



Funded by a grant from the National Geographic Society



Overview of Community Activities

Here we give an overview of some of the community activities and focus on three areas: School activities including four areas: **field trips, farmer activities, student activities, and an activity carried at facility for children with special needs.**

1) School activities including field trips to Al-Makhrour valley

We approached several schools and held meetings with 12 schools in the four communities surrounding the valley (Battir, Al-Walja, Husan and Beit Jala). Several educational activities were initially held in small focus groups at the schools. We decided then to take students of elementary schools in seven schools from these communities on field trips to the valley. A minimum 20 student from each school were nominated/selected by their teachers as those who could be influential among their peers and showed interest in environmental issues (total 150 students participated, 50% female). They were taken on day-long trips involving hikes starting in Beit Jala (8:30 AM) and walking through the valley to Battir and along the way stopping at stations to learn and interact. The training for students included hands on work and interactive workshops that covers ecosystems, fauna and flora, human impact on the environment, cleaning any trash found through the way and much more. The focus was on behavioral change.

Date of Field trip	school	School principal
Wednesday 20/3/2019	Battir male elementary	اسماعيل البطمة (مشرف النوادي البيئية)
Monday 25/3/2019	Tel-Rabee' Girls school (Husan)	نورما شناعة
Tuesday 26/3/2019	Battir female elementary	رقية عمر
Thursday 28/3/2019	Wadi Damas School (Beit Jala)	اسماعيل مسالمة
Saturday 30/3/2019	Al-sadeeq school Husan (males)	داود مناصرة
Tuesday 2/4/2019	Al-Walaja School (mixed boys and girls)	برهان العيسي
Tuesday 6/4/2019	Beit Jala Girls school	وفاء اجنين





2) Agricultural work

The agricultural work was started under the National Geographic Society Grant as per our plan to work to educate farmers about things like organic agriculture, agro-biodiversity, keeping corridors for animals/plants, avoiding use of pesticides and insecticides, and overall having a healthy ecosystem for both humans and fauna/flora. Several meetings were conducted in the targeted 4 villages through different stakeholders of each community attended these meetings. The project team explained to participants (and many times farmers encountered in our field trips to the valley) the project objectives and how eco- and agro – tourism can help them. Initial meetings were held 2nd and 24th of Jan 2019 and included representatives from civil society, local cooperatives members, and other key persons (farmers). While this was achieved successfully, many farmers from the beginning asked for further support which we could not provide via the NGS grant and we did manage to do more for them via a supplementary grant we fortunately received from the Darwin Initiative (still ongoing).





3. Student activities

As an extension of our work in Al-Makhrou and even though this was not required or part of the listed activities in the grant proposals), we engaged in activities relating to conservation via education at a local community college. The course Fauna and Flora offered at Bethlehem Bible College in their program on Tourism guiding diploma included 24 students of various backgrounds. It was taught by Prof. Mazin Qumsiyeh of the Palestine Institute for Biodiversity and Sustainability. It used the area of Al-Makhrou as a focus for much of the work as a model and as a key natural laboratory for the course. Below are three sections that illustrate this:

- 1) Report on fieldwork done 23/11/2019
- 2) Report on a workshop held with students where we came up together with a 5 point plan of conserving Al-Makhrou
- 3) An exam in which much of the emphasis was on Al-Makhrou fauna and flora and threats to it.

Section 1. Exhibit Trip to Makhrou with students 23/11/2019

A field trip was carried walking the path from Ras Beit Jala to Battir (about 7 km). In the beginning, Prof. Qumsiyeh engaged the students with interactive questions and role-play on how and what they should show to tourists (eco-, agricultural, cultural tourism) coming to the area. We then walked stopping at 5 stations where we learned about different areas (including the final stop in Battir where Nadia Al-Butma, daughter of Hassan Mustafa) gave a good presentation on people history. During our walk we observed mammals (humans, goats), birds (Kestral, Jay, Tit, Bulbul, Myna bird, Black cap, Robin), reptiles (gecko, agama lizard, green lizard, skink lizard), invertebrates (three species of grasshoppers, praying mantis, Syrian millipede, beetles, at least five species of land snails), mushrooms, many tree species (hawthorn, pistacia, olives, haven, oaks, figs, almonds, pine, cypress, etc), many shrubs (e.g. ephedra, natash. oregano/zaatar), and many annual plants (including

beginning blooming crocus/zu'furan,). We also learned about geology and geography and ethnography of the area.





Section 2. Reports on workshop held with students focusing on managing Al-Makhroun as a model for managing Palestinian Ecosystems

The 24 students engaged in a workshop facilitated by Prof. Qumsiyeh where we discussed many issues including value of Al-Makhroun (World Heritage Site), why we should protect it, what threats were observed (habitat destruction, human damaging “land reclamation” practices, solid and liquid waste, and colonial activities (see also **the Annex** that includes our letter to UNESCO and the response to it about the Israeli threats). After lengthy discussions of issues and potential solutions, the class narrowed down the interventions (recommendations) for Al-Makhroun management to five key points (these were taken into consideration in building the Biodiversity Conservation Plan):

- 1. Expand research in the area of Al-Makhroun:** We need to understand who are the people that come to Al-Makhroun, how do they spend their time, where do they spend their time, how do they arrive and leave and why do they come to Al-Makhroun? We need to know what flora and fauna are found in the valley, what are the ecosystems in this valley. Also which threats are there to the environment and what damages are done to it. Based on this research it will be easier to make a plan, to do recommendations.
- 2. Assign responsibilities and carry them:** In order to protect Al-Makhroun valley it is important to have it very clear who is responsible for the valley, for the trails and the maintenance. There are trash bins, but who is emptying them and how often? There is responsibility for the local community: The villages of Battir, Al Khader, Husan, Beit Jalla, for the national authority (Ministry of Agriculture, Ministry of Tourism and the Environmental Quality Authority).
- 3. Enforce laws and regulations and integrate local and national responsibilities:** The environmental police should be active in this area to enforce the law. People who litter should be fined. Rules and regulations should be made very clear on the entrance to Al-Makhroun valley and there has to be control and punishment.
- 4. Environmental awareness for the whole community:** This can be done through education programs, reaching out to schools, to the whole community, to the local authorities and the media. It can be helpful to have some famous and influential people on board to push for environmental conservation.
- 5. Establish a small information / tourist office on the entrance of the valley** from both sides, especially for the busy weekend days. With information on flora and fauna, information about how to behave in the valley, what is not allowed and how to respect the environment. There could be a small fee or donation box where people can share in the financial aspects of keeping the valley beautiful and clean.

Section 3. Bethlehem Bible College Fauna and Flora Second Exam

In our trip to the Makhrou valley Saturday, we may encounter fauna and flora we discussed in class. Show me you learned some interesting information by writing what you would tell tourists (at least 3 things for each) about these humans, animals, plants, fungi, or habitats



A



B



C



D



E



F



G

cidental number species 49 are exclusively (which reduced species

4. Activity with students of Life Gate Rehabilitation

Our team visited Life Gate Rehabilitation Center-Beit Jala 18 Dec 2019 and met with 32 special needs students. We display Specimens (insect and birds, etc.) and talked to them about humans, animals, plants and nature in a story-telling frame.





