

LESSON 10

GARDEN STRUCTURES

Aim

Determine appropriate garden structures for a garden.

There are two aspects to the design of structures in a landscape:

- a) The way the structure is itself designed.
- b) The way the structure as a landscape component is incorporated into the overall landscape.

There are several considerations with both of the above aspects:

- Safety: has the structure been designed to be safe? Is positioning safe? (eg. you don't want a swing too close to a seat).
- Function: does the structure serve the purpose it was meant to serve?
- Aesthetics: does the structure achieve the desired aesthetic effect?
- Maintenance: how much effort will be required to maintain both the structure and the area surrounding? The design, construction and materials selected will influence the maintenance required (eg. a seat placed in grass needs hand clipping underneath to control the grass...a seat in concrete needs no such effort.)

Often compromises have to be made so that a balance can be achieved between all of the considerations listed above (and perhaps others - eg. cost).

UNDERSTANDING GARDEN ROOMS

Think of your garden as being made up of rooms. Just like your house, each room should have a particular purpose: the lounge room indoors is the place you entertain guests; the patio outside may be the place you also entertain guests. The laundry inside is where you deal with cleaning clothes: the washing line outside is also where you deal with cleaning clothes.

If you want a house that is both functional and attractive, you build a wall between the lounge and laundry. Similarly, if you want a garden that is functional and attractive, you would block the view between the patio and washing line.

Step By Step – How to design a garden room

Even if you only use one garden style, you will still have distinct areas within the garden. Garden rooms can each have an ambience of their own.

First take measurements and make drawings as you did for your macro design. Then work out what components you need to realise your idea.

1. Structures and hard surfaces, eg. pergolas, decks, paving stones, railway sleepers, ponds, etc. These will decide the structure of the garden room. A formal garden will have geometric lines, whereas an informal garden might include an irregular or curved path. Consider views when deciding where to build. You don't want to see the back of the garden shed from the lounge room window!
2. Soil – does it need fertiliser, cultivation, etc?
3. Plants – will you need a creeper to cover the fence, or flowers for colour and scent, or trees for shade, or grass for a lawn? How long will they take to grow? How big should they be? How many do you need? What species will grow well in your area?
4. Statuary, garden ornaments and seating – use sparingly – just enough to set the mood and create areas of interest in the garden room
5. Be realistic – will the tree you want to plant grow into power lines, or have roots that will get into the drains?

Garden Room Components – What to put in your garden room

You may find it helpful to decorate your garden room in the same way as you would decorate a room inside the house. Every room has walls, a ceiling, a floor, furniture and ornaments, each of which gives the room a distinct character.

In your garden room, the components include:

- walls – the 'wall' encloses and defines the space. It gives a strong vertical element to the design and sets the area apart from the rest of the garden. It could be a fence or solid wall, a lattice panel, a screen of plants or even a small garden bed.
- floor – most often a grass lawn but it could be paved or surfaced with loose gravel
- ceiling – the sky is the most obvious component but overhead branches, pergolas, arbours, etc.
- furniture – not essential for every garden room but most areas could have at least one comfortable bench to encourage people to linger and enjoy the garden
- ornaments – plants are the most essential decorative features of the garden room; also statues, birdbaths, ponds, etc. will add charm and interest.

FURNISHING THE GARDEN

As with the house, the furniture you choose depends on the style of the garden, what you use different parts of the garden for, and your personal taste and budget.

Some things to think about:

*If you have a big garden, provide seating in places away from the house. These places can be used for rest and quiet conversations.

*Position seating in comfortable areas. Avoid placing them in extreme sun, wind, cold, heat, glare etc.

*Think about the type and quantity of seating. How many people need to sit in a particular spot? How comfortable does the seating need to be? Are people likely to sit there frequently or for long periods of time? Where are tables needed – for eating, playing a game or perhaps doing some sort of hobby?

*What outdoor 'rooms' do you have in your garden, and what furniture would increase the use of these areas?

Outdoor rooms that could be furnished include covered outdoor entertainment areas such as a veranda or deck, pool area, BBQ area, gazebo or even a quiet part of the garden.

*You may need children's furniture in certain parts of the garden – on the veranda or under a shady tree.

Creating an impact

Often compromises have to be made so that a balance can be achieved between all of the considerations listed above (and perhaps others - eg. cost). Often something very simple can create an enormous impact in a garden. A sculpture, strategically placed to catch the eye, or a courtyard wall painted in a vibrant colour, might do more to enhance the garden than a whole garden bed full of plants. Here we show you some simple but effective ways to create an impact in your garden using sculpture, water and walls.

Sculpture

A well-placed sculpture is probably the easiest way to create a focal point in the garden. The classical designs have an enduring appeal, and there are many excellent reproductions available. A popular trend is the use of Roman and Greek-style classical columns. The taller columns are used as a decorative feature in their own right, often placed against a wall, while the shorter ones can be used as a plinth for an urn or sculpture.

Contemporary sculptures work well in the minimalist garden or courtyard. Designs are often abstract or eclectic, and may be geometric in form, crafted from metal, plastics, fibreglass and other refined materials not usually used in the garden.

For maximum impact, make sure the sculpture has plenty of room around it. Don't crowd it with a mass of different plants and textures. If you do want to include some greenery for a softening effect, use uniform plantings, either as massed ground-covers around the base or a hedge or wall of neatly clipped climber behind the sculpture.

Walls

In a small courtyard, bare walls are the most dominant feature. Generally, the tendency is to make the walls disappear behind a screen of climbers and shrubs. However, there are some pretty exciting things you can do to walls:

- Paint a wall a single colour. Not only does it make an interesting backdrop, a painted wall changes the mood of the garden, depending on the colours used. Hot colours (red, yellow, pink) make the whole garden feel warmer, more vibrant and active; cool colours (green, blue) are more restful and cool the garden down (psychologically); dark colours give a feeling of enclosure and intimacy; light colours open the area up.
- Paint a *trompe l'oeil* on a wall. A *trompe l'oeil* is an illusion, a painted scene designed to deceive the eye. It gives a quirky, humorous touch to the garden, and makes the garden appear larger than it really is.
- Cover the wall with panels of decorative lattice.
- Create niches (shallow recesses) in the wall to display urns, busts or small sculptures. Niches tend to give the garden or courtyard a formal, classical look.

- Place a decorative gate in the wall, perhaps aligned with a fountain, ornament or the main doors of the house to create an axis.
A plain solid gate set in a high wall gives the garden a sense of intrigue, a secret retreat from the outside world, and teases the mind about what may lie beyond the door.

Mirrors

One of the most intriguing tricks for small outdoor areas is using a mirror placed on a wall. The mirror catches and reflects light, 'extends' the view, and gives the illusion that the garden is bigger than it really is.

Where to place a mirror

- Behind a pond, to catch the movement and play of light on water.
- At the end of an axis, such as path, to give the illusion of extra length.
- Against a dark wall, with some light-coloured plants in front of, and below it, to give a feeling of lightness and space
- Behind a statue, allowing you to see it from all angles.

It is important to use a good quality mirror with a good backing, as the backing will soon peel off cheaper mirrors exposed to the weather. All mirrors of course are at risk of breaking; but if placed in a location that is obscure, perhaps partially protected from severe storms and away from where children play ball games, the likelihood of breaking is minimal.

Water

Most professional designers consider that water is an essential component of the garden. And for good reason – water adds an extra dimension to the garden, bringing movement, sound, and a sense of coolness, which is both psychological and real.

The water feature doesn't have to be elaborate to create an impact. Generally, simple water features work better in small spaces. Some of the most effective water features are based on geometric designs, including circular or rectangular pools set in ground-level paving, raised rectangular water channels, and spheres with bubbling water.

For a real sense of drama, a water wall is hard to beat, with water cascading over the wall in a smooth sheet, or catching and splashing over bowls or receptacles embedded in the wall, or spouting from wall jets. Underwater lights add a further exciting dimension to the garden at night.

FOUNTAINS AND WATER DISPLAYS FOR RECREATIONAL LANDSCAPING

Fountains are designed for a variety of different functions however, the following types predominate:

1. Fountains to entertain people and children
2. Fountains as spectacles and focal points
3. Fountains instead of cooling towers for park restaurants
4. Fountains for privacy

Apart from fountains, waterfalls, ponds, streams, lakes and other such features can be used very effectively in a landscape.

Construction Details

Fountains are not so different to most other structural, electrical and mechanical constructions and can be usually built by tradesmen under a general contract provided there is a sympathetic liaison between the fountain engineer and with the landscape architect.

Consider each of the following guidelines for fountain construction:

- a) If the fountain is not part of the general contract and is added as an afterthought, costs can escalate considerably.
- b) Fountain construction in plastics should be treated with caution. There is a history of problems with some plastics.
- c) Pool finishes above the water line can be to the architect's preference, but below water a dull dark colour is essential.
- d) Make all drains oversize to ensure quick drainage of the pool and to pass small debris.
- e) Suction or return screens should be half the diameter of the smallest jet in the system. Flow rate through screens should not exceed 0.6 m/sec.

Low flow velocities prevent soft, long oversized material being extruded through the screen and swelling back to normal size later.
- f) Illumination of fountains is a major factor. Source of illumination should be hidden from the viewer. Underwater illumination is usually more effective than overhead.
- g) When specifying underwater lights, ensure there is adequate water to ensure lamp cooling.
- h) Non corrosive plumbing is essential to prevent water staining and long life of the feature. Don't use plastic pipes through concrete walls though (brass is better).
- i) Water filtration should be sized to filter the whole pool every two hours. Incorporate proper skimmers to remove surface pollution.
- j) Maintain water pH at 6.8 - 6.9 for a clean sparkling effect.
- k) Pumps can be of the dry type or submersible. Dry type pumps are cheaper to buy but often more expensive once the cost of installation is added.
- l) Beware of plated fountain jets. Highly polished jets usually are cast aluminium that has a short life.
- m) Design edges of the pool to avoid/discourage people sitting on them. Always construct a curb or some barrier though.
- n) Have a key-operated master switch close to the pool so the pool's electrical system can be switched off when doing maintenance.
- o) Ensure the maintenance department are given full instructions on all aspects of the pool (electrical, structural, water etc)

FEATURE POTS

Like all garden accessories, pots can be used to complement a garden theme. Popular pots include Grecian urns for classical gardens, olive pots and citrus tubs for Mediterranean gardens, strawberry pots and wooden barrels for cottage gardens, and oversized water bowls for courtyards.

Pots come in all sorts of shapes and sizes, and while their main function is, of course, to grow plants in, they can be used for other purposes – as decorative storage containers, as indoor ornaments, and as garden accessories. Pots are available in a range of materials including plastic, ceramics, terracotta and stone. But you needn't be limited to shop-bought finishes. With a little creativity, you can personalise your pots, using paints, stencilling and mosaics to create a decorative and highly individual garden ornament.

Different ways to use pots

As storage containers:

- Large pots are good for holding firewood and umbrellas.
- Smaller pots are good for storing small items of gardening paraphernalia including balls of string, dibble sticks, plant labels, secateurs and all those other small bits and pieces that are all too easy to lose in the garden shed.
- Smaller pots are also good for kitchen storage, including scissors, pens and pencils, and kitchen tools.

Pots as indoor ornaments

It's often easier to appreciate a beautiful pot without the distraction of a plant growing in it. If you have a favourite pot, give it pride of place indoors and don't bother trying to justify its presence by growing a plant in it.

Pots that work well indoors include highly ornamented pots, large urns with narrow necks (which are impossible for growing plants anyway), and glazed, decorative pots. They look good in entranceways, by fireplaces and in casual entertaining areas, but make sure they're not likely to be knocked over by over-enthusiastic dogs and children.

Special effects using pots

- Place a large pot at the end of an axis to accentuate a vista in a formal garden.
- Frame an entranceway with a matched pair of pots containing topiary plants.
- Place a small water bowl beside a path in a cottage or bush garden to attract birds.
- Seal a pot to create water pond for fish and waterlilies near a pathway.
- If you have a collection of pots, all in different sizes and shapes, group them together for greater impact.
- Use hanging baskets to liven up a veranda or pergola.
- Attach window boxes to the front of the house for a bright, cottage look.

Personalising pots with paints, stencils and tiles

Paints and stencils


Plain terracotta pots can be dressed up with colourful paint finishes. Unless you're skilled with a paintbrush, use simple patterns – stripes, spots and other geometric strokes.

Paint the pot with a white undercoat to give an even finish then apply water-based house paints or poster colour paints. You may need to apply several coats because the terracotta will absorb the paint.

Masking tape can be used to give neat outlines for stripes – paint in the areas between the stripes, then peel off the tape when the paint is completely dry. Acetate stencils from craft shops can be used for more complex designs – tape the stencil onto the pot before painting in the stencilled area. When the pot is completely dry; coat the surface with varnish.

Mosaics

A mosaic will transform an ordinary pot into a unique piece of art. Draw the design onto the pot. Cut tiles or broken china into small pieces using a tile cutter and stick them onto the pot with tile adhesive. Leave the pot to dry overnight. Mix acrylic paint or cement dye with powdered waterproof tile grout and water. Rub the grout into the gaps in the mosaic. Leave to dry for several minutes then scrub the surface with a nailbrush to remove excess grout then leave to dry overnight.

	<p>SELF ASSESSMENT</p> <p>Perform the self assessment test titled 'test 10.1'</p> <p>If you answer incorrectly, review the notes and try the test again.</p>
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LAYOUT PROBLEMS WITH PLAYGROUND STRUCTURES

Playground Entrance/Exit - There should be some type of fence or barrier to stop children running out onto a road, into a garden bed etc. This barrier can even be simply a lot of open space (provided it is a lot).

Seating - Children run wildly, often not looking where they are going. If seats, rubbish bins or some other structures are badly positioned, collisions will be frequent.

Swings and other moving equipment - such equipment does encroach on a lot more space than is at first obvious when it is being used. There should be barriers to stop children crossing the path of a moving swing.

Surfacings - if a structure is to be climbed on or a surface to be run across, ideally the surfacing should be both soft and clean. Mulch is usually the most ideal.

Sufficient Space - the landscaper should be very careful not to overcrowd an area. Too much equipment in any area can lead to accidents.

Height from which a child needs to fall to achieve concussion

Material	Height needed to fall
Concrete	less than 30 cm (1 ft)
Asphalt	less than 30 cm (1 ft)
Packed earth	about 60 cm (2 ft)
Standard rubber tile	about 120 cm (4 ft)
Wood shavings (15 cm deep)	about 3 m
Sand (30 cm)	about 3.6 m

Furnishings and features are the finishing touches to a landscape. They can be the things which set a garden apart, which make it twice as attractive or twice as useful as another garden.

MOTORISED VEHICLE PARKS

Trail bikes, mini bikes, go carts, beach buggies, four-wheel drive vehicles and snow vehicles are all motorised recreation vehicles. In recent times, the expanded use of such vehicles has led to a rapid growth in demand for 'special' facilities to cater for their needs. There are a number of implications common to all types of motorised vehicle parks:

Landscape impact

Clearly, this type of machinery has the potential to cause significant damage to the environment. Erosion, air pollution, damage to vegetation and wildlife are all considerations. Proper design and sensible management are necessary if irreversible damage is to be avoided. Overuse not only leads to an area eventually becoming a wasteland, but in the process deprives the patrons of a satisfactory facility.

Noise pollution

Because of the noise associated with this type of activity it is best to utilise areas isolated as far as possible. Ideally motorized vehicle facilities should be surrounded by a barrier such as a mound, fence or belt of vegetation to retain the noise.

Fuel crisis

Increasing prices and a reduction in the stocks of the earth's fuel resources might lead to a decrease in the demand for motorized vehicle parks. This point should be considered before outlaying too much effort or expense in providing new facilities.

Safety

There is a potential in this type of recreation facility for accidents of a more serious nature than with many other recreation pursuits. As such, it is very important to:

- a) Train patrons properly in the use of vehicles and facilities.
- b) Police the use of facilities.
- c) Provide adequate first aid facilities.
- d) Maintain facilities to a proper safety standard at all times.
- e) Consider safety as priority criteria when designing facilities in the first place.

Types of motorised vehicle parks

Different types of vehicles require different types of facilities:

- Smaller vehicles do not need as wide a track as wider vehicles.
- Four wheel drive vehicles can endure rougher terrain than some other types of vehicles.
- More powerful vehicles can climb steeper slopes.

Vehicles are able to be operated in many different ways; each requiring different types of facilities:

Observed tracks/trails....require a design which enables most (if not all) of a track to be viewed by spectators from the one point (eg. a mound, stand etc). Usually this viewing point is best located at the start/ finish position of a circuit.

Enduro's....requires maximum challenge in the facility. The aim of this type of facility is to test the vehicle's endurance. It should incorporate such things as difficult corners, steep slopes and possibly jumps.

Cross Country....requires longer distances through relatively unprepared terrain. The amount which this type of facility is used should usually be controlled strictly.

Short Circuit....requires relatively short distances over a circuit. The circuit is usually designed for and intended to be exposed to repeated heavy use. If the area becomes badly damaged by heavy use, it is a relatively small area which needs to be repaired.

Case Study: Motor Sports Centre

The Royal Automobile Club and Auto Cycle Union in the UK undertook a detailed feasibility study into the needs of a motor sports centre. A facility which would cater to most of the major events involved in the normal motor car and motor cycle calendars should contain the following facilities:

a) Circuit Racing. A circuit of approximately 1.4 miles (2.26 km) with a width of 9 metres. This would cater to both bike and car racing. The circuit should contain the following bends: a double right angle, a long fast right hander, a long right angled corner, asses, tight left hander and a wide radius hairpin.

b) Sprints And Drag Racing. The main straight of the circuit extended to at least 3/4 mile (1.21 km) would provide for drag racing. The width should be at least 12 metres.

c) Kart Tracks. A kart circuit should be just under 800 m long and 6 m wide.

d) Auto Cross, Motor Cross. These are circuits on grass or virgin ground.

e) Hill Climbs And Scramble Courses. These might be included in a facility, depending on the type of terrain being developed.

f) Driving Tests. Part of the site should be laid out as a parking area to be used for car parking or driving tests.

g) Skid Pan. Safety arrangements at various parts of the facility should be incorporated including guard rails and barriers etc).

The facility should incorporate properly constructed driving surfaces, sign posts, telephone system, public address system, toilet facilities, pit facilities, and if finance permits, such things as catering (food), children's creche, spectator stands, a playground etc.

Case Study 2: Motorbike Trail

Below are some factors that would affect selection and design of a site for a motorbike trail:

- Isolation....Are other people likely to be disturbed?
- Separation from natural or conservation areas to prevent environmental damage.
- Access for bike riders....will they need to come by car? Can they park cars if they do?
- Interest of the site....is it flat or undulating? Are there trees?
- Ease of site to develop....is the surface clean and safe to ride on? Is it rocky, sandy or stony ground?
- Soil stability....what is the likelihood of erosion?
- Existing ancillary facilities...toilets, parking, water, storage sheds, shelter, picnic facilities etc are all valuable if already nearby.

SKATEBOARDING FACILITIES

In recent times skateboard riding has developed into an established sport. Backyards, roads and pavements were the first areas to be used for skateboarding, but these facilities offered neither the safety nor the challenge needed by the skateboard enthusiast.

Today skate facilities range from the supermarket car park which is allocated on weekends to skateboard riders, through to extremely involved skate parks with half pipes costing literally thousands of dollars to plan and construct.

Types of facilities

There is no firm model which all skate facilities must be modelled on. However there are probably a few main ways facilities are provided:

a) Existing Areas - Paths in parks, courts in sporting areas or schools, car parks etc.

b) Converting Existing Facilities - Tennis or basketball courts, swimming pools (in winter), roller skating rinks, warehouses and disused factories etc. Tennis, basketball or other such courts with concrete or asphalt surfaces are usually quite successful with the addition of some slopes. The use of swimming pools isn't usually advisable as the surfaces are rarely suited to skateboarding. Roller skate facilities can sometimes have a very smooth surface which might be too fast for skateboarding. Apart from this consideration, roller facilities can be ideal for skateboards. Before converting old buildings, it is important to check the strength of floors.

Large concrete pipes cut in half and set into a mound either end to end, or adjoining an existing hard surface can be a relatively easy and inexpensive way of obtaining sloping facilities.

c) Building Specifically For Skateboarding - If an area is developed right from the beginning specifically for skateboarding, the main facilities which might be included are as follows:

i) Freestyle Area. This involves a flat (or slightly sloped) area. Allow 10 sq metres per skateboarder when in full use. An ideal size for this area would be about 500 sq metres.

ii) Modified Freestyle Area. This is a freestyle area plus a ramp or several ramps.

iii) Mogul Area. This consists of a shallow bowl with a bank all around. The width and slope can vary with a central feature being humps (ie. moguls) of up to 45 degree slope.

iv) Slalom Run. Here there is a push off area (flat or a slight slope) leading to an incline and ending in a run out area (flat area to finish). The slalom is usually a straight run of 50 to 100 metres with a 3-4 metre take off (start) and a finish of 15 metres.

v) Channel Run. This is similar to a slalom run except the rider here tends to move from side to side instead of straight down the run. As such, inclines on the sides of the channel become important, varying in slope from approx 1:14 (for beginners) to almost vertical (for the accomplished rider).

vi) Snake Run. This is a further development of the channel run where the channel is deeper and twisting ending in a bowl which could be anything from 2-5m in depth. The sides of this bowl are almost vertical.

vii) Drop Bowl. This is a specialized facility which could be either a part of a snake or a channel run. Again here the walls are almost vertical. Parts of the drop bowl sides can be 60-80 degree slope. The bottom of the bowl will have a flat floor. Part of the side will have a slope of only 30 degrees - it is from this point that the skateboarder will enter the bowl. There is a flattened section above the bowl leading into this entry section.

Skateboarding surfaces

A wide variety of surfaces has and can be used for skateboarding. The essential prerequisites for a surface are:

- It should be properly drained.
- It is relatively smooth, but still provides adequate traction between the surface and the polyurethane of the board.
- It should not become slippery.
- It should be sufficiently solid to take the pressures exerted upon it by high speed riding.
- It should not crack or develop bumps with time. If any uneven spots appear in the surface, they should be attended to immediately.

Concrete is usually sufficient provided it is properly reinforced and of an adequate thickness. Concrete should be 0.3 metres thick on a 0.2 metre compacted washed sand base in major facilities. The concrete should be reinforced by overlapping F62 mesh. Concrete should be cured with damp hessian.

Bitumen usually is not a sufficiently hardwearing surface particularly on sloped runs.

Brushing or spraying surfaces with gunite is particularly good to improve grip, although too heavy an application tends to result in the loss of these beneficial qualities.

Safety

It might be necessary to surround deeper bowls with some type of fencing even if only a post and rail. This is obviously improved by the addition of wire netting.

In major skate parks, consideration should be given to separating spectator and user areas.

Obviously the greatest contribution will be made to safety by providing supervision in an area. A facility should always be designed to allow one point from which the whole facility can easily be supervised.

OUTDOOR FURNITURE

We put outdoor furniture into our gardens for two reasons:

1. To be used and to embellish or enhance the aesthetics of the garden.
The right piece of furniture put in the right place will do for a garden what a well chosen sauce does for French cuisine (ie. Change the whole impression detected).
2. To be used. Outdoor furniture adds to the way you can use a garden in the same way that furniture adds to the way you can use a house.

Your Choices:

- Furniture can be permanently fixed in position (e.g. seating built around a tree or into an embankment), or moveable.
- The style can be formal or informal.
- It can be hardy to weather, remaining outside all of the time, or require storing under cover when not in use.
- It can be made from metal, timber, fibreglass or plastics.

A general comparison between the main materials used in furniture

<i>PLASTICS</i>	<i>TIMBER</i>	<i>METAL</i>
Can get sweaty to sit on in hot weather	Softer to sit on than other materials.	A very hard surface to sit on.
Heats up at an average rate.	Slow to heat up.	Gets hot quickly on a warm day.
Low maintenance -doesn't need painting.	Needs treatment with paint or preservative every few years	Corrosive metals need painting or other treatments.
Some cheaper types will crack if exposed to U.V. light for extended periods.	Sun can cause splits and cracks in some timbers.	Sun does not cause deterioration.
Aesthetics more suited to a modern garden.	Aesthetics suit natural or period garden styles well.	Most metal furniture is designed for period(e.g. old world) gardens.
Looks shabby if it becomes dusty. Needs wiping over regularly.	Can still look good when it becomes a little dirty	Looks shabby if not kept clean, and if paint work not in top condition.

Timber

There are many different types of timber used for furniture. The characteristic of the material varies according to the type being used.

Pine

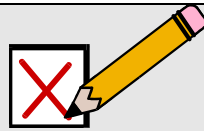
Radiata pine is both inexpensive to buy and very easy to work with (being a softwood it can be cut and worked with easily). The cheapest garden furniture available is usually made from pine. If unpainted and not treated with preservative, pine will not last beyond one season.

Furniture built with treated pine will last 10 years or more.

Untreated pine furniture must be painted with several coats of a timber preservative/wood stain if going to be left in the weather. It will require repainting every 1-2 years, and even then, it will not last as long as other timbers.

Hardwoods

Furniture made from hardwoods is more expensive, but if painted with appropriate wood stains or preservatives, will last a great deal longer.



SELF ASSESSMENT

Perform the self assessment test titled 'test 10.1'
If you answer incorrectly, review the notes and try the test again.



ASSIGNMENT

Download and do the assignment called 'Lesson 10 Assignment'.