

ALEP

Aboriginal Landcare Education Program

6

Maintain Properties and Structures



Learning Guide

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Student name:.....

Student number:.....

INTRODUCTION

Welcome to *Maintain Properties and Structures*. You may need to build and maintain property and structures around your workplace or community in various land management situations. You might need these skills when working for councils or nurseries, doing ranger work or when managing your own country. Training should be completed on the job over an extended period of time.

This learning guide deals with building and maintaining a small nursery for growing plants. There are instructions for building a **Simple Seedling Shadehouse** for the nursery. The learning guide covers safe use of tools and basic construction techniques. The information and skills gained will be useful for maintaining other properties and structures as well.

EQUIPMENT REQUIRED

To complete this training you will need the following:

1. Appropriate Personal Protective Equipment (PPE).
2. Safety gear for field work including first aid kit, maps and water.
3. Access to a range of tools for building and maintaining a nursery.
4. Building materials for making a shadehouse.

ASSIGNMENTS

There are three assignments you will need to complete.

Some of these assignments may go towards your final assessment.



Thanks to the Wulain Rangers for building the **Simple Seedling Shadehouse** in 3A



Section	Assignment	Competent (C) Not yet competent (NYC)	Date Achieved
Getting Prepared	Assignment 1. Project Risk Assessment		
Tools, Equipment and Materials	Assignment 2. Tools		
Building and Maintaining a Nursery	Assignment 3. Build a Seedling Shadehouse		
Finishing Up			

1

GETTING PREPARED

1A. COLLECTING INFORMATION

Information about building and maintaining property and structures can be obtained from many sources. The types of situations that you may need to address are many and varied.

This learning guide gives a general outline. You will find many detailed resources in libraries, on the internet and at your local hardware store, garden centre or nursery. Look at the References on page 25 for some ideas.

1B. BUILDING AND MAINTAINING SAFELY

There are dangers associated with carrying out building and maintenance work. It is important that you be aware of the potential dangers so you can avoid getting injured or sick.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- PPE is very important when building and maintaining structures.
- Wear appropriate clothes for working outdoors, i.e. long trousers and a hat etc.
- Wear thick protective gloves when required.
- Solid steel capped working boots will be essential to prevent any crushing injuries to the feet. Joggers are not suitable footwear unless they have steel caps.
- When working underneath structures a hard hat may be necessary.
- Earmuffs will be necessary when working with noisy machinery or tools.



KEEP WORK AREA SAFE AND TIDY

- Clean up any unwanted rubbish on the job site straight away.
- Do not leave rubbish lying around when working as it creates a hazard.
- In dry conditions in the bush there is a risk of bushfires starting from sparks from grinders or welders. Look out for dry grass near your worksite and if necessary clean away any dry plant material.
- Have fire fighting equipment handy in case of a fire.
- Watch out for snakes, spiders and wasps, and rusty iron or broken glass, in amongst grass.
- Always have a first aid kit on site and make sure someone has a first aid certificate.



SAFE LIFTING

- Always lift heavy objects correctly to avoid injuring your back (see Resource 1).

WORKING WITH TOOLS

- Keep safe distances away from other workers around hand tools.
- Learn how to maintain and use hand tools correctly to avoid injury.
- Only use tools according to manufacturer’s instructions. For example never use a screwdriver or a knife as a chisel as the blade tip tends to break off and can cause injury.
- Always replace broken tools rather than try and repair.

POWER TOOLS

- The biggest hazards result from misuse of the tool and improper maintenance. Before using any power tool get proper training on its use.
- Never operate power tools when sleepy, sick, when taking medicines, or if you have been drinking.
- Never carry a power tool by the cord and never pull the cord to disconnect from the power point. This can damage both the cord and the machine.
- All power tools and extension cords should be tested and tagged by a qualified electrician every six months.
- Don’t run power cords where people can trip on them and don’t allow vehicles to drive over power cords.
- Don’t run power cords through water and keep them away from heat, fire, and oil.
- Remove the power cord from the power point when you are not using the tool or when changing things such as saw blades, drill bits and grinding wheels.
- Maintain all tools in perfect working order and make sure the power point is in good condition.
- Always wear appropriate PPE such as gloves, ear plugs and goggles or safety glasses.
- Wear rubber soled boots when using 240 volt power tools to help protect against electric shocks.
- If welding is carried out on the job site be aware that the flash from welders can severely damage your eyes. Never directly or indirectly look at the flash.

MACHINERY AND VEHICLES

- Extreme caution should be taken using motorised machinery such as cement mixers, augers and slashers.
- Only properly trained people should use motorised machinery. Additional PPE may be required.
- Be aware of vehicles on the work site. Keep well clear of any moving vehicle even if the driver has acknowledged your presence.
- Never approach a vehicle from behind or walk under a load lifted in a bucket.
- Fluorescent safety vests should be worn when the job site has frequent machinery or vehicle movement.
- Use traffic safety cones to direct vehicles on the site.



1 – GETTING PREPARED

HAZARDOUS SUBSTANCES

- Extreme caution should be taken using chemicals and other hazardous substances.
- Only properly trained people should use chemicals and additional PPE may be required.
- Hazardous substances should be correctly stored.

SAFETY CHECKLIST ACTIVITY








Long trousers, shirt and boots		
Hat (hard hat if necessary) and gloves		
Sunscreen, insect repellent and sunglasses		
Safety vests		
Dust mask		
Additional PPE as required		
Water		
First aid kit		
Fire extinguisher		
Traffic safety cones		
Permits (if required) and maps		

PROJECT RISK ASSESSMENT



- Stop and think before starting work.
- What needs to be done so you can work safely?
- Complete the **What to do about it?** column – we have written one thing in each box – try and think of some others.
- Fill in all of the last row by adding a new hazard.

HAZARD and what can happen = the risk	What to do about it?
<p>TRIP HAZARDS</p> <p>Risk of: Injury from falling over</p> 	<ul style="list-style-type: none"> • Don't run – walk carefully • • •
<p>NOISY EQUIPMENT</p> <p>Risk of: Damage to ears</p> 	<ul style="list-style-type: none"> • Wear earmuffs • • •
<p>USE OF POWER TOOLS</p> <p>Risk of: Injury or electrocution</p> 	<ul style="list-style-type: none"> • Maintain tools properly • • •
<p>LIFTING THINGS</p> <p>Risk of: Injured back</p> 	<ul style="list-style-type: none"> • Use a wheelbarrow to move things • • •
<p>SUN EXPOSURE</p> <p>Risk of: Heat exhaustion, dehydration and sunburn</p> 	<ul style="list-style-type: none"> • Work in the shade in the middle of the day • • •
	<ul style="list-style-type: none"> • • • •

2

TOOLS, EQUIPMENT AND MATERIALS

2A. TOOLS AND EQUIPMENT

Using the correct tools and equipment will not only make the job easy but will also help to keep you free from injury. Make sure you select appropriate tools for the job you are doing and identify faulty or unsafe tools.



Simple Seedling Shadehouse

These tools and equipment are needed to build the **Simple Seedling Shadehouse** in section 3A.

- Electric grinder
- Hammer
- Knife
- Marking paint
- Mattock
- Pliers
- Power drill (and drill bits and screwdriver attachments)
- Rake
- Hacksaw
- Scissors
- Screwdrivers
- Shovel
- Spirit level
- Steel post driver
- Step ladder
- String line
- Tape measure

OTHER TOOLS AND EQUIPMENT

Here are some other tools and equipment you might need while building and maintaining your nursery. There may be others too.

- Auger
- Bolt cutters
- Broom
- Brushcutter
- Concrete mixer
- Laser level
- Mower
- Paint brushes
- Slasher
- Soil leveller
- Spade
- Spanners
- Wheelbarrow

2B. MATERIALS

Materials needed will vary greatly. Here are the materials needed to build the **Simple Seedling Shadehouse**

Simple Seedling Shadehouse

- 6 star pickets (1.65 metres long) – or you can use fence droppers
- 20 metres of 2" rural polypipe (green line with 50mm internal diameter) – it usually comes in a 50 metre roll
- Supports: 3 lengths of 7.2 metre long PVC pipe or ceiling battens
- Packet of 100 roofing screws: length depends on thickness of supports
- Packet of 100 x 300mm cable ties
- Soft wire
- 19mm polypipe for water supply
- 15 metres of 3.6 metre wide medium density (50%) shadecloth (usually comes in 30 metres rolls)
- Shadecloth joining pins and butterfly clips



TOOLS

Go through these pictures and either:

- write down the name of each tool

OR

- tell your trainer the name of each tool

3A. BUILDING A NURSERY

PLANNING

Talk to your workers and other community members who have an interest in the nursery and draw up a plan for your nursery. You need to think about:

- What type of plants you are going to grow and their growing conditions.
- How many plants you are going to grow so you make enough space.

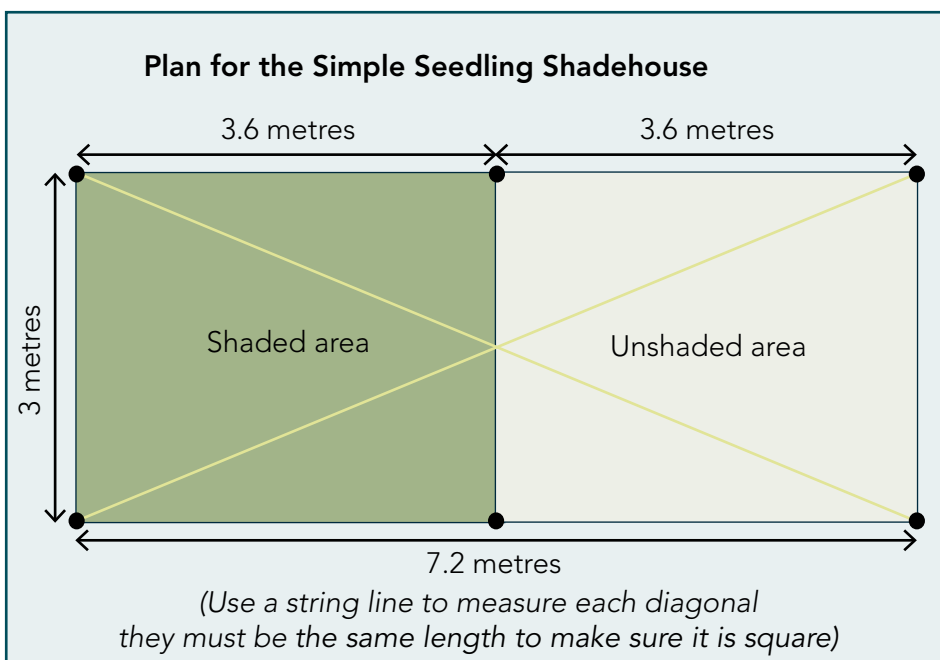
A small native plant nursery can function with only a seedling shadehouse and a full sun hardening off area.



Seedling shadehouse



Full sun hardening off area



NOTE

Before you start make sure you have the permission of the person who owns the land. For some projects you will need written permission and/or permits.

3 – BUILDING AND MAINTAINING A NURSERY



SEEDLING SHADEHOUSE

The seedling shadehouse is where the plants start their life and is the most important part of the nursery operation. All newly potted seeds and young seedlings need to be kept in the shade for a few weeks. Pick a flat area with no existing shade for the shadehouse site.

There are a whole range of methods of building a shadehouse. You have two options:

- Design the shadehouse yourself and source all the materials. You will need to make sure your group has all the skills necessary to build the shadehouse. We have included information on building a **Simple Seedling Shadehouse** in the shaded boxes in this guide.

OR

- Buy a kit shadehouse and follow the manufacturer's instructions. If you can afford to buy a kit it means all the materials will be included. There are lots of suppliers, try the yellow pages and the internet to find them.



The following information outlines the basic elements of a shadehouse.

Floor

The best floor for a shadehouse is flat, well drained concrete. If you have the resources you should lay a concrete slab to put the shadehouse on. There may even be an old concrete slab you can use. See Resource 2 for information on mixing and pouring concrete.

If you can't afford a concrete floor you should aim for a gravel floor with weed mat underneath it. This will stop the weeds coming through and let the water drain out of the nursery.

Another option is to use decking or duckboards to create a floor that drains easily. Old packing crates could be used.



ACTIVITY

Calculate the volume of concrete required for a slab measuring 3m wide x 4m long x 300mm thick (see Resource 2).

ACTIVITY

With your trainer practice the correct lifting and turning technique when using a long handled shovel.



Frame

If you have people with building skills in your community you may want to build a steel or wood frame for your shadehouse. You can make sure it is strong by cementing the poles into the ground. However the **Simple Seedling Shadehouse** design will let you build your shadehouse frame with minimal building experience.

Measure out

Clear the ground and then measure up your area with a tape measure and string line. The **Simple Seedling Shadehouse** is 3.6 metres by 3 metres. However its frame is twice as long (7.2 metres) because only half is shaded (the other half is for plants in full sun under the same irrigation system).

You will need to adjust the size depending on your site, especially if you already have a concrete slab for the floor. This activity needs to be undertaken as a group, with an experienced supervisor present. Use the diagram on page 9 to help check if the shape is square.

Digging holes/hammering in stakes

Before digging any holes or trenches, or hammering in stakes for the nursery frame make sure there are no services underground. For instance telephone, power and water lines are often located underground. Your council or ESO (Essential Services Officer) may have information about underground services.

You can also call 'Dial before you Dig' service to make sure you won't dig into underground pipes and cables.

DIAL BEFORE YOU DIG

Phone: 1100 Fax: 1300 652 077



Be careful when digging holes with a spade as wrongly twisting and turning with a load of soil can easily damage your back. Remember wet soil is a lot heavier than dry soil.

Install star pickets

- Put one star picket in each corner and one in the middle of each long side (so you have 3 on each long side).
- Drive the star pickets into the ground until there is 1 metre sticking out.
- Make sure you line them up properly and check they are straight (like building a fence).
- You can grind the corners of the star pickets smooth to stop them cutting into the polypipe.



Checking with the ESO



3 – BUILDING AND MAINTAINING A NURSERY



Install arches

- Unroll the polypipe – you may need to leave unrolled in the sun for a while to let it straighten out.
- Measure 3 pieces of polypipe that are each 6.2 metres long each, cut them with a hacksaw.
- Push each end over a star picket so you get 3 parallel arches.

Install supports

- Use the PVC pipe or ceiling battens as supports.
- You need 3 supports, one on each side and one along the top as a ridge pole.
- Secure the supports to the arches with roofing screws (the length of the screw will depend on the thickness of your support) or you might be able to use wire.
- You might need to put additional vertical timber supports under the arches to give it more strength.

Water supply

Unless you are able to water your seedlings by hand EVERY day, you will need to undertake *Install Micro-irrigation Systems* and put an irrigation system in after the shadehouse is finished. However it may be necessary to install the water supply and attach it to the frame while you are building the shadehouse.

Connecting water supply



Shade material

Cover the whole frame with shadecloth. Ask your trainer or hardware store about the best type of shadecloth to use for your nursery. It comes in different thicknesses (50% is usually good but depends on what you're growing). You can put chicken wire or ringlock underneath the shadecloth to make it stronger. Use cable ties, wire, screws or fencing clips to attach the shadecloth to the frame.

Attaching the shadecloth

- Using shadecloth cover the frame completely.
- The shadecloth is 3.6metres wide – so you can just roll it over the arches. Then cut shorter sections for the front and back walls.
- (Remember if you want a bigger shadehouse you can shade the whole of the 7.2 metre long frame with shadecloth – use 2 lengths of shadecloth and join together with joining pins).
- Secure the shadecloth to the frame using cable ties or tie wire.
- Join pieces of shadecloth to each other using joining pins.
- If you put a wire around the base of your frame you can attach the shadecloth to it with butterfly clips or cable ties.



Door

You can put a recycled door in the shadehouse. Or you can just leave an end open, or cut a door into the shadecloth.

Shelving

The plants in pots and trays should not sit on the ground. Make up shelves or benches to store the pots and trays on. You might be able to find second hand benches or make them up from steel and mesh.



3 – BUILDING AND MAINTAINING A NURSERY

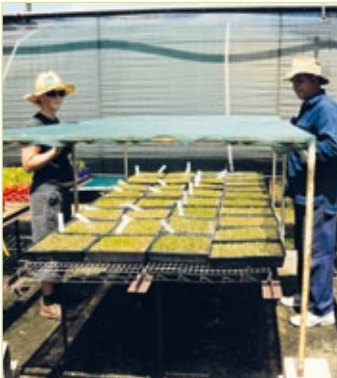
POTTING AREA

You will need an area to pot your plants. This should be shady and cool so the workers are comfortable. You could just work under a big tree, work in the seedling shadehouse, or maybe set up a shade sail or shadehouse for workers, or there might be a covered area in a shed that is not too hot. You will also need a nice big workbench at a comfortable working height and a storage area for your potting materials – sand, cocopeat, pine bark etc.



SEMI SHADE AREA

After the plants have been in the seedling shadehouse for a few weeks they will be ready to move into a semi shaded area. This might be under a tree, under portable shade structures (like tables made out of shadecloth) or in a different shadehouse with lighter shadecloth.



FULL SUN HARDENING OFF AREA

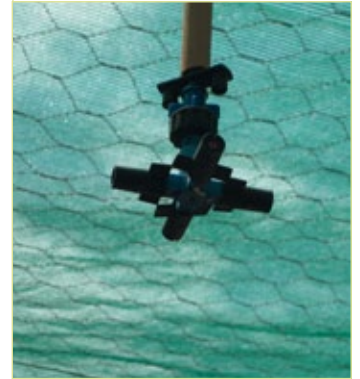
After a few weeks in the semi shade area the plants should be moved into the full sun to harden them off before they are ready to be planted in the ground. You should pick a good sized area that has no shade on it.



IRRIGATING THE NURSERY

The seedling shadehouse, semi shade area and full sun hardening off area all need to be irrigated. You should work through *Install Micro-irrigation Systems* to learn about irrigation and then talk to your trainer, irrigation shop, garden centre or nursery about the best irrigation system for each of these areas. The system may differ depending on the type of plants you want to grow.

It is possible to hand water instead of setting up an irrigation system but you will need to water new seedlings a few times every day or they will die.



TOOL SHED

All your tools, materials and equipment should be stored in a secure tool shed. If you are using chemicals in the nursery make sure you have a safe, locked cupboard or shed to keep them separate from everything else.

WORKERS' REST AREA

It is important that your workers have a comfortable area to sit and have their rest breaks. This could be some seats under a shady tree or shade sail, or maybe even an air-conditioned lunch room in a demountable.



GROWING PLANTS

Once your nursery is installed you need to make sure all your workers are properly trained to grow and look after your plants. The following learning guides will help with this:

- *Undertake Propagation Activities*
- *Pot Up Plants*
- *Tend Nursery Plants*

3 – BUILDING AND MAINTAINING A NURSERY

ACTIVITY

With your group make up a maintenance plan for your nursery.



ACTIVITY

Walk around your nursery and fill in the maintenance schedule found on the next page.

3B. MAINTAINING THE NURSERY

Once you have your nursery established you need to make sure it is properly looked after. This includes doing regular maintenance. There are a whole lot of things that need to be maintained. Here are a few basic things in a nursery situation:

- Shadehouses – ripped shadecloth, broken frame.
- Sheds and demountables – leaks and cracks, flaking paint.
- Paths – pot holes, slippery algae.
- Drains and gutters – blocked.
- Tools and equipment – in need of repair.
- Irrigation – blocked or leaking.
- Fencing – broken wires.
- Grass and weeds – need slashing or weeding.

MAINTENANCE PLAN

It is a good idea to write a maintenance plan up. The plan should include the following sections:

- Safety procedures before starting maintenance.
- Visual checks on all buildings and structures.
- Visual checks on paths and drainage.
- Routine servicing jobs including checking operation of tools and equipment.
- Instructions for cleaning and disposal of wastes.
- Reporting requirements for the maintenance schedule.

You should keep in mind the following when writing the plan:

- Local building codes.
- Your industry standards.
- Your organisation's policies and procedures.
- Product labels and manufacturer's specifications.

MAINTENANCE SCHEDULE

The maintenance schedule is where you write down all the maintenance jobs that need doing. A maintenance schedule sheet is found on the next page. When deciding what repairs to do, and when, you will need to take into account:

- How severe the damage is (is it a minor painting job, or has the whole structure collapsed)?
- Can people continue to work safely until the repairs are made?
- What tools and materials you need and what your budget is?

MAINTENANCE SCHEDULE

MAINTENANCE SCHEDULE – NURSERY			
Maintenance needed	Is it dangerous?	Tools and materials needed	Date completed

3 – BUILDING AND MAINTAINING A NURSERY

Example maintenance schedule

MAINTENANCE SCHEDULE – NURSERY			
Maintenance needed	Is it dangerous?	Tools and materials needed	Date completed
Weeds along paths	No	herbicide + spray pack	
Algae on paths	Yes	Bleach, water and broom	1/3/2010
Leaking irrigation	No	Irrigation parts and pliers	15/3/2010
Broken shovels	No	Replace shovels.	

4A. DISPOSAL OF WASTE MATERIAL

After building and maintaining property there is often a range of unwanted waste material left behind that needs to be dealt with. Things such as metal cut offs, old wire, replaced timber, old concrete etc. It is best practice when finished to leave a completely clean site free of rubbish.

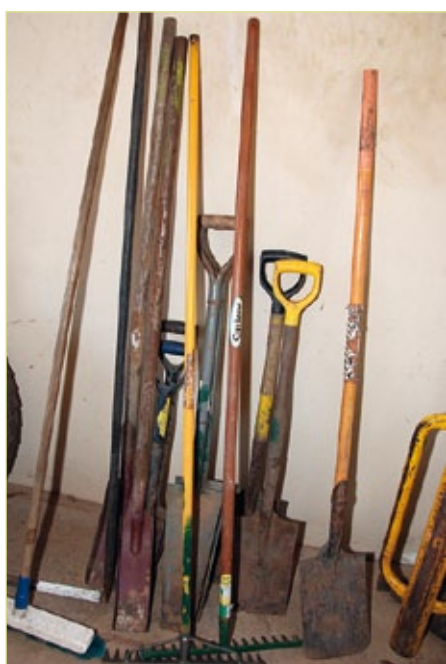
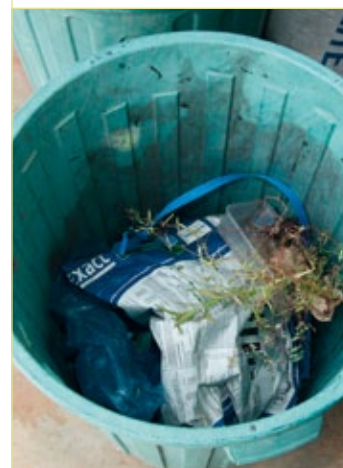
Methods of waste disposal could include:

- Organic waste: mulch and composting
- Inorganic waste: plastic/metal/paper based materials may be recycled, reused or returned to manufacturer.

4B. TOOL MAINTENANCE

To make the next job easy and to prevent personal injury it is very important to keep tools in good condition. Follow the steps below each time the tools are used:

- Wash all tools to remove mud and dirt, and oil any metal parts to prevent rusting. Steel wool and a light oil will remove any surface rust.
- Keep tools sharp and in good working order. Bevel the back edge of a spade off with a bench grinder or a coarse sharpening stone.
- Replace any broken handles. Never use bush sticks as handles as they often break causing injury.
- Sand and oil all wooden handles to avoid getting nasty splinters. Use 50% mineral turpentine and 50% raw linseed oil on wood.
- Report any broken or damaged electrical tools to your trainer for repair by a qualified electrician.

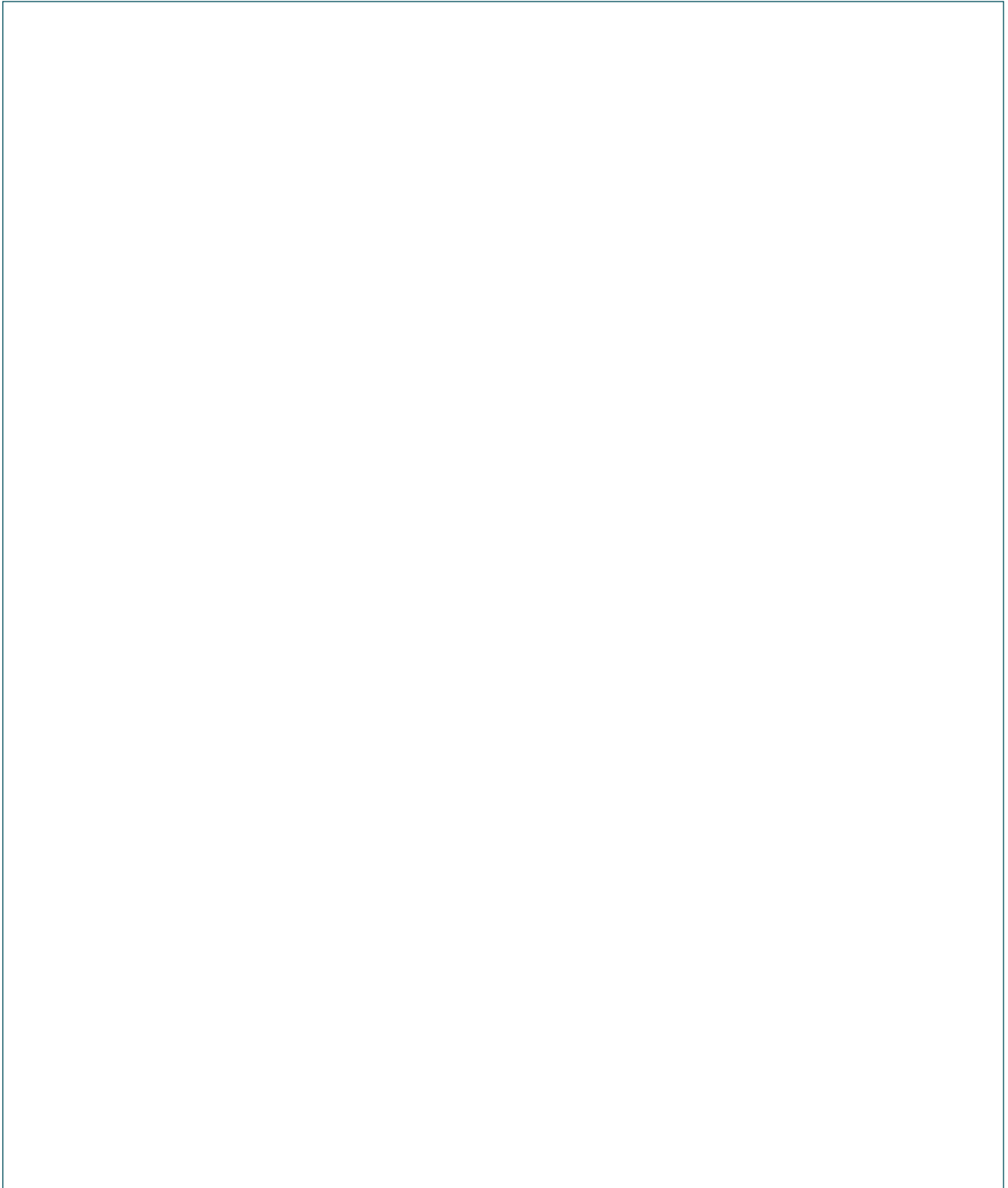


BUILD A SEEDLING SHADEHOUSE

Together with your trainer and your work group, plan and build a seedling shadehouse.

Draw a picture of the completed shadehouse here.

(If you already have a seedling shadehouse you should carry out maintenance on it with your group using your maintenance schedule).



RESOURCES AND REFERENCES

RESOURCE 1: BASICS OF GOOD LIFTING

Correct handling of materials is important to ensure a safe working environment. Improper lifting techniques can lead to back pain and learning the right way to lift will help you avoid this.



1. Plan ahead

- Size up the object and test to see if it is possible to lift by yourself
- Clear a path and make sure there are no obstacles in your way
- Practice the lifting motion before you lift the object

2. Lifting the object

- Place your feet shoulder width apart with your feet close to the object
- Keep the object close to your body
- Bend your knees and tighten your stomach muscles
- Get a firm hold on the object and stand up slowly keeping your back straight
- Let your legs do the lifting work
- Take short steps and do not twist

3. Putting the object down

- Keep the object close to your body
- Bend your knees and keep your back straight
- Let your legs do the work
- Wait until it is firmly in place before letting go



RESOURCE 2: USING CONCRETE

CONCRETING SAFELY

- Plan out your project carefully.
- Wear heavy gloves to protect your skin.
- Make sure you don't get concrete in your eyes – wear safety glasses or goggles.
- Wear a dust mask when working with the dry cement.
- Use the wheelbarrow to move heavy bags of cement and other materials (see Resource 1 for lifting heavy bags).

MEASURING UP

Concrete is priced and sold by the cubic metre. A cubic metre is the volume of an area that is 1 metre by 1 metre by 1 metre.

When laying concrete you will need to work out the number of cubic metres of concrete required.

You will need the following:

- Pocket calculator
- Pencil
- Paper

Measure the length, the width and the depth of the concrete slab you want to pour. Make sure all measurements are in metres (1mm = .001m). Using your pocket calculator multiply the length by the width and then multiply that number by the depth. The answer you get will be the number of cubic metres of concrete you need for your slab.

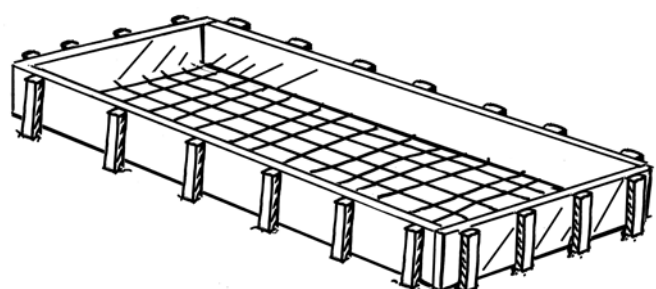
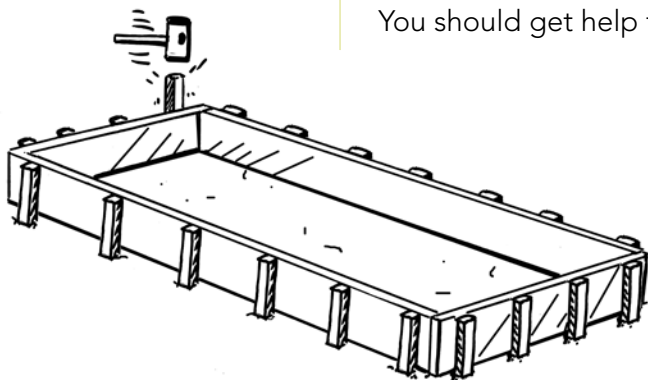
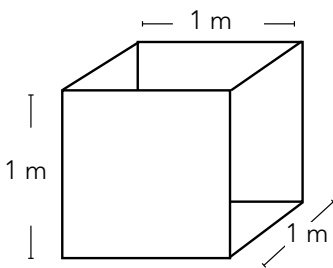
Try calculating different slab sizes till you get the hang of it. Don't forget to try calculating odd sized slabs as well. Hint: You can divide odd-shaped slabs into smaller shapes, then find the cubic metres of each individual shape and add all cubic metres together.

MAKING THE FORM WORK

The form will define the shape of your final concrete product. You might make it above the ground using wood, or dig it out of the ground.

You should use straight pieces of wood and stakes to hold them in place. You should make sure the concrete will drain properly when it is dry.

You should get help from your trainer to do this properly.



INGREDIENTS

Concrete is made from cement, sand, gravel and water. These ingredients are mixed in a 1:2:4 proportion to achieve maximum strength (1 part cement, 2 parts sand, 4 parts gravel).

The ingredients come either

- Ready mixed in a bag for small projects. OR
- For larger quantities you can buy the ingredients separately.

MIXING

Mixing by hand

The mixing area must be both clean and dry.

1. Spread the sand evenly over the mixing area. Spread cement evenly over the sand and stir until its all mixed together. Spread the mixture out evenly and add the gravel on it and mix it thoroughly again. All dry materials should be thoroughly mixed before water is added. (If using bagged ready mixed concrete you should still work the ingredients over until thoroughly combined).
2. Shape dry mix into a pile (like a volcano) and form a hollow bowl in the centre. When mixing concrete always use clean tap water that is free of salt and contamination. Pour some of the water into the bowl, gradually mixing in the dry mixture until all the water is absorbed. Re-form the pile and bowl, add and mix more water.
3. Add a little water at a time until you have achieved a firm consistency. The amount of water used to mix the ingredients is by far the most important factor in determining the final strength of the concrete: use the least amount of water that will still give you a workable mix.
4. A workable mix should be smooth and plastic (not wet and runny or dry and crumbly). If the mix is too wet, add small amounts of sand and gravel (in the proper proportions) until the mix is workable. If the mix is too stiff, add small amounts of water and cement until the mix is workable. Note the amounts of materials added for future batches.

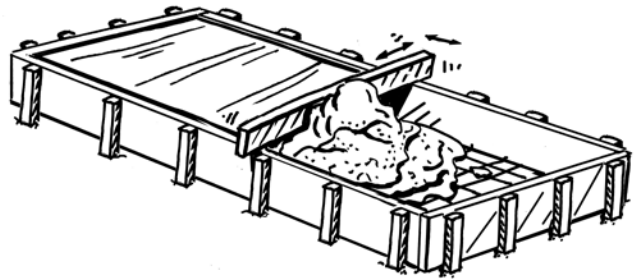
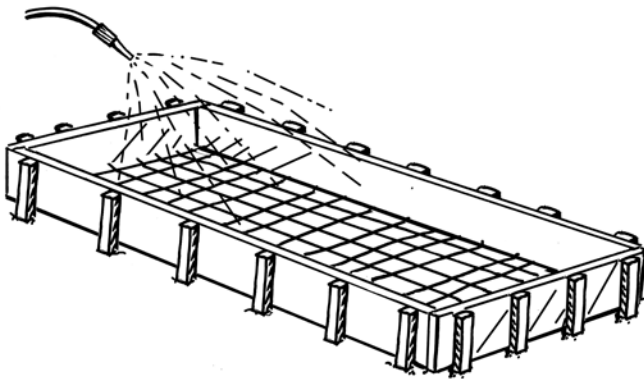
Mixing by machine

1. Add approximately 2/3 of the required water and turn the machine on.
2. Add the coarse aggregate followed by the sand and then the cement.
3. Blend together until a uniform colour is achieved.
4. Add the rest of water slowly and sparingly until a workable mix is achieved.
5. Run the mixer for 5 or 6 minutes after all the materials are in the drum.

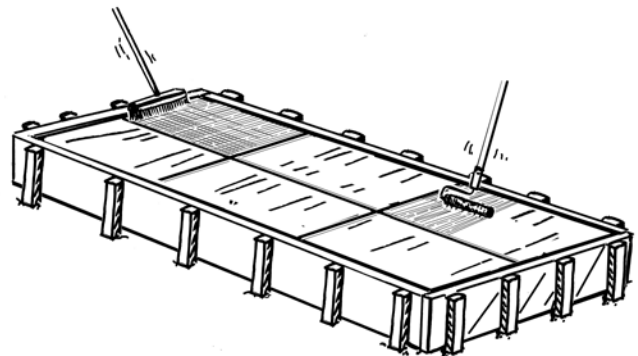
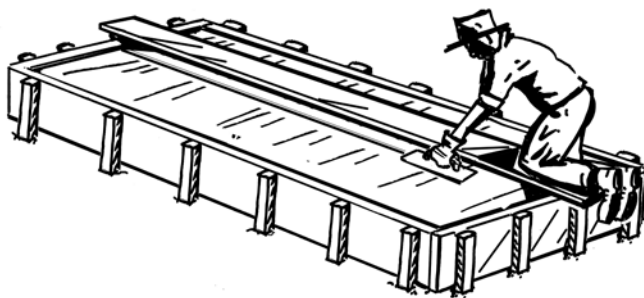


POURING AND FINISHING

- Lightly spray the surface with a hose.
- Pour the concrete into the form work using a wheelbarrow.
- Tap the form work with a hammer to settle the concrete and compact it and remove air bubbles.
- Use a straight piece of wood to level the concrete.



- When it has set so it is firm but not hard, use a groover tool to put in contraction joints every few metres (they let the concrete expand and contract in hot and cold weather).
- Create a soft pattern of parallel lines by dragging a soft brush or paint roller straight across a moderately wet surface (see image).



CURING

- Always protect new concrete from rain until it has hardened.
- Make sure no kids or animals walk on the concrete until it is hard.
- Never lay concrete on extremely hot days because the evaporation during mixing and curing will give a poor result.
- Once it is hard hose with a fine mist twice a day for about three days after the concrete has been poured.
- Curing involves keeping the concrete damp so that the chemical reaction that causes the concrete to harden will continue for as long as necessary.

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