

The Rufford Foundation Final Report

Congratulations on the completion of your project that was supported by The Rufford Foundation.

We ask all grant recipients to complete a Final Report Form that helps us to gauge the success of our grant giving. The Final Report must be sent in **word format** and not PDF format or any other format. We understand that projects often do not follow the predicted course but knowledge of your experiences is valuable to us and others who may be undertaking similar work. Please be as honest as you can in answering the questions – remember that negative experiences are just as valuable as positive ones if they help others to learn from them.

Please complete the form in English and be as clear and concise as you can. Please note that the information may be edited for clarity. We will ask for further information if required. If you have any other materials produced by the project, particularly a few relevant photographs, please send these to us separately.

Please submit your final report to <u>jane@rufford.org</u>.

Thank you for your help.

Josh Cole, Grants Director

Grant Recipient Details							
Your name	Yury O. Kopylov-Guskov						
Project title	In the footsteps of Georg Steller: obtaining information about endangered plant species on the Mednyj Island (Commander Islands, northern Far East of Russia)						
RSG reference	21434-2						
Reporting period	April 2017 – January 2018						
Amount of grant	4700						
Your email address	kopylov.guskov@gmail.com						
Date of this report	02.02.2018						



1. Please 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
Obtaining the actual information about status of previously known populations of following species: Isoetes maritima, Cypripedium yatabeanum, Carex anthoxanthea, Carex circinata, Cerastium aleuticum, Claytonia sibirica, Draba aleutica, Listera convallarioides, Platanthera dilatata, Potentilla beringii, Potentilla villosa, Ranunculus bongardii, Rhinanthus borealis, Stellaria crispa, Vaccinium ovalifolium				We didn't found two species from our list: Carex circinata and Stellaria crispa. The reason is very poor difference between these rare species and other common close to them. Despite our attempts to collect much material, the specialists in the groups didn't confirm our findings as Carex circinata or Stellaria crispa. The opposite situation occurred with Ranunculus bongardii: the specimens we supposed to be Ranunculus bongardii have been determined by A.N. Luferov as R. uncinatus which is a new species for flora of Russia. Known populations of other species were found and inspected. We documented their exact coordinates and condition.
Findings of previously unknown populations of the species of our interest Findings of new species				We found new populations for: Isoetes maritima, Cypripedium yatabeanum, Carex anthoxanthea, Cerastium aleuticum, Draba aleutica, Listera convallarioides, Potentilla beringii and Ranunculus uncinatus. All these populations were examined in the same way as the known ones. We found one new species for flora of Russia (Ranunculus uncinatus), six
Spreading of obtained information				new species for flora of the Commander Islands (one is rare) and 19 new species for flora of the Mednyj Island (one is rare) See answer to the question 6.



2. Please explain any unforeseen difficulties that arose during the project and how these were tackled (if relevant).

We didn't face with such difficulties.

3. Briefly describe the three most important outcomes of your project.

- 1. We got the actual information about status of previously known and found by us populations of two endangered plant species and of 12 species with North American range type on the Mednyj island (see answer to question 1);
- 2. We found a new species for flora of Russia (Ranunculus uncinatus); six new species for flora of the Commander Islands - Agrostis trinii (rare), Cardamine microphylla, Poa paucispicula, Potamogeton praelongus, Rumex longifolius, Stellaria graminea; 19 new species for flora of the Mednyj island – Achillea nigrescens, Agrostis exarata (rare), Alopecurus glaucus, Anthoxanthum glabrum, Athyrium americanum, Callitriche hermaphroditica, Callitriche subanceps, Carex eleusinoides, Eleocharis acicularis, Elymus repens, Hierochloë alpina, **Hippuris** tetraphylla, Hypericum kamtschaticum, Leontodon autumnalis, Menyanthes trifoliata, Myriophyllum sibiricum, Phleum pratense, Poa lanata, Silene vulgaris.
- 3. We broadly spread the obtained information (see answer to question 6).

4. Briefly describe the involvement of local communities and how they have benefitted from the project (if relevant).

As in the previous time (project 17574-1) we worked in collaboration with the Komandorsky Nature Reserve, increasing the knowledge of its staff in the field of conservation biology of the studied species.

Spreading of the obtained results (see the answer to question 6) serves for ecological education of the community and locals. We also discussed the current project with other researchers we met during expedition on the island.

5. Are there any plans to continue this work?

Our detailed studies of both Bering Island (the first small grant) and Mednyj Island (this second small grant) gave abundant new information on population status of the endangered plants on the Commander Islands. The further work on monitoring of the discovered populations of rare species on the Commander islands falls on the staff of the nature reserve, as it was planned initially. In the same time our results suggest that the flora of other poorly accessible islands of the Russian Far East is also unsatisfactory revealed, hampering protection of the endangered species. Such species on the uninhabited Far Eastern islands are in focus of our scientific interest.



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

We made three presentations about the project. Yury Kopylov-Guskov, Nikita Tikhomirov and Maria Ivanova made a presentation on a scientific conference in the Moscow South-West High School No. 1543. A video of this presentation we uploaded to YouTube video hosting (https://youtu.be/SriM C92a60) and sent the link to our colleagues and interested persons including those in the Kamchatka region. In addition Nikita Tikhomirov made a presentation on meeting of the Department of Higher Plants (Lomonosov Moscow State University, faculty of Biology) and Polina Volkova made a popular presentation in the ARHE Center (Moscow; http://arhe.msk.ru/?p=26455).

We submitted an article with obtained new information on endangered populations and floristic findings for publication in a peer-reviewed scientific journal (Botanicheskij zhurnal). Information about status of rare species populations was used in writing of a new edition of the Red book of Kamchatka (expected release in 2018). We also sent our results to the editorial board of the Red Book of Russia (release of the next edition is not announced).

Our photos of rare species we sent as illustrations for the website of Komandorsky nature reserve (http://komandorsky.ru/red-book.html) and deposited them to the main Russian botanical forum Plantarium (http://www.plantarium.ru/page/dwellers/point/9597.html).

7. Timescale: Over what period was The Rufford Foundation grant used? How does this compare to the anticipated or actual length of the project?

The project lasted from April 2017 to January 2018 almost in the accordance with the initial plan. We summarised existing information on the target species in April — June 2017, using various sources of information (literature, herbarium and scientists knowledge); we worked in the field in July — August 2017 and we summarised the obtained information in September 2017 —January 2018. We managed to finish the project earlier then planned (in January but not in February) due to active help of our colleagues who promptly checked our determinations of species.

8. Budget: Please provide a breakdown of budgeted versus actual expenditure and the reasons for any differences. All figures should be in £ sterling, indicating the local exchange rate used.

Item	Budgeted Amount	Actual Amount	Difference	Comments
Flight Moscow Petropavlovsk-Kamchatsky Moscow (3 persons)	1200	1468,1	-268,1	The plane tickets were more expensive than we planned



Ship Petropavlovsk- Kamchatsky – Mednyj Island Petropavlovsk- Kamchatsky (3 persons)	2900	2770,0	+200,0	Cost for transportation was slightly cheaper than we planned. The saved money we spent on plane tickets
Food (3 persons * 40 days)	600	531,9	+ 68,1	We spent on food less money than we planned. The saved money we spent on plane tickets
Totals	4700	4700	0	Exchange rate was 1 Pound Sterling = 72.2 Russian Roubles. The funds were exchanged when arrived (02.03.2017)

Our initial extended budget also included additional funding from Moscow State University, Moscow South-West High School No. 1543 and Komandorsky Nature reserve in total amount of \pounds 9860. We received all this money in time and in amount we planned.

9. Looking ahead, what do you feel are the important next steps?

Our results suggest that the flora of other poorly accessible islands of the Russian Far East is also unsatisfactory revealed, hampering protection of the endangered species. That is why we feel essential to explore population status of endangered plants on the other uninhabited Far Eastern islands.

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

Yes, we used the logo in all the presentations mentioned in paragraph 6. We also acknowledged the support of RSGF in the scientific publication in peer-reviewed journal.

11. Please provide a full list of all the members of your team and briefly what was their role in the project.

- **Yury O. Kopylov-Guskov** project leader; communication with the Rufford Foundation and preparing of all reports; preliminary planning of floristic routs, taking photos of plants, examination of target populations, analysis of collected material, preparing presentations and publications.
- **Polina A. Volkova** communication with the Komandorsky natural reserve, organizing transportation to Mednyj Island, pre-field information summarizing, planning of floristic routs, examination of target populations, analysis of collected material, preparing presentations and publications.
- **Nikita P. Tikhomirov** pre-field information summarizing, examination of target populations, collection of material, analysis of collected material, preparing presentations and publications.



Maria O. Ivanova – collection of material, preparing presentations and publications (Note: Maria participated our project fully as volunteer, we didn't spend funds received from the Rufford Foundation on her).

12. Any other comments?

We are grateful to The Rufford Foundation for the continuing support of our projects and hope on future collaboration.

