## **Opinion on Footage of Turkeys Dr. Monica Bando 12.18.2020**

I reviewed footage from a facility housing four white domestic turkeys. Two turkeys (Butter and Bread) were housed together and the other two turkeys (Peas and Carrots) in this footage were singly housed. Turkeys were confined to small pens; I am told the dimensions were approximately 12 ft. long x 7 ft. wide. The back wall of the pens appears to be the cinder block wall of the building. Vertical wood posts/fencing around twice the height of the turkeys, separates each pen. A combination of vertical wood posts/fencing and a metal gate secures the front of each pen. The flooring of the pens appears to be concrete, based on an empty pen visible in one video, although the flooring outside of the pens could be packed dirt due to the irregular surface texture. I could not appreciate obvious drainage in the empty pen. There is a thin layer of what appears to be wood shavings in each pen. Each pen contains a hanging metal feeder and a plastic container on the floor or wooden stump, which may contain drinking water. There is bright overhead lighting. Two turkeys (Peas and Carrots) have extensive and severe feather damage along the back, wings, and tail, and Carrot also has a large featherless area of the chest.

Turkeys are highly social animals who form complex and seasonally variable social groupings. They engage in a wide range of social behaviors and vocalizations. Turkeys naturally explore large areas of diverse habitat and spend large portions of their day foraging for diverse food items. Turkeys also enjoy dust-bathing, an important behavior to promote and maintain feather health and this is also an important social activity that multiple birds will engage in simultaneously. Turkeys also naturally roost, particularly at night, and may choose different roosting sites each night.

The turkeys in this footage are confined to small, barren, indoor pens. Housing turkeys alone or with incompatible conspecifics deprives them of healthy and natural social interactions that provide a sense of security, comfort, and other positive emotional/affective states. The unnatural levels, quality, and duration of artificial lighting has also been demonstrated to compromise the health and well-being of birds. Indoor housing presents the additional health and welfare risks associated with poor ventilation that can predispose birds to respiratory disease and ill-health. Visual barriers and shelters are necessary to provide birds with opportunities to retreat from view of people and conspecifics and to seek reprieve from direct overhead lighting. Perching and roosting sites are necessary provisions for foot and leg health as well as behavioral and mental well-being. Clean, dry, and ample substrates are necessary to protect foot health as well as provide opportunities for turkeys to engage in foraging behaviors. Without evidence of adequate drainage or ventilation, there is high risk of moisture accumulating in the limited substrate available which leads to bacterial and mold growth and predisposes to foot and respiratory infections. Ample quantity and quality of space is fundamental to ensuring turkeys can engage in healthy levels of physical exercise and engage in a wide range of healthy behaviors including exploration and foraging. Failure to provide the aforementioned basic necessities for turkeys not only predisposes them to illness and disease but also results in chronic stress and frustration, among other negative affective states. A common manifestation of chronic stress and frustration in birds is feather damaging or feather plucking behavior, which can be self-directed or directed

at conspecifics. Because two of the turkeys in this footage are singly housed, feather damage is most likely self-directed. In addition to chronic stress and frustration, feather damage may also be caused, or exacerbated, by ectoparasites, nutritional imbalances, and underlying illness. The featherless patch on the chest of one of the turkeys may be due to feather picking behavior and/or may be due to the flooring and insufficient substrate and lack of perching/roosting resources that would alleviate pressure from that area. The brown staining of the tail feathers may indicate gastrointestinal disturbance from poor nutrition, chronic stress, illness, poor sanitation, and/or result from insufficient space to avoid contacting waste material, particularly when deprived of opportunities to perch or leave the floor.

It is challenging to assess body condition of birds without directly palpating or feeling them as their feathers are very deceptive. It is also difficult to opine on the behavior of these turkeys without additional footage or direct evaluation.

Overall, what I can say is that the overall appearance of these turkeys is very poor due to the extent and severity of feather damage. In addition, their housing, characterized by lack of space, perches, roosts, shelters, natural lighting, outdoor access, dust baths, visual barriers, natural vegetation, and sufficient substrates, presents numerous, cumulative, and chronic stressors that severely compromise the physical and psychological well-being of these turkeys.