

## Final Evaluation Report

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Your Details	
<b>Full Name</b>	Ruzanna Petrosyan
<b>Project Title</b>	Conservation of the Endangered Endemic Parthenogenetic Lizards in Armenia
<b>Application ID</b>	36638-1
<b>Date of this Report</b>	26.06.2023

**1. Indicate the level of achievement of the project's original objectives and include any relevant comments on factors affecting this.**

Objective	Not achieved	Partially achieved	Fully achieved	Comments
Monitoring lizard's populations by conducting field surveys to determine presence/absence, estimate density, and identify new sites using maps.				According to scientific literature, there are approximately 14 populations of <i>Darevskia rostombekowi</i> in Armenia. Our comprehensive study of these localities revealed the presence of this species in only eight habitats. Population assessment indicated a low number of individuals in these populations.
Mapping the current locations of the target species and identify factors negatively impacting their habitats.				The loss of habitat due to human factors is the most significant cause of the disappearance of parthenogenetic rock lizard species. For these species, the threatened range consistently experiences a decline in habitat quality. The main causes of the disappearance of parthenogenetic rock lizard species of the <i>Darevskia</i> genus include road construction, urbanisation, synanthropic animals, climate change, and habitat fragmentation.
Establish a comprehensive database of parthenogenetic lizards belonging to the <i>Darevskia</i> genus in Armenia.				Creating a comprehensive database of lizards, including species, regions, locations, dates, habitats, vegetation types, and collectors' information. This ongoing work aims to ensure the continuous development and expansion of the database.
Generate and publish scientific articles focusing on the ecology and conservation of the partenogenetic species of rock lizards genus <i>Darevskia</i>				Lectures, meetings and seminars were held for preschool institutions, schools and universities. Currently are preparing next article for publication in international journal.
Establishment of a conservation centre and information stands for parthenogenetic rock				For scientific and informational purposes, a centre for the conservation of parthenogenetic rock lizards of Armenia has been established at

lizards in Armenia.				Yerevan Zoo. The centre focuses on studying the reproductive and ecological characteristics of these unique lizards. Informational stands have been installed at locations where these unique lizards are found, providing information about them.
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**2. Describe the three most important outcomes of your project.**

- a). The population status, distribution, and abundance of parthenogenetic rock lizards in Armenia were assessed estimated.
- b). The main threats and types of negative factors influencing species populations are identified.
- c). Capacity Building: Students, schoolchildren, and interested individuals have acquired monitoring skills and conservation practices both in field conditions and in the laboratory. They have undergone training during field practices on vertebrate survey methods and have been informed about the significance of conserving these unique species of rock lizards for biodiversity of Armenia.

**3. Explain any unforeseen difficulties that arose during the project and how these were tackled.**

Due to rainy weather in spring, several trips to lizard habitats had to be cancelled. Agreement with the Ministry of Environment on the placement of information stands in the “Dilijan National Park” on parthenogenetic lizards lasted longer than expected.

**4. Describe the involvement of local communities and how they have benefited from the project.**

We organised seminars at Yerevan State University for targeting students and schoolchildren, where we delivered informative sessions on our research. Furthermore, we actively participated in the STARMUS VI Festival held in Armenia, attracting a significant audience. We actively participated in the EXPO organised at Yerevan State University, where we showcased our research findings and projects. Our presence at the event provided a valuable platform to engage with a diverse audience, including students, researchers, and the public, allowing us to share our scientific endeavours, foster collaborations, and raise awareness about the importance of our research in the field. Our involvement extended to various events and meetings related to our research field.

**5. Are there any plans to continue this work?**

Of course, we plan! The next important conservation steps needed to prevent the extinction of this unique population of parthenogenetic rock lizards are very important. Our proposed strategies include both ex situ and in situ conservation

measures and the establishment of new lizard populations for long-term sustainability. This comprehensive effort aims to protect the rare and endangered rock lizards, with particular attention to the protection of endemic species.

#### **6. How do you plan to share the results of your work with others?**

We have planned several approaches to share the results of our work with others. First and foremost, we intend to publish our findings in scientific journals and present them at relevant conferences and symposiums. This will allow us to reach the scientific community and share our research outcomes. Additionally, we aim to create accessible and informative reports, publications, or brochures that can be shared with local conservation organisations, government agencies, and stakeholders. Furthermore, we recognise the importance of public engagement and education, so we plan to organise public seminars, workshops, or exhibitions to disseminate our results to a wider audience. Through these various channels, we aim to maximise the impact of our work and contribute to the broader understanding and conservation of the studied species. Information desks installed in the tourist area of rare species of lizards, where lizards are clearly visible on the walls of churches and rocks, as well as a special exhibition of parthenogenetic rock lizards in the Yerevan Zoo, will make it possible to convey information to a wide audience.

#### **7. Looking ahead, what do you feel are the important next steps?**

Looking ahead, several important next steps can be identified. Firstly, it is crucial to continue monitoring the populations of the targeted species to assess their trends, distribution, and habitat conditions. This ongoing monitoring will provide valuable data for informed conservation management decisions. Additionally, further research is needed to deepen our understanding of the ecological requirements, reproductive behaviour, and specific conservation needs of the studied species. This research can help identify key conservation actions and prioritise efforts for habitat protection and restoration.

Collaboration and partnerships with relevant stakeholders, such as local communities, conservation organisations, and governmental agencies, are also essential. By fostering cooperation, we can collectively implement effective conservation measures, raise awareness, and secure long-term support for the preservation of these species and their habitats.

Furthermore, it is vital to engage in capacity building by providing training and education to local communities, students, and researchers. This will contribute to the development of local expertise and empower individuals to actively participate in conservation initiatives. Lastly, it is crucial to disseminate the findings and outcomes of our work through publications, presentations, and targeted outreach programmes. Sharing knowledge and raising awareness about the importance of conserving these species will foster a broader understanding and generate support for their protection. By prioritising these next steps, we can make significant strides towards the effective conservation of the studied species and contribute to the preservation of biodiversity in the region.

**8. Did you use The Rufford Foundation logo in any materials produced in relation to this project? Did the Foundation receive any publicity during the course of your work?**

Yes, the project utilised the Rufford Foundation logo in conference meetings, posters, and information desks as a means of acknowledging their support and partnership. These materials prominently featured the Rufford Foundation logo to provide visibility and recognition for fund' contribution to the project.

**9. Provide a full list of all the members of your team and their role in the project.**

**Marine Arakelyan** - Marine Arakelyan served as a consultant for the project. Her expertise as a professor at Yerevan State University provided valuable guidance and support in designing the project's research methodology, data analysis, and interpretation. Her extensive knowledge in the field of biology and conservation contributed significantly to the project's overall success.

**Seda Adamyan** - As a field worker and a bachelor's student in the Faculty of Biology at Yerevan State University, Seda Adamyan played a crucial role in collecting field data. She actively participated in field surveys, conducting observations, recording species data, and contributing to the overall monitoring efforts. Seda's dedication and attention to detail greatly contributed to the accuracy and reliability of the collected data.

**Tatevik Harutyunyan** - Tatevik Harutyunyan volunteered her time and expertise as a Master's student in the Faculty of Biology at Yerevan State University. She actively supported various aspects of the project, including data analysis, literature review, and report writing. Tatevik's commitment to the project and her research skills were instrumental in generating meaningful insights and contributing to the project's scientific outputs.

**Anna Tadevosyan** - Anna Tadevosyan also volunteered as a Master's student in the Faculty of Biology at Yerevan State University. Her contributions primarily involved fieldwork and data collection. Anna actively participated in surveys, specimen identification, and data recording. Her dedication to data accuracy and attention to detail greatly assisted in capturing relevant information and enriching the project's dataset.

Together, this team worked collaboratively to fulfil the objectives of the project, combining their academic knowledge, fieldwork skills, and dedication to contribute to the research and conservation efforts surrounding the targeted species of rock lizards.

**10. Any other comments?**

I want to thank The Rufford Foundation for supporting my work and promoting the conservation and research of parthenogenetic rock lizards in Armenia.





*Darevskia rostombekowi*, *Darevskia dahli*, *Darevskia armeniaca*.



*Darevskia rostombekovi*.





*Darevskia rostombekovi*.



*Darevskia portschinskii*, male.





*Darevskia portschinskii*, female.



*Darevskia portschinskii*.





*Darevskia armeniaca*.