

SUPPORTING DATA MOBILIZATION ACTIVITIES IN RUSSIA WEST OF URAL MOUNTAINS

FINAL ACTIVITY REPORT

Guidelines on how to complete the activity report are included in italics. You are welcome to remove the guideline text from the document before you submit the report.

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1. Executive summary

Provide a brief explanation of the project and its implementation, the objectives achieved, lessons learned and conclusions.

The project «Supporting data mobilization activities in Russia west of Ural mountains» allowed performing automated digitization of significant part of the Zoological Museum of Moscow University catalogues of birds and mammals collections.

2. Contact information

Provide the name, institutional affiliation, role in the project and contact details of the author(s) of the report.

Anton A. Morkovin, Zoological Museum of Moscow State University, project supervisor, e-mail: a.morkovin@yandex.com

3. Project summary

This section should provide readers with a good understanding of the project, from the original plans to the final implementation, highlighting:

- *The activities that have been completed at the time of writing the report, and those that are ongoing or pending (e.g. longer-term evaluation, follow-up projects/meetings/training events) and your plans for their completion.*
- *How the different partners in the project have contributed to its implementation.*

In total, collection cards for more than 54000 specimen (about 50500 items for birds and 3500 items for mammals) were transformed into digital form.

3.1. Activities completed

Highlight the activities that have been completed at the time of writing the report. Explain how the different partners in the project have contributed to its implementation.

Museum cards were transformed into electronic form by a third-party company specialized in catalogues OCR. The electronic card image catalogue was created, and key information from cards was imputed into an electronic database. For every specimen which don't have coordinates written by its collector, georeferences was added based on geographic information from cards.

3.2. Ongoing and post-project activities

Highlight ongoing or pending activities (e.g. longer-term evaluation, follow-up projects/meetings/training events) and your plans for their completion.

We plan to make a connection between the published dataset and MSU electronic system displaying information about biological collections (animal.depo.msu.ru). This connection will allow updating and adding new data in an automated way.

4. Project objectives

A list of the objectives included in your original project proposal, stating for each how far you advanced towards their achievement. Also include any additional objectives that were defined during the implementation of the project.

The research collection of the Zoological Museum of Moscow Lomonosov State University contains about 130,000 specimens of birds and about 190,000 of mammals. They were collected since the early 1800s across the whole Palaearctic region. Formerly, the museum documentation was carried out in a traditional way on standard paper media. The goal of the project was digitization and georeferencing 50K bird specimens and 4K mammal specimens with subsequent publishing via www.gbif.org. The data was published in a GBIF dataset. During the digitization, we also obtained an opportunity to find and correct mistakes presented in paper cards catalogues.

5. Project deliverables

The original list of deliverables from your project proposal, including a description and a link to each of the final deliverables produced. Alternatively, the deliverables can be attached to the report if possible. Make sure to include details of data mobilized through the project and/or re-usable information resources or tools. Should your deliverables include data publication to GBIF, please make sure to include the project ID in the dataset metadata.

The link to the GBIF dataset: (<https://www.gbif.org/dataset/9beef55a-b4a4-4031-a1e0-0d2bdeea2c21>).

6. Project communications

Report on the way the results of your project have been communicated and shared with the project stakeholders and broader GBIF community. Please also review the page describing your project available from <https://www.gbif.org/project/7xIH2xCxEWolKom6wSQ2Y0/data-mobilization-by-the-lomonosov-moscow-state-university>. Highlight any additional documents, events, news items or links that you would like to add to your page.

The project was presented on the international conference “Informational technologies in biodiversity studies” (<http://bit.icc.ru>) delivered in Irkutsk, Russia, in 11-14 September 2018.

7. Evaluation: findings and conclusions

An assesement of the overall outcomes and impacts of your project, including strengths and weaknesses in its implementation and results. Try to identify clear conclusions from your experience during the implementation of the project. If any changes have been made to the project plans please clearly indicate this in the report and the reasons for this. Also report on any feedback on the project’s relevance from the partners and stakeholders

The third-party digitization service was a fast way to transform a significant amount of data into electronic form, although its results had to be additionally checked by zoology specialists. The card scans now can be used as paper cards substitute and backup.

8. Recommendations and lessons learned

This section should be addressed to others preparing similar projects in the future. Try to identify your experiences that could help others to design and implement projects more effectively, including the best practices to adopt and the pitfalls to avoid.

Before digitization, it would be useful to describe a representative set of paper cards differed in material and formatting type, to make easier further assessment of required techniques.

9. Future plans

A description of how the partners involved will build on the results of this project in their future work. This could include future collaborative activities, such as plans to complete any unfinished project activities and how the future impact of the project could be monitored or measured.

We plan to finish the complete digitization of catalogues, and continue with catalogues for other animal groups.

Signed on behalf of the project partners

Date
