Review of: "Causes, temporal trends and the effects of urbanisation on admissions of wild raptors to rehabilitation centres in England and Wales"

Ryan Bourbour[1]

1 University of California, Davis

Potential competing interests: The author(s) declared that no potential competing interests exist.

In this paper, Panter et al. summarizes raptor rehabilitation intake data, investigates intake trends over time, and relationships between intake causes and urbanization using records from multiple Wildlife Rehabilitation Centers in Wales and England. The utilization of rehabilitation data is very informative, and this study goes beyond a basic summary of intake records which make the results and interpretations useful for regional raptor conservation efforts. Overall, I found the study well written, using appropriate analyses, and with clear presentation. My assessment of the study is positive, and while I thought the discussion addressed the limitations of the data, I do have minor comments that I intend as constructive for using raptor rehab intake data for analyses and discussing conservation implications:

1. While a captive bird at WRCs may serve a valuable contribution to community education and outreach, these individuals are no longer part of the wild breeding population. Therefore, a bird that remains in captivity is not equivalent to a bird that is rehabilitated and released back into the wild from a conservation perspective. In addition, raptors that were euthanized could have potentially lived in captivity if space to house the bird was available. Given that captive birds only represented ~1% of the records, I don't believe this impacts the interpretation of the results, but it is worth addressing the nuances of this situation.
2. In my experience, orphaned raptors are often brought into WRCs for a multitude of both anthropogenic and natural causes, and in many cases it may be difficult to determine whether the raptor orphan is due to a human cause or not. For example, raptors often naturally fledge several days before they are fully flighted, and members of the public do not always understand this process and often bring in a healthy fledgling simply because they found it on the ground (i.e., an over-rescue). It is not clear from Appendix A whether these distinctions were able to be determined from the intake data. Additionally, nestling raptors may become orphaned because parents were killed by an anthropogenic cause (i.e. collision, rodenticide, persecution) during provisioning.
3. Tawny Owls are reported in this study to have high intake rates with regards to vehicle collisions and orphanage. This makes me wonder whether the two are correlated in the study region. Were vehicle collisions causes most common during the breeding season or post-breeding or a common year-round?

Despite the minor comments above, this study is a valuable contribution to the raptor literature and can serve as a model for future studies using raptor rehabilitation intake data to investigate regional threats to raptor populations. I appreciated

the conservation angle of the study and the discussion highlighting the importance of post-release monitoring of individuals in order to better understand the role raptor rehabilitation centers play in raptor conservation efforts.