



TO: AUTHORS & CO-AUTHORS

FROM: PRRIP TAC & EDO

SUBJECT: FEEDBACK IN PREPARATION FOR ARTICLE DISCUSSION

DATE: MARCH 31, 2023

I. CONTEXT

Two publications have been selected for discussion during the Technical Advisory Committee's (TAC) April 2023 quarterly meeting:

- Baasch et al. 2022. Whooping Crane (*Grus americana*) use patterns in relation to an ecotope classification in the Central Platte River Valley, Nebraska, USA.
<https://doi.org/10.5751/ACE-02311-170235>
- Caven et al. 2022. Whooping crane stay length in relation to stopover site characteristics.
<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1387&context=nacwgproc>

Both publications are directly relevant to Program science and make reference to management of habitat along the central Platte River to benefit whooping cranes. These publications have direct relevance to Program science, land, and water management. As such, it is important that the TAC is aware of, evaluates, and is able to draw conclusions from this research in order to provide relevant information to the Governance Committee (GC). To facilitate a productive discussion, the EDO has compiled feedback provided by TAC members and EDO staff with the focus on methods and results from the published research.

The EDO requests from the TAC as a result of this discussion:

- 1) TAC plan for providing information on these publications to the GC.
- 2) TAC opinion based on current understanding of these two recent publications on whether the Program needs to go back and do a finer scale analysis on diurnal use site selection characteristics. Does the TAC recommend the Program conduct a check-in analysis to reevaluate diurnal use wet meadows by whooping cranes on the central Platte River?

II. COMMENTS, FEEDBACK, AND QUESTIONS

Baasch et al. 2022 Whooping Crane (*Grus americana*) use patterns in relation to an ecotope classification in the Central Platte River Valley, Nebraska, USA.

- 1) Why was the choice made to compare use locations to random locations available throughout the entire Associated Habitat Reach (AHR) rather than using a similar scale for available locations to that used in the Baasch et al. 2019 publications ([Baasch et al. 2019a](#), [Baasch et al.](#)



[2019b](#))? To help communicate the principal differences among these locations, would you be willing to provide summary statistics (distributions of each explanatory variable for both use and available locations) of land use at use locations compared to available locations across the AHR?

- 2) To what extent is PRRIP diurnal use data included in the public sightings database used for this study? What do you estimate is the overlap in the dataset used by [Howlin & Nasman 2017](#) and dataset used in this publication over the same time period?
- 3) Why were all riverine diurnal use sites excluded from this analysis? Did you look at all diurnal use sites (both on- and off-channel), and if so, how might those results differ from those presented in this publication?
- 4) Why weren't marsh meadows and ag wetlands just defined as wetlands?
- 5) How were these wetland types identified and delineated?
- 6) The categories in Figure 4 are not evenly separated, how were they selected and what percentage of points falls in each category?
- 7) What do you think the management implications are for the Program?

Caven et al. 2022 Whooping crane stay length in relation to stopover site characteristics.

- 1) It appears that multiple roost and day use points were used for some longer stopovers. How did you decide the number of points of each type used to characterize each unique stopover?
- 2) To help with interpretation of results, would you be willing to provide a table that demonstrates which explanatory variables were subject to Winsorization and/or multiple imputation and to what extent. How was missing data distributed among explanatory variables?
- 3) In Figures 2-3 many of your top explanatory variables vary less than 5% MSE from one another, and in Figure 5 your increase in stay length in response to some of those variables is less than a day. Do you have confidence intervals associated with these partial dependence plots? How did you choose which to focus on as important for whooping crane selection and habitat management?
- 4) I assume how long a crane stays at any one spot during migration is dependent on weather, body condition and maybe habitat conditions if they are not feeling the need to move on, but how is encouraging longer stayovers beneficial to cranes?
- 5) What do you think the management implications are for the Program?



III. REFERENCES

Baasch DM, Farrell PD, Howlin S, Pearse AT, Farnsworth JM, Smith CB. 2019a. Whooping crane use of riverine stopover sites. PLoS ONE 14(1): e0209612.

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Baasch DM, Caven AJ, Jorgensen JG, Grosse R, Rabbe M, Varner DM, LaGrange T. 2022. Whooping Crane (*Grus americana*) use patterns in relation to an ecotone classification in the Central Platte River Valley, Nebraska, USA. *Avian Conservation and Ecology* 17(2): 35.

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Howlin S and Nasman K. 2017. Correlates of whooping crane habitat selection and trends in use in the central Platte River, Nebraska. Western EcoSystems Technology, Inc., Cheyenne, WY.

<https://platteriverprogram.org/sites/default/files/PubsAndData/ProgramLibrary/Correlates%20of%20Whooping%20Crane%20Habitat%20Selection%20and%20Trends%20in%20Use%20in%20the%20Central%20Platte%20River.pdf>