HACCP GUIDANCE FOR THOSE PRODUCING WILD GAME MEAT FOR HUMAN CONSUMPTION EITHER AT AN APPROVED GAME HANDLING ESTABLISHMENT OR UNDER EXEMPTION ALLOWED BY THE FOOD HYGIENE REGULATIONS
HACCP guidance for those producing wild game meat for human consumption either at an approved game handling establishment or under an exemption allowed by the Food Hygiene Regulations

Introduction:
Where food is prepared, manufactured or processed, operators can develop their own food safety management procedures by following the traditional HACCP process, or by following Guides to Good Practice, including generic HACCP guides.

Documentation is an important part of the HACCP process, providing evidence of the operator's thinking and decisions that can be audited. Hygiene procedures, checks and actions need to be documented. But this does not mean recording everything; a flexible approach may be taken allowing the possibility of making a record only when there is a problem or if something unusual happens and recording the corrective action as a result. All records should identify the persons who complete them. Records must be kept for a sufficient time to allow the operator to verify the HACCP based system, and the competent authority to audit it.

Smaller businesses (such as shoots preparing oven ready birds) should use the ‘Food Safety Management Diary for Wild Game Meat Producers’ if they do not have alternative arrangements in place. Large and/or complicated businesses (such as those preparing oven ready birds and cooked ready meals) need more sophisticated systems. The food risk associated with a business is dependant on the type of products handled and produced and not necessarily dependant on the size of the business in question.

Generic HACCP Guides:

The meat production process is similar enough across the industry to justify a ‘generic’ approach for implementing HACCP principles. This approach helps to provide uniformity in training, implementation, and enforcement but cannot reflect the individual features of each plant and how it operates. So, if they want to follow generic guidance, operators need to adapt it to reflect their own circumstances.

- Model HACCP template documents are at pages 2-3
- A partial generic HACCP plan for wild game is at pages 4-10
HACCP PLAN FOR:

Hazards:
- **Biological Safety**: to prevent, eliminate or reduce the microbiological contamination of meat and to reduce the potential for growth.
- **Physical and Chemical Safety**: to avoid the physical and chemical contamination of meat.

Product: Wild deer carcases and in feather wild game birds

Intended use: Primal cuts (haunches etc) and oven ready birds

Process:
- Check condition of all carcases at delivery including declarations and temperature
- Skin and pluck carcases avoiding physical/chemical contamination of carcases
- Eviscerate birds avoid contamination from pathogenic bacteria, dirt or faecal material
- Deer carcases should already be eviscerated (at the shoot by the hunter/trained person) if not and suspected abnormality is reported on the trained person declaration notify the competent authority
- Place carcases in chiller, (temperature - deer no more than 7°C, birds no more than 4°C) avoiding contamination particularly cross contamination between skinned/plucked game and in skin/feather carcases
- Trim if necessary and present for official post mortem inspection
- Cut primal cuts and package (check packaging equipment)
- Place in chiller until dispatch

Packaging, Storage, Distribution:
- Package primal cuts and oven ready birds in temperature controlled environment
- Keep products chilled until dispatch in refrigerated transport vehicles
- Follow cleaning/disinfection schedule for vehicles and check vehicle refrigeration before dispatch

Customers: Local butchers, hotels and restaurants. London wholesale market and retailers in France and Belgium

PROCESS STEPS

1. Acceptance of carcases
2. Skinning
2B. Plucking
3. Evisceration (as necessary)
4. Chilling and chilled storage
5. Inspection, cutting, trimming
6. Packaging and dispatch
7. 
8. 
9. 
10. 
11. 
12. 
BELOW IS A HACCP TEMPLATE – COMPLETE ONE PAGE FOR EACH PROCESS STEP

IMPORTANT: COMPLETE A COPY OF THIS PAGE FOR EACH PROCESS STEP - AMEND LOWER COLUMN HEADINGS # AS APPROPRIATE

<table>
<thead>
<tr>
<th>PROCESS STEP: 1</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOOD SAFETY HAZARDS AND CAUSES</td>
<td>CONTROL MEASURES</td>
</tr>
<tr>
<td># CRITICAL / LEGAL LIMIT(S)</td>
<td>MONITORING PLAN</td>
</tr>
<tr>
<td>Procedure</td>
<td>Frequency</td>
</tr>
<tr>
<td>---</td>
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<tr>
<td>Named person or job description</td>
<td>Complete as appropriate</td>
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</tbody>
</table>

A Critical Control Point (CCP) is a process step at which control is essential to prevent, eliminate or reduce a hazard to an acceptable level. The decision tree annexed to PART THREE Chapter 1 of the Meat Industry Guide may be used to help determine CCPs.

If this process step is a CCP establish at least one critical limit, monitoring procedures and corrective actions for this step.

If this process step is one of these:
- Acceptance of carcases (visual contamination / temperature)
- Acceptance of raw meat (visual contamination / temperature)
- Dressing Procedures (visual contamination)
- Chilling/storage/dispatch (temperature)

It is a control point required by the regulations. If not identified as a CCP, establish a ‘legal’ limit, monitoring procedures and corrective actions for this step.
### Process Step 1 - Acceptance of carcases

<table>
<thead>
<tr>
<th>HAZARDS &amp; CAUSES</th>
<th>CONTROL MEASURES</th>
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<th>MONITORING PLAN</th>
<th>CORRECTIVE ACTION PLAN</th>
</tr>
</thead>
</table>
| Carcases derived from unhealthy animals and birds | • Large wild game carcases rejected if not accompanied by trained person’s declaration and/or frozen  
• Batches of small wild game carcases rejected if not accompanied by trained person’s declaration | Presence of trained person’s declaration  
Traceability requirement | Check each large wild game carcase has declaration. | Each batch/large wild game carcase |
| Contamination of carcases from excessive dirt on hides or feathers | • Game that cannot be skinned / plucked hygienically due to contamination on hides/feathers not accepted | Pre-dressing check that standards are being met | Each delivery | Inform OV  
Retrain / inform staff  
Report to / change supplier  
Reject delivery |
| Contamination of carcases from faecal material in abdominal or thoracic cavities due to “belly” shots or unhygienic gralloching | • Game with contaminated abdominal or thoracic cavities not accepted | Pre-dressing check that standards are being met | Each delivery | Inform OV  
Retrain / inform staff  
Report to / change supplier  
[Reject delivery] |
| Growth of pathogenic bacteria on carcases due to too high temperature during transport or improper storage by supplier | • Only accept chilled carcases or carcases shot the same day  
• Only “un-heaped” game accepted | Temperature through out the meat no more than:  
7° C for large wild game  
4° C for small wild game | Check carcase temperature using calibrated disinfected temperature probe | Report to / change supplier / haulier  
Check refrigeration equipment is working and carry out maintenance  
Retrain instruct staff  
[Reject delivery] |
## Process Step 2A – Skinning

<table>
<thead>
<tr>
<th>HAZARDS &amp; CAUSES</th>
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</table>
| Contamination of carcases by faecal material / pathogenic bacteria on the hide | • Trained staff instructed in correct skinning technique with prevention of in rolling by using clips  
• Two knife system used  
• Knife rinsed and disinfected between each carcase following cleaning / disinfection procedures  
• Sanitiser water temperature [at least 82°C]  
• Any visible contamination removed | No visible faecal contamination of the carcase | Visual check that standard is being met | Each carcase  
• Trim affected carcases  
• Investigate the cause, amend procedures as necessary  
• Adjust / repair water heater  
• Retrain / instruct staff if procedures not followed  
• Re-assess adequacy of operating instructions |

| Contamination of carcases by physical contaminants (e.g. hair) from equipment | • Plant and equipment cleaning and maintenance schedule followed | Water temperature 82°C | Check on water temperature with probe thermometer | At start up and [ ]  
• Re-assess adequacy of operating instructions  
• Retrain / instruct staff if procedures not followed |

| Contamination of carcases by bacteria on hands, arms, aprons of dressing staff | • Trained staff instructed to wash/rinse hands, arms and aprons to be washed and rinsed between handling each carcase | Refer to operating instructions including personal hygiene procedures [*] and usual supervisory activities/records | Refer to operating instructions including cleaning procedures [*] and usual supervisory activities/records | • Re-assess adequacy of operating instructions  
• Retrain / instruct staff if procedures not followed |

* Cross reference to instructions/procedures kept elsewhere
### Process Step 2B – Plucking

<table>
<thead>
<tr>
<th>HAZARDS &amp; CAUSES</th>
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</tr>
</thead>
</table>
| Contamination of carcases by pathogenic bacteria from plucking machine / surfaces | • Company cleaning schedule followed  
• Visual inspection before start up | | Refer to operating instructions including cleaning procedures [ * ] and usual supervisory activities / records | • Re-assess adequacy of operating instructions  
• Retrain / instruct staff if procedures not followed |

### Process Step 3 – Evisceration

<table>
<thead>
<tr>
<th>HAZARDS &amp; CAUSES</th>
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</tr>
</thead>
</table>
| Contamination of carcases by pathogenic bacteria / faecal material from ruptured stomach / gut / crop | • Trained staff instructed in evisceration techniques / procedures | No visual contamination | Visual check of carcases  
Each game carcase | • Carcasses correctly trimmed  
• Check and if necessary, trim carcases produced since last monitoring  
• Investigate the cause of the failures, amend procedures as necessary  
• Retrain / instruct staff if procedures not followed |
| Contamination of carcases by pathogenic bacteria / faecal material from dirty knives / evisceration equipment | • Knives / evisceration spoons rinsed and disinfected [between each large game carcase]  
• Sanitiser water temperature [at least 82°C] | Water temperature 82°C | Check on water temperature with probe thermometer  
At start up and [ ] | • Remove knives to correctly operating sanitiser  
• Adjust / repair water heater  
• Retrain / instruct staff if procedures not followed |
| Contamination of carcases by pathogenic bacteria on hands, arms, aprons of dressing staff | • Trained staff instructed to wash and rinse hands, arms and aprons regularly | | Refer to operating instructions including personal hygiene procedures [ * ] and usual supervisory activities / records | • Re-assess adequacy / frequency of washing / rinsing  
Retrain / instruct staff if procedures not followed |
**Cross reference to instructions/procedures kept elsewhere**

**Process Step 4 – Chilling and chilled storage**

<table>
<thead>
<tr>
<th>HAZARDS &amp; CAUSES</th>
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</table>
| Growth of pathogenic bacteria on carcases / product due to too high chilling and storage temperature | ▪ Air temperature of chill store maintained at [x]°C  
▪ Internal muscle temperature of chilled stored carcases kept below 7°C for large and 4°C for small game  
▪ Chiller alarm set at [ ]°C  
▪ Carcases do not touch during cooling | ▪ Carcase temperature reduced and maintained through out the meat at 7°C for large game and 4°C for small game within [x] hours | Check automatic log of air temperature  
[ ] times a day  
Test alarm  
[once a week] | • If needed, move carcases to a correctly functioning chill store  
• Check / correct carcases produced since the last monitoring showed this process was under control  
• Retrain / instruct staff if procedures not followed |
| Growth of pathogenic bacteria on carcases / product due to too slow chilling process/too long in chilling hall / close spacing carcases during cooling / poor stock rotation in chill store | ▪ Carcases stored in food grade polypropylene crates (birds)  
▪ Trained staff instructed in chill and storage procedures, including correct carcase spacing | Stock dispatched within [ ] days of kill date | Check on carcase temperature before loading using calibrated disinfected temperature probe  
Visual check of carcase spacing during cooling  
Check stock rotation | [Once a day]  
[Once a day]  
[Once a day] | • Reduce air temperature where carcases are held  
• Move carcases to a correctly functioning room  
• Check / correct carcases produced since the last time monitoring showed this process was under control  
• Investigate the cause of failures and amend procedures as necessary  
• Move the carcases to get the desired spacing  
• Retrain / instruct staff if procedures not followed  
• Destroy old stock |
Contamination of carcases / product by pathogenic bacteria, physical, chemical contaminants from dirty chill store/equipment

| Plant and equipment cleaning and maintenance schedule followed | Refer to operating instructions including cleaning and maintenance procedures [ * ] and usual supervisory activities / records | • Re-assess adequacy of operating instructions
• Retrain / instruct staff
• Re-assess adequacy / frequency of cleaning and maintenance schedule |

Contamination of carcases / product by pathogenic bacteria from store / handling staff

| Trained staff instructed to follow personal hygiene procedures | Refer to operating instructions including personal hygiene procedures [ * ] and usual supervisory activities/records | • Retrain / instruct staff
• Re-assess adequacy of operating instructions |

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**Process Step 5 – Inspection, cutting, trimming**

<table>
<thead>
<tr>
<th>HAZARDS &amp; CAUSES</th>
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<th>CORRECTIVE ACTION PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contamination of meat by pathogenic bacteria from faecal material</td>
<td>Trained staff instructed to check product against agreed product specification before cutting</td>
<td>No visible contamination</td>
<td>Visual check</td>
<td>[Each carcase]</td>
</tr>
</tbody>
</table>
|                  |                  |                       |                 | • Product removed from line
• Carcases trimmed / cleaned / reworked
• Product rejected / destroyed
• Check / correct carcases produced since the last time monitoring showed this process was under control
• Investigate the cause of failures, amend procedures as necessary
• Retrain / inform staff if procedures not followed |

* Cross reference to instructions/procedures kept elsewhere
| Contamination of meat by pathogenic bacteria from other meat (especially of other species) | • Meat handled in separate batches  
• Trained staff instructed to handle meat of different species separately and to follow company hygiene procedures | Refer to operating instructions including cleaning procedures between batches [*] and usual supervisory activities / records | • Re-assess adequacy of operating instructions  
• Retrain / instruct staff if procedures not followed |
| --- | --- | --- | --- |
| Contamination of meat by pathogenic bacteria / physical / chemical contaminants from knives / cutting tables / equipment during trimming | • Trained staff instructed to follows operating, cleaning and staff hygiene procedures  
• Two knife system used  
• Batch sterilisers used for knives / chain mail, temperature [at least 82°C], checked with probe thermometer twice a day | Water temperature 82°C  
Check water temperature  
At start up and [*] | • Re-assess adequacy of operating instructions  
• Retrain / instruct staff if procedures not followed  
• Adjust/ repair water heater |
| Contamination of meat with metal fragments from broken knife blades / band saws and chain mail | • Knives / chain mail checked for damage before and during use  
• Regular maintenance checks on cutting equipment  
• Metal detection at step [*] | Refer to operating instructions including maintenance procedures [*] and usual supervisory activities / records | • Re-assess adequacy of operating instructions  
• Retrain / instruct staff if procedures not followed |
| Contamination of meat by pathogenic bacteria / physical contaminants from cutting staff | • Trained staff instructed to follow personal hygiene rules | Refer to operating instructions including personal hygiene procedures [*] and usual supervisory activities / records | • Re-assess adequacy of operating instructions  
• Retrain / instruct staff if procedures not followed |
| Growth of pathogenic bacteria on meat due to poor temperature control from being too long in cutting room | • Cutting room maintained below [*]°C  
• Trained staff instructed to ensure product spends less than [x] minutes in cutting room | Cutting room temperature below [*]°C  
Meat temperature below [*]°C  
Check meat temperature [*] times a day | • Move product to chiller  
• Investigate the cause of high temperatures, amend procedures / repair temperature control equipment / monitoring equipment as necessary  
• Retrain / instruct staff if procedures not followed |
**Process Step 6 – Package and dispatch**

<table>
<thead>
<tr>
<th>HAZARDS &amp; CAUSES</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Growth of pathogenic bacteria due to inadequate temperature control at dispatch</td>
<td>• Carcasses / product chilled before dispatch below [x] °C &lt;br&gt; • Vehicle container chilled below [y] °C before loading</td>
<td>Product temperature below: &lt;br&gt; 7° C for large wild game &lt;br&gt; 4° C for small wild game &lt;br&gt; Vehicle air temperature below [y] °C before loading</td>
<td>Check carcase / product temperature before loading using calibrated disinfected temperature probe &lt;br&gt; Check vehicle temperature before loading</td>
<td>[Sample from each load] &lt;br&gt; [Each vehicle]</td>
</tr>
<tr>
<td>Contamination of carcases / product by pathogenic bacteria from outer packaging during packing/loading process</td>
<td>• Trained staff instructed in packing/loading procedures, including transport of game birds / product in food grade polypropylene crates palleted and over-wrapped</td>
<td>Refer to operating instructions including packing and loading procedures [*] and usual supervisory activities / records</td>
<td></td>
<td>▪ Re-assess adequacy of operating instructions &lt;br&gt; ▪ Retrain / instruct staff if procedures not followed</td>
</tr>
<tr>
<td>Contamination of carcases / product by pathogenic bacteria, physical, chemical contaminants from dirty vehicles</td>
<td>• Cleaning and maintenance schedule for vehicles followed</td>
<td>Refer to operating instructions including cleaning and maintenance procedures [*] and usual supervisory activities/records</td>
<td></td>
<td>▪ Re-assess adequacy of operating instructions &lt;br&gt; ▪ Retrain / instruct staff if procedures not followed</td>
</tr>
<tr>
<td>Contamination of carcases by pathogenic bacteria from loading staff</td>
<td>• Trained staff instructed to follow personal hygiene procedures</td>
<td>Refer to operating instructions including personal hygiene procedures [*] and usual supervisory activities / records</td>
<td></td>
<td>▪ Re-assess adequacy of operating instructions &lt;br&gt; ▪ Retrain / instruct staff if procedures not followed</td>
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