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| **Risk Assessment** | | | | |
| **Risk Assessment for the activity of** | **Southampton University Beekeeping Society Honey Extraction, Processing and Sales** | | **Date** | **25/09/2024** |
| **Unit/Faculty/Directorate** | **Southampton University Students Union (SUSU)** | **Assessor** | **Harry Lister (President)**  **Fleur Masters (Treasurer)** | |
| **Line Manager/Supervisor** |  | **Signed off** |  | |

**This is the risk assessment for Beekeeping Societies honey and wax processing and jarring which will be completed during Winter 2024. The honey will be extracted from the hives and separated from the comb, with the honey then left to settle to separate the honey from the wax. This will occur in a lab on Highfield campus, likely in building 85.**

**On a separate date, the wax will then be scraped off and the honey jarred and labelled, not within a lab as this requires less hands on activity and so a reduced chance of contamination. The honey will be sold in The Shop and The Locker, as well as society members. Wax will also be processed for future use.**

| ***PART A*** | | | | | | | | | | |
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| **(1) Risk identification** | | | **(2) Risk assessment** | | | | **(3) Risk management** | | | |
| **Hazard** | **Potential Consequences** | **Who might be harmed**  **(user; those nearby; those in the vicinity; members of the public)** | **Inherent** | | |  | **Residual** | | | **Further controls (use the risk hierarchy)** |
| **Likelihood** | **Impact** | **Score** | **Control measures (use the risk hierarchy)** | **Likelihood** | **Impact** | **Score** |
| Contamination of honey from environment or people | Loss of honey, illness of customers, legal action | Members of the society, members of the public | **2** | **5** | **10** | Extraction and processing will occur in a lab in B85 on Highfield campus so the risk of contamination can be better controlled.  Members will be required to wash their hands and wear clean (i.e. not visibly dirty) clothes during the extraction.  Extraction will be overseen by a member that has completed level 2 food safety training.  Honey will be inspected by SUSU staff at The Shop for irregularities such as fermentation before the delivery is accepted.  Hand sanitiser will be available  A refractometer will be used to ensure the water content of the honey is below the legal limit of 18%.  Only new jars to be used.  Supers and deeps containing honey not to be places on ground at any time. | **1** | **5** | **5** | Contact details for the society will be freely available on and beside the honey being sold in case problems arise. |
| Chemical Hazards | Contamination of honey with chemical residues leading to health risks for consumers, loss of honey, legal action | Anyone who consumes the honey, members of the society | **2** | **4** | **8** | Lab surfaces to be cleaned thoroughly before extraction occurs.  Regular inspection and maintenance of filtration equipment.  Use of food-grade cleaning agents and proper rinsing. | **1** | **4** | **4** |  |
| Slips, trips and falls | Physical injury | Any member present | **2** | **4** | **8** | All boxes and equipment to be stored away from main meeting area, e.g. stored under tables  Floors to be kept clear and dry, and visual checks to be maintained throughout the meeting by members.  Extra vigilance will be paid to make sure that any spilled food products/objects are cleaned up quickly and efficiently in the area. | **1** | **4** | **4** | Seek medical attention from SUSU Reception staff if in need  Contact emergency services if needed, contact security through the phone number on the back of ID cards afterwards so they can direct emergency services.  All incidents are to be reported on the as soon as possible ensuring the duty manager/health and safety officer have been informed. Follow [SUSU incident report policy](https://www.susu.org/groups/admin/howto/protectionaccident) |
| Insufficient fire safety awareness | People may be trapped, fire exits may be blocked. | Any member present | **2** | **5** | **10** | Members to be informed of fire exits and instructed not to obstruct them / clear any obstructions they spot | **1** | **5** | **5** |  |
| Injury from accident with equipment | Cuts, bruises, burns, other minor injuries | Members of the society present | **2** | **2** | **4** | Knives will be cleaned before and during the extraction.  Knifes can be heated with warm (Not boiling) water to make it easier to cut the wax.  Members will be instructed to be careful with knifes and to only cut away from themselves.  Boiling water to be safely contained and any spillages mopped up. | **1** | **2** | **2** | 999 and security to be notified if a severe incident occurs. |
| Carrying heavy honey supers / deeps up stairs to lab | Strained muscles, trips, falls | Members of the society present | **3** | **2** | **6** | Heavy objects to be carried in pairs.  Members to be instructed not to lift with their back.  Places where the supers can be rested on the way to the lab to be scouted ahead of lifting. |  |  |  |  |
| Bees brought into lab, bees attracted to lab by leftover honey | Stings, disruption | Present members of the society, nearby members of the public. | **3** | **2** | **6** | All members and equipment to be examined for bees and bees removed before entering the building  Surfaces to be cleaned after the processing has been completed  Windows to be closed during the processing. | **1** | **2** | **2** |  |
| Glass Honey Jars | Broken glass if jars are damaged leading to cuts | Members of the society present | **3** | **2** | **6** | Jars to be kept out of the way in their packaging until they are needed.  Dustpan and brush will be kept nearby  Brokenglass to be disposed of through broken glass bins in lab. | **2** | **1** | **2** |  |
| Honey Jarring |  |  |  |  |  |  |  |  |  |  |
| Honey contamination during jarring | Loss of honey, health risks for consumers, legal action | Members of the society, anyone who consumes the honey | **2** | **5** | **10** | Jarring to be held from one or two locations where committee members can supervise.  Event to be overseen by committee member who has food safety level 2 qualification.  Hand sanitiser to be freely available. | **1** | **5** | **5** | Honey to be checked before being sold. |
| Glass jars being dropped | Cuts | Members of the society present | **2** | **3** | **6** | Jars to be kept in packaging for as long as reasonably possible.  Jars to be kept away from edges.  Any broken glass to be cleaned up immediately.  A room with a smooth floor should be used where possible so the glass can be cleaned easier. | **1** | **2** | **2** |  |
| Wax Extraction |  |  |  |  |  |  |  |  |  |  |
| Hot water | Burns, scalds | Members of the society present | **2** | **3** | **6** | Committee members to always supervise hot surfaces.  Gatherings to be held away from hot surfaces where possible,  Scalds to be held under cold water for as long as reasonably possible after they have occurred.  Pouring of the wax to be done by committee members of sufficient strength. | **1** | **2** | **2** |  |
| Sale of honey |  |  |  |  |  |  |  |  |  |  |
| Handling and storing of money | Theft, loss / misplacement leading to financial loss | Members of the society | **2** | **3** | **6** | Honey to be sold through SUSU shop and The Locker  Money to be paid for the entirety of honey at once through moneyhubs, with an invoice being sent to SUSU finances. | **1** | **3** | **3** | Sale being supervised by Gary Smith ([gaz.smith@soton.ac.uk](mailto:gaz.smith@soton.ac.uk)) and Szymon Malecki-Willis ([s.malecki-willis@soton.ac.uk](mailto:s.malecki-willis@soton.ac.uk)) who can be contacted in case of any incidents. |
| Heavy boxes of honey jars | Strained muscles, dropped jars | Members of the society | **2** | **3** | **6** | Boxes to be lifted in pairs  A moveable trailer to be used if possible.  Jars to be stored close to SUSU shop. |  |  |  |  |

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| ***PART B – Action Plan*** | | | | | | | |
| **Risk Assessment Action Plan** | | | | | | | |
| **Part no.** | **Action to be taken, incl. Cost** | **By whom** | **Target date** | | **Review date** | **Outcome at review date** | |
| 1 | Risk assessment shared with participating members | Harry Lister | 1 week before the event | |  |  | |
| 2 | Room set up correctly – Surfaces cleaned, floor dried, clothes visually inspected | Participating members | On the day | |  |  | |
| 3 | Improvements for next year suggested | Suggestions by participating members, compiled by Harry lister and Fleur Masters | 1 week after the event | |  |  | |
| 4 | Level 2 food safety course to be advertised to members | Harry Lister | 1 month before the event | |  |  | |
| 5 | Instructions given on how to lift heavy equipment correctly | Harry Lister | On the day | |  |  | |
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| Responsible manager’s signature: Harry Lister | | | | | Responsible manager’s signature: Fleur Masters | | |
| Print name: Harry Lister | | | | Date: 25/09/2024 | Print name: FLEUR MASTERS | | Date:  25/09/2024 |

**Assessment Guidance**

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| 1. Eliminate | Remove the hazard wherever possible which negates the need for further controls | If this is not possible then explain why |  |
| 1. Substitute | Replace the hazard with one less hazardous | If not possible then explain why |
| 1. Physical controls | Examples: enclosure, fume cupboard, glove box | Likely to still require admin controls as well |
| 1. Admin controls | Examples: training, supervision, signage |  |
| 1. Personal protection | Examples: respirators, safety specs, gloves | Last resort as it only protects the individual |

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| **LIKELIHOOD** | 5 | 5 | 10 | 15 | 20 | 25 |
| 4 | 4 | 8 | 12 | 16 | 20 |
| 3 | 3 | 6 | 9 | 12 | 15 |
| 2 | 2 | 4 | 6 | 8 | 10 |
| 1 | 1 | 2 | 3 | 4 | 5 |
|  | | 1 | 2 | 3 | 4 | 5 |
| **IMPACT** | | | | |

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| Impact | | Health & Safety |
| 1 | Trivial - insignificant | Very minor injuries e.g. slight bruising |
| 2 | Minor | Injuries or illness e.g. small cut or abrasion which require basic first aid treatment even in self-administered. |
| 3 | Moderate | Injuries or illness e.g. strain or sprain requiring first aid or medical support. |
| 4 | Major | Injuries or illness e.g. broken bone requiring medical support >24 hours and time off work >4 weeks. |
| 5 | Severe – extremely significant | Fatality or multiple serious injuries or illness requiring hospital admission or significant time off work. |

Risk process

1. Identify the impact and likelihood using the tables above.
2. Identify the risk rating by multiplying the Impact by the likelihood using the coloured matrix.
3. If the risk is amber or red – identify control measures to reduce the risk to as low as is reasonably practicable.
4. If the residual risk is green, additional controls are not necessary.
5. If the residual risk is amber the activity can continue but you must identify and implement further controls to reduce the risk to as low as reasonably practicable.
6. If the residual risk is red do not continue with the activity until additional controls have been implemented and the risk is reduced.
7. Control measures should follow the risk hierarchy, where appropriate as per the pyramid above.
8. The cost of implementing control measures can be taken into account but should be proportional to the risk i.e. a control to reduce low risk may not need to be carried out if the cost is high but a control to manage high risk means that even at high cost the control would be necessary.

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| Likelihood | |
| 1 | Rare e.g. 1 in 100,000 chance or higher |
| 2 | Unlikely e.g. 1 in 10,000 chance or higher |
| 3 | Possible e.g. 1 in 1,000 chance or higher |
| 4 | Likely e.g. 1 in 100 chance or higher |
| 5 | Very Likely e.g. 1 in 10 chance or higher |