A small garden you can plan

A practical sample from The Great Canadian Garden Bible
Tyler Clark / PermOasis Retreat Ltd.

Start with food you already eat and a patch you can reach on an ordinary busy day. These pages show a measured two-bed example, the lettuce profile that helps you plant it, and a record sheet for learning from the result.

Read it in this order

Sample pages 2 and 3: put your climate and household goal ahead of your seed order.

Sample pages 4 to 6: measure two beds, turn the plan into tasks and check whether a second crop actually fits your season.

Sample pages 7 and 8: use the lettuce profile for starting, spacing, watering and harvesting. Choose a cultivar suited to your site.

Sample page 9: print the blank bed record and keep it with your seed packet. The manuscript identifies it as a sheet to copy for each growing area.

Before you plant

The two-bed plan is a worked example, not a field-tested yield promise. The whole rectangle, including access, is larger than its planting area. Adjust paths, bed width, timing and crop choices to your needs and conditions. The lettuce profile includes brief protected-growing notes; those are not a complete system design.

Development preview / Not for sale

Taken from the 22 October 2026 amended review manuscript. Horticultural review, editing and practical trials remain publication work. This is not a finished edition or safety certification. No canning, preservation process or adapted recipe is included.

Original printed page numbers remain visible. References to other chapters and G04/G06 point outside this sample. Source codes are explained on sample pages 10 and 11. The earlier hardening-off and food-handling chapters are not included. This is not standalone food-safety guidance; the fresh-storage window is a quality reference.

PRACTICAL GARDENING

Use hardiness, frost and heat together

The 2025 Canadian hardiness update uses 1991–2020 climate. Use the official location tool for perennial selection; do not copy a zone from a distant city. Canadian zones incorporate several climate variables and are not interchangeable with USDA minimum-temperature zones. [E31]

Question	Evidence to keep	Decision
Will the perennial survive?	Canadian hardiness system, named cultivar, local survival record	Choose stock with regional experience.
Will its crop ripen?	Heat, frost-free window, cultivar maturity and actual harvest dates	An alive tree without edible fruit is not a food forecast.
When can an annual begin?	Soil thermometer, local forecast, hardening and crop tolerance	Use the crop’s trigger rather than the zone number.
How risky is a date?	Station frost percentile, threshold, period and coverage	A median is not a safe final-frost date.

Compare a nearby lowland station with your slope, coast or exposed site. Keep station ID, coordinates, elevation, period and missing-year coverage in the climate worksheet. Record your own first and last frost beside the published values. Where percentiles are unavailable, label the uncertainty; do not manufacture a probability from a mean.

For a trial planting, keep part of the crop back until the forecast and root-zone conditions agree. Use a measured protective cover and a replacement plan.

Hardiness predicts a type of climate exposure. It does not promise a tomato harvest.

GARDEN PLANNING / BEGIN WITH SUPPER

Plan a garden that feeds your household

This chapter turns a food wish list into a garden you can plant, maintain and use. Finish with a household target, a measured bed plan, a planting schedule and a harvest record. Start at a scale you can care for, then expand with evidence from your own harvest.

Choose your first season goal

Goal	What to plan
Fresh additions	A few favourite crops for meals during the growing season.
Fresh food and winter stores	Measured harvest targets plus suitable storage and processing capacity.
A larger share of household food	Staple crops, protein foods, cooking fuel, storage and a backup food supply.

A productive vegetable patch does not establish year-round food independence. Define which foods and which months the garden is intended to cover. Keep purchased food in the plan while learning what the site can reliably produce.

Give each crop a job

Choose a small core that matches familiar meals. Add a storage crop, a frequently picked crop and a flavour crop when the site permits. Perennials belong in a separate long-term plan: allow for establishment, mature size and any required pollination partner before counting their harvest.

First garden tip

Grow a garden you can visit on an ordinary busy day. Put water access and easy harvesting on the plan before ordering seed.

Use the worksheets that follow before buying supplies. The existing climate references and crop profiles provide the growing instructions; this chapter helps decide how much and where.

GARDEN PLANNING / MEASURED EXAMPLE

Draw a first garden you can maintain

This optional trial has two 1.2 × 2.4 m beds. Planting area is 5.76 m². With a 0.6 m central path and 0.6 m perimeter access, the overall rectangle is 4.2 × 3.6 m, or 15.12 m². These are design choices, not universal accessibility standards. Widen paths and reduce bed width to suit the gardener and equipment.

Sample note: the two-bed drawing appears on sample page 6.

Worked layout example. Bed A and Bed B are labels; draw crop positions at the spacing given in their profiles.

Try a small selection of crops you already eat. Draw every mature plant or row before ordering seed. Put tall supports where their shadow will least obstruct sun-loving crops. [S64] Garlic planted in autumn occupies space into the following growing season; do not promise that bed to an early spring crop.

Mark the water route, harvest access and any wildlife protection outside this rectangle. Fruit trees, compost and spreading vines require additional space. This trial is for learning and fresh food, with no household yield promise.

BEGINNER FOUNDATION / DATES FOLLOW CONDITIONS

Turn the bed plan into planting tasks

Direct sowing means placing seed in its growing bed. Transplanting moves a started plant into that bed. Thinning removes extra seedlings to achieve final spacing. Hardening off gradually introduces protected seedlings to outdoor sun and wind. Choose the method in each crop profile and follow seed depth and spacing. [S64]

Make one calendar row per planting

Task	Record before planting
Indoor start	Crop; local transplant trigger; weeks indoors; seed date; light and heat needs.
Direct sow	Crop; acceptable soil and temperature conditions; depth; rows; sowing date.
Transplant	Hardening-off period; forecast; soil conditions; final spacing; watering.
Repeat planting	First bed clearing date; next crop; maturity estimate; local deadline.

Soil temperature and crop cold tolerance help determine planting time. Measure conditions where the crop will grow and check forecasts. A calendar date alone cannot confirm a bed is ready. [S66] Read whether packet days to maturity begin at sowing or transplanting.

Use the same space again when time allows

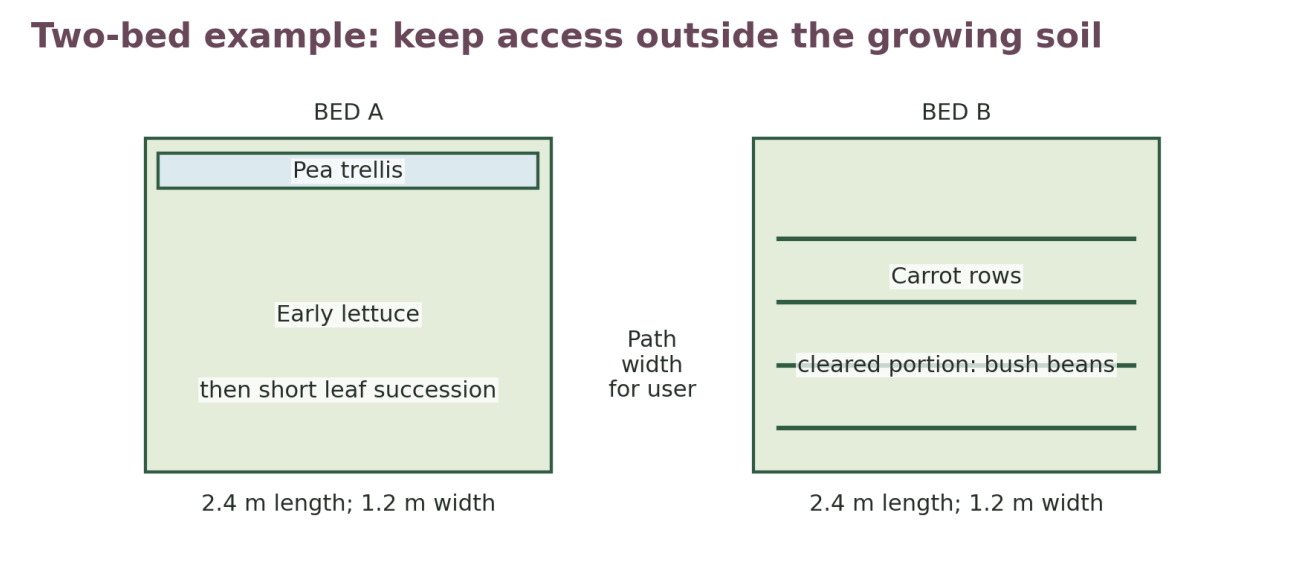
Succession planting can mean repeated small sowings or a new crop after an earlier harvest. Confirm that the bed will be vacant and the next crop has suitable conditions. Autumn growth slows as temperature and light decline. Maryland Extension adds 14 days when estimating fall maturity; that is a starting method requiring local adjustment, not a Canada-wide allowance. [S67]

Original arithmetic example: 70 usable growing days remaining minus 45 days to maturity minus an assumed 14-day allowance leaves 11 days of margin. The calculation cannot establish crop survival or the correct allowance for your site.

PRACTICAL GARDENING

A first season in two small beds

Continue the measured two-bed plan from “Draw a first garden you can maintain”: two 1.2 × 2.4 m beds with external access. This is a workload and spacing exercise; yield depends on cultivar, weather and management. Do not budget food security from these untested example yields.



Dimensions and labels relate to the example shown.

Bed / stage	Planting quantity in the example	Next task
A, first stage	One 2.4 m pea trellis row; follow packet spacing. Two 1.2 m lettuce rows, thinned to eight plants total.	Install trellis before sowing; record emergence and thin lettuce.
A, after peas	Clear peas after usable harvest; sow two short baby-leaf rows if the remaining season supports them.	Check remaining days, water and flea-beetle protection.
B, first stage	Four 1.2 m carrot rows; thin a trial to about 5 cm in-row, with 30 cm rows.	Keep seedbed moist; thin deliberately.
B, warm stage	If carrots finish early enough, use the cleared portion for two 1.2 m bush-bean rows at the cultivar’s spacing. Otherwise retain the carrots and skip beans.	Wait for adequate warmth; pick repeatedly.

Seed count is a calculation, not a promise: eight desired lettuce plants ÷ 0.80 assumed germination ÷ 0.80 assumed establishment = 12.5, rounded to 13 seeds. Replace both assumptions with actual tests. For tiny direct-sown seed, sow a measured trial then thin; do not count a packet as established plants.

Succession check: an illustrative 55-day bean plus a 14-day planning allowance needs 69 suitable days after sowing. With a chosen frost-risk cutoff of 15 September, that makes 8 July the latest trial sowing date. This is calendar arithmetic, not a local guarantee. If carrots still occupy the bed, or soil warmth and remaining light are unsuitable, omit the second crop. Use your cultivar’s maturity basis and local frost-risk date.

ASTERACEAE / LACTUCA SATIVA

Lettuce

For a first crop, choose a loose-leaf lettuce and decide whether you want individual leaves or full-size plants. Head lettuce needs its own space and a suitable cool growing period. [S291, S290]



Romaine heads at a grocery store. Jeffery Martin, CC0 1.0, Wikimedia Commons. cultivar unspecified. [S297]

Growing field	Starting specification
Light and soil	Full sun in cool seasons; partial shade of about 4 to 6 hours direct light is possible. Use drained, moisture-retentive soil, pH about 6.0 to 6.8. [S290, S291]
Starting route	Direct sow when the soil is workable, or start indoors about four weeks before a suitable transplant target. Follow the earlier hardening-off chapter. [S291]
Seed preparation	Use untreated seed without special treatment unless the packet specifies otherwise. Sow lightly, about 3 mm deep; keep this shallow seedbed moist. [S292]
Leaf lettuce at full size	Thin to about 15 to 20 cm between plants, with rows about 30 cm apart. [S292]
Head lettuce	Romaine: about 30 cm apart, rows 40 to 50 cm. Butterhead: 20 to 30 cm apart, rows 30 cm. Iceberg: 30 cm apart, rows 45 cm. [S292]
Maturity	Maryland lists about 40 to 80 days depending on type. Baby leaves can be picked earlier. Confirm the supplier’s harvest stage and counting convention. [S290]

DID YOU KNOW? Lettuce belongs to the aster family. Arugula and mustard belong in the brassica rotation, even when all three share a salad bowl. [S291, S296]

Greenhouse suitability and specialized care

Suitability: Cool-season candidate. Lettuce is a practical cool-house crop. Summer production needs a heat-tolerant cultivar and careful ventilation.

Specialized care: Space for the intended baby-leaf or head harvest, keep moisture steady and avoid warm stagnant air. Sow small successions and inspect hearts for aphids and decay. Winter growth is limited by light even with heat; do not leave mature heads standing until they bolt or rot. [S291, S290, S292]

Hydroponic/aeroponic option: Lettuce suits NFT channels or aerated deep-water culture. Aeroponic production has also been studied; dependable root wetting matters more than the tower label. [HY05, HY23, HY28]

LETTUCE / WATER HARVEST AND REPEAT SOWING

Keep lettuce coming to the table

Keep shallow roots supplied

Begin with about 25 mm rain plus irrigation weekly, then check the root zone rather than relying on the calendar. Sandy soil may need smaller, more frequent waterings. Long days and heat encourage bolting, the production of a flowering stalk, with tougher, bitter leaves. [S291]

Feed from the soil test

Apply the measured nutrient recommendation before planting. Reassess growth around 10 cm tall, a feeding checkpoint in Minnesota's guide. Do not copy its fixed fertilizer rate into every soil. [S291] For containers, record nutrients already in the growing medium and follow the selected vegetable fertilizer label.

Compare an analysed organic fertilizer with an analysed conventional product for the actual nutrient shortage. Compare the cost of the required nutrient dose, not just package size. Use local cultivar results and the garden-input comparison when choosing supplies.

Harvest leaves or harvest a head

Take usable outer leaves, leaving younger leaves to continue growing. For a head crop, wait for the cultivar's intended form: loose butterhead, upright romaine or firm iceberg. [S291, S290] Do not strip a plant repeatedly while expecting an unchanged full-head harvest.

Plan a small succession trial

if a household uses four small heads weekly, begin with four plants in one batch and a second labelled batch a week later. Record actual maturity and consumption. This is a learning schedule, not a promise of four new heads every week. Adjust the interval when heat, day length or cold changes growth.

Use G04 or G06 for temporary lettuce between slower crops. Mark when the lettuce must leave. Shade from a taller crop may help in hot weather, but root competition and access still need checking. [S290]

Store the fresh harvest briefly

USask gives washed, gently dried lettuce a fridge reference of about 5 to 7 days, using a perforated container with a damp paper towel. Keep it separate from ethylene-producing apples, pears and tomatoes. [S292] Treat that window as a quality reference; inspect before use and follow the earlier food-handling chapter.

FIRST GARDEN TIP: Pick what you need for supper before planning a large preserving crop. Lettuce fills the fresh-food part of the pantry plan.

READER WORKSHEET / COPY FOR EACH GROWING AREA

Keep one record for every bed

Use this original worksheet with your crop profiles, climate reference and laboratory instructions. It records what happened in your garden so next season’s decisions can be based on more than memory.

Bed or container record	Your entry
Name and year	_____
Measured growing area and sun	_____
Crop and cultivar or rootstock	_____
Previous crop and plant family	_____
Soil test lab, date and recommendation	_____
Sowing or transplant date and soil trigger	_____
Seed count, germination and plants established	_____
Amendment product, quantity and date	_____
First and last harvest; total usable harvest	_____
Main problem and confirmed diagnosis	_____
Change to make next season	_____

Do not turn one season into a guarantee

Retain failures as well as successes. A cultivar’s result depends on weather, planting route and care. Record supplier maturity conventions and your own harvest dates separately. Keep this sheet beside the seed packet or nursery label.

Sources for the growing pages

E31 · Natural Resources Canada
Canada’s Plant Hardiness Site, 1991–2020 / 2025 update
https://www.planthardiness.gc.ca/

S64 University of Saskatchewan
Growing food a how to guide for a Healthy Yard
https://gardening.usask.ca/articles-and-lists/articles-how-to/growing-food.php

S66 University of Minnesota Extension
Planting the vegetable garden
https://extension.umn.edu/garden-and-home/yard-and-garden/gardening-in-minnesota/planting-the-vegetable-garden

S67 University of Maryland Extension
Fall Vegetable Gardening
https://extension.umd.edu/resource/fall-vegetable-gardening

S290 University of Maryland Extension
Growing Lettuce in a Home Garden
https://extension.umd.edu/resource/growing-lettuce-home-garden

S291 University of Minnesota Extension
Growing lettuce, endive and radicchio in home gardens
https://extension.umn.edu/garden-and-home/yard-and-garden/gardening-in-minnesota/growing-lettuce-endive-and-radicchio

S292 University of Saskatchewan
Lettuce Grow with USask
https://gardening.usask.ca/documents/grow-with-us-pdfs/lettuce_website2025.pdf

S296 University of Maryland Extension
Plant Fertilize Water a Salad Table or Salad Box
https://extension.umd.edu/resource/plant-fertilize-water-salad-tabletm-or-salad-boxtm

Image credit and specialist references

S297 Wikimedia Commons / Jeffery Martin
Stack of romaine lettuce heads.jpg
https://commons.wikimedia.org/wiki/File:Stack_of_romaine_lettuce_heads.jpg

HY05 Virginia Cooperative Extension
Hydroponic Production of Edible Crops Nutrient Film Technique Systems. NFT setup, crop choice and flow management; related leafy-crop trials are practical applications.
https://ext.vt.edu/content/pubs_ext_vt_edu/en/SPES/spes-463/spes-463.html

HY23 Horticulturae research article
Effect of Nutrient Solution Cooling in Summer and Heating in Winter on the Performance of Baby Leafy Vegetables in Deep-Water Hydroponic Systems. Deep-water leafy crops and root-temperature management.
https://www.mdpi.com/2311-7524/8/8/749

HY28 Scientia Horticulturae research article
Iodine biofortification of sweet basil and lettuce grown in two hydroponic systems. Floating and aeroponic crops; biofortification treatments are not adopted.
https://doi.org/10.1016/j.scienta.2020.109783

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