

# Diggin' in the Dirt: Why Do We Graft Apples?

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## Grafting workshop in February

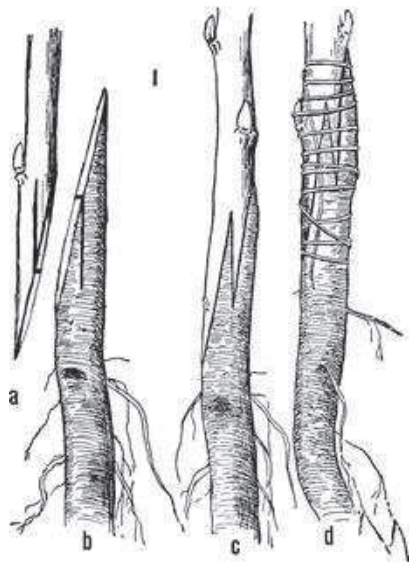
The OSU Extension office in St. Helens will be hosting a grafting workshop on February 16th from 9 a.m.-12:00 p.m. Participants will be taught how to graft apple scions on to dwarf apple rootstocks. Each participant will receive 5 rootstocks to work with and supplies to secure the graft. Scion varieties will be available or participants can bring their own varieties they wish to graft. Cost of the workshop is \$15. The class is limited to 20 people so early registration will assure a place. To register or for more information, call the Extension office at 503 397-3462.

## Why do we graft apples (and other plants)?

New varieties of fruit trees or ornamental woody plants come about from several sources. A farmer or plant breeder might do a controlled cross, moving pollen from the flower of one variety to the female parts of the flower of another variety. This work is done both commercially and in universities to develop new plant types. On the other hand, many varieties arise from chance crossings that get noticed once the seedling matures and shows unique qualities. Sometimes, trees produce spontaneous mutations that might affect only one limb and have desirable characteristics like nicer fruit or disease resistance on that limb only.

But, then the question is, how do you get more of these new plants?

You can't make the cross repeatedly since each time you will get seeds and thus plants with mixed genetics and appearance. So you have to clone the new plants, in other words, make an exact copy. Many woody trees and shrubs are fairly easy to propagate by rooted cuttings. Each cutting is a clone from the "mother" plant. This is the way most woody plants are propagated in the nursery industry.



But some woody plants root poorly. But they can be grafted onto a seedling (or other) rootstock. Almost all fruit trees except figs (which root from cuttings easily) are propagated in this way. For years, apples were grafted onto seedling rootstocks. In the fall, the farmer would sow seeds and new plants would emerge in the spring. After growing through the summer, the seedlings would be suitable for grafting next winter. Winter was traditionally used for grafting because the success rate is was

higher when the scion and rootstock are dormant when first grafted. The farmer would take the rootstock and make a cut into which he (or she) would stick a piece of the variety (say, Gravenstein, Northern Spy, or King) they wanted a copy of. The joint would then be wrapped tightly and coated in beeswax or grafting "goop." If all went well, the rootstock and scion (the piece of the variety) would knit together over the winter and next year could be planted out into an orchard. Another technique involved grafting a new variety onto limbs of an existing fruit tree with the ultimate aim of converting the entire tree to the new variety. Today, commercial grafting is more often done by "budding, in which a dormant bud of the desirable tree and is inserted into the rootstock in a small "T" cut.

The other big change has come in rootstocks. Some seedling rootstocks are still used, especially for ornamentals like Japanese maples. But for apples and most fruit varieties, specialty rootstocks are used. New rootstocks control the ultimate size of the new tree (dwarf or semi-dwarf), may provide some disease resistance, and will come into first fruit much faster than a graft on a seedling rootstock. For much more detailed information, see this excellent public-

tion available free on line from Washington State University: <http://cru.cahe.wsu.edu/CEPublications/PNW496/PNW496.pdf>

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## Free newsletter

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## Contact information for the Extension office

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St. Helens, OR 97051  
503 397-3462  
Email: [chip.bubl@oregonstate.edu](mailto:chip.bubl@oregonstate.edu)

## Tree Planting Workshop to be held February 8, 2013

OSU Extension Service is conducting a "Plant Your Trees Right" workshop on Friday, February 8<sup>th</sup>, from 9:00 to 11:00 AM at the Scappoose Bay Marina.

The class will cover bare-root seedling handling and care, planting technique and follow-up care. It is recommended for small acreage woodlot owners who would like to learn and get hands-on practice in advance of this winter's planting season.

The event is free, but registration is required. Please call the Extension office at 503-397-3462

to register. Participants should dress warmly, as the class will be held outdoors, and bring along their own planting tools.

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Our next issues will be February 7 & 21.

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