

Review Form 3

Journal Name:	Annual Research & Review in Biology
Manuscript Number:	Ms_ARRB_128077
Title of the Manuscript:	A CASE STUDY ON THE SUCCESSFUL DIAGNOSIS AND TREATMENT OF AN ADULT TUSKER AND A JUVENILE CALF ELEPHANT (<i>Elephas maximus</i>) IN WILD AILING FROM LACTO-ACIDOSIS
Type of the Article	case study

PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	This manuscript is an important contribution to the scientific community, shedding light on a rare and critical condition, lacto-acidosis, in wild elephants. It provides detailed insights into how early diagnosis and timely treatment can effectively manage such metabolic disorders, ensuring the health and survival of these majestic animals in their natural habitats. The study serves as a practical guide for veterinarians and conservationists, offering clear protocols that can be applied in similar cases. Beyond its clinical relevance, the manuscript highlights the importance of protecting and preserving wildlife by addressing their health needs with compassion and precision.	
Is the title of the article suitable? (If not please suggest an alternative title)	<p>The article's title, "A Case Study on the Successful Diagnosis and Treatment of an Adult Tusker and a Juvenile Calf Elephant (<i>Elephas maximus</i>) in Wild Ailing from Lacto-Acidosis," is descriptive and conveys the subject matter effectively. However, it is lengthy and could benefit from a more concise and engaging phrasing.</p> <p>Suggested Alternative Title: "Successful Management of Lacto-Acidosis in Wild Elephants: A Case Study of an Adult Tusker and a Juvenile Calf"</p> <p>This alternative retains the key elements of the study while making the title more concise and impactful.</p>	

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<p>Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>The article's abstract is fairly comprehensive, providing a summary of the background, methods, results, and conclusion. However, there are areas where it could be improved for clarity, conciseness, and completeness. Here are some suggestions:</p> <p>Additions: Specific Results: Include key findings such as improved biochemical parameters (e.g., LDH and potassium levels) and observable clinical changes post-treatment. Quantitative data from the results section would strengthen the abstract. Implications: Add a sentence about the broader significance of the study for wildlife conservation and veterinary practices. Location Details: Mention the geographical context (e.g., Odisha, India) to make the case more specific and relevant. Deletions: Excessive Detail on Methods: The description of sampling methods (e.g., EDTA and Clot Activator vials) could be simplified to focus on the key diagnostic procedures. Redundancy: Avoid repeating common knowledge, such as the importance of early detection, unless it is directly related to the findings. Revised Abstract: Background: This study documents cases of lacto-acidosis in a wild adult tusker and a juvenile elephant in Odisha, India, based on clinical symptoms, blood analysis, and history of carbohydrate-rich feed consumption. Methods: Diagnostic samples, including blood, trunk wash, and fecal matter, were collected under sedation and analyzed to confirm elevated acidity and related metabolic disturbances. Results: Treatment with Soda-Bicarb, fluids, and supportive medications markedly improved clinical symptoms, blood parameters, appetite, and mobility in both elephants. Conclusion: This case highlights the critical role of timely diagnosis and targeted treatment in managing metabolic disorders in wildlife, offering a replicable approach for conservation and veterinary intervention.</p> <p>This revised abstract is concise, includes specific outcomes, and highlights the study's relevance to the scientific community.</p>	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>The manuscript appears to be scientifically correct, following a systematic approach to diagnosing and treating lactic-acidosis in wild elephants. The methods and treatment protocols described align with established veterinary practices, and the biochemical and hematological data support the diagnosis and outcomes. The following points substantiate its scientific validity:</p> <p>Clear Diagnostic Basis:</p> <p>Clinical symptoms (e.g., slow movement, inflammation, and behavioral changes) and laboratory findings (elevated LDH and potassium levels, reduced blood pH) support the diagnosis of lactic acidosis.</p> <p>Established Treatment Protocols:</p> <p>Using Sodi-bicarb, fluid therapy, and supportive medications like anti-inflammatory and neuro-vitamins is an appropriate response to manage metabolic acidosis and dehydration.</p> <p>Detailed Methodology:</p> <p>The description of sample collection (blood, trunk wash, and fecal analysis) follows standard procedures, ensuring reliable results.</p> <p>Improvement post-treatment:</p> <p>Documented clinical improvements, such as reduced inflammation and restored mobility, validate the effectiveness of the treatment.</p> <p>Use of References:</p>	

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	<p>The manuscript references relevant scientific literature to support its findings and treatment strategies, lending credibility to its claims. Suggestions for Improvement: While the manuscript is scientifically correct, minor improvements could enhance its robustness:</p> <p>Statistical Analysis: Incorporate statistical tests to validate the significance of changes in biochemical parameters post-treatment. Comparative Discussion: Relate findings to similar cases in other wildlife studies for better context. Preventive Measures: Discuss strategies to mitigate the risk of lactic acidosis in wild elephants, which would provide a holistic view.</p> <p>The manuscript is scientifically sound and contributes valuable knowledge, but it could benefit from additional analysis and broader contextualization.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>The manuscript's references are pertinent to lacto-acidosis in elephants; however, they are somewhat limited in number and include some older sources. More recent and diverse references would enhance the manuscript's depth and relevance.</p> <p>Additional References for Consideration:</p> <p>"Lactic Acidosis: Current Treatments and Future Directions" American Journal of Kidney Diseases (2016) This article discusses contemporary treatments for lactic acidosis, providing insights that could apply to veterinary practices.</p> <p>"Lactic Acidosis in Sepsis: It's Not All Anaerobic" CHEST Journal (2015) This study explores the complexities of lactic acidosis in critical care, offering perspectives that may inform the understanding of similar conditions in wildlife.</p> <p>"Diagnostic Use of Lactate in Exotic Animals" Veterinary Clinics of North America: Exotic Animal Practice (2022) This article examines the diagnostic significance of lactate levels in exotic animals, which could provide valuable context for the cases presented in the manuscript.</p> <p>"Lactic Acidosis Induced by Manual Restraint for Health Evaluation in Loggerhead Sea Turtles" Journal of Zoo and Wildlife Medicine (2021) This research highlights how stress-induced lactic acidosis can occur in wildlife during handling, offering relevant insights for the treatment of wild elephants.</p> <p>Integrating these recent studies would not only update the manuscript's references but also provide a broader scientific context, thereby strengthening the discussion and conclusions.</p>	

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<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language of the article conveys the scientific content effectively, but it requires improvement in grammar, structure, and clarity to meet the standards of scholarly communication. Below are specific observations and recommendations:</p> <p>Observations: Grammatical Errors:</p> <p>Frequent errors in grammar and punctuation (e.g., “Before the collection of blood” should be “Prior to the collection of blood”). Overuse of commas disrupts sentence flow and readability. Wordiness and Redundancy:</p> <p>Sentences like “After getting the formal permission for tranquilization, it was decided to go for tranquilization” are repetitive and can be condensed for clarity. Awkward Phrasing:</p> <p>Examples include “immediately, the elephant came into its senses” and “it needs to be tranquilized to have a proper observation.” Technical Jargon:</p> <p>Some terms, such as "PCV" and "LDH," are used without explanation, which could hinder understanding for a broader audience. Inconsistent Tone:</p> <p>The tone varies between formal scientific reporting and conversational phrasing, which detracts from the manuscript's professionalism. Recommendations: Grammar and Syntax:</p> <p>Revise sentences for grammatical accuracy and smoother flow. For instance: Original: “Before the collection of blood, the area was cleaned with spirit alcohol.” Revised: “Before collecting blood samples, the area was cleaned with alcohol.” Conciseness:</p> <p>Avoid redundancy by condensing repetitive information. For example: Original: “After getting the formal permission for tranquilization, it was decided to go for tranquilization.” Revised: “After receiving formal permission, the elephant was tranquilized.” Clarity:</p> <p>Ensure all technical terms are defined or explained on their first use. Scholarly Tone:</p> <p>Maintain a consistent formal tone throughout the manuscript. Replace informal phrases like “came into its senses” with “regained consciousness.” Proofreading:</p> <p>Conduct thorough proofreading to eliminate minor punctuation, capitalization, and formatting errors. Conclusion: While the manuscript effectively conveys the research findings, the quality of English needs refinement to meet the standards of scholarly communication. A professional language editor or thorough review could improve the manuscript’s clarity, readability, and overall impact.</p>	
<p><u>Optional/General</u> comments</p>	<p>General Comments:</p> <p>Impact on Wildlife Conservation: The manuscript provides a valuable case study for addressing health issues in wild elephants, contributing to the broader understanding of wildlife conservation and veterinary practices.</p>	

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	<p>Visual Presentation: Including figures and images enhances the paper's appeal and provides visual context to the cases. However, labeling and captions can be more detailed to improve clarity.</p> <p>Ethical Considerations: The manuscript could benefit from a section discussing the ethical aspects of interventions in wildlife, including permissions and the potential risks of handling and tranquilization.</p> <p>Future Scope: It would be helpful to include a brief discussion of future directions, such as strategies to monitor and prevent similar cases in the wild or the development of guidelines for wildlife health management.</p> <p>Language Refinement: While the content is scientifically sound, improving the language quality and coherence would make the manuscript more impactful and accessible to an international audience.</p> <p>Additional Context: A brief background on lacto-acidosis in elephants or other wildlife could help readers unfamiliar with the topic better understand its significance.</p> <p>Overall Suggestion: The manuscript addresses an important topic and contributes to wildlife health literature. Minor revisions in language, additional context, and a deeper discussion of ethical and preventive measures would enhance its quality and reach.</p>	
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PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

Name:	Muralidhar Kurni
Department, University & Country	Anantha Lakshmi Institute of Technology & Sciences, India