

Save Time, Save Money and Be Healthy as You Garden

Start from a basis in reality

How many hours per week is "low", for you? (No such thing as no maintenance.)

Lawn requires 8 minutes work per month per 100 square feet

Trees, shrubs, groundcover, 10-12 minutes per month per 100 square feet

Annual flowers, 15-20 minutes per month per 100 square feet

Perennial garden, 60 minutes per month per 100 square feet

Everything needs more than average time in spring, less in summer

Find a once-a-year helper or cut deals with family and friends. Barter!

Choose for *types* of work you like, groundcovers if you're not a weed-er;

compact, shrubby plants if you're not a stake-r.

About money...

Does "time is money" apply to you? It's a limiter! Below, \$ will save, (\$) may "cost."

100 sq. ft. of perennial garden: \$200-280 labor, \$130-190 in plants & materials

Cheaper labor can cost in unsuspected ways. So hire smarter, not cheaper.

Power tools *may* save time but often do not, and there are hidden costs.

Time saving materials and equipment

(\$) Root barriers

Fertilize *less* and slow (slow-release products). Soil test, then stick to one fertilizer.

(\$) Staking *kits*

Watering systems, such as leaky buckets & hose connection stations. Also polymers.

A simple, standard kit of tools:

good wheelbarrow, 5-gallon bucket, small tarp

weeder, trowel, pruners, folding saw, spade, fork, rake, tarp

Sharp tools literally *cut* the work. Buy a honing stone and file

Tools that fit your hand and height

(\$) Gloves and boots

(\$) Seriously-raised beds

Wise moves -- most net savings on all fronts:

\$ Start earlier in spring, work later in fall. Every hour then saves 2-3 in summer.

Bundle, then cut. Use twigs as stakes, might even place them in fall.

\$ Buy plants and have materials delivered only when, and where, you need them.

\$ Dispense with non-essential tasks: prune harder, less often; stop spraying.

Do it when you think of it -- don't be ruled by "garden calendars!"

\$ Prune more in the off-season, less while shrubs and trees and growing.

\$ Restrain the urge for constant change and novelty.

\$ Establish several mini-compost sites around the yard, and sheet-compost there.

Prune perennials harder, more often. Throw out sickies, disappointments, invasives!

\$ Cut less in fall and as beds evolve; allow Nature to help and the fittest take over.

Define your goals for the day and stick to them. Walk and look before you work

Work in one-hour segments, starting in high-visibility, fun areas.

\$ Plant small and water small.

\$ Water early in the season for less water overall.

Mulch! Start with clean beds. Smother weedy areas. \$ Recycle all clippings as mulch.

(\$) *Use* what you grow: Vegetables, wood, yard waste...

Design for low maintenance:

- Better "bones," wider paths and built-in maintenance paths.
- Fewer edges. Check at the outset to be sure they're mow-able.
- Make more of easy-care species, discard high care.
- Do more with shrubs, (\$) groundcover (bulbs). If it works, mass it!
- (\$) Use long-lived clumping species to thrive, not just survive on your site.
- Know more about your soil -- dig some holes, do a drainage test.
- Use plants that will *mature* at the size you desire, so they are no-prune.
- Design with higher contrast in plant combos, so weeds can't hide.
- Place highest-maintenance areas closest to your eye and seat.

Gardening healthy is smart, and also saves time and money

Dress for success:

- Wear a hat! Protects you from sun, cold, insects, and scrapes.
- Gardeners in glasses have the advantage - protection from pokes!"
- Earplugs: On hand, because noisy equipment is more than just a nuisance.
- Gloves, long sleeves, and pants rather than shorts.
 - It's a chemical world! Even soil and plants may irritate skin.
 - Take care with *all* chemicals, even home-made remedies and fertilizers.
- Boots make digging easy, plus guard against scrapes and ankle twists.

(\$) Treat yourself to good tools.

- Knee pads -- portable or built-in -- spread the weight, save the knee.
- Padded, lightweight and rotating handles.
- Ergonomically designed tools to keep wrist and thumb in line.
- Fibreglas wheelbarrow.

Move like a pro, avoid the muscle strain.

- Keep your back from aching:
 - Bend your knees!
 - Use a cart.
 - Use more of your body - especially your legs.
 - Move smooth, don't jerk. Be "The Graceful Gardener."
 - Choose tools that fit the job, your size and ability.
- Protect your arms, wrists and hands:
 - Learn the neutral position for wrist and thumb, in line with arm.
 - Hug-carry, don't pinch-carry.
 - Stab and draw with that trowel, don't burrow and lift.
 - Vary your motions: Change which hand and *which foot* you use.

Despite these warnings, gardening is still good for your health!

- Be aware of but don't dwell on potential dangers
- Gardening gives us:
 - Greater strength and flexibility, increased cardiovascular fitness
 - Stress reduction
 - Better overall health
- We use 340 calories/hour (150-pound person).
 - Same as one hour of low impact aerobics!

Common Skin-Irritating Plants and Precautions*

Poison ivy causes an itchy rash. Avoid it by learning to recognize it and eliminate it from areas you frequent; cover all exposed skin while near it, work around it only when air is quite cool, wear protectant creams, wash thoroughly immediately after suspected contact

Junipers cause a rash on many people. Wear long sleeves while trimming.

Thorny plants may cause fungus infections where thorns puncture or scratch skin. Rose, hawthorn, barberry, grapeholly. Wear heavy or double gloves.

Rue (*Ruta graveolens*) and its relatives (gas plant, citrus trees) can cause a burning rash. Avoid getting oil from leaves on skin and then staying in the sun.

Euphorbia species' sap causes an irritation or phytophotodermatitis. Avoid contact with the sap.

Iris, hyacinth and daffodil sap and juices from bulbs can cause a skin rash. Avoid contact with the sap; don't touch cut bulbs with bare skin.

Stinging nettle raises painful welts. Learn to recognize and avoid contact.

Perhaps the best precaution: Don't grow irritating plants. There are so many other, safer plants to grow!

*From "AMA Guide to Poisonous and Injurious Plants" K. Lampe, M. McCann, AMA, Chicago, 1985

12 Preventive Measures**

1. Vary activities and motions or tasks within those activities.
2. Take frequent rest from repetitive motions.
3. Use the correct posture for all your tasks.
4. Use the more "user friendly" ergonomically designed tools that conform to your hand, not force your hand to adapt to them. Tool handles are being redesigned relative to diameter, attachment angles, coatings (anti-slip), contouring (finger grips) and coverings (rubber cushioning).
5. Use wrist supports if you need help keeping your wrist immobilized or in the neutral position.
6. Grasp, don't pinch, tools, pots and other items.
7. Don't push with your thumb or if you must, keep it in its neutral position (the position it's in when not using your hand). Wrap your thumbs around handles to avoid positioning them lengthwise along the handles.
8. Decrease the rate of any repetitive task, and take frequent rests from gripping tasks such as pruning.
9. Use mechanical or electronic assistance whenever possible.
10. Stop at first sign of pain. Examine/adjust what you're doing or how you're doing it.
11. Exercise to build up shoulder, mid-back and other muscles that may weaken when activities concentrate on other muscles. Also, do conditioning exercises that strengthen the hand and arm muscles.
12. Apply the principles of ergonomics to everything you do: to your hobbies (especially gardening, tennis, golf, computers or other wrist-wriggling activities) and activities you frequently perform.

**From Bonnie Lee Appleton, Assoc. Prof. of Horticulture, Virginia Tech. U.

dB Levels and Effects

dB Produced by:

150	jet takeoff from 25M	<u>Effect is:</u> eardrum rupture
140	aircraft carrier deck	turn earphone protection to "high"
130	jet takeoff from 100M	" " "
120	thunderclap, chainsaw live rock music	human pain
110	steel mill, auto riveting auto horn from 1M	human pain
100	jet takeoff from 305M, outboard motor, power lawn mower, farm tractor, jack hammer garbage truck	serious hearing damage (8 hours)
90	busy city street, diesel truck, food blender	hearing damage (8 hours)
80	garbage disposal, dishwasher average factory, freight train at 5M	possible damage
70	freeway traffic at 15M, vacuum cleaner	annoying
60	restaurant conversation, office background music	annoying
50	quiet suburb, home conversation	quiet
40	library	quiet
30	quiet rural area	quiet
20	whisper, rustling leaves	very quiet
10	breathing	
0		threshold of human hearing

from Noise Pollution Clearinghouse www.nonoise.org

OSHA Noise Exposure Standards

Monitor for noise at or above 85 dB

Use ear protection when sound levels exceed:

over 90 dB for 8 hours/day
over 92 dB for 6 hours/day
over 95 dB for 4 hours/day
over 97 dB for 3 hours/day
over 100 dB for 2 hours/day
over 102 dB for 1-1/2 hours/day
over 105 dB for 1 hour/day
over 110 dB for 1/2 hour/day
over 115 dB for 1/4 hour/day or less

Lower frequency sounds are more harmful than higher frequency sounds (measured in cycles per second). Example: 105 dB at 100 cycles/second is on the same level for potential harm as 130 or more dB at 8,000 cycles/second

OSHA 3074 "Hearing Conservation"

establishes:

- Noise exposure can cause hearing loss and other effects (disorientation and stress syndromes)
- Noise level (dB) and duration are factors
 - If short-term exposure, hearing loss is usually short term
 - with longer exposure, hearing loss gradually becomes permanent
- To test for damage
 - start with baseline audiogram (measures sharpness/acuity)
 - Test annually to compare
 - Look for standard threshold shift averaging 10dB or more in either ear at 2,000, 3,000 or 4,000 Hertz
- Average sound exposure must be calculated if various noise levels exist for varying amounts of time

