

Abstracts Book

#Vultures2023

















14,15 & 16 November

#vultures2023

EVENT SCHEDULE

scientific programme

Day 1

14 Nov.	Auditorium	Programme organization: All interventions feature one name only:
08:00	Registration	Oral presentations - the speaker's name Posters - 1st author's name Duration of the interventions:
10:00	Welcome Session	Standard talks - 12 mins Speed talks - 5 mins
	Junta de Extremadura Vulture Conservation in Extremadura	
	MITECO Vulture Conservation in Spain	
	José Tavares Vulture Conservation in Europe	
11:45	Coffee break	
12:15	Sergio Lambertucci Old and new threats for Neotropical vul what is happening with the Andean Cor	
	Questions & Discussion	
12:55	Julien Hirschinger & Olivier Duri Investigating the 2022 H5N1 Outbreak in	
	Jovan Andevski Wildlife Crime Academy	
	Questions & Discussion	
13:35	Lunch	

















14 Nov.	Auditorium	Sala Europa	Sala García Matos
15:05	Rafael Mateo Daily incidence of lead ammunition ingestion in Griffon Vulture in Spain: comparing estimations from regurgitated pellets and blood analysis	Cloé Pourchier The conservation of vultures in an interconnected world: focus on West and Central Africa	Alex Llopis Dell The Bearded Vulture EEP and its contribution to the advance of knowledge about its biology
	Enrico Bassi Lead ammunition: a widespread threat, hampering the conservation of large avian scavengers in south-central Europe	Fadzai Matsvimbo Belief-based use of vultures in Africa: Finding the balance between conservation and culture	Shannon Hoffman Bred 4 the Wild – Managing the southern Bearded Vulture for ex-situ breeding success
	Andrea Bonisoli-Alquati Lead and oxidative stress in migrant and resident Turkey Vultures in California	Sebastián Kohn Andean Condor research and conservation in Ecuador	Jemima Parry-Jones Conservation breeding as a conservation tool for South Asian Gyps Vultures
	Questions & Discussion		
15:55	Marta Herrero Villar Monitoring veterinary pharmaceutical residues in livestock carcasses and avian scavengers: new compounds in the spotlight	MsAP Roundtable Mohamed Amezian Vulture research and conservation in Morocco: Assessment of progress in the framework of the Vulture MsAP	Alex Llopis Dell Best practice how to release Bearded Vultures into the wild
	Chris Bowden Update on addressing the ongoing threat to vultures of veterinary drugs	André Botha Preliminary report and results of the CMS Vulture MsAP Mid-term Implementation Review	Marleen Huyghe Analysis of various release techniques for Cinereous Vultures to determine key factors for an optimal release strategy
	Sophie Cook Are the processes regulating the licensing of veterinary NSAIDs in vulture range states fit-for-purpose?	Umberto Gallo-Orsi & Iván Ramírez The Convention on Migratory Species and beyond: Collaborative efforts for vulture conservation	Emilian Stoynov Griffon and Cinereous Vultures delayed release of captive bred individuals in reintroduction programmes in Bulgaria
	Questions & Discussion		
16:45	Coffee Break		

































Day 2



14,15 & 16 November

EVENT SCHEDULE

scientific programme

15 Nov.	Auditorium		
09:00	Marcos Moleon Pais Vultures, predators and humans	: a story of interactions	
	Pascual Lopez Lopez Conservation challenges and op	portunities for migratory vultures:	a movement ecology perspective
	Questions & Discussion		
10:15	Katherine Steinfield Carrion converging: Skull shape	is predicted by feeding ecology in	vultures
	Milene Matos LIFE Aegypius Return: Consolida (Aegypius monachus) to Portugal and	ting the return of the Critically End Western Spain	angered Cinereous Vulture
	Questions & Discussion		
	Cultural Moment		
11:20	Coffee Break		
	Auditorium	Sala Europa	Sala García Matos
11:50	Corinne Kendall Using survival analysis from telemetry and transects to assess short-term population trends in vultures	Olivier Duriez How hungry are Griffon Vultures ?	María Jesús Palacios Threats for carrion birds in Extremadura and their management



John Mallord

High annual survival

rates and breeding success

Mattie Purinton

The effects of food predictability on the foraging ecology of African Whitebacked Vultures (Gyps africanus)

Fiammetta Berlinguer

LIFE Safe for Vultures - implementation of conservation actions and population status

















15 Nov.	Auditorium	Sala Europa	Sala García Matos
	Andrea Santangeli Project SURVIVALIST: SURVIVAL in Space and Time: Identifying mortality bottlenecks along the annual cycle of vultures	David Delgado Management of food availability as a conservation tool for the Cinereous Vulture population (Aegypius monachus) in the Portuguese-Spanish bordering area	Nikola Novović Vulture status and perspective in Montenegro - Insights and Challenges
	Questions & Discussion		
12:40	Eneko Arrondo Interspecific relationships during Griffon Vulture overwintering in Africa	Richard Zink Of vultures and drones: Assessing the potential of Unmanned Aircraft Systems for European vultures research	Sylvia Zakkak Wildfire effects on Cinereous Vulture breeding and habitat use in the Dadia-Lefkimi-Soufli Forest National Park
	Chandra David Release Strategies for the California Condor Recovery Program	Carlota Viada Sauleda First photographic census of Black Vultures and Griffon Vultures in Mallorca	Eduardo Santos Cinereous Vulture (Aegypius monachus) recolonization of Herdade da Contenda (Southeastern Portugal): characterisation, evolution and conservation
	Estelle Sandhaus Patterns of parental investment in nesting California Condors	Yohan Sassi Vultures' foraging network: a century-old hypothesis investigated with radar	Pedro Ribeiro The discovery of a new colony of Cinereous Vultures in Malcata Nature Reserve: population status and prospects
	Questions & Discussion		
13:30	Lunch		
15:00	Poster-Session		

















	Speed talks		
15:45	Irene Estellés-Domingo Wind farms and raptors: unveiling the challenges and solutions for vulture conservation	Toni Wegscheider The Bearded Vulture in Germany – results from the first three releases (2021-2023)	Hristo Peshev GPS tracking data relates vulture mortality due to acute intoxication at a considerable distance from the site of poisoned bait consumption
	Nicolò Borgianni Monitoring Eurasian Griffon Vulture (Gyps fulvus) collision with wind turbines in the central Apennines (Italy)	Sachin Ranade The Vulture Reintroduction Program in Assam, India	Stoucho Stouchev Antipoisoning activities in Bulgaria to enforce vultures conservation in the country
	Dariusz Gorecki To fly or not to fly in the rotor swep zone? Detection-reaction systems can protect Griffon Vultures against collision on wind farm	Clément Daboné Hooded Vultures, (Necrosyrtes monachus) are still declining in West Africa: nearly fifty-year assessment study (1969 - 2019)	Hanna Oosterhoff Soaring through the central Apennines. Where (not) to go
	Questions & Discussion		
	Speed talks		
16:10	Apostolis Kaltsis Current status of Griffon Vulture (Gyps fulvus) in Greece: population monitoring results and identification of critical habitats	Candy Marleen Fahrenholz Assessing vulture nesting site selection in Namibia: The influence of microscale landscape structures using drone-based methods. Survey of two endangered vulture species at Kuzikus Wildlife Reserve	Anne K. Scharf Vulture Research Consortium (VRC)
	Dobromir Dobrev Long-term Griffon Vulture population development in the Eastern Rhodopes, Bulgaria	Campbell Murn Heading south, but to where? A shifting distribution of breeding Lappet-faced Vultures (Torgos tracheliotos) is impacted by fire and elephants in Kruger National Park, South Africa	Martina Scacco The Drylands project

















Auditorium

	Speed talks		
	Alyona Kaptyonkina Griffon vulture (Gyps fulvus) in Kazakhstan	Sandro López-Ramírez Is southern Europe environmentally favourable for the long-term establishment of Rüppell's Vulture (Gyps rueppellii)?	Tom Riffel Tagging vultures in Zambia – movement dynamics in extensive wilderness areas
	Mohammed Shobrak Vulture conservation status in Saudi Arabia	Michelle Marcano-Delgado Spatio-temporal movements and home range of Rüppell Vultures in Europe	Irene Breda Long distance movements in a social obligate scavenger: exploring the role of age, sex and season
			Alejandro Onrubia Magnitude and trends of vultures passage through the Strait of Gibraltar
	Questions & Discussion		
16:40	Coffee Break		
17:10	Roundtable 1 The IUCN SSC Vulture Specialist Group (VSG)	Roundtable 2 Tackling vultures-livestock incidents	Short Workshop Positive communication for vulture conservation
	André Botha & Chris Bowden An overview of the IUCN SSC Vulture Specialist Group – 2012-2023	Fátima Domínguez Gigante Multi-source data for dealing with conflicts between livestock farmers and vultures: preliminary results from the project LIFE Aegypius Return	
		LIFE GypAct Conflicts between livestock farmers and vultures in France	
18:10	Cultural Visit to Caceres		

















Day 3



14,15 & 16 November

EVENT SCHEDULE

scientific programme

16 Nov.	Auditorium
09:00	Darcy Ogada Drivers of vulture poisoning are not created equal: disproportionate effects and their likely impacts on African and migratory European population
	Questions & Discussion
	Jose Rafael Garrido López Conservation Focus: Rüppell's Vulture along the Western Flyway
	Keith Bildstein Future potential advances in vulture conservation
	Questions & Discussion

	Questions & Discussion		
	Auditorium	Sala Europa	Sala García Matos
10:15	Mary Davies The SAVE consortium: Saving Asia's Vultures from Extinction	Cecilia Gimeno Castellano The natal dispersal of Canarian Egyptian Vultures: extrinsic and intrinsic drivers	Jon Etxebarria Factors affecting collision risk in wide-ranging species: implications for large-scale wind energy development
	Mary Malasa The Vulture Safe Zone Initiative - creating safe havens for endangered vultures; successes and lessons learnt in Zambia	Krishna Prasad Bhusal Testing of methods to evaluate population numbers of the Egyptian Vulture (Neophron percnopterus) in Nepal	Jacopo Cerri Fast wind energy development in Sardinia and its overlap with movements of Griffon Vultures (Gyps fulvus)
	Radhika Jha Impact of climate change on the habitat suitability of three critically endangered vultures in northern India	Joan Real Key factors behind the dynamic stability of the Egyptian Vulture breeding pairs census in continental Spain	Elena Bravo-Chaparro Movement ecology to inform environmental planning of renewable energies: an example with Griffon Vultures and wind farms





Questions & Discussion













16 Nov. **Auditorium** Sala Europa Sala García Matos Coffee Break 11:05 Gideon Vaadia Jenny Weston Constance Blaru Accelerometer-based remote Mid-term Implementation Visual perception of wind classification of Griffon Vulture Review of the Flyway Action turbines by birds: focus on 11:35 behavior as a conservation tool Plan for the conservation of vultures and raptors the Balkan and Central Asian populations of the Egyptian Vulture (Neophron percnopterus) Marta Acácio Vladimir Dobrev **Anastasios Bounas** Ageing in nature: lifelong Egyptian Vulture conservation Population Viability Analysis for changes in the movement at a flyway scale: Challenges the Cinereous Vulture in Greece: and social behaviour of and opportunities Extinction Risk assessment Griffon Vultures under the future impact of windfarms **Eleanor Flatt** Vladimir Dobrev Elzbieta Kret Vulture movements and Where do Egyptian Vultures When green energy jeopardizes health in a human dominated from Central Asia spend the the conservation of threatened landscape in South Pacific winter? species: Cumulative effects of Costa Rica industrial wind farm development on the Cinereous and Griffon Vulture in Thrace, NE Greece. Questions & Discussion **Vladimir Dobrev** Alvaro Camina JB Mihoub Long-distance post-release Reinforcement program for A review of camera detection movements challenge the Egyptian Vultures leads to systems in Spain to minimize 12:30 metapopulation restoration successful supplementation wind energy impacts on of Bearded Vultures of the breeding population in vultures and other raptors the Balkans **Vladimir Dobrev** Julien Terraube Alazar Daka Identifying the main drivers Recent stabilization of the Impact to vultures of wind of young Bearded Vulture Egyptian Vulture population energy in Ethiopia, an movements in three European in the Balkans emerging threat subpopulations **Dorian Santos-Cottin** Alessandro Andreotti Agustín Riopérez Back to the Alps: Trends in LIFE Egyptian Vulture project -DTBird tool for vulture population size and drivers main results of actions carried protection and collision of breeding success in a out in Italy control at wind farms reintroduced Bearded Vulture population

















16 Nov.	Auditorium	Sala Europa	Sala García Matos
13:20	Lunch		
14:50	Pascal Orabi LIFE GYP'ACT - Strengthening the reintroduction program to restore the <i>Gypaetus barbatus</i> metapopulation between the Alps and the Pyrenees	Antonio-Román Muñoz From the first observations to the recent establishment: the paradox of a sub-Saharan species colonizing the western Palearctic	Brian Mcgowan Global perspective on Insulation and Protection strategy to reduce risk of electrocution on distribution power line infrastructure
	Anthony Andarelli LIFE program GypRescue - Rescue of the Bearded Vultures' population of Corsica	Alejandro Onrubia Rüppell's Vulture (Gyps rueppelli): A new vulture species for Europe?	Liam Innis RGI's Bird Portal - Working with grid operators and civil society or bird protection around the grid
	Juan Jiménez Reintroduction of Bearded Vulture in the Maestrazgo (E Spain). Are we achieving the expected results?	Juan Ramírez First confirmed data of Rüppell's Vulture breeding in Senegal: phenology and population estimation	Manon Quetstroey LIFE SafeLines4Birds. Reducing bird mortality caused by power lines
	Enrique Avila Lopez Bearded Vulture Reintroduction Project in Andalusia: Results and population estimates through the use of camera traps located on cliffs	Maarten Vis Breeding Rüppell's Vultures in European zoos	Rubén Moreno-Opo Future prospects to reduce negative impacts of power lines
	Questions & Discussion		
16:05	Coffee Break		
	Auditorium		
16:35	Franziska Loercher An overview on Bearded Vulture	conservation in Europe	
	Luis T. Costa MAVA and vultures – a personal v	view on funding vulture conservation	on and the overall result
	Questions & Discussion		
17:05	Closing Session		



















Meet the Scientific Committee

Patricia Mateo Tomas

Assistant Professor in Ecology and Conservation Biology. Instituto Mixto de Investigacion en Biodiversidad. University of Oviedo, Spain.

Olivier Duriez

Assistant Professor in Ecology and Conservation Biology. University of Montpellier. Centre d'Ecologie Fonctionelle et Evolutive (CEFE-CNRS), France. Advisory board of the Vulture Conservation Foundation.

Alvaro Camia Cardenal

Senior Environmental Specialist. IFC-International Finance Corporation. Advisory board of the Vulture Conservation Foundation.

Raphaël Néouze

Former Vultures Project Manager at the Grands Causses. Psychothérapist. Management board of the Vulture Conservation Foundation.

Fiammetta Berlinquer

Associate Professor in Animal Physiology at the Department of Veterinary Medicine. University of Sassari, Italy.

Enrico Bassi

Research consultant in Wildlife Ecology. Bergamo, Italy. Advisory board of the Vulture Conservation Foundation.

Daniel Hegglin

Researcher at SWILD, Zürich, Switzerland. Management board of the Vulture Conservation Foundation.

Franziska Lörcher

Scientific coordinator at the Vulture Conservation Foundation.

Julien Terraube

Research Officer at the Vulture Conservation Foundation.



Standard presentation

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1 - Department of Genetics of Populations and Ecogenotoxicology, Institute for Biological Research "Siniša Stanković" – National Institute of the Republic of Serbia, University of Belgrade, Bulevar Despota Stefana 142, 11060 Belgrade, Serbia; 2 - Birds of Prey Protection Foundation, Bulevar Despota Stefana 142, 11060 Belgrade, Serbia

Using genetics for creating proper conservation strategies for protected species – the case of Griffon Vulture (*Gyps fulvus*)

Genetic diversity is highlighted by IUCN as one of the three pillars of biodiversity that need to be protected together with species and ecosystem diversity. Thus, before any conservation measures of reintroduction/restocking are undertaken, especially in the regions where autochthonous populations exist, it is necessary to evaluate the genetic diversity of both the autochthonous and introducing populations. If there are no autochthonous populations, the nearest neighbouring populations are used as donors and only if neighbouring populations are non-existent distant populations could be used. In this way, the local adaptations and genetic variation specific to the region will be preserved.

In the Balkan Peninsula, the stable and autochthonous population of Griffon Vulture persists and it should be protected as such. The genetic data based on microsatellites demonstrated the existence of two genetic clusters one of which is specific for the Balkan and Iberian Peninsula. The study of mitochondrial DNA diversity demonstrated the existence of private haplotypes unique for both peninsulas. Long-time monitoring of named populations demonstrated different migration patterns. Birds from the Balkans migrate almost exclusively to the Middle East while the Iberian birds migrate to northwest Africa, which is the reason why they rarely come into contact. Natal philopatric behaviour specific to the species dictates that the unique genetic fingerprint will remain fixed in the region of their origin. Thus, in nature, gene flow between named populations is low, or insignificant. In addition, somewhat different climate conditions between Iberian and Balkan peninsula could also drive genetic differentiation due to the local adaptations.

The detected level of genetic differentiation between these regions suggests that different conservation approaches are needed to preserve specific and unique genetic diversity and that the current program of restocking the vulture population of the Balkan Peninsula with the birds from the Iberian Peninsula needs to be re-evaluated.

Keywords: genetic diversity, *Gyps fulvus*, reintroduction, restocking, Balkan Peninsula, conservation strategy

