Broccoli to Butterflies
School Garden Templates

by Roxane Smith
Travis County Master Gardeners Association
About Broccoli to Butterflies

Broccoli to Butterflies is a school gardening program that coincides with the academic year; beginning in September and ending in May.

It is a long-term planting program using cool-season vegetables and herbs.

Beds are planted in fall to go through until May. In late winter / early spring, some vegetables and herbs are allowed to flower to attract and nourish bees, butterflies and other pollinators. In spring, spaces created by harvested vegetables are filled with brightly colored annual flowers. Beds are cleared in mid-May and planted with a summer cover crop in preparation for the next fall planting.

The program is designed to work with 4’ x 4’ or 4’ x 8’ garden plots.

Calendar

September: Prepare beds.
September-October:
  Plant out transplants when available in stores.
  Sow seed during appropriate time.
Fall, winter and early spring: Grow and harvest.
March:
  Fill in spaces created when vegetables are harvested with brightly colored annuals.
  Allow herbs and selected vegetables to bolt and flower to attract bees and butterflies.
May: Clear ground, dig over and sow with grocery store bought cow peas (black-eyed peas) for summer cover crop.
Irrigation: Water sources must be nearby and easy to use for the garden to be a success.

Site: As a cool season garden, plants can tolerate some shade, but more sun is better; no less than 4-5 hours a day.

Drainage needs to be good. Do not plant in soggy soil.

Start small; only tackle what is reasonable given time considerations and other pressing demands.

Locate tall vegetables first and shorter vegetables after. Work further out from the border toward the edge of any side.

Because they do not grow well during the academic year, there are no warm-season herbs and vegetables in this scheme: no tomatoes, basil, eggplant, cucumbers, peppers, or corn.

Stories to include:

Jack-and-the-Beanstalk (fava beans) from the Old World.

Planting of the Three Sisters (corn, summer beans, squash) from the New World.

Classroom activities:

Fall / Winter: meal of vegetable soup made in a stock pot or microwaved, then pureed in a blender with yogurt and herbs, served with baguette and a dessert brought from home.

Winter / Spring: meal of wilted leafy vegetables with a little yogurt, parmesan cheese, and nutmeg served over ramen noodles with a small winter salad on the side.
Garden Style Possibilities

Formal

Farm

Cottage

Spinach
Plant seed unless otherwise noted

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Artichoke (crowns/transplants)
Asian greens (seeds or transplants)
Asparagus (crowns)
Beans, snap and lima
Beets
Broccoli (transplants)
Brussels sprouts (transplants)
Cabbage (transplants)
Cantaloupe (muskmelon)
Carrots
Cauliflower (transplants)
Chard, Swiss (seeds or transplants)
Collards (seeds or transplants)
Corn
Cucumber
Eggplant (transplants)
Fava beans
Garlic
Greens, cool season
Greens, warm season
Kale (seeds or transplants)
Kohlrabi (seeds or transplants)
Lettuce (seeds or transplants)
Mustard (seeds or transplants)
Okra
Onion, bulbing (transplants)
Onion, bunching/multiplying
Pulse, English, snap and snow
Potato, Irish
Potato, sweet (slips)
Pumpkin
Radish
Shallots
Spinach (seeds or transplants)
Squash, summer
Squash, winter
Tomatoes (transplants)
Turnip
Watermelon

Plants grown in winter will benefit from protection during freezing weather
Plants grown in late summer will benefit from shade cover during establishment
## Plant Guide

<table>
<thead>
<tr>
<th>Plant</th>
<th>Width (Inches)</th>
<th>Height (Inches)</th>
<th>Transplant or Seed</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beans - Fava</td>
<td>6 x 6</td>
<td>36-60</td>
<td>Seed</td>
<td>Plant early, many varieties</td>
</tr>
<tr>
<td>Beets</td>
<td>3 x 3</td>
<td>12</td>
<td>Seed</td>
<td></td>
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<tr>
<td>Broccoli</td>
<td>12 x 12</td>
<td>18-24</td>
<td>Transplant</td>
<td>Let side shoots flower</td>
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<tr>
<td>Cabbage</td>
<td>12 x 12</td>
<td>12-18</td>
<td>Transplant</td>
<td></td>
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<tr>
<td>Carrots</td>
<td>3 x 3</td>
<td>12</td>
<td>Seed</td>
<td>Short root varieties</td>
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<tr>
<td>Cauliflower</td>
<td>12 x 12</td>
<td>12-18</td>
<td>Transplant</td>
<td></td>
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<tr>
<td>Chard</td>
<td>6 x 6</td>
<td>12-18</td>
<td>Transplant / Seed</td>
<td>Red=pretty White=hardy</td>
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<tr>
<td>Kale</td>
<td>6 x 6</td>
<td>6-12</td>
<td>Transplant</td>
<td>Flowers can be eaten</td>
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<tr>
<td>Lettuces</td>
<td>6 x 6</td>
<td>6-12</td>
<td>Transplant / Seed</td>
<td>Leaf type, not head</td>
</tr>
<tr>
<td>Leeks</td>
<td>3 x 3</td>
<td>18-24</td>
<td>Plants</td>
<td>Buy at grocery store</td>
</tr>
<tr>
<td>Mustard</td>
<td>6 x 6</td>
<td>12-18</td>
<td>Transplant / Seed</td>
<td>Let flower</td>
</tr>
<tr>
<td>Onion/Garlic</td>
<td>3 x 3</td>
<td>12-18</td>
<td>Sets or cloves</td>
<td>Buy cloves at grocery store</td>
</tr>
<tr>
<td>Peas - Sugar</td>
<td>3 x 3</td>
<td>72</td>
<td>Seed</td>
<td>Needs strong support; plant early</td>
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<tr>
<td>Radishes</td>
<td>3 x 3</td>
<td>6-12</td>
<td>Seed</td>
<td>Red=quick White=slower</td>
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<tr>
<td>Spinach</td>
<td>6 x 6</td>
<td>6-12</td>
<td>Transplant / Seed</td>
<td>Let flower</td>
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<tr>
<td>Fennel/Dill</td>
<td>18 x 18</td>
<td>36</td>
<td>Transplant</td>
<td>Plant early; rich soil</td>
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<tr>
<td>Cardoon</td>
<td>36 x 36</td>
<td>60</td>
<td>Transplant</td>
<td>Plant early; rich soil</td>
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<tr>
<td>Artichoke</td>
<td>36 x 36</td>
<td>60</td>
<td>Transplant</td>
<td>Plant early; rich soil</td>
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<tr>
<td>Flat parsley</td>
<td>12 x 12</td>
<td>12-18</td>
<td>Transplant</td>
<td>Let flower</td>
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<tr>
<td>Cilantro</td>
<td>12 x 12</td>
<td>12-18</td>
<td>Seed</td>
<td>Let flower</td>
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<tr>
<td>Arugula</td>
<td>12 x 12</td>
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<td>Seed</td>
<td>Let flower</td>
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<td>6” x 6”</td>
<td>12” x 12”</td>
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**Height Key:**
- **18+”**
- **12-18”**
- **6-12”**

**Graphical Elements:**
- **18” x 18”**
- **36” x 36”**
Examples

Key:
A = Lettuces
B = Spinach
C = Leeks
D = Cilantro
E = Chard
F = Flat Parsley
G = Broccoli
H = Mustard
J = Arugula
K = Carrots
L = Kale
M = Radishes
N = Fennel/Dill
P = Cauliflower/Cabbage
Q = Cardoon
R = Beets
S = Fava Beans

Height Key:
- 18+”
- 12-18”
- 6-12”

Individual transplants:
Spinach
Leeks
Chard
Parsley
Broccoli
Kale
Fennel/Dill
Cauliflower
Cardoon
Cabbage

- Dot denotes individual transplants.
Other Organizations, Publications and Contacts

Square Foot Gardening, Mel Bartholomew, Rodale Press, 1981
The Edible School Yard, edibleschoolyard.org
Austin Sustainable Food Center, sustainablefoodcenter.org
Austin School Garden Network, austinsgn.org

Daphne Richards:
Horticulture Extension Agent Travis County
1600-B Smith Road
Austin, TX, 78721
Master Gardeners Help Desk:
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