

COHAS Aurélie

Personal information

Single

Birth date : 25/08/1979

Nationality : French

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Research experience

2002- 2006	PhD position "Evolutionary causes of extra-pair paternity in socially monogamous species. The example of the Alpine marmot (<i>Marmota marmota</i>)" Supervision: Pr. D. ALLAINÉ	Biometry and Evolutionary biology laboratory Claude Bernard University Lyon 1
2001- 2002	Master's research Technical report : Preliminary study of the impact of connectivity on the distribution in the plain of the Rhône river of the Common Toad: Use of a permeability model. Bibliographic report : Integration of landscape in population dynamics Supervision: Pr. P. JOLY	Ecology of fluvial ecosystems laboratory Claude Bernard University Lyon 1
2000-2001	Bachelor's research Report : Study of a population of reintroduced Cistude turtles (<i>Emys orbicularis</i>) in an artificial landscape: Comparison with a native population Supervision : P. JOLY	Ecology of fluvial ecosystems laboratory Claude Bernard University Lyon 1
2000	Voluntary work Report : Reintroduction of the European cistude <i>Emys orbicularis</i> , at the Bourget lake : Following of the first experimental release Supervision : A. MIQUET	Savoie Natural Patrimony Conservatory

Education

2002-2006	PhD Thesis Supervision: Pr. D. ALLAINÉ	Biometry and Evolutionary biology laboratory Claude Bernard University Lyon 1
2001-2002	Master's degree: Analyses and models of biological systems Awarded with honours, rank: 9/33	Claude Bernard University Lyon 1
2000-2001	Bachelor's degree: Biology of populations and ecosystems Awarded with honours, rank : 5/92	Claude Bernard University Lyon 1
1999-2000	Foreign exchange program 9/1999-6/2000 Tulane University USA Awarded with honours	Claude Bernard University Lyon 1 Tulane University (USA)

Scientific activities

- Publications** P. JOLY, C. MORAND, **A. COHAS** (2003) Habitat fragmentation and amphibian conservation: Building a tool for assessing landscape matrix connectivity. **Comptes Rendus Biologie** 326: 132-139.
- A. COHAS**, N.G. YOCOZ, A. DA SILVA, B. GOOSSENS, D. ALLAINÉ (2006) Extra-pair paternity in the monogamous alpine marmot (*Marmota marmota*): The roles of social setting and female mate choice. **Behavioral Ecology and Sociobiology**, 55: 597-605.
- A. DA SILVA, G. LUIKART, N.G. YOCOZ, **A. COHAS**, D. ALLAINÉ (2006) Heterozygosity-Fitness-Correlation revealed by microsatellite analyses in European alpine marmots (*Marmota marmota*). **Conservation Genetics**, 7 : 371-382.
- Congress** P. JOLY, C. MORAND, **A. COHAS** (2002) Habitat fragmentation and amphibian conservation: building a tool for assessing landscape matrix connectivity. Biodiversity conservation and management, International Congress, Vouziers, France, Juillet 4-7.
- A. COHAS**, D. ALLAINÉ (2005) Extra-pair paternity in alpine marmots (*Marmota marmota*): Are males from Mars and females from Venus. Fifth international conference on genus *Marmota*, International Congress, Tashkent, Uzbekistan, August 31-September 2, in press
- Seminar** D. ALLAINÉ, **A. COHAS** (2006) Paternités hors-couple chez la marmotte alpine : bons gènes, diversité ou compatibilité ? Biogéosciences Laboratory, University of Bourgogne.
- A. COHAS** (2006) Extra-pair paternity in Alpine marmots. Female choice and male competition. Max Planck Institute for Ornithology.
- A. COHAS** (2006) Causes évolutives des paternités hors-couple chez les espèces socialement monogames. L'exemple de la marmotte alpine (*Marmota marmota*), Fonctionnement and evolution of ecological systems laboratory UMR 7625, University Pierre et Marie Curie Paris VI. Novembre 13.
- Reviewing** Behavioural Ecology and Sociobiology

Teaching

2002-2006	Teaching assistant	Biometry and Evolutionary biology laboratory Claude Bernard University Lyon 1
Course	Computer sciences for biologists (36h) Basic skills in computer sciences applied to biological questions	Lab work Undergraduate level
	Computer sciences (256h) Basic skills in computer sciences	Lab work Undergraduate level
	Animal biology (72h) Introduction to systematic and to principal organisation plans by dissection and microscopic observations	Lab work Undergraduate level

Mathematics for biological sciences (36h)	Lab work Undergraduate level
Analysis: functions, integrative calculus, differential equations	
Probability: probability, random variable, probability laws	
Statistics: descriptive statistics, parameters estimations, confidence intervals, hypothesis tests, Means comparison, frequencies comparison, Chi2	
Statistics (10h)	Lab work Undergraduate level
ANOVA1, ANOVA2, Regression	
Population genetics (24h)	Courses, Lab work Graduate level
Microsatellites use for the study of population structure and dispersal	
Evolutionary biology (18h)	Courses, Lab work Graduate level
Mating systems	

Supervision From bachelor to master students

Technical skills

Field work	Capture-recapture protocol Trapping, marking, handling of marmots (biometric measures, blood sampling, tissue biopsy) Behavioural observations
Lab work	Microsatellite analyses Extraction, amplification, sequencing, genotyping <i>Software: Cervus, Genepop, Genetix, Gimlet, Identix</i>
Statistics	Non parametric statistics Multivariate statistics Modelling Linear model, generalized linear model, mixed model, generalized mixed model, additive model, mixed additive model, GEE <i>Software: R, S-Plus, SAS</i>
Population biology	Capture-recapture analysis <i>Software: M-Surge, Mark, U-care, Release</i>
GIS	Geographic data base building <i>Software: Arcview</i>