

Gardening Step by Step



Vegetable Gardening Guide and Calendar for USDA Zones 2-4 Gardens

Use this vegetable gardening guide to plan your plot, maximise harvests, and enjoy home-grown veg from early spring through to winter.

The Vegetable Guide

This guide is designed to be read alongside our handy monthly vegetable gardening calendar, which sets out the key sowing, planting and harvesting information on a month-by-month basis. **The calendar starts on page 14 below.**

This guide for USDA Zones 2-4 is tailored specifically for northern gardeners who face challenges with a shorter growing season, colder temperatures, and earlier frosts. The recommendations focus on maximizing productivity within these limitations through proper timing, variety selection, and season-extension techniques.

Aubergine (Eggplant)

Sow: Mar-Apr (indoors, 8-10 weeks before last frost)

Transplant: Late May-Jun (after all danger of frost, when soil is thoroughly warm)

Harvest: Aug-Sep

Eggplants need a long season and warm conditions. Use black plastic mulch and row covers to warm soil. Choose extra-early varieties like 'Early Midnight', 'Millionaire', or 'Patio Baby'.

Broad Beans (Fava)

Sow: Apr-May (direct outdoors as soon as soil can be worked)

Transplant: Not recommended (direct sow)

Harvest: Jul-Aug

Broad beans tolerate cool conditions and should be planted early. Fall plantings rarely survive in zones 2-4. Plant densely for support in windy conditions.

French/Runner Beans

Sow: Apr-May (indoors, 3-4 weeks before last frost); May-Jun (direct outdoors after frost)

Transplant: Late May-Jun (after all danger of frost)

Harvest: Jul-Sep

Bush beans produce earlier than pole types and are better suited to short-season climates. Succession plant every 2 weeks until early July for continuous harvest.

Beetroot (Beets)

Sow: Apr-Jun (direct outdoors as soon as soil can be worked); Jul (for fall crop)

Transplant: May (if started indoors, though direct sowing is preferred)

Harvest: Jun-Oct

Early varieties like 'Early Wonder' perform best. For fall crop, sow in July for harvest before hard freeze. Mulch helps maintain soil moisture.

Broccoli (Calabrese)

Sow: Mar-Apr (indoors, 4-6 weeks before last frost); Jun (indoors for fall crop)

Transplant: May (spring crop); Jul (fall crop)

Harvest: Jul-Sep (spring planting); Sep-Oct (fall planting)

Broccoli prefers cool weather. Spring plantings must mature before summer heat; fall plantings should mature before hard freeze. Fast-maturing varieties like 'Green Magic' work best.

Broccoli – Purple Sprouting

Sow: May-Jun (indoors)

Transplant: Jun-Jul

Harvest: Early spring the following year (with protection)

Requires winter protection in zones 2-4. May not be reliable in zone 2 without significant insulation or high tunnel protection.

Brussels Sprouts

Sow: Apr-May (indoors, 4-6 weeks before last frost)

Transplant: Late May-Jun

Harvest: Sep-Oct (after frost improves flavor)

Long-season crop that performs well in cold climates. Plant in spring for fall harvest; Brussels sprouts actually improve in flavor after frost.

Cabbage – Spring

Sow: Mar-Apr (indoors, 4-6 weeks before last frost)

Transplant: May (after danger of hard frost)

Harvest: Jun-Jul

Use fast-maturing varieties like 'Stonehead' or 'Golden Acre'. Fall-planted overwintering cabbage generally doesn't survive in zones 2-4.

Cabbage – Summer

Sow: Mar-Apr (indoors)

Transplant: May

Harvest: Jul-Aug

Quick-maturing varieties work best. Summer cabbage should be harvested before splitting occurs in summer heat.

Cabbage – Red/Savoy (Autumn)

Sow: May-Jun (indoors)

Transplant: Jun-Jul

Harvest: Sep-Oct

Fall cabbage matures in cool weather and can withstand light frosts, which actually improve flavor. Choose varieties with 70-80 day maturity.

Carrots

Sow: Apr-Jun (direct outdoors as soon as soil can be worked); Jul (for fall crop)

Transplant: Not recommended (direct sow only)

Harvest: Jul-Oct

Choose shorter, faster-maturing varieties for northern zones. Succession plant every 2-3 weeks. Fall-sown carrots can be heavily mulched for winter harvest in zone 4.

Cauliflower – Summer

Sow: Mar-Apr (indoors, 4-6 weeks before last frost)

Transplant: May-Jun

Harvest: Jul-Aug

Cauliflower needs consistent temperatures. Choose early varieties like 'Snow Crown' that mature in 55-60 days.

Cauliflower – Fall

Sow: May-Jun (indoors)

Transplant: Jun-Jul

Harvest: Sep-Oct

Fall cauliflower produces more reliable heads in the cooling temperatures of late summer/early fall. Self-blanching varieties simplify cultivation.

Celeriac

Sow: Feb-Mar (indoors, 10-12 weeks before last frost)

Transplant: Late May-Jun

Harvest: Sep-Oct (before hard freeze)

Requires a long growing season. Start very early indoors and provide consistent moisture throughout the growing season. May not reach full size in zone 2-3.

Celery

Sow: Feb-Mar (indoors, 10-12 weeks before last frost)

Transplant: Late May-Jun

Harvest: Aug-Oct

Requires a long growing season. Start very early indoors and provide consistent moisture throughout the growing season. Self-blanching varieties are easier.

Chard (Swiss Chard)

Sow: Apr-Jun (direct outdoors as soon as soil can be worked)

Transplant: May (if started indoors)

Harvest: Jun-Oct

Highly cold-tolerant and can be harvested until hard freeze. One of the most reliable leafy greens for northern gardens.

Courgettes/Marrows (Zucchini)

Sow: Apr-May (indoors, 3-4 weeks before last frost); Late May-Jun (direct outdoors after frost)

Transplant: Late May-Jun

Harvest: Jul-Sep

Choose bush varieties with shorter days to maturity. Black plastic mulch helps warm soil. Harvest frequently for continued production.

Cucumbers

Sow: Apr-May (indoors, 3-4 weeks before last frost); Late May-Jun (direct outdoors after frost)

Transplant: Late May-Jun (after soil has warmed)

Harvest: Jul-Sep

Choose shorter-season varieties like 'Northern Pickling'. Bush types and parthenocarpic varieties (which don't require pollination) produce earlier.

Garlic

Sow: Oct (plant cloves in fall before ground freezes) or very early Apr (spring planting)

Harvest: Jul-Aug

Fall planting is preferred but requires heavy mulch protection in zones 2-3. Hardneck varieties like 'Music' and 'German Extra Hardy' are most cold-tolerant.

Kohl Rabi

Sow: Apr-Jun (direct outdoors as soon as soil can be worked); Jul (for fall crop)

Transplant: May (if started indoors)

Harvest: Jun-Oct

Fast-growing crop well-suited to northern gardens. Succession plant for continuous harvest. Fall crop often has better quality.

Melons

Sow: Apr (indoors, 4-6 weeks before last frost)

Transplant: Late May-Jun (when soil is thoroughly warm)

Harvest: Aug-Sep

Choose extra-early varieties (75-85 days) like 'Minnesota Midget' or 'Blacktail Mountain'. Use black plastic mulch, row covers, and other season-extension techniques.

Kale

Sow: Apr-Jun (direct outdoors as soon as soil can be worked); Jul (for fall/winter crop)

Transplant: May (if started indoors)

Harvest: Jun-Oct, and sometimes through winter with protection

Extremely cold-hardy and improves in flavor after frost. Can often be harvested into early winter, especially with row covers or mulch.

Lettuce

Sow: Apr-Aug (direct outdoors as soon as soil can be worked; use succession planting)

Transplant: May-Aug (if started indoors)

Harvest: May-Oct

Cool-season crop ideal for northern gardens. Use succession planting every 2 weeks. Heat-resistant varieties needed for mid-summer.

Leeks

Sow: Feb-Mar (indoors, 8-10 weeks before last frost)

Transplant: May-Jun

Harvest: Aug-Oct

Choose faster-maturing varieties. Dig before ground freezes in fall. Some varieties can handle light frost which improves flavor.

Onions

Sow: Feb-Mar (indoors, 8-10 weeks before last frost)

Transplant: Apr-May

Harvest: Aug-Sep

Use “long-day” onion varieties which perform well in northern latitudes with long summer days. Sets can be planted as soon as soil can be worked.

Spring Onions (Scallions)

Sow: Apr-Jul (direct outdoors as soon as soil can be worked; succession plant)

Harvest: Jun-Oct

Fast-growing crop that performs well in cool weather. Succession plant every few weeks throughout the season.

Parsnips

Sow: Apr-May (direct outdoors as soon as soil can be worked)

Transplant: Not recommended (direct sow only)

Harvest: Sep-Oct (or after frost for sweeter taste)

Long-season crop, but well-suited to cold climates. Frost improves flavor. Some can be left in ground with heavy mulch for early spring harvest in zone 4.

Peas

Sow: Apr-Jun (direct outdoors as soon as soil can be worked; succession plant)

Transplant: May (if started indoors)

Harvest: Jun-Sep

Perfect crop for northern gardens. Use multiple plantings (every 2-3 weeks), switching to heat-tolerant varieties for summer seeding.

Peppers (Sweet & Chilli)

Sow: Mar-Apr (indoors, 8-10 weeks before last frost)

Transplant: Late May-Jun (after soil is warm)

Harvest: Jul-Sep

Choose early varieties (60-70 days to maturity) like 'Ace' or 'King of the North'. Use black plastic mulch and row covers to warm soil.

Potatoes

Plant: Apr-May (as soon as soil can be worked, when soil temp reaches about 45°F)

Harvest: Jul-Sep (depending on variety)

Plant early and mid-season varieties rather than late-season types. Early varieties like 'Yukon Gold' and 'Red Norland' perform well in short seasons.

Pumpkins/Squash

Sow: Apr-May (indoors, 3-4 weeks before last frost); Late May-Jun (direct outdoors after frost)

Transplant: Late May-Jun (after soil has warmed)

Harvest: Aug-Oct (before hard frost)

Choose varieties with 85-95 days to maturity. Winter squash must be harvested before frost damages fruits. Summer squash produces earlier.

Radish

Sow: Apr-Sep (direct outdoors as soon as soil can be worked; succession plant)

Harvest: May-Oct (3-5 weeks after sowing)

Quick-growing crop perfect for northern gardens. Succession plant every 1-2 weeks. Use heat-resistant varieties in summer.

Rocket (Arugula)

Sow: Apr-Aug (direct outdoors as soon as soil can be worked; succession plant)

Harvest: May-Oct

Cool-season crop that grows quickly. Succession plant every 2-3 weeks. Becomes bitter in summer heat so plant in partial shade during warm months.

Spinach

Sow: Apr-May (direct outdoors as soon as soil can be worked); Aug (for fall crop)

Harvest: May-Jun; Sep-Oct

Prefers cool weather and grows quickly. Spring crop often bolts in June heat; fall crop more reliable. Cold-tolerant varieties like 'Tyee' perform best.

Sweet Corn

Sow: May-Jun (direct outdoors when soil warms to 60°F or 2 weeks after last frost)

Transplant: Jun (if started indoors, though direct sowing is preferred)

Harvest: Aug-Sep

Choose extra-early varieties (65-75 days) like 'Early Sunglow'. Plant in blocks rather than rows for better pollination. Black plastic mulch helps warm soil.

Turnips

Sow: Apr-May (direct outdoors as soon as soil can be worked); Jul-Aug (for fall crop)

Harvest: Jun-Oct

Fast-growing crop well-suited to northern gardens. Fall-grown turnips have sweeter flavor. Succession plant every 2-3 weeks.

Swedes (Rutabaga)

Sow: May-Jun (direct outdoors)

Harvest: Sep-Oct

Longer-growing than turnips but very cold-hardy. Plant in late spring for fall harvest. Flavor improves after frost.

Tomatoes

Sow: Mar-Apr (indoors, 6-8 weeks before last frost)

Transplant: Late May-Jun (after all danger of frost)

Harvest: Jul-Sep

Choose extra-early tomato varieties (55-65 days) like 'Early Girl', 'Stupice', or 'Sub-Arctic Plenty'. Determinate types often perform better in short seasons. Use wall-o-water or other season extenders for earliest planting.

The Vegetable Gardening Calendar

January

Indoor Activities:

- Plan garden layout and order seeds
- Inventory and repair tools and equipment
- Set up grow lights for February seed starting
- Start onion seeds indoors at the end of month (zones 3-4 only)

February

Sow Indoors:

- Celeriac
- Celery
- Leeks
- Onions
- Peppers (end of month)
- Tomatoes (end of month, for early varieties)

Indoor Activities:

- Start seed germination tests
- Clean and sanitize seed trays and pots
- Begin hardening off overwintered plants (zone 4 only)

March

Sow Indoors:

- Aubergine (Eggplant)
- Broccoli (Calabrese)
- Brussels Sprouts
- Cabbage (Spring)
- Cabbage (Summer)
- Cauliflower (Summer)
- Lettuce (for transplants)
- Onions (finish sowing)
- Peppers (Sweet & Chilli)
- Tomatoes

Outdoor Activities:

- Set up cold frames
- Test soil temperature and pH
- Apply compost to beds as soil thaws
- Prune fruit trees and bushes before buds break

April

Sow Indoors:

- Broccoli (final sowings)
- Cabbage (Red/Savoy for fall)
- Cauliflower (Fall)
- Courgettes/Marrows (Zucchini)
- Cucumbers
- Melons

- Pumpkins/Squash
- Sweet Corn (in biodegradable pots)

Sow Outdoors (as soon as soil can be worked):

- Broad Beans
- Carrots (under row cover)
- Chard
- Kale
- Lettuce (under row cover)
- Onion sets
- Parsnips
- Peas
- Radish
- Spinach (under row cover)
- Turnips

Plant Outdoors:

- Garlic (if not fall-planted)
- Potatoes (late month, when soil reaches 45°F)

Harvest:

- Overwintered spinach or kale (zone 4 with protection)

May

Sow Indoors:

- Broccoli (Purple Sprouting)
- Cabbage (Red/Savoy) – for fall harvest

- Cauliflower (Fall)

Sow Outdoors:

- Beetroot
- Carrots
- Chard
- French/Runner Beans (late month, when soil is warm)
- Kale
- Kohl Rabi
- Lettuce (succession sowings)
- Peas (succession sowings)
- Radish (succession sowings)
- Rocket
- Spinach
- Spring Onions
- Swedes (Rutabaga)
- Turnips

Transplant (after danger of frost):

- Broccoli (Calabrese)
- Cabbage (Spring)
- Cabbage (Summer)
- Cauliflower (Summer)
- Lettuce
- Onions

Harvest:

- Asparagus (zone 4)
- Lettuce (early plantings under protection)
- Radish
- Rhubarb
- Spring Onions
- Spinach (early sowings)

June

Sow Outdoors:

- Beetroot (succession sowings)
- Broccoli (for fall harvest)
- Carrots (succession sowings)
- Chard
- Courgettes/Marrows (Zucchini) – direct sow
- Cucumbers – direct sow
- French/Runner Beans
- Kale (for fall/winter)
- Kohl Rabi
- Lettuce (succession sowings, choose heat-tolerant varieties)
- Peas (final sowings, choose heat-tolerant varieties)
- Pumpkins/Squash – direct sow
- Radish (succession sowings)
- Rocket
- Spring Onions

- Sweet Corn

Transplant (all frost danger passed):

- Aubergine (Eggplant)
- Broccoli (Purple Sprouting)
- Brussels Sprouts
- Cabbage (Red/Savoy for fall)
- Cauliflower (Fall)
- Celeriac
- Celery
- Courgettes/Marrows (Zucchini)
- Cucumbers
- Leeks
- Melons
- Peppers (Sweet & Chilli)
- Pumpkins/Squash
- Sweet Corn
- Tomatoes

Harvest:

- Asparagus (final harvests)
- Lettuce
- Peas (early varieties)
- Radish
- Rocket
- Spinach

- Spring Onions
- Turnips (early sowings)

July

Sow Outdoors:

- Beetroot (final sowings for fall crop)
- Carrots (final sowings for fall crop)
- Kale (final sowings for fall/winter crop)
- Kohl Rabi (final sowings)
- Lettuce (succession sowings)
- Radish (succession sowings)
- Rocket (succession sowings)
- Spinach (for fall harvest)
- Spring Onions (final sowings)
- Turnips (for fall crop)

Transplant:

- Broccoli (for fall harvest, final chance)
- Cabbage (fall varieties, final chance)
- Cauliflower (fall varieties, final chance)

Harvest:

- Beetroot (early sowings)
- Broad Beans
- Broccoli (Calabrese) – early plantings
- Cabbage (Spring)

- Carrots (early varieties)
- Cauliflower (Summer)
- Courgettes/Marrows (Zucchini)
- Cucumbers
- French/Runner Beans
- Garlic (when tops begin to yellow)
- Kohl Rabi
- Lettuce
- New Potatoes (early varieties)
- Peas
- Radish
- Rocket
- Spring Onions
- Summer Squash
- Turnips

August

Sow Outdoors:

- Lettuce (cold-hardy varieties for fall)
- Radish (final sowings)
- Rocket (final sowings)
- Spinach (for fall and overwinter in zone 4 with protection)
- Spring Onions (final sowings for fall use)

Harvest:

- Aubergine (Eggplant)
- Beetroot
- Broccoli (Calabrese)
- Cabbage (Summer)
- Carrots
- Cauliflower (Summer)
- Celeriac (early varieties)
- Celery
- Courgettes/Marrows (Zucchini)
- Cucumbers
- French/Runner Beans
- Kale
- Kohl Rabi
- Leeks (baby leeks)
- Lettuce
- Melons
- Onions (when tops fall over)
- Peas (final harvests)
- Peppers
- Potatoes (mid-season varieties)
- Radish
- Rocket
- Sweet Corn (early varieties)
- Tomatoes

- Turnips

September

Outdoor Activities:

- Begin preparing beds for next season
- Collect seeds from open-pollinated varieties
- Plant cover crops in harvested areas
- Apply row covers for frost protection

Harvest:

- Aubergine (Eggplant) – final harvests
- Beetroot (store for winter)
- Broccoli (fall crop)
- Cabbage (Summer and early fall varieties)
- Carrots (main crop, store for winter)
- Cauliflower (Fall)
- Celeriac
- Celery
- Courgettes/Marrows (Zucchini) – final harvests
- Cucumbers – final harvests
- French/Runner Beans – final harvests
- Kale
- Kohl Rabi
- Leeks

- Lettuce
- Onions (cure for storage)
- Parsnips (after frost for sweetest flavor)
- Peppers – final harvests
- Potatoes (maincrop, store for winter)
- Pumpkins/Squash (before hard frost)
- Radish
- Rocket
- Spinach
- Spring Onions
- Swedes (Rutabaga)
- Sweet Corn
- Tomatoes – final harvests before frost
- Turnips

October

Outdoor Activities:

- Plant garlic for next year's harvest
- Apply compost to beds
- Mulch perennial vegetables
- Prepare cold frames for extending harvest season

Plant Outdoors:

- Garlic (before ground freezes)

Harvest:

- Broccoli (fall crop, final harvests)
- Brussels Sprouts (improved by frost)
- Cabbage (fall varieties)
- Carrots (final harvest, store for winter)
- Cauliflower (Fall, final harvests)
- Celeriac (main harvest)
- Celery (final harvests)
- Kale (continues after frost)
- Leeks
- Lettuce (final harvest, cold-hardy varieties)
- Parsnips (after frost for best flavor)
- Pumpkins/Winter Squash (before hard frost)
- Rocket (final harvests)
- Spinach (fall crop)
- Swedes (Rutabaga)
- Turnips (store for winter)

November

Outdoor Activities:

- Final garden cleanup
- Protect perennial vegetables with deep mulch
- Store tools and equipment for winter
- Apply winter protection to sensitive plants

Harvest:

- Brussels Sprouts
- Cabbage (fall varieties, final harvests)
- Kale (until covered by snow)
- Leeks (until ground freezes)
- Parsnips (final harvest or heavily mulch for winter)

December

Indoor Activities:

- Review garden journal notes from the past season
- Plan next year's garden layout and crop rotation
- Inventory seeds and place orders for next season
- Check stored vegetables and remove any showing signs of rot

Harvest:

- Kale (with protection, zones 3-4 only)
- Leeks (with protection, zone 4 only)
- Root vegetables (from storage)