How to grow salad greens in Wisconsin
by Robin Mittenthal, January 2010

Important notes about this guide and about greens:
1) This guide is a small section of a book-length manual for beginning gardeners called From the Ground Up. The manual includes more information about how to grow the crops discussed here, as well as general explanations of fertilizer, compost, weed management, and other related topics. It is available for free online at the following address: http://www.eagleheightsgardens.org/tips/garden_manual_v_1.1.pdf
2) Most greens (especially lettuce, endive, radicchio, and spinach) do not do well in the hot, dry weather we tend to have in Wisconsin in July and August. You may choose not to grow greens at this time, or you can try covering your greens with material known as “floating row cover” (available at most local garden stores), which can help your greens stay moist and may improve your success growing greens during hot weather. However, be prepared for your greens to “bolt” (get tall, get bitter, and go to seed) quickly when temperatures rise.
3) Many greens (especially spinach, tat soi, arugula, and bok choi) do well even in very cold weather. These greens can be planted in Wisconsin as early as late March. You can also plant them in late August or early September and they will grow and be edible through at least the first light frosts of the year. Floating row cover (mentioned above) is also helpful at these times because it holds in heat and helps the greens grow faster.
4) Be aware that even in the most favorable weather, most salad greens are short-lived plants. If you want to have salad throughout the entire growing season in Wisconsin, you will need to plant multiple times (perhaps as often as every 2-3 weeks). If you want a green leafy vegetable that you can plant once and harvest all season long, try kale, collard greens, or chard (see the separate vegetable planting guide).

Types of greens

Many different greens can be planted, cared for, and harvested in just about the same way. Some greens may be familiar and others less so. A partial list of such plants, grouped to indicate the relationships between different plants:

1) Sunflower family plants (also called Asteraceae) -- lettuce (many varieties), endive, radicchio.
2) Cabbage family plants (also called Brassicaceae) -- mizuna (also called kyona), komatsuna, broccoli raab, arugula, mustard, red mustard, Napa cabbage (also called Chinese cabbage), hon tsai tai, tat soi, canola (also called yu choi or edible rape), bok choi (also called pak choi).
3) Goosefoot family plants (also called Chenopodiaceae) -- spinach, amaranth, chard, beets (Note that chard and beets can be used in salads, but are also grown for other uses)
4) Herbs -- fennel, parsley, basil, chervil, perilla. (Note that these herbs can be used in salads, but are also grown for other uses -- see the separate handout on herbs for a discussion of growing herbs for drying and other food uses.)
5) Miscellaneous other greens -- Purslane, sorrel, mâche (also called corn salad), dandelions

Most of these greens can be used uncooked in salads, at least when they are young. A few are processed somehow or used in cooking (for example, Napa or Chinese cabbage, which is used to make the Korean dish kim chee). With the exception of sorrel, which is a long-lived perennial, all of these greens are grown as annuals.

How to grow greens, method 1: salad mix

Almost any green can be raised for a salad mix, also called “baby” greens or mesclun (which also means “mixed”). To grow mesclun, the seeds of one or more greens are planted very densely and the plants' leaves are harvested when small (less than about 15 cm/6 in long). Several varieties of these young leaves are often mixed together to make the mesclun. Mesclun has less water in it than head lettuce and is often considered more flavorful.

To grow a mesclun, you can either a) buy a pre-mixed mesclun mix containing seeds of many different plants, b) buy seeds of multiple plants, mix them together, and plant one or more rows of the mixed seeds, or c) buy seeds of multiple different greens and plant one or two “pure” rows of each green, cutting them and mixing the leaves together to make the mix. If there’s one green you like very much (like lettuce, arugula or spinach) you can grow it the same way but just eat it on its own.

To grow a mesclun mix, choose the green or greens you want to grow, buy at least 50 g (about 2 oz) of each green, and follow the steps on the next page.
Steps for growing and harvesting salad mix:

a. Prepare the bed(s) where your salad mix will grow. Unlike most vegetables, greens do not need much in the way of fertilizer or soil amendments. However, it doesn’t hurt to enrich your beds a bit before planting.

b. Mark each row you want to plant by using a stick or other tool to scrape a very shallow trench (no deeper than 0.5 cm/0.2 in). If you don’t have much space, rows can be as little as 8 cm (3 in) apart, but you will have to do all of the weeding by hand. If you plant rows 15 cm (6 in) apart, you will be able to use a hoe to weed between the rows, though you will probably also need to do some hand weeding.

c. Scatter the seed of your mesclun mix (or a single green) down the trench so that the seeds are less than 2.5 cm (1 in) apart.

d. Take some soil in one hand and use the fingers of your other hand to crumble the soil finely over the seeds. DO NOT put more than 0.5 cm (0.2 in) of soil over them. Small seeds buried deeper than this will not come up.

e. When you have finished covering your row(s) of seeds, spread a hand and press lightly down along the length of the row. This gives the seeds good contact with the soil so they can absorb water.

f. Water the bed carefully and lightly. If you splash a lot of water on the bed in large drops, you will wash the small, shallowly planted seeds right out of the bed.

g. If you have it, cover the bed(s) with floating row cover. This will help keep the bed moist, speed up the growth of your greens, and keep them from being eaten by insects (especially flea beetles) and other pests. Most greens will grow without floating row covers, but if you have problems with insects, a cover might be the first thing to try.

h. Water the greens lightly twice a week if there is no rain, or three times if it is very hot and dry.

i. Your greens should start to grow. As the plants get to be 2.5-5 cm (1-2 in) tall, you should be able to identify what is a green and what is a weed. Use your hands and/or a hoe to remove the weeds. If you are using a floating row cover, leave the plants covered until the are at least 5 cm (2 in) tall, uncover them, weed them, recover them, and take the cover off only when the greens are ready to be harvested. If you are growing spinach, you should thin while you are weeding. Thin the spinach plants so they are 10 cm (4 in) apart.

j. When the greens are about 15 cm/6 in long, you can begin harvesting them. This may be as little as 3 weeks after planting and as many as 5 weeks. To do this, take a sharp knife and carefully cut them 1-2 cm (0.5-1 in) above the surface of the ground, just mowing along the row(s) like a lawn mower. Cut only what you need for 4 or 5 days of eating (you can always come back to cut more fresh greens!). If you cut high enough, you leave the living base of each plant and it will regrow at least one or two more times for you to harvest it again. If you choose to, you can pull up whole plants and cut the roots off, but obviously there will not be any second crop! Note that some plants, particularly spinach, are better off picked than cut (harvesting any leaves that are at least 8 cm/3 in long).

k. Keep the greens out of the sun and heat and get them in a refrigerator or cold water as soon as possible (putting them in cold water quickly is best – it takes the heat out of the leaves). You can wash them right away, or wait to wash them until just before you want to eat them. To wash the greens, use a salad spinner (a kitchen tool available in many stores) or just swish them in a bowl of cold water. Pull out any dead or sick-looking leaves. Drain the leaves as best you can with a strainer and on a towel or paper towel. However you do it, getting water off the greens is important.

l. Put the dry mesclun in your refrigerator. It will store longest in a plastic box with a tight-fitting lid. Before you put the greens in, line the box with paper towels. These will absorb water given off by the greens and prevent rotting.

How to grow greens, method 2: heads

Some kinds of greens (especially lettuce, endive, radicchio, bok choi, and Napa cabbage) are raised for what are called heads.

To do this, the seeds are planted much farther apart than for salad mix and the plants are allowed to form large, dense masses of leaves. Note that many other greens, like spinach, never form heads and should always be planted as described for salad mix.
To grow greens as heads, buy 28 g (1 oz) or more of seed of a head-forming green and follow the steps below.

Steps for growing and harvesting greens as heads:

a. Prepare the bed(s) where your greens will grow. Unlike most vegetables, greens do not need much in the way of fertilizer or soil amendments. However, it doesn't hurt to enrich your beds a bit before planting.

b. Mark each row you want to plant by using a stick or other tool to scrape a shallow trench (no deeper than 1.3 cm/0.5 in). Rows should be 30-45 cm (12-18 in) apart. The closer spacing will keep the heads smaller, which can be nice.

c. Plant your seeds about 2 cm apart (0.8 in, or 10 seeds/foot)

d. Take some soil in one hand and use the fingers of your other hand to crumble the soil finely over the seeds. DO NOT put more than 0.5 cm (0.2 in) of soil over them. Small seeds buried deeper than this will not come up.

e. When you have finished covering your row(s) of seeds, spread a hand and press lightly down along the length of the row. This gives the seeds good contact with the soil so they can absorb water.

f. Water the bed carefully and lightly. If you splash a lot of water on the bed in large drops, you will wash the small, shallowly planted seeds right out of the bed.

g. If you have it, cover the bed(s) with floating row cover. This will help keep the bed moist, speed up the growth of your greens, and keep them from being eaten by insects (especially flea beetles) and other pests. Most greens will grow without floating row covers, but if you have problems with insects, a cover might be the first thing to try.

h. Water the greens lightly twice a week if there is no rain, or three times if it is very hot and dry.

i. Your greens should start to grow. As the plants get to be 2.5-5 cm (1-2 in) tall, you should be able to identify what is a green and what is a weed. Use your hands and/or a hoe to remove the weeds. At the same time, thin the greens so that the plants are 15-20 cm (6-8 in) apart. If you are using a floating row cover, leave the plants covered until the are at least 5 cm (2 in) tall, uncover them, weed and then them, recover them, and take the cover off only when the heads are ready to be harvested.

j. When the greens have made heads of a size you like (this takes 50-60 days for many common greens), you can begin harvesting them. Harvest using a knife to cut each plant off just above ground level. Cut only as many heads as you can eat in a week. Cutting every other head will let the remaining heads grow larger.

k. Keep the heads out of the sun and heat and get them in a refrigerator or cold water as soon as possible (cold water is best for cooling down the heads quickly). Drain the heads as best you can by shaking them or letting them drip dry.

l. Store head lettuce in a plastic bag together with a paper towel. The towel will absorb water given off by the greens and will keep them from rotting.

A few other good things to know about greens

If you plant a green and it does not come up within two weeks, the most likely reasons are a) your seed was old (the seeds of many greens does not store well), or b) you did not keep the seed bed wet enough. Don’t worry. Just go ahead and try again. You can replant the same bed or row immediately, perhaps with a different green or new seed.

Greens are great because they grow quickly and can be planted at many times through the season to replace other plants that have died.

As soon as you are done harvesting any planting of greens, you should rip out and compost any remaining plants. Plant the ground to another crop (potentially another different kind of green) or prepare it for winter.

Mizuna — a green that’s not widely known in the US