



## Risk Assessments

### **Bush craft on and off site**

Including: Den building, fire building and lighting, cordage making, willow weaving/hurdle making, pond/stream-dipping, mini-beast hunts

Contained in the following pages are the risk assessments and operating procedures for Dukes Barn bush craft. This should be read in conjunction with the On-site Green Spaces RA and the Use of Tools RA.

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.

Bush craft on-site and off-site

<b>Benefit Statement</b>	Learning about the crafts of our ancestors builds respect for our natural surroundings. Whether through exploration of their own environment or through play children and young adults are especially drawn to den building, fire lighting and use of sharp tools. Through taking part in organized activities participants can learn to manage the risks to themselves and their environment.			
<b>General off-site hazards (for on-site see 'on-site green spaces' specific risk management)</b>				
<b>What are the hazards/ risks?</b>	<b>Who affected and Risk</b>	<b>What we are already doing / control measures</b>	<b>Further action required</b>	<b>Action required Responsibility / dates due and completed</b>
Limited or no mobile phone coverage.	All Participants and staff	Mark points with mobile phone coverage on site map. Ensure all adults aware of nearest accessible telephone.	No further action at this time	
Children wandering off	All Participants and staff	At start of session, show the children where the boundaries are. Allocate adults to watch boundary line and conduct regular head counts.	No further action at this time	
Contact with strangers	All Participants and staff	Participants to only talk to those adults involved in the session. Participant to alert an adult if stranger attempts contact. Adults to watch boundary to be aware of any lurking strangers and contact police if necessary.	No further action required at this time.	
Contact with strange dogs	All Participants and staff	Give advice not touch or interact with strange dogs until owner is engaged and advice given as to how to interact with it. Adults to watch boundary and be aware of approaching dogs and intervene. If appropriate and possible ask owner to keep their dog under control in the area.  Check with participants to see if any are wary of dogs.	No further action required at this time.	

Bush craft on-site and off-site

Ground Conditions: Wet slippery leaves on ground which may hide hazards underneath them. Tripping over roots, branches, uneven ground, ditches etc	All Participants and staff	Take adequate precautions: <ul style="list-style-type: none"> <li>• Wear suitable and appropriate footwear.</li> <li>• Encourage children to walk in an orderly line.</li> <li>• No running in the woods and rate of progress adopted. Any injury to be dealt with by school first aider who must ensure that other members of staff are in charge of his or her group.</li> </ul>	No further action required at this time.	
Sweet chestnut cases or rubbish in leaf litter puncturing and/or irritating the skin. Rubbish with sharp edges hidden in the leaf litter causing injury	All Participants and staff	<ul style="list-style-type: none"> <li>• Participants should be advised to take care when gathering leaf litter.</li> <li>• Litter will be collected and placed in the bin whenever encountered.</li> </ul>	No further action required at this time.	
Ingestion of 'wild foods', plant leaves, stems, roots and flowers - Poisoning	All Participants and staff	Full briefing given, no wild food or plant material to be consumed unless positively identified as safe by centre staff.	No further action required at this time.	
Weather (heat)/ Hyperthermia	All Participants and staff	<ul style="list-style-type: none"> <li>• An assessment made of ambient temperature, clothing, work rate and hydration made.</li> <li>• Proactive hydration measures taken and appropriate work rates adopted.</li> <li>• Appropriate action taken to maintain adequate core temperature of individuals up to and including returning to centre.</li> </ul>	No further action required at this time.	
Weather (cold)/ Hypothermia	All Participants and staff	<ul style="list-style-type: none"> <li>• An assessment made of ambient temperature, wind speed, precipitation levels and clothing.</li> <li>• Appropriate action taken to maintain adequate core temperature of individuals up to and including returning to centre.</li> </ul>	No further action required at this time.	

Bush craft on-site and off-site

Weather (snow and ice)	All Participants and staff	An assessment made of prevailing and forecast weather conditions and session cancelled/terminated as appropriate. Including regard for travelling conditions.	No further action required at this time.	
Weather (wind)/falling trees	All Participants and staff	An assessment made of prevailing and forecast weather conditions and session cancelled/terminated as appropriate.	No further action required at this time.	
Hell's bank Plantation & surrounding areas Environment/Falling from height-Drowning	All Participants and staff	<ul style="list-style-type: none"> <li>The woodland is a 'none managed' woodland therefore a constant awareness of the environment with regard to dead trees/branches and wind damaged trees/branches is to be adopted.</li> <li>Staff awareness raised re any cliffs/edges within the woodland and appropriate areas/activities adopted with regard to the students 'behaviour' on the day.</li> <li>Staff awareness raised re any bodies of water/streams in the woodland and appropriate areas/activities adopted with regard to the students 'behaviour' on the day.</li> </ul>	No further action required at this time.	
Works being carried out by other agencies/Various	All Participants and staff	<ul style="list-style-type: none"> <li>Contact made with contractors, extent of works assessed and area for activities changed as necessary.</li> </ul>	No further action required at this time.	
Livestock graze on the surrounding fields.		<ul style="list-style-type: none"> <li>Hands should be washed or sanitised before eating</li> <li>When deemed necessary, participants should be advised to undertake tick checks.</li> </ul>	No further action required at this time.	
Dog faeces – toxicara and general infection risk	All Participants and staff	<ul style="list-style-type: none"> <li>Check working area.</li> <li>Use disposable gloves or bag if handling faeces.</li> <li>Warn staff if working in a contaminated area.</li> </ul>	No further action required at this time.	

<b>Activity specific hazards</b>				
<b>Fire lighting, including flint, steel, match and bow drill ignition</b>				
Fire /Burns	All Participants and staff	Water container/sand to be on hand. The following controls for specific hazards should negate this risk.	No further action required at this time.	
Minor burns from 'nest'	All Participants and staff	<ul style="list-style-type: none"> <li>• Full briefing given to size of nest and how to hold, with awareness to wind direction and controlling the movement of the participants.</li> <li>• Gloves to be made available for handling the nest if required.</li> <li>• Age ability and behavior of group will also be considered.</li> </ul>	No further action required at this time.	
Fire steel-Bow drill-matches Minor burns from hot components	All Participants and staff	<ul style="list-style-type: none"> <li>• Briefing given before activity commences with warnings throughout with regards to which items get hot.</li> <li>• Supervision adjusted as appropriate.</li> </ul>	No further action required at this time.	
Burns during friction fire-lighting		<ul style="list-style-type: none"> <li>• Correct method will be demonstrated and the activity carried out under the direct supervision of the instructor.</li> <li>• Group will be advised that the drill can still reach very hot temperature, even before smoke has been generated and therefore a suitable level of care taken in handling the drill.</li> </ul>	No further action required at this time.	
Fire - Spreading to surrounding area	All Participants and staff	<ul style="list-style-type: none"> <li>• Group/individuals assessed on the day to ascertain whether fire is appropriate.</li> <li>• Fires only to be lit in appropriate locations; i.e. on a clear site with no overhanging trees and either in a fire pit or ground clear of debris, roots and peat.</li> <li>• Fires not to be left unattended at any time.</li> <li>• An adequate supply of water.</li> <li>• Fire to be extinguished before leaving the site</li> </ul>	No further action required at this time.	
Explosion of materials - stones	All Participants and staff	Ensure the fire site is clear of stones and do not place around the base, especially if composition is uncertain.	No further action required at this time.	

Bush craft on-site and off-site

Flint and steel cuts	All Participants and staff	<ul style="list-style-type: none"> <li>• Participants to be shown the sharp nature of flint and how to correctly hold and strike the two.</li> <li>• Char cloth to be used to allow for more successful ignition.</li> </ul>	No further action required at this time.	
Entrapment in bow drill components	All Participants and staff	<ul style="list-style-type: none"> <li>• Correct method will be demonstrated and the activity carried out under the direct supervision of the instructor.</li> <li>• Participant to have long hair and clothing tied back or tucked out the way.</li> <li>• Fingers to be kept clear of moving components.</li> </ul>	No further action required at this time.	
Edged and pointed tool work - Cuts to self  (see Tool Use risk assessment for full risk management considerations)	All Participants and staff	<ul style="list-style-type: none"> <li>• Participants assessed on the day to ascertain whether edged tool work is appropriate.</li> <li>• Appropriate instruction given with warnings.</li> <li>• Groups kept to manageable size.</li> <li>• Additional supervision provided by a 'buddy buddy' system of work where appropriate.</li> <li>• Inappropriate behaviour results session termination.</li> </ul>	No further action required at this time.	
Lifting and Carrying	All Participants and staff	<ul style="list-style-type: none"> <li>• Appropriate lifting and carrying methods to be adopted.</li> <li>• Keep below shoulder level.</li> </ul>	No further action required at this time.	
Collecting fuel - Cuts-scratches & stings	All Participants and staff	<ul style="list-style-type: none"> <li>• Full briefing given, as to how to collect materials including materials to look for.</li> <li>• Materials provided where ability or age of group deem it more appropriate.</li> </ul>	No further action required at this time.	

<b>Cooking over a fire – Dutch oven, tray, sticks, bread oven or kettle</b>				
Scalding/burns by fire/hot food/pots/liquid	All Participants and staff	<ul style="list-style-type: none"> <li>• Area immediately around a fire (the fire circle) should not be walked through</li> <li>• Only individuals tending to the fire should be in close proximity and they must be invited in by the instructor.</li> <li>• If necessary a 'restricted' area will be physically marked out. Instructor to make participants aware of safe fire lighting techniques and the effect of wind direction, etc.</li> <li>• Instructor to judge whether handling of hot items is appropriate by group.</li> <li>• If deemed necessary due to behaviour, age or cognitive ability of participants, they may be restricted to aiding in the preparation of food, but only adults will be able to handle pots or trays from the fire</li> <li>• Sticks for marshmallows or food should be of a good length and either soaked prior to use or of live wood.</li> <li>• Groups to be reminded at the start of the activity not to handle metal pots/kettle once they have been over a fire.</li> <li>• Appropriate gloves to be provided where pots need to be handled.</li> </ul>	No further action required at this time.	
Food poisoning and germs contracted from unclean hands and food preparation	All Participants and staff	<ul style="list-style-type: none"> <li>• Make sure all of the group wash or sanitise their hands before participating in any cooking or eating activities.</li> <li>• Instructor to ensure all food is prepared in a hygienic way on cutting boards. Instructor to ensure food is cooked thoroughly and is hot when served.</li> <li>• Instructor to ensure all food is stored in cool dry containers in a secure cabinet.</li> <li>• Ensure all participants wash their hands at the end of the session.</li> </ul>	No further action required at this time.	
Allergies to food stuffs	All Participants and staff	Check with group leaders/staff of any group allergies to materials food stuffs being used.	No further action required at this time.	

Bush craft on-site and off-site

<b>Den building</b>				
<p>Lifting and Carrying</p> <p>Being hit on the head by timber, due to a dangerous carrying technique, or the shelter collapsing.</p> <p>Suffering eye damage from branches or twigs carried at eye level</p>	<p>All Participants and staff</p>	<ul style="list-style-type: none"> <li>• Participants will be shown correct lifting and carrying techniques and advised to seek help when moving awkward or heavy materials.</li> <li>• Participant briefed not to carry large logs in appropriate to age and ability.</li> <li>• Helmets may be worn at the discretion of the instructor, such as in case of limited special awareness or behavior regulation. If participants are asked to wear helmets, the instructor must also wear a helmet at all times.</li> <li>• Participants should be instructed in a safe carrying technique i.e. never carry timber above shoulder height and care taken when turning with the wood in order to prevent contact with other people.</li> <li>• At all times Participants are required to take general care in their actions and this is monitored by the instructor and group leader.</li> </ul>	<p>No further action required at this time.</p>	
<p>Material collection – stings, cuts, ticks - Lyme Disease</p> <p>Exposure to carcinogenic spores from bracken during late summer and autumn.</p> <p>Attempts to pull up bracken leading to cut hands.</p>	<p>All Participants and staff</p>	<ul style="list-style-type: none"> <li>• Participants advised NOT to pull up bracken for use on their shelters and if they do the instructor will clearly brief the likelihood of cutting hand and how to pick it safely.</li> <li>• First aid kit available and instructor trained.</li> <li>• Participants advised to tick check after use of bracken even if sourced from low risk areas. Wear long trousers and sleeves where possible. Brush clothes down regularly. Check skin for ticks at the end of work. If bitten, seek medical advice immediately.</li> <li>• When collecting leave litter participants to be made aware of hidden sharp objects such as litter and sweet chestnut cases, nettles etc.</li> <li>• Gardening gloves are advised, however will not protect from all sharp objects.</li> </ul>	<p>No further action required at this time.</p>	



Bush craft on-site and off-site

Participants climbing trees and falling from height	All Participants and staff	<ul style="list-style-type: none"> <li>In fine weather participants can be asked not to climb trees, or to climb no further than head height (that is, the Participants height above the ground) as appropriate to the group.</li> <li>Climbing of trees should only be to enable participants to reach hung up dead wood on low branches for shelters/fires.</li> <li>Behaviour of the group and adequate supervision should always be considered.</li> </ul>	No further action required at this time.	
<b>Cordage making</b>				
Stings from Nettles during collection/ preparation	All Participants and staff	<ul style="list-style-type: none"> <li>Before collecting nettles the group will be shown the best method of collection.</li> <li>Gloves/rags will be made available to minimise stinging.</li> </ul>	No further action required at this time.	
Allergies from materials or insect bites	All Participants and staff	Check with group leaders/staff of any group allergies to materials being used.	No further action required at this time.	
<b>Willow weaving &amp; Hurdle making</b>				
Willow Weaving and wild art - Branches and twigs - Eye injury Trips	All Participants and staff	<ul style="list-style-type: none"> <li>Briefing on what to pick or touch</li> <li>Space group out</li> <li>Ensure cut ends are blunt not pointed</li> </ul>	No further action required at this time.	
<b>Pond/stream dipping &amp; mini-beast hunts (see stream walking RA in addition)</b>				
Minibeast hunting/handling - Irritation to anaphylactic shock where allergy is present. Lyme's disease.	All Participants and staff	<ul style="list-style-type: none"> <li>Group briefings and risk disclosure</li> <li>Knowledge of site if tick rich. Tick briefing to be given</li> <li>Ask group lead regarding and allergies</li> </ul>	No further action required at this time.	

Bush craft on-site and off-site

<p>Pond and River Activities- Water, banks and currents - Slips and falls leading to injury, drowning and death Weils disease, E-coli etc.</p>	<p>All Participants and staff</p>	<ul style="list-style-type: none"> <li>• Wash hands immediately after activities</li> <li>• Group briefings on firm footing, slippery rocks, not grabbing wildlife if falling</li> <li>• First aid kit to be at hand at all times</li> </ul>	<p>No further action required at this time.</p>	
<p>Equipment- Nets, trays etc - Poke in eye or body, trips and falls, injuries and potential drowning through distraction or mishandling equipment</p>	<p>All Participants and staff</p>	<ul style="list-style-type: none"> <li>• An adequate ratio of nets to participants to avoid crowding at water's edge/in water or canoe</li> <li>• Group briefings</li> <li>• Group management and supervision</li> </ul>	<p>No further action required at this time.</p>	
<p>Pond Creatures- Diving beetle larvae, mosquitoes, midges etc - Bits, stings and allergic reactions, shock.</p>	<p>All Participants and staff</p>	<ul style="list-style-type: none"> <li>• Group briefings and risk disclosure</li> <li>• Knowledge of site</li> <li>• Avoid direct contact</li> <li>• Ask group lead regarding and allergies</li> </ul>	<p>No further action required at this time.</p>	



Bush craft on-site and off-site

## Operating procedures

# Fire wood collection & fire lighting inc. bow drill, flint & steel, fire steel & cooking

### **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 including burns gel or water and means to extinguish fire.
- Tools should be maintained and prepared ready for the group.
- 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.
- Fire should only be lit in a suitable area away from over hanging branches and ground cleared of leaf litter. Not in an area of peat.
- All loose clothing and hair should be tucked out the way or tied back.
- No wild food should be ingested unless positively identified by an instructor.
- Groups to be reminded at the start of the activity not to handle metal pots/kettle once they have been over a fire.

### **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 wood. 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.



Bush craft on-site and off-site

## 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.



## Bush craft on-site and off-site

- 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

# Bush craft activities including, cordage making, den creation, willow weaving

### **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:**

- 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.
- When handling plant material ensure group are aware of hazards and provided with gloves where appropriate
- Show correct technique for harvesting bracken and cordage material.
- Tick checks should be done and hands washed after gathering natural material.
- Correct lifting techniques should be used when handling larger branches.
- Always check surroundings before moving with branches and keep below shoulder height.
- Check area for building den to look above - for fragile overhanging branches, dead wood standing, below – for insects, roots and rocks.

### **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 wood. 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.



Bush craft on-site and off-site

## Operating procedures

# Pond/stream dipping & mini-beast hunts

### **Instructor requirements:**

Current First Aid

Instruction staff to be familiarised in the site and common wildlife hazards.

### **Key briefing points:**

- 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.
- Brief on conditions underfoot and not to stand on large wet rocks.
- If at a pond/canoe edge ensure in a stable position and do not over reach.
- Keep nets and equipment tidy and carried safely to avoid trip, slip or poke injuries.
- Wash hands after contact with the water and cover all cuts.
- Do not eat or drink while engaged in the activity.
- Check with group leads if any allergies are known to wild life.
- Have first aid kit to hand.
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### **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 wood. 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.