

Statements on the FPCC Ambassador Animal Program Report of July 2022,

regarding the coyote at River Trails Nature Center

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I. Quality and Interpretation of Evidence

- A. There is no actual quantitative or qualitative data on the coyote's behavior in the FPCC Ambassador Animal Program Report (hereafter, "the Report"). Neither visiting veterinarian collected data on the coyote nor both were there for short periods of time (Dr. Kubala paid two visits and Dr. Garrett paid one).
- B. Research scientists who collect and analyze data would be better suited to assessing the coyote's behavior and welfare. Measuring well-being is a complicated and often hotly-debated field on its own and so requires clear definitions of observable behaviors. Not many veterinarians have experience with behavior.
 - 1. Dr. Garrett's background in "Farm Animal Reproduction Medicine and Surgery" is not in line with the Report's emphasis of seeking "[c]urrent best practice...focused on a behavior-based approach" (p. 15). Dr. Garrett works with *domestic* species raised in close confinement for profit, a setting where animal behavior problems are common with little effort to reduce them.
 - 2. Although Dr. Kubala was able to pick up on staff conveying anthropomorphic misinformation about the coyote to visitors, Dr. Garrett concluded that "...the keepers are very attuned to his condition and behavior..." (p. 38).
 - 3. While Dr. Kubala noted the coyote's "strong prey drive" (p. 29) toward children running past, Dr. Garrett describes the coyote's reactions to children as "curious" (p. 37).
 - 4. While the Executive Summary of the Report claims that Dr. Garrett said a larger enclosure was not necessary, his actual statement (p. 36, Report) qualified that in terms of financial constraints, not animal welfare.
- C. The Report only contains a few vague mentions of the coyote's actual behavior and includes unquantifiable descriptions of behavior, for example, Dr. Abete concluded that the coyote was "happy" (p. 17).
- D. Although the Report claims that Dr. Kubala and Dr. Garrett used the AZA Large Canid Care Manual as their standard (hereafter referred to as the AZA Manual), only Dr. Kubala actually referenced it in her report.

II. Ignoring or downplaying the coyote's pacing

- A. An “ethogram” is a list of physical descriptions of all the behaviors seen in a given species. Although the AZA Manual contains an ethogram of large canid behavior that researchers would use to quantify the coyote’s behavior, neither visiting veterinarian referred to it, nor did the Report mention it, but the report did include it as an appendix without reference/explanation.
1. The AZA Manual ethogram contains the following definition of pacing: “walk back and forth over the same, small area.”
 2. Dr. Garrett described the coyote’s locomotive activity as a “metered pace and by no means frantic” -- he does not define what he means by “frantic” (an uncommon term in animal behavior/welfare) but regardless, the speed or demeanor of pacing does not make a difference to the judgement of pacing as per the AZA Manual and per animal behavior/welfare literature which list “pacing” as an abnormal repetitive behavior (ARB) (for examples, see [here](#) and [here](#)).
- B. The Report ignores the coyote’s pacing as a problem despite clear comments in the AZA Manual about how pacing indicates poor welfare (a section of the AZA Manual that Dr. Kubala delineates as a point of improvement, p. 31, Report).
1. “Canids kept in undersized areas may show diminished well-being as evidenced by pacing, aggression, nervousness, poor reproduction, and poor care of offspring (p. 11, AZA Manual).”
 2. Given that definition, and that Dr. Kubala’s observation of the coyote showing nervousness and aggressive behavior toward unfamiliar people (p. 29, Report) we can conclude that as per the AZA Manual (p. 11), that the coyote shows diminished well-being.
- C. The Report misleads readers with the Executive Summary statement, claiming that neither Dr. Kubala nor Dr. Garrett “...indicated that the coyote paces in an unnatural pattern” when in fact, Dr. Garrett writes nothing of “natural” or “unnatural” in his evaluation letter included in the Report. Dr. Kubala (Report, p. 31) cites the AZA Manual where it describes pacing (regardless of natural or unnatural pattern) as “abnormal” -- “When large canids do not have sufficient visual privacy or feeling of security, they are more likely to show stereotypic abnormal behavior, including pacing....” (AZA Manual, p. 12).
- D. The Chicago Tribune ([7/26/22](#)) reported that the coyote paces but draws an incorrect conclusion when it stated “both [veterinarians] found that the coyote was well-cared for and that his frequent pacing in circles was not a sign of stress.” While Dr. Garrett did not mention pacing in terms of “stress,” Dr. Kubala includes the AZA Manual statement that pacing is an abnormal behavior (p. 31, Report; pp. 11-12 AZA Manual) and results from the stress of unexpressed natural behavior (see [Clubb and Vickary, 2006](#) for more on stress and pacing).
- E. The Report ignores the coyote’s pacing with the unreferenced claim that “[e]very expert who has observed the coyote in person over some period of time and who has access to the coyote’s medical records has agreed that it is well-cared for and does not exhibit stress-induced or other problematic behaviors” (p. 22)

1. What aspect of the medical records inform behavior?
 2. Who are these unnamed experts and how do they define stress-induced or other problematic behaviors? Anyone familiar with the animal welfare literature knows that pacing is a common problem behavior in captivity, so any expert should not be surprised to see the coyote pacing.
- F. The FPCC only gives citations for some statements and includes Mason (2004) as one reference. However, the better-known Mason (2007) article calls for zero-tolerance of pacing, indicating that is a problem not to be ignored or downplayed. Mason (2007) describes how hard these abnormal behaviors are to address in zoos and that enrichment is not enough.
- G. Pacing may also lead to physical stress. For example, the AZA Manual (p. 51) states, “It is believed that stomach torsion may be related to pacing...”
- H. Dr. Kubala suggests that the coyote does not get enough exercise (thus his pacing does not count as exercise).

III. Down-playing the coyote’s needs: Companionship and enclosure size

- A. The Report ignores the recommendations of Dr. Kubala on enclosure size and on the importance of social contact with a member of the coyote’s own species, given that their future plan is for the coyote to continue to live alone in a space less than half the AZA recommended size.
1. Dr. Garrett downplayed the AZA Manual’s recommendations for enclosure size and downplayed the need for a conspecific. Instead, he referenced the small enclosure size listed for domestic dogs in the tightly confined space of medical research laboratories (p. 35, Report).
 2. Although the FPCC Report claims to promote the AZA Manual as the standard, the Executive Summary actually downplays the AZA recommendations for a 5000 square-foot habitat. Dr. Garrett interprets the recommendation as pertaining to animals not imprinted on people, but the AZA Manual says nothing about imprinting (see Table 5, p 11, Report).
 3. At less than half the recommended size, the proposed larger enclosure will not prevent pacing. Free-living coyotes walk 3-10 miles daily and can run up to 43 MPH. According to Kroshko, et al. (2016, see [here](#)):

“Overall, naturally wide-ranging Carnivora with long chase distances are thus most prone to extensive stereotypic route tracing in captivity. This suggests that captive carnivores cannot relinquish aspects of ranging and pursuit hunting, even when their homeostatic needs are met.”

- B. Dr. Kubala cites the AZA Manual when she emphasized that although one may observe a free-living coyote alone, this is a temporary configuration (p. 23, AZA Manual). The Report dismisses her AZA-based recommendation for a social companion (ideally introducing a single female or less ideally, a single male as per p. 32, Report; pp. 24 AZA Manual).

- C. The Executive Summary of the Report contains an odd misleading claim that “[t]he other expert [Dr. Garrett, presumably] said that living with an additional coyote could be beneficial to the coyote at River Trail, but could also be stressful.” (p. 2). However, nowhere in Dr. Garrett’s evaluation letter does he mention pros or cons of adding a social companion.
- D. The Report does not offer any data to support the claim that the coyote’s “...behavior and demeanor seem to indicate that it is comfortable as a solitary coyote” (p. 18).
- E. Regarding the question of whether the coyote would welcome or drive away other coyotes, we can collect some pilot data by introducing him first to a calm dog in a controlled protocol, using the enclosure walls between them a safety barrier.

IV. Measuring future behavior/pacing/stress --There is no clear plan for assessing behavior and welfare.

- A. The Report claims that “[t]he ability to monitor an animal’s physical and emotional health – particularly their stress levels – continues to advance” (p. 13) and the Executive Summary claims insight into protocols for monitoring behavior and stress, but nowhere in the Report is there mention of how the coyote’s stress levels have or will be measured. While a planned manual will include “procedures” for “welfare assessments” (p. 21), there is no mention of how welfare will be measured.
- B. The Report claims there is an annual “overall observation of the coyote’s behavior” during a physical exam by a vet (p. 17) but where is this data and how is it analyzed?
- C. Cortisol stays elevated for 72 hours after a stressful event. Do the vet records include data about the coyote’s cortisol levels?
- D. If the agencies interviewed in the report advised the FPCC on how to monitor welfare, I’d expect to see mention of how the FPCC planned to implement this knowledge and address welfare concerns but the Report contains none. Further, the agency names appear listed as if they support the Report, when they should have only been references at the end of the report as they served as sources of general information, and not comments on the River Trail coyote’s habitat or behavior.
- E. Dr. Garrett makes a good suggestion to use a trail camera to capture data to analyze the coyote’s activity budget. This data could help identify patterns of stress triggers and pacing.
- F. The description in the Report of the coyote’s enclosure includes mention of potential natural behaviors, but in how many natural behaviors does the coyote engage?

V. Larger enclosure vs. moving to sanctuary

- A. The Executive Summary of the Report claims (p. 1) that “[e]xperts who have examined the coyote have said...that transfer to a new facility to live with other coyotes could possibly and even likely cause the coyote harm.” However, Neither Dr. Kubala nor Dr. Garrett said anything like that in their evaluation letters. So who claims this and why are their statements not included and referenced?

- B. In the Executive Summary of the Report (p. 2), the same unsubstantiated claim appears that “[m]oving the coyote to a new location and introducing it to other members of its species will cause some—perhaps a significant – amount of stress to the animal. As an imprinted animal that has become accustomed to being cared for and interacting with people, these stressors may be increased.” However, there is no reference given for this source of information and neither Dr. Kubala nor Dr. Garrett made these claims in their evaluation letters.
- C. The FPCC staff mentioned to Dr. Garrett that the coyote appears fearful of loud vehicles but Dr. Garrett discounted the problem as happening infrequently, referring to routine weather-based machinery (which could be argued to happen frequently, depending on how one defines “frequent”).
1. Dr. Garrett writes “The staff have observed that the coyote becomes temporarily agitated by the presence of certain types of vehicles, primarily snowplows, and by some maintenance equipment like mowers” but goes on to conclude that “[t]he disruptive noise events occur infrequently and I don’t consider this a concern for the well-being of the coyote. In addition, the staff have the capacity to administer gabapentin and trasadone [sic]....to help reduce the short-term stress associated with the noise events.”
 2. Does this mean that the coyote gets these drugs before any lawn mowing or snow-plowing takes place?
 3. Measuring the coyote’s cortisol levels could help determine his stress levels post-acute sound events.
- D. Dr. Garrett suggests that if the enclosure is enlarged, that the coyote “...could be confined to a section of the enclosure while work is done to the other part of the enclosure.” The Report also suggests securing the coyote next to where the new enclosure will be built, which means exposing the coyote to long-term noise and stress.
- E. Dr. Kubala also notes from the AZA Manual that “Excessive sound stimuli can result in behavioral and physiological responses in animals and in extreme cases can be a contributing factor to immunosuppression, intestinal problems, and other veterinary health disorders relating to glucocorticoid responses” (p. 30, Report; p. 10, AZA Manual).
- F. The acute stress resulting from transporting the coyote is much less of a concern as it takes approximately 72 hours for cortisol levels to decline after a stress-producing event.