With warmer weather finally here, it’s a great time to enjoy the region’s local berry abundance—including the luscious blackberries, raspberries, olallieberries and other treats of summer. And if you aren’t yet growing your own berries, it’s a good time to start planning for an addition to your gardening repertoire.

Known collectively as “cane berries” or “brambles,” blackberries and their many relatives in the rose family’s *Rugosa* genus are an easy-to-grow perennial crop that, once established, will keep producing year after year with minimal care. Christof Bernau, who manages the garden area at the UCSC Farm, offers some ideas for establishing and growing this summertime treat.

### Location, Location, Location

“You definitely want to think well in advance about the location of your berry beds because caneberries are going to be with you for many years,” says Bernau. Things to consider when siting your beds include—

**Soil type:** “Caneberries are fairly widely adaptable but prefer a near-neutral to slightly acidic pH,” says Bernau. High organic matter will help deliver nutrients to the plants and retain moisture in the soil. Bernau notes that soil that holds moisture well is important because the plants are relatively thirsty and shallow rooted, with roots extending only 2–3’ deep. “Note that brambles do not like poor drainage or waterlogged soil, especially in winter when they’re vulnerable to rotting, even though they’re semidormant.”

**Sun exposure:** Berries do best in full sun, as less sun equals less fruit production. Shadier sites also mean that the canopy will stay wet longer, leading to potential disease problems (see page 6).

**Neighboring plants:** Think about how the established berries will influence neighboring crops or other plantings. According to Bernau, you can expect 5’–6’ or more of vertical growth in the spring and summer. This translates to shady conditions for nearby beds, which could be either beneficial or detrimental, depending on the needs of adjacent plantings.

**Previous crops:** Avoid planting berries in sites where crops in the Solanaceae family (tomatoes, peppers, eggplants, potatoes) have grown, as the soilborne diseases such as Verticillium wilt that affect these crops can remain in the soil and damage berry plantings.

**Dusty conditions:** Dust on the plants can promote the presence of spider mites, a pest that will feed on berry leaves and weaken the plant. Try and site your plantings away from the edges of roads or paths where dust may be an issue.

### Bed Preparation and Planting

“You’re only going to have one opportunity to do any significant soil preparation, and that’s before you do your first planting,” says Bernau. “If you can do a deep digging—to as deep as 2 feet, if possible—and incorporate lots of compost and any minerals needed to address deficiencies and create the proper soil pH, that’s going to pay benefits in the long run.” Once the berries are established, it’s difficult to work the soil without damaging plant roots.

Ideally, bed preparation should begin in early fall, before the Central Coast’s rainy season kicks into high gear. The deeply dug and amended bed can then sit fallow or be covered with a mulch to minimize soil disturbance during the rainy season. Fall or winter is also the time to establish your trellis system (see page 2).

When it comes time to plant the berries (January or February in the Monterey Bay region), wait for a relatively dry window to avoid working wet soil. Peel back the mulch cover, add a shovelful of compost to the planting hole, and bury your plants to the same depth they were growing in the nursery. This location will be evident on the stems, with darker browns and greens having been above ground and white or lighter-colored portions of the stem having been underground.

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Depending on the vigor of the variety, raspberries are usually planted between 18” and 36” on center (from the center of the planting hole to the center of the next planting hole) and blackberries between 36”–60” on center, with rows 5–10’ apart.

**Support structures**

Caneberries need support in the form of a fence or trellis system. “There are a variety of systems, depending on the type of cane fruit and how involved you want to get,” says Bernau.

Typical trellising systems are 5–7’ tall. For the uprights placed at the bed ends, choose materials that won’t rot easily, such as steel pipes, t-posts, redwood posts, or redwood set in concrete footings. String heavy steel wire between the uprights at 18” intervals to give the canes support. Bernau notes that it’s important to have guy wires extending from the uprights to hold them in place and prevent sagging. References in the Resources section provides plans for various trellis systems (see page 6).

**Choosing Varieties: Primocane (everbearing) versus Floricane (June bearing)**

Caneberry varieties come in two distinct types: primocane and floricane. As Bernau explains, “The difference between primocane and floricane varieties is where and when they bear fruit.”

Primocane varieties bear fruit on the current season’s growth, first developing new canes, then short laterals, finally flowering and setting fruit. In contrast, current season growth on floricane varieties will remain vegetative and in the second year, these canes produce laterals, then flowers and then set fruit.

Because primocanes must first develop new stems before flowering and fruiting, they tend to bear later in the season, but over a longer “picking window.” Floricanes, because they bear on preexisting wood, tend to bear earlier in the season, and are often called “June bearing.”

These differences dictate two approaches to winter pruning—

*Primocane varieties:* The first winter and every winter thereafter, prune 100% of canes to within a couple of inches of the ground. They’ll grow back completely starting in the spring through the summer.

*Floricane varieties:* Don’t prune the first winter after planting, since you’ll only have first-year wood. From the second season onward, you’ll have both first- and second-year wood present during the growing season.

Starting in that second winter, prune out 100% of the older wood and leave all but the weakest of the one-year-old wood. “The first-year wood will look younger and more tender, with no blossom residue—those are the canes you keep, as they will bear flowers and fruit

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in the coming season,” says Bernau. The canes you prune back will be replaced by new first-year wood in the coming growing season.

In the Monterey Bay region, pruning should be done in January or February, even if the plants aren’t completely dormant.

By growing both primocane and floricanne varieties, you can extend the “picking window” of your berries over a longer period. “The floricanes bear earlier since the second-year wood is in place at the start of the season,” says Bernau. The primocanes will come on in mid summer and may bear into the fall, depending on the variety.

Based on his experience growing caneberries at the UCSC Farm, Bernau recommends a number of both floricanne and primocane blackberry and raspberry varieties:

**Blackberries (thornless)**

**Raspberries**
- ‘Autumn Bliss’, ‘Autumn Britten’, ‘Caroline’, ‘Nova’, ‘Tulaeen’. Bernau notes that both ‘Heritage’ and ‘Summit’ are also great varieties for the home gardener, but the berries tend to crumble so are not a prime choice for commercial growing.
- ‘Ann’ and ‘Golden Summit’ = golden raspberry—pretty, but more of a novelty than a great-tasting berry

**Irrigation, Disease Control, and Ongoing Fertility**

Berries are a relatively “thirsty” crop and will produce better with regular irrigation. Once the winter rains taper off and plants are leafing out, Bernau and his staff apply water to the berry beds two to three times per week in 45 minute sets via one line of drip irrigation tape per row of plants. Irrigation should continue into the fall, when plants start to enter dormancy or the rains return.

“Watering your berries with drip irrigation offers a number of advantages, including fewer weeds,” says Bernau. Drip irrigation directed at the base of the berry plants will also keep the plants contained to the beds. “If you water overhead the roots will run wherever they want, which means you may be digging roots and berry plants out of the pathways.”

Avoiding overhead irrigation will also help minimize problems with rust, the fungus that can plague caneberryes under moist conditions. “Along with drip irrigation, we use three other approaches to control rust problems,” explains Bernau:

- **Thin canes**: By removing canes midway through the growing season you can increase air circulation and light penetration so that the canopy dries more rapidly.
- **Remove affected leaves and canes**: True to its name, the rust fungus appears as distinct rusty-orange spots on the underside of leaves. “If it gets well established you’ll see those same spots or a spider clusters on the stems, and it can eventually start to discolor the tops of the leaves,” says Bernau. If you see rust developing, prune and remove affected leaves and canes to keep the spores from spreading.

- **Avoid morning harvest**: By avoiding the canopy when it’s damp with morning dew or fog you minimize the chance of moving fungal spores from leaf to leaf.

Bernau also offers several options for maintaining fertile soil in your established berry beds—

In the fall, plant cover crops in the paths between the rows to provide fertility to the adjacent plants.

Every two to three years, top dress the plants with compost as plants emerge from dormancy in February and March, being careful not to disturb the plant roots.

Mulch the beds with a thin layer of compost (about a half pound per square foot) in the spring—too deep a layer can insulate the soil and prevent it from warming up, thus slowing plant growth.

**Harvest**

When fully ripe, caneberryes should look plump and come right off the plant without tugging. Ripe blackberryes will lose their shiny color and turn a dull black. The fruit won’t ripen off the plant, so be sure to pick fully ripe berries.

Note that these “soft fruit” don’t keep well once harvested, so use them up in the first few days, or make a plan to can or freeze them. When freezing, first spread your fruit in a single loose layer on cookie sheets and put in the freezer until solid, then repack berries in ziplock freezer bags. This will allow you to more easily remove small quantities of fruit as needed rather than trying to break chunks from a frozen mass of fruit.

**Sources**

If you’re only putting in a handful of plants, look for bareroot divisions from your local garden center or nursery. “For larger plantings, I’d recommend mail order companies, which can offer both more varieties and better prices,” says Bernau.

For orders of up to 25 plants, Raintree and One Green World offer good options. For larger orders, Bernau recommends Nourse (in Massachusetts), Boston Mountain (in Arkansas), and Sakuma Norcal, which sells rooted tissue cultures of blackberries in nine-packs. “We’ve had good luck with the tissue culture plants, although they’re a little slower to take off in the spring compared to the bareroot plantings,” says Bernau. Note that mail orders should be placed in the fall so that your plants get reserved—if you wait until January or February the plants may be sold out.

**Resources**

http://www.mastergardeners.org/picks/berries.html
http://ucanr.org/sites/gardenweb/Berries/

**Berry Growers’ Companion**, by Barbara Bowling. Timber Press, 2005