

Molecular Ecology and Conservation Genetics Laboratory

Head & PI: **Konstantinos Sotiropoulos**, Assistant Professor

Department of Biological Application and Technology

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1. Personnel:

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Konstantinos Sotiropoulos	Assistant Professor	ksotirop@uoi.gr	26510-09031 26510-07375
Anastasios Bounas	PostDoc	abounas@cc.uoi.gr	26510-09031
Elisavet-Aspasia Toli	PhD candidate	toil.elisavet@yahoo.com	26510-09031
1-2 undergraduate students/year			

2. Short description & Research:

Molecular Ecology and Conservation Genetics Laboratory (MECGL), is engaged both in education (through the implementation of Diploma theses) and in research. The Laboratory focuses at the population ecology, evolution and conservation of threatened animals using standard field research, behavioral experiments and genetic analysis of molecular markers.

3. Facilities:

MECGL provides all the adequate equipment for DNA analysis and Genotyping, diet analysis, behavioural experiments, as well as for field trips and sampling of aquatic and terrestrial animals.

4. Services to third parties:

1) Consultancy services for biodiversity conservation issues using molecular and genetic approaches 2) Fieldwork services, sampling, inventory and monitoring of Biodiversity.

5. Research Projects:

2014-2015. Monitoring and Evaluation of the conservation status of amphibians and reptiles of Community interest in Greece. Hellenic Herpetological Society.

2015. Monitoring of Amphibians and Reptiles in the area of Lake Pamvotis' Management Authority. Managing Authority of Lake Pamvotis.

2015. Monitoring and Evaluation of the conservation status of amphibians and reptiles of Community interest in the area of Chelmos-Vouraikos management authority. Managing Authority of Chelmos-Vouraikos National Park.

2015. Monitoring and Evaluation of the conservation status of amphibians and reptiles of Community interest in the area of Dadia Forest. Managing Authority of Dadia Forest.

2015. Monitoring and Evaluation of the conservation status of amphibians and reptiles of Community interest in the area of Evros Delta management authority. Managing Authority of Evros Delta.

2014-2016. «Conservation and study of the biology of the Karpathos Frog, the most endangered and unknown amphibian in Europe». The Mohamed bin Zayed Species Conservation Fund.

2016-2018. «Epirus grasshopper conservation: linking genetics and ecology under a conservation perspective». The Mohamed bin Zayed Species Conservation Fund.

2017. «Evaluation of Amphibian Biodiversity in the reed ecosystems of lake Prespa». Society for the Protection of Prespa - LIFE15 NAT/GR/000936.

2017. «Conservation actions for the priority species *Triturus macedonicus* in the protected area of lake Pamvotis. Managing Authority of Lake Pamvotis /The Green Fund.

6. Recent Publications:

Veith M, Gocmen B, **Sotiropoulos K**, Eleftherakos K, Lotters S, Godmann O, Ehl S (in press). My stone is my castle: Phylogeographic analyses suggest long-term survival on the spot in micro-endemic Lycian salamanders. *PLOS One*.

Toli E-A, Chavas C, Denoël M, Bounas A, **Sotiropoulos K*** (in press). A subtle threat: behavioral and phenotypic consequences of invasive mosquitofish on a native paedomorphic newt. *Biological Invasions*.

Bounas A, Keroglidou M, Toli E-A, Chousidis I, Tsaparis D, Leonardos I, **Sotiropoulos K*** (in press). Constrained by aliens, shifting landscape or poor quality waters? Factors affecting the persistence of amphibians in an urban pond network. *Aquatic Conservation: Marine and Freshwater Ecosystems*.

Tsaparis D, **Sotiropoulos K**, Legakis A, Kotoulas G, Kasapidis P (2019) New phylogeographic insights support the distinctiveness and conservation value of the little known roe deer Greek populations. *Mammalian Biology - Zeitschrift für Säugetierkunde*, 96, 23-27.

Pafilis P, Kapsalas G, Lymberakis P, Protopappas D, **Sotiropoulos K** (2019) The feeding ecology of the Karpathos marsh frog (*Pelophylax cerigensis*): what's in the menu for the most endangered frog in Europe? *Animal Biodiversity and Conservation*, 42, 1-8.

Toli EA, Siarabi S, Bounas A, Pafilis P, Lymberakis P, **Sotiropoulos K**. (2018) New insights on the phylogenetic position and population genetic structure of the Critically Endangered Karpathos marsh frog *Pelophylax cerigensis* (Amphibia: Anura: Ranidae). *Acta Herpetologica*, 13, 117-123.

Bounas A, Tsaparis D, Efrat R, Gradev G, Gustin M, Mikulic K, Rodríguez A, Sarà M, Kotoulas G, **Sotiropoulos K**. (2018). Genetic structure of a patchily distributed philopatric migrant: implications for management and conservation. *Biological Journal of the Linnean Society*, 124, 633-644.

Bounas A, Tsaparis D, Gustin M, Mikulic K, Sarà M, Kotoulas G, **Sotiropoulos K**. (2018) Using genetic markers to unravel the origin of birds converging towards pre-migratory sites. *Scientific Reports*, 8(1) DOI: 10.1038/s41598-018-26669-x.

Wielstra B, Canestrelli D, Cvijanović M, Denoël M, Fijarczyk A, Jablonski D, Liana M, Naumov B, Olgun K, Pabijan M, Pezzarossa A, Popgeorgiev G, Salvi D, Si Y, Sillero N, **Sotiropoulos K**, Zieliński P, Babik W (2018) The distributions of the six species constituting the smooth newt species complex (*Lissotriton vulgaris* sensu lato and *L. montandoni*) – an addition to the New Atlas of Amphibians and Reptiles of Europe. *Amphibia-Reptilia*, DOI: 10.1163/15685381-17000128.

Bounas A, Siarabi S, Papadaki C, Toli E-A, **Sotiropoulos K** (2018) DNA barcoding against poaching of Chamois (*Rupicapra rupicapra*), two confirmed cases from Greece. *Journal of Wildlife and Biodiversity*, 2(1), 1-5.