

# The business of raising beef with welfare on the forefront

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## Abstract

Understanding consumer expectations of animal welfare and social responsibility can seem like a topic too broad for our producers to focus on while engrossed in the day-to-day operations of farms. However, it's paramount that producers understand that our consumers extend us a social license to operate our farms when displaying confidence in purchasing our products. Furthermore, producers have a social responsibility to protect the brands of our largest consumers because they are often built on a specific beef product. Think about your favorite place to order a burger. They are very in tune with what their consumers' preferences are and they purchase a lot of ground beef. We have a responsibility to this organization to protect their interest in the beef industry if we want them to continue purchasing beef raised and processed in the United States. If we are unable to do that, they will undoubtedly find an alternative product, either through development or marketing, that the consumer will demand. With this responsibility in mind, veterinarians can work with producers on continuous improvement of animal welfare practices in order to maintain that confidence from consumers.

**Key words:** cattle handling, animal welfare, consumer demand

## Consumer demand

Consumers drive the demand of beef products and we must recognize this importance on the farm level. Consumers in the millennial and Generation X categories can be confusing to follow based on correlation, sometimes lack thereof, of consumer survey statistics and purchasing statistics. During the COVID-19 pandemic, meat and poultry sales increased 34.6%, measured by more buyers and more money spent per trip. Beef alone, generated 61% of new fresh meat dollars.<sup>5</sup> While 94% of Americans are choosing meat for high quality protein and 3 of 4 consumers agree it belongs in a healthy, balanced diet, there is a huge disparity among generations of consumers. The younger generations have increasing amounts of consumers that are categorized as flexitarians. Flexitarians are people willing to consume meat, but actively trying to reduce the amount they consume on a weekly basis. This leaves the opportunity for our industries to increase consumer trust in health, welfare and social responsibility in our hands as veterinarians, producers and the relationship that is forged between the two.

## Cattle handling

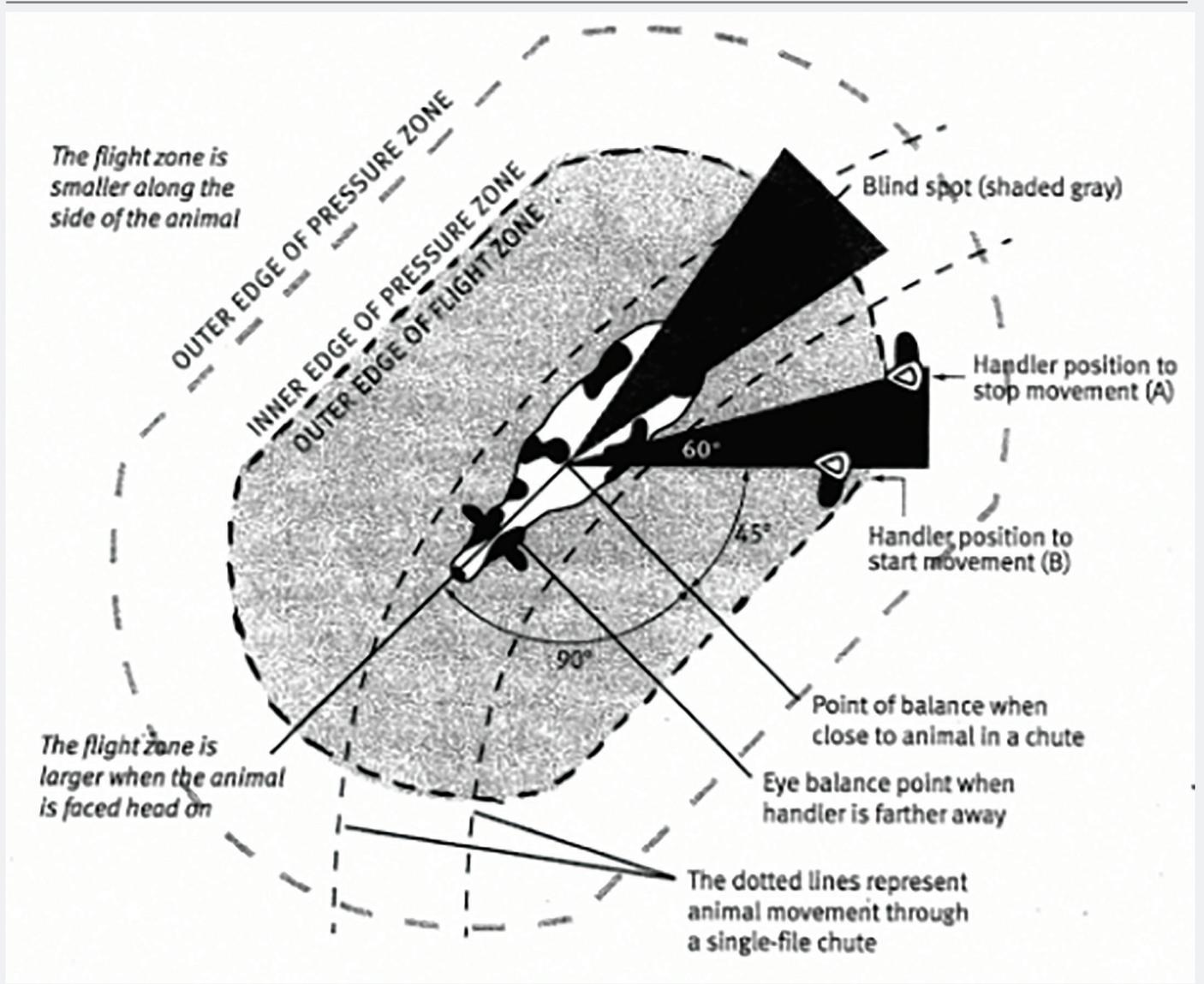
The mantra I use when training on-farm employees on cattle handling is taken from the U.S. Navy Seals, "Slow is smooth, smooth is fast." By understanding the basics of cattle behavior, we can teach a skill that needs to be demonstrated slowly, and after developing this skill, it becomes smoothly executed. When we reach the apex of smoothly executing any skill, we will increase the speed in which we conduct on farm work. The basics of cattle behavior that I teach during trainings on farm include

the importance of understanding the personality of the cattle you are attempting to handle by assessing their position and demeanor. Respecting the fact that cattle have a pack mentality and are herd animals. Describing the patterns of predation and peripheral vision cattle possess will help with worker movement patterns when approaching cattle. Having a keen understanding of the pressure and flight zone of cattle by following Dr. Temple Grandin's diagram<sup>3</sup> and utilizing the point-of-balance appropriately to elicit movement in the direction that is desired by the cattle handler (Figure 1).

Principles of moving cattle through a raceway and from a large open area are important to discuss with animal handlers as they are often points of frustration during cattle handling if not performed correctly (Figures 2, 3). Cattle moving through a raceway up to a chute or barn must be handled from the point-of-balance just above the shoulders. It is important for caretakers to enter the flight zone before the point-of-balance traveling toward the back of the animal to elicit movement in the opposite direction (forward). The caretaker must then exit the flight zone and walk to the front of the next animal in line, enter the flight zone and repeat this pattern of movement. When a caretaker understands this principle, they will reduce the overall number of steps they actually have to take and elicit the movement they desire in cattle that are in an alley or raceway. If a caretaker would like to remove animals from a large pen or paddock, a different course must be taken with the same basic principles applied. By identifying the flight zone of the group, you can elicit movement with the direction the group will head based on where you enter the flight zone. It is important in wide open spaces to maintain a zig zag pattern of movement so you are moving in and out of the blind spot or replicating a pattern of predation that the cattle will respond very calmly to (Figure 2).

The final, simple principle of cattle handling that we have to reiterate with cattle handlers is the use of a gathering apparatus such as a Bud Box or Grandin Tub or Bud Flow Tub. If these apparatuses are used as a storage facility for cattle, the animals will become confused about what caretakers are asking them to do. The simple way to combat this is to reinforce that the only amount of cattle that is appropriate to bring up to the gathering apparatus is the amount of head that will fit in the raceway directly following the tub or box. If you bring up the correct amount of cattle at the right time, they will enter the tub or box, file into the raceway and require very little persuasion to do so. If you bring up too many animals or bring them too early, they will try to enter the raceway, not find the exit and proceed to circle around the tub or box. Creating repetition of this behavior will result in cattle that do not know what to expect with the handling facilities. You will have producers who believe the facilities are not adequate when, in reality, the use of the facilities is improper. This practice will eliminate confusion in the animals and decrease frustration in the caretakers.

Figure 1:



## Welfare

Traditionally the five freedoms of animal welfare have been taught in educational settings.<sup>1</sup> They have been adopted by many organizations as the standards that are under human control for monitoring animal welfare on farms. They first appeared in the Brambell Report after the U.K. commissioned an investigation into the standards of welfare of intensively farmed animals in 1965. This investigation was led by Professor Roger Brambell. The five freedoms are expressly stated as the freedom from hunger and thirst; discomfort; pain, injury and disease; to express normal behavior; and from fear and distress.

Many organizations are transitioning to the promotion of the five domains model promoted by Professor David Mellor.<sup>4</sup> He challenges organizations and experts to move beyond the structure of the five freedoms and into the five domains model. This model discusses how the various aspects of nutrition, physical environment, health and behavioral interactions contribute to the mental status of the animal. The five domains are outlined in Figure 4 and show how each domain affects the overall

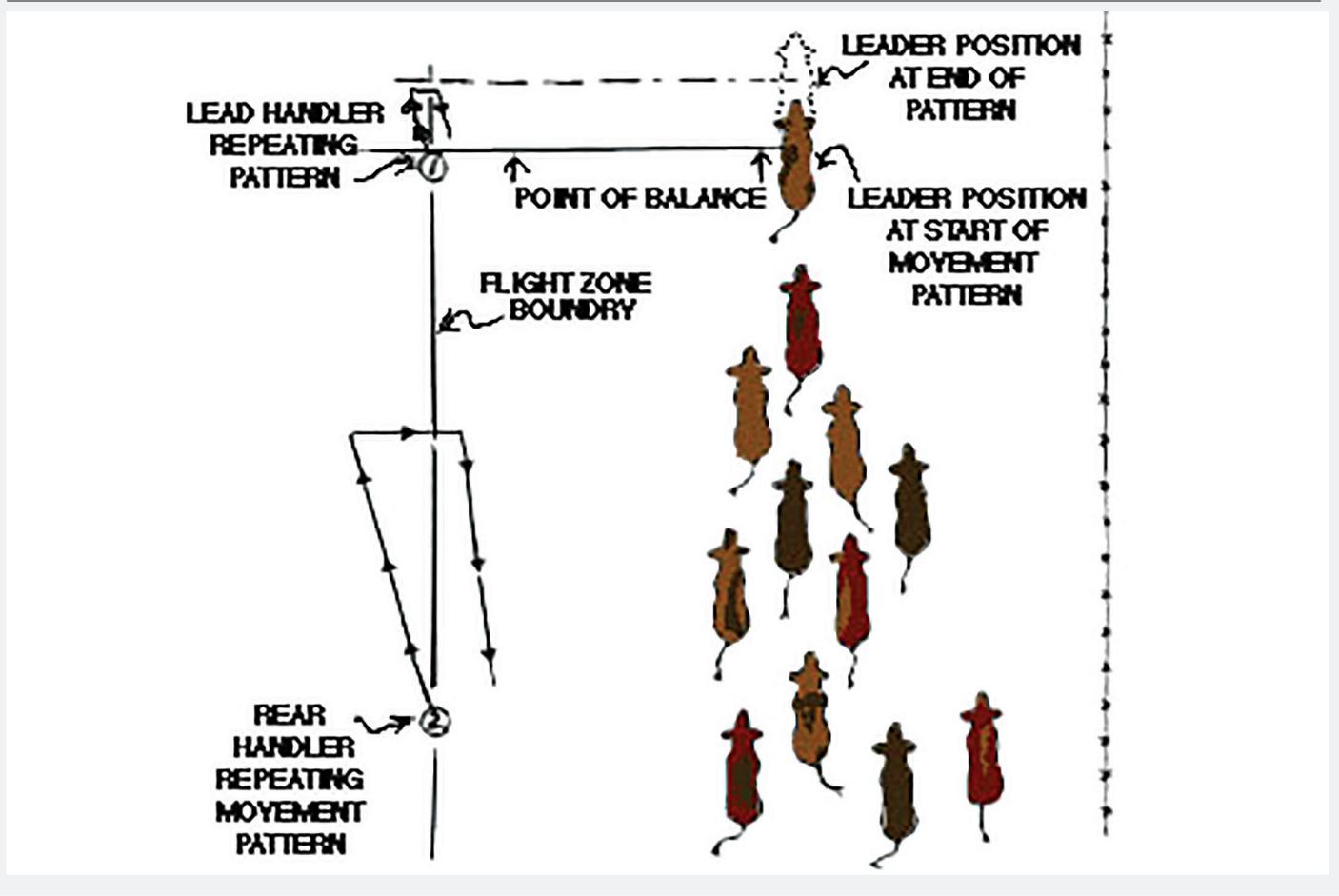
mental domain and thus leading to a state of welfare for the animal or group of animals.

## Client services

Translating how a focus on animal welfare in practice can be useful on farm is imperative for practitioners. I offer that practitioners should be well positioned to either recommend a Beef Quality Assurance training program or offer it as a service themselves. Beef Quality Assurance is a standard, industry-driven certification opportunity that is becoming very commonly required by retailers and packers and will eventually be driven to the ranch level of the beef industry and in many instances already has been.

There are demand driven premiums available to producers that are not based on carcass merit. These program cattle are typically contracted out far in advance of entering the feedlot portion of the industry. Most of these programs are based on the transfer of information specific to the group of cattle being purchased. This information can include, but is not limited to

Figure 2:



age, source, management practices, breed influence, employee well-being and sustainability practices. A veterinarian can help producers implement these programs and the producers will receive an additional premium for cattle sold that qualify for the program. The USDA publishes data on monthly harvest premiums and discounts based on carcass weight and this information is available to the public. Several of these programs are routinely receiving premiums in excess of Choice, Select and CAB carcass quality premiums. Occasionally, they will receive premiums in excess of those available to Prime cattle.

## Summary

When working with clients and producers on animal welfare or handling topics, I find it easier to begin the conversation with how they can improve their return-on-investment (ROI). To remain sustainable as business people, we must have ROI for our expenses. We inherently know that animals treated well are more productive and oftentimes more profitable.

Offering services or unique consulting opportunities that focus on animal welfare or handling topics can expand your professional knowledge base, increase your interactions with producers, and help elevate producers to be prepared for what the consumers are going to continue demand of us as an industry. These demands are fair and must be met and it is the right thing to do as a veterinarian in bovine practice.

Figure 3:

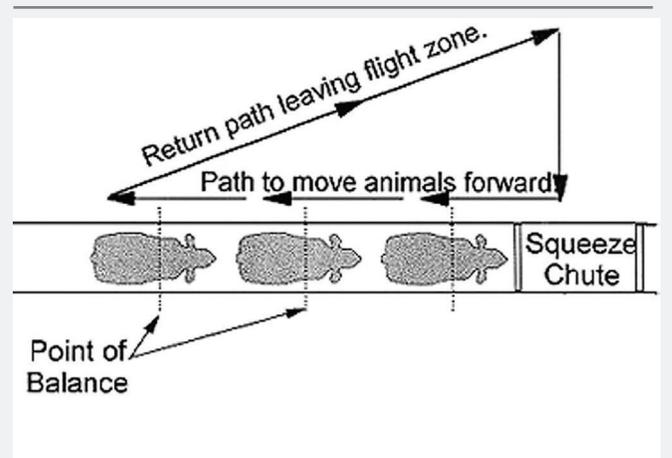
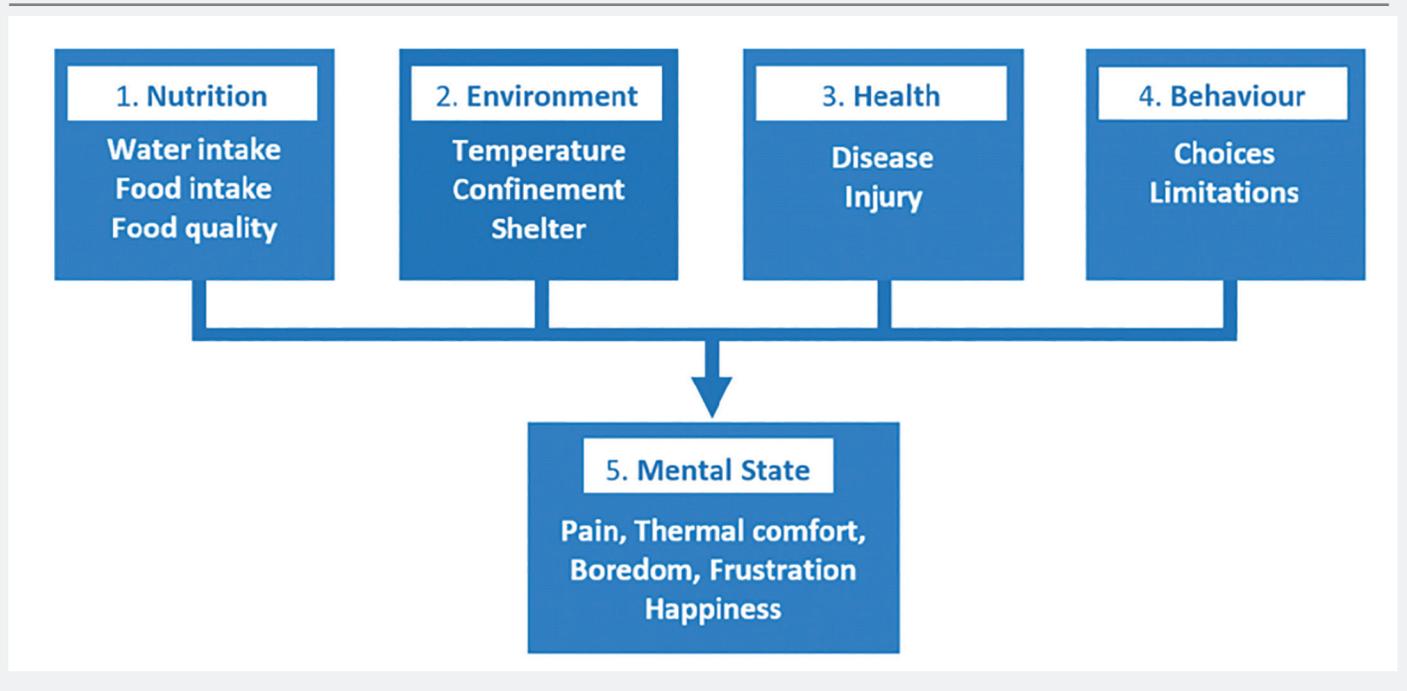


Figure 4:



## References

1. Brambell R. 1965. Report of the Technical Committee to Enquire into the Welfare of Animals Kept Under Intensive Livestock Husbandry Systems, Cmd. (Great Britain Parliament), H.M. Stationery Office, pp. 1-84.
2. Endenburg N, Takashima G, Lith H, Bacon H, Hazel S, Jouppi R, Lee N, Seksel K, Ryan S. 2020. Animal Welfare Worldwide, the Opinion of Practicing Veterinarians. *J Appl Anim Welf Sci*. 24. 1-23. 10.1080/10888705.2020.1717340.
3. Grandin T. Understanding Flight Zone and Point of Balance for Low Stress Handling of Cattle, Sheep and Pigs. <https://grandin.com/behaviour/principles/flight.zone.html>
4. Mellor DJ. Updating animal welfare thinking: Moving beyond the “Five Freedoms” to “A Life worth Living”. *Animals*. 2016;6:21. doi: 10.3390/ani6030021.
5. Roerink A. Top Findings of the Midyear Power of Meat 2020. Annual Meat Conference, 2020. [https://www.meatconference.com/sites/default/files/books/Midyear\\_POM\\_Top\\_10.pdf](https://www.meatconference.com/sites/default/files/books/Midyear_POM_Top_10.pdf)

## Other suggested readings

Grandin T. *Improving Animal Welfare: A Practical Approach*, 3rd Edition. CABI. December 8, 2020. 441 pages.

