It is important to clean the greenhouse at the end of the season so that pests aren't carried over the next season.

These are just a few of the things I learned and am eager to apply to my own greenhouse, when I get around to building one. For now, I plan to take part in the community greenhouse. If you take a short walk up from of the Co-op grocery store in downtown Craik, you will see a greenhouse that is a very close replica of the greenhouse at Lynn's house. This is a hoop-style greenhouse made with materials costing about \$500, less if you can find scrap re-bar and wood for the end frames.