



# Archery Risk Management Plan

CCC Hawkesbury

School: \_\_\_\_\_ Year: \_\_\_\_\_ Dates: \_\_\_\_\_

Program: \_\_\_\_\_ Supervising Staff: \_\_\_\_\_

## Activity Context

The archery range at CCC Hawkesbury is located next to River Lodge on the left end of the property. Archery is fun way to challenge participants in their confidence, decision making and hand eye co-ordination. Participants are instructed on how to hold, load and fire a re-curve bow safely and effectively.

### Leader to Participant Ratios

1 **Activity Facilitator** to 17 participants

For all groups with participants under 18yo:  
Group is required to have a **Supervising Adult/Teacher**, provided by the group, present

Variations to ratio requirements may occur on a group-by-group basis.

### Participation Requirements

Minimum Age: 8 years of age

Variations to participant requirement may occur on an individual client assessment.

### Equipment

Participants are required to wear/have the following:

- Appropriate environmental protection (ie. Hat, sunglasses, t-shirts, raincoat, warm clothing)
- Enclosed footwear
- Adequate water

Any personal medication required (i.e., asthma, EpiPen etc.)

### Activity Facilitators

Activity Facilitators are CCC Activity Staff or equivalent.

Activity Facilitators are trained and signed off as competent to run activity by a qualified permanent CCC staff member.

Note: Where it is not specified the management of risk is expected to be undertaken by the Activity Facilitator.

### First Aid / Emergency

The school or group have primary responsibility for first aid, however:

- Activities Co-Ordinator holds current first aid and CPR certificates
- Large First Aid Kit available in First Aid/ PA room in main dining hall.
- For minor incidents, Activity Facilitator/Teacher/Group Leader communicates with Activities Co-Ordinator and fills out Incident Report Form. The school or group, with centre staff determine the need to call an ambulance or a hospital visit.
- For major incidents, if we are first on the scene, we will perform initial First Aid until the Teacher/Group Facilitator takes over. Our "Emergency and Critical Incident Policy and Procedure" outlines additional procedures required for an emergency.

## Risk Management Plan

Hazard / Risk Description	Existing Control Measures	Risk Rating		
		Likelihood	Consequence	Risk Rating
<b>Activity Specific – Risk factors specifically associated with activity at CCC Hawkesbury</b>				
<b>Participants being hit with arrows</b>	<ul style="list-style-type: none"> <li>• Pre-activity briefing conducted by Activity Facilitator</li> <li>• Participants will be shown where to wait safely, where to shoot from and in which direction</li> <li>• Participants to put bows on ground after shooting and wait in specified safe waiting area on the benches at the back of the range.</li> <li>• Participants may only enter archery range to collect arrow when instructed by the activity facilitator, after all arrows have been shot and the range is clear.</li> <li>• Bows may only be picked up and loaded after range has been declared clear by activity facilitator</li> <li>• Activity Facilitator is to ensure that the firing zone, behind targes and on either side of firing zone are free of persons (participant and non-participant) before allowing clients to fire arrows.</li> </ul>	Rare	Catastrophic	Low
<b>Dropping arrow on foot</b>	<ul style="list-style-type: none"> <li>• Participants to wear enclosed footwear</li> <li>• Briefing to include correct way to handle arrows and accompanying equipment</li> </ul>	Possible	Insignificant	Low
<b>Injury from static arrow</b> <ul style="list-style-type: none"> <li>- Tripping into arrow while collecting</li> <li>- Tripping over while holding arrow(s)</li> </ul>	<ul style="list-style-type: none"> <li>• Briefing to cover safe retrieval of arrows, walking, approaching targets from the side and how to hold arrows when returning them to the quiver.</li> <li>• Arrows only to be retrieved under guidance of facilitator</li> </ul>	Unlikely	Moderate	Low
<b>Bow string impacting arm</b>	<ul style="list-style-type: none"> <li>• All participants to wear arm guard while shooting, if long sleeve clothing is absent.</li> </ul>	Possible	Minor	Low
<b>Arrow shot in wrong direction resulting in injury</b>	<ul style="list-style-type: none"> <li>• Briefing to cover how, where and which direction to load and fire bows.</li> <li>• Clear, fenced, and signed area to show firing range.</li> <li>• Obvious, designated targets to shoot at.</li> </ul>	Rare	Catastrophic	Low

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Hazard / Risk Description	Existing Control Measures	Risk Rating		
		Likelihood	Consequence	Risk Rating
	<ul style="list-style-type: none"> <li>Shooting area defined by safety line and participants instructed to only aim at target.</li> <li>Clients are informed, prior to commencement of activity, of consequences that incur if rules are not followed.</li> </ul>			
<b>Arrows deflecting back towards archers</b>	<ul style="list-style-type: none"> <li>Targets placed and kept at a minimum distance of 5m from archers</li> <li>Foam targets used</li> <li>Range kept clear of solid objects</li> </ul>	Rare	Catastrophic	Low
<b>Slipping/Tripping/ Fall/</b> From uneven surfaces, equipment, trip hazards, obstacles in the environment.	<ul style="list-style-type: none"> <li>Area inspected by Activity Facilitator prior to activity and any hazards removed or mitigated e.g., Sticks &amp; rocks on the ground removed.</li> <li>Equipment in activity area set up in an organised manner to reduce trip hazards</li> </ul>	Unlikely	Minor	Low
<b>People – Risk factors associated with the people using the activity</b>				
<b>Participant Behaviour</b> Inability or decision to not follow directions or cooperate	<ul style="list-style-type: none"> <li>Clear behaviour expectations set at start of activity sessions</li> <li>Encouraging supportive environment</li> <li>Activity Instructor collaborates with Adult Supervisor/ teacher to maintaining adequate supervision of all participants throughout the session.</li> <li>Outline consequences of inappropriate behaviour</li> <li>Removal of individual from activity or cancellation of whole activity if safety procedures and instructions are not being followed.</li> </ul>	Unlikely	Major	Low
<b>Participant Ability</b> Unable to complete activity due to: <ul style="list-style-type: none"> <li>Fear / Anxiety</li> <li>Complacency / Overconfidence</li> <li>Physical Ability</li> </ul>	<ul style="list-style-type: none"> <li>Activity Instructor promotes a supportive environment</li> <li>Participants briefed according to age, ability, experience</li> <li>Participation is based on meeting requirements</li> <li>Demonstration of understanding and/or skills must be shown prior to undertaking activity</li> <li>Participants are guided through activity supportively by Activity Facilitator</li> </ul>	Possible	Moderate	Low

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		Likelihood	Consequence	Risk Rating
	<ul style="list-style-type: none"> <li>Activities are challenge by choice - participants are positively challenged but not forced to participate in activity</li> </ul>			
<b>Activity Facilitator</b> Unsafe practices leading to an injury to a participant caused by: <ul style="list-style-type: none"> <li>Poor supervision and instruction by Activity Facilitator</li> <li>Incompetence of Instructing activity</li> </ul>	<ul style="list-style-type: none"> <li>Activity Facilitators must always follow Standard Operating Procedures</li> <li>Activity Facilitators are trained and signed off as competent to run activity by qualified permanent CCC staff member.</li> <li>Formal qualifications in Outdoor Recreation and relevant fields desired.</li> <li>Communication equipment at each activity sessions (radios)</li> <li>Vigilant supervision always required by Activity Facilitator</li> <li>Leaders personal protective equipment and rescue equipment available at all activity sessions</li> </ul>	Unlikely	Major	Low
<b>Supervising Adult</b> Unsafe practices including: <ul style="list-style-type: none"> <li>Poor supervision by group leaders</li> </ul>	<ul style="list-style-type: none"> <li>School/Church groups informed, prior to camp, that there is to be a supervising adult at each activity if persons are under 18 years of age.</li> <li>Activity Facilitator will stop or cancel activity without adequate supervision from Group Leaders</li> </ul>	Unlikely	Major	Low
<b>Observers</b> Injury to... Guests or others observing activity while it is running	<ul style="list-style-type: none"> <li>Observers not allowed to participate in activity without activity briefing</li> <li>Observers briefed on safe areas to view the activity and monitored by Activity Instructor.</li> </ul>	Unlikely	Major	Low
<b>Unsupervised Users</b> Injury to... Guests on site when activity is not running; Members of public accessing camp land (unauthorised)	<ul style="list-style-type: none"> <li>Arrows locked away between sessions and at the end of each day</li> <li>Activity equipment packed and locked away when not in use.</li> <li>Signage at Archery Instructing Unsupervised users to keep out.</li> </ul>	Unlikely	Major	Low
<b>Equipment – Risk factors associated with the equipment used for the activity</b>				

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Hazard / Risk Description	Existing Control Measures	Risk Rating		
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<p><b>Equipment Failure</b> Due to improper use, faulty / damaged equipment, wear and tear.</p>	<ul style="list-style-type: none"> <li>• Activity Facilitators trained in selection, use, inspection, care &amp; maintenance of activity equipment</li> <li>• Activity Facilitators inspect equipment prior to use by the participant each time and not used if there is an issue with the equipment – equipment reported to Activities Co-Ordinator.</li> <li>• Participants briefed on proper use and care of equipment e.g., avoid standing on equipment and store in designated area when not in use.</li> <li>• All equipment clearly stored and labelled for intended activity.</li> <li>• Equipment regularly inspected and maintained – strings replace on bows when showing signs or wear, and bows and arrows replaced if damaged or broken</li> <li>• Equipment stored, maintained, and retired according to manufacturer instructions and retired early if showing significant signs of wear and tear.</li> <li>• All equipment rated and certified for its use and used according to manufacturer guidelines.</li> <li>• Activity Facilitator records in equipment log and notifies Activities Co-Ordinator if equipment is broken or damaged.</li> </ul>	Rare	Major	Low
<b>Environment – Risk factors associated with the environment including weather</b>				
<p><b>Exposure to UV rays</b> Causing sunburn</p>	<ul style="list-style-type: none"> <li>• Sun smart strategies are encouraged e.g., hats, long sleeved and collared shirts</li> <li>• Marquees provided for activities without shaded areas</li> </ul>	Possible	Minor	Low
<p><b>Exposure to Heat</b> Causing dehydration, heat stroke etc.</p>	<ul style="list-style-type: none"> <li>• Sun smart strategies are encouraged</li> <li>• Participants are encouraged to drink water, carry water bottles</li> <li>• Guests are briefed on location of water filling facilities on arrival</li> <li>• In extreme heat activities modified / cancelled and alternate activities arranged</li> </ul>	Unlikely	Moderate	Low
<p><b>Cold / Wet Weather</b> Causing hypothermia etc.</p>	<ul style="list-style-type: none"> <li>• Weather conditions regularly monitored for adverse conditions</li> </ul>	Rare	Moderate	Low

CCC Hawkesbury: Life Changing Adventures

January 2021 Karina Sullivan

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Hazard / Risk Description	Existing Control Measures	Risk Rating		
		Likelihood	Consequence	Risk Rating
	<ul style="list-style-type: none"> <li>Participants briefed on wearing suitable protective clothing</li> <li>Activities modified / cancelled if necessary or alternate activities arranged</li> </ul>			
<b>Lightning Strike</b>	<ul style="list-style-type: none"> <li>Weather conditions regularly monitored for adverse conditions</li> <li>Activities delayed / cancelled when thunder or lightning is present, participants are moved to safe area.</li> <li>Activities modified / cancelled if necessary or alternate activities arranged</li> </ul>	Rare	Catastrophic	Low
<b>Injury, bites or allergic reaction caused by organism</b>	<ul style="list-style-type: none"> <li>Groups briefed on arrival of appropriate actions for sighting/bite by snakes</li> <li>Area monitored for bees, snakes, spiders and if spotted participants notified of the hazard and managed accordingly.</li> <li>Prescribed medication readily available if participant is high risk e.g., EpiPen.</li> <li>Radio communication at each activity area, comprehensive first aid kit available in the first aid room if required. Activity Facilitator administers first aid accordingly.</li> <li>Medical attention/ ambulance sought if required.</li> </ul>	Unlikely	Major	Low
<b>Tree or Tree branch falling on person/s</b>	<ul style="list-style-type: none"> <li>Regular tree checks of activity area carried out and appropriate maintenance performed e.g., Dead or dying tree branches cut/removed</li> <li>Participants briefed on safe waiting areas and high-risk areas to avoid.</li> <li>In high winds participants removed from under or near trees deemed high risk e.g., eucalyptus.</li> </ul>	Rare	Catastrophic	Low

## Risk Ratings

This risk assessment is measured according to the following risk ratings:

### Likelihood Ratings

Likelihood is the description of the probability and frequency. The likelihood of the risks occurring as outlined in CCC Hawkesbury risk management plans is determined after the control measures have been implemented.

Score	Description	Broad description of frequency	Time framed description of frequency
1	Rare	The event may occur, but only in highly exceptional circumstances	Not expected to occur for years
2	Unlikely	Could occur at some time	Expected to occur at least annually
3	Possible	Might occur at some time	Expected to occur at least monthly
4	Likely	Will probably occur in most circumstances	Expected to occur at least weekly
5	Almost certain	Is expected to occur in most circumstances	Expected to occur at least daily

### Consequence Ratings

The outcome of an event or situation expressed qualitatively or quantitatively, being the human impact, damage to infrastructure, disruption to public or financial loss.

Score	Description	Injury or impact details
1	Insignificant	Little or no injury requiring no medical attention; Minimal impact on environment; Insignificant adjustments to program; Insignificant damage to property, normal wear; Some difficulty in retaining competent staff; Expected running costs incurred
2	Minor	Minor injuries requiring first aid / some medical attention; Minor impact to plants / animals, no disruption to ecosystems; Rescheduling / replacement of program activities to client satisfaction; Damage requiring small repairs, low cost; Some difficulty in attracting, developing, resourcing and retaining competent staff; Minor costs incurred (<\$250)
3	Moderate	Serious injuries requiring hospitalisation / ongoing medical attention; Ecosystem / landscape self repairs within 12mo; Significant disruption / cancellation of program events; Damage requiring moderate repairs or replacement, moderate cost; Significant difficulty in attracting, developing, resourcing and retaining competent staff; Moderate costs incurred (<\$1,000)
4	Major	Injuries that are life threatening or causing long term disability; Ecosystem / landscape self repairs within 36mo; Program disruption causing loss of program; Damage requiring high cost/projects for repair/replacement; Guest experience and program is majorly affected by lack of competent staff; Major costs incurred (<\$15,000)
5	Catastrophic	Fatality; Irrecoverable loss of ecosystem / landscape; Program disruption causing broad loss of reputation; Massive damage, significant replacement of infrastructure required; Programs unable to be fulfilled due to lack of competent staff; Massive costs incurred (>\$15,000)

The consequence of an incident occurring may vary greatly depending on the individual circumstances of each incident.

Example – A student trips and falls – a detailed analysis of falls might show that although falls occur weekly, more serious injuries from falls only occur once or twice a year. In the main most of the other falls have relatively minor outcomes. Therefore the incident could be scored either according to the severity of the actual outcome, or according to the most likely or typical outcome for that type of incident.

Both approaches are valid, however, to ensure consistency CCC Hawkesbury has adopted an approach to record the most likely or typical outcome for all incidents.

### Risk Rating Matrix

All identified risks are recorded in the following risk matrix according to likelihood and consequence. The purpose of this matrix is to provide a snapshot of all identified risks and establish the level of risk to determine if further treatment is required.

Likelihood	Consequences				
	1 - Insignificant	2 - Minor	3 - Moderate	4 - Major	5 - Catastrophic
1 - Rare	1	2	3 Exposure to cold	4 Harness trauma, equipment failure	5 Fall from height, lightning strike, structure failure
2 - Unlikely	2	4 Falling object, injury from environment, chafing	6 Entanglement, exposure to heat	8 Injury to observers, unsupervised persons, participant behavior, unsafe activity facilitator, participant ability, group leader, allergic reaction	10
3 - Possible	3	6 Slipping, cuts, impact injury, rope burn, inverting, UV exposure	9	12	15
4 - Likely	4	8	12	16	20
5 - Almost certain	5	10	15	20	25

### Risk Treatment

#### 1-4 Low Risk

- Risk does not generally need to be managed any further (current controls are adequate), however the risk needs to be monitored for changes in circumstances and current control effectiveness.
- Risk generally may be accepted.

#### 5-9 Medium Risk

- Risk needs to be regularly monitored for any changes and control/treatment effectiveness.
- Risk may be accepted after consideration.

#### 10 -14 High Risk

- Risk is unacceptable, risks must be further treated or removed to bring rating to medium
- Risks are to be re-assessed by Activities Co-Ordinator

#### 15+ Extreme Risk

- Unacceptable risk, urgent attention is required to treat or remove risks
- Management to consider elimination of activity

Original Risk Assessment Conducted by: *Jemima Robinson, Activities and Hosting Manager, Mt Victoria* Date: 27<sup>th</sup> January 2016

Reviewed:

*January 2017*

*October 2018, Amanda Bennett, Activities Manager, Yarramundi*

*January 2021, Karina Sullivan, Activities Co-Ordinator, CCC Hawkesbury*

*CCC Hawkesbury: Life Changing Adventures*