

**SOUND AGRICULTURAL PRACTICE
Opinion Number 20-1**

SUBJECT: Request for an Opinion Pursuant to Section 308 of the Agriculture and Markets Law as to the soundness of the use of livestock guardian dogs by Joshua Rockwood of West Wind Acres.

REQUESTOR: Joshua Rockwood
West Wind Acres
144 Beebe Road
Knox, NY 12023

Preliminary Statement

On September 19, 2019, Joshua Rockwood, owner of West Wind Acres, requested that the Commissioner issue an Opinion as to the soundness of the use of livestock guardian dogs to protect his pasture raised meat chickens, egg chickens and turkeys from predation. This request arises from complaints from a neighbor about barking, particularly at night.

The Department conducted a sound agricultural practice review for the use of livestock guardian dogs on the property leased by Mr. Rockwood for the raising of livestock. For the reasons set forth below, West Wind Acres' use of livestock guardian dogs is a sound agricultural practice.

The following information and findings have been considered in reaching this Opinion.

Information Considered in Support of the Opinion

THE FARM

1. West Wind Acres, founded in 2011, is a pasture-based farm used to raise pigs, grass-fed beef cattle, spotted draft horses, chickens and turkeys. In June 2017, West Wind Acres moved from a prior location to its current location in the Town of Knox, consisting of approximately four hundred acres of leased land from Local Farms Fund. Local Farms Fund is a community impact farmland investment fund that supports young and early-stage farmers to provide a path to eventual ownership of the farmland by the leasing farmer, typically after a 5-year term.
2. West Wind Acres currently utilizes guardian livestock dogs on two parcels to protect small livestock from predation. According to tax assessment rolls for Albany County, tax map parcel number 45.-2-18 consists of 51.30 acres, and tax map parcel number 45.-2-19 consists of 52.40 acres. The tax assessment rolls also indicate that both parcels are subject to an agricultural assessment. Department records confirm that both parcels are located within Albany County Agricultural District No. 1.
3. On November 8, 2019, Dr. Robert Somers, Manager of the Agricultural Protection Unit and Judy Littrell, Senior Environmental Analyst of the Agricultural Protection Unit, completed a site visit at West Wind Acres with Mr. Rockwood to examine the use of four Maremma livestock guardian dogs used to protect from predation pasture raised flocks consisting of about three thousand meat chickens, three hundred layer chickens, twenty-five turkeys and two hundred pigs. As observed by Department staff, parcel number

45.-2-19 includes the farmstead, pastures and land for hay production. Parcel number 45.-2-18, north of the farmstead, includes pasture and forest land.

4. The West Wind Acres business plan indicates that Mr. Rockwood raises pasture-based/free range chickens and livestock as a marketing specialty. The farm's goal is to provide locally produced, nutritionally dense meats to consumers throughout the northeast region of the United States, including Rhode Island, Massachusetts, Connecticut and New Jersey. At this time, however, the majority of the farm's products are sold locally at the retail level, either through a retail location at the farm, or through the Community Supported Agriculture (CSA) system.
5. The herd of cattle is managed in a rotational grazing system, moved over various pastures on a regular basis. The farm utilizes four strands of high tensile wire fence netting to confine the animals in fields that are located across the road from the farm.
6. Mr. Rockwood is currently undergoing the implementation of Best Management Practices (BMPs), working with the Natural Resources Conservation Service (NRCS) and the Albany County Soil and Water Conservation District. The plan to be implemented includes the installation of cattle laneways, stream exclusions, and fencing. Fencing, buffer seeding, mulching and prescribed grazing practices have been implemented. Installation of two stream crossings, and a trail/walkway system are planned for 2020.
7. On December 17, 2019, Ms. Littrell confirmed with Dianna Stanton, NRCS Field Technician, that she is working with Mr. Rockwood to improve environmental stewardship practices on the farm. Ms. Stanton considers Mr. Rockwood to be a thoughtful grazer, who is looking to become a high-level grazing farm operation.

MR. ROCKWOOD'S USE OF GUARDIAN DOGS

8. Mr. Rockwood reports that he first purchased two Maremma Sheepdogs to serve as livestock guardian dogs in 2012, at a previous farm location, to combat predator issues which threatened raised livestock at this location.
9. Currently Mr. Rockwood utilizes four Maremma Sheepdogs, which are all microchipped, receive regular rabies vaccinations, and licensed by the Town of Knox. The dogs are typically kept with the cattle and chickens within a confined area by 5 strand poultry or electric netting.
10. Mr. Rockwood indicates that his young livestock guardian dogs are trained by their parents' instinct and example, their natural drive being to protect the herd. Mr. Rockwood teaches basic commands such as "no", "mine", "cage" and "barn." Mr. Rockwood has sold puppies from his dogs to other pasture-based farming operations; however, the four currently utilized for his operation are permanent and are not intended for sale.
11. During the site visit, Department staff observed the dogs were contained in their own shed, with a fenced outdoor area available for exercise. Mr. Rockwood stated that he

currently contains the dogs due to neighbor complaints, and the proximity to the complaining neighbor.

12. Under normal conditions, Mr. Rockwood noted that the dogs guard his livestock on a continuous basis. Mr. Rockwood explained that, while working, they are usually kept in the area of the farmstead and walk the perimeters of pasture fences pertaining to the various groups of poultry and livestock. During the growing season, the meat chickens and layer chickens are grouped together, with the turkeys maintained separately. Shelter for the guardian dogs is provided within the pastures, where the dogs are fed, given access to water and receive protection from the elements, such as sun and rain.
13. On January 10, 2020, in a conversation with Ms. Littrell, Mr. Rockwood concluded that since he has been keeping the dogs contained, predators are moving closer to the farmstead. He reported that during the week of January 1, 2020 he observed a neighbor who trapped a 35-pound bobcat and a fisher, animals which are known to prey on small livestock. Mr. Rockwood reports that from approximately September 11, 2019 through January 2, 2020 approximately 100 laying hens, almost 200 meat chickens, and at least five piglets have been lost to predation due to the inability to utilize the guardian livestock dogs.

NEIGHBOR COMPLAINT

14. During August and September 2019, a neighbor located directly across the road from the farmstead, escalated complaints about the dogs by contacting the Albany County Sheriff and the Town's Dog Control Officer (DCO).
15. On September 11, 2019, the DCO issued Mr. Rockwood an appearance ticket, which alleged a violation of Town Law related to excessive dog barking and dogs running at large, a violation of Local Law §§5(A and B) of the Zoning Code. At his court appearance on September 25, 2019, Mr. Rockwood's violation was dismissed. Mr. Rockwood was cooperative and explained that new fencing is being installed to replace the temporary netting that was installed as a short-term solution to keep the dogs contained.
16. On November 6, 2019, Ms. Littrell contacted Nichole Salisbury, the Town of Knox DCO who signed the appearance ticket issued on September 11, 2019. She stated that in August, September and October the same year, she received numerous complaints about the dogs barking. These complaints arose from Mr. Rockwood's neighbor located directly across the road from the farmstead. These complaints were filed during late night hours. Ms. Salisbury reported that, in investigating these complaints, she did not hear the dogs barking upon driving the road and stopping on the road.
17. On December 26, 2019, at approximately 2:00 AM, the DCO was called again on a complaint about Mr. Rockwood's barking dogs, who, according to Mr. Rockwood, were contained in the barn. Because the DCO could not take any further action, the DCO notified the Sheriff. The Sheriff responded to the complaint with a visit to Mr. Rockwood's farm. No violations were issued.

BARKING ISSUE

18. During the Department's site visit, which lasted about one hour, Dr. Somers and Ms. Littrell observed the dogs for several minutes and noted that they did not bark and did not react noticeably to the presence of people. Mr. Rockwood did note that there are times when the dogs do bark at night, due to the detection of predators nearby. Mr. Rockwood indicates that he has trained the dogs to stop barking when commands are spoken to them.
19. NRCS and Albany County Soil and Water Conservation District (SWCD) staff have visited the farm on several occasions, spanning hours at a time, to layout plans for the BMP implementation project. On November 12, 2019, Judy Littrell contacted Tonnie Sauca, Jr., Conservation District Technician for the SWCD. Mr. Sauca stated that, while he was present on the farm, he did not recall or observe barking dogs or any other aggressive behavior by the dogs on the property. Dianna Stanton, NRCS Field Technician, indicated that she has not had any direct interaction with the dogs; however, she noted that she has not heard them barking during the occasions she has visited the farm.
20. On December 5, 2019, notification was sent to the fifteen landowners adjacent to the two parcels where the livestock guardian dogs are typically utilized. The Department notified these landowners that the Department is conducting a sound agricultural practice review and invited them to comment on the keeping of livestock guardian dogs by Mr. Rockwood. Two of these letters were returned due to unknown forwarding addresses.
21. By letter dated December 10, 2019, one set of landowners submitted comments in support of Mr. Rockwood's farming practices. The landowners identified Mr. Rockwood as a cooperative and helpful neighbor, who seeks to promote sustainable agricultural policies and practices in the Town of Knox through his work with NRCS personnel and in meeting the requirements of the United States Department of Agriculture Environmental Quality Incentives Program (EQIP). The letter also noted that there is a vibrant community of coyotes in the area and they understand the need for the livestock guardian dogs. The neighbor stated that they do not hear Mr. Rockwood's dogs excessively barking and do not feel threatened by the dogs.
22. The Department did not receive any correspondence from the complainant neighbor.

USE OF LIVESTOCK GUARDIAN DOGS

23. The Maremma Sheepdog Club of America describes the Maremma Sheepdog as a livestock guardian dog bred to take responsibility for keeping the flock safe from predators and classifies the breed as independent thinkers. The Club states that "barking is a significant part of its livestock guarding instincts...[and the Maremma Sheepdog] never barks without a reason." (<http://www.maremmaclub.com/maremma-faq.html>)

24. In *Livestock Guarding Dogs: Their Current Use World Wide*, Mr. Robin Rigg states that livestock guarding dogs protect animals from external threats. They are social animals, stay in a group and protect the flock as if they were part of its group. They are attentive to their wards, drive away intruders and livestock guardian dogs are "...the most cost-effective method of non-lethal predator control." Benefits of their use on the farm include: not needing to corral animals at night, alerting the owners if they perceive a danger, protecting the owner's property, reducing predation, and allowing for a more efficient use of pastures. (Robin Rigg, Department of Zoology, University of Aberdeen, 2001).
25. The USDA Information Bulletin Number 588 (as revised 1999) states that the use of livestock guardian dogs has made a resurgence due to federal restrictions on the use of substances in the elimination of predator species, the inability to provide adequate protection from certain predators using conventional methods of livestock protection, and the desire by some individuals to use nonlethal methods to control predation. The dogs, when acquired at a young age, assimilate and become part of the flock they are protecting. They stay with the flock day and night and act independently; they are not pets. The authors state that both coyotes and foxes avoid confrontation and stay a reasonable distance from the livestock when they know that a guardian dog is present. They suggest that the sole use of guarding dogs to protect livestock from predation does not eliminate the need to use other control methods. Other methods mentioned include the use of electric fences and mechanical scare devices; corralling animals at night; keeping the barn or corral illuminated at night; keeping the animals near human habitation; or trapping and shooting predators. (USDA Information Bulletin Number 588, 1999, Livestock)
26. The Department of Environmental Conservation's web site ("Coyote Conflicts") states that coyotes are an integral part of our ecosystems in New York. DEC states that conflicts with livestock occur in the State. Most of the problems involve sheep or free ranging chickens and ducks. Proper husbandry techniques help minimize depredation. (www.dec.ny.gov/animals/6971.html)
27. The Department of Environmental Conservation also states that bald eagle populations across New York State are thriving in historic numbers as a result of the restoration and recovery program known as "hacking," which involves hand rearing and releasing older nestlings in the absence of parent birds. (www.dec.ny.gov/press/110637.html)
28. A fact sheet published by the United States Fish and Wildlife Service, Region 5 (Northeast), states that eagles typically only travel as far as they have to in order to find food, especially adult eagles with established territories. Adults will stay on their territory (roughly one to six square miles) year-round provided there is open water nearby where they can hunt. Should a severe winter limit the food supply, eagles will move as far south as necessary to find open water and suitable feeding grounds. However, young eagles typically wander great distances in search of food, which may span several states. (fws.gov/uploadedFiles/Region_5/NWRS/Central_Zone/Montezuma/EagleFacts.pdf)

29. Dr. Robert E. Chambers, Professor Emeritus, Department of Environmental and Forest Biology, SUNY-ESF, in an article entitled *The Coyote in New York State*, states that coyotes are well established in New York and it is estimated that 20,000 to 30,000 animals live within the State. According to Dr. Chambers, "[coyotes can be a significant problem to individual sheep-raisers." He states that farmers should realize that they pose a threat to their livestock and should utilize a combination of guard dogs, fencing, and pasture management to minimize predation.
(Environmental Information Series, *The Coyote in New York State*, rev. 2006, www.esf.edu/pubprog/brochure/coyote/coyote.html)
30. In an article published by the United States Cooperative Extension System entitled *Predator Management for Small and Backyard Poultry Flocks*, guardian dogs are determined to be extremely effective at deterring predator producers where flocks free-range and local predators are a problem, both during the day and at night. This approach to predator control requires that the dogs stay with the flock at all times.
(<https://poultry.extension.org/articles/poultry-management/predator-management-for-small-and-backyard-poultry-flocks/>)
31. According to a publication by the Texas Agricultural & Mechanical College of Texas Extension entitled "Livestock Guardian Dogs," these dogs protect livestock in many ways. They walk their charge and leave scent around the perimeter and bark when a predator is near. Their last line of defense is to attack the predator. When guardian dogs bark, it is because they detect predators and will not stop until their charge is out of danger. (<https://sanangelo.tamu.edu/files/2013/08/Livestock-Guardian-Dogs1.pdf>)
32. A publication by the Pennsylvania State College of Agricultural Sciences warns that any discipline given to guardian dogs in response to excess barking defeats their purpose and instinct to protect. (<https://agsci.psu.edu/wagn/topics/virtual-field-days/working-dogs-on-the-farm>)
33. Agriculture and Markets Law §308(1) 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. Tonnie Sauca Jr., Albany County Soil and Water Conservation District, stated that the farm is a participant in AEM, having completed a Tier 3 plan. However, the agricultural practice of using a guardian dog to protect livestock from predation is not a water quality concern which would be evaluated under AEM. The farm also participates in federal environmental stewardship programs administered by the United States Department of Agriculture, such as those mentioned within this Opinion.

EXISTING THREAT

34. The practice of producing pasture-raised/free range livestock and poultry comes with a high risk of predation due to its inherent open nature. As observed by Department staff during a site visit, and reported by Mr. Rockwood, predators proximate to West Wind

Acres include bald eagles, owls, hawks, and ground predators such as coyotes and fishers.

35. Mr. Rockwood reports that, during January and February of 2020, a thirty-five-pound bobcat and two fishers were trapped in the area of his farm and that he has observed coyotes attack the farm's livestock and poultry. Aerial predators such as bald eagles have picked up 8-week-old piglets in the pasture and, during winter months, fly into his three-sided swine barn to pick up piglets in the barn. The result is economic hardship due to the loss of marketable livestock. Mr. Rockwood estimates that an 8-week-old piglet is worth approximately \$100, in addition to the lost economic opportunity of not having the lost piglets to market at their prime value when they are 6 to 9 months of age.
36. On November 13, 2019, it was noted that a story appeared in the local media regarding another farm located in the Town of Medusa, Albany County, that lost seven sheep due to the presence of coyotes or possible mountain lions. This farm is located in a neighboring town to Mr. Rockwood's farm.
37. On December 13, 2019, Judy Littrell contacted Thomas Gallagher, Livestock Specialist, Albany County Cornell Cooperative Extension, to gather information on practices to combat predation, specifically concerning pasture-raised livestock. Mr. Gallagher explained that, as more farms implement pasture-raised livestock farming practices, more complaints arise concerning predators, and estimated that approximately 25 percent of producers in Albany County use some type of guard animal on their property.
38. Since the issuance of the September 11, 2019 violation, Mr. Rockwood has confined the dogs in the housing area observed by Department staff during its site visit in an effort to avoid further issues. As a result, Mr. Rockwood reported that, as of January 2, 2020, the farm has lost approximately 100 laying hens, almost 200 meat chickens, and at least five piglets killed by predators.

Findings

Based upon the facts, information and circumstances described above, and in consultation with the Advisory Council on Agriculture, the New York State Department of Environmental Conservation, the USDA Natural Resources Conservation Service, and the Sound Agricultural Practice Guidelines¹ by which agricultural practices are evaluated, I find the following:

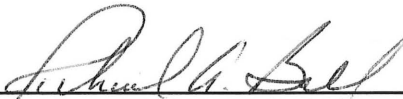
¹ On November 1, 1993 the NYS Advisory Council on Agriculture published its report entitled *Protecting the Right of New York Farmers to Engage in Sound Agricultural Practices*. The Council developed guidelines to assist the Commissioner of the Department of Agriculture and Markets in determining what 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.

1. The Department has found no evidence or received other information indicating that Mr. Rockwood is currently in violation of federal, state or local law resulting from the use of livestock guardian dogs to protect their livestock from predation.
2. The Department has found no evidence that the use of livestock guardian dogs has resulted in bodily harm or property damage off the site. All farm animals, including dogs, should be kept on the farm. Mr. Rockwood intends to install additional fencing that will contain the dogs.
3. The use of Maremma livestock guardian dogs for the protection of livestock from predation has achieved the intended result in a reasonable and supportable way. West Wind Acres is a pasture-based farm that raises a number of small livestock in an area where predator population is abundant. Since the guardian dogs have been confined to their housing area, Mr. Rockwood reports hundreds of animals lost to local predators. The use of the Maremma Sheepdogs is very efficacious, as demonstrated by the few animals lost to predation before the dogs were confined. Protection of chickens and immature livestock under a free-range pasture setting would not be possible without the use and presence of livestock guardian dogs, and the literature does not suggest any cost-effective alternatives.
4. Information received by the Department indicates that a wide range of predators is present in the vicinity of West Wind Acres. A farm in a nearby town lost seven sheep due to predation from coyotes or possible mountain lions. Protection from predation is necessary because chickens and small livestock have no way of protecting themselves. Livestock guardian dogs aggressively protect their wards through confrontation and barking, irrespective of the time of day when predators are present. A combination of good fencing, the presence of guardian livestock dogs and pasture management is necessary to protect pasture raised fowl and small livestock from predation. All three of these management practices are necessary and utilized by West Wind Acres for livestock protection. Furthermore, livestock guardian dogs have been used for centuries to protect livestock because the dogs instinctively bark to ward off potential predators and aggressively defend their wards from dangerous situations.

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 Maremma livestock guardian dogs to protect pasture raised livestock on land leased by Joshua Rockwood, with an address of 144 Beebe Road, Knox, New York, as described above, is sound.

11/2/20
Date



RICHARD A. BALL
Commissioner of Agriculture and Markets