

**SOUND AGRICULTURAL PRACTICE**  
**Opinion Number 06-2**

**SUBJECT:** Request for an opinion pursuant to Section 308 of the Agriculture and Markets Law as to the soundness of a certain agricultural practice conducted by Charles D. Anken in the City of Rome, Oneida County.

**REQUESTER:** Joseph Mellace, Esq.  
314 North James St.  
Rome, New York 13440

**Preliminary Statement**

By letter, dated September 23, 2005, Joseph Mellace, Attorney for Charles D. Anken, requested that the Department review the soundness of an agricultural practice conducted by Mr. Anken. Mr. Mellace requested that the Commissioner issue an opinion as to the soundness of the use of a propane cannon, from a noise perspective, for the protection of crops grown by Mr. Anken on three separate parcels located within the City of Rome. Mr. Mellace indicated that the City of Rome has received noise complaints as a result of Mr. Anken's use of the cannon on the three properties. According to information provided by Mr. Mellace, Mr. Anken was cited by the City of Rome for allegedly violating the Rome Code of Ordinances Section 80-25.6 (c) (iv) (c), with regard to the discharge of a corn gun (propane cannon) at a parcel located on Merrick Road, City of Rome on August 14, 2005 more frequently than at fifteen minute intervals. As of this date, there has been no disposition of the matter.

The Department conducted a sound agricultural practice review of the use of the propane cannon by Mr. Anken. The following information and findings have been considered in reaching this Opinion.

**Information Considered in Support of the Opinion**

1. Charles Anken owns and operates a crop farm located on Turin Road in the City of Rome, Oneida County. He owns approximately 60 acres and rents approximately 440 acres and uses the land for the production of forage crops, small grains, grain corn and sweet corn. Department records indicate that the three parcels in question (19.90 acres on Merrick Road, 23.70 acres on Turin Road, and 4.86 acres on Turin Street) are not located in an agricultural district. The parcels do not receive an agricultural assessment.
2. On November 29, 2005, Matt Brower, Department Agricultural Resource Specialist, and a Certified Crop Advisor, visited the Anken farm to gather information on the practice. Mr. Anken informed Mr. Brower that he has used a propane cannon on these properties for at least 25 years to protect

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his sweet corn crops from damage caused by red winged blackbirds. Mr. Anken indicated that he has two cannons, but only uses one at a time.

3. Mr. Anken stated that a cannon has been used from approximately the middle of July until the middle of September and is rotated from one field to another every 2-3 weeks. He stated that a cannon has been used seven days a week from approximately 6:00 or 6:30 a.m. until no later than 9:00 p.m. However, Mr. Anken indicated that he has forgotten to turn the cannon off before 9:00 p.m. on two or three occasions each year and those times did so at 12 a.m. or 1 a.m. Mr. Anken stated that the cannon has been set to fire at 3-5 minute intervals. He also stated that he does not use the cannon unless bird damage is observed. According to Mr. Anken, he has not used visual deterrents to prevent bird damage.

4. Mr. Anken stated that he sets the cannon to fire more frequently (3-5 minutes) in the morning and, indicated that on occasion when he has time to get to the field, he resets the cannon to fire less frequently (up to every 30 minutes) in the middle of the day when the birds are not feeding as heavy. If the bird pressure increases again at the end of the day, he resets the cannon to fire more frequently. He also indicated that while he has tried a longer firing interval during heavy feeding times in the morning and late day, the cannon shot at those intervals did not provide adequate protection.

5. Mr. Brower observed during his November 29, 2005 site inspection that the three fields under review are surrounded by residences. He also observed that there is very little vegetative buffer between the fields and the residences. Mr. Brower noted that it is difficult to position the cannon very far from the residences because of the size of the fields and the population density.

6. The Department mailed a letter to 46 landowners having property adjacent to the three properties under review, notifying them of the agricultural practice review and inviting comments on the practice. The Department received twelve responses. Eight landowners indicated that they are not opposed to the use of the cannon to prevent bird damage and four landowners indicated that they object to the use of the cannon.

7. Of the eight landowners that expressed no objection to the use of the cannon, two indicated that other noise in the area is more offensive. Several indicated that they understand the need for the cannon for crop protection. Three indicated that the noise from the cannon was comparable to other noises in the neighborhood.

8. Four landowners indicated that they object to the use of the propane cannon. Two indicated that the noise from the cannon interferes with their quality of life, upsets their dog, and causes stress. None indicated that they had experienced any bodily harm or property damage as a result of the cannon use.

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9. City of Rome Zoning Ordinance Section 80-25.6(c) (iv) (c) provides that “[o]peration of agricultural equipment or devices [is allowable] between the hours of 6:00 a.m. and 10:00 p.m. except that impulsive sounds emanating from corn guns shall not be discharged more frequently than at fifteen (15) minute intervals in residential districts and/or within five-hundred (500) feet of a residential district boundary.” In a letter to the Department dated November 8, 2005, Joan K. Harris, Assistant Corporation Counsel for the City of Rome, stated that the three parcels in question are all located in a residential zoning district. Ms. Harris also stated that during 2004 and 2005, the City of Rome Code Enforcement Department received complaints concerning the frequency of the cannon firing and the hours during which the cannon was used. Ms. Harris indicated that the cannon fires “every two (2) minutes during all hours of the day and night.”

10. In her letter, Ms. Harris states that prior to 2004, the use of the propane cannon was not regulated by the City of Rome. However, when the current zoning code was adopted in 2004, restrictions were placed on the use of propane cannons to address the increase in residences located adjacent to farmland. Ms. Harris also indicates that the City has attempted to be sensitive to the needs of agricultural operators by not prohibiting the use of such cannons. Ms. Harris explained that the limitations concerning the use of propane cannons were included in the ordinance “in the interest of protecting the health, safety, and welfare of the citizens of Rome.” While indicating that citizens have been awakened by the cannon or were unable to sleep and that the cannon “emits nerve-shattering blasting noises,” Ms. Harris does not identify any specific bodily harm or damage resulting from the use of the cannon.

11. On January 3, 2006, Mr. Brower contacted Paul Ziminski, Codes Enforcement Officer for the City of Rome, for information concerning complaints that his office has received. Mr. Ziminski reported that numerous complaints were received about the use of the cannon at the Anken properties during 2004 and 2005. Mr. Ziminski indicated that Mr. Anken was cited for violations of the City’s Zoning ordinance in 2004 and 2005.

12. A fact sheet of the Ontario Ministry of Agriculture, Food and Rural Affairs<sup>1</sup> includes a statement that “[u]nchecked, birds can completely destroy an entire crop. A flock of 5000 starlings can consume up to 1 ton of food over a 10 day period.” The fact sheet also points out that bird damage is increasing because “bird populations are increasing, and there have been changes to migration patterns due to climatic changes.” According to the document, birds usually feed early in the morning around sunrise and late in the afternoon around sunset.

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<sup>1</sup> Fraser, Hugh W., K. H. Fisher and I. Frensch. Bird Control on Grape and Tender Fruit Farms. Ontario Ministry of Agriculture. 1998, pp. 1-11.

13. Information in the Ontario fact sheet indicates that birds do not react nearly as much to visual deterrents as they do to acoustical ones. It further indicates that visual deterrents are usually add-ons to acoustical systems and visual deterrents rarely provide sufficient protection by themselves. The Ontario Ministry recommends an integrated approach to controlling bird damage, including:

- Using a combination of scaring methods that affect the bird's sense of sight and sound and create a sense of fear;
- Position devices along the perimeter of the area to be protected, near trees and at entry areas.

14. The fact sheet indicates that "Although the loudness of the blast is important, it is the unexpected nature of the blast that keeps birds nervous. Units should *never* blast at intervals of less than 3 minutes. Birds quickly get accustomed to units that are stationary, shoot at regular intervals, or fire very rapidly."<sup>2</sup>

15. The fact sheet contains a recommendation that growers get an early start on their control program. "Bird control equipment *must* be in place at least 10 days before the crop is attractive to the birds, usually when it is colouring, softening, sweetening, depending on the crop. For early control, propane-fired cannons...should be set to run *infrequently*. This might be an interval *average* of 10 minutes for the randomized firing/sound sequences. For a typical control season of 8 weeks, the interval *average* should decrease about 1 minute per week. However, as stated earlier, the interval *average* should *never* be less than 3 minutes, since this would reduce the equipment's effectiveness."<sup>3</sup>

16. On January 3, 2006, January 13, 2006, and April 13, 2006, Department staff contacted Dr. Paul Curtis, Extension Wildlife Specialist at Cornell University, to obtain information on the control of birds in corn crops. Dr. Curtis stated that firing intervals need to be based upon site specific conditions such as the type of crop, bird pressure, type of birds, and proximity to nesting areas. Dr. Curtis indicated that he has found no research establishing the longest firing interval that can be used and still achieve adequate crop protection. However, he indicated that shorter firing intervals could be less effective because birds may "habituate to the noise" faster. Dr. Curtis indicated that the Ontario Fact sheet approach of decreasing the interval average by one minute each week but never less than 3 minutes sounded reasonable; however, it is not an exact science. Dr. Curtis indicated that typically red wing blackbirds and grackles feed on corn. He indicated that

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<sup>2</sup> Id, at page 5.

<sup>3</sup> Id, at page 12.

generally a 5-10 minute interval seemed reasonable to protect a corn crop from red wing blackbirds and grackles; however it is very site specific. Dr. Curtis indicated that new cannons cost approximately \$300 to \$400 and have adjustable intervals, random timing features and light and dark sensors.

17. Agriculture and Markets Law §308, subdivision 1, paragraph b requires that the Commissioner consider whether an agricultural practice is conducted by a farm owner or operator as part of his or her participation in the Agricultural Environmental Management (AEM) program as set forth in Agriculture and Markets Law Article 11-A. Mr. Anken does not participate in the Agricultural Environmental Management program.

### Findings

Based upon the facts, information and circumstances described above, and in consultation with the Advisory Council on Agriculture; the New York State College of Agriculture and Life Sciences at Cornell and the Sound Agricultural Practice Guidelines<sup>4</sup> by which agricultural practices are evaluated, I find the following:

1. The City of Rome's Zoning Ordinance places restrictions on the use of propane cannons, including a limitation on firing intervals to no less than 15 minutes in residential districts. Mr. Anken was cited for allegedly violating this ordinance on August 14, 2005, although there has been no disposition of the matter as of this date. The Department has found no evidence or received other information indicating that Mr. Anken has been cited for any violation of federal or state law as a result of the use of the cannon.
2. The Department has received no evidence that Mr. Anken's use of a cannon to protect crops from bird damage has resulted in bodily harm or property damage off the farm. A letter was sent to forty-six neighboring landowners requesting comments on the use of the cannon. Twelve responses were received of which four complained about the cannon use generally. While two landowners stated that the cannon adversely impacts their quality of life and causes stress, they did not claim bodily harm or property damage.

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<sup>4</sup> On November 1, 1993 the NYS Advisory Council on Agriculture published its report entitled *Protecting the Right of New York Farmers to Engage in Sound Agricultural Practices*. The Council developed guidelines to assist the Commissioner of the Department of Agriculture and Markets in determining what is sound pursuant to Section 308 of the Agriculture and Markets Law. The Guidelines state that the practice 1) should be legal; 2) should not cause bodily harm or property damage off the farm; 3) should achieve the results intended in a reasonable and supportable way; and 4) should be necessary. The sound agricultural practices guidelines recommended by the Advisory Council on Agriculture are given significant weight in assessing agricultural practices.

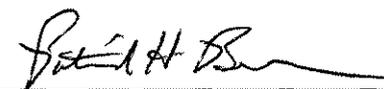
3. Mr. Anken's use of the propane cannon to protect against bird damage generally achieves the intended result in a reasonable and supportable way. While allowing the device on a few occasions to continue firing while not needed for such protection is not supportable, that occurred only a few times and due to inadvertence. Otherwise the firing interval settings as well as the location of the cannon appear to be warranted under the site specific conditions of this situation. While Mr. Anken does not use visual deterrents, utilization of these alone would not achieve the protection provided by use of the propane cannon.
4. The use of a bird control method is needed to prevent damage to the corn crop at the Anken crop farm. Without the use of some type of bird control, there would be an adverse economic impact to the farmer as a result of the loss in crop production. The use of the cannon is a cost-effective method of protecting the corn crop.

### Conclusion

Based on the information and findings set forth above and in accordance with section 308 of the Agriculture and Markets Law, I conclude that, from a noise perspective, the use of a propane cannon by Mr. Anken for the protection of crops, as described above, is sound to the extent that the firing interval for the cannon is never less than three minutes, the firing interval is adjusted consistent with the amount of bird pressure occurring and the cannon is only used during daylight hours. In reaching this conclusion, the fact that Mr. Anken has been issued a citation alleging his violation of the City of Rome's zoning ordinance has been taken into account. Upon balancing all relevant factors, as described above, issuance of this Opinion is warranted.

June 9, 2006

Date



Patrick H. Brennan  
Commissioner of Agriculture  
and Markets