Slug: Ask the Master Gardener
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A common problem west of the Cascades with many fruits and some vegetables is poor pollination. Plants will usually not set fruit without the transfer of compatible pollen and the consequent production of seed.

Since fruit is actually swollen ovarian tissue formed to protect seed as it matures, it will generally not hang on the plant if seeds are not formed. Lack of pollination often leads to either no fruit or deformed fruit.

An inspection of the seed cavities of dropped fruit usually reveals the absence of viable seed. If you do find seed, it is often deformed and shriveled.

A major factor leading to poor fruit set on many tree fruits in western Washington is temperature. When temperatures fall below 55 degrees, as they often do here in early spring, there is often a scarcity of honeybees, the major pollinating insects. Rainy and overcast conditions, even when temperatures rise above 55 degrees, also tend to restrict honeybee activity. Though bumblebees and other kinds of bees do fly in colder weather, there are not enough of them, usually, to take up the slack. Syrphid flies also help with the process of pollination and may be present but they just don't work the flower hard enough to result in good fruit set.

One thing you can do to protect the bees that are working for you, is to be cautious with insecticides. They should not be applied to fruit trees during the bloom cycle. Caterpillars of various kinds do tend to appear about this time, and do not have the inclinations to refrain from leaf consumption until flowering is over. If at all possible, wait to spray. If treatment is absolutely necessary, B.t. (Bacillus thuringiensis) is the safest thing to use when bees are foraging.

Control of disease on tree fruit does require applications of fungicides during bloom, however fungicides such as lime-sulfur, funginex, captan, benlate, and most others do not present a hazard to bees. Problems occur when fungicides are mixed with insecticides by the gardener or are purchased as mixtures commercially. These mixtures should definitely be avoided at flowering time.

Many fruit, such as pears, apples and Asian plums are self-sterile and unless there are other cultivars of these fruits nearby, with compatible pollen available, there is probably not going to be much fruit set. Even peaches, European plums, blueberries, raspberries, strawberries, and grapes, which are largely self-fertile, still require pollen to be transferred from one flower to another for fruit to set. Without insects to move all this pollen around for us, there would be very little fruit.

There is a WSU publication that can help you with selection of compatible fruit tree cultivars and bloom times. It is EB 0937 "Tree Fruit Varieties for Western Washington" and can be obtained at your local WSU Extension office.

This column is written by Washington State University/Skagit County certified Master Gardeners. Questions may be submitted to WSU/Skagit County Cooperative Extension, 306 S. First Street, Mount Vernon, WA 98273-3805.