

Board Research Initiative Request for Proposals

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Euthanasia of Large Poultry

Background

The current euthanasia standards used by the poultry industry are the 2013 AVMA euthanasia guidelines, which state methods acceptable for euthanasia of poultry. However, the AVMA guidelines do not include a list of approved tools or criteria that must be met in order for a tool or mechanical system to be acceptable for euthanasia. For individual poultry, manual cervical dislocation is the primary method of euthanasia on farms, but may not be appropriate for large poultry or may not be the preferred method for farm staff. As an alternative, various tools have been developed for on-farm euthanasia of individual large chickens and turkeys including mechanical cervical dislocation, captive bolt, and gas euthanasia. However, none of these tools or systems is officially endorsed, and there are no provided criteria or means of verifying if tools meet the standards for euthanasia according to the AVMA guidelines. There is a need to objectively evaluate the safety, functionality and humane outcome of mechanical tools and systems that can be used for poultry euthanasia to meet the AVMA performance standards.

Research Questions

The objective of this RFP is to solicit proposals to address the following questions:

- Does the use of mechanical cervical dislocation, captive bolt, or CO₂ gas chambers provide humane euthanasia in large chickens and turkeys?
 - Can the tool be administered in a reliable manner (repeatable)?
 - Can the tool be applied safely and by a sole operator?
 - Can the tool be administered in a way that causes minimal pain and distress for the bird?
 - What is the time to unconsciousness or insensibility of the bird with each tool? Is this different for chickens and turkeys? Is this different for birds of different ages or sizes?
 - What practical clinical signs should be verified for insensibility and death after using the tool or mechanical system?
 - Does the tool result in irreversible euthanasia? Or, does it result in stunning of the bird, but not immediate death?
 - Is a secondary method required to effectively kill the bird if the primary tool results in stunning?
- Are there new or innovative methods to address euthanasia of large poultry?

Areas of Focus

- Objective measures to evaluate whether mechanical tools and systems provide humane euthanasia in large chickens and turkeys.
- Evaluation of mechanical cervical dislocation, captive bolt, and gas chambers as alternatives to manual cervical dislocation for humane on-farm euthanasia of large chickens and turkeys.

Proposal Submission

Researchers should submit only a maximum two-page pre-proposal summary that describes the parts of the objectives they wish to address and what they propose to do. A title, the researcher's name, affiliation, and email address should be included in the pre-proposal. Details of procedures or specifics of the budget should not be included in the pre-proposal submission. Pre-proposals should be submitted in Microsoft Word format to Debbie Jorgensen at djorgensen@uspoultry.org. **DEADLINE FOR PRE-PROPOSAL SUBMISSION IS NOVEMBER 1, 2017.**

The outcome of the pre-proposal review will be one of three responses from USPOULTRY:

- Send a full research proposal for consideration.
- Please make specific modifications in what you are proposing and send a full proposal.
- Do not send a full research proposal.

Full proposals will follow established USPOULTRY guidelines as seen at www.uspoultry.org. Funds can be used for graduate students, technicians, research supplies, and work and meeting travel. Funds cannot be used for professional (faculty or postdoc) salaries or equipment purchase. Up to 15% overhead is allowed. No budget, including overhead, may exceed \$125,000.