

## AQUILA a-LIFE End-of-Project Congress 21-22 September 2022 Majadahonda, Madrid

## **CONCLUSIONS**

- 1. Bonelli's Eagle conservation actions, coordinated at the regional level have proved to be a good strategy to improve the overall status of the species at a **metapopulation** level.
- 2. A **participatory conservation** strategy, where key sectors are involved, favours and accelerates conservation projects of all kinds, such as reinforcement / reintroduction or threat mitigation.
- 3. Electrocution is the main cause of **unnatural mortality** of the Bonelli's Eagle, in most of its range, and compromises its conservation. There are other anthropogenic causes of mortality such as drowning in irrigation ponds, illegal shooting, and collision.
- 4. The most important cause of **natural mortality** for the species is competition with the Golden Eagle. Trichomonas infection is the most frequent injury in the juveniles sampled, which affects productivity.
- 5. **Habitat loss and degradation**, caused by urbanisation and infrastructure development, which negatively affect populations.
- 6. **New pairs** have been established in all the AQUILA a-LIFE project's areas of action. Currently, the 26 active territories of Bonelli's Eagle from released specimens certify that the cage-hacking release strategy, designed by the project, is an appropriate methodology to generate new breeding areas for this species. These new pairs have generated 64 fledged chicks.
- 7. Recruiting individuals from different origins (rehabilitation centres, translocations, captive breeding) is a guarantee of continuity for **reintroduction** projects.
- 8. The tagging of wild specimens in **Andalusia** (the most important population in Europe) has shown an almost no dispersal or recruitment of birds outside this region, compared to the behaviour observed in other continental areas. This would further justify reinforcement and reintroduction projects, where deemed necessary.
- 9. Improvements in GPS transmitter technology are allowing a wider knowledge of the eagles' behaviour, as is the case of the **accelerometer**.
- 10. The **French and Portuguese** populations are increasing. The peri-urban expansion of the Portuguese population, which breeds mainly in trees, is a very interesting strategy.
- 11. In the eastern Mediterranean (**Cyprus, Greece, Israel**) there has been an increase in knowledge of the juvenile dispersal of the species thanks to the tagging of specimens with GPS transmitters.
- 12. The **international action plan** for Bonelli's Eagle, which is being prepared, will be a very important planning tool and will facilitate the development of national strategies, the financing of conservation projects and will improve communication and coordination between countries for the conservation of this species.



- 13. The **correction of power lines** has proven to be a very effective measure against unnatural mortality by electrocution.
- 14. The **safety distances** in the correction of power lines should be reduced with respect to those of the Spanish Royal Decree 1432/2008.
- 15. Proper execution of protection measures on power lines is essential to improve the efficiency of these actions. In this regard, it is necessary to continue improving the training of the sectors responsible of retrofitting power lines to avoid electrocutions in **poorly corrected ones**.
- 16. **Coordination** between environmental administrations, the Public Prosecutor's Office, NGOs and electricity companies is facilitating the solution to the electrocution problem. Governance is essential to this cause. The involvement of **industrial authorities** remains a challenge.
- 17. **The effect of collisions** is greatly underestimated due to the difficulty of its detection. This is another challenge that needs to be tackled more intensively.
- 18. **Research and development** of new technologies or products is essential to mitigate this problem.