


Location:	Leicester Outdoor Pursuits Centre	Date of Assessment:	5/12/12	Last Reviewed:	November 2024	Name of Assessor:	Chris Murnin
Activity:	Bushcraft – Fire Lighting	Assessment Reference Number:	4.37		CM	Signature of Assessor:	
ITEM/ HAZARD	CONTROL MEASURES						
Ferrocium Rod	<ul style="list-style-type: none"> Warn group the edges of the scrapers can be sharp Always scrape away from the hand holding the rod Pulling the rod rather than pushing the scraper reduces the chance of hitting or “punching” the fire surround Aim sparks away from the body to avoid them coming in contact with skin or clothing 						
Flint and steel	<ul style="list-style-type: none"> Warn group flint edges will be sharp Using bigger bits of flint reduce the chances of hitting fingers with the steel Use the flint and steel at arms length Suggest the use of eye protection for prolonged use or for novices Oval steels offer more protection to knuckles as they can place their fingers through the steel. 						
Matches	<ul style="list-style-type: none"> Check the matches are in good condition before use Strike matches away from the body Place match in tinder or extinguish match before flame reaches finger tips 						
Solar Ignition	<ul style="list-style-type: none"> Inspect equipment for any damage from storage before use Avoid prolonged looking at the focal point created by the solar ignition, sunglasses will offer some protection. Only focus the point onto designated tinder. 						
Electrical Ignition	<ul style="list-style-type: none"> Keep batteries and steel wool separate during storage If you have to, hold the steel wool on the opposite end you are touching to the battery Place glowing embers into a tinder bundle quickly to avoid burning fingers 						
Fire piston	<ul style="list-style-type: none"> Ensure group have been fully briefed on how to hold or position the piston Specifically mention the risk to the skin between your thumb and forefinger Users must have a firm grip of the piston to keep it stable during use Avoid “slapping” the piston down as this will cause bruising to the palm of your hand 						
Chemical ignition - Potassium permanganate and antifreeze	<ul style="list-style-type: none"> Chemicals should be kept out of the reach of children until used for demonstration COSHH sheet kept in the office in case of accidental consumption Use should be closely supervised Avoid inhaling fumes 						
Group Bow	<ul style="list-style-type: none"> Ensure group have been fully briefed on where to stand when the bow is in use. The group members holding the bearing block must be in a stable, kneeling or braced position. Users must have a firm grip of the bow before starting their first strokes. Non-participants and observers to stand clear of the working area. 						



Hand drill	<ul style="list-style-type: none"> ■ Ensure the group have been fully briefed on where to sit or kneel. ■ Instructor to demonstrate good technique before Users attempt a go. ■ Users must ensure a good grip before beginning to drill. ■ Users must stop if they feel hot spots occurring on their palms. ■ Non-participants and observers to stand clear of the working area.
Finger entrapment	<ul style="list-style-type: none"> ■ Keep hands clear whilst the bow is in use ■ Hold onto the top of the bearing block, keeping fingers clear of the drill. ■ Instructor to demonstrate how to hold the bow correctly ■ Care is to be taken when wrapping the drill in the bow string ■ Fire piston demonstration should clearly show the risk of pinching skin and how to avoid it
Burns	<ul style="list-style-type: none"> ■ The drill, bearing block and base board will be hot after use, leaving to cool down before handling. ■ Use an ember pan eg. (sliver of wood, leaf) to move embers about, to avoid burning fingers. ■ All loose hair and clothing to be tied back when blowing the ember to light the tinder nest. ■ Ensure Participants hold the tinder nest lightly from below, so they are able to quickly drop it in the event of it getting too hot to hold. ■ Fire only to be lit in a designated area. ■ Fire bucket should be within reach ■ Once a piece of fuel has been added to the fire it should not be picked up again
Drill	<ul style="list-style-type: none"> ■ Non participants to stand clear whilst bow and drill are in use. ■ Drill ends will become very hot during use, do not touch ■ Care is to be taken when wrapping the drill in the bow string ■ Drill to be inspected for splinters and cracks before use
Physical injury	<ul style="list-style-type: none"> ■ Ensure the working area is free of anything which could catch the bow or the bow hand. ■ Take turns in operating the bow to reduce fatigue ■ Loose hair and clothing to be tied back or removed. ■ Group to be closely supervised by an Instructor ■ Equipment only to be used as instructed ■ Once tinder nest has taken light, it must immediately be placed in the designated fire area / fire lay, or extinguished.
Further risks	<ul style="list-style-type: none"> ■ All risks should be minimised by continual appraisal of participants condition, the environment and equipment through dynamic risk assessment by the staff members involved. ■ Some risks remain due to the nature of the activity but every care must be taken to minimise these.

