

Risk Assessments

Hand-tool use in gardening and bush craft activities

Contained in the following pages are the risk assessments and operating procedures for Dukes Barn hand-tool use in bush craft and gardening activities.

These risk assessments have been carried out by the staff of Dukes Barn taking into account any entries to our accident / near miss report folder. These risk assessments are reviewed, updated and amended on an annual basis.



Benefit Statement		Tools are often viewed by adults as something children shouldn't use. It's well known that prohibiting most children from doing anything, particularly something that they arguably have a biological drive to do, is a guaranteed way of ensuring that they'll do it! However, through age appropriate and supervised bush craft and gardening activities children can learn safely the proper use of tools. Therefore, safeguarding themselves against the dangers in the future.		
What are the hazards/risks?	Who affected and Risk	What we are already doing / control measures	Further action required	Action required Responsibility / dates due and completed
General hazards				
Uneven-slippery ground/ Stumble-slip/ trip Hazards	All Participants and staff	These will all be pointed out prior to activities taking place by a member of staff from Dukes Barn.	No further action at this time	
Lifting and Carrying	All Participants and staff	Appropriate lifting and carrying methods to be demonstrated by instructor and ensure staff and children adopt these.	No further action required at this time.	
Weather (heat)/ Hyperthermia – loss of concentration in tools use	All Participants and staff	An assessment made of ambient temperature, clothing, work rate and hydration made. Proactive hydration measures taken and appropriate work rates adopted. Appropriate action taken to maintain adequate core temperature of individuals up to and including returning to classroom.	No further action required at this time.	
Weather (cold)/ Hypothermia – numb fingers in tools use	All Participants and staff	 An assessment made of ambient temperature, wind speed, precipitation levels and clothing. Appropriate action taken to maintain adequate core temperature of individuals up to and including returning to classroom. 	No further action required at this time.	



Edged and pointed tool work harm participant and others	All Participants and staff	 Group/individuals assessed on the day to ascertain whether edged tool work is appropriate. Appropriate instruction given with warning. Groups kept to manageable size while tools in use. Walk, don't run with tools. Always hand to another person handle first or by placing on a flat surface to be picked up. Carry with blade covered and end pointing down. PPE will be provided where appropriate. Ensure tools are age and height appropriate. Inappropriate behaviour results in session termination. Long-hair must be tied back in some way to ensure vision is not impaired. All loose clothing should be secured. Cover any open-wounds. Appropriate closed-toe footwear to be worn at all times. Additional supervision provided by a 'buddy' system of work where appropriate. All tools should be stored away when not in use. 	No further action required at this time.	



Specific tool hazards – in addition to those in general				
Hand & Battery- powered Drills	All Participants and staff	 Either clamp or if large enough brief on appropriate holding of item to be drilled to ensure it doesn't spin. Keep long-hair, and loose clothing away from gears. Keep fingers away from drill bit when in use and ensure it has cooled before removing. 	No further action required at this time.	
Saws – bow, hand and folding – cuts	All Participants and staff	 Keep the guard on the blade or folded whenever the saw is not in use and store clearly e.g. SAWS HERE or locked in tool store Ensure folding saws are locked into open position before use and closed when not, keeping fingers away from the closing. Keep hands away from the blade. NOTE If a young child is sawing they should have both hands on the handle Have dominant hand on the handle – no glove. Wood to be sawed should be held firmly ensuring knees and other body parts are clear of the saw before beginning to saw. Practise the sawing motion with the guard on where applicable. Check the blade before each use – replace/tighten blade if necessary. 	No further action required at this time.	
Awl/Screwdrivers	All Participants and staff	 Either fix or brief on appropriate holding of item to be fixed or punched. 	No further action required at this time.	



Scissors/secateurs	All Participants and staff	 Use in dominant hand and keep fingers clear of blades. Only use appropriate sized gloves for the use of secateurs. 	No further action required at this time.	
Peeler	All Participants and staff	 Use in dominant hand and keep fingers clear of blades. Always scrap away from yourself and others. Gloves should not be worn as good grip cannot be guaranteed. 	No further action required at this time	
Fixed blade knife - Morakniv	All Participants and staff	 Before unsheathing the knife the user must be in the position they will work. Use in dominant hand and keep fingers clear of blades. Always cut away from yourself and others, being aware of the blood triangle. Arm span distance away from others plus 1m. Gloves should not be worn as good grip cannot be guaranteed. Full briefing on appropriate techniques should be given. Blade should be replaced in holder when not in use. 	No further action required at this time	
Garden forks/spades/ racks/hoes	All Participants and staff	 Place blade/prongs in the ground before applying weight. Do not discard tools on the ground, creating a trip or impaling hazard. Make sure participant is balanced and working ergonomically. 	No further action required at this time.	



Hammer	All Participants and staff	 Use in dominant hand and keep fingers clear of strike area. Brief on appropriate holding of item to be fixed or punched. Consideration will be given to hand-eye coordination development and appropriate assistance will be given. 	No further action required at this time.	
Adhesive (PVA/hot-glue gun)	All Participants and staff	 Only solvent-free adhesives are to be used. Brief on use and ensure appropriate PPE is used. Ensure hands are washed to remove all PVA. In the case of hot-glue guns – brief on appropriate use, including the risk of burns from the nozzle. 	No further action required at this time.	



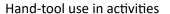
Operating procedures Bush craft general tool use

Instructor requirements:

Current First Aid, Bush craft competency training or site specific sign off from centre manager. Instruction staff to be familiarised in the set up and operation of all tools.

Key briefing points:

- The instructor should always have access to a first aid kit.
- Tools should be maintained to a good level of sharpness and locked away in the tool shed until the time of the session.
- The instructor should always be in a suitable position to supervise the whole group.
- Instructors should inspect all equipment at the start of any session and remove any item they are not happy with for inspection by the Head of Centre.
- A full briefing should be given along with appropriate tool use and handling appropriate to the activity.
- All participants should be wearing appropriate clothing for the weather and activity including sturdy footwear that covers toes.
- Appropriate lifting techniques should be given when required.





Operating procedures

Bush craft knife (Morakniv) & saw (bow/folding barco/hand) work including whittling, feather stick, battening, pot holders etc.

Instructor requirements:

Current First Aid, Bush craft competency training or site specific sign off from centre manager. Instruction staff to be familiarised in the set up and operation of all tools.

Key briefing points (Morakniv):

- Instructors should inspect all equipment at the start of any session and remove any item they are not happy with for inspection by the Head of Centre.
- All knives and saws should be kept locked away when not in use.
- A full briefing should be given along with appropriate tool use and handling appropriate to the activity.
- All participants should be wearing appropriate clothing for the weather and activity including sturdy footwear that covers toes.
- Before unsheathing the knife the user must be in the position they will work.
- Use in dominant hand and keep fingers clear of blades.
- Use firm forehand grip and look at where blade will travel before making a cut.
- Always cut away from yourself and others, being aware of the blood triangle.
- Arm span distance away from others plus 1m.
- Gloves should not be worn as good grip cannot be guaranteed.
- Full briefing on appropriate techniques should be given elbows on knees when sitting, carving to dominant side, back of blade and knife heel to knee in fixed position for shaving wood, reinforced grip, chest lever, batoning, chop through batoning etc.
- Blade should be replaced in holder when not in use putting blade away at 90 degrees with blade facing outwards.

Key briefing points (saws):

- Instructors should inspect all equipment at the start of any session and remove any item they are not happy with for inspection by the Head of Centre.
- A full briefing should be given along with appropriate tool use and handling appropriate to the activity.



- All participants should be wearing appropriate clothing for the weather and activity including sturdy footwear that covers toes.
- Keep the guard on the blade or folded whenever the saw is not in use.
- Ensure folding saws are locked into open position before use and closed when not, keeping fingers away from the closing.
- Keep hands away from the blade. NOTE If a young child is sawing they should have both hands on the handle
- Have dominant hand on the handle no glove.
- Wood to be sawed should be held firmly ensuring knees and other body parts are clear of the saw before beginning to saw.
- Practise the sawing motion with the guard on where applicable. Angle vertically to start cut.
- Saw on a stump or with saw horse to aid against saw jumping to holding hand or foot.
- Check the blade before each use replace/tighten blade if necessary.
- Use appropriate bow saw for wood open teeth for dead, dry wood and closed –uneven teeth for wet and live wood.

Offsite (in addition to the above):

- The instructor should always carry a first aid kit. Additional safety equipment including an emergency shelter, sleeping bag and hot drinks may be carried if deemed necessary.
- The group should be appropriately briefed before entering the site. The importance of staying together, helping each other and the slippery and irregular nature of the woodland area should be highlighted as well as any stream areas or sudden drops.
- The instructor should always be in a suitable position to supervise the whole group.



Operating procedures Gardening

Instructor requirements:

Current First Aid.

Instruction staff to be familiarised in the set up and operation of all tools.

Key points and risk management:

- The instructor should always have access to a first aid kit.
- Instructors should inspect all equipment at the start of any session and remove any item they are not happy with for inspection by the Head of Centre.
- All participants should be wearing appropriate clothing for the weather and activity including sturdy footwear that covers toes.
- Appropriate lifting techniques should be given when required.
- All participants should be aware of the plants, materials they are handling and provided with appropriate PPE where required.
- All cuts to be covered, wash hands before eating.
- The instructor will brief the group at the start and again during the session.
- The instructor should always be in a suitable position to supervise the whole group.