

# Archery Risk Management Plan



Lutanda Mt Victoria

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

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

## Activity Context

The archery range at Lutanda Mt Victoria is on the sports oval across from our main building, with 2 moveable targets able to be set at varying distances. 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 an effectively.

### Leader to Participant Ratios

For groups 13yo and above:

1 Activity Facilitator to 20 participants

For groups 8-13yo:

2 Activity Facilitators to 20 participants

For all groups with participants under 18yo:

Group is required to have a supervising adult present

Higher ratios may be required depending on differing group requirements or circumstances

### Participation Requirements

Participants are required to demonstrate competence in using a bow safely before taking part. Participants are to be able to follow instructions

For safety, jewellery is to be removed and long hair tied back

Minimum Age: 8yo

Restrictions may apply under differing circumstances

### Equipment

Participants are required to wear/have the following:

- Sun protection (sunscreen, shirt etc.)
- Closed toe footwear
- Adequate water
- Any medication required

The following personal protective equipment is provided and must be worn by participants using the course:

- Neoprene arm guard

### Activity Facilitators

Activity Facilitators are trained and signed off as competent to run activity by Activities Manager

Activity Facilitators hold current first aid and CPR certificates

### Emergency

Archery is conducted on site and first aid is located nearby  
Ambulance time is 8 minutes

Activity Facilitators carry the following equipment:

- First Aid Kit
- UHF Radio

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## Risk Management Plan

Hazard / Risk Description	Existing Control Measures	Risk Rating		
		Likelihood	Consequence	Risk Rating
<b>Archery Specific – Risk factors specifically associated with archery at Lutanda Mt Victoria</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 hang up bows after shooting and wait in specified area behind chain and yellow safety line</li> <li>Participants may only enter archery range to collect arrow with facilitator after range is clear</li> <li>Bows may only be loaded after range has been declared clear by facilitator</li> </ul>	Rare	Catastrophic	Satisfactory
<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 hold arrows</li> </ul>	Possible	Insignificant	Satisfactory
<b>Injury from static arrow</b> - Tripping into arrow while collecting - Tripping over while holding arrow(s)	<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</li> <li>Arrows only to be retrieved under guidance of facilitator</li> </ul>	Unlikely	Moderate	Satisfactory
<b>Bow string impacting arm</b>	<ul style="list-style-type: none"> <li>All participants to wear arm guard while shooting</li> </ul>	Possible	Minor	Satisfactory
<b>Arrow shot in wrong direction resulting in injury</b>	<ul style="list-style-type: none"> <li>Briefing to cover where to fire from and in which direction. As well as where to load bows and in which direction. Cover holding bows down when loading</li> <li>Shooting area defined by safety line</li> </ul>	Rare	Catastrophic	Satisfactory
<b>Hit by car on the road in front of oval</b>	<ul style="list-style-type: none"> <li>Participants to be accompanied by facilitator or supervising adult</li> <li>Participants to stay on oval during activity unless accompanied by a supervising adult</li> <li>Cars onsite to adhere to onsite speed limit of 15km/h</li> </ul>	Rare	Catastrophic	Satisfactory
<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	Major	Satisfactory
<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>Maintaining supervision</li> <li>Outline consequences of inappropriate behaviour</li> <li>Removal of individual from activity or cancellation of activity</li> </ul>	Unlikely	Major	Satisfactory
<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>Supportive environment encouraged</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> <li>Activities are challenge by choice - participants are positively challenged but not forced to participate in activity</li> </ul>	Possible	Moderate	Satisfactory

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<b>Activity Facilitator</b> Unsafe practices leading to an injury to a participant caused by: <ul style="list-style-type: none"> <li>Poor supervision by Activity Facilitator</li> </ul>	<ul style="list-style-type: none"> <li>Activity Facilitators must follow Standard Operating Procedures at all times</li> <li>Activity Facilitators are trained and signed as competent, by a qualified Activities Instructor. Vigilant supervision required by Activity Facilitators at all times</li> <li>Communication equipment available readily at activity sessions</li> </ul>	Unlikely	Major	Satisfactory
<b>Group Leader</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>Groups briefed on requirement to provide supervising adult for participants under 18 years old prior to camp and activities</li> <li>Activity Facilitators will stop or cancel activity without adequate supervision from Group Leader</li> </ul>	Unlikely	Major	Satisfactory
<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>Bows are only to be loaded in specified area and facing towards targets</li> <li>Observers are behind safety firing line</li> </ul>	Unlikely	Major	Satisfactory
<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>Groups briefed on not using facilitated activities without Activity Facilitators</li> <li>Activity equipment locked away when not in use</li> </ul>	Unlikely	Major	Satisfactory
<b>Equipment – Risk factors associated with the equipment used for the activity</b>				
<b>Equipment Failure</b> Due to improper use, faulty / damaged equipment  Bows, arm guards	<ul style="list-style-type: none"> <li>Activity Facilitators trained in selection, use, inspection, care &amp; maintenance of activity equipment</li> <li>Activity Facilitators perform check of equipment prior to each activity</li> <li>Participants briefed on proper use of equipment</li> <li>All equipment clearly stored and labelled for activity intended for</li> <li>Equipment regularly inspected and maintained</li> <li>Equipment stored, maintained and retired according to manufacturer instructions</li> <li>Equipment used certified by manufacturer as suitable for use</li> </ul>	Rare	Major	Satisfactory
<b>Environment – Risk factors associated with the environment including weather</b>				
<b>Exposure to UV rays</b> Causing sunburn	<ul style="list-style-type: none"> <li>Sun smart strategies are encouraged</li> </ul>	Possible	Minor	Satisfactory
<b>Exposure to Heat</b> Causing dehydration, heat stroke etc.	<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 locations on arrival</li> <li>Activities modified / cancelled if necessary or alternative activities arranged</li> </ul>	Unlikely	Moderate	Satisfactory
<b>Cold / Wet Weather</b> Causing hypothermia etc.	<ul style="list-style-type: none"> <li>Weather conditions regularly monitored for adverse conditions</li> <li>Participants briefed on wearing suitable protective clothing</li> <li>Activities modified / cancelled if necessary or alternative activities arranged</li> </ul>	Rare	Moderate	Satisfactory
<b>Lightning Strike</b>	<ul style="list-style-type: none"> <li>Weather conditions regularly monitored for adverse conditions</li> <li>Activities delayed / cancelled during lightning storm, participants moved to safe area</li> <li>Activities modified / cancelled if necessary or alternative activities arranged</li> </ul>	Rare	Catastrophic	Satisfactory
<b>Injury or Allergic Reaction caused by organism</b>	<ul style="list-style-type: none"> <li>Groups briefed on arrival on appropriate actions for sighting/be bitten by snakes</li> <li>Activity area regularly monitored for organisms commonly causing allergic reaction and treated accordingly</li> <li>Suitable medication and first aid to be readily available (user group must provide first aid)</li> <li>Communication equipment readily available</li> </ul>	Unlikely	Major	Satisfactory

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	<ul style="list-style-type: none"> <li>Medical assistance within 15 minutes</li> </ul>			
<b>Injury caused by contact with natural features</b>	<ul style="list-style-type: none"> <li>Regular checks of activity area carried out and appropriate maintenance performed (sticks removed etc.)</li> <li>Participants briefed on safe areas</li> </ul>	Unlikely	Minor	Satisfactory

### 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 Lutanda Mt Victoria 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)

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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 Lutanda Mt Victoria 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.

<b>Likelihood</b>	<b>Consequences</b>				
	<b>1 - Insignificant</b>	<b>2 - Minor</b>	<b>3 - Moderate</b>	<b>4 - Major</b>	<b>5 - Catastrophic</b>
<b>1 - Rare</b>	1	2	3 Exposure to cold	4 Harness trauma, equipment failure	5 Fall from height, lightning strike, structure failure
<b>2 - Unlikely</b>	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
<b>3 - Possible</b>	3	6 Slipping, cuts, impact injury, rope burn, inverting, UV exposure	9	12	15
<b>4 - Likely</b>	4	8	12	16	20
<b>5 - Almost certain</b>	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 Manager

#### 15+ Extreme Risk

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

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Document Revision: *Version 3*

Risk Assessment Conducted by: *Tim Legge* Position: *Activities & Hosting Manager, Lutanda Mt Victoria*  
Date of Risk Assessment: *2<sup>nd</sup> April 2015* Date of Review: *April 2016*

Document Revision: *Version 4*

Risk Assessment Conducted by: *Tim Legge* Position: *Activities & Hosting Manager, Lutanda Mt Victoria*  
Date of Risk Assessment: *22<sup>nd</sup> August 2016* Date of Review: *August 2017*