

ARCHERY

Goal – Purpose of the activity.	
Archery is the art, sport, practice, or skill of using a <u>bow</u> to <u>shoot arrows</u>. Historically, archery has been used for hunting and combat. In modern times, it is mainly a competitive sport and recreational activity. At Camp Cooby, Archery is one of the more popular activities for groups. From Primary School age to the Upper Senior School groups, it is always a challenging and rewarding activity. Easy to learn but hard to master, participants can learn the basics quickly and be firing (somewhat inaccurately at first) within minutes. Safety is the highest priority, and ensuring all participants adhere to the directions regarding to preparing, loading, firing and collecting arrows is the Activity Leaders greatest responsibility. While the outcomes could be catastrophic, if all safety is followed, it is exceptionally safe.	
Participants	Leadership and Qualifications
Participants are those persons who undertake the activity, and who are not a leader or assistant leader for the activity. Dependent Participants are persons owed a duty of care by the activity provider who is reliant upon the activity leaders for supervision, guidance and instruction to support the person's participation. All participants are to be considered Dependent Participants for this activity.	Adventure activities must be led by competent people who have appropriate skills, knowledge and experience. Providers must ensure activity leaders involved in activity delivery: • conform with the providers' risk management systems • have current, verified and documented skills, knowledge, experience • only assume roles within their skills, knowledge, experience • provide an appropriate level of supervision for the activity context • are fit to fulfil their duties (e.g. managed for health, fatigue, medications) • comply with appropriate activity-specific recommendations of activity leader to participant ratios.
Participant/Leader Ratios	
Ratio 1:20 + 1 School Staff Member (Assistant Leader) for school groups. Activity Leader is to provide Level 1 (Direct Supervision), Assistant Leader (school personnel) is to provide Level 2 Supervision.	
Operational Procedures	Location: Beside Ropes Course Shed
Each shooting station should have 3 arrows, bow set in position. Each student should have an optional finger tab and an arm guard whilst shooting. Sequencing Archery can be sequenced anytime within a program design and doesn't require a pre-requisite activity to achieve outcomes. Outcomes can be delivered around the following key themes: goal setting, meeting a target / deadline, the value of practice / resilience Setup To be completed with range diagram at next usage of archery Briefing • Bows were developed to kill both people and animals. • Archery is an Olympic sport – why? • Archery is a dangerous sport but if treated with respect will also be a lot of fun. • We will be using recurve bows for the sessions. • One main rule to look after the bows is to never 'dry fire'. This means shooting a bow without an arrow in it. • Briefing correctly and managing safety are of the utmost importance. Briefing and instructions/demonstration to all students prior to them commencing. Explain the different parts of the bows and arrows, and explain the different zones in the range (all participants will remain in the waiting zone until invited by the instructor, similarly, those who have been invited into the shooting zone will not enter the firing zone until invited by instructor when all bows have been placed onto the stands). Remember to point out the odd feather / fletching (aka Freddy) on the arrow. 1. Explain the different parts of the bows and arrows, making sure to point out the odd feather/fletching (aka Freddy) on the arrow 2. Explain the different zones within the shooting range. All participants are to remain in the 'Waiting Zone' until invited by the Activity Leader to enter the 'Shooting Zone'. Those that have been invited into the Shooting Zone are not to enter the 'Firing Zone' until invited by the Activity Leader. All bows are to be placed onto the stands before being invited into the Firing Zone 3. The arm that participants will pull back with is the are then are going to aim with. This relates to the eye – generally students will aim with their dominant hand.	

4. The forearm/elbow of the other arm is at risk of being hit with the string due to hyperflexing and needs to be protected with an arm guard.
5. Explain the 'Sighting Eye' – look through hands at the target with both eyes open, alternate between closing/opening each eye. Which eye can you still see the target with? That eye is your Sighting Eye.
6. When shooting, remember to be FFAT:
 - Feet nice and wide, 90 degrees to the target. Placed either side of the firing line
 - Freddy (i.e. the odd feather) – bow out like a table, always facing the ground or the target. Freddy needs to be sitting out from the bow at 90 degrees when the arrow is clicked in so that he doesn't hit the bow on the way through
 - Fingers – two fingers below the arrow (or one finger above the arrow), not touching the arrow (thumb and pinkie well away from the string)
 - AIM – don't worry about the participant's aim too much on the first go. After their first shot, provide some guidance – look down the arrow and line up the tip with the target
 - Make your body a T – make sure elbow is right back and nice and high. Fingers should slide backwards to release the string. Hand should finish beside the ear. Get the group to then follow the steps with an imaginary bow and arrow.
7. Activity Leader shows participants how to collect arrows. When collecting arrows, no-one is permitted to walk into the Firing Zone until all participants have put their bows back on the stand, and are invited by the Activity Leader. No running. Only the participants who have fired should be collecting the arrows. When pulling an arrow out of the ground check if anyone is around and pull the arrow out the way that it went in. Similarly, when removing an arrow from the target, one hand on the target and the other removing the arrow with a twisting action (demonstrate), ensuring no-one is in hitting distance. When carrying arrows, tips pointed towards the ground at all times.
8. Inform participants of the following instructions when firing as a group:
 - First rotation move forward to the edge of the Firing Zone
 - Place feet either side of the firing line
 - Pick up bows
 - Load arrows and fire when ready – this is to be said by the Activity Leader each time
 - When all arrows are fired, place bow back on stand and move back behind the safety zone line
 - Activity Leader calls "Range Clear" when all bows are placed back on stands
 - All shooters collect arrows and return arrows to stands. Shooters then return to Safety Zone
 - Call next round of shooters
9. Stand behind each person on their first shot to help with technique. As students improve and are aware of the safety requirements, you may allow participants to shoot all at once

Consequences:

Participants who are unable to follow safety guidelines should be immediately removed from the rotation and usage of behavior modification techniques employed (in consultation with the groups leader / teacher) to ensure the participant isn't putting themselves or others at risk.

Equipment and Logistics

- 6 Archers per round – 3 archers per station
- 3 Targets
 - 3 Target stands
 - 3 Arrows per shooter (18)
 - 6 Bows and Arrow stands
 - 1 arm guard per shooter
 - 1 finger tab per shooter
 - Clear lines for the range delineating the areas for non-shooters, waiting line, and shooting line
 - First aid kits appropriate to the location and level of training must be carried.

Levels of Challenge and Possible Variations

1. Archery targets are further away – vary the distance in target placement for advanced participants
2. Reduce the number of arrows to shoot in a single round (scoring)
3. Use balloons on the targets to allow for more accurate shooting practice
4. Participants score using games (e.g. outside circle towards inside bullseye)

Safety Considerations

All participants must stay behind the first safety line unless it is their turn to shoot.

4-6 Archers are called and move to the 2nd safety line and wait (numbers can vary based upon group size, participants attention level, group needs)

Archers are called to the firing line and place one foot either side of the line.

At all times, when an arrow is loaded onto the bow the archers must face towards the target (downrange)

All archers must aim at their targets and not fire across the range to other targets.

All archers must fire directly at the target and not aim over the targets or too high.

All bows must be in their stands and not being held by participants when arrows are being collected down range

Please review / read the corresponding Risk Assessment

<https://strategenics2014.sharepoint.com/:w/s/reflections/EdrsW8XHJcdLg3Grgs5iGIIbuEAIDBaC4aCNyU34ucLgDg?e=aMhkNU>

This document was created following the DEET Curriculum Activity Risk Assessment (CARA) Guidelines

<http://education.qld.gov.au/curriculum/carmg/activity-guidelines.html>

Emergency Management Procedure

- A** Assess situation, call emergency services, assist those in danger
- E** Evacuate students, staff and visitors, if appropriate
- I** Inform School Camp Leader onsite and off site, Camp Cooby Directors or Camp Manager if not onsite
- O** Organise resources, advise parents
- U** Undertake recovery operations and return site to normal

Risk Assessment

Danger	Risk Description	Risk Level	Management Strategies	Residual Risk Assessment – after Management Strategies
Environment				
Sun Exposure	Sunburn Dehydration Heat Exhaustion/ Stroke	M	Review expected weather conditions prior to the activity / start of the day www.bom.gov.au/qld http://www.bom.gov.au/australia/meteve/ http://www.eldersweather.com.au/qld/darling-downs/geham Participants advised on appropriate clothing and equipment. Clothing with sleeves must be worn. Participants carry minimum of 3L water. Refill stops. Particular pointers to apply sunscreen to backs of hands and inside thighs. (recommended minimum +30) Regular rest stops. Encourage peer reminders and monitoring. Briefs and debriefs as well as should be conducted in the shade where available. Artificial shade gazebos or sun sails will be provided where available.	L
Poor Weather Conditions / storms	Wind direction and strength	S	Review expected weather conditions prior to the activity / start of the day www.bom.gov.au/qld http://www.bom.gov.au/australia/meteve/ http://www.eldersweather.com.au/qld/darling-downs/geham Monitor winds before and during the activity, including the direction and intensity of wind to affect arrow travel Aggressive movement of trees nearby are an indication of thinking about strong management strategies or cancellation of activity.	L

			Assess students' ability to cope with increasingly difficult wind conditions. Activity suspension or cancellation should be considered during strong winds or poor weather conditions that may affect the focus of archers. Participants will be briefed on emergency procedures / evacuation point at beginning of program	
Rain	Wet Equipment Hypothermia Slips and trips	S	Review expected weather conditions prior to the activity / start of the day www.bom.gov.au/qld http://www.bom.gov.au/australia/meteye/ http://www.eldersweather.com.au/qld/darling-downs/geham Pre-briefing and equipment list outlines appropriate clothing and wet weather gear. Participants are shown how to waterproof equipment. Group condition is monitored closely during wet weather. Group to be briefed on safe practice in wet conditions using extra caution. Students will wear firmly fitting, covered footwear with a non-slip sole. Participants will be instructed to be aware of the ground underfoot, & to avoid walking on damp/wet areas & to be aware of trees, branches & brambles, & not to run.	L
Bushfire	Potential for local bushfire	H	Review expected weather conditions prior to the activity / start of the day www.bom.gov.au/qld http://www.bom.gov.au/australia/meteye/ http://www.eldersweather.com.au/qld/darling-downs/geham Review the Fire Danger Ratings – Darling Downs and Granite Belt http://www.bom.gov.au/qld/forecasts/bushfire.shtml https://www.ruralfire.qld.gov.au/BushFire_Safety/Pages/tune-in-to-warnings.aspx Fire Danger Rating of Severe or above should enact Camp Cooby Fire Management Plan and may impact programming / activities in consultation with client Monitor social media for updates on local fires / visible fires or smoke https://www.facebook.com/QldFireandRescueService https://twitter.com/QldFES https://www.ruralfire.qld.gov.au/map/Pages/mapfeeds.aspx Aggressive heat waves are an indication of thinking about bush fire management strategies or cancellation. Participants advised on appropriate clothing and equipment in days of Severe or higher fire danger rating Participants carry minimum of 3L water. Fires may only be lit in specified areas. Fires should not be lit in windy conditions. Participants will be briefed on emergency procedures / evacuation point at beginning of program	L
Dead Trees	Impact Injuries	M	Participants are briefed about the dead trees and the likelihood of tree fall if they are hit. Archery will be in a cleared area, away from trees Participants are not to sit under dead trees or broken / dislodged branches during sessions	L

Archery Activity Plan

Physical Injury from environmental factors	Cut Feet Embedded Objects from rocks / sticks	S	Participants are expected to wear closed in shoes at all times Participants are not to run at the archery range	L
Environmental Impact	Environmental damage to site	M	Participants are to be briefed on specific and unique environmental factors that concern Cooby Dam. Ensure rubbish / food waste is 'carried out' of archery range and appropriately disposed of. Trees and other native plants are not to be climbed upon / destroyed by participants	L
Wildlife	Environmental risk to animals on site	S	Participants are expected to wear closed in shoes at all times. Appropriate pathways are chosen to avoid potential wildlife Pathways are kept clear and mowed to ensure all wildlife can be seen and avoided. Participants will be instructed to be aware of the ground underfoot, & to avoid walking through unmown areas & to be aware of trees, branches & brambles which may be home to various wildlife Participants will be instructed to give all wildlife a wide berth to avoid interaction / potential injury Staff will inspect all activity areas prior to use to ensure no wildlife is in close proximity and archery will cease if wildlife (wallaby's, kangaroos) move into the archery range or behind the target location	L
Danger	Risk Description	Risk Level	Management Strategies	Residual Risk Assessment – after Management Strategies
People				
Shooting Procedures	Being shot by an arrow from another shooter	H	Clear instructions regarding the shooting procedure. - Shooters move to end of safety zone - Shooters move forward to firing line, no one to pick up bows - Shooters pick up bows and load arrows upon verbal instructions - Shooter begin firing - All arrows must be fired before moving back to safety zone Instructors must be aware of left and right handed archers and their respective placement on the firing line – Left handed participants stand to the left end of the firing line Demonstrations of archery technique should be done with the dominate hand for the group visually (usually right handed)	M
Participants	Potential injury due to clothing / hair entanglement with equipment	M	All students should be wearing firmly-fitting clothing, especially with long sleeve shirts / jumpers If it is cold / raining, consideration should be given to stopping the session if rain jackets / warm clothing is too bulky to allow appropriate technique Long hair must be tied back	L

Archery Activity Plan

Misfire or inappropriate technique	Appropriate technique is demonstrated, and shooters taken through technique individually	H	Clear instructions are given to shooters prior to firing first arrows - Stand with one foot either side of firing line - Place bow in hand with hand placed to the leg - Pick up arrow by the nock, take over the bow, and nock onto string - Raise arm to shooting height - Place fingers on the string (1 above, 2 below or 2 below the string). - Draw string to corner of the mouth holding an upright position, elbow draws back high - Release, slide fingers backwards Participants are individually coached in technique in first round of shooting	M
Soft tissue injury	Bruising on the inner forearm from the bow string when shooting	M	Arm braces should be worn by everyone Correct shooting technique taught Full length arm bracer available if needed Instructor awareness of technique being poor by participants Encourage long sleeves to be worn that is firmly fitting	L
Not following instructions - Participants	Participants not following instructors potentially resulting in physical or emotional injury / damage	S	Participants will be briefed on the risks associated with the activity and safety being a high priority Staff will ensure safety procedures are met and will cease any activity which may result in a participant's safety being jeopardised Staff should maintain a low tolerance for breaches of safety and seek assistance from 1 teaching staff, 2 program coordinator or camp management if participant behaviour cannot be adjusted to meet safety requirements Behaviour management techniques in line with school policy / best practice should be employed early to adjust participant behaviour Participants will be removed from the activity if they fail to follow directions given by staff, in consultation with teaching staff (if school group)	L
Allergies / Asthma	Environmental triggers (pollens, dust)	H	Check medical information for participant prior to activity Instructors to be aware of possible triggers. Participants should be encouraged to carry own medication if available / appropriate.	L
Danger	Risk Description	Risk Level	Management Strategies	Residual Risk Assessment – after Management Strategies
Equipment				
Public / animals walking on to range	Other participants / clients entering the firing range / endangering themselves	H	Archery range is clear from obstructions (trees, wires, vegetation) for 20 metres beside and 50 metres behind the targets Backstop of a mound / fence or visual barrier behind targets to stop arrows flight distance Warning signs behind the ranges (red warning flags / witches hats) to identify exclusion zones, including an "overshoot zone funnel" Limited entry / exit points to the archery range Instructor awareness of other groups movements during the session near to the archery range Instructor "stop" command briefed.	L

			Participants instructed to visually check that there is nobody in the target / exclusion zone before they commence shooting Shooting may not recommence until other participants and/or animals have reached a safe area	
Inappropriate shooting	Participants shooting up into the air / inappropriate usage of equipment that endangers others	H	Instructors to give clear briefings appropriate to the needs of the group and to inform all individuals of the consequences of purposefully ignoring these Bows and Arrows separated when not in use (arrows stored in locked container) Demonstrations given for all aspects of the sessions Instructor actively monitoring throughout session Participants shooting /drawing back and raising higher than the top of a target butt is considered to be unsafe and must not be used	L
Arrows	Arrows rebounding and hitting participants	M	Minimum shooting distance marked out of at least 20 metres All participants instructed to stay behind the waiting line if not shooting Closed toed footwear to be worn	L
Arrows	Impalement whilst removing arrows from the target / ground	M	At the instructors discretion the group will be able to remove their own arrows from the target but this will only be allowed if the instructor is confident in their ability to do so safely A full demonstration and brief will be given to participants The participant withdrawing the arrows must stand to one side of the target to prevent eye injury on withdrawal of arrows The instructor must be vigilant throughout Participants must walk whilst approaching targets and when returning arrows to their holder Targets must be secured firmly to the stand and participants instructed to hold the targets when removing arrows to avoid injury	L
Overdrawing	Potential strings breaking / arrow or bow damage	M	All arrows are long enough for adults to use to prevent over drawing Instructor to monitor participants usage of bows and recommend different sizes as appropriate. Always used matched arrows (same type, size, length, fitted with same points, nocks and fletches)	L
Faulty equipment	Faulty equipment could result in further damage to equipment and increase risk of incident	M	Staff will inspect all equipment before and after activity. All equipment will be used and maintained according to the manufacturer's recommendations Arrows / fletching broken during a session must be removed from service and reported to camp management for maintenance Strings showing signs of abrasion and wear, e.g. fraying or severing (particularly under the nocking point), must be replaced	L

Consequence					
Likelihood	Insignificant 1	Minor 2	Moderate 3	Major 4	Catastrophic 5
A (almost certain)	S	S	H	H	H
B (Likely)	M	S	S	H	H
C (Moderate)	L	M	S	H	H
D (unlikely)	L	L	M	S	H
E (rare)	L	L	M	S	S

Risk Level

H – High risk: e.g. likely or almost certain to occur, with at least moderate consequence – at least medical treatment required (See table below)

S – Significant risk

M – Moderate risk

L – Low risk

CONSEQUENCE RATING TABLE		
1	Insignificant	No injuries, No financial loss
2	Minor	First Aid treatment, Low financial loss
3	Moderate	Medical treatment required, Medium financial loss
4	Major	Extensive injuries, High financial loss
5	Catastrophic	Death, Major financial loss