

Acquisition of professional skills in Veterinary Medicine degree by using ICT: camera trapping techniques in wildlife

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INTRODUCTION

New technologies ↔ *Teaching revolution*

Wildlife monitoring

- Species presence or absence.
- Population size estimation.
- Species geographical distribution.
- Natural behavior knowledge.



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ICT: Trapping cameras

Risk assessment

- Management practices.
- Interspecies relationships.
- Diseases transmission.



Competences & Skills (OIE, 2012)



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Decision making and establishment of management, conservation and sanitary control programs in wildlife

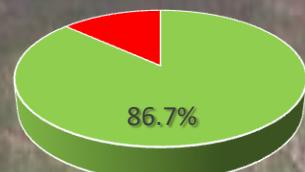
MATERIALS & METHODS

- 2015-2016 and 2017-2018 academic years.
- 34 theoretical-practical sessions.
- Small groups including 4-8 students.
- Collaborating hunting states grounds were visited.
- Phototrapping cameras were set up and installed in the natural environment.
- Graphic material obtained was collected, processed and interpreted.
- Finally, a satisfaction survey was completed by the students.

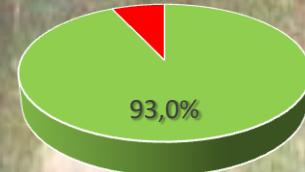


RESULTS

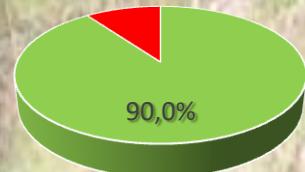
- First approach to wildlife for students of Veterinary Medicine Degree.



Students who discovered a new professional alternative



General evaluation of the activity by the students



Positive evaluation of the implemented ICT as a useful tool for teaching

Newer, more flexible and attractive strategies

CONCLUSIONS

Active learning using trapping cameras led students to a practical, dynamic and participatory acquisition of skills in biology, management, health and conservation of wild species.

Our results confirm the usefulness of ICT in practical teaching, favouring the involvement of the students in the learning process.

Further implementation into a new optional subject (Ecopathology of Wildlife)

REFERENCES

Carrasco-García, R. et al. (2018). Consumption of big game remains by scavengers: a potential risk as regards disease transmission in Central Spain. *Frontiers in Veterinary Science*, 5, 4.
 Garrote, G. et al. (2014). A comparison of scat counts and camera-trapping as means of assessing Iberian lynx abundance. *European journal of wildlife research*, 60(6), 885-889.
 Jiménez, J. et al. (2018). Spatial mark-resight models to estimate feral pig population density. *Hystrix, the Italian Journal of Mammalogy*, 28(2).
 Kukielka, E. et al. (2013). Spatial and temporal interactions between livestock and wildlife in South Central Spain assessed by camera traps. *Preventive Veterinary Medicine* 112, 213-221.
 Zamora, J. (2012). *Manual Básico de Fototrampeo: Aplicaciones al estudio de los vertebrados terrestres*. Técnicas en Biología de la Conservación, Nº 4. Tundra Ediciones. Valencia, España.

