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Wildlife fences to mitigate human-wildlife conflicts in Africa — A literature analysis

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INTRODUCTION & AIM

Main reasons for fencing are:

- Control human-wildlife conflicts
- Marking of boundaries
- Protect biodiversity
- Prevent the transmission of zoonotic diseases

Types of fences

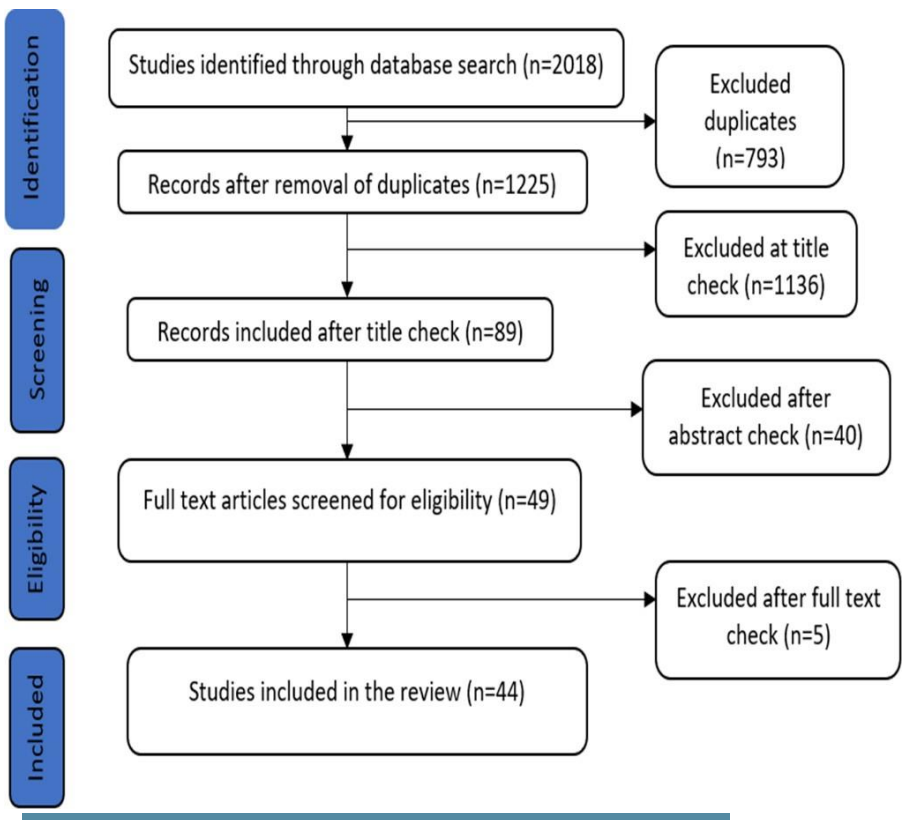
- Electric
- Veterinary fences
- Barbed wire
- Predator proof fences
- Bee hive fences

Objectives of this review

To determine the:

- Reasons for fencing
- Types of wildlife fences
- Effectiveness of wildlife fences
- Most targeted species for fences
- Controlled and non-contained species
- Causes of fence damage

METHODOLOGY



RESULTS & DISCUSSION

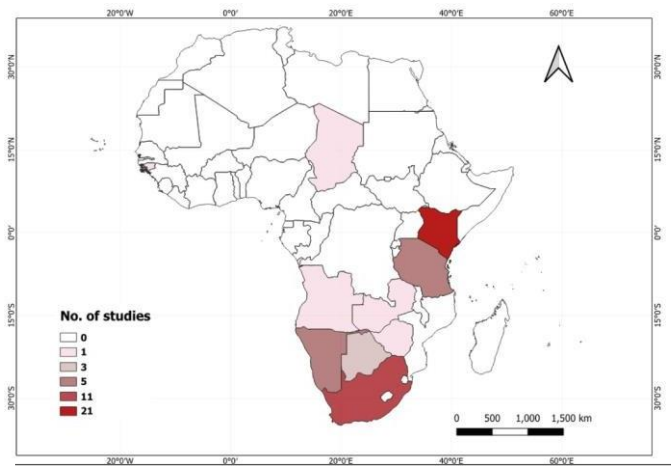
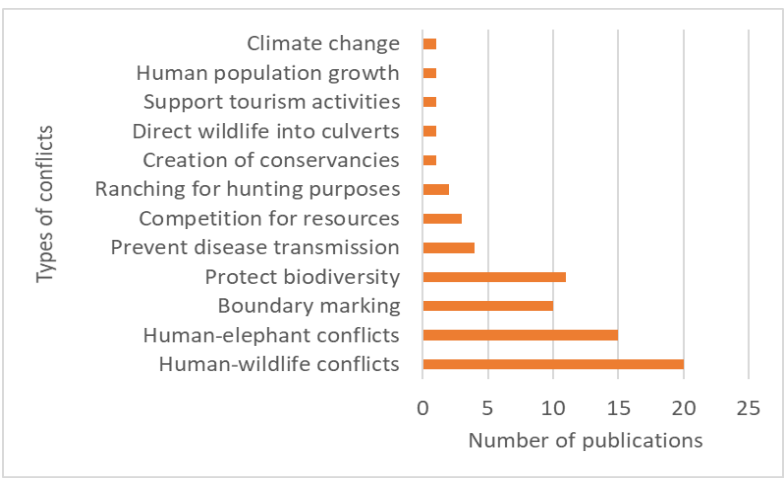


Fig. 1. The distribution of articles (n = 44) of research by countries which reported the use of wildlife fences as a mitigation method for human-wildlife conflicts.

Fig. 2. Graphical representation for the number of publications(n=44) focusing on the reasons for wildlife fencing in Africa



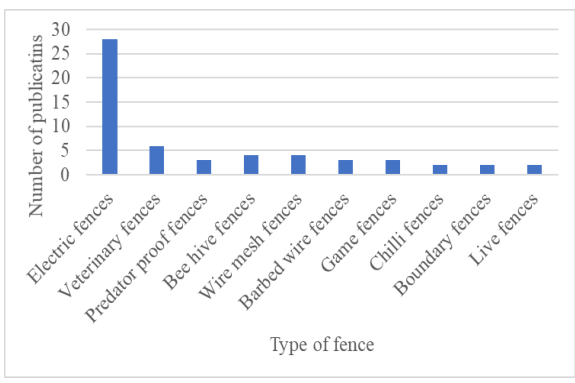


Fig. 3. Number of publications (n=44) focusing on the types of fences used in the mitigation of human-wildlife conflicts in Africa

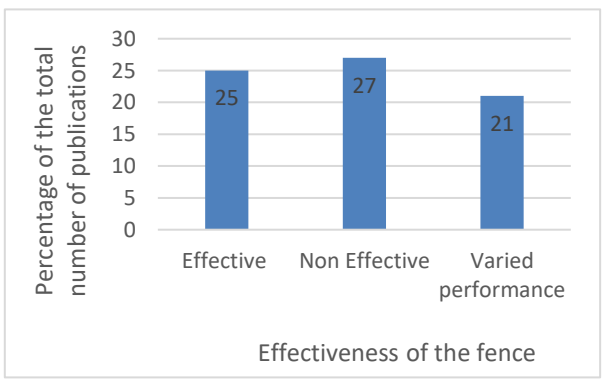


Fig. 4. Percentages of the total number of publications (n=44) focusing on the effectiveness of fences as a method for the mitigation of human-wildlife conflicts in Africa

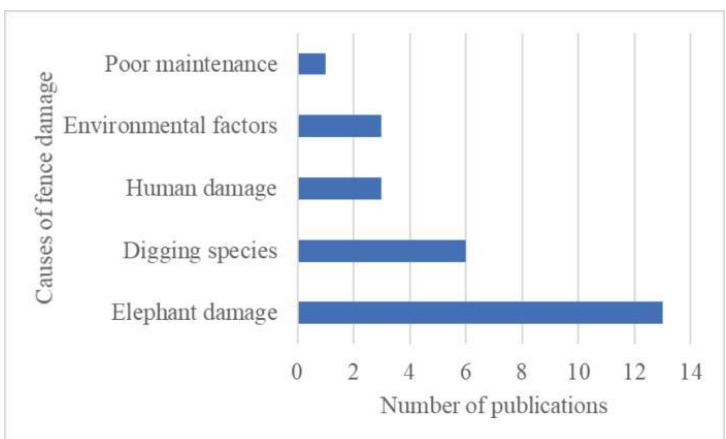


Fig. 5. Graph for the number of publications (n=44) focusing on the damage to fences as a method for the mitigation of human-wildlife conflicts in Africa

CONCLUSION

Fences are effective if well-maintained but they could be more efficient if combined with other mitigation methods. Wildlife managers should continually work to improve the current fence designs to ensure they protect humans while being friendly to wildlife.