**Fire Risk Assessment**

**Leave-no-trace fire, lighting and campfire cooking**

| Location: Kinder Croft Outdoor Nursery, Leckmelm Wood, Ullapool, Ross-shire, IV23 2RH  GR: NH 157 916 | Description of activity and area assessed:  Woodland setting, Kinder Croft. Identify a suitable location for setting a fire. Making area safe, marking out, setting fire, lighting, using and extinguishing.  Using fire to heat water in a kelly kettle, billy can and pot to make hot drinks, cooking and activities. | | | | Assessor:  Joni, Jo, Steph |
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| Checked by: |
| Date: 07/11/22  Updated |
|
| Nearest Emergency phone:  KC site: 07704663486  Merlin’s landline: 01854613064 | Benefits of activity: participants will learn about fire safety, how to light a fire, identifying materials, safely managing a fire and using it to provide warmth and hot drinks, survival skills. How to safely extinguish a fire and why this is important. | | | | Date of review:  Aug 2023 |
| Nearest  Doctors: Ullapool - 01854 612015  Hospital: Raigmore, Inverness - 01463 704000  Ambulance: 999 |  |
| Persons at risk: Leader and participants | | | |
| Hazard (activity steps) | Risk (potential harm) | Evaluation  1-9 | Control action | Residual evaluation | Benefits of risk |
| **Choosing a safe site leave no trace,**  **Fire pit site at shelter**  Causing wildfire (on and under ground)  Danger to site users  Destruction of habitats and property  Weather input in fire safety (wind) | See general nursery risk assessment.  Injury from hung up canapy etc.  Fire spreading and causing injury and damage to property.  Minor or major burns due to lack of fire control | 9  9 | Use general and dynamic risk assessments in setting area.  (ground, shrub, eye level and canopy)  Led by a qualified FS leader/ first aider. Site away from combustible material, soil type etc.  Fires should be in containers in a surround (log, stone, green wood, sand)  Alway have water (dirt, sand) at hand to extinguish and clean water to douse burns/ first aid kit  Staff assess wind level on light if appropriate | 3  3 | Safe fire lighting skills. Awareness of wider environment and its properties. |
| Clearing site - spiky foliage  Disturbing animal, wasp or bee nests | Cuts to hands  Animal bites, insect stings | 3  3 | Leader to check area first and remove foliage with gloves.  Leader to check site first. Instruct learners to notice what foliage they are clearing and to watch for any insects. | 1  1 | Fire safety. Awareness of potentially harmful foliage. Awareness of the ecosystem and other users of that space. |
| Marking the site with green wood - may involve cutting (see tools risk assessment) | Choosing unsuitable materials such as tinder dry wood. | 4 | Leader to show how green wood can be identified. Explain reasons for use and reason for marking out. Check size of site and wood used for marking out before fire is lit. | 1 | Fire safety. Materials, uses and properties. |
| Collecting materials for fire lighting. Using found wood - wet and rotten wood.  May involve cutting (see tools risk assessment) | High levels of smoke produced from wet wood. Smoke inhalation risk. | 6 | Leader to demonstrate characteristics of dry wood, types and sizes of wood needed. Hanging wood. Leader to check all wood before fire lighting. | 2 | Fire safety. Materials, uses and properties. |
| Lighting the fire - use of fire steel or matches.  Ignition. | Injury/burns from ignition of fire. | 6 | Leader to check fire structure before ligithing. Demonstrate striking. Supervise at all times. | 2 | Fire safety. Materials. |
| Feeding the fire | Falling in fire. Fire becoming too big and hot. | 6 | Explain and demonstrate kneeling by fire, outside of marked area and carefully placing wood onto the fire. Continuous discussion on size of fire and how much wood is needed. | 2 | Fire safety. Materials |
| Heating water in Billy can hanging from tripod (Option to set separate fire for Kelly kettle and follow Kelly Kettle risk assessment). | Scalds and burns from spilling or bubbling over water | 6 | Leader to place tripod, supervise filling of billy can to not overfill then placing billy can on chain using gloves. | 2 | Fire safety. Use of PPE. |
| Pouring of water into cups | Scalds and burns | 6 | Leader to explain and demonstrate placing cup on ground inside fire circle, then picking up billy can with gloves and being careful not to touch sides of can and fill mug. Then safely place can on ground inside the fire circle and remove gloves for the next person. | 2 | Fire safety. Use of PPE. Sharing and community. |
| Extinguishing the fire | Scalds and burns.  Environmental spread of fire. | 6 | Leader to explain and demonstrate waiting for fire to go out. Pouring on water, then using a stick to spread fire and break up chunks of charcoal. Then demonstrate and work together to check the heat of remains by holding in hand. Fire only safe when no warm lumps remain. | 2 | Fire safety. Environmental care. Community and sharing. Responsibility for actions. |
| Main (Shelter) fire pit,  Surrounding ground area falling in / tripping over stones off step  Objects rolling into fire.  Metal bar, grate and cook equipment.  Hot liquids/ steam  Smoke  Sparks/ embers  Hair, long clothing or hats  2 Year old children and fire | (Fire not in use)  Cut, injure through blunt trauma angst stone surround  (Fire in use)  As above, burns, scalds clothes catching fire.  Spread fire, damage to property. Burn when retrieving.  Metal burns (mostly likely hand)  Scolds and steam burns to people on and around fire.  Trigger asthma, eye and lung irritation  Spread fire (wildfire), damage to property, potential burns to clothing, skin and eye.  Hair and clothing could catch fire  As above | 3    3 - 4    3      3 - 4    3 - 4    4    3      3  6 | Staff member present near the shelter, walking feet, sitting safe distance from the fire rule regularly reminded, yellow x mark stone to avoid. Bark laid to even ground, bearer to encourage walking and limit traffic.  As above except allocated staff member monitoring and in charge of fire  Staff member to retrieve items in the fire pit (if safe) using correct PPE (fire glove, tongs) fire extinguishers, fire blanket and unlimited water (on hose) for dowsing.  Allocated staff member monitoring and in charge of fire, explain properties of metal conduction. Only staff to handle metal on and around fire. Staff using correct PPE (fire glove stored safely next to fire pit)  Allocated staff member monitoring liquids on fire, explain properties of water dargers, ensuring it is secure and level to reduce tipping, ensure children are safe distance from hot liquids and steam.  Encourage children to walk carefully out of the smoke, staff using PPE (masks) child with asthma spend a limited time at fire and monitored for attack.only burning suitable wood.  Staff awareness of atmospheric and environmental conditions, such as dry summer, high winds  and choosing when not to have a fire. Local weather or advisory warnings considered.  Staff to wear appropriate clothing and hair tied up.  Staff will remove or tuck away any long items of clothing, and tie back hair if required.  All same control actions  as above, higher staff to child ratios 1:3 children, physical intervention rapid response as children closely shadowed. | 2  2  1  2  2  2  1  2  2 - 3 |  |

