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EXTENSION

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The expense ledger is meant to keep track of all expenses associated with the garden. All seeds, fertilizer, chemicals and other purchases should be recorded here with their prices.

Recording the brand name, variety or company from which each item was purchased may also be helpful for future reference.

Capital expenses such as equipment do not need to be counted in the annual operating cost as a total because their cost is divided among many seasons. The total cost of the equipment can be divided over its expected lifespan and that amount can be included each year thereafter.

Example:

Purchase price of tiller: \$2,000

$$\frac{\$2,000}{20 \text{ years}} = \$100 \text{ per year}$$

After 20 years, you would not make any more entries for the tiller because it would have reached the end of its life on a financial basis even if you continue using it. Equipment that is rented must be included each year as an annual expense.

Once calculated, the total from this section, will be subtracted from the revenue section of this book.

Expenses

Date	Item	Unit Price	Total

Expenses

Date	ITAM		
	Item	Unit Price	Total

Revenue Ledger



The revenue ledger is meant to keep track of the value of the produce grown. Because your garden produce is meant to replace the produce normally purchased. We recommend you look at your local grocery or farmers market for the current retail price of the produce you would have bought otherwise.

Example:

Tomatoes harvested: 50 pounds Current local price: \$2 per pound

 $50 \ pounds \ x \ $2 = 100

The value of the tomatoes in the example is perceived to be \$100, based on local prices.

Revenue

Date	Item	Unit Price	Total

Revenue

Date	Item	Unit Price	Total

Total Revenue – Total Expenses = Total Return on Investment \$___

Garden Journal



The garden journal section should be used to record activities of this garden in as much detail as possible. This information can be used as a reference to review at the end of the season or to look back at growing conditions from previous years.

Information to include would be dates that certain crops were planted and any observations during that time. Observations may include pests, growth, rainfall and temperature.

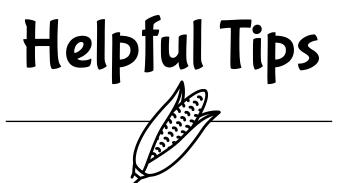
Significant weather events should be documented as well; these may include hail events, frosts, droughts or anything that could affect the crop. Harvest dates for certain crops may help develop a trend to predict future harvests under the same conditions.

Date	Activity

Date	Activity

Date	Activity

Date	Activity

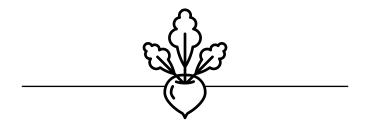


Crop Rotation

Crop rotation is a must for gardening. By keeping records of what, where and when you plant, you will be able to rotate your garden design. Plants in the same family should be on a four-year rotation, as they can get the same diseases. For example, if you planted tomatoes in one area this year, you would avoid planting eggplant, potatoes or peppers in that spot for the next three years. Growing corn where legumes, such as peas or beans, have been planted in the past is a good idea. Because legumes and rhizobacteria in the soil have a mutualistic relationship that incorporates nitrogen into the soil, the corn will utilize that nitrogen in the following season. It is also best to remove plant debris in the fall to avoid harboring disease and insects.

Disease and Composting

If you have plants that get a disease, do not compost them. Some diseases will survive in the soil. Do not compost weeds, insectinfested plants or pesticide-treated plants. Too much of one type of plant in your compost can hinder the breakdown process. When applying compost, a good rule of thumb to follow is to add one to two inches per season. For more information on composting, check out NDSU Extension publication FN1901 How to Compost.



Insects

The most important thing to do when insects are involved is to determine if they are causing harm or if they are beneficial. Not all insects should be killed just because they are near or on your plants. Some insects are beneficial to your plants and can help them grow and produce more. If the insect is not beneficial, having a threshold level is important in helping determine if and what action needs to be taken. Determining threshold levels for weeds and diseases are also important.

Seed Saving and Storage

Some seeds can be saved and stored for the next growing season. Some vegetables store better than others. Tomatoes and beans are examples of vegetables with seeds that are easy to save and store for the next growing season. To harvest seeds, wait until the vegetable has ripened then remove the seeds. Wash the seeds, allow them to dry, and store in a clean container. Make sure to label the seeds with the name, variety and date they were collected. Use these seeds the next year; older seeds have a lower chance of survival and less growth.

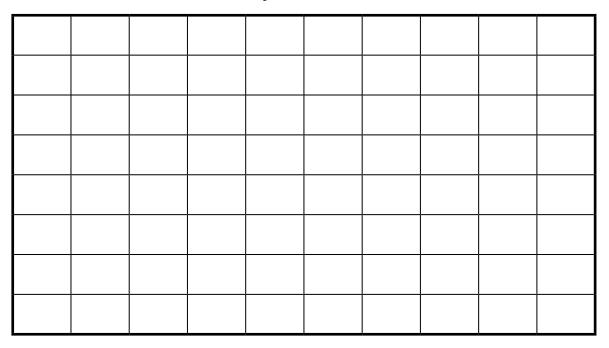


Volunteer Opportunity

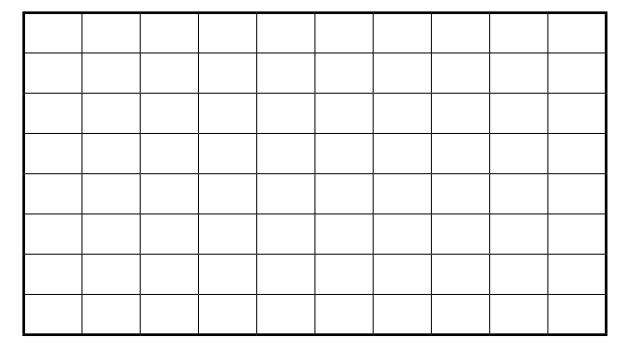
Volunteer opportunities can include donating excess produce to your local food banks, assisting with community gardens and much more. Hunger Free ND is a great way to find organizations which accept fresh produce in your area. Extension Master Gardeners are also a good way to get involved with volunteering. Contact your local Extension office for more opportunities to help in your community.

Garden Diagram

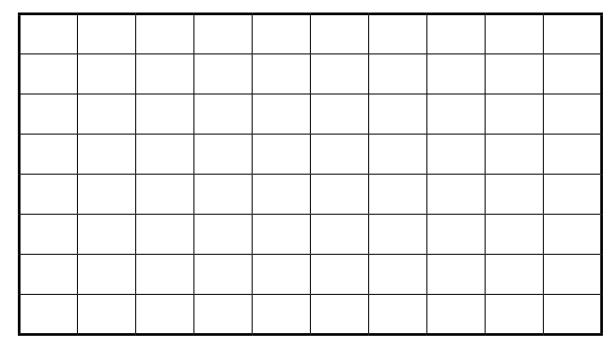
Garden 1

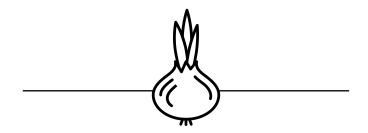


Garden 2



Garden 3



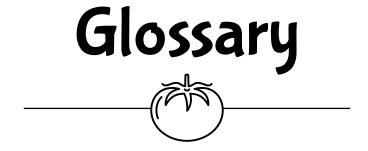




Notes

Notes





Acclimatization: the process of making plants adapt to different growing conditions

Annual: a plant that will complete its life cycle in one growing season

Biennial: a plant that will complete its life cycle in two growing seasons

Determinate: plants grow to a "set" size and their fruit all tends to ripen at about the same time

Fertilizer: essential amendments that provide a plant with nutrition

Floriculture: the study and growing of flowers

Herbicide: a chemical for killing plants

Hybrid: when two plants that have different traits are crossed

Hybrid vigor: seen with a hybrid plant; often results in resistance to disease and insects, an increase in yield and a change in physical characteristics from the parent plant

Indeterminate: plants grow until frost kills them and their fruit tends to ripen throughout the season

Insecticide: chemicals that harm, repel or kill insects

Legumes: plants that symbiotically convert unusable nitrogen from the atmosphere into usable ammonia by means of rhizobacteria

Olericulture: the study and growing of vegetables

Organic matter: material from plants, animals and other living organisms that play vital roles in water, nutrients and life cycles of plants in their vicinity

Perennial: a plant that will live more than two seasons

Pesticide: chemicals for controlling pests

Pomology: the study and growing of nuts and fruits

Rhizobacteria: bacteria living on the roots of plants that benefit plants by producing hormones and fixing atmospheric nitrogen

Systemic insecticide: a chemical a plant takes in usually through the root system, and moves or translocates it to different parts of the plant

Symbiotic: the relationship of two or more organisms in which both benefit



For more information on this and other topics, see www.ag.ndsu.edu/extension

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