Title: Managing aerial shooting – principles for consideration

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Approved by: Animal Health Committee

Revision history:

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NASOPs support national consistency and provide guidance to response personnel undertaking operational tasks.

1. Purpose
   - To provide the principles that may be considered prior to the aerial destruction of animals during an emergency animal disease (EAD) response.

2. Application/Scope
   - This NASOP should be applied by those planning for the destruction of feral or unmanageable animals as part of an EAD response and the destruction is to be done by shooting from a helicopter.
   - Use of other destruction methods delivered from the air, for example, baiting, are not covered in this NASOP.
   - These principles should be combined with any jurisdictional operational policy that applies and should be used within the constraints of particular circumstances.

3. Resources/equipment
   - This should be guided by:
     - jurisdictional policies, SOPs and Work Instructions relating to the shooting from helicopters; and
     - the plan developed for the property/area involved.
   - Where no jurisdictional policies or procedures are available, contact can be made with Biosecurity Queensland through 13 25 23 to request access to the Biosecurity Queensland (BQ) Helicopter Destocking Manual (Operational Procedures and Guidelines) and relevant SOPs and Work Instructions.

4. Warnings
   - The plan developed using these principles must be approved by the Incident Manager prior to implementation.
   - The costs of helicopter destocking operations are substantial and will increase if using turbine powered helicopters.
   - The nature of the task—shooting from low flying helicopters over rough terrain in unfavourable climates—poses very high safety risks for operators and ground staff.
   - Planners need to be aware that aerial destruction of animals can attract close or adverse media coverage; a communication strategy needs to be developed in advance.
   - Officers in charge of helicopter tasks must be clearly identified and take responsibility for keeping tight controls over the operation to maintain safety levels and to ensure the operation remains effective and efficient.
• Prior training and/or some form of accreditation of those involved with managing the operations and of those conducting the shooting from the helicopters is essential.
• Shoot only the target species of the correct ownership; do not shoot other species opportunistically during the operation.
• Warnings, risks and risk management procedures should be included into jurisdictional SOP’s and Work Instructions that support this NASOP.
5. Description of activities

- Manuals, SOPs and Work Instructions of the operating jurisdiction should be referred to concurrently with this NASOP. Where these are not available, refer to the BQ, Qld Helicopter Destocking Manual (Operational Procedures and Guidelines) and the BQ, Qld Firearms Training Manual.
- Shooting from a helicopter centres on two major considerations:
  - getting the job done both effectively and efficiently, and
  - doing the job safely and humanely.
- Conduct of an aerial shooting operation requires a sequence of steps to be followed, and include:
  - planning
  - choice of helicopter company, pilots and personnel
  - operating procedures
  - inspection of designated area of operations
  - shooting protocols, and
  - reporting.

5.1 Planning

- Comprehensive and thorough planning is essential to ensure the effectiveness, lawfulness, efficiency and safety of helicopter destocking operations and must be done before any operations commence. The value of such planning cannot be overstated. Risk management should be used as an integral part of the planning process. The following aspects must be addressed.
  - **Legalities** - ensure the operation and the nature of the shooting activities has a clear, legally sound basis.
  - **Consultation** - with managers, land owners, stock owners and neighbours well in advance to discuss the nature and timing of your intended operation and obtain as much information as possible for the task.
  - **Mapping** - quality maps showing legal property boundaries, fences, paddocks, features, obstacles and infrastructure. Neighbouring holdings, give and take areas and relevant internal fencing should also be shown.
  - **Orientation and familiarisation** - thorough ground surveys first followed by familiarisation flights by helicopter. Identify features with GPS.
  - **Logistical planning** – access to property, resources, manpower, aircraft.
  - **Search & rescue (SAR) planning** - should be based on the principle that the on-site team is responsible for and capable of initiating and implementing its own SAR plan, using specialist rescue/evacuation services as necessary.
  - **Operational planning** - daily operational plans should be developed for best use of resources. Reference material is available from the jurisdiction or from BQ to assist with specialist equipment, alternative approaches, searching/flying approach/patterns, containment/avoiding dispersal, safe operating procedures.
  - **Briefings** - a senior operational officer should conduct daily briefings (or more frequent, as necessary) to inform team members and co-ordinate activities.
5.2 Choice of helicopter company and pilots

- The selection of a competent helicopter operator/company is probably the single most important element of helicopter shooting efficiency and safety.
  - Aerial mustering operators/companies are normally preferred as they use similar skills in terms of low flying, spotting ability and animal behaviour experience.
  - Good mustering pilots should be selected as they usually have the desirable skills.
  - Whenever possible, larger, more powerful helicopter types are preferred.

5.3 Choice of personnel

- Once selected, only the officer in charge (OIC) and the chosen aerial shooting team should be allowed within the designated area of operations. Non essential people should be excluded.
  - When engaged in shooting operations, only personnel essential to the shooting operation can be carried in the helicopter.
  - Shooters should have received prior training/accreditation and then be briefed before participation.
  - It is essential to clearly identify the OIC.
  - A deputy OIC should be nominated to assume control as necessary.
  - Pilot numbers should be planned and controlled so that pilots fly within legal limits and avoid cumulative fatigue effects.
  - A Senior Pilot can be appointed to manage the activities of the other pilots including rotation or stand down of pilots.
  - Operators may have exemptions from Civil Aviation Safety Authority to fly long hours. The OIC should sight any such exemptions before commencement of the operation.

5.4 Operating procedures

- The OIC should:
  - ensure the chain of command is clear and understood by all team members, and
  - brief the whole team daily.
- Maintain confidentiality and a professional approach at all times, particularly with the use of radios and other communications.
- Planning must ensure safety is not compromised.
- Some flexibility needs to be allowed so pilots and shooters can apply initiative and experience to individual situations.
- Any deviation from daily plans must be communicated to all air crews and ground crews.
- SAR capability must be present and responsibilities clearly assigned.
- Communications must be used and must allow all teams to communicate with each other.
- Helicopters should work in pairs.
- All teams must be aware of the safety procedures developed for the operation and how to respond in different situations, e.g. field of fire when working in pairs, etc;
- Obstacles and other critical features should be flown over and the team should familiarise themselves with them before shooting commences.
- Contingency plans should be developed. The default contingency plan should be to cease operations until the issue is rectified and/or normal operations can recommence.
- Fuel management safety requires close attention. Refuelling is a pilot's task.
- If staff are to be landed from helicopters, this task must be included in operational plans so coordination and workplace health and safety issues are addressed beforehand.
- Field experience shows that planners should multiply the number of animals thought to be present by threefold.
• Keep accurate details of all animals shot. Ask the pilot to keep a running tally as well. Record all neighbours’ animals shot.

5.5 Inspection of Designated Area of Operations
• The operations centre will define the area of operations and will define the animals to be destroyed within this designated area.
• Inspections of the designated area of operations should be done before shooting operations begin to familiarise teams with the area, its obstacles and the location and temperament of the target species. This can be done both by ground and air.
• When destocking, paddock inspections should be done after completion of the operation to ensure the target species has been reduced to the desired level.
• Follow sound and consistent inspection procedures appropriate to the locality.
• Appropriate search patterns for the locality should be used.
• Grid pattern searches may be useful, especially on the final inspection.

5.6 Shooting protocols
• Where relevant to the target species, obtain and be able to recognise all brands and earmarks of the destocking property and its neighbours.
• Shoot only the target species.
• Ensure wounded animals are not left behind.
• Inform all affected parties prior to inspections and operations and keep records of notifications.
• Keep the owner/manager fully informed of the details of their property program and actions that are taking place. Be mindful of the situation they are in.
• Owner participation will help establish mutual agreement and trust.
• Keep permanent records of activities and property programs.
• Grid pattern searches may be useful, especially on the final inspection.
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• Use only qualified officers who have the necessary statutory appointments to perform the duties.

5.7 Reporting
• The OIC must ensure there are regular reports provided back to the operations centre as per agreed schedule.

6. References
• Biosecurity Queensland Helicopter Destocking Manual (Operational Procedures and Guidelines)
• AUSVETPLAN Manuals – Destruction, Disposal, Wild Animals Response Strategy and other relevant manuals
  – AUSVETPLAN manuals are available at http://www.animalhealthaustralia.com.au
• Jurisdictional legislation
• Jurisdictional SOPs and Work Instructions relating to aerial shooting.

7. Appendices
• Nil