

SOUND AGRICULTURAL PRACTICE
Opinion Number 01-1

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 the Pereira Farm in the Town of Deerfield, Oneida County.

REQUESTOR: Mr. Philip M. Sacco
Supervisor, Town of Deerfield
6329 Walker Road
Deerfield, New York 13502

Preliminary Statement

In a letter to the Department dated June 7, 2000, Philip M. Sacco, Supervisor for the Town of Deerfield in Oneida County, requested that the Department review the soundness of an agricultural practice on the Pereira farm. Mr. Sacco requested that the Commissioner issue an opinion as to the soundness of the use of propane cannons, from a noise perspective, for the protection of crops grown on the farm. The Town and County do not have a noise ordinance, however, Mr. Sacco stated the Town has received several complaints concerning the noise generated by the cannons.

Pursuant to the request, the Department conducted a sound agricultural practice review of the use of the propane cannons at the Pereira farm. On July 20, 2000, Matt Brower, Department Agricultural Resource Specialist and a Certified Crop Advisor, visited the Pereira property to gather information on the use of the cannons.

Information Considered in Support of the Opinion

1. Luis and Ana Pereira own a dairy farm located at 7015 Crooked Brook Road in the Town of Deerfield, Oneida County. The farm consists of approximately 120 cows and approximately 200 acres which are owned by the Pereiras and 240 acres which are rented. According to the Department's agricultural district file, the farm is in Oneida County Agricultural District #8, which was recertified on or about January 6, 2000.
2. According to Mr. Pereira, he began using the cannons in 1998 to protect his cornfields from damage caused by crows. He stated that once he plants his corn, the crows pull the seeds out of the ground. Mr. Pereira also stated that the crows pull the young plants out of the ground and eat the attached seeds. He stated this problem occurs until the plants develop three to four leaves, which takes about 4-5 weeks. He

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indicated that he uses three cannons to protect three different cornfields. He also indicated that the cannons are not placed near houses or the road.

3. According to Mr. Pereira, the cannons are used from approximately the middle of May until the middle of June. He stated that the cannons are used between approximately 7:00 a.m. and 8:00 p.m. He also stated that the cannons generally are set to fire 5 to 10 minutes apart.
4. Mr. Pereira stated that the cannons were only used for approximately 2 weeks in 1999. However, because of cool wet weather during spring 2000 it took the corn longer to germinate and the growth rate was slower. Consequently, he needed to use the cannons for a longer period of time, approximately 4 to 5 weeks in 2000. According to Mr. Pereira, he also uses a shotgun to scare the crows. He stated that once the crows get used to the cannons and they are no longer effective, he stops using them. He also stated that he does not know of any other method of damage control that he could use that would be effective. He indicated that he would be willing to consider an alternative.
5. On October 26, 2000 Mr. Brower contacted Mr. Sacco to gather additional information relative to the use of the cannons. Mr. Sacco stated that while his initial letter indicated that the cannons were used for approximately 51 days during spring 2000, 4 to 5 weeks is probably a more accurate time span.
6. According to Mr. Brower, at the time of his visit, the cannons were not being used. Mr. Pereira showed Mr. Brower the approximate location where one of the cannons had been placed. Mr. Brower reported that two of the cannons were still in the fields where they had been used. The cannons had been placed at least several hundred feet from any houses. Also, some of the neighboring houses are screened from the cannons by a wooded area.
7. The Department mailed a letter to sixteen landowners adjacent to the Pereira property notifying them of the agricultural practice review and inviting them to comment on the practice. Only three of the landowners responded to the Department. One landowner indicated in a letter to the Department that the use of the cannons seemed to be a humane method of controlling the crows. Another landowner wrote and indicated that the cannons fire between 6:00 a.m. and 10:00 p.m.(Subsequently, the landowner stated to Mr. Brower that the cannons were turned off a little earlier than 10:00 p.m. but later than 8:30 p.m.) That neighbor also questioned the efficacy of the cannons. According to this landowner, the noise from the cannons is disturbing to her family, friends, and pets. A third landowner stated in a letter to the Department that the cannons fire between 7:30 a.m. and 8:30 p.m. She also questioned the effectiveness of the cannons and complained about the disturbance from the cannons.

8. The United States Naval Observatory Astronomical Applications Department indicates that the sun sets between 8:19 p.m. and 8:43 p.m. from mid-May until mid-June for the Utica, Oneida County, New York area.
9. On September 19, 2000 Mr. Brower contacted Dr. Paul Curtis, Extension Wildlife Specialist at Cornell University, to obtain information on the control of crows in corn crops. Dr. Curtis stated that he did not know of any other treatment that would be more effective for preventing the damage caused by the crows. He also indicated that the cannons are typically only needed from dawn until dusk. According to Dr. Curtis, the use of propane cannons is more cost effective than other control methods such as the use of scare-eye balloons. Dr. Curtis stated that there are devices available that imitate the distress call of a bird. According to Dr. Curtis, Mr. Pereira would need at least three of the devices, which cost about the same as the cannons. Dr. Curtis stated that these devices produce a great deal of noise and have not been tested in an agricultural setting during the day to determine their efficacy in controlling crows.
10. According to Ron J. Johnson, Extension Wildlife Specialist at the University of Nebraska¹, "Crows may damage seedling corn plants by pulling the sprouts and consuming the kernels." Johnson indicates that damage can be severe for individual farms. Johnson states that "Frightening is effective in dispersing crows from roosts, some crops, and other troublesome sites."
11. On January 16, 2001, Mr. Brower contacted Jeanine Broughel, an Environmental Chemist at the DEC Central Office, to gather information concerning the use of poisons or repellants for crow control. According to Ms. Broughel, *Avitrol* is a restricted use pesticide that is labeled for crow control.
12. On January 16, 2001 Mr. Brower contacted Dr. Curtis to gather information on the use of *Avitrol*. According to Dr. Curtis, one of the main problems with using the poison for crow control is that it would be available to other nontarget birds and wildlife. Dr. Curtis also indicated that neighbors would be disturbed by the sight of a crow that was in the process of dying after being poisoned by the *Avitrol*. In a letter to the Department dated January 29, 2001, Dr. Curtis stated that *Avitrol* is only labeled for use in maturing corn, not in newly sprouting corn.
13. On February 22, 2001, at the suggestion of DEC, Mr. Brower contacted Rich Chipman, the NYS Director of USDA APHIS Wildlife Service, about the use of *Avitrol*. Mr. Chipman indicated that he contacted the company that manufactures the product and was informed that one *Avitrol* product is not labeled for use in seedling corn. However, the company does have another *Avitrol* product which is labeled for use in this situation.

¹ Johnson, R.J. Prevention and Control of Wildlife Damage. University of Nebraska. 1994, pp. E33-E39.

Findings

Based upon the facts, information and circumstances described above, and in consultation with the New York State Department of Environmental Conservation; the Advisory Council on Agriculture; the New York State College of Agriculture and Life Sciences at Cornell; the USDA Natural Resources Conservation Service; and the Sound Agricultural Practice Guidelines² by which agricultural practices are evaluated, I find the following:

1. The Town of Deerfield and Oneida County do not have a local noise ordinance. The Department has found no evidence or received other information indicating that the Pereiras have been cited for any violation of federal, state or local law as a result of the use of the propane cannons.
2. Two neighbors find the cannons disturbing. However, the Department has found no evidence that the use of the propane cannons has resulted in bodily harm or property damage off the site.
3. The cannons provide a cost-effective method of protecting the corn crop and at this time, they are the most effective method for controlling crows. It appears that the cannons are positioned as far away from neighboring houses as possible while still providing adequate crop protection. There may be an *Avitrol* product that is labeled for use in seedling corn. However, the Department does not consider *Avitrol* to be a reasonable alternative because its use would pose a risk to nontarget birds and wildlife.
4. The use of the propane cannons is necessary during daylight hours. The use of some type of crow control method is needed to prevent damage to the corn crop. Without the use of some type of crow control, the Pereiras would suffer an economic loss as a result of the cost of planting and the crop production loss. While Mr. Pereira states the cannons are used only during the year when necessary and only during the daylight hours, one of his neighbors contends that the cannons have been used in later hours. The Department has been unable to completely resolve this inconsistency in regard to the time of cannon use.

² 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.

Conclusion

Based on the foregoing and in accordance with section 308 of the Agriculture and Markets Law, I conclude that, from a noise perspective, the use of propane cannons on the Pereira farm for the protection of crops grown on the farm, as described above, is sound, to the extent the cannons are used during daylight hours.

March 26, 2009

Date



Nathan L. Rudgers
Commissioner