

4-H Growing Things Series

Discovering Outdoor Gardening



Introduction

Do you enjoy spending time outdoors? Do you eat lots of vegetables and fruit? In this project, you will grow some of the tastiest produce you've ever eaten. Vegetable and fruit gardening is a rewarding, inexpensive hobby. And, you can enjoy your harvest year round.

Unlike traditional 4-H projects, this project is designed to be completed throughout the Spring and Summer months. This project can be completed in a garden of any size. If you have raised garden beds, you can use them.

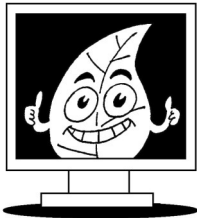
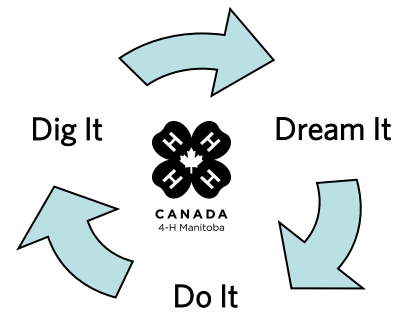
In this project, you will learn about a variety of plants, plan your garden, plant it, and care for the garden while watching out for pests. Gardening can be really easy and fun. In the end, you will be rewarded with an abundance of fresh produce. Eat lots of it at harvest time and save some for later!

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- Revised 2019 -

Meet Larry Leaf!

Larry says, "Don't leave me alone—look for me throughout the manual. I'll share exciting and important information that will help you with your project."



Leaf it to Me!

This More Leaves box will appear throughout the project book. Check out the great website link ideas that will lead you to fun online content to help you with your 4-H project.

Learning is 3D!

To help you get the most out of your learning, each project meeting has the following parts:

- Dream it!** Plan for success
- Do it!** Hands on learning
- Dig it!** What did you learn?

What Skills Will You Learn?

Each section or Skill Builder in this project has activities to do that will help your group *learn to do by doing* while learning new skills and having fun!



To complete this project, you must:

- Complete the activities in each Skill Builder **OR** a similar activity that focuses on the same skills, as you and your leader may plan other activities.
- Plan and complete the Showcase Challenge.
- Complete the Portfolio Page.
- Participate in your club's Achievement (See the inside back cover for more information about 4-H Achievements).

	Members will be able to...	Activities	Page
Skill Builder 1	Plants Galore <ul style="list-style-type: none"> • Explain the purpose of a greenhouse • Understand the similarities & differences between annuals & perennials • Identify the main parts of the plant 	• Visit a Greenhouse	5
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Skill Builder 5	The Power of Pests <ul style="list-style-type: none"> • Describe good & bad influences on the garden • Identify various pests • Respond to pests to protect the garden 	• Good vs. Bad Bug	17
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Skill Builder 6	Harvest Time <ul style="list-style-type: none"> • Collect produce as it ripens • Use fresh produce in a meal • Explain how local food can feed a community 	• Taste Test	19
		• A Gardening Record	19
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When you successfully complete your Skill Builders, you will showcase what you have learned.			
Showcase & Portfolio	• Explain success in using the skills listed above	• Showcase Challenge	22
		• My Portfolio	24

Refer to this planting guide throughout the gardening process.

PLANTING GUIDE FOR THE HOME VEGETABLE GARDEN								
Kinds	Distance between Rows, Feet	Distance within rows, inches	Amount of seed, or # of plants per 50-foot row	Depth to cover, inches	Days to Emergence (good temp & moisture)	Number of days to seeding to harvest	Approximate yield per 50-foot row	How to use or store
Bean (bush) (pole)	2 2	2-3 8-12	4 oz. 4 oz.	1 1/2 - 2 1 1/2 - 2	7-10	52-70 65-70	30-50 qt.	Fresh, fresh frozen, canned, pickled
Beet	11/2	1-3	1/2 oz.	1/2	4-10	55-70	250 roots	Fresh, pickled, canned, cool cellar
Broccoli Early Late	21/2 21/2	18 18	1 packet 1 packet.	transplants 1/2	4-10	60-80	30-40 qt.	Fresh, fresh frozen
Cabbage Early Late	21/2	18	1 packet.	transplants 1/2	4-10	60-80 100-105	30 heads	Fresh, raw Fresh, raw, kraut, or storage
Carrot	11/2-2	1-2	1/4 oz.	1/2	6-18	60-75	30-75 lb.	Fresh, raw, canned, cool cellar
Cauliflower	21/2	18	1 packet.	transplants	5-10	60-80	30 heads	Fresh, fresh frozen
Chard, Swiss	2	8-12	1/2 oz.	1/2	4-10	50-60	Use all season	Fresh
Corn	21/2-3	12-18	2 oz.	1-2	5-8	60-100	45-75 ears	Fresh, fresh frozen, canned
Cucumber Slicing Pickling	4 4	12-24 12-24	1/8 oz. 1/8 oz.	1/2-1 1/2-1	6-10	65-75 60-70	100-150 50-150 fruits	Raw, Pickled
Lettuce (leaf) (head)	11/2 11/2	6 12	1 packet. 1 packet.	1/4 1/4	6-8	40-50 50-75	100 50 heads	Raw Raw
Onion Transplants Seeds or sets	11/2 11/2	3 2-3	1 packet of Seed, 1/2 lb sets	transplants Seed 1/2 Sets 1	6-10	115-135 95	50-75 lb.	Raw, fresh, dry dark cool storage
Parsnips	11/2-2	2-4	1/4 oz.	1/2	14	120-150	150-300 roots	Store sand, moss, sawdust; or leave in ground over winter
Pea	11/2-3	2	4 oz.	11/2-2	6-10	60-80	20-40 qt. pods	Fresh, fresh frozen, canned
Potatoes	2-3	12	5 lbs cut to 1.5 oz	4	4-11	As soon as big enough	60-100 lbs	Fresh, stored
Pumpkin	6-8	36-48	1 oz.	1	4-10	110-130	30-50 fruits	Fresh, store dry
Radish	1	1	1/2 oz.	1/4	4-10	25-35	30-100 bunches	Fresh
Rutabaga	2	6	1/2 oz.	1/4	4-10	110-130	100 lb.	Fresh, stored
Spinach	11/2	4-6	1/2 oz.	1/2	5-12	40-45	1-2 bu.	Fresh, fresh frozen
Squash	6-8	36-48	1 oz.	1	4-6	90-115	100 fruits	Fresh, store dry
Tomato Staked Not Staked	2 3	18-24 36	25-33 plants 17 plants	transplants	6-12	100-130	150-300	Fresh, canned
Turnip	11/2-2	3-4	1/2 oz.	1/4	3-8	50-70	150 roots	Fresh

Manitoba's Plant Hardiness Zones

DISCOVER



<http://www.agr.gc.ca/atlas/agpv?webmap-en=78529700717d4cab81c13e9f9404ef10&webmap-fr=c1b454842d3748b0bb0807d7817d34c2>

Skill Builder 1: Plants Galore

Larry Says....

How many plants could a single person or organization grow? Greenhouses are the perfect place to visit to see thousands of plants under one roof. You might find a new favourite plant at the greenhouse.



DISCOVER

SKILLS CHECKLIST



- Explain the purpose of a greenhouse
- Understand the similarities & differences between annuals & perennials
- Identify the main parts of the plant

Important Words

Watch for these important words throughout this Skill Builder:
Greenhouse, Annual, Perennial, Succulent, Herb



Dream it!

Visit a Greenhouse

Locate a local greenhouse and arrange a time to visit. Owners and operators may have more time for a tour in the off-season. What are the benefits of a greenhouse?

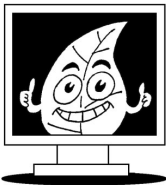
While at the greenhouse, learn about the following:

- | | | |
|---|---|--|
| <input type="checkbox"/> Planting Process | <input type="checkbox"/> Your Growing Zone & Season | <input type="checkbox"/> Plant Propagation Methods |
| <input type="checkbox"/> Business Operation | <input type="checkbox"/> Plant Parts & Growth | <input type="checkbox"/> Pest Management |
| <input type="checkbox"/> New Plants | <input type="checkbox"/> Annuals & Perennials | <input type="checkbox"/> Indoor Growing Challenges |

Record three things you learned.



Complete the Do it! section of this Skill Builder at the greenhouse, too!



More Leaves...

Take a look inside this greenhouse in Carman, Manitoba
<http://www.vanderveensgreenhouses.com/photo-gallery/>.
Then, see how vegetable plants are commercially grown for mass production by watching this video: <https://www.youtube.com/watch?v=P9rzHg42U3g>



Do it!

What Do You Like?

While you are at the greenhouse, think about what you like to grow by answering these questions. Why do you plant a garden?

What veggies do you like?

What veggies don't you like?

What new plants would you like to try to grow? Look around the greenhouse to see which plants catch your eye!

Annuals & Perennials

Compare annuals and perennials. Place the two plants side by side. What differences can you see? Ask a gardener at the greenhouse to tell you more about the growth of annuals and perennials.


Annuals	Both	Perennials

Try Something New

At the greenhouse, select a new plant. This project focuses on fruit and vegetable gardening. Take this opportunity to select any plant you wish. You might choose something new or unique such as cacti, herbs, water garden plants, trees, succulents, perennials, or non-flowering plants such as ferns.

What did you select?

Why?



Larry Says...

Many plants can be started indoors and transplanted to an outdoor garden when the weather improves.



Dig it!

Why do people enjoy gardening?

Would you like to operate a greenhouse?

What will you purchase from a greenhouse on a future visit?

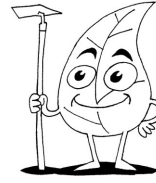
What's next?

Skill Builder 2 is all about preparing for planting a garden in the spring. There are lots of things you can do to prepare before the snow melts.

Skill Builder 2: Plan It Out

Larry Says....

Think about the weather patterns in your community. Some fruits and vegetables will grow well in your climate, while others will be unsuccessful. The climate plays a huge part in the decisions of a gardener. There are a lot of activities in this Skill Builder; spread them out over multiple project meetings.



DISCOVER

SKILLS CHECKLIST



- Prepare to plant a garden
- Select seeds for a garden
- Compare the qualities of soil samples

Important Words

Watch for these important words throughout this Skill Builder:
Climate, Zone, Growing Season, Community Garden, Acidic, Alkaline



Dream it!

Do Your Research

What zone will you be growing in?

What is the average length of the growing season in your area?

Name a task related to outdoor gardening for each month of the year.

January	
February	
March	
April	
May	
June	
July	
August	
September	
October	
November	
December	



More Leaves...

These maps show information about the climate and growing season in Manitoba. Learn more about your region at <https://www.gov.mb.ca/agriculture/weather/agricultural-climate-of-mb.html#summary-of-all-maps>



Do it!

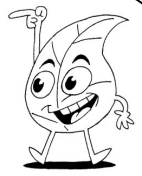
Seed Selection

What would you like to plant in your garden? Think about the favourite vegetables you listed in the What Do You Like? activity in Skill Builder 1. Look in a seed catalogue to select veggies. Try to plant a variety of plants. Select plants from at least 5 of the categories below.

- A plant that is started in early spring & transplanted _____
- A plant that was purchased as a seedling _____
- A perennial vegetable _____
- A plant that grows below ground _____
- A leafy vegetable _____
- A squash _____
- A vine _____
- A vegetable that is a flower _____
- An herb _____
- A fruit (even if you didn't know it was a fruit) _____
- A legume _____

Larry Says...

Plant veggies that you and your family like to eat. Don't let your efforts go to waste.

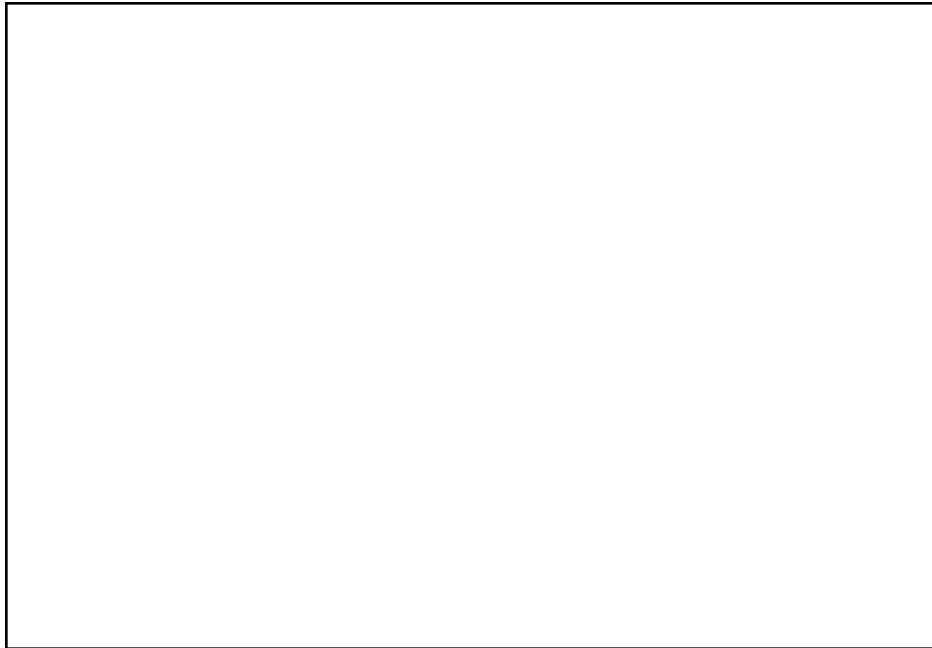


Larry Says...

Finalize your seed selections and order the seeds. You can also purchase seeds at local stores in the spring.

Garden Map

Plan and draw a map of your garden. You will need to know how big your garden is. Refer to the seed catalogue for information on seed spacing and row width. You might need to revise your seed selection as you begin



Larry Says...

You can also plan to use containers or a community garden if one is available.



mapping. Include a copy of your map in the space below.



More Leaves...

Learn more about companion gardening at <http://www.vegetablegardeninglife.com/companion-planting-charts.html>

Tools of the Trade

Think about the tools and supplies, including seeds, you will require for gardening. Organize and list the items you already have. Identify the items you will need to buy. As you purchase new items, keep a record of their costs in the chart below.

Tools & Supplies I Have:	Tools & Supplies I Need:



Date	Description	Cost
TOTAL		

Larry Says...

Look for gardening tools at yard sales in the spring.

Row Markers

You will want to label your rows or sections of plants so you remember where you have planted each vegetable. Row markers can be as simple as sticks, rocks, or other items around the yard. You can also use row markers for a decorative touch. Locate materials that can be used as row markers or create your own using paint sticks or wooden spoons and bright paint.



<http://twigandtoadstool.blogspot.ca/2012/05/wooden-spoon-garden-stakes.html>



<http://www.livingwellspendingless.com/2014/03/31/diy-rainbow-garden-markers/>

Soil Quality Tests

Soil is an important factor in gardening. Good soil includes a mixture of minerals, organic material, water, air, and living plants and microorganisms.

DISCOVER

To determine your soil type, drip water onto a small amount of soil in your hand. Squeeze and roll the soil until it starts to stick to your hand. The extent to which it can be shaped gives a rough idea of the soil type. Compare your soil sample to the diagrams below. Which soil type do you have?



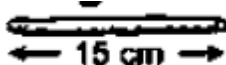
Sand: soil is loose, single grained, can be heaped but not formed



Sand Loam: can be shaped into a ball that easily falls apart.



Silt Loam: Can be rolled into a short, thick cylinder.



Loam: about equal sand, silt, and clay. Can be rolled into a thick thread that breaks when bent.



Clay Loam: soil can be rolled into a thick thread and can also be bent carefully into a U shape without breaking.



Light Clay: soil feels smooth and can be bent into a circle with some cracks.



Clay: like plasticine, can be bent into a circle without cracks.

How can you improve your soil for planting?

You can also complete a soil test to determine whether your soil is acidic or alkaline. This characteristic of soil is important in selecting what you will grow and where you will grow it. You should take samples from different areas of the garden.

Soil is Acidic if: Soil + Baking Soda --> Bubbles

Soil is Alkaline if: Soil + Vinegar --> Bubbles

What did you find out?

Acidic

Alkaline



Larry Says...

You can add compost (coffee grounds, tea bags, egg shells, orange peels, dried leaves, and potato tops) to your soil for additional nutrients.

Larry Says...

Berries, tomatoes, and potatoes grow best in slightly acidic soil. Broccoli, cauliflower, cabbage, and asparagus grow best in slightly alkaline soil.



Seed Tapes

If you are going to plant some of your vegetables in rows, you can prepare seed tapes to speed up the planting process. Seed tapes are especially useful when you will be planting tiny seeds like lettuce, spinach, radishes, carrots, or parsnips. Using seed tapes will reduce the amount of wasted seed and you won't need to thin these veggies later.

DISCOVER

- Gather some newspaper, scissors, markers, flour and water, and your seeds before getting started.
- Your seed package will include information on planting. Determine how far apart your seeds should be planted. Make sure this is the distance for **after** thinning. Also take note of how deep these seeds should be planted.
- Create a paste using 5 parts flour to 1 part water. You will only need to use about 15 mL of flour.
- Cut newspaper into 5 cm strips. Along each strip, measure and mark dots for the placement of each seed based on the spacing.
- Place a small drop of paste at each dot. Place one seed in each drop of paste.
- Let dry overnight.
- Roll up and secure with an elastic. Label each roll.
- Store seed tapes in a dry, cool place until planting.

When you are ready to plant, lay the seed tape across the ground in a straight line. Place soil on top of the tape to the depth indicated on the seed package. Keep the soil and the seed tape moist.



<http://premeditatedleftovers.com/gardening/how-to-make-seed-tape-with-newspaper/>



More Leaves...

Learn more about gardening from this resource: Basic Gardening Manual for Northern Manitoba: <http://www.gov.mb.ca/ana/pdf/pubs/mafri-gmnm.pdf>. Much of its information is relevant to gardening across Manitoba.



Dig it!

Why did you select these seeds?

Do you think your gardening project will be expensive or profitable?

Did you make any improvements to your soil?

What's next?

You will begin planting your garden in Skill Builder 3. Wait until the risk of frost has passed before planting outdoors. You might have some plants you can start indoors in early spring.

Skill Builder 3: Plant, Plant, Plant



Larry Says....

Our Manitoba growing season is limited. Watch the forecast so you plant your garden at the best possible time. Wait until after the last frost, but make sure your vegetables will have enough time to produce veggies before the first fall frost. Plant when nature is ready.



SKILLS CHECKLIST

- Plant & transplant plants
- Explain the process of planting seeds
- Prepare an experiment

Important Words

Watch for these important words throughout this Skill Builder:

Moisture, Forecast, Till, Transplant, Experiment



Dream it!

As the snow melts and the temperatures warm, recognize the changes in your garden. Is it moist?

When it is dry enough, till your garden to loosen the soil before planting.

Look at the forecast. When do you think the best date to plant your garden will be?

Do it!

An Early Start

Give some of your plants an early start. Plant seeds and draw your plant at three different stages of its growth up to the time of transplanting. Follow your leader's instructions.

A Gardening Record

In a separate notebook or scribbler, keep a record of your observations of your garden. Take note of germination, plant growth rates, rainfall and significant weather, weeds, pests, and anything else that interests you.

DISCOVER



More Leaves...

Refer to this guide to compare pictures as your garden grows. **The Basics of Vegetable Gardening in Manitoba:**
<http://www.gov.mb.ca/ana/pdf/pubs/mafri-vp.pdf>



More Leaves...

You can become a CoCoRaHS weather reporter. Join this citizen-science project at <http://www.cocorahs.org/Canada.aspx>. As a 4-H member, receive a rain gauge and report your rainfall totals to CoCoRaHS every morning.



Experimental Gardening

There are many gardening practices that have been tried and tested over the years. Some gardeners swear by a certain practice, while that technique may not work for others. Try something new in your garden with some of your plants. Some of these techniques are applied as soon as the seeds are planted, while others are tested later in the growing season.

Here are some ideas:

- Thinning vegetables
- Planting at different times
- Tomato cages/stakes
- Shelters for pumpkins
- Place a board over the row of carrots (this holds the moisture) until they are visibly pushing above ground
- Place grass around bases of tomatoes
- Plant marigolds near tomatoes (to keep aphids away)
- Under watering (this can encourage deep root development)
- Grow peas along a fence or around cages

Larry Says...

When you are experimenting, you need to be able to prove that your special treatment in the experiment is what caused a different result. Grow one set of plants normally (this is a control group) and one set of experimental plants.



I am going to experiment by _____

I predict _____

I will know this because _____

Planting Time

When the temperatures warm up and the risk of frost has passed, it is time to plant your garden. Watch the forecast so you can pick a good day. You might want to plant some crops, like lettuce, in part rows at a time at weekly intervals so you have a long lasting supply. As you are planting, keep a record of the date and the variety you are planting in each row. Follow your leader's instructions.

Date	Plant	Variety	Other Notes



Dig it!

Why do you need to till a garden before planting?

Why is starting plants indoors a good idea in Manitoba?

What have you noticed in your garden observations so far?

Larry Says...

As you are planting one row with larger seeds (beans, peas, corn, etc), count and record the number of seeds you sow in that row. You will need this information in Skill Builder 4.



What's next?

You will need to spend time caring for your garden throughout the growing season. Keep recording any changes you notice and observe your experiment to see if your prediction is correct.

Skill Builder 4: Maintenance Matters

Larry Says....

Looking after a garden takes time and plants require patience. Plants have many needs for good growth. Stay safe while working in your garden. Protect yourself from sunburns and mosquitoes.



DISCOVER

SKILLS CHECKLIST



- Describe sustainable maintenance practices
- Care for a garden
- Record changes in garden plants

Important Words

Watch for these important words throughout this Skill Builder:
Sustainability, Thinning, Fertilizer, Germination



Dream it!

You will be spending a lot of time outdoors while you care for your garden. List 5 reasons why gardening is good for you.

- 1.
- 2.
- 3.
- 4.
- 5.

Larry Says...

Gardening requires muscle power and it keeps you physically fit.



Sustainable Practices

Sustainable practices are farming and gardening methods that are less harmful to the environment. They don't use too many resources from the Earth and they keep the Earth in balance. Think of some ways that you can be a sustainable gardener.



More Leaves...

Consider these sustainable gardening tips. <http://www.motherearthnews.com/organic-gardening/gardening-techniques/sustainable-gardening-zm0z11zsto.aspx>

Do it!

A Gardening Record (continued)

Continue recording your observations in your gardening record book. As you are caring for your garden, record rainfall amounts. Record when you are thinning your vegetables and any fertilizers you apply to your garden.

Larry Says...

Consider getting a rain barrel to collect the water that runs off of your home. Use this water to keep your garden moist.



DISCOVER

Germination Rate

Do you remember the row that you counted the number of seeds that were planted? Refer back to that information. Count the number of plants that are growing in that row. To determine the rate of germination, calculate:

$$\frac{\text{Number of Seeds that Grew}}{\text{Number of Seeds that were Planted}} \times 100 =$$

Experimental Gardening

Provide a report on your experiment in Skill Builder 3. What have you discovered so far?



Dig it!

What is the most difficult part of maintaining a garden?

How could you improve the germination rate?

How are you gardening sustainably?

What's next?

Skill Builder 5 introduces a variety of pests that will affect the productivity of your garden.

Skill Builder 5: The Power of Pests

Larry Says....

There are numerous pests and enemies that will attempt to limit the success of your garden. Be prepared to fight back. Approach pest management in an environmentally friendly and sustainable way.



DISCOVER

SKILLS CHECKLIST



- Describe good & bad influences on the garden
- Identify various pests
- Respond to pests to protect the garden

Important Words

Watch for these important words throughout this Skill Builder:
Weed, Disease, Enemy



Dream it!

Good vs. Bad Bugs

Some bugs and diseases will attack the plants in your garden. Weeds will gather moisture and can starve your plants. But, there are some good, helpful bugs in your garden too. Circle the good bugs in the collection below.



Larry Says...

Birds and bats help pollinate flowers, too.



Aphid



Cutworm



Bee



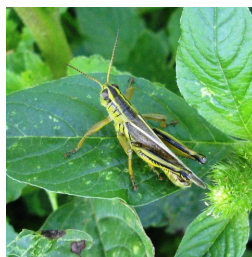
Potato Beetle



Ant



Ladybug



Grasshopper



Armyworm



Dragonfly

Do it!

A Gardening Record (continued)

Continue recording your garden observations. As you work through this Skill Builder, take note of any pests (insects, weeds, or diseases) you are encountering in your garden.

Fight Back

Locate three different pests in your garden. Try to find different weeds, insects, and diseases. Provide a description or drawing of each pest. If you don't know what the pest is, do some research to find out. What is it called? How will you respond to it?

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Garden Inspection

Hopefully you've been taking really good care of your garden. Ask a leader, 4-H member, friend, or neighbour to visit your garden. Your visitor can provide feedback in the following areas:

- Planted with care (straight rows with spacing, well thought-out layout)
- Safe storage of tools
- Moisture and drainage, water conservation methods
- Weeds & pests visible
- Ability to answer questions about the gardening process and observations
- Able to explain experiment procedure and results (if visible at this time)

Comments:



Dig it!

What good bugs did you observe in your garden?

How did you respond to pests?

How could you be more proactive in responding to pests?

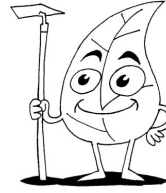
What's next?

In Skill Builder 6 you will be rewarded for your efforts. Your hard work and patience will result in delicious fruits and veggies. Eat some now and save some for later!

Skill Builder 6: Harvest Time

Larry Says....

Your hard work has paid off. As your plants produce fresh veggies and fruit, enjoy the products of your labour. The harvest is your reward.



DISCOVER

SKILLS CHECKLIST



- Collect produce as it ripens
- Use fresh produce in a meal
- Explain how local food can feed a community

Important Words

Watch for these important words throughout this Skill Builder:
Farmer's Market, Food Security, Preserving, Exhibit



Dream it!

Taste Test

Which tastes better? Fresh from your garden or store-bought?

Find out in this activity.

Test two different foods.

Circle the winner and state why you think it tasted better.

_____ vs _____

Why?

_____ vs _____

Why?

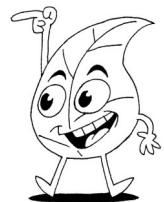
Do it!

A Gardening Record (continued)

Continue recording your garden observations. As you work through this Skill Builder and harvest your crops, take note of the fruits or vegetables each plant is producing. Record which plants produced a lot and which plants did not. Think about what you would like to grow next year.

Larry Says...

Harvest veggies when they are fully-grown, but before they get tough and woody. Make sure you harvest most of your veggies before the first frost. Potatoes and parsnips can stay in the ground even after frost has touched the leaves.



More Leaves...

Learn more about when your veggies will be ready to be harvested by visiting http://gardening.about.com/od/vegetablepatch/a/HarvestTimes_2.htm

Visit a Farmers' Market

Is there a Farmers' Market in your area?

Plan to visit a Farmers' Market or a road-side vegetable stand. What garden produce are vendors selling?

What else do people sell at a Farmers' Market?

What is a Community Supported Agriculture Program? Is there a Community Supported Agriculture program near you?

Consider selling some of your produce at the Farmers' Market. What would you need to do to make your garden a business?

Larry Says...

The St. Norbert Farmers' Market in south Winnipeg has been operating since 1988. It has more than 125 full-time vendors.

100 Mile Meal

Grow local, eat local! Food production and transportation can be very unfriendly to our environment. The 100 Mile Meal movement has gained substantial recognition in recent years. Plan and prepare a meal that uses only ingredients that can be sourced from within 100 miles of your home.

List the dishes you served and include a picture of your meal.

Larry Says...

It is estimated that the food we eat travels 1500 to 2000 miles from farm to table. Longer transportation means local food is a fresher choice.
(FoodMattersManitoba)



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Larry Says...

Food security means that everyone can get enough healthy food to be well and active.

Too Much Food


What can you do with your fruits and vegetables if you have too much to eat during harvest time?

Consider giving some produce to a friend or neighbour, donating it to a local food bank, or preserving it so you can enjoy it all winter. What is one item you could donate to a food bank? _____

Think about a fruit or vegetable you would like to preserve. You could make jelly or freeze peas, beans, or corn. Potatoes can be stored in a cool, dark, damp place. Prepare at least one fruit or vegetable for storage and include the recipe or explain the storage process.

Exhibiting

Research a local fair or horticultural show. Learn about the expectations and proper practices of exhibiting and enter some of your produce. The fruits and vegetables to be displayed will vary by the timing of the fair. What produce can you exhibit? Record your entries and results.





More Leaves...

Review the Manitoba Horticultural Association's Judging Guide: <http://www.mbagsocieties.ca/wp-content/uploads/2015/02/Judging-Standards-Horticulture.pdf>



Dig it!

Did you eat more nutritious foods during harvest time?

What plant produced the most?

What did you learn from you experiment?

What will you change in your garden next year?

What's next?

Remember to clean up your garden and till it in the fall! Now that you have finished all the Skill Builders in this project, it is time to think about and plan for the Showcase Challenge. The Portfolio Page is for you to make sure your Discovering Outdoor Gardening Project Skills Chart is complete. There is a space for you to write down reflections on the project (what you liked and didn't like, etc.).

Showcase Challenge

Bringing it all together!

DISCOVER

Now that you have finished this project, it is time to think about how you will share your experiences and knowledge with others. You may put your new skills to work by helping at a community event or at your club Achievement or teaching others about your topic. The goal of the Showcase Challenge is to help highlight your new skills and help **you** understand how you can use them. It can be an opportunity to receive feedback from others on your project. So go back through your manual and find some highlights of your learning (what you are proud of) and think about how you will “showcase” it.

Dream it!

Here are some Showcase Challenge Suggestions:

- Demonstrate something you made or learned about
- Act out a play
- Create a game
- Use your new skills to help with the Club Achievement plans
- Make a poster or display
- Make a video or slideshow
- Compose a song
- Or come up with your own idea. It is up to you and your leader!



My Showcase Challenge Plan



My showcase idea: _____

What materials and resources do I need? _____

Who do I need to help me? _____

When do I need to have things done by? _____

Do it!

Insert or attach your finished product or a photo of you sharing your skills in your Showcase Challenge.

DISCOVER

Dig it!

Now that you have showcased your project skills;

- How did your Showcase Challenge go?
- What would you do differently next time?
- How will you use your new skills in the future? (*in different situations?*)





My 4-H Portfolio Page



Name: _____ Date: _____ Year in 4-H: _____

Club: _____ Hours Spent on 4-H: _____ (Project and Other 4-H Activities)

Discovering Outdoor Gardening

To be completed by the leader and the member based on observations and conversations throughout the project.

Skill Builder	Members will be able to... Each Skill Builder had a Skills Checklist which identified the skill you will learn.	We know this because... Identify activities completed and record observations and information from discussions about activities.
1	<ul style="list-style-type: none"> • Explain the purpose of a greenhouse • Understand the similarities & differences between annuals & perennials • Identify the main parts of the plant 	
2	<ul style="list-style-type: none"> • Prepare to plant a garden • Select seeds for a garden • Compare the qualities of soil samples 	
3	<ul style="list-style-type: none"> • Plant & transplant plants • Explain the process of planting seeds • Prepare an experiment 	
4	<ul style="list-style-type: none"> • Care for a garden • Record changes in garden plants • Describe sustainable maintenance practices 	
5	<ul style="list-style-type: none"> • Describe good & bad influences on the garden • Identify various pests • Respond to pests to protect the garden 	
6	<ul style="list-style-type: none"> • Collect produce as it ripens • Use fresh produce in a meal • Explain how local food can feed a community 	

Additional Comments/Activities:

Leader Point of Praise!

I am most impressed by...

I acknowledge that the member has completed the 4-H project requirements.

Leader's Signature: _____



Above and Beyond!

In addition to project skills, 4-H also increases skills in meeting management, communications, leadership, community involvement through participation in club, area, or provincial 4-H events or activities. List below any activities you participated in this year in 4-H.

(Some examples include Executive Positions Held, Workshops, Communication, Community Service, Rally, Bonspiels, Conferences, Judging, Camps, Trips, Awards, Representation to Area or Provincial Councils, etc)

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

**Feel Free to add additional pages that include awards, certificates, new clippings, photos or other items that describe your 4-H involvement.

Member Point of Pride!

What I learned...

What I need to improve on...

What I want others to notice...

Member's Signature: _____



Point of Praise! Another's perspective on your achievements in 4-H.

(community professionals, 4-H club head leader, friends of 4-H)

I am most impressed by...

I believe that you have learned...

In the future I encourage you to...

Signature: _____





4-H Achievement

4-H Achievement is... a 4-H club celebration when members have completed their projects. Achievements are planned by the club to give recognition to members and leaders for their accomplishments in their 4-H projects and club activities.

A 4-H Achievement can take many different formats: from choosing a theme, to member project displays, to members using their new skills for the event (entertainment, food, decorating, photographer, etc.), to members presenting their project to the whole group, the options are endless and open to the creativity of the members and leaders in each club!

Clubs may also plan their Achievement to promote 4-H to the community or to recognize sponsors and others who have helped the club.

Members and leaders - be sure to check your project books for the project completion requirements, so you will be ready for your club's Achievement celebration!

If you have any questions, comments or suggestions for this or other 4-H projects contact:

Manitoba 4-H Council
Phone: 204-726-6136
Fax: 204-728-9040
Email: learns@4h.mb.ca
www.4h.mb.ca

This manual is for educational use only and is not intended as professional advice.

CANADA
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For more information about 4-H and the many 4-H opportunities available please visit

www.4h.mb.ca



What is 4-H?

4-H is an international youth organization involving more than 7 million members in 80 countries around the world.

In Canada, 4-H began in 1913 in Roland, Manitoba as a community-based organization dedicated to growth and development of rural youth. Today's 4-H program reaches both farm and non-farm youth across Canada. The motto of "Learn To Do By Doing" is embodied in the program, as 4-H focuses on skill development as well as personal development of life skills such as communications, leadership and citizenship.



DISCOVER

4-H Motto

"Learn To Do By Doing"



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4-H Pledge

I pledge,
My HEAD to clearer thinking,
My HEART to greater loyalty,
My HANDS to larger service,
My HEALTH to better living,
For my club, my community, and my country, and my world.

All project materials are available in
alternate format upon request.

4-H Manitoba project material is developed by
Manitoba Agriculture