

Briefing: Adaptive Gardening

or how to work your plot, not your back.

Like couture tailoring adaptive gardening is concerned with ensuring a garden, the design of activities, methods, and tools that will be used there, as well as its physical design, is a good fit for the people who will work in it or visit. There is no ‘one size fits all’ – an individually tailored approach is required. The only generally applicable rule is always to **consult** with the people who are going to use the garden.

In the past, much of the advice given out by experts was based on ‘traditional methods’ such as double digging and even the demanding regimes of competition growers, which are unsuitable for many people. Adaptations may be necessary in our own domestic plots, as much as at community or therapeutic garden projects e.g. when a change in working hours, or in a health condition means less time or energy is available to tend the garden.

Situation	Suggestions
<p>Less time or decline in strength/fitness</p>	<ul style="list-style-type: none"> • Adapt design & planting to require less maintenance. • Reduce plot and lawn sizes – use membrane/mulches e.g. gravel, bark chip • Watering – use water-retaining gel in compost mix. Use mulches (eg corn-starch sheeting, cocoa mulch, pebbles) over compost in containers as well as in beds. Have several sizes of watering can to hand inc small ones – lighter to lift. Set up accessible water containers at convenient points, and consider installing irrigation systems e.g. ‘leaky hoses’. Try ‘immersion bath’ watering for seed trays and containers where they are set into a larger container of water to soak up what they need then lifted out. A 3-foot cane inserted into the end of a hose pipe can extend the reach of it without needing to bend or stoop. Sand or a mulch on top of a seed bed can help it stop drying out so quickly. • Opt for low maintenance plants e.g. perennials, shrubs. For food gardeners this could mean fruit bushes, rhubarb & asparagus, artichokes and perennial herbs • No-dig systems • Choose plants with maximum interest and a long season. • Encourage wildlife (allies in pest control and bring interest to the garden.)

<p>Knee/back problems, impaired mobility (& Sight loss)</p>	<ul style="list-style-type: none"> • Raised beds can be useful – reducing the need for stooping. They can be any shape including round, organic shapes, and include varied heights, little ‘niches’ for sitting in, or broad flat wall tops for resting on. Materials may include used tyres, sleepers (not ex-railway due to toxic residues), brick, drystone dyke, ‘Link-a-Bord’ (from Harrod Horticultural online, among others), scrap wood, turf etc. They may also be helpful for visually impaired gardeners who may want to avoid stooping to the ground when they can’t see whether the way is clear of thorns etc. • Use polystyrene chunks instead of crocks as drainage in pots to reduce weight. • Use a potting bench and arrange your tool shed so that equipment is easy to reach without bending and overstretching. • Try some ‘adapted’ tools. Long handled trowels/forks etc allow weeding without bending to soil level. Handle extensions can be bought to extend length of conventional tools or attach at a perpendicular angle as a more comfortable option for the wrist. Suppliers include Wolf and Peta tools, but these tools are very individual – try one first to see how it suits. • ‘Kneeler’ – a foldable kneeling pad with ‘arms’ on which you can lean to push yourself up to standing again. Workshop participants said these were hard to find, and expensive from some outlets. The following model has been advertised in Coopers catalogue: ‘Garden Kneeler/Seat’ B587 page 30 for £15.99 Tel 01279 757100 www.coopersofstortford.co.uk
<p>Gardening from a Wheelchair</p>	<ul style="list-style-type: none"> • ‘Table-top’ raised bed – allows gardeners to get knees underneath instead of twisting sideways to work on a bed. • Paths and surfaces – use roll-out paths (e.g. from www.agriframes.co.uk) and turf-saving blocks (from various landscape suppliers. This may be called ‘grass guard’, ‘cellular grass paving’, ‘ground guard’ ‘turf stabilization’ ‘reinforcement mesh/grid’ ‘grass/ground protection’). These can make lawns, gravel or wood chip areas far more stable and sturdy for wheelchair access. • Elevate containers when you want to work on them by putting them on top of another upturned pot. • Experiment with long-handled tools to extend reach.

<p>Weak grip/loss of fine motor skills or co-ordination</p>	<ul style="list-style-type: none"> • Adapted tools e.g. secateurs with assisted grip mechanism are available. • Pelleted seed may be easier to handle, or opt for larger seed varieties, mix very fine seed with sand to aid sowing. Buy in plug plants instead. • Mix seed with wallpaper paste and use an 'icing bag' to pipe the seed into lines. Be aware that some wallpaper paste may contain a fungicide that organic growers may want to avoid.
<p>Sight Loss</p>	<ul style="list-style-type: none"> • Contrast – high contrast can improve visibility for people with certain sight conditions. A cheap way to incorporate higher contrast is to paint yellow or white bands on tool handles or path edges and intersections. Buy yellow or bright coloured equipment, and even planting in colour blocks may be more easy to navigate for some people • A handrail or tactile markers may helps some people to find their way around the garden independently. • Lines or blocks of a single crop may be easier to weed than mixed planting • Use scent and texture to help people identify plants e.g. to distinguish lavender and sage or the hairy leaves of pumpkins, as well as just for pleasure. • Make outsized plant labels/markers with space to write names on in large print.
<p>Motivation</p>	<ul style="list-style-type: none"> • Try square yard plots – this size has been found to be useful with some groups because it is small enough to be weeded or sown in a single session without overwhelming, and so gives a sense of achievement. May engender a sense of ownership too. • 'Fast-return' plants e.g. peas, beans, sunflowers, lettuce, rocket. Things that grow and crop quickly may be better able to capture and keep the imagination of gardeners with short concentration spans or lower motivation. The ultimate of course are mustard and cress seeds or bean sprouts – ready in around 4 days – cultivated on a window sill. • Rewards, praise and thanking people for their input are important factors in creating and sustaining motivation. • Planning and setting goals that are appropriate for each gardener is also useful in some situations. Involving everyone in this process is helpful. Too large a project can be daunting and demotivating. Too easy or insignificant a task can also be boring and uninspiring. • Creative projects – e.g. bringing mosaic or design into the garden; using dried plant materials for art projects can broaden the repertoire of activities on offer especially in winter.

	<ul style="list-style-type: none"> • Sales of produce can be very motivating – when buyers part with hard-earned cash for something a gardener has grown this is a clear statement of the quality and value it has to others, and gives pride to the grower. • Finding other interests or ‘hooks’ to gardening e.g. someone who enjoys cooking may be inspired to grow herbs for culinary use. Landscaping or construction work may be seen as more ‘macho’ by some who think gardening is not for them.
Communication difficulties	<ul style="list-style-type: none"> • ‘Signifiers’ (e.g. a small plastic flower pot) can be used to help non-verbal gardeners understand that gardening activity is scheduled, or to convey which tasks or plants will be involved. • Pictorial markers – can be used to indicate certain places, rules or systems e.g. the correct place for tools storage.
Dementia	<ul style="list-style-type: none"> • Continuous paths e.g. circular, figure of eight, preferred to linear ones as doubling back to retrace one’s steps can be disturbing • Certain wall heights may encourage climbing – consult the experts (see Stirling University below)

Further reading and resources:

www.campossensorygarden.org - Showcases design features of a garden built for and by people with visual impairments in Rio de Janeiro State, Brazil. (in English & Portuguese).
www.jbrj.gov.br/arboreto/jd_cegos.htm - Rio de Janeiro Botanic Garden’s ‘Touch and Scent’ garden designed for and by visually impaired people. Plant list supplied – available in English too.

www.sensorytrust.org.uk - Advises on inclusive design of public spaces
www.fieldfare.org.uk Works with people with disabilities and countryside managers to promote & improve access to the countryside. For Physical Access Standards see page http://www.fieldfare.org.uk/?page_id=48

www.stir.ac.uk/dsdc - Stirling University Dementia Services Development Centre – produces a book on ‘Designing Gardens for People with Dementia’ ISBN 1-85769-128-8
www.trellisScotland.org.uk - Advice and information about accessible garden design and techniques and the use of gardening for health and life opportunities for all. You can also use the site to ask for help via the forum, promote your project via the blog spot or contact other garden projects in Scotland who have designed gardens for the needs of different groups.
<http://www.chicagobotanic.org/therapy/resources> - useful articles, books and pamphlets.

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