



Title Page

1. CLP project ID & Project title
04326417/Conservation of Velvet Scoter on Tabatskuri Lake in Georgia
2. Host country, site location and the dates in the field
Georgia, Tabatskuri lake/05.06.2017 – 28.12.2017
3. Names of any institutions involved in organising the project or participating
NGO "PSOVI"/Ilia State University/Agency of Protected Area of Georgia.
4. The overall aim summarised in 10–15 words
Maintain and increase the population size of Velvet Scoter in Georgia.
5. Full names of author(s)
Nika Paposhvili
6. Permanent contact address, email and website
birder_nik@yahoo.com
7. Date which the report was completed
27.07.2018

Table of Contents

Contents

Project Partners & Collaborators	3
Section 1:	4
Summary	4
Introduction	5
Project members	6
Section 2:	7
Aim and objectives	7
Changes to original project plan	7
Methodology	7
Outputs and Results	8
Communication & Application of results	9
Monitoring and Evaluation	10
Achievements and Impacts	10
Capacity Development and Leadership capabilities	11
Section 3:	11
Conclusion	11
Problems encountered and lessons learnt	11
In the future	12
Financial Report	13
Section 4:	14
Appendices	14
Bibliography	36
Address list and web links	36
Distribution list	36

Project Partners & Collaborators

Please list and acknowledge all of the project's collaborators, including individuals, organisations and government departments. Please provide a brief description of how each was involved in the project.

Environmental Association "PSOVI"

„PSOVI“ was CLP Sub-Grant Contractor and Implemented procurement and banking operations under the project.

Institute of Ecology, Ilia State University

Supported the project with field equipment (boat and camping equipment for volunteer students)

Agency of Protected Area

Provided us with permits to monitor Tabatskuri Lake and appointed two local rangers to help us with field work and communication with locals.

Borjomi-Kharagauli National Park's Rangers:

1. Ilia Berdzenishvili
2. Gagik Papikiani
3. Harutun Margariani

Being involved in surveys of Velvet Scoter. Also, helped us to communicate with the locals.

Volunteers:

1. Sopia Kiknavelidze - BSc student, Ilia State University
2. Lia Gogoladze - MSc student, Ilia State University
3. Nika Budagashvili - BSc student, Ilia State University
4. Ilia Berdzenishvili - Ranger, Ktsia-Tabatskuri managed reserve.
5. Armen Sandadze - Local fisherman

During the project, these people were actively involved in surveys of Velvet Scoter. Also, they helped us to raise the awareness in the local community.

Local School Director: Seroga Kandiliani

Allow and helped us to present our project for local pupils and organize one-day bird watching trip for them on Tabatskuri Lake.

Local fisherman: Armen Sandadze

Helped us to survey and cooperate with the fishermen.

Locals:

1. Valod Magradze
2. Bejani Melikidze
3. Vakhtang Berdzenishvili
4. Samvel Aivaziani

Helped us to set up information boards on the Territory of Tabatskuri Lake.

Levan Mumladze, Zurab Javakhishvili, Sopio Kiknavelidze & Mariam Gabelaia
Helped to provide: information boards, information brochures and reports in English.

Zura Janiashvili
Helped to create the distribution maps

Nuca Kiknavelidze
Painted the logo of Velvet scoter for advertising and the awareness-raising campaigns.

Elmar Witting
Donated a spotting scope (Leica TELEVID 77)

Opticron
Donated 3 binoculars for the volunteers

IDEA WILD
Donated Canon lens 300mm

Khatuna Kiknavelidze
Helped us to design the information boards and brochures.

Mariam Avakova
Helped us to translate information boards and brochures to Armenian language.

Zurab Javakhishvili & Levan Mumladze
They gave us a lot of useful advice during the project, which helped to implement the project successfully.

Section 1:

Summary (max 200 words) *the summary should be written concisely, summarising the entire report with a statement on each of the following: project aim, objectives, key results, main impacts. If project or progress was different to that expected, brief details should be given here.*

The isolated population of Velvet Scoter in Caucasus is on the edge of extinction. Accordingly, the aims of the project were: to support the conservation of Velvet Scoter by increasing our knowledge of the population status of Velvet Scoter, and raising the awareness on Velvet Scoter with local community and other stakeholders.

We conducted regular surveys of Velvet Scoter population on Tabatskuri Lake. We also worked with the local communities to raise their awareness. According to our study Velvet Scoter is predominantly using northern part of the lake around the breeding island. There are 30-35 pairs of Velvet Scoters on Tabatskuri Lake, however, only 6-15 pairs have an opportunity to breeding due to human impact, limited breeding territory and competition with Armenian Gulls. Therefore breeding success of Velvet Scoter is 19 %.

As a result of our awareness raising campaign and cooperation with the protected areas, the impact of the human influence on Velvet Scoter has decreased during project implementation. Armenian Gull remains as main competitor and important limiting factor for breeding Velvet Scoter. We think that long-term survival of this population of Velvet Scoter is at risk and needs long-term surveys and active conservation.

Introduction (max 500 words)

Keep the introduction short and include a brief section on each of the following:

- *The conservation value of the project work*

Small, population of Velvet Scoter is breeding on the mountain lakes of East Anatolian Plateau (Turkey, Georgia, Armenia). Population is isolated from the main Northern Eurasian Breeding population. There is very little knowledge about this isolated population. Velvet Scoter was thought to nest on multiple lakes of Javakheti plateau (Northern part of East Anatolian Plateau in Georgia). Our observations on Georgian part of its distribution confirmed breeding of this species only on Tabatskuri Lake. Velvet scoter is in the Red List of Georgia, although there are no conservation actions directed to protect it. As a result of our project, the decision makers at the ministry of environmental protection and agriculture as well as local population from the villages around Tabatskuri Lake became aware of existence of a small, isolated, and endangered population of Velvet Scoter on Tabatskuri Lake in Georgia. After our project provided information about breeding of Velvet Scoter to the protected areas authorities, rangers have been appointed to monitor illegal activities around the lake and reduce threats to the Velvet Scoter.

As a result of the project the population size, distribution range, breeding site, breeding success, feeding area, moulting place and main threats are known. All of these are important primary steps for the success of future conservation actions.

- *The conservation problem and issues addressed*

Destruction of important habitats, illegal hunting, intensive fishing, disturbance, collection of eggs and competition with Gulls has caused a dramatic decrease in the number of Velvet Scoters in Georgia. As a result, small breeding population of Velvet Scoter is left only on the Tabatskuri Lake. However, the local communities, as well as the representatives of the protected area were not informed about it. Accordingly, rangers of the protected area were not monitoring it. During the project, we have been raising awareness with local communities. We prepared informational brochures and banners with information about the status of Velvet scoter, the threats that are affecting them, and the ways that people can contribute to reduction the threats. The brochures were distributed in the local community and banners installed around Tabatskuri Lake. We met with representatives of the protected area and provided information about Velvet Scoter. As a result, two rangers helped us to monitor the site. Since then, rangers have been appointed to monitor for illegal activities around the lake and reduce threats to the Velvet Scoter.

- *Background to the project site and its conservation significance*

Tabatskuri Lake is located in the southern part of Georgia, on the volcanic Javakheti Plateau, Altitude – 2000 meters above sea level. Surface area - 14.2 km². Max. Depth – 43 m. Average depth - 15 m. The water is transparent and clean. The small island (1 ha) in the northern part of the lake is the only natural breeding place for Velvet Scoter in Georgia.

- *Identify the key partners and their role*

Agency of Protected Areas - Protection of the Velvet scoter and important areas for their existence/promoting conservation projects.

Rangers of Protected areas - Monitoring, protecting and preventing illegal actions (such as disturbance, gathering eggs and fishing in banned areas).

Environmental NGOs - Conservation, Cooperation with Protected Areas, awareness raising campaigns in local society and training of rangers.

Local population – cooperating with the rangers of the protected area and with us. (Stopping of illegal actions and providing information on illegal actions).

The fishermen – cooperation with the rangers of the protected area and us, meaning that they should provide information about by-catch.

- *Include a map of the area*



Project members

List the project members, giving brief details of their relevant qualifications, experience, current occupation and employer, and their main roles in the project. Where relevant give an indication of the age group.

1. Nika Paposhvili (Team Leader): PhD student at Ilia State University, Faculty of Life Sciences. Duties: Field-worker, Community worker, Education expert, Data analysis and report writing.
2. Niko Kerdikoshvili: PhD student at Ilia State University, Faculty of Life Sciences. Duties: Field-worker, Community worker, Education expert.
3. Marina Piduashvili: Private (Business) Masters of Laws student at Ilia State University. Duties: Communication with locals. She helped us to communicate with local ethnic Armenian communities and with relations and cooperation with Agency of Protected Area.

Section 2:

Aim and objectives (max 200 words)

Provide a statement of the main aim and underlying objectives of the project as described in initial project outline or explain any changes or adaptations to the original statement.

The aim of the project was: Increase knowledge of the population status of Velvet Scoter and raise awareness of the local community and other stakeholders about this species. The objectives of the Project were: 1. Determine the exact population size of Velvet Scoter and assessment of threats. 2. Determine the population range and range size variation within a year. 3. Determine the exact location and characteristics of breeding sites and assess breeding success. 4. Deliver all the information about the Velvet Scoter to local community and stakeholders.

Changes to original project plan (max 200 words)

Please give details of any changes to the original project plans, including any objectives that were not fully delivered and explain how this impacted the delivery of the project. Describe how any problems were addressed and what solutions were found to deal with these issues.

There was no deviation from the original plan.

Methodology (max 500 words)

For each objective please describe in concise and specific statements all project methodologies. Including any relating to ecological and social science research, as well as activities involving project stakeholders such as education & outreach, livelihoods, policy or capacity building. This section should provide adequate detail so as to enable the study to be repeated.

At the beginning of the project, we conducted field expeditions to all lakes in Georgia where historically breeding of velvet scoter was recorded (See Map N1. Page 17). We surveyed lakes from a suitable vantage place by binoculars and telescope. Lakes, where Velvet Scoter was detected were monitored weekly to confirm breeding. We confirmed breeding of the scoter only on Tabatskuri Lake. We were monitoring whole lake with breeding scoters once a week from June to November 2017 and from April to June 2018. For monitoring we used 20-60x magnification telescopes and 8x and 10x magnification binoculars. During every survey we were counting number of male and female birds (See Table N1. Page 18). After the counts we

monitored movement of the birds and space use. We were observing competitive communication between them and other species of birds, reaction on fishermen boats and other disturbing factors. We did all of these to study how scoters were using breeding/feeding areas and to identify main threats that are affecting breeding population of Velvet Scoter. In addition we prepared a questionnaire containing 5 questions (See Table N2. Page 19) and surveyed locals, fishermen and hunters in order to identify anthropogenic threats affecting Velvet scoters. Using questioner we accessed knowledge local population had about Velvet Scoter. Upon completion of the project, we conducted questioner survey in local communities to evaluate the efficiency of our project (See Table N3. Page 20).

After incubation was finished, we checked all the possible territories where according to our survey the Velvet scoter was breeding. We found Velvet scoters breeding locations (nests) and counted the amount of hatched and rotten eggs. We conducted weekly counts of hatchlings before left breeding lake and headed south. Based on the data obtained from the survey we have calculated breeding success (See Table N4. Page 23).

Within the awareness raising campaign we prepared bilingual (Georgian/Armenian) brochure and banners with information about status of Velvet scoter, the threats that are affecting their population, and the ways people can contribute to reduce threats (See Picture 17&18. Page 32). We distributed the brochures in the local community and installed the banners around Tabatskuri Lake.

We conducted 10-minute educational talks for local school children in every class and gave them informational brochures, notebooks and pens with the logo of Velvet Scoter. All of these gifts were specially prepared and translated in Armenian language as well. Second half of the day, we took school children for field trip at Lake Tabatskuri. We taught them how to identify Velvet scoter and other duck species and how scientists are counting them. As a result of this activity they received theoretical and practical knowledge of bird identification and counting methods.

In order to spread the information widely, we used TV, social networks, web database biodiversity-georgia.net and the Georgian edition of National Geographic magazine. We arranged a one-day field trip to the Tabatskuri Lake for 25 members of the Facebook group "Wildlife of Georgia". They received information about bird monitoring methods and participated in bird count. Most active 5 people were awarded T-shirts with Velvet Scoter and CLP logos.

After the end of our fieldwork we held the workshop for all stakeholders and interested parties, introduced results of the project and talked about future conservation plan.

Outputs and Results (max 500 words)

For each objective please provide details of all the quantifiable results of the project's activities. For quantifiable research outputs of you should include presentation and data analysis of the results, with tables and graphs to summarise where suitable. For quantifiable outputs of activities involving stakeholders you should include, for example, the number of publications or posters and their distribution, the number of workshops and participants, the number of stakeholders engaged, evidence of behaviour change, funds raised etc. Include photos where appropriate.

After an extensive search (we've checked all 7 lakes with historical record of Velvet Scoter on Javakheti plateau: Saghamo, Paravani, Khanchali, Kartsakhi, Buggasheni, Madatapa, Tabatskuri. See Map N1. Page 17) Velvet Scoter was not detected on any mentioned wetland except Tabatskuri Lake.

According to our research, there are 30-35 pairs of Velvet Scoters on Tabatskuri Lake (See table N1 and N5. Pages 18 & 23). From observed pairs, only 6-15 pairs were successfully nesting on Tabatskuri Lake annually. Low number of breeding attempts was due to human impact, limited breeding territory and competition with Armenian Gulls. Velvet Scoters breed on the island at the northern part of the lake (See Map N2. Page 17). After hatching (late July) we found 6 nests of Velvet Scoter. Of the 48 eggs, 17 failed to produce a hatchling while 31 were successful. However from 31 hatchlings only 9 fledged. Based on the obtained data we calculated breeding success (See Table N4. Page 23). The breeding success was determined – 0.188. The main threats to the population of Velvet Scoter on Tabatskuri Lake based on interviews with 35 locals (See Table N2. Page 19) and field observations are: 1. Disturbance and nest distraction (The locals move to the island and collect the eggs for food); 2. Limited breeding ground (They use only one island (less than 1ha) for breeding, which is located on Tabatskuri Lake). 3. Competition with Armenian Gull (On the island there's a large colony of the Armenian gulls, they are more aggressive and chase Velvet scoters away from the island). 4. By-catch in Fishing nets (Fishermen are using gillnets to catch fish in the lake. They place nets around the breeding and feeding locations of Velvet scoter. Many times they leave old, damaged fishing nets in the water as well. Fishing nets are one of the main threats for the scoter).

Within the awareness-raising campaign we prepared 500 informational brochures and distributed in the local community; 3 informational banners - installed on the shore of Tabatskuri Lake; 2 wall clock with Velvet scoters logo - was given to the local school and to the administration of Borjomi-Kharagauli Protected Areas; 100 notebooks and stickers (with painting of Velvet scoter and CLP logos on it) were distributed in local school and volunteers; 40 T-shirts and 10 caps were distributed through group members, volunteers, project supporters, and rangers of protected areas.

We arranged workshop to provide information on project activities and findings to the stakeholders. Workshop was attended by 2 representatives from Ministry of Environmental Protection of Georgia; Natural resource management specialist from Borjomi-Kharagauli National Park; 2 rangers from Ktsia-Tabatskuri Managed Reserve. Director of NGO "PSOVI"; 2 professors, 1 ornithologist and 5 researchers from institute of ecology of Ilia State University; 1 professor, 1 ornithologist and 4 researchers from institute of zoology of Ilia State University; Director and Head of Scientific Division of Tbilisi Zoo; 10 Students and 4 members of the Facebook group "Wildlife of Georgia". Total 36 people.

Communication & Application of results (max 200 words)

Please explain how the project's results have been communicated and how they have been applied to addressing the project's conservation problem.

We have used information brochures and banners for communicating the project results to the locals. The brochures and banners contain information about the status of Velvet scoter, the threats that are effecting them, and the ways local people can contribute to the reduction of threats.

We arranged workshop to provide information on project activities and findings to the stakeholders. As a result, all stakeholders have information about the Tabatskuri population of the Velvet scoter. Geneticists of Ilia State University are interested in our target species and they are ready to assist us in the genetic study of Velvet Scoter.

During the project we met the representatives of the protected areas and informed them about the results of our project. As a result, two rangers have been appointed to monitor illegal activities around the lake and efforts of the rangers are aimed to protect important places for the Velvet Scoter.

Project results were present in 5th Pan-European Duck Symposium. Which was held on 16th-20th April 2018 in Isle of Great Cumbrae, Scotland.

Currently we are working on long-term conservation plan based on the results of our research.

Monitoring and Evaluation (max 200 words)

What Monitoring and Evaluation activities were carried out to assess the effectiveness of the project's activities?

We developed a questionnaire with 4 questions to assess impact of our project on awareness of local population about Velvet Scoter. One of our volunteers, Nika Budagashvili conducted survey in the village Tabatskuri. Over 50 people were interviewed (See Table N3. Page 20). The results of the survey show, that most of the locals (including fishermen and hunters) increased their awareness about Velvet Scoter. As a result of the activities performed during our project they have information about the breeding population of Velvet scoter on Tabatskuri Lake and major threats affecting the species.

Furthermore, as a result of our project, the rangers of the protected area know important for Velvet scoter areas and try to prevent illegal activities on these territories.

Achievements and Impacts (Max 500 words)

Please list the most important Achievements and Impacts of the outputs listed in the previous sections and explain the significance of each one in relation to the overall aim of the project. If possible you should try to come up with a single sentence for each achievement and follow it with a description and explanation of how this achievement contributes to the project's objectives and overall goal.

1. As a result of the project, all stakeholders became aware of existence of the isolated and endangered population of Velvet scoter in Tabatskuri Lake. As a result, stakeholders offered assistance in the Conservation activities of Velvet scoter.
2. One of the biggest achievements of this project is that population size, distribution range, breeding, feeding and moulting territories are identified and mapped. Also, the threats and ways to avoid these threats are determined. All this is important and necessary information for successful conservation of species.
3. Institute of Ecology of Ilia State University is ready to conduct population genetic analysis of velvet scoter to identify level of isolation of Black Sea population from Northern population.
4. Tabatskuri Lake is included in Ktsia-Tabatskuri managed reserve, but rangers of the Protected Areas were not controlling the Lake strictly, because they did not know about the existence of Velvet scoter. At the beginning of the project, we met with the Director of the Protected Areas and introduced our project. The representatives of the protected area supported the project. As a result, two rangers helped the project team to conduct surveys and to communicate with local villagers. Also, one more ranger has been appointed to monitor and prevent illegal activities around the lake.

5. Locals and students have been actively involved in various activities of the project. Out of five volunteers, two were locals – a ranger from Protected Area and fisherman from village Tabatskuri. Both of them have been very helpful in communicating with locals and fishermen.

Capacity Development and Leadership capabilities (Max 250 words)

Please describe how the project contributed to improvements in capacity of the project team members in relation to specific skills and leadership capabilities.

This project provided to the project team members with experience in planning and executing conservation project, team organisation and public relation skills. Additionally, project provided opportunity to raise knowledge about the ecology of Velvet Scoter in Georgia. Project enabled us to develop conservation projects and plans for future.

Section 3:

Conclusion (max 250 words)

Provide accurate, detailed and specific conclusions, avoiding general inferences and interpretations. Describe the overall project's contribution to its central conservation aim and answer questions raised in the introduction, highlight any new information exposed by the project process.

As a result of our research, it was established that Velvet scoter breeds only on the Tabatskuri Lake in Georgia. Species is using only northern part of the lake, near the island, which is the only breeding place for them on Tabatskuri Lake. The Tabatskuri population is 30-35 pairs, but only 6-15 pairs breed annually due to human impact, limited breeding territory and competition with Armenian Gulls. After failed breeding attempt, birds are leaving the lake and probably are heading towards the wintering grounds. Birds which are nesting successfully on the island, hatch ducklings (Hatching Success - 64.6%), as a result of predations and youth drowning in fishing nets, a small number of hatchlings reaches to the fledging age (Fledging Success - 29%). As a result breeding success of Velvet scoter is low (Breeding Success – 18.8%). Because of raised awareness of the local community and cooperation with the protected areas, the impact of anthropogenic factors on birds has decreased. Decreased anthropogenic pressure promotes the growth of the colony of Armenian Gulls. It has negative impact on the Velvet Scoter as well. Also, fishermen still continue to fish around the island where velvet scoter breeds.

As a result of the above mentioned threats, the long-term survival of this population of Velvet Scoter is at risk and needs long-term surveys and active conservation measures.

Problems encountered and lessons learnt (max 500 words)

The purpose of this section is to provide information on lessons learned during the project work that can be usefully applied to other CLP projects. Please answer the below fields:

- *Which project activities and outcomes went well and why?*
Counting and surveying of Velvet Scoters were not difficult, because of prior experience in this matter. Meeting the locals and distribution of the booklets, stickers, t-shirts, clocks, caps and notebooks was easy and joyful because everyone loves gifts. Also, we involved locals to set up banners and gave them a reward. Overall, having field experience and collaboration with locals helped much to succeed in project activities.
- *Which project activities and outcomes have been problematic and in what way, and how has this been overcome?*
At the beginning it was difficult to conduct a survey among the local communities, they avoided answering questions. Then we asked the local resident (who became one of our volunteers) to help us conduct the survey and then everything went well.
- *Briefly assess the specific project methodologies and conservation tools used.*
We counted ducks using "direct count" method. The project team monitored birds weekly. We observed behaviour and movement of scoter using spotting scopes and binoculars. Observed movement and presence of ducks was mapped on the topographic map of the lake and later on the Google Earth Pro. To investigate anthropogenic pressure on the population, we used a questionnaire and surveyed local population (including fishermen and hunters).
During the project, we cooperated closely with the Borjom-Kharagauli National Park and regularly provided them with information about the project results.
In order to disseminate information and raise awareness with locals, we spread informational brochures (prepared by us), installed banners and hold presentations about Velvet scoter. Also, we use social networks and other media to spreading information.
- *Please state important lessons which have been learnt through the course of the project and provide recommendations for future enhancement or modification to the project activities and outcomes.*
As a result of the project it is clear that in order to successfully implement conservation project, it is necessary to include local people (at least 1-2 locals) in project staff. They will help in communication with the local community. It also positively affects the locals when the project has some benefit for them. For example, when we installed information banners on Tabatskuri Lake, we asked locals to help us and donate money for their assistance. As a result, they feel responsible for installed banners and pay attention to them. However, there is an exception when the locals continue to carry out illegal activities and threaten endangered species. In this case, it is necessary to cooperate with state agencies to prevent such actions by the law.

In the future (max 200 words)

Please explain what efforts you will be taking to sustain this work beyond the grant period and what further work would be useful for the conservation of the target species/area.

From April 15, 2018, we continue to monitor Velvet Scoter population on Tabatskuri Lake. Environmental Association "PSOVI" and Ilia State University provided resources to monitor returning population numbers of scoter on Tabatskuri Lake (See Table N5. Page 23). We are writing new project proposal to continue monitoring on Tabatskuri Lake in order to conduct needed conservation activities to ensure long term conservation of the population. We plan to

mark important territories of Velvet Scoter with buoys in Tabatskuri Lake to help protected area rangers with enforcing regulations on fishing net placement. We plan to install 4-5 camera traps on the island to monitor illegal activities and study competitive interaction of scoters and gulls. We plan to raise funds for GPS tracking devices to study movement and wintering grounds of velvet scoter. Additionally, we plan to investigate the isolation level of Black Sea population from Northern population using molecular genetic methods.

Financial Report

Please copy and paste the summary sheet from your financial report here

Itemized expenses	Total CLP Requested (USD)*	Total CLP Spent (USD)	% Difference	Details & Justification (Justification must be provided if figure in column D is +/- 25%)
PHASE I - PROJECT PREPARATION				
Communications (telephone/internet/postage)	100.00	94.61	-5%	
Field guide books, maps, journal articles and other printed materials	100.00	90.83	-9%	
Insurance	100.00	92.09	-8%	
Visas and permits				
Team training				
Reconnaissance				
Other (Phase 1)				
EQUIPMENT				
	2,025.00			Spotting scope was donated to the project by German birdwatcher guide Elmar Witting. Funds re-allocated to cover camping equipment costs
Scientific/field equipment and supplies		1835.83	-9%	
Photographic equipment	500.00	500.00	0%	
	350.00			We bought good tents and sleeping bags and one more tent for volunteers. The deficit was covered by funds re-allocated from
Camping equipment		538.36	54%	

Boat/engine/truck (including car hire) Other (Equipment)	2,280.00	2584.00	13%	"Scientific/field equipment and supplies" (\$188.36) Including tax (20%)
PHASE II - IMPLEMENTATION				
Accommodation for team members and local guides				
Food for team members and local guides	1,710.00	1704.40	0%	
Travel and local transportation (including fuel)	2,280.00	2275.47	0%	
Customs and/or port duties				
Workshops	550	505.83	-8%	
Outreach/Education activities and materials (brochures, posters, video, t-shirts, etc.)	1,350.00	1285.60	-5%	
Other (Phase 2)				
PHASE III - POST-PROJECT EXPENSES				
Administration				
Report production and results dissemination	500.00	515.00	3%	
Other (Phase 3)	500.00	463.74	-7%	
Total	12,345.00	12,485.76		

Section 4:

Appendices

Please include important additional information not required in the main text along with:

- Completed CLP M&E measures table (see below)
- Raw field data: if large amounts of data were generated, include them here and summarise results using tables and statistics in the main text.
- Copies of any newspaper/magazine articles relating to the project.
- Papers published or manuscripts proposed based on project data

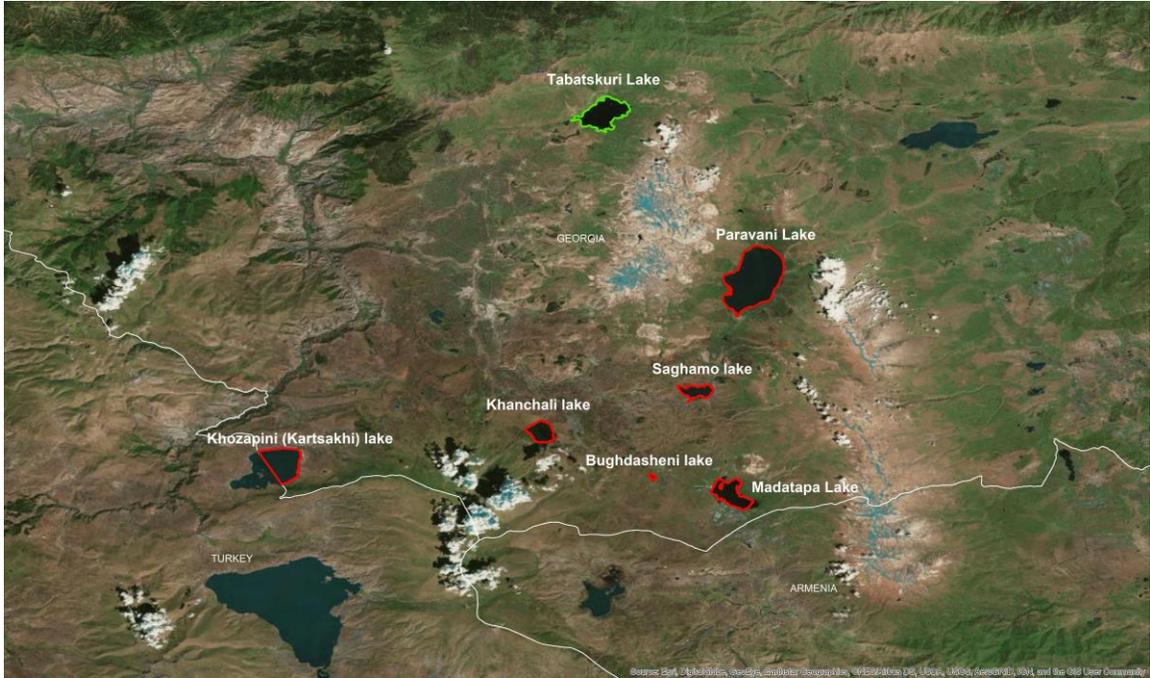
Output	Number	Additional Information
Number of CLP Partner Staff involved in mentoring the Project	4	Charlotte Klinting Christina Imrich Laura Owens Stuart Paterson
Number of species assessments contributed to (E.g. IUCN assessments)	1	IUCN assessments

Number of site assessments contributed to (E.g. IBA assessments)	1	IBA and SPA for Birds assessments
Number of NGOs established	-	-
Amount of extra funding leveraged (\$)	5000 £	From Rufford
Number of species discovered/rediscovered	1	Velvet Scoter (<i>Melanitta fusca</i>)
Number of sites designated as important for biodiversity (e.g. IBA/Ramsar designation)	1	IBA and SPA for Birds
Number of species/sites legally protected for biodiversity	1	As a result of the project, the rangers controlling the lake (Island) to reduce threats to the Velvet Scoter.
Number of stakeholders actively engaged in species/site conservation management	5	Agency of Protected Areas of Georgia; 3 Rangers of Ktsia-Tabatskuri Managed Reserve; NGO "PSOVI"; Ilia State University; Schools
Number of species/site management plans/strategies developed	1	The long-term conservation plan is in the process of development now.
Number of stakeholders reached	9	Ministry of Environment and Natural Resources Protection of Georgia; Agency of Protected Areas of Georgia; NGO "PSOVI"; Ilia State University; The Locals; The Local schools; The Local governance; Fishermen; Tbilisi Zoo;
Examples of stakeholder behaviour change brought about by the project.	3	The Locals do not move to the island to collect eggs; Ktsia-Tabatskuri rangers control the lake. NGO "PSOVI" and Ilia State University continue to support for the conservation of Velvet Scoter after the end of this Project too.
Examples of policy change brought about by the project	1	Rangers of the Protected Areas have not controlled the Lake extremely well, because they did not know about the existence of Velvet scoter. As a result of our project, they know

		about it and try reduce threats to the Velvet Scoter.
Number of jobs created	1	Based on the results of our project one more ranger has been appointed to monitor for illegal activities around the lake.
Number of academic papers published	1	Published soon in the scientific journal "Wildfowl"
Number of conferences where project results have been presented	2	The project results were present in 5th Pan-European Duck Symposium. Which was held on 16th-20th April 2018 in Isle of Great Cumbrae, Scotland. The project results and future plans were presented in Rufford small grant conference "Conservation Across the Caucasus". Which was held on 2th-4 August 2018 in Stepantsminda, Georgia.

Appendix 4.1 CLP M&E measures

Map N1

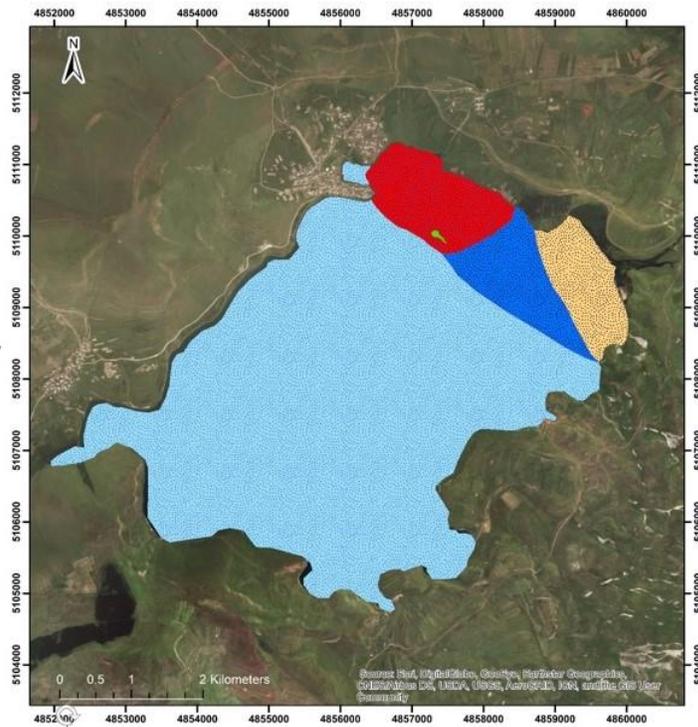


Map N2

Legend



1. Breeding Ground
2. Unused Area
3. Mating and Feeding Territory
4. Molting and Feeding Territory
5. Corridor



Notice: During the surveys Velvet Scoter has not been observed in the light blue area.

Table N1
Velvet Scoter Census 2017

Location	Date	Male	Female	Total
Tabatskuri Lake, Georgia	31.05.2017	57	31	88
Tabatskuri Lake, Georgia	10.06.2017	59	33	92
Tabatskuri Lake, Georgia	05.07.2017	18	17	35
Tabatskuri Lake, Georgia	14.07.2017	15	10	25
Tabatskuri Lake, Georgia	22.07.2017	17	11	28
Tabatskuri Lake, Georgia	31.07.2017	15	12	27
Tabatskuri Lake, Georgia	10.08.2017	17	14	31
Tabatskuri Lake, Georgia	15.08.2017	15	14	29
Tabatskuri Lake, Georgia	20.08.2017	16	15	31
Tabatskuri Lake, Georgia	25.08.2017	15	14	29
Tabatskuri Lake, Georgia	30.08.2017	17	15	32
Tabatskuri Lake, Georgia	05.09.2017	17	15	32
Tabatskuri Lake, Georgia	10.09.2017	17	14	31
Tabatskuri Lake, Georgia	16.09.2017	15	0	15

Tabatskuri Lake, Georgia	23.09.2017	17	0	17
Tabatskuri Lake, Georgia	01.10.2017	17	0	17
Tabatskuri Lake, Georgia	06.10.2017	17	0	17
Tabatskuri Lake, Georgia	13.10.2017	0	0	0
Tabatskuri Lake, Georgia	18.10.2017	0	0	0
Tabatskuri Lake, Georgia	25.10.2017	0	0	0
Tabatskuri Lake, Georgia	02.11.2017	0	0	0

Table N2
The Results of the First Survey

N	Age	Gender	Village	Is there hunting/fishing on Tabatskuri Lake?	Do the people collect bird eggs on the island?	Have you seen/heard trapping duck in fishing net?	Have you seen Velvet Scoter (We showed them the picture)?	Do you know that Velvet Scoter is only breeding on the Tabatskuri lake in Georgia?
1	43	Male	Tabatskuri	Yes	Rarely	Yes	No	No
2	37	Female	Tabatskuri	Yes	Rarely	No	No	No
3	60	Male	Tabatskuri	Yes	Rarely	Yes	No	No
4	22	Male	Tabatskuri	Yes	Rarely	Yes	Yes	No
5	23	Male	Tabatskuri	Yes	Yes	Yes	Yes	No
6	30	Female	Tabatskuri	Yes	No	No	No	No
7	54	Female	Tabatskuri	Yes	Rarely	Yes	No	No
8	49	Female	Tabatskuri	Yes	Yes	Yes	Yes	No
9	29	Male	Baraleti	Yes	No	No	No	No
10	44	Male	Tabatskuri	Yes	No	No	No	No
11	45	Male	Chikharua	Yes	No	Yes	No	No
12	16	Male	Tabatskuri	Yes	Yes	Yes	Yes	No
13	15	Male	Tabatskuri	Yes	Yes	Yes	Yes	No

14	23	Male	Tabatskuri	Rarely	No	No	No	No
15	45	Male	Tabatskuri	Yes	No	No	No	No
16	40	Male	Moliti	Yes	No	Yes	No	No
17	28	Male	Moliti	Yes	Yes	Yes	No	No
18	29	Male	Moliti	Yes	Yes	Yes	No	No
19	29	Male	Moliti	Yes	No	No	No	No
20	30	Male	Moliti	Rarely	No	No	No	No
21	35	Male	Chikharua	Yes	No	No	No	No
22	58	Male	Tabatskuri	Rarely	Rarely	Yes	Yes	No
23	48	Male	Tabatskuri	Yes	Rarely	Yes	Yes	No
24	29	Male	Balanta	Yes	Rarely	Yes	No	No
25	31	Male	Balanta	Yes	No	No	No	No
26	27	Male	Chikharua	Yes	No	Yes	No	No
27	40	Female	Tabatskuri	Yes	No	Yes	No	No
28	58	Male	Tabatskuri	Yes	Yes	Yes	Yes	No
29	55	Female	Tabatskuri	Yes	Yes	Yes	No	No
30	80	Male	Moliti	Yes	Yes	Yes	Yes	No
31	56	Male	Moliti	Yes	Yes	Yes	Yes	No
32	29	Female	Moliti	Yes	No	Yes	No	No
33	70	Female	Moliti	Yes	No	Yes	No	No
34	14	Male	Tabatskuri	Yes	Yes	Yes	Yes	No
35	27	Male	Tabatskuri	Yes	Rarely	Yes	Yes	No
36	-	Male	-	Refused	Refused	Refused	Refused	Refused
37	-	Male	-	Refused	Refused	Refused	Refused	Refused
38	-	Male	-	Refused	Refused	Refused	Refused	Refused
39	-	Male	-	Refused	Refused	Refused	Refused	Refused
40	-	Male	-	Refused	Refused	Refused	Refused	Refused
41	-	Male	-	Refused	Refused	Refused	Refused	Refused
42	-	Female	-	Refused	Refused	Refused	Refused	Refused

Table N3
The Results of the Second Survey

N	Age	Gender	Village	Have you seen or heard about Velvet Scoter?	Do you know that Velvet Scoter is only breeding on the Tabatskuri lake in Georgia?	Where did you know/ hear about Velvet Scoter?	Do you try to contribute to reducing the threats, as it's given in the informational brochure/ Banners?
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1	35	Male	Tabatskuri	Yes	Yes	For Banner	Sometimes
2	32	Male	Tabatskuri	Yes	Yes	For Banner	Sometimes
3	49	Female	Tabatskuri	Yes	Yes	For brochure	Yes
4	60	Female	Tabatskuri	Yes	Yes	For brochure	Yes
5	19	Male	Tabatskuri	Yes	Yes	For brochure	No
6	15	Male	Tabatskuri	Yes	Yes	For brochure	Yes
7	13	Male	Tabatskuri	Yes	Yes	For brochure	Yes
8	15	Male	Tabatskuri	Yes	Yes	For brochure	Yes
9	15	Male	Tabatskuri	Yes	Yes	For Banner	Yes
10	20	Male	Tabatskuri	Yes	Yes	For Banner	Yes
11	24	Male	Tabatskuri	Yes	Yes	For Banner	Yes
12	43	Male	Tabatskuri	Yes	Yes	For Banner	Sometimes
13	14	Male	Tabatskuri	Yes	Yes	For brochure	Yes
14	15	Male	Tabatskuri	Yes	Yes	For brochure	Yes
15	13	Male	Tabatskuri	Yes	Yes	For brochure	Yes
16	16	Male	Tabatskuri	Yes	Yes	For Banner	Yes
17	41	Male	Tabatskuri	Yes	Yes	For Banner	Sometimes
18	40	Female	Tabatskuri	Yes	Yes	For Banner	Yes
19	16	Female	Tabatskuri	Yes	Yes	For brochure	Yes
20	38	Female	Tabatskuri	Yes	Yes	For Banner	Yes
21	29	Male	Tabatskuri	Yes	Yes	For Banner	Yes
22	27	Male	Tabatskuri	Yes	Yes	For Banner	Yes
23	67	Male	Tabatskuri	Yes	Yes	For Banner	No
24	34	Male	Tabatskuri	Yes	Yes	For	Sometimes

						Banner	
25	56	Male	Tabatskuri	Yes	Yes	For Banner	Yes
26	50	Male	Tabatskuri	Yes	Yes	For Banner	Yes
27	39	Male	Tabatskuri	Yes	Yes	For Banner	Sometimes
28	41	Male	Tabatskuri	Yes	Yes	For Banner	Sometimes
29	33	Male	Tabatskuri	Yes	Yes	For Banner	Yes
30	30	Male	Moliti	Yes	Yes	For Banner	Yes
31	36	Male	Moliti	Yes	Yes	For Banner	Sometimes
32	18	Male	Moliti	Yes	Yes	For brochure	Sometimes
33	10	Male	Moliti	Yes	Yes	For brochure	Yes
34	12	Male	Moliti	Yes	Yes	For brochure	Yes
35	10	Male	Moliti	Yes	Yes	For brochure	Yes
36	9	Male	Moliti	Yes	Yes	For brochure	Yes
37	45	Male	Moliti	Yes	Yes	For Banner	Yes
38	49	Male	Moliti	Yes	Yes	For Banner	Yes
39	19	Male	Moliti	Yes	Yes	For Banner	Yes
40	47	Female	Moliti	Yes	Yes	For Banner	Yes
41	68	Female	Moliti	Yes	Yes	For Banner	Yes
42	28	Female	Moliti	Yes	Yes	For Banner	Yes
43	44	Male	Moliti	Yes	Yes	For Banner	Yes
44	41	Female	Moliti	Yes	Yes	For Banner	Yes
45	23	Female	Moliti	Yes	Yes	For Banner	Yes
46	52	Male	Moliti	Yes	Yes	For Banner	Yes
47	50	Female	Moliti	Yes	Yes	For Banner	Yes

48	36	Male	Moliti	Yes	Yes	For Banner	Sometimes
49	30	Male	Moliti	Yes	Yes	For Banner	Sometimes
50	32	Male	Moliti	Yes	Yes	For Banner	Yes

Table N4
Nesting Data and breeding Success

Nest	Eggs	Rotten	Hatched	Fledged	HS	HM	FS	FF	BS	BF
1	10	2	8	-						
2	8	3	5	-						
3	8	4	4	-						
4	7	3	4	-						
5	7	2	5	-						
6	8	3	5	-						
Total	48	17	31	9	0.646	0.354	0.290	0.710	0.188	0.813

HS - Hatching Success was calculated by dividing the number of hatched eggs (he) by the total number of eggs (e), as shown in the formula: $HS=he/e$. **HM** - Hatching mortality was calculated by subtracting the hatching success from 1, as shown in the formula: $HM=1-HS$.

FS - Fledging Success was calculated by dividing the number of fledging (f) by the total number of hatchlings (h), as shown in the formula: $FS=f/h$. **FF** - Fledging Failure was calculated by subtracting the fledging success from 1, as shown in the formula: $FF=1-FS$.

BS - Breeding Success was calculated by dividing the number of fledging (f) by the total number of eggs (e), as shown in the formula: $BS=f/e$. **BF** - Breeding Failure was calculated by subtracting the breeding success from 1, as shown in the formula: $BF=1-BS$.

Table N5
Velvet Scoter Census 2018

Location	Date	Male	Female	Total
Tabatskuri Lake, Georgia	15.04.2018	0	0	0
Tabatskuri Lake, Georgia	25.04.2018	31	23	54
Tabatskuri Lake, Georgia	05.05.2018	43	34	77
Tabatskuri Lake, Georgia	15.05.2018	41	35	76

Picture N1. Survey the historical range of Velvet Scoter on Javakheti plateau in Georgia.



Picture N2. Survey of Velvet Scoter on Tabatskuri Lake



Picture N3. Velvet Scoters (*Melanitta fusca*) on Tabatskuri Lake



Picture N4. Velvet Scoters (*Melanitta fusca*) on Tabatskuri Lake



Picture N5. Velvet Scoter (female) on the nest



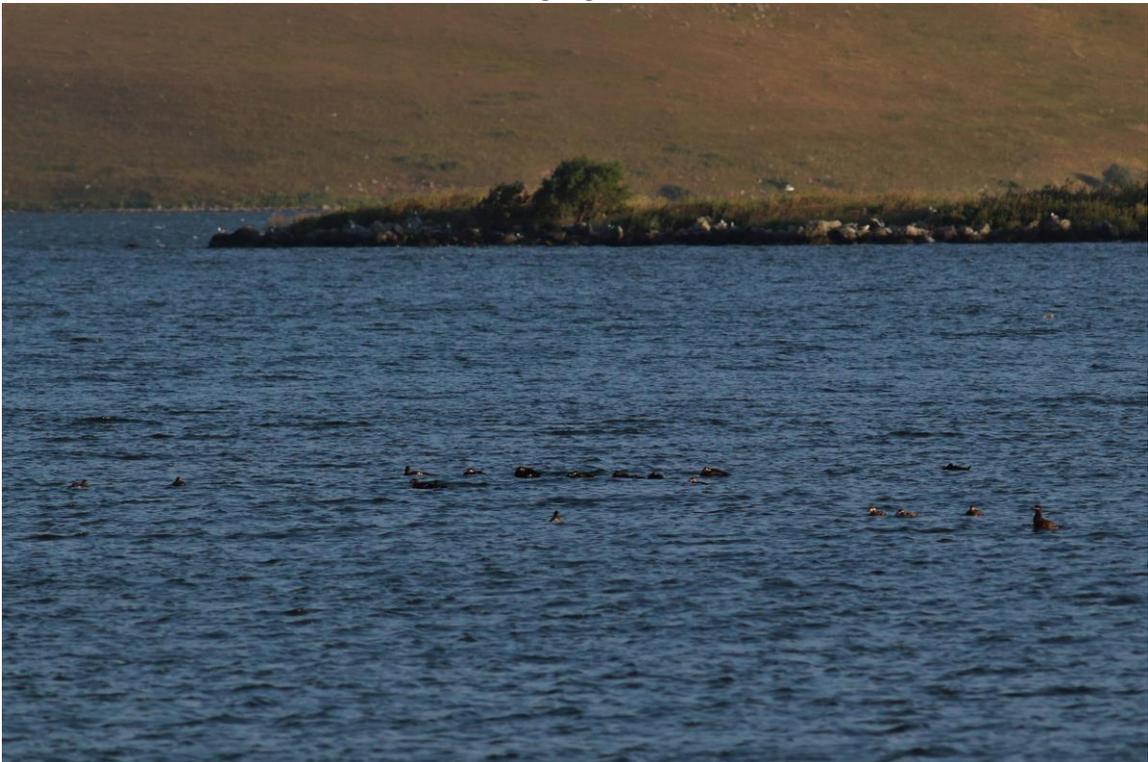
Picture N 6. Velvet Scoter nest. Hatched and rotten eggs



Picture N7. Velvet Scoter (female) with hatchlings on Tabatskuri Lake



Picture N8. Velvet Scoter (females) with fledglings



Picture N9. The logo of Velvet Scoter, designed specifically for the awareness-raising campaigns



Picture N10. Meeting with the representatives of Protected Areas of Georgia



Picture N11. The survey of locals



Picture N12. The survey of fishermen



Picture N13. A one-day field trip on the Tabatskuri Lake for members of the Facebook group "Wildlife of Georgia".



Picture N14. Visiting the local schools



Picture N15. Meeting with the local school pupils and dissemination the information about Velvet Scoter



Picture N16. Velvet Scoter watching with local school pupils



Picture N17. The informational Brochures



გარიელზე მოქმედი
ძირითადი საფრთხეები

- საბუდარი ადვილების დაკარგვა
- შეწუხება და ბუდეების განადგურება
- სათევზაო ბაღში გაბმვა/დახრჩობა
- გარემოს დაბინძურება
- ნადირობა



თქვენ რა შეგიძლიათ გააკეთოთ ამ ფრინველის გადასარჩენად?

- შეეცადეთ არ გამოიყენოთ ტბის სანაპირო ზოლი და კუნძული სასოფლო სამეურნეო დანიშნულებისთვის.
- შეეცადეთ არ შეხვიდეთ ტბის სანაპირო ზოლის სიახლოვეს დაჭაობებულ ტერიტორიაზე და ნუ შეუშვებთ იქ შინაურ ცხოველებს.
- ნუ გადახვალთ კუნძულზე და შეეცადეთ თავი აარიდოთ მის სიახლოვეს მტორიანი ნავით გავლას.
- ნუ შეაგროვებთ ფრინველის კვერცხებს.
- ნუ დაშურებელია პოპულაციისთვის.
- ნუ გამოიყენებთ სათევზაო ბაღებს კუნძულისა და დაჭაობებული ყურეების სიახლოვეს.
- ნუ გადამყრით/დატოვებთ ძველ სათევზაო ბაღებს წყალში.
- ნუ დაბინძურებთ წყალს საყოფაცხოვრებო ნარჩენებით.
- მოუყვით შეგობრება და ნათესავებს გარიელის შესახებ.



*ნუ მოკლავ გარიელს,
დაიცავი!*

პროექტის მხარდამჭერები (Project Supporters):









გარიელის კონსერვაცია საქართველოში
Conservation of Velvet Scoter in Georgia
Coordinator: Nika Paposhvili
Tel: +995 577 987 220
Email: birder_nik@yahoo.com

Melanitta fusca

გარიელი

იხვი
რომელიც
მხოლოდ
ტაბანყურის
ტბაზე
შემორჩა

Picture N18. The informational banner



Picture N19. Set up the informational banners



Picture N20. Workshops for stakeholders



Picture N21. The information dissemination through TV media



Picture N22. Presentation about Velvet Scoter at American Academy in Tbilisi



Picture N 23. Presenting the project results on 5th Pan-European Duck Symposium



Picture N 23. Presenting the project results on Rufford Small grant conference



Bibliography

List all the sources that you used, highlighting the most important ones. Also include the publications and communication outputs from the project as well as papers being prepared for publication by project members.

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Address list and web links

An annotated list of useful names, addresses and websites

<https://iliauni.edu.ge/ge/siaxleebi-8/gonisdziebebi-346/sadjaro-leqcia-garielis-melanitta-fusca-konservacia-saqartveloshi.page>

<https://www.facebook.com/groups/1017103611652484/permalink/1770962679599903>

<http://www.nationalgeographic.ge/wm.php?page=magazine&category=567>

https://www.youtube.com/watch?v=2fzL_fW8IKw&feature=youtu.be

<http://biodiversity-georgia.net/index.php?taxon=Melanitta%20fusca>

Distribution list

List where copies of the report have been distributed for reference by future project leaders and others, and where the report can be bought (if relevant).

<http://biodiversity-georgia.net>

In addition, the scientific article published soon in the scientific journal "Wildfowl"