

**Final Report on the research project entitled:**

**Monitoring the distribution of *Neurergus kaiseri* and identifying priority areas for conservation in Lorestan Province, Iran**

Supported by: the Secretariat of CITES Management Authority of Switzerland

**Project Methods included:**

- Data collection: Field work/ interviews with local people/ unpublished data in the provincial and the federal Department of Environment.
- Mapping the distribution of appropriate habitats and the species
- Using Maxent software for modelling the distribution of the species & prioritization of the sites for conservation

**Project Objectives**

- Identifying distribution areas of *Neurergus kaiseri* in Lorestan province
- Gap Analysis in the protected area network
- Conservation Planning

**Project outputs:**

1-The project covered the Master thesis of Mrs. Maryam Tondravan Zangeneh with the title “Identifying Priority Areas for Conservation of *Neurergus kaiseri* using Systematic Conservation Planning Approach (Case Study: Lorestan Province)” .

She successfully organized and performed field work in difficult terrains and was also very good in retrieving the relevant scientific literature and putting it into context with her own results.

In addition, the project provided a good opportunity to cooperate in conservation activities with local authorities/field expert and local NGOs in Lorestan province.

2-Some results of the project were already published in the Iranian Journal of Applied Ecology.

Full paper (in Farsi): <http://ijae.iut.ac.ir/article-1-785-fa.html>

Abstract (in English): [http://ijae.iut.ac.ir/browse.php?a\\_id=785&sid=1&slc\\_lang=en](http://ijae.iut.ac.ir/browse.php?a_id=785&sid=1&slc_lang=en)

## **Assessment of the Conservation Status and Habitat Suitability of Critically Endangered Lorestan Newt (*Neurergus kaiseri*) in Lorestan and Khuzestan Provinces**

*M. Tondravan Zangene , S. Fakheran Esfahani1, S. Poormanafi, J. Senn*

Abstract:

Lorestan newt (*Neurergus kaiseri*) is an endemic species which has restricted dispersal in southern Zagros Mountains in Iran, and it is listed as critically endangered in IUCN red list. Today the populations of this species are decreasing and facing serious threats. In this study, habitat suitability of *Neurergus kaiseri* was evaluated using a MaxEnt modelling approach according to environmental and climatic parameters (thermal and precipitation). Based on the results derived from the MaxEnt model, the most important parameters were related to annual and seasonality precipitation, annual mean temperature, elevation and land cover, respectively. Also, assessment of the conservation status of this species with species distribution areas and adapting them with protection networks revealed that currently, none of the suitable habitats of Lorestan newt are protected and there is no legal support for conserving these sites that the issue makes this critically endangered species even more vulnerable.

**Keywords:** Habitat suitability, Khuzestan province, Lorestan province, Maximum entropy (MaxEnt), *Neurergus kaiseri*, Protected areas.

**3-**Another manuscript which was submitted to an international scientific journal is under review

**4-** Publishing and Printing 2000 copies of a Brochure/Leaflet with basic information about the species and about the need for conservation of *Neurergus kaiseri* in Lorestan province. This is being distributed among local people and tourists by support from the Department of Environment DoE of Lorestan.

## **Time Frame for the project:**

Start date: October 2014

Field work and Data collection: Fall 2014, Spring 2015

Communication with local DoE Staff/ Local communities/NGO: Spring-Summer 2015

Modelling and Mapping the species distribution: Summer2015

Preparing Report/ Manuscripts/ Brochure: 2015-2016

Publication in Iranian Journal of Applied Ecology: Fall. 2016

(The published paper and the brochure are enclosed to this report).

## **Budget:**

### **a. Personnel**

MSc student, Assistant personnels at IUT, Driver, helpers for the field work and at IUT.

### **b. Travel**

Car rental, mileage, Lodging, meals, per diem (as appropriate) per individual.

### **c. Equipment & Supplies**

Camera, Soft wares, Satellite Images, Consumables for field works and sampling, producing the brochure, printing, information leaflet for local people.

### **d. Miscellaneous.**

**e. Total Direct Cost** The total of all items except administrative overhead.

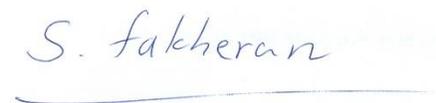
\*Some part of the costs (e.g. for printing the brochures, and for field works) was covered by my research grants, which is provided by the Department of Natural Resources of Isfahan University of Technology, IUT.

Line Item Costs	Total
Salaries & wages	1800 CHF
Insurance	150 CHF
Professional services	550 CHF
Travel & Per Diem	1200 CHF
Equipment and supplies	500 CHF
Miscellaneous expenses	400 CHF
<b>Total</b>	<b>4600 CHF</b>

### **Acknowledgment**

I would like to thank the Swiss CITES Secretariat for financial supports of this project. I am very grateful for all kind supports and advices from Dr. Josef Senn. I wish also to thank staff of Department of Environment in Lorestan Province for accompanying and supporting us during field works and for providing valuable data on the species distribution.

Sincerely,



Sima Fakheran

Zurich, August 2017