

Planting & Maintenance Guide for Fruits, Nuts, & Berries

Fruits, nuts, and berries need tender loving care to thrive and produce fruit in Central Texas. Following these basic guidelines for soil preparation and maintenance can lead to success. First choose a location in full sun where the soil has good surface *and* internal drainage. Give each plant proper spacing to minimize diseases and maximize production.

For Apples, Blackberries, Peaches, Pears, Plums, and Raspberries it is essential to amend the soil to a depth of *at least* 18 inches and a width of *at least* 3 feet for each plant. If you have deep soil, mix high **quality compost** into the native soil. The resulting soil blend should be 30% compost. The finished soil level should be a little above the native soil. This allows for settling and compost degradation. If you have shallow soil, mix in **high quality garden soil** with the native soil and create a raised bed. For greater nutrition add a **mineral supplement** and **mycorrhizal fungi**.

Dewberries, Figs, Grapes, Jujubes, Olives, Pecans, Persimmons, and Pomegranates may be planted with moderate soil amending. Pecans should **only** be planted where there is at least 3 feet of native soil.

Chilling Hours are the number of hours between 34° and 45° F that apples, peaches, pears, and plums must receive before they can bloom successfully & produce fruit. Different varieties have varying chilling hour requirements. Central Texas weather can be unpredictable and extreme so chilling hours will vary from year to year. The Austin area receives an average of 600 chilling hours. Downtown Austin receives fewer chilling hours; the Hill Country receives more. Ask our staff how to choose the proper fruit tree variety for your area.

To plant, amend the soil as described above. Dig the hole big enough to accommodate the entire root system without crowding. For bare root trees, build a small, firm hill in the center of the hole. Place the tree on top and spread the roots out along the sides of the hill. Backfill the hole with the amended soil. *Do not cover up the first root* coming out of the trunk – this should be slightly above the soil line. The graft should be well above ground level and facing the prevailing wind. (In our area the prevailing wind is from the southeast). Tamp the soil gently & firmly.

Water the entire root zone and beyond thoroughly right after planting. Follow with a solution of **liquid seaweed** alone or mixed with **fish emulsion**. Water deeply during the winter only enough to prevent the soil from drying out completely. Water deeply during the growing season about once every week, depending on weather and soil. Pay close attention to watering while trees are developing fruit and in late summer, when the trees set their flower buds for the next spring. When temperatures are above 95°F, water deeply once or twice a week.

Mulch over the root zone of all fruit and nut trees and berries with an aged mulch. Maintain a layer at least three inches thick – starting a few inches away from the trunk and extending beyond the dripline.

Pruning at planting time is essential for all apples, pears, pecans, plums, and peaches. Check the individual information sheets on these and other fruits for information on initial pruning. For further pruning help, search for fruit tree pruning information online, and only consult university websites for the most accurate information.

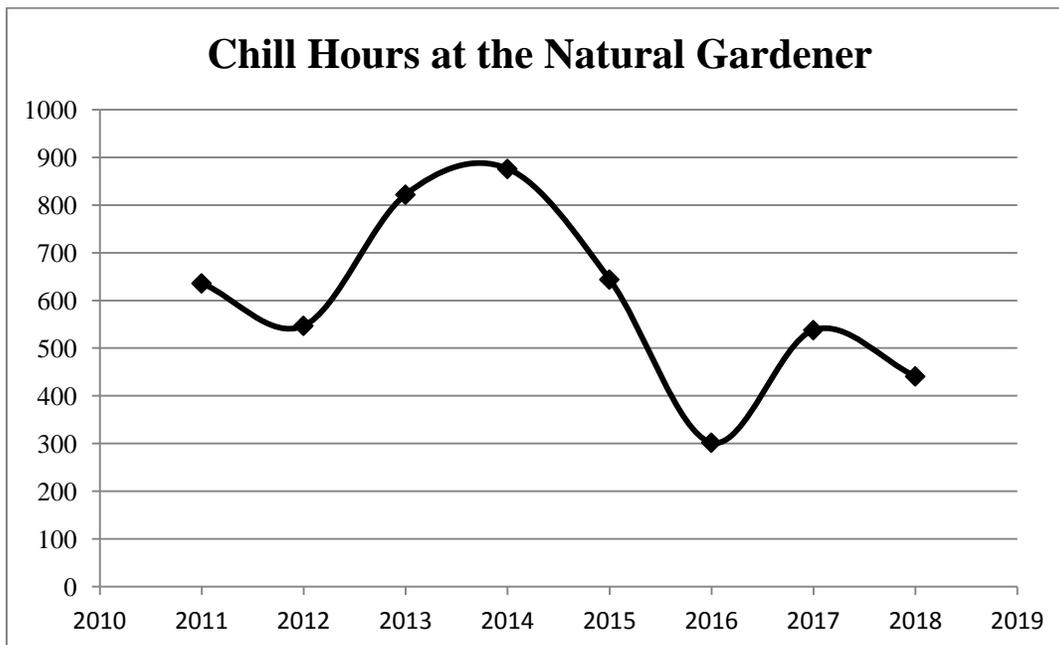
Fertilize most fruits once a month in March, April, May, and June with a **high nitrogen all purpose fertilizer** over the entire root zone. Only fertilize if the plant is actively growing. Add another light application again in the fall (late October). *Do not fertilize figs, pears, or grapes on this schedule*. We fertilize our grapes only once a year in late winter, and this schedule would work for figs too. For pears just use compost. These three fruits do best in lean soils.

Prevent overwintering pests and disease by removing any dropped fruit. Remove leaf litter in the fall.

Beneficial Nematodes applied to the soil every fall is very helpful in preventing the plum curculio pest on stone fruits. Please see our handout on *Plum Curculio* for more information.

Fruit Tree Spray Schedule for Apples, Peaches, Pears, and Plums

1. *At leaf drop in the fall*: Spray **Sulfur** or a **Biological Fungicide** to help prevent diseases.
2. *During winter dormancy*: Spray **Neem oil, Organocide** or another organic oil once a week for 2–3 wks.
3. *At bud swell in late winter/early spring*: Spray a fungicide as listed in #1 above.
4. *Late winter* is the time to control the Plum Curculio, which causes “the worm” in the fruit of plums, peaches, and sometimes apples. At Petal-Fall (5 days after bloom), and again at Shuck Split (14 days after bloom), spray an organic insecticide. Petal-Fall is when 80% - 100% of the flower petals have fallen. Shuck split happens after the fruit has just barely formed and has just expanded enough to split its papery covering (the “shuck”). Repeat in 10 – 14 days for a total of 3 sprays. Use **Kaolin Clay** or **Take Down Garden Spray**. See our handout on *Plum Curculio* for more information.
5. Throughout the growing season, once a month or more apply **seaweed** alone or mixed with **fish emulsion**. In addition, spray our **Aerobically-brewed Compost Tea** regularly for overall health, disease prevention, and disease control.



Chilling hours for The Natural Gardener: Average – 624. Chill hours varied by 600 hr from 2014-2016. Central Texas has a highly variable climate. This is partly to blame for the phenomenon of over abundance one year and a total bust the next.