

NEW CHALLENGES FOR THE MANAGEMENT AND CONSERVATION OF BEAR AND WOLF POPULATIONS



ZAMORA - PRESENTIAL SEPTEMBER 28 – OCTOBER 1

XII INTERNATIONAL SYMPOSIUM 2023

INTERNATIONAL SEMINAR: "MANAGEMENT AND SANITARY CONTROL OF WILD UNGULATES IN TERRITORIES WITH LARGE CARNIVORES" (09/28/2023)



INTERNATIONAL WORKSHOP "*online*" (09/29/2023)

Management problems in large carnivores.

TECHNICAL VISIT:

- Wildlife reserve Sierra de la Culebra
- Iberian Wolf Center



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INTERNATIONAL SEMINAR (PRESENTIAL) MANAGEMENT AND SANITARY CONTROL OF WILD UNGULATES IN TERRITORIES WITH LARGE CARNIVORES.

THURSDAY, 28th SEPTEMBER 2023

- 16:30 h. Welcome reception and collection of credentials. Seminar rules.
- 17:00 h. Conference.
Animal tuberculosis: interaction between wildlife and domestic livestock.
Invited speaker: PhD. Ana Balseiro Morales. University of León (Spain).
- 17:30 h. Conference.
Zoonoses in large game in Portugal: A two-decade overview and the importance of initial examination.
Invited speaker: PhD. Madalena Vieira-Pinto. University of Trás-os-Montes e Alto Douro and Vice-President of WAVES Portugal (Portugal).
- 18:00 h. Oral communications. Session1.
Sem.1. Wild boar, water and biodiversity, a complex network to obtain One Health and the sharing of ecological spaces between living beings. *N. Piscopo, O. Tamburis, F. Esposito, M. Manno, R. Primi, M. Feio, L. Esposito.*
Sem.2. Detection of age classes of Wild Boar (*Sus scrofa*) from camera trapping using Automatic Deep Learning-Based Object Detection. First results. *R. Primi, L. Orteni, P. Girotti, B. Ronchi, R. Spina, S. Violino, D. D'Agostino, N. Piscopo, P. Viola.*
- 18:45 h. Panel discussion with regular and invited speakers.
- 19:15 h. Coffe break.
- 19:30 h. Conference.
Evolution of the progress of Epizootic Hemorrhagic Disease in Spain and its consequences.
Invited speaker: PhD. Ana María Carvajal Urueña. University of León and Mr. José Emilio Yanes García. University of Salamanca (Spain).
- 20:00 h. Oral communications. Session2.
Sem.3. Study on the origin of the current wild boar population in Campania Region (Italy). *M. Puigliano, E. D'Anza, N. Piscopo, I. Cascone, A. Rossetti, M. G. Riccardi, F. Ciotola, V. Peretti, S. Albarella.*
Sem.4. Exploring the potential links between gut microbiota composition and natural populations management in wild boar (*Sus scrofa*). *G. Vedel, X. Triadó-Margarit, O. Linares, J.M. Moreno-Rojas, E. de la Peña, I. García-Bocanegra, D. Jiménez-Martín, J. Carranza, E. Casamayor.*
Sem.5. Monitoring of wild ungulate populations in lands affected by fires in the province of Zamora (June 2022-June 2023) and analysis of the Iberian wolf presence. *E. Abril, T. Yanes, M. Pertejo, E. Martínez.*
- 20:45 h. Panel discussion with regular and invited speakers.
- 21:30 h. Institutional reception and Spanish-style "cocktail".

FINAL PROGRAM

This is a preliminary program, so it may be subjected to small last-minute variations.



Coordination



XII SYMPOSIUM INTERNATIONAL (PRESENTIAL) NEW CHALLENGES FOR THE MANAGEMENT AND CONSERVATION OF BEAR AND WOLF POPULATIONS.

FRIDAY, 29th SEPTEMBER 2023

09:00 h. Welcome reception and collection of credentials. Symposium rules.

09:30 h. Main Conferences.

The recovery of the Cantabrian bear and the new conservation challenges.

Invited speaker: Mr. Guillermo Palomero García. President of the "Oso Pardo" Foundation (Spain).

Demographic evolution of the Wolf (*Canis lupus*) in Spain and reflections on its new legal status.

Invited speaker: Mr. Mario Sáenz de Buruaga. Director of "Consultora de Recursos Naturales" (Spain).

BLOCK I. BIOLOGY AND ECOPATHOLOGY.

10:30 h. Oral communications. BI. Session1.

BI.1. Capture and radio-tagging plan for brown bears in Castilla y León. Planning and first results. *D. Cubero, D. Pinto, G. de Pedro, N. Foces, A. Soto, M. Villa, L. Puchades, C. León.*

BI.2. Clinical management and recovery of an injured Cantabrian bear cub: the case of "Martín". *M. Villa, N. Foces, G. de Pedro.*

BI.3. Seroprevalence of *Sarcoptes scabiei* infection in the Iberian wolf and the red fox of the northwest of the Iberian Peninsula. *E. Estévez-Sánchez, M.J. Otero-Folgueira, J.P. Barrera, A. Montoya, P. Moraleda, L.E. Fidalgo, A.M. López-Beceiro, R. Checa, G. Miró.*

BI.4. mt-DNA haplotype analyses in dead wolves found on Italian and Iberian territories. *E. D'Anza, I. Cascone, M. Pugliano, N. D'Alessio, L. Esposito, N. Piscopo, S. Albarella, V. Peretti, F. Ciotola, J. Merino.*

11:15 h. Conference.

Genomics of the Brown Bear in the Cantabrian Mountains.

Invited speaker: PhD. José Castresana Villamor. Institute of Evolutionary Biology from Spanish National Research Council-CSIC (Spain).

11:45 h. Panel discussion with regular and invited speakers.

12:15 h. Coffe break.

12:30 h. Inaugural Ceremony.

12:45 h. Oral communications. BI. Session2.

BI.5. Valsemana brown bear acclimatization facility. Cantabrian benchmark for the recovery and reintroduction of bears in the natural environment. *D. Cubero, M. Osorio, D. Pinto-Parada.*

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BI.6. Case of leishmaniosis in an Iberian wolf (*Canis lupus signatus*) kept in semi-freedom in the province of Zamora. L. Merino, J. Palacios, T. Yanes, V. Castilla, R. Balaña, M. Martínez-Valladares.

BI.7. Effectiveness of attractants and bait for Iberian wolf detection; captivity-based and free-ranging trials. L. del Río, J. A. Zearra, R. Mateo, P. Ferreras, J. Tobajas.

BI.8. Non-invasive genetics as a useful tool for impact assessment: a case study of the Iberian wolf in Northern Portugal. L. Duarte, J. Vieira, M. Almeida, M. Rodrigues, M. Lapa, C. Rodríguez, F. Petrucci-Fonseca.

13:30 h. Conference.

Wolves in Portugal: status and conservation challenges of an endangered population.

*Invited speaker: **PhD. Francisco Álvares.** CIBIO researcher (Portugal).*

14:05 h. Panel discussion with regular and invited speakers.

14:30 h. *Lunch.*

16:00 h. Oral communications. BI. Session3.

BI.9. Gastrointestinal and respiratory parasites present in the Iberian wolf (*Canis lupus signatus*) from the province of Zamora. L. Merino, E. Merino, D. García-Dios, P. Morrondo, P. Díaz, V. Castilla, R. Balaña, M. Martínez-Valladares.

BI.10. Presence and diversity of gastrointestinal parasites in domestic and wild carnivores cohabiting with Iberian Wolf in Northeastern Portugal. T. L. Mateus, A. Pereira, C. Carneiro, A. Monzón.

BI.11. How Wolves and Dogs Smell the World: A Comparative Neuroanatomical Journey. I. Ortiz, M.V. Torres, L.E. Fidalgo, P. Sánchez, A.M. López.

16:45 h. Conference.

The Wolf and the human being: coexistence.

*Invited speaker: **Mrs. Odile Rodríguez de la Fuente.** Biologist and environmental educator (Spain).*

17:15 h. Coffe break.

17:45 h. Oral communications. BI. Session4.

BI.12. New threats to the recovery of the Cantabrian brown bear population. A. Balseiro, G. Herrero-García, J.F. García Marín, R. Balseira, J.M. Monasterio, D. Cubero, G. de Pedro, Á. Oleaga, A. García-Rodríguez, I. Espinoza, B. Rabanal, G. Aduriz, J. Tuñón, C. Gortázar, L.J. Royo.

BI.13. Non-invasive techniques applied to the study of wolf diet in a portuguese area with measures to promote wild prey (Baixo Sabor). S. Lemos, L. Llana, A. Monzón.

BI.14. Index of zoonoses of large game causing most concern in the scientific community. A.C. Abrantes, M. Vieira-Pinto.

18:30 h. Panel discussion with regular and invited speakers.

19:00 h. Conference.

Management problems in large carnivores in Portugal.

*Ponente: **PhD. Francisco Petrucci-Fonseca.** University of Lisbon (Portugal).*

19:00 h. **International Workshop “on-line”.**

Management problems in large carnivores.

Invited speakers:

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PhD. Djuro Huber. University of Zagreb (Croatia).

PhD. Juan Carlos Blanco Gutiérrez. Scientific Advisor of the “Oso Pardo” Foundation (Spain).

PhD. Martin Tomko. University of Kosice. President of WAVES Slovakia. (Slovakia).

PhD. Luis Llaneza Rodríguez. “Asesores de Recursos Naturales ARENA S.L.” (Spain).

Coordinator: **PhD. Ana Carvajal Urueña.** University of León (Spain).

Presenter: **Mrs. Laura Yanes Martínez.** ILEX Consultora Ambiental.

21:30 h. End of day.

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SATURDAY, 30th SEPTEMBER 2023

09:30 h. Conference.

Monitoring and conservation of Iberian Wolf populations in Castilla y León.

Invited speaker: Mr. David Cubero Bausela. Head of the Service of Natural Areas of Flora and Fauna of Castilla y León. (Spain)

10:00 h. Conference.

What do robots do in the middle of wildlife?: ethology and robotics.

Invited speaker: PhD. Vicente Matellán Olivera. University of León and Director of the Supercomputing Center of the Junta de Castilla y León (Spain).

BLOCK II. EVOLUTION OF POPULATIONS, CONSERVATION AND COEXISTENCE WITH THE HUMAN BEING.

10:30 h. Oral communications. BII. Session1.

BII.1. Operation to locate and recover several specimens of brown bear after their collapse in the Palentinian Mountain. *P. Zuazúa, D. Cubero, D. Pinto.*

BII.2. A biomedical reason for the conservation of the Iberian wolf: relevant keys against Alzheimer's. *R. Castro.*

BII.3. Livestock Guarding Dogs: Assessing and Optimizing their Use. *S. Ribeiro, F. Petrucci-Fonseca.*

BII.4. Preliminary results of wolf (*Canis lupus italicus*) predation to livestock in Lazio Region. *C. Tiberi, R. Primi, P. Viola, A. Vitali.*

11:15 h. Conference.

Health management and control of the Marsican Brown bear in the wild and in semi-captivity.

Invited speaker: PhD. Leonardo Gentile. Official veterinarian of the Abruzzo, Lazio and Molise National Park (Italy).

11:45 h. Panel discussion with regular and invited speakers.

12:15 h. Coffe break.

12:45 h. Oral communications. BII. Session2.

BII.5. Aversive conditioning of brown bears in Laciana and Alto Sil. *D. Pinto, D. Cubero.*

BII.6. Compensatory measures for hydroelectric use in "Baixo Sabor" (Northeast of Portugal) for the protection of the Iberian Wolf. *A. Monzón, C. Carneiro, S. Lemos, C. Silva, A. Pereira.*

BII.7. Robot-dogs shepherding a herd: preliminary study of animal-robot interaction. *C. Fernández, A. Gutiérrez, C. Álvarez-Aparicio, J.M. Gonzalo-Orden, L. Sánchez-González, F.J. Rodríguez-Lera.*

13:30 h. Conference.

Management of the Brown bear in Castilla y León. Action plans.

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Invited speakers: Mr. Daniel Pinto Parada and Mr. Gabriel de Pedro Aguilar. Natural Heritage Foundation of Castilla y León (Spain).

14:00 h. Panel discussion with regular and invited speakers.

14:30 h. *Lunch.*

16:30 h. Oral communications. BII. Session3.

BII.8. Overcoming perception system challenges for herding with a 4-legged robot. *V. Riego, M.Á. González-Santamarta, V. Matellán, F.J. Rodríguez-Lera, L. Sánchez-González.*

BII.9. Evaluation of the impact of the fires in the Sierra de la Culebra on the wolf population. *V. Palacios, B. Martí-Domken, R. Campos, V. Sazatornil, E.J. García, J.V. López-Bao.*

BII.10. The wolf: predation on domestic livestock or food preferences? Five years of observations in the National Park Abruzzo, Lazio and Molise, Italy. *V. di Pirro, L. Gentile, L. Esposito, N. Piscopo.*

BII.11. Using integrated step selection functions to study brown bear (*Ursus arctos*) movement and habitat selection. *J. Vieira, Y. Mertzanis, F. Petrucci-Fonseca.*

17:15 h. Conference.

Bear conservation in France : issues related to a small cross-border population.

Invited speaker: Mr. Julien Steinmetz. Coordinator for the bear management at the OFB (France).

17:45 h. Panel discussion with regular and invited speakers.

18:00 h. Coffe break.

18:30 h. Oral communications. BII. Session4.

BII.12. Carnivore damage prevention news: exchanging knowledge to facilitate coexistence. *S. Ribeiro, R. Rigg, D. Mettler, M. Herdtfelder, V. Salvatori, J. Linnell.*

BII.13. Geospatial analysis of movement patterns of a rescued and reintroduced Wolf in central-southern Italy. *A. Minichino, A. Antonucci, S. Angelucci, M. Pompameo, A. Fioretti.*

BII.14. New active strategies in support of the livestock industry against predations: PAN (Project Farmers-Nature) protocol. *F. Trenta, A. Gallizia, M. Ferretti, G. Pennacchioni.*

BII.15. The use of donkeys for the prevention of damage caused by wild carnivores in herds of domestic ruminants: A bibliographic review. *C. Díez Valle.*

19:15 h. Closing Conference.

The challenge of managing large carnivores. Future perspectives.

Invited speaker: Mr. José Ángel Arranz Sanz. General Director of Natural Heritage and Forest Policy of Junta de Castilla y León (Spain).

19:45 h. Panel discussion with regular and invited speakers.

20:45 h. End of the day. Instructions for the next day technical visit (**OPTIONAL**).

21:15 h. Symposium Gala dinner (**OPTIONAL**) (Zamora)

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SUNDAY, 1st OCTOBER 2023

TECHNICAL VISIT TO WILDLIFE RESERVE “SIERRA DE LA CULEBRA” AND TO THE IBERIAN WOLF CENTER OF CASTILLA Y LEÓN “FÉLIX RODRÍGUEZ DE LA FUENTE” (OPTIONAL).

- 06:30 h. Departure from Zamora to “Sierra de la Culebra”.
Deer viewing and chance to see wild wolves in the nature.
- 09:30 h. Departure to Robledo de Sanabria.
- 10:15 h. Breakfast at the Iberian Wolf Center of Castilla y León.
- 11:00 h. Conference
Sustainable management of the Iberian Wolf Center of Castilla y León Félix Rodríguez de la Fuente.
Invited speakers: Mr. Jesús Palacios Alberti (Wolf Center Director) and Mrs. María José Rodríguez Ferrero (Natural Heritage Foundation of Castilla y León) (Spain).
- 11:30 h. Guided technical tour to the Iberian Wolf Center of Castilla y León.
Dependencies and museum rooms.
*Invited speakers: **Monitors team.** ILEX Consultora Ambiental.*
Theoretical-practical seminar: routes through the different observatories of the Center.
Management and health program of the Iberian Wolf in the Center.
*Invited speakers: **Management and veterinary care team.** ILEX Consultora Ambiental.*
- 14:15 h. Closing ceremony.
- 15:15 h. Lunch.

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