

Sleaford Maltsters Archery Club

Health & Safety Risk Assessment

Archery Activities, Indoor and Outdoor Ranges

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#### Introduction

This risk assessment has been produced to identify hazards and means of reducing the risk of injury and/or loss to the Committee and members of Sleaford Maltsters Archery Club.

The Committee of the Sleaford Maltsters Archery Club is to ensure that the actions to reduce risk specified in this assessment are taken and where necessary rules and procedures of the Club are to be amended.

This risk assessment must be made available to Club members and others who have use of the facilities of the Club to ensure they understand the risks involved with the sport of archery and use of the Club facilities generally. If necessary a copy of this document can be produced and supplied on request through the Club secretary.

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### **Activity and Equipment**

The club participates in target archery. This occurs indoors at distances usually up to 20yds at Northgate Sports Hall twice a week during the indoor season (September to March).

Shooting also occurs outdoors at distances up to 100yds at the Archery Field, Osbournby during the outdoor season (March to September). This usually occurs twice a week, but it may occur daily at the discretion of the club committee.

Some club members may additionally attend tournaments, which may be hosted at one of the venues listed above or at an external location.

The equipment used is modern recurve bows, compound bows, traditional-style bows (such as longbows) and crossbows shooting at straw or foam targets. Archers also make use of a number of accessories, such as quivers, tabs, arm-guards/bracers, finger slings, and chest guards.

| Responsible person (e.g. employer) or person having control of the premises | Sleaford Maltsters Archery Club Committee |
|---|---|
| Date of Risk Assessment   |   |
| Date of Previous Risk Assessment  | Not applicable                            |
| Date of Review  |   |

| Assessor | rs: |
|----------|-----|
|----------|-----|

Date:

| RISK CLASSIFICATION                         |   |   |   |   |  |  |
|---|---|---|---|---|--|--|
| NOTE: RISK = LIKELIHOOD X SEVERITY SEVERITY |   |   |   |   |  |  |
|   |   | 1 | 2 | 3 |  |  |
| LIKELIHOOD                                  | 3 | 3 | 6 | 9 |  |  |
|   | 2 | 2 | 4 | 6 |  |  |
|   | 1 | 1 | 2 | 3 |  |  |

## **All Locations**

| Risk | c/Hazard  | Nature of Risk/Hazard               | Persons at Risk  | Control Measures                                   | Risk Classification |
|------|-----------|-------------------------------------|------------------|--|---------------------|
| 1.   | Equipment | String may snap, bow limbs or       | Archer, those in | Regularly (monthly) inspect strings and bows for   | Before measures:    |
|      | failure   | riser may fail while shooting.      | the immediate    | wear. Replace equipment deemed to be unsafe.       | Severity - 2        |
|      |           | Arrows may break on release.        | vicinity.        |  | Likelihood - 2      |
|      |           |                                     |                  | Regularly (weekly) check arrows for loose or       | Total - 4           |
|      |           |                                     |                  | damaged nocks, loose points. Replace damaged       |                     |
|      |           |                                     |                  | or loose components. Check carbon arrows for       | After measures:     |
|      |           |                                     |                  | splintering, discard if deemed unsafe.             | Severity - 2        |
|      |           |                                     |                  |  | Likelihood - 1      |
|      |           |                                     |                  | Instruct new archers against "dry firing" bows,    | Total - 2           |
|      |           |                                     |                  | as this can lead to early limb failure. Do not use |                     |
|      |           |                                     |                  | Fastflight strings or carbon arrows on wooden      |                     |
|      |           |                                     |                  | bows, as these can overstress the riser.           |                     |
| 2.   | Bowstring | Bowstring may become caught on      | Archer.          | Ensure that archers tie back long hair and         | Before measures:    |
|      |           | loose hair or clothing or hit the   |                  | remove jewellery or loose outer                    | Severity - 2        |
|      |           | arm on release. Shooting without    |                  | garments, which could become caught.               | Likelihood - 3      |
|      |           | suitable finger protection (e.g.    |                  |  | Total - 6           |
|      |           | tab, glove) can cause injury to the |                  | Require archers to wear arm protection to          |                     |
|      |           | fingers.                            |                  | minimise possible injury and instruct in proper    | After measures:     |
|      |           |                                     |                  | release technique.                                 | Severity - 1        |
|      |           | Drawing a compound bowstring        |                  |  | Likelihood - 1      |
|      |           | without a release aid can cause     |                  | Require non-compound archers to shoot with a       | Total - 1           |
|      |           | the string to derail from the cams, |                  | tab/glove at all times. Require compound           |                     |
|      |           | leading to equipment damage and     |                  | archers to use a release aid.                      |                     |
|      |           | the potential for severe injury.    |                  |  |                     |

| Risk/Haz | azard        | Nature of Risk/Hazard   | Persons at Risk                                    | Control Measures  | Risk Classification   |
|----------|--------------|---|--|---|---|
| 3. Bov   | ow<br>sembly | Bow is assembled or disassembled incorrectly, and may come apart while in use (consequences as per failure of bow limb or riser).   | Archer.  | Instruct archers in correct assembly of equipment, including limb assembly and stringing/de-stringing.  Annually inspect limb bolts and nuts for signs of excess wear, replacing where necessary.  Check novices' bow setups before allowing them to shoot.   | Before measures: Severity - 2 Likelihood - 2 Total - 4  After measures: Severity - 2 Likelihood - 1 Total - 2 |
| 4. Bos   | oss/stand    | Target boss and/or stand mishandled, possibly resulting in boss falling on archer and causing injury.  Target boss/stand not secured, possibly resulting in injury to archer and/or damage to arrows.  Potential for injury when lifting and carrying bosses due to improper lifting technique, obstructions while carrying, or splintering of wooden stands. | Those in the immediate vicinity of the boss/stand. | Instruct archers in the correct handling of bosses/stands.  Instruct archers not to lift bosses alone, and advise as to correct technique for mounting boss to stand.  Instruct archers in method for securing bosses to stand/ground.  Do not allow shooting to commence until all targets are appropriately secured and cease shooting if targets become insecure | Before measures: Severity - 1 Likelihood - 2 Total - 2  After measures: Severity - 1 Likelihood - 1 Total - 1 |

| Risk | /Hazard      | Nature of Risk/Hazard           | Persons at Risk | Control Measures                             | Risk Classification |
|------|--------------|---------------------------------|-----------------|--|---------------------|
| 5.   | Short arrows | Arrows too short for the archer | Archer.         | Check arrow length for all new archers using | Before measures:    |
|      |              | may be drawn off the arrow rest |                 | prescribed technique, issuing only arrows of | Severity - 3        |
|      |              | and loosed into the back of the |                 | required minimum length.                     | Likelihood - 2      |
|      |              | riser or the bow hand.          |                 |  | Total - 6           |
|      |              |                                 |                 | Do not allow archers to shoot if arrows of   |                     |
|      |              |                                 |                 | the required minimum length are              | After measures:     |
|      |              |                                 |                 | unavailable.                                 | Severity - 3        |
|      |              |                                 |                 |  | Likelihood - 1      |
|      |              |                                 |                 |  | Total - 3           |
| 6.   | Heavy bows   | Use of an inappropriate draw-   | Archer.         | Instruct beginners using lightweight bows,   | Before measures:    |
|      |              | weight bow may result in        |                 | ensure they employ correct draw technique    | Severity - 2        |
|      |              | muscular or other soft tissue   |                 | before graduating to heavier bows.           | Likelihood - 3      |
|      |              | injury.                         |                 |  | Total - 6           |
|      |              |                                 |                 | Ensure archers who purchase their own        |                     |
|      |              |                                 |                 | equipment receive appropriate advice.        | After measures:     |
|      |              |                                 |                 |  | Severity - 2        |
|      |              |                                 |                 |  | Likelihood - 1      |
|      |              |                                 |                 |  | Total - 2           |

| Risl | k/Hazard             | Nature of Risk/Hazard  | Persons at Risk                      | Control Measures  | Risk Classification   |
|------|----------------------|--|--------------------------------------|---|---|
| 7.   | Collection of arrows | Arrows which land in/on the ground may cause injury if walked/run into.  Arrows in target represent various hazards, in approaching the target, or when being removed from the boss.  Carbon arrows tend to splinter when broken, and the resulting pieces are known to be highly sharp. | All those in the immediate vicinity. | Instruct archers in these hazards and of the importance of approaching the target with caution.  Instruct new archers in correct technique for drawing arrows from boss, including the importance of standing away from boss when others are pulling arrows. Do not allow anyone to run on the range, or to wear open-toed shoes/sandals. Ensure all lost arrows are reported and that every effort has been made to locate them.  Carbon arrows may only be pulled with an arrow puller tool. Broken carbon arrows should be removed from the range with great care, and all efforts should be made to collect missing pieces. | Before measures: Severity - 2 Likelihood - 2 Total - 4  After measures: Severity - 2 Likelihood - 1 Total - 2 |
| 8.   | Shooting control     | Inadequate control of shooting may result in personal injury to an archer or spectator.  | All those in the immediate vicinity. | Shooting must always be under the control of an experienced archer acting as the Range Captain, or a qualified Judge.  All archers must understand that this person is in charge of the shoot and must obey their commands.  New archers are instructed as to the role of the Range Captain/Judge, and the commands they are likely to give.  | Before measures: Severity - 3 Likelihood - 2 Total - 6  After measures: Severity - 3 Likelihood - 1 Total - 3 |

| Ris | k/Hazard                        | Nature of Risk/Hazard  | Persons at Risk                      | Control Measures  | Risk Classification   |
|-----|---------------------------------|--|--------------------------------------|---|---|
| 9.  | Range layout                    | Incorrect range layout may result in personal injury to spectators or archers.                               | All those in the immediate vicinity. | The range must be secure and laid out in accordance with the Archery GB Rules of Shooting. Shooting must not begin until this is the case.  | Before measures:<br>Severity - 3<br>Likelihood - 2<br>Total - 6 |
|     |                                 |  |                                      | Spectators and participants are advised where they may and may not stand whilst shooting is in progress.  | After measures:<br>Severity - 3<br>Likelihood - 1<br>Total - 3  |
| 10. | Arrows shot outside safety area | Arrows inadvertently shot outside of the safety area may result in personal injury to spectators or archers. | All those in the immediate vicinity. | Archers must be made familiar with and adhere to Archery GB Rules of Shooting. Any archer deemed by the Field Captain or Judge not to be doing so should be asked to stop shooting and leave the field. | Before measures:<br>Severity - 3<br>Likelihood - 2<br>Total - 6 |
|     |                                 |  |                                      | In particular archers must not be allowed to use any form of "over-arm draw" and should ensure that the bow is not pointed at too extreme an angle.   | After measures:<br>Severity - 3<br>Likelihood - 1<br>Total - 3  |
|     |                                 |  |                                      | The bow must remain flat.   |   |

| Risk | /Hazard     | Nature of Risk/Hazard            | Persons at Risk | Control Measures                                  | Risk Classification |
|------|-------------|----------------------------------|-----------------|---|---------------------|
| 11.  | People or   | A person or animal straying into | Those in the    | Ensure that the range is laid out in accordance   | Before measures:    |
|      | animals     | the safety area may receive      | safety area.    | with the Archery GB Rules of Shooting and that    | Severity - 3        |
|      | straying    | personal injury from arrows or   |                 | the safety area is observable at all times during | Likelihood - 2      |
|      | into safety | other equipment projected        |                 | shooting.   | Total - 6           |
|      | area        | towards the target.              |                 |   | After measures:     |
|      |             |                                  |                 | Ensure that access past the shooting line to      | Severity - 3        |
|      |             |                                  |                 | indoor ranges is secured before shooting          | Likelihood - 1      |
|      |             |                                  |                 | commences.  | Total - 3           |
|      |             |                                  |                 | The Field Captain and all archers must remain     |                     |
|      |             |                                  |                 | vigilant and suspend shooting immediately if the  |                     |
|      |             |                                  |                 | safety area is violated.                          |                     |
|      |             |                                  |                 | People must not be able to enter the shooting     |                     |
|      |             |                                  |                 | area without passing a suitable barrier warning   |                     |
|      |             |                                  |                 | that beyond which a danger exists.                |                     |
|      |             |                                  |                 | All grounds are deemed accessible to the public   |                     |
|      |             |                                  |                 | even if this involves trespass.                   |                     |
|      |             |                                  |                 | Ensure that spectators and those waiting to       |                     |
|      |             |                                  |                 | shoot remain behind the waiting line.             |                     |
|      |             |                                  |                 | Ensure all participants are familiar with the     |                     |
|      |             |                                  |                 | commands to start and stop shooting. Do not       |                     |
|      |             |                                  |                 | allow anyone to cross the shooting line except    |                     |
|      |             |                                  |                 | when instructed to do so by the Field             |                     |
|      |             |                                  |                 | Captain/Judge                                     |                     |

| Risk | x/Hazard                        | Nature of Risk/Hazard  | Persons at Risk                       | Control Measures  | Risk Classification   |
|------|---------------------------------|--|---------------------------------------|---|---|
| 12.  | Travel to external competitions | Club members are at risk of serious injury due to traffic accidents, caused by reckless or inattentive driving by members of the club or by other members of the public.  Accidents may also be caused by driving in adverse weather conditions, or by improper vehicle maintenance. | Drivers and all passengers.           | Anybody driving club members to external competitions must possess a valid drivers license and appropriate insurance, and must not drive if under the influence of alcohol or drugs.  Drivers should avoid distractions while driving, such as loud music or the use of mobile devices. If a driver feels tired, they must stop at the nearest rest station.  Drivers deemed to be dangerous should be reported to the captain and prevented from driving again. Drivers who are not confident in their abilities are not to be pressured into driving for the club.  See the club's Code of Conduct for further details. | Before measures: Severity - 3 Likelihood - 2 Total - 6  After measures: Severity - 3 Likelihood - 1 Total - 3 |
| 13.  | Social<br>activities            | Social events may include shared meals with the club or visits to local pubs. These carry the usual risks associated with the consumption of alcohol and club members may risk exposure to allergenic foods.   | All attendants at club social events. | Food servers should be made aware of any severe allergies.  Medical attention should be sought out immediately if any club members show signs of alcohol poisoning. The use of illegal drugs is forbidden at all social events.   | Before measures: Severity - 2 Likelihood - 2 Total - 4  After measures: Severity - 1 Likelihood - 1 Total - 1 |

| Risk | /Hazard    | Nature of Risk/Hazard      | Persons at Risk   | Control Measures                                   | Risk Classification |
|------|------------|----------------------------|-------------------|--|---------------------|
| 14.  | Infectious | Illness may spread between | All attendants at | All sessions have a sign-up system, to allow for   | Before measures:    |
|      | disease    | members.                   | club events.      | track and trace to be implemented if necessary.    | Severity - 1        |
|      |            |                            |                   |  | Likelihood - 2      |
|      |            |                            |                   | Club members are encouraged not to attend          | Total - 2           |
|      |            |                            |                   | events if they are unwell/likely to be contagious. |                     |
|      |            |                            |                   |  | After measures:     |
|      |            |                            |                   |  | Severity - 1        |
|      |            |                            |                   |  | Likelihood - 1      |
|      |            |                            |                   |  | Total - 1           |

# **Northgate Sports Hall**

| Risk/Hazard |   | Nature of Risk/Hazard  | Persons at Risk  | Control Measures   | Risk Classification  |
|-------------|---|--|--|--|--|
| 1           | Non-members entering the safety area: site-specific | There are two doors that allow physical access to the safety area: one near the sports hall reception and a fire exit to the right of the hall where archers store equipment while shooting. | Non-members accessing the safety area through these doors. | Doors should be locked where possible. Where this is not possible, signage should be placed on the outside of the door nearest to the bosses to warn individuals that archery is in progress.  The club may inform other users of the hall that it is not safe to enter the range, particularly the safety area, during the club's sessions.  All club members must be aware of the need to call a halt to shooting (FAST) if a person is inside the safety area. Archers, and particularly the range captain, should be aware of these specific access locations and remain attentive throughout in case there is a need to cease shooting. | Before measures: Severity - 3 Likelihood - 2 Total - 6 After measures: Severity - 3 Likelihood - 1 Total - 3 |

| Risl | r/Hazard                   | Nature of Risk/Hazard  | Persons at Risk                             | Control Measures   | Risk Classification   |
|------|----------------------------|--|---|--|---|
| 2    | Access to storage location | Personal injury may occur when accessing the on-site storage location.  Equipment may fall or slip if stored incorrectly; this includes equipment belonging to other clubs who share the storage location. Additionally, some items of equipment - particularly target bosses - do not fit easily through the doorway, and may harm those carrying them if not done correctly. | Individuals accessing the storage location. | Individuals accessing storage should be familiar with the site and/or supervised by someone familiar with the site, both when removing and replacing equipment. Care should be taken at all times to ensure that equipment is stored such that it will not fall.  No individuals should attempt to remove equipment on their own, particularly heavy equipment such as target bosses. Those accessing the cupboard should also be aware of other equipment stored near the club's own, and be attentive in case it is not safely secured.  When exiting the storage area with heavy or large equipment, members should be aware that some equipment - in particular, target bosses - may need to be manipulated or carried carefully in order to fit safely through the doorway. | Before measures: Severity - 2 Likelihood - 2 Total - 4  After measures: Severity - 1 Likelihood - 1 Total - 1 |

| Risk | /Hazard             | Nature of Risk/Hazard                          | Persons at Risk              | Control Measures  | Risk Classification  |
|------|---------------------|--|------------------------------|---|--|
| 3    | Fall from<br>height | Personal injury from falling from step ladder. | Individuals in the vicinity. | The step ladder is to be inspected before and after use to ensure it is not defective.  Only senior club members who feel competent to use the step ladder are to use it. | Before measures: Severity - 3 Likelihood - 2 Total - 6 After measures: Severity - 2 Likelihood - 1 Total - 2 |

# Archery Field, Osbournby

| Risk | /Hazard | Nature of Risk/Hazard  | Persons at Risk                      | Control Measures  | Risk Classification   |
|------|---------|--|--------------------------------------|---|---|
| 1    | Weather | Competitors/officials/spectators are at risk from elements when shooting outdoors; fog may reduce visibility of the safety area, or an archer or their equipment may be struck by lightning and electrocuted.  Archers are at risk of hyper/hypothermia in extreme weather conditions. | All those in the immediate vicinity. | Shooting must be suspended if the safety overshoot distance is not visible. Shooting must be suspended at the first sign of a thunderstorm in the immediate vicinity and not resumed until the danger is past. Archers must be prepared for extreme weather conditions, and medical attention must be sought out if here are signs that a club member is suffering from heat stroke or a similar ailment. | Before measures: Severity - 3 Likelihood - 1 Total - 3  After measures: Severity - 1 Likelihood - 1 Total - 1 |

| Risk | x/Hazard      | Nature of Risk/Hazard  | Persons at Risk                      | Control Measures  | Risk Classification   |
|------|---------------|--|--------------------------------------|---|---|
| 2    | Car park      | Driving into and out of car park from main road. Traffic movement. Vehicle collision. Personal Injury.   | All those in the immediate vicinity. | Site has been designed to separate vehicles from pedestrians and shooting range.  People not familiar with site are advised to drive slowly from main road on to site.  Drivers should park carefully to allow for emergency vehicle access through gate.   | Before measures: Severity - 4 Likelihood - 2 Total - 8  After measures: Severity - 2 Likelihood - 1 Total - 2 |
| 3    | Lone shooting | A person or animal straying into the safety area may receive personal injury from arrows or other equipment projected towards the target.  Injury or onset of illness to the archer. | Individuals in the vicinity.  Archer | Following Archery GB rules, solo shooting by senior archers is permitted.  Any member shooting on their own is doing so at their own risk in respect of personal injuries.  Provided that they are an adult member of Archery GB, one parent/guardian alone may supervise their own child(ren).  They should carry a mobile phone with them, to summon assistance in the case of an emergency.  They should inform another person that they are at the field and times. | Before measures: Severity - 3 Likelihood - 2 Total - 6  After measures: Severity - 1 Likelihood - 2 Total - 2 |

| Risk | k/Hazard   | Nature of Risk/Hazard  | Persons at Risk  | Control Measures   | Risk Classification   |
|------|--|--|--|--|---|
| 4    | Members of public gaining access to the site during play | Due to the open-access nature of the site, it is possible for individuals to gain entry, where they are in danger of receiving personal injury from arrows or other equipment if they cross into the shooting area.  This may include via the site's main entrance, or via the nearby public footpath.  All grounds are deemed accessible, including through trespass. | Personal injury to individuals, which may range from mild to severe. | The range should be set up in accordance with Archery GB rules of shooting, including overshoot, signage, and barriers demarcating the shooting area. Barriers and signage must be visible at all times.  It should be impossible for individuals to enter the shooting area without passing a physical barrier with signage warning them that access is restricted for safety reasons.  The range captain and all archers must remain vigilant and suspend shooting immediately if any individuals cross into the shooting area, by calling "FAST". All participants must be familiar with these commands before shooting.  The range captain should be strategically positioned on site to notice members of the public arriving through the open-access site entrance.  Signage will be specifically deployed near the open-access site entrance.  All archers will be briefed on the site layout before shooting at the range. | Before measures: Severity - 3 Likelihood - 3 Total - 9  After measures: Severity - 2 Likelihood - 2 Total - 4 |

| Risl | c/Hazard         | Nature of Risk/Hazard               | Persons at Risk   | Control Measures   | Risk Classification  |
|------|------------------|-------------------------------------|---|--|--|
| 5    | Uneven<br>ground | There may be uneven ground on site. | Personal injury following a fall or trip after standing on uneven ground. | Members should proceed with caution when moving across the grounds (such as when moving towards targets to collect arrows).  When setting up the range, designated committee members should make note of any areas of significant damage, to provide participants with ongoing information about the state of the site for that session. | Before measures: Severity - 2 Likelihood - 2 Total - 4 After measures: Severity - 2 Likelihood - 1 Total - 2 |

| Risk/Hazard |                  | Nature of Risk/Hazard   | Persons at Risk  | Control Measures   | Risk Classification   |
|-------------|------------------|---|--|--|---|
| -           | Arrows in ground | Arrows left in the ground may be a trip hazard and cause personal injury to individuals traversing the grass. | Personal injury to individuals, which may range from mild to moderate. | Archers are responsible for their equipment and should ensure that after each end, all arrows shot have been collected. Shooting will not continue unless all arrows are accounted for, or substantial loss of shooting time occurs.  A metal detector will be on-site for use to locate all "lost" arrows.  Only carbon arrows with an aluminium core or fully metal arrows may be shot to facilitate location with metal detectors.  Archers are encouraged to shoot at distances at which they are confident they will not miss. If an archer repeatedly misses, the range captain will ask them to retire for the session, and to shoot at a shorter distance in future.  In the case that an arrow has not been located by the end of the session, archers will be responsible for remaining on site and attempting to locate the arrow for as long as feasible. Searching will resume after the subsequent shooting session. | Before measures: Severity - 2 Likelihood - 2 Total - 4  After measures: Severity - 2 Likelihood - 1 Total - 2 |

| Risk | k/Hazard              | Nature of Risk/Hazard   | Persons at Risk  | Control Measures   | Risk Classification   |
|------|-----------------------|---|--|--|---|
| 7    | Water<br>course       | A stream runs the full length of the north edge of the site. The car park is adjacent to this as is the storage unit        | Personal injury<br>following<br>slipping down<br>the bank or risk<br>of drowning   | Vegetation to be kept longer along field edge to create a buffer zone  | Before measures: Severity - 2 Likelihood - 2 Total - 4  After measures: Severity - 2 Likelihood - 1 Total - 2 |
| 8    | Shooting<br>direction | The range faces East to West so there is a risk of archers shooting with the sun in their eyes  Missed target "lost arrows" | Personal injury<br>to individuals,<br>which may range<br>from mild to<br>moderate. | Range is set out so that archers shoot East to West before midday (facing main road) West to East after midday See Risk 6 for lost arrow procedure | Before measures: Severity - 2 Likelihood - 2 Total - 4 After measures: Severity - 2 Likelihood - 1 Total - 2  |