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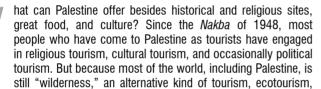
## **Ecotourism**

## Opening a Natural Window to Palestine





By Mazin Qumsiyeh and Elias Handal



has grown significantly over the last few decades. Some tourists come to Palestine in order to appreciate our "untamed" nature. This phenomenon is tied to the growth of the environmental movement, especially since we have begun to realize how much habitat destruction is caused by humans (and human-induced climate change). Ecotourism should help preserve the environment since it may encourage people who live in key areas to value and benefit from the riches of these areas. As we learn to better respect nature and the environment, ecotourism has become a catchword used by many all around the world.

In Palestine, we are very familiar with terms such as *nuzha* and *shat'ha*, which refer to going out to enjoy nature hikes. The older generations tell us of times when agriculture coexisted with the natural environment, creating a tapestry of sustainability. With an area of 27,000 km<sup>2</sup>, Palestine is located between Europe,





The common blackbird (Turdus merula) is native to Palestine

Asia, and Africa, in the western part of the Fertile Crescent where humans first developed agriculture. Its unique geography and geology have given Palestine more biological diversity than some countries ten times its size. The diverse habitats cover five ecozones: the central highlands, the semi-coastal region, the eastern slope, the Jordan Valley, and the coastal region. Palestine also spans four biogeographical (Mediterranean, regions Irano-Saharo-Arabian, Turanian, and Ethiopian-Sudanese subtropical). Climate is moderate with mild winters and warm, dry summers in most areas, but this is also variable within rather short distances. Snowy Mount Hermon is barely 100 miles away from the semi-tropical climate in the Jordan Valley. The landscape is spectacular, from lofty mountains in the Galilee and the central highlands to the lowest point on earth in the Dead Sea region at 400 meters below sea level. Rainfall is between 1,000 mm in the highest mountains to less than 50 mm in arid regions. Temperatures also vary from freezing to over 35°C during the summer months in the Wadi Araba areas.

The Mediterranean Zone flora has characteristic trees such as oaks and Pistacia. The plant cover decreases proportionally as we head south and east into Irano-Turanian then Saharo-Arabian flora with pockets of Ethiopian-Sudanese flora. This creates diverse habitats for animals that include over 500 species of birds, over 100 mammals, over 100 reptiles, and thousands of species of invertebrates. Thus. Palestine is a treasure for nature lovers, and its many trails provide ample opportunities to observe, enjoy, and photograph not only stunning nature views but also plants and animals.

During the past few decades, various movements have focused their efforts on helping the local economy (devastated by colonialism) through launching several initiatives that aim to bring alternative tourists to Palestine. Ecotourism seemed a logical choice, considering the beauty of the landscape and the rich fauna and flora. Various trails have been designed that sometimes mix local cultural tourism with ecotourism.\* This is a new phenomenon that has met



The Syrian spadefoot toad can be found only in the Jinsafut temporary rainfall pond near Wadi Qana: it is extinct in other places in Palestine and Jordan. To increase its population, the Palestine Institute for Biodiversity and Sustainability has raised tadpoles ex situ and successfully returned them to the Jinsafut pond.

with some significant success. Now is the time to enhance these trails and respond to those who are asking about how best to protect and preserve the environment while at the same time offering maximum benefit to people. Trail design must be based on scientific principles that respect the ecosystems (including nature and people) that they hope to serve. Bethlehem University's Palestine Institute for Biodiversity and Sustainability (PIBS) is devoting significant resources and expertise to address such issues. Let us take two case studies as examples that have great potential for ecotourism.

Case Study 1: In the Bethlehem district there is a spectacular valley called Al-Makhrour: the name refers to the Makhrour Valley) is also on UNESCO's list of World Heritage Sites. But the

water seepage over ancient limestone rocks. Al-Makhrour is located in the northwest area of Bethlehem City with its World Heritage Site of the Church of the Nativity. Its Mediterranean habitats are the last natural pristine areas in the increasingly urbanized Bethlehem district. Surrounding the valley are the ancient communities of Beit Jala, Husan, Al-Walaia, Al-Khader, and Battir. The latter village (including parts of Al-

The rare aquatic flower (Ranunculus peltatus) can be found in Wadi Qana, near Bethlehem.



valley is also threatened by expanding Israeli colonies such as Gilo, Har Gilo, and the Gush Etzion settlement complex. The potential of this valley has been under careful investigation for nearly three years, and three projects that relate to this area (one that focuses on biodiversity mapping, one on developing local communities, and one on preserving cultural heritage relating to the environment) aim to map the area's biodiversity and generate a management plan that protects, values, and promotes the humans. animals, and plants of the valley. This is not an easy task. But PIBS's team is supported by partners that include the National Geographic Society and British scientific colleagues who not only help ensure the high quality of the scientific study but also work with local farmers and schools to ensure that the valley's cultural and natural heritage is valued and protected.

Case Study 2: Changes in the environment and habitat affect animals and plants and may lead to extinction of species. A good example of such an area under severe threat is Wadi Qana. In partnership with Belgian Development Cooperation and the Royal Belgian Institute of Natural Sciences, a project was developed that initially focused on studying the ecosystems in the northern transition zone of Wadi

Palestine offers great sites not only for religious and cultural tourists or persons interested in experiencing the local repercussions of world politics, it also offers gems and treasures for lovers of nature.

Qana Protected Area, Subsequent recommendations aimed to develop and implement a management plan that would foster environmental education and conservation. The project searched for temporary rainfall ponds and studied the Jinsafut pond, the only currently known location of the Syrian spadefoot toad. It recorded the flora and fauna of the pond and monitored the changes that occur throughout the seasons. Efforts to locate other similar ecosystems have proven unsuccessful, as the Svrian spadefoot toad (Pelobates syriacus) and the aquatic flower (Ranunculus peltatus) were found only in this area. The toad is extinct in Jordan and was found nowhere else in the

A walking trail leads from Beit Jala to Battir through Al-Makhrour Valley.



A uniquely varied flora and fauna, a variety of beautiful trails that can be explored alone or with expert guides, and its warm and welcoming people make Palestine a prime ecotourism destination.

West Bank except in this pond. As a special accomplishment of this project, the tadpoles were raised ex situ and successfully returned to the pond. Focusing on the pond's conservation, an analysis of its strengths, weaknesses, opportunities, and threats (SWOT analysis) found that strengths include its uniqueness and local interest: weaknesses include previous neglect. Threats include Israeli colonial activities, for example, the expansion of settlements and new housing developments, as well as Palestinian human activities such as poor agricultural practices and overgrazing. Opportunities include its high potential for research, ecotourism. and simple remedial measures that can help protect the site.

The findings obtained in these two case studies and many other ongoing projects support the idea that ecotourism may help communities



The non-poisonous *Hemorrhois nummifer* is the most common species of snakes in Palestine.

develop and thrive economically while also protecting the natural environment. The key to success is the power of knowledge, gained through meticulous scientific research, combined with involvement of the local communities in everything we do to protect our beautiful Palestine.

Article photos courtesy of the author.

Professor Mazin Qumsiyeh teaches courses ranging from molecular biology to anthropology to biodiversity at both Bethlehem and Birzeit universities. He is the director of the Institute for Biodiversity and Sustainability and of the Palestine Museum of Natural History (www. palestinenature.org) at Bethlehem University.

Elias N. Handal is a graduate student in environmental biology and a staff zoologist at the Palestine Museum of Natural History, Bethlehem University.

Children taking part in an ecotourism and educational tour of Al-Makhrour Valley.





<sup>\*</sup>See, for example, Masar Ibrahim at https://masaribrahim.ps.