Geoffrey Mesbahi

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Research experience

Post-doc Since 2020	***Agronomic value of temperate fodder trees for dairy cattle production*** PhD Sandra Novak, INRAE, France

- Forage sampling
- Faeces sampling
- Feeding behaviour sampling (scan and focal sampling)
- Remote sensing (TLS, drone photogrammetry)
- Statistical analyses (R software)
- Supervision of 1 BA student and 1 field assistant
- Pollard trees maintenance
- Outreach

Doctorat 2017 -2020	***Prediction of agronomical and ecological grasslands characteristics, and their trade-offs. Focus on the Vosges Mountains permanent grasslands*** Prof Sylvain Plantureux, University of Lorraine - INRAE, France Cécile Bayeur, Northern Vosges Regional Nature Park, France

- Field botany
- Forage sampling
- Soil sampling
- Interviews of farmers
- GIS (QGIS software)
- Database management
- Statistical analyses (R software)
- Supervision of 7 MA students
- Teaching 43 hours
- Outreach

Field assistant 2015-2016	***Semantics content in titi monkey alarm call sequences*** PhD Mélissa Berthet, University of Neuchâtel, Switzerland

- Wild monkey population monitoring
- Cognitive experiments
- Behaviour observation (scan sampling)
- Faeces sampling
- Protocol reflection
- Assistants training

Engineer thesis 2014	***Impact of soil properties and agronomical practices, and their interactions, on French earthworms communities***

PhD Kevin Hoeffner, University of Rennes 1 - CNRS, France

- Earthworms gathering
- Earthworms identification
- Database management
- Statistical analyses

Education

Doctorate degree 2017-2020	**PhD in agronomic sciences** University of Lorraine Lorraine, France Jury: Prof Gillet F., PhD Bonis A., PhD Diquelou S., PhD Magda D., PhD Michaud A.
Engineer degree 2009 – 2014	**Engineer in agriculture and management** UniLaSalle Beauvais, France

Additional courses

Summer school 2021	**Analysis and Experimentation on Ecosystems**, France Remote sensing for the study of terrestrial ecosystems: From theory to practical application
Animal testing 2021	**ONIRIS**, France Animal testing diploma: experimental design and execution
Workshop 2021	**Gaia formation**, France Fodder trees for herbivorous farm animal
Workshops 2020-2021	**INRAE**, France Writing a data paper, HAL
Workshop 2019	**Regional Nature Parks and Botanic conservatories**, France Grassland phytosociological classification
Doctoral program courses 2017-2020	**University of Lorraine**, France Writing and publishing a paper, Pedology, Life cycle assessment

Grants

AnaEE 2021	Scholarship (1 week) to participate to the AnaEE summer school on remote sensing at the Lautaret Garden, France.
INRAE Phase 2021-2022	Projet Innovant Fund (19 000€, 2 years) for the project " *Agronomic value of temperate fodder trees for dairy cattle production*"

Journal articles

Narbona Sabaté L., <u>Mesbahi G.</u>, Dezecache G., Cäsar C., Zuberbühler K., Berthet M. (accepted) Animal linguistics in the making: The Urgency Principle and titi monkeys' alarm system, *Ethology Ecology & Evolution*

Berthet M., <u>Mesbahi G.</u>, Duvot G., Zuberbühler K., Cäsar C., Bicca-Marques J.C. (2021) Dramatic decline in a titi monkey population after the 2016-2018 sylvatic yellow fever outbreak in Brazil, *American Journal of Primatology*, e23335
doi: 10.1002/ajp.23335

<u>Mesbahi G.</u>, Michelot-Antalik A., Goulnik J., Plantureux S. (2020) Permanent grassland classifications predict agronomic and environmental characteristics well, but not ecological characteristics, *Ecological Indicators*, 110, 105956
doi: 10.1016/j.ecolind.2019.105956

Goulnik J., Plantureux S., Van Reeth C., Baude M., <u>Mesbahi G.</u>, Michelot-Antalik A. (2020) Facial area and hairiness of pollinators visiting semi-natural grassland wild plants predict their facial pollen load, *Ecological Entomology*, 45 (6), 1296-1306
doi: 10.1111/een.12913

<u>Mesbahi G.</u>, Bayeur C., Michelot-Antalik A., Plantureux S. (2019) Choosing classification systems for predicting the characteristics of permanent grasslands, *Fourrages*, 237, 57-65 (in French)

Berthet M., <u>Mesbahi G.</u>, Pajot A., Cäsar C., Neumann C., Zuberbühler K. (2019) Titi monkeys combine alarm calls to create probabilistic meaning, *Science Advances*, 5:eaav3991, doi: 10.1126/sciadv.aav3991

Berthet M., Neumann C., <u>Mesbahi G.</u>, Cäsar C., Zuberbühler K. (2018) Contextual encoding in titi monkey alarm call sequences, *Behavioral Ecology and Sociobiology*, 72:8, doi: 10.1007/s00265-017-2424-z

Book & Thesis

Bayeur C., Hennequin C., <u>Mesbahi G.</u>, Plantureux S. (2020) Les prairies permanentes du massif des Vosges. Typologie agroécologique et diagnostic prairial.
ISBN: 978-2-9574260-0-3

Mesbahi G. (2020) Prediction of agronomical and ecological grasslands characteristics, and their trade-offs. Focus on the Vosges Mountains permanent grasslands (PhD thesis).

Conferences and posters

Berthet M., <u>Mesbahi G.</u>, Duvot G., Zuberbühler K., Cäsar C., Bicca-Marques J.C. (accepted) A Brazilian population of titi monkeys reduced to 20% after an outbreak of sylvatic yellow fever. *Joint Meeting of the International Primatological Society and the Latin American Society of Primatology*, Quito, Equator.

Oral presentation

<u>Mesbahi G.</u>, Bayeur C., Plantureux S. (2020) Trade-offs between agronomic and ecological characteristics in permanent grasslands. *28th General Meeting of the European Grassland Federation*, online.

Poster presentation

Narbona-Sabaté L., <u>Mesbahi G.</u>, Berthet M. (2020) Urgent information is shared first in titi monkeys' alarm sequences. *Webinar Société Française de Primatologie*, online.

Oral presentation

Narbona-Sabaté L., Cäsar C., <u>Mesbahi G.</u>, Berthet M. (2020) Black-fronted titi monkeys (*Callicebus nigrifrons*) refine their alarm message after urgent information is shared. *Animal Behaviour Live: Annual Online Conference*, online.

Poster presentation

<u>Mesbahi G.</u>, Bayeur C., Plantureux S. (2019) Les typologies agronomiques : des outils efficaces pour évaluer rendements et performances des prairies permanentes. *Journées de Printemps de l'AFPF*, Paris, France.

Poster presentation and conference paper, in French

<u>Mesbahi G.</u>, Bayeur C., Plantureux S. (2019) Des prairies permanentes diversifiées et performantes. *Journée de l'école doctorale*, Nancy, France.

Poster presentation, in French

<u>Mesbahi G.</u>, Bayeur C., Plantureux S. (2018) Prediction of grassland values by phytosociological or agronomical approach. *27th General Meeting of the European Grassland Federation*, Cork, Ireland.

Poster presentation and conference paper

Berthet M., <u>Mesbahi G.</u>, Pajot A., Cäsar C., Neumann C., Zuberbühler K. (2018) Titi monkey alarm sequences: when combining creates meaning, in LaCroix T. (Chair), "Evolutionary explanations of compositional communication: the state of the art" symposium. *26th Philosophy of Science Association Biennial Meeting*, Seattle, USA.

Oral presentation

Berthet M., Neumann C., <u>Mesbahi G.</u>, Zuberbühler K. (2017) Contextual information in titi monkey B-sequences. *7th European Federation for Primatology meeting*, Strasbourg, France.

Oral presentation

Berthet M., Neumann C., <u>Mesbahi G.</u>, Zuberbühler K. (2017) Do titi monkeys encode predator type and location in their alarm sequences?. *35th International Ethological Conference*, Estoril, Portugal.

Oral presentation

Berthet M., Neumann C., <u>Mesbahi G.</u>, Cäsar C., Zuberbühler K. (2017) Contextual differences of two alarm call types in titi monkeys. *15th Conference of the Gesellschaft für Primatologie*, Zürich, Suisse.

Poster presentation

Invited speaker

<u>Mesbahi G.</u> (2020) Quelle classification pour la prédiction des propriétés prairiales ? *Séminaire national Habitats - « Typologies, données et cartographies : état des lieux des connaissances et perspectives sur les besoins opérationnels »*, Paris, France

Teaching

2019

Practical	**Agroforestry botany and ecosystem services.** Master level, 8 hours.	
Tutorial	**Statistical analyses of agroforestry dataset.** Master level, 4 hours.	
Practical	**Grassland botany and functional traits.** Master level, 8 hours.	
Tutorial	**Statistics: determinant of grassland species and functional traits.** Master level, 4 hours.	

2018

Practical	**Collect of animal behaviour on the field.** Master level, 8 heures

2017

Lecture	**Initiation to global agroforestry**. Master level, 3 hours.
Lecture	**Discovery of research projects**. Master level, 2 hour.

Tutorial	**Mixing crops at different scales.** Master level, 15 hours. Grading of final exam.
Practical	**Grassland botany and functional traits.** Master level, 8 hours.

Professional services

Onsite and online presentation of the OasYs farm and its agroforestry system (2021-2022)

Workshop co-organization *Les prairies permanentes, notre avenir en herbe !* (2021) Meisenthal, France
120 participants, 20 speakers

Reviewer for *General Meeting of the European Grassland Federation* (2020)

Jury member for *Concours des Pratiques Agro-Ecologiques Prairies & Parcours* (2019)

Outreach

Mesbahi G. (2021) RadioCocci n°6 Agriculture et changement climatique, online

Mesbahi G., Bayeur C., Plantureux S. (2021) La typologie agroécologique des prairies permanentes. *Les prairies permanentes, notre avenir en herbe !*, Meisenthal, France
Oral presentation

Mesbahi G., **Novak S.** (2021) L'abre, une ressource fourragère. *Les prairies permanentes, notre avenir en herbe !*, Meisenthal, France
Oral presentation

Berthet M. & Mesbahi G. (2019) Découvrez les singes titis et leur système de communication unique. *The Conversation France*

Mesbahi G. (2018 et 2019) La typologie de prairies permanentes : un outil pour agronomes et écologues. *Journée de formation à la phytosociologie du massif vosgien*, Saverne et Rothau, France
Oral presentation

Mesbahi G. (2018) Les typologies agroécologiques. *Natura 2000 biogeographic seminar*, Parc Naturel Régional des Vosges du Nord, France
Oral presentation

Mesbahi G. (2018) Prairies permanentes : la conservation par la valorisation : exemple du massif vosgien. *Séminaire des Parc Naturels Régionaux Biodiversité et Gestion de l'Espace*, Eppe-Sauvage, France
Oral presentation

Languages

French	Mother tong	**Portuguese**	Basic
English	Fluent	**German**	Basic