A photograph of a rusty orange wheelbarrow with a black handle, filled with various gardening tools. A black-handled shovel, a yellow-handled shovel, and a black-handled fork are leaning against the wheelbarrow. The background is a dense thicket of green foliage.

Ecology
Action's

Garden Calendar
~ a working gardener's guide ~

Deep Soil Preparation for good structure



Close Spacing to conserve water



A few components of the
GROW BIOINTENSIVE®
method of farming

Composting to build fertile soil



Record-Keeping so you know what works!



Dear Gardener,

Ecology Action is a small 501(c)(3) non-profit organization founded in 1971. Our mission is to teach people worldwide to better feed themselves while building and preserving the soil and conserving resources.

Our Common Ground Mini-Farm programs include education, training, and continuing research in the GROW BIOINTENSIVE® sustainable mini-farming method. The method, developed through over 40 years of intensive research and hands-on practice, focuses on small-scale, organic, manual techniques for food-raising as a way of life, and is now used by farmers and gardeners throughout the United States and in over 150 other countries to strengthen local food-raising initiatives. Our continuing research goal includes complete economic, nutritional, environmental, soil and resource sustainability by developing, teaching, and implementing the GROW BIOINTENSIVE method.

We thank you for contributing to the well-being of the planet and our communities with your gardening, and hope that this guide will assist you in planning and managing your garden this year and into the future!

Happy Farming from your friends at Ecology Action!



For more information about the GROW BIOINTENSIVE method and our programs, publications, tours and workshops please visit our website at:

<http://www.growbiointensive.org>



Some thoughts and ideas about how you might consider using this calendar:

The more you garden, the more you'll find that it's fun, exciting, and a good practice to plan 3-6 months ahead.

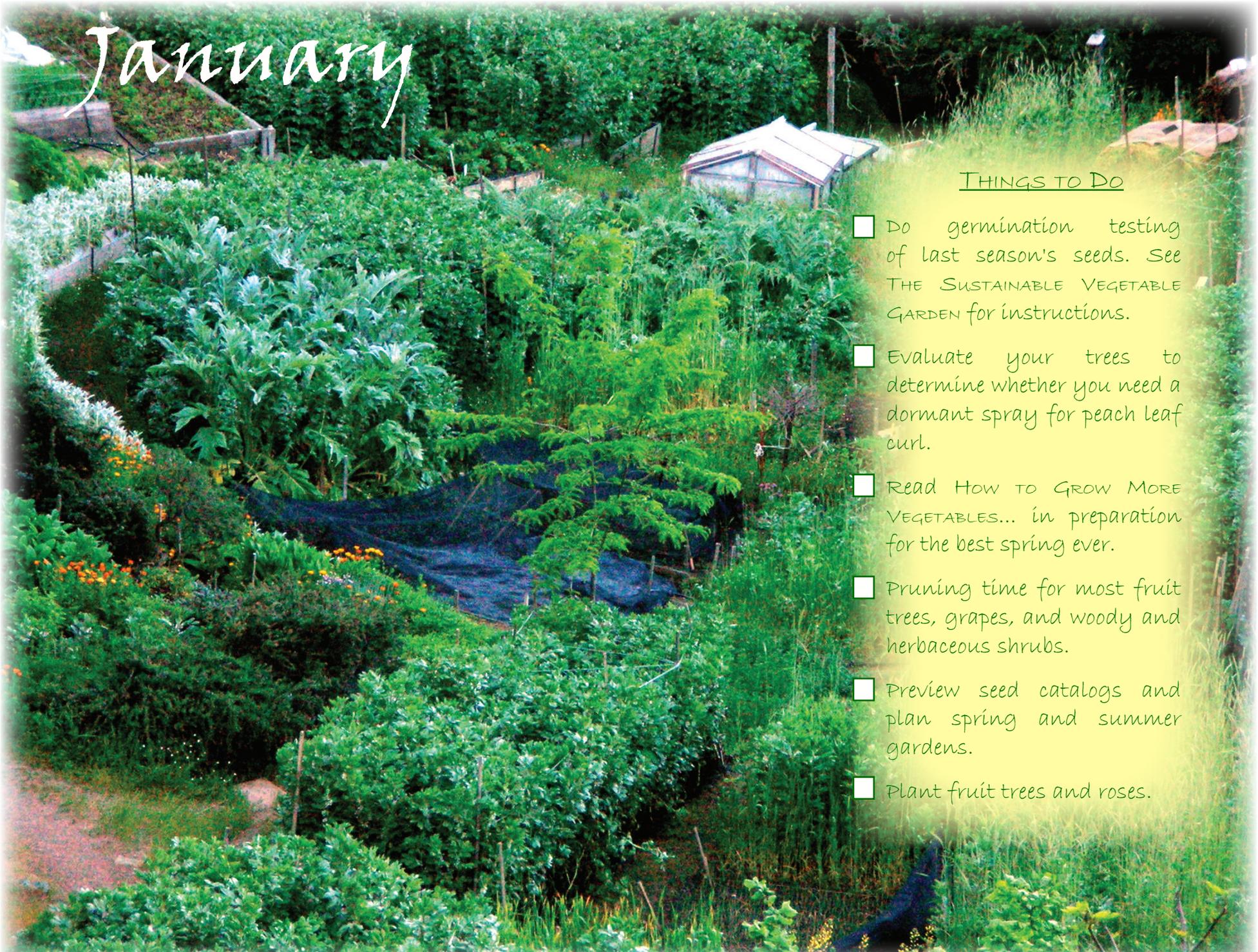
This sort of foresight can make your life easier, your harvests more successful, and your plants happier.

For example, most people, when the weather starts to cool, begin to think of planting cabbage. However, cabbage should actually be started in flats in the middle of June and July to be ready for transplanting from August through mid-September.

Planning and record-keeping are important tools for a successful garden from year to year, and things that you write down now could help you to a better harvest next year.

As we garden and learn from garden guides, friends and farm advisors, we often get so excited that we want to immediately incorporate all of our new seed varieties, innovations, and efficiencies; however, it's not always possible, or prudent to try all the new approaches at once!

So, if you think of something you'd like to try, but want to save for later, jot it down on your calendar and you'll know just what to do, and when.



January

THINGS TO DO

- ❑ Do germination testing of last season's seeds. See THE SUSTAINABLE VEGETABLE GARDEN for instructions.
- ❑ Evaluate your trees to determine whether you need a dormant spray for peach leaf curl.
- ❑ Read HOW TO GROW MORE VEGETABLES... in preparation for the best spring ever.
- ❑ Pruning time for most fruit trees, grapes, and woody and herbaceous shrubs.
- ❑ Preview seed catalogs and plan spring and summer gardens.
- ❑ Plant fruit trees and roses.

PLANT DIRECTLY MID-MONTH:

(Planning note: While they can be planted in February, artichokes, asparagus, rhubarb and strawberry sets will produce a bigger first-year crop if planted in early September)

Artichokes*, Asparagus*,
Rhubarb*, Strawberry Sets*♥

START IN FLATS MID-MONTH:

Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Celery, Collards, Kale, Kohlrabi, Leeks, Lettuce, Mustard Greens, Onions, Parsley, Scallions

February

THINGS TO DO

- Clean up garden leftovers, leaves, pruning bits, etc.
- Final bare root planting and last minute pruning.
- Experienced gardeners can sow flats of tomatoes, peppers and eggplants indoors or in a warm greenhouse.
- Plant blueberries, blackberries, raspberries, boysenberries, loganberries.
- Any plant grafting should be done this month.
- Prune roses at the end of the month

.PLANTING SYMBOLS

- * Plant from roots or sets
- ♥ These plants should be protected.

PLANT DIRECTLY:

Potatoes*♥,
Strawberry Sets♥

START IN FLATS MID-MONTH:

Broccoli, Brussels Sprouts,
Cabbage, Cauliflower,
Swiss Chard, Chives, Collards, Eggplant,
Kale, Kohlrabi, Leeks, Onions, Parsley,
Peas, Peppers, Tomatoes,

PRICK-OUT SEEDLINGS:

Broccoli, Brussels Sprouts,
Cabbage, Cauliflower, Celery,
Chives, Swiss Chard, Collards, Kale,
Kohlrabi, Leeks,
Lettuce, Mustard Greens, Parsley

PLANTING SYMBOLS

* Plant from roots or sets

♥ These plants should be protected.

THINGS TO DO

Check garden for slugs and snails.

Check oak trees for moth larvae (spray
with bacillus thuringiensis).

March

April

PLANT DIRECTLY MID-MONTH:

Swiss Chard, Dill,
Parsnips, Strawberry Sets,
Sunflowers, Turnips

START IN FLATS MID-MONTH:

Basil, Beets, Broccoli, Brussels
Sprouts, Cabbage, Carrots,
Cauliflower, Swiss Chard, Collards,
Eggplant♥, Kale, Kohlrabi, Leeks,
Leaf Lettuce, Onions, Parsley,
Parsnips, Peas☞, Peppers♥,
Rutabaga, Spinach, Tomatoes♥,
Turnips

PLANTING SYMBOLS

* Plant from roots or sets

☞ In partial shade

♥ These plants should be protected. Because of potential severe insect damage in early season, keep flats and seedling containers in a safe place, and then transplant in early May.

Approximate Date of last Hard
Frost: April 15th

THINGS TO DO

- ☐ Remember to implement companion planting practices in your garden! See [HOW TO GROW MORE VEGETABLES...](#) for more information.
- ☐ Check plants for cabbage looper moths, slugs and snails.
- ☐ Protect immature crops from birds for at least 10 days after planting.
- ☐ Get pheromone traps ready for apple codling moths.
- ☐ Good time to plant an herb garden or flowering perennials.
- ☐ Start double-digging spring beds when soil is dry enough to work.
- ☐ Fertilize perennial flower and vegetable beds, citrus trees and spring bulbs.
- ☐ Time to harvest and compost cover crops.
- ☐ Lift & divide perennials such as daisies, day lilies, campanula and dianthus.
- ☐ After they finish flowering, prune spring-blooming shrubs such as quince, flowering plum and lilac.

May

PLANT DIRECTLY:

Beets, Swiss Chard, Carrots,
Potatoes*, Radishes,
Strawberry Starts, Sunflowers

START IN FLATS MID-MONTH:

Basil, Beets,
Leeks, Parsnips,
New Zealand Spinach

START IN FLATS END OF MONTH:

Cucumbers, Melons, Pumpkins,
Squash (summer & winter)

PRICK-OUT SEEDLINGS:

Eggplant**, Peppers**,
Tomatoes**

TRANSPLANT MID-MONTH:

Beets, Broccoli♣,
Brussels Sprouts♣, Cabbage♣,
Carrots♣, Cauliflower♣, Celery♣,
Chives♣. Swiss Chard, Collards♣,
Kale♣, Kohlrabi, Leeks♣, Lettuce♣,
Onions♣, Parsley♣♥, Peas♣,
Lettuce♣, Parsley♣, Parsnips♣,
Spinach♣, New Zealand Spinach,
Turnips

THINGS TO DO:

- Water compost piles regularly and turn when necessary. See THE SUSTAINABLE VEGETABLE GARDEN for more information.
- Control earwigs with biological insecticidal soap.
- Plant a diversity of herbs and flowers to attract beneficial insects.
- Fertilize fruit trees, roses, cane berries and strawberries.

REMEMBER:

Last Soft Frost:
Approximately May 15th

PLANTING SYMBOLS:

- * Plant from roots or sets
- ** Move from 3" to 6" flat
- ♣ Can also plant directly
- ♥ These plants should be protected.

PLANT DIRECTLY MID-MONTH:

Basil, Beans (Bush and Pole),
Beets, Swiss Chard, Carrots,
Corn, Cucumbers, Dill, Eggplants,
Leaf Lettuce, Parsley,
Pumpkins, Melons, Peppers, Squash,
Strawberry Sets, Tomatoes

START IN FLATS MID-MONTH:

Basil, Beans, Broccoli,
Brussels Sprouts, Cabbage,
Carrots, Cauliflower, Swiss Chard,
Collards, Cucumbers, Kale,
Kohlrabi, Leaf Lettuce, Parsley,
New Zealand Spinach

PRICK-OUT SEEDLINGS:

Broccoli, Brussels Sprouts,
Cabbage, Carrots, Cauliflower,
Swiss Chard, Collards, Cucumbers,
Kale, Kohlrabi, Leaf Lettuce, Melons,
Parsley, Pumpkins,

TRANSPLANT:

Basil, Swiss Chard, Cucumbers,
Eggplant, Leaf Lettuce, Melons,
Parsley, Peppers, Pumpkins, Squash
(Summer & Winter), Tomatoes

THINGS TO DO

- ❑ Stake, cage or trellis indeterminate tomatoes, large pepper plants, and pole beans. (Note: tomato cages can reduce yields)
- ❑ Start building compost piles with plant residues from the garden. Be diligent with daily watering as hot weather sets in.
- ❑ Keep harvesting to prolong plant vigor and production (e.g., pick bush beans every other day).
- ❑ Harvest, thresh, and mill mature grains planted last Autumn. Bake bread from freshly harvested wheat.

June

July

PLANT DIRECTLY:

Bush Beans, Beets, Broccoli,
Carrots, Swiss Chard,
Corn (Short-Season Varieties) ♦,
Leaf Lettuce, Parsley, Radishes,

START IN FLATS MID-MONTH:

Carrots, Swiss Chard, Leaf Lettuce,
Parsley, Parsnips, Rutabaga,
New Zealand Spinach, Turnips

PRICK-OUT SEEDLINGS:

Broccoli, Brussels Sprouts,
Cabbage, Cauliflower,
Collards, Kale, Kohlrabi

TRANSPLANT LATE IN MONTH:

Broccoli, Brussels Sprouts,
Carrots, Cabbage, Cauliflower,
Collards, Swiss Chard, Kale,
Kohlrabi, Leaf Lettuce, Parsley,
New Zealand Spinach

PLANTING SYMBOLS:

♦ Can be planted late in mid-season because they will mature before the cool autumn weather.

THINGS TO DO

- Start perennial herbs from seed in flats this month.
- Leave some plants for seed saving (see GROWING TO SEED in Bountiful Garden's catalog).
- Regular watering of plants is important this month.
- Cover tender plants with 30% shade netting 10 A.M. - 5 P.M.
- Can, dry, freeze and give away surplus fruit and vegetables.
- After harvest, protect soil from sun by planting a cover or compost crop such as buckwheat. See HOW TO GROW MORE VEGETABLES... for more information.
- Harvest, thresh, and mill mature grains planted last Autumn. Bake bread from freshly harvested wheat.
- Stop watering onions when tops begin to significantly lose color and fall over. Stop watering garlic when only six leaves remain fully green. Harvest both crops 10 days later. Pull whole plants, brush off soil (don't wash), cure bulbs in a dry, shady place, remove tops (or braid), store in cool, dry place.
- Thin excess fruit on fruit trees.



THINGS TO DO

- Raspberries and blackberries: remove weak canes, canes that have fruited this year, and unneeded emerging canes.
- Provide 30% shade netting for flats during hot spells.
- Remember to save seeds from the vegetables and flowers that have done well in your garden so you can use them next year.
- Water diligently.
- Keep compost piles moist.

PLANT DIRECTLY:

Chard, Radishes

START IN FLATS MID-MONTH:

Swiss Chard, Mustard,
Radicchio, Spinach

TRANSPLANT:

Carrots, Chard, Leaf Lettuce
Parsley, Parsnips, Rutabaga,
New Zealand Spinach, Turnips

August

PLANT DIRECTLY:

(Planning note: While they can be planted in February, artichokes, asparagus, rhubarb and strawberry sets will produce a bigger first-year crop if planted in early September)

Artichokes*, Asparagus*,
Rhubarb*, Strawberry Sets*

Wheat, Oats, Triticale, Barley,
Cereal Rye and Fava Beans
Sept. 21 - Oct. 15

START IN FLATS MID-MONTH:

Wheat, Oats, Triticale, Barley,
Cereal Rye and Fava Beans

TRANSPLANT:

Swiss Chard, Mustard,
Radicchio, Spinach

PLANTING SYMBOLS

* Plant from roots or sets

THINGS TO DO

- Build compost piles as you are cleaning up summer growing beds.
- Sow fava bean seeds as a compost crop into harvested beds. Continue through October.
- Transplant native perennials.
- Refrigerate tulip bulbs for six to eight week in a well-ventilated paper bag. (Keep apart from apples).
- Early in the month, when many growing areas are empty, do soil testing to plan for Spring gardens. We like the basic and trace-mineral package from Timber Leaf Soil Testing, available online at:
www.timberleafsoiltesting.com

September

PLANT DIRECTLY:

Garlic from bulbs

Wheat, Oats, Triticale, Barley
and Cereal Rye
October 1- 15

START IN FLATS 1ST OF MONTH:

Wheat, Oats, Triticale, Barley
and Cereal Rye

TRANSPLANT:

Wheat, Oats, Triticale, Barley
and Cereal Rye

REMEMBER:

1st soft frost approximately
October 15th

THINGS TO DO

- Protect plants from frost.
- Harvest herbs in time to dry, make herb vinegars, jellies, etc., for holiday gifts.
- Plant your own grains to harvest, thresh, mill and bake in June and July. See our publication *GROW YOUR OWN GRAINS*, available from bountifulgardens.org, for more information.
- This is another good time to put in an herb garden, shrubs, and California native plants.
- Plant bulbs such as daffodils, narcissus, freesias, anemone and others.
- Chill tulips and hyacinths for four to six weeks and plant in December.
- Transplant perennial herbs.
- Sow California native wildflower seeds.

October



THINGS TO DO

- Finish planting and fertilizing bulbs.
- Clean, sharpen and oil garden tools and handles, including wooden handles, to be ready for next planting season.
- In late November, do first dormant oil spray if needed for peach leaf curl control.
- For frost protection, cover tender trees, flowers and vegetable plants.

PLANT DIRECTLY:

Fall Bulbs
Wild Flowers

No flat-sowing, pricking-out
or transplanting this month

REMEMBER:

1st hard frost approximately
November 15th

November

December

THINGS TO DO

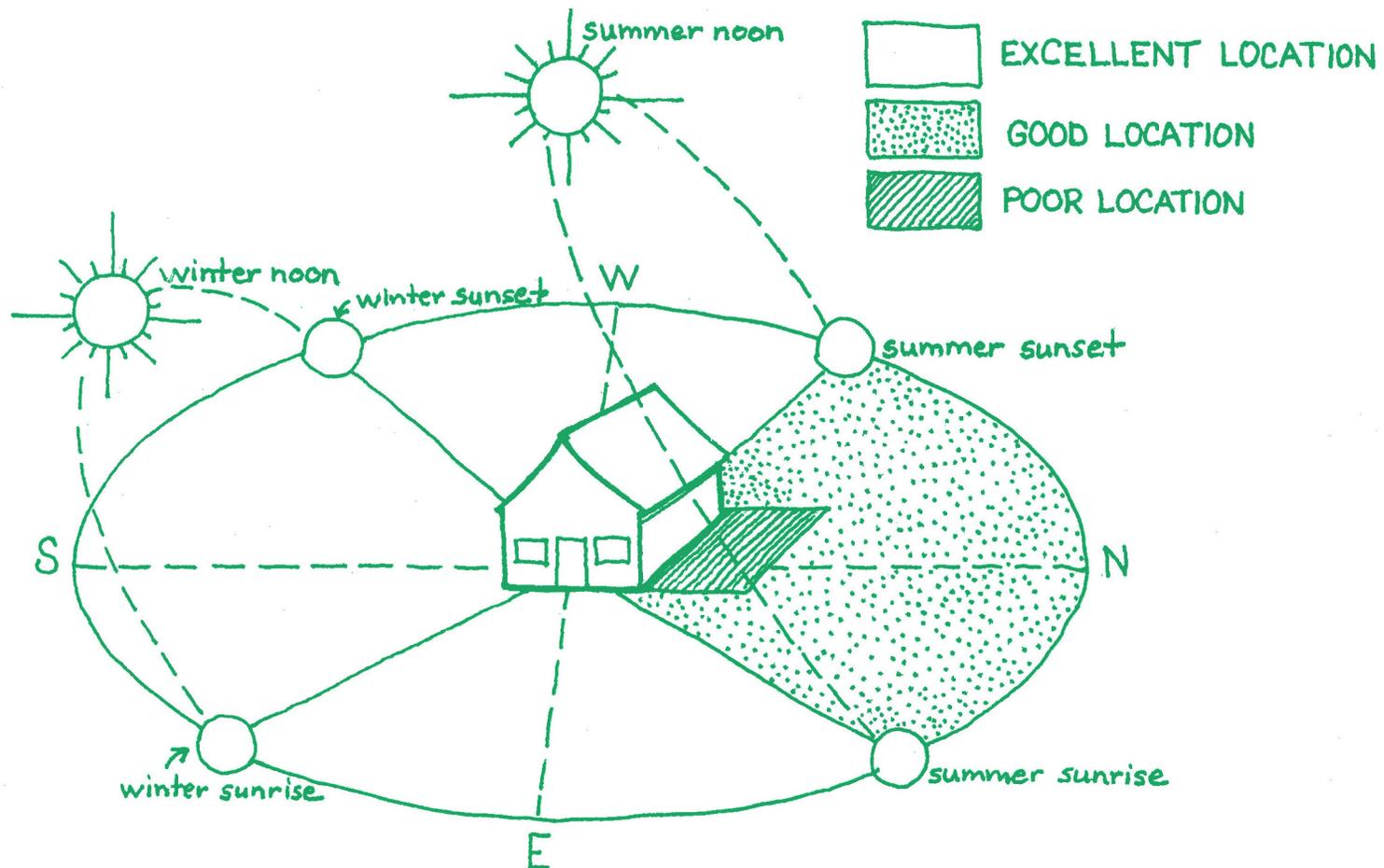
- Cover compost piles to prevent over-wetting during winter rains. Uncover when it's not raining so piles can breathe.
- Give gifts from your garden: dried herbs, braided garlic, homemade wine, comb honey, dried fruit, tomato seeds, dried zucchini chips, birdhouse gourds, or a dried bouquet of flowers.
- Start forcing indoor bulbs for winter color — amaryllis, paperwhites, hyacinths
 - Spray for peach leaf curl with copper sulfate.

For January:

- Make holiday garden gift list so you can plan your garden more easily.

To determine the part of your yard which has the best potential for good crop growth, use the illustration below, bearing the following points in mind:

- A minimum of 4 hours of full sunlight is needed for any significant food plant growth, and 7 to 11 hours (preferably the latter) are normally required.
- For areas with low sunlight (4 to 6 hours), try experimenting with the cool season crops listed on page 79 of *HOW TO GROW MORE VEGETABLES...* or try Bountiful Gardens' SHADY GARDEN COLLECTION.
- For areas with 7 to 10 hours of full sunlight, cool- and warm-season crops listed on that page should do well.
 - For areas with 11 or more hours of full sunlight, cool-, warm- and hot-season crops should thrive!



Sample Biointensive Garden Plan for Willits, CA

Crop Variety	1	2	3	4	5	6	7	8	9	10	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
	Sq Ft	Centers	Max. # of Plants		Amount of Seed Needed for Actual Area		Number of Flats to Sow		Number of Flats to Prick Out														
			/100	Actual	No.	Ounces	No.	Centers	No.	Centers													
Tomato <i>Rutgers</i>	10	21	35	4	6 seeds	.0004	.02	1	.06	2		2/21 →	4/1 F					3/21 →	5/1 PO	5/21 TP	8/15 H →		
Lettuce <i>Bronze Arrow</i>	10	9	248	25	32 seeds	.0012	0.1	BC	.23	1.5			4/14 →	5/1 F			7/21 H →	4/21 →	5/7 PO	5/21 TP			
Onions, Green <i>Ishikura</i>	2	3	2,507	50	72 seeds	.0078	.28	BC	-	-			3/21 →	4/7 F			5/21 TP			7/21 H →			
Sweet Corn <i>Montana Bantam</i>	20	15	84	17	23 seeds	.22	.09	1	-	-					5/16-18 F					5/21 TP			
Watermelon <i>Sugar Baby</i>	10	18	53	5	7 seeds	.034	.11	2	-	-				4/21-28 F						5/21 TP	7/26 H →		
Cucumbers <i>Marketmore 86</i>	2	12	159	2	3 seeds	.004	.05	2	-	-				4/21-28 F						5/21 TP	7/21 H →		
Snap Beans, Bush <i>Roc D'or</i>	2	6	621	12	16 seeds	.16	.06	1	-	-					5/7-14 F					5/21 TP	7/21 H →		
Carrots <i>Nantes TipTop</i>	4	3	2,507	100	182 seeds	.008	-	-	-	-										5/21 BC	7/21 H →		
Cantaloupe <i>Cantalun</i>	10	15	84	8	11 seeds	.009	.17	2	-	-				4/21-28 F						5/21 TP	8/21 H →		
Potatoes <i>Red Norland</i>	25	9" C 9" deep	248	62	-	5.8-7.75 lbs	-	-	-	-			Order	4/21 Sprout	5/21 TP						7/26 H		
Onions, Regular <i>New York Early</i>	5	4	1,343	67	96 seeds	.01	.38	BC	-	-	1/7-21 F				5/21 TP						8/30 H		

10/4 BC
Compost Crops

BC = Broadcast F = Flat H = Harvest PO = Prick Out TP = Transplant

This chart contains information for planning a garden with 11 crops we feel would be a good start for a first 100-square-foot Biointensive garden. For more information about using the charts and designing your Biointensive garden, see *THE SUSTAINABLE VEGETABLE GARDEN.*