



Question to EURCAW-Poultry-SFA

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Level: Catching; Handling

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Background context provided by the solicitor

The requestor is presently organising an avian influenza training exercise in relation to turkeys. This will involve the catching of turkeys in a loose house and i) their placement in cages for onward transport, ii) their placement in units for gas killing and the killing process itself and iii) their placement in a restraining device, e.g. an inverted cone to facilitate on-site captive bolt euthanasia, and the killing process itself.

The query relates to the optimal methods of corralling and catching turkeys in a loose house that minimises stress and injury to the birds, (as well as stress to the stockperson), the best practice in handling and carrying an individual turkey for placement in a cage for transport/killing and also in a cone for captive bolt euthanasia. The requestor is also interested in the optimum restraint devices for captive bolt euthanasia.

Question

What are the optimal methods of corralling and catching turkeys in a loose house that minimize stress and injury to the birds?

What are the best practices for manual handling and carrying an individual turkey for:

- i) placement into a cage for onward transport,
- ii) for placement into a containerized unit for gassing and
- iii) for placement into a cone for captive bolt euthanasia?

What are the best/optimum turkey restraint devices available for the purposes of captive bolt euthanasia?



Answer

What are the optimal methods of corralling and catching turkeys in a loose house that minimises stress and injury to the birds?

During catching and loading, birds are exposed to the following relevant welfare consequences: handling stress, injuries, restriction of movement and sensory overstimulation (EFSA, 2022). For each welfare consequence, EFSA identified animal-based measures (ABMs) and hazards and proposed both preventive and corrective or mitigative measures. Domestic birds may experience one or more negative affective states when exposed to these welfare consequences, including fear, pain, discomfort, distress and frustration. Positive human–animal relationship during rearing will habituate birds to human presence and mitigate handling stress during catching and crating (EFSA, 2022). As best practice to mitigate the effects of handling stress, birds should be herded quietly and carefully (in loose-housing systems, EFSA, 2022).

Turkeys are social birds and like to stay and move together in flocks. In fact, they usually move away as a group when approached by handlers.

When corralling turkeys, the handler should be using principles of the “flight zone”. The “flight zone” is the animal's personal space and is used as an indicator of impending threats. The flock itself will also have a defined “flight zone”, which determines how close the handler may approach the flock before they all move away as a group. The size of the “flight zone” will vary depending on the bird's familiarity with human contact. To move turkeys, the handler should place himself at the opposite side of where he wants to move the birds and gently push them. Using the flock “flight zone” to herd birds can work to reduce stress on the flock and make moving or catching birds easier and faster.

There are some special considerations when herding turkeys since, unlike other poultry they will often move towards a human when he or she first approach the birds. Having feed and drinker lines raised to the ceiling of the building is very important when driving or herding turkeys, to avoid injuring the birds.

When herding floor reared birds, it is best to divide the flock into smaller groups (depending on the layout of the farm e.g. 10-20 birds) for easier movement and also to prevent herding the same bird back and forth several times which will increase fatigue and risk of heart failure to the bird.

Waving items such as flags or a garbage bag on a stick may aid in herding turkeys (fig.1). Due to their large size, turkeys can get stressed easily if walking too far or too fast. When herding these birds, move them slowly and allow some occasional resting breaks for the birds. Also, use gates or nets to corral them and to avoid them returning to their original position inside the barn.

When moving turkeys, walk slowly when nearing the birds. All movements must be **slow and steady**. Do not let the birds jump on each other. **Sudden movements can panic the entire flock** and this can cause injury to birds. Additionally, if approached too quickly, birds may jump up or try to fly to escape and this can potentially injure the bird as well as the handler; it also stirs up dust, making working conditions difficult.

Turkeys are **very sensitive to light** and bright lights can distress them. When possible, lights should be dimmed to keep the birds calm during movement. Even bright or white colour clothing can stress birds. When



possible, crew members moving turkeys should wear dark coloured clothing. As with other poultry species, turkeys are stressed by **loud noises**.

The presence of unfamiliar persons can stress birds, however this is most likely unavoidable during an animal health emergencies. Herding and handling as quietly as possible will help keeping the stress to the birds at a minimum. Gently nudging birds to move them forward could be done, while on the contrary, kicking or striking, pressing sensitive body parts, lifting/dragging by the bird's neck/head/wing/tail, using an electric shock/sharp instrument or holding its eyes (Alberta Farm Animal Care 2017) will severely impair birds welfare. If a turkey is reluctant to walk, it may be carried and placed gently on the loader, provided there is no evidence of injury. Turkeys must be carried by one or two legs (just above the feet) and one wing such as described in figures 3 and 4.

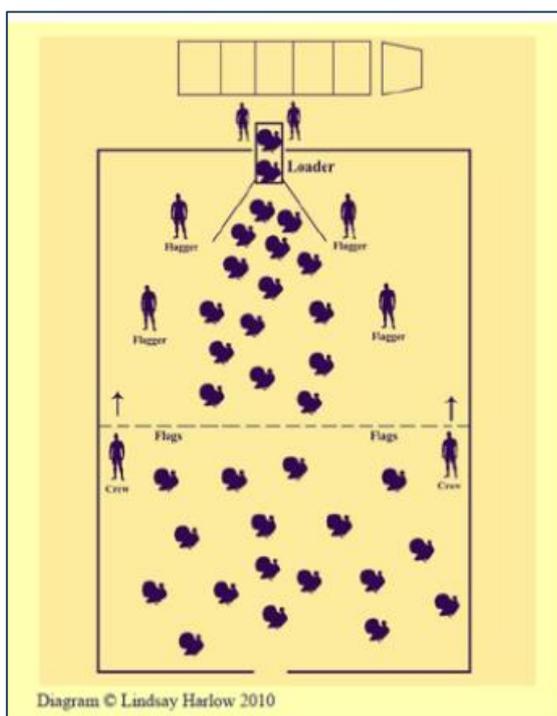


Figure 1. Flag use during turkey handling (Credit to: Poultry handling and transportation manual, 2017)



Figure 2. Flag use in turkey corraling (Credit to: Anja Riber)

Once the turkeys have been captured and restricted into an area, it is important to monitor the birds' condition and activity levels for signs of overheating or lack of air. Birds that are overheated will have red-flushed faces, snoods and wattles. They will have open-mouthed breathing and rapid panting. If there is limited oxygen to the flock due to overcrowding, the birds will be gasping and stretching their neck to breathe; their snoods and wattles will have a purple coloration. As capture and containment progress, monitor the flock closely for birds piling up along the edges of the catch pen. This can lead to suffocation of the birds on the bottom of the pile. If the birds begin to pile, they must be separated immediately to avoid smothering. To reduce risk of smothering fences used to move the birds must be in wire mesh and if necessary, lift the bottom of the net to allow some of the birds to escape (this may occur in particular in the case of small birds or poults).

Turkeys should be herded to the pre-loader/loader ramp **slowly** and in **small groups**. In fact, putting smaller groups of birds on at a time will help keep birds calm and will allow the stockpersons to maintain a slow, steady belt speed. Stuffers (who catch turkeys at the top of the conveyor) should grab the base of one wing with one hand and the legs with the other to gently guide the turkey into the container.

What are the best practices for manual handling and carrying an individual turkey for placement into a cage for onward transport and for placement into a containerised unit for gassing?

In the case of manual catching, heavy turkeys are grasped with one hand by the two legs, from behind and lowered onto their breast. With the other hand, the shoulder of the wing furthest away is grasped to lift and carry the bird (EFSA 2022).

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Heavy turkeys (above 5 kg) can also be directly grasped by the base of one wing with one hand and the contralateral shank with the other, lifted and carried close to the stockpersons body.

For crating, birds are grasped by the base of the wings, with one hand and the contralateral leg (or both legs) with the other hand and pushed into the crate sliding the keel bone on the floor of the crate with the bird's head facing forward. (EFSA 2022)

Smaller turkeys (<= 1kg) can be lifted by placing one hand on each side of the body, over the wings with the legs hanging free. To do this, cup both hands around the body of the bird with your thumbs near the backbone and your fingers over the wings and around the breast. Then, gently shift the bird so that the breast is in the palm of one hand and provide additional support by gently grasping both legs with the other hand. (www.AviagenTurkeys.com)

Poults can be picked up individually gently grasping the bird from above in the palm of the hand covering the wings and holding the birds head between the index and annular finger.

Poults can also be picked up in groups of four or five by lifting them from below, using hands as a scoop and gently restraining the bird's legs between your fingers.

What are the best practices for manual handling and carrying an individual turkey for placement into a cone for captive bolt euthanasia?

Turkeys are very strong birds with powerful legs and wings. As the HSA recommends (HSA Practical Slaughter of Poultry, 2021), to handle a turkey, the stockperson should reach from behind with one hand and take secure hold around both legs, gently lower the bird onto its breast, then slide their free arm over the wings and under the body. Later, the stockperson should lift the bird to his/her body. The stockperson can then transfer both legs into his/her other hand and use his/her free hand to control the wings.



Figure3. Manual handling and restrain a turkey. (Credit to: IZSLER)

Due to the strength of turkeys, the stockperson should take secure hold around both legs with one hand rather than securing the legs between his/her outstretched fingers. Turkeys may be immobilized and lifted by the legs and the shoulder of the wing furthest away from the stockperson. Later, the bird should be placed inside the cone in head-down.

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To avoid having to lift heavy turkeys for stunning, they may be manually restrained on the ground by taking hold of the legs in one hand and gently lowering the bird onto its breast (figure 4).



Figure 4. Manual handling and restrain a turkey. (Credit to: HSA Practical Slaughter of Poultry, 2021)

Small or young turkeys may be lifted using the same method as for chickens. That is picking up the animal by placing both hands securely over the wings to prevent flapping. Once the bird is held, one hand should be slid under the body and firmly clenched the legs between your outstretched fingers (positioning one or two fingers between the legs) and support the bird's breast on the palm of the same hand. The wings can then be controlled by the opposite hand or by holding the bird against stockpersons' body, under their arm (figure 5).



Figure 5. Manual handling of a small turkey. (Credit to: HSA Practical Slaughter of Poultry, 2021)



What are the best/optimum turkey restraint devices available for the purposes of captive bolt euthanasia?

To ensure accurate captive bolt placement and stockperson safety, the turkey must be correctly restrained. The use of restraint devices allows that only one stockperson is enough to carry out the restraining and euthanasia. Otherwise, if the restraining is manual, two stockpersons are needed one for holding the animal and another for shooting (EFSA, 2019). Various methods of restraint are used to calm birds and reduce the risk of accidental injury for both the bird and stockperson during slaughter.

When using a **cone**, first ensure that the cone is the right size for the bird. The turkey should be placed inside the cone in head-down to contain wing flapping. As this process involves inversion, the animals can experience pain and fear (EFSA, 2019). For this reason, the stockperson should always be ready to slaughter the bird immediately after restraining it. It's very important that the time for which birds are restrained in a cone prior to stunning should be as short as possible. It is a good idea to maintain hand contact with the bird head for the first few seconds it is in the cone as this will help calm the animal.



Figure 6. A cone used to restrain a turkey, the beak should be hold when applying the captive bolt. (Credit to: IZSLER)

Alternatively, the birds can be restrained in a **plastic bin** of an appropriate size. It has to be placed upside-down, over top of the body of the bird to contain wing flapping and leg movements. The turkey should be placed on the floor in a sternal recumbent position with its keel on a solid and flat surface. In these cases, a slot should be cut out from the end of the bin to allow the head to be accessed from outside of the box, without causing any injury to the neck.



Figure 7. A plastic bin used to restrain a turkey. (Credit to: Evaluation of Two Models of Non-Penetrating Captive Bolt Devices for On-Farm Euthanasia of Turkeys, 2018)

References

- Alberta Farm Animal Care 2017. Poultry handling and transportation manual. High Riber. 88pp. Available from: <https://www.afac.ab.ca/wp-content/uploads/2019/02/Poultry-Handling.pdf>
- European Commission. 2018. Factsheet how to handle and restrain poultry. Available from: https://food.ec.europa.eu/system/files/2021-08/aw_prac_slaughter_factsheet-2018_handle_poultry_en.pdf
- 4. EFSA Panel on Animal Health and Welfare (AHAW): "Killing for purposes other than slaughter: poultry", EFSA Journal 2019;17(11):5850
- HSA (Humane Slaughterhouse Association). 2021. Practical Slaughter of Poultry.
- Wheathampstead, UK. 43 pp. Available from: <https://www.hsa.org.uk/downloads/publications/practicalslaughterofpoultrydownload-cm-updated.pdf>
- Woolcott, Caitlin R., Stephanie Torrey, Patricia V. Turner, Lilia Serpa, Karen Schwean-Lardner, and Tina M. Widowski. 2018. "Evaluation of Two Models of Non-Penetrating Captive Bolt Devices for On-Farm Euthanasia of Turkeys" Animals 8, no. 3: 42. <https://doi.org/10.3390/ani8030042>