Overview

- Tips for designing and adapting your garden to reduce maintenance

- Tools and techniques to prevent pain and injury
Why Adapt Your Landscape or Garden?
Because gardening can hurt us!

- Lifting
- Bending
- Kneeling
- Twisting
- Reaching
- Jarring movements
Common Gardening Injuries

- Neck strain
- Lower back strain
- Rotator cuff tears
- Tendonitis - shoulder, wrist, thumb
- Lateral epicondylitis ("tennis elbow")
- Carpal tunnel syndrome - wrist
- De Quervains tenosynovitis - thumb
- Chronic ulnar collateral ligament injury - thumb
- Pre-patellar bursitis ("burst knee")
How can I design for easier landscape and garden care?
You can garden anywhere...
Landscapes...
Use solid edging around plant beds

Reduces weeds
Plant Densely

• Reduces weeds
Plant Perennials in Plant Beds

• Less replanting
Vegetable / herb gardens...
Raised Beds
Get your garden off the ground!

• Raised beds -
  – reduce weeding
  – can save your back
Raised beds

– Materials: concrete block, plastic/composite “lumber”
– Standing or sitting?
– Width <4 ft. Height 2 ft.
Tools for raised beds

• Depends on bed height
Container Gardening
Container gardening tips

- Give roots plenty of space
- Use drained containers
- Metal, wood not ideal
- No saucers
- Best soil mix: ??
The ultimate low-maintenance landscape may not really be a landscape…

Hardscaping + Trees + Raised beds, containers, wall boxes, window boxes, hanging baskets…
Use the Right Tool for the Job
Know your tools

- Moving mulch
- Mixing in compost
- Digging potatoes
- Moving gravel
- Trenching
- Planting shrubs
- Digging in roots
Know your tools

Light weeding
Know your tools- pruners

- Hand pruners
- Saws
- Loppers
• Tools with arm support
• Braces / Grip aids
• Adaptive handles for leverage
Stand-up Garden Seeder
(PVC pipe + kitchen funnel)
Working at ground level

- Garden Kneelers
- Chairs
- Stability?
Easier Irrigation

- Coil or expanding hoses
- Tree bags
- Micro-irrigation systems
  – Use a timer!!
Use the Right Gardening Techniques for the Job
Reduce the physical stress of gardening…

- Alternate activities
- Alternate standing stance
- Sit and hydrate in shade frequently!

Tips-
- Bring your water with you
- Set a timer!
Reduce the physical stress of gardening...

Stretch before and after gardening

1. 10–15 seconds
2. 10–15 seconds
3. 3–5 seconds 2 times
4. 10–15 seconds
5. 15–20 seconds
6. 3–5 seconds 2 times
7. 8–10 seconds 2 times

Reducing strain on Hands, Wrists, and Arms

• Use tools with right size handle/gripping pattern for YOUR hand
• Keep wrist straight
  – Use adaptive tools or handles if needed
Reduce back strain

• Use long-handled cultivators, rakes and hoes (~57”+)
• Use push-pull motion (not chopping)
Reduce back strain

• Use wide stance when raking, cultivating, hoeing, shoveling
• Keep back straight
• Move with your knees
Digging

• Use digging tools with wide foot support
• Keep digging shovels sharp
• Wide stance, straight back when lifting
Reducing back strain

• Use 4-wheel garden cart
• Don’t overload carts
Gardening with Vision Impairments
Gardening with low vision / blindness

• Keep tools together and easy to move
• Use a tactile grid on garden beds
• Keep a small weatherproof radio on while working to help locate starting point
Use tactile spacers for seeding, making rows
Gardening with low vision / blindness

- Walking surfaces should be even, provide traction
- Use plants with scent, taste, tactile interest
- Yellow/white/blue easier to see (pots, flowers, bed edges, tool handles, etc.)
- Use rope as a guide to garden areas
Wear the Right Gardening Gear for the Job
A little dirt never hurt anyone? Protect yourself!

- Fungi
  - Sporotrichosis…
- Bacteria
  - Tetanus…
- Parasitic worms
  - Hookworm…
- Parasitic protozoa
  - Giardiasis…
Hats

- Light-colored
- Wide brim
- Shades neck
- Breathable
- Washable
Eye Protection

- UV Sun Protection
- Safety glasses - pruning, weed-eating, working around shrub beds
- Sealed safety glasses - working with mulch, sawdust
- Anti-fog helpful
Clothing

- Sun protection
- Insect protection
- Protection from scratches, scrapes
- Quick-drying
- Stretchy
Gloves

- Shouldn’t constrict movement or circulation!
- Should provide protection from scrapes, insects
Shoes

• Should provide:
  – Insect protection
  – Proper soles if digging
  – Arch support
  – Good traction
Protect yourself from infections

- Keep animals out of vegetable gardens
- Wash produce before eating it
- Don’t use water from rain barrels on vegetables
- Wear the right gear
Summary
Keep gardening fun and safe:

• **Design** your landscape for easier maintenance
• **Use raised beds and containers** for annual vegetables and flowers
• **Stretch** before and after gardening
• **Use better tools and techniques** to prevent injury and make gardening easier
• **Wear the right garden gear** to protect from sun, insects and scrapes