



STOCKING THE TOOLSHED: CHOOSING THE RIGHT HAND TOOLS

Lynn Lorenson, Nevada County Master Gardener

From *The Curious Gardener*, Spring 2008

Gardening is hard on your body. Choosing a tool that fits the size of your body and strength is only the beginning. Even if the tool is comfortable to use, injury can happen. *The main risk is overuse of a muscle or joint.*

Foothill gardeners have challenging terrains and soils. Just how do you dig a hole when the shovel keeps hitting rocks?

You start with a digging tool: a spading fork, a railroad pick or a pulaski, half mattock and half ax. For the really tough, rocky sites a digging bar is essential.

Hand tools are designed for specific purposes. The purpose for shovels is to **move** materials, soil, sand, gravel or rock. Professional tool sources list as many as 20 different kinds of shovels and spades!

The Inventory

Home gardening tasks can be accomplished with 3 basic types of **shovels**: a square point for moving sand and gravel, a round point for moving soil and a drain spade for creating irrigation furrows and cleaning out road side drains. If you plan to install underground irrigation or electrical trenches, a trenching shovel makes the task easier.

Forks are a second, essential- type of long handled tool. Choose the right sized scoop fork to work with mulches, compost and manure. Cultivating and refuse removal is made easier with a cultivating fork or refuse hook. These are handy to comb the thatch from ornamental grasses that you don't want to shear.

Garden grading and cleanup can be handled with 2 basic **rakes**. A bow rake (left) is for the heavy jobs in smoothing and leveling soil and moving small rocks. Choose a spring rake for leaves.

A groundskeeper rake equipped with torsion springs can do everything from spreading mulch, lifting thatch and removing leaves from gravel paths without moving the gravel. These rakes are lightweight and can be found in 21inch widths.

The perennial task of weeding calls for a **hoe**. Heavy grubbing hoes may be needed for the initial work on a newly cleared site. Double-edge hoes work well in garden beds. An oriental style hoe with a pointed blade can be used as a trowel, weeder and cultivator.

An addition long handled tool is a **pole pruner**. Pruners come with a cutting blade or saw. Combination heads with a saw and a cutting blade are also available. The pruners are fitted with extension or sectional poles of wood or fiberglass. These tools are difficult to use and cost between \$125 and \$200. Buy the best to do the job or leave it to a professional.

Wooden handles provide the most shock absorption for long handled tools. Extend the life of the handle by oiling or painting.

UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION



PLACER COUNTY

11477 E Avenue
Auburn, CA 95603
(530) 889-7385

E-Mail: ceplacer@ucdavis.edu

The University of California, in accordance with applicable Federal and State law and University policy, does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, medical condition (cancer-related), ancestry, marital status, citizenship, sexual orientation, or status as a Vietnam-era veteran or special disabled veteran. Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action Director, University of California, Agriculture and Natural Resources, 1111 Franklin, 6th Floor, Oakland, California 94607-5200. (510) 987-0096. United States Department of Agriculture, University of California, Placer & Nevada Counties cooperating.

NEVADA COUNTY

255 So Auburn
Grass Valley, CA 95945
(530) 273-4563

E-Mail: cenevada@ucdavis.edu

Always buy the best tools you can afford, especially when choosing loppers and pruning tools. Fit the size of the pruning tool to the hand and the job. Using a sharp tool that is comfortable will lessen stress.

Use **bypass pruners** that cut with a scissor action on shrubs and trees. **Anvil pruners** work well for perennials. Save the anvil loppers for cutting roots and brush cutting. A sickle makes shearing ornamental grasses easier.

Specially designed tools don't always help.

The American Journal of Occupational Therapy compared a regular trowel with an ergonomic version. The ergonomic tool was heavier and had a longer handle. The wrist movement was the same. The additional weight caused more ulnar deviation that can lead to repetitive-strain injury.

Training for the garden workout

First, choose hand tools that fit your size, your strength level, and the task to be done. Now, learn how to be a backyard athlete. Gardening causes a third to half of summer recreational injuries. Back pain and knee injuries are common. Gardening activities can cause carpal-tunnel syndrome, tennis elbow and trigger thumb. How do you do it right? Keep up your training all year long. Put as much thought into conditioning to garden as you would to run a triathlon. Poor form and technique taxes muscles and puts too much pressure on joints.

Possibly the most improperly used hand tool is the shovel.

The proper use a shovel will prevent strain to the back and shoulders. Stand close to the material you are moving. Turn your body by moving your foot rather than twisting at the waist. Your legs should be carrying the weight instead of the back and arms. Lift less than the maximum with each scoop. Keep your back straight with your head up. Make stretching your back and legs part of your gardening workout.

Cross training is important. Focus on keeping yourself injury free rather than finishing the weeding or pruning in one unbroken time frame.

Just like the gym workout, move from station to station in the garden. Lift half a bag of potting soil. Mow half the lawn. Prune 3 rose bushes. Rake the flowerbed by the deck. Stop, get a drink of water. Sit for 5 to 10 minutes. Start the circuit again.

Use long handled tools when possible to reduce bending, squatting and kneeling. Limit your time in any one gardening activity.

The main risk is overuse of a muscle or joint.

Simplify and reduce your landscape to keep the joys of making things grow while reducing the aches and pains.

References

American Occupational Therapy Association, www.gardenersrecovery.com/information.html
"Ergonomics Risk Factors for Musculoskeletal Disorder in Wine Grape Vineyard Work"
<http://ag-ergo.ucdavis.edu/papers/vineyardjmm.html>

UNIVERSITY OF CALIFORNIA COOPERATIVE EXTENSION



PLACER COUNTY

11477 E Avenue
Auburn, CA 95603
(530) 889-7385

E-Mail: ceplacer@ucdavis.edu

The University of California, in accordance with applicable Federal and State law and University policy, does not discriminate on the basis of race, color, national origin, religion, sex, disability, age, medical condition (cancer-related), ancestry, marital status, citizenship, sexual orientation, or status as a Vietnam-era veteran or special disabled veteran. Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action Director, University of California, Agriculture and Natural Resources, 1111 Franklin, 6th Floor, Oakland, California 94607-5200. (510) 987-0096. United States Department of Agriculture, University of California, Placer & Nevada Counties cooperating.

NEVADA COUNTY

255 So Auburn
Grass Valley, CA 95945
(530) 273-4563

E-Mail: cenevada@ucdavis.edu

Placer County Hotline: (530) 889-7388. Visit us online at <http://pcmg.ucanr.org>