Help conserve the wildlife of Wadi Digla Protectorate

Ministry of State For Environmental Affairs

Biodiversity Monitoring 
& Assessment Project
(BioMAP)

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Egyptian Digla
Journey to Wadi Digla Protectorate

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Egypt produces a huge amount of waste annually, but there were no secure disposal sites until 1983. Since then, many desert areas have been designated for waste disposal and burning, in addition to recycling activities in the cities, especially Cairo. Wadi Digla Protected Area suffers from illegal dumping of waste.

Coloured plastics are harmful because their pigment contains heavy metals that are highly toxic. Some of the harmful metals found in plastics are copper, lead, chromium, cobalt, selenium, and cadmium. We must dispose of waste in a way that does not harm the environment, and keep it away from resources we use. If we do not, it may cause poisoning or diseases such as growth decrease in children, cancer, and nervous system damage. In extreme cases it can kill.

Wadi Digla is remarkable for its great wildlife diversity. It shelters many rare animals, such as ibex, red fox and gazelle, and plants such as the caper. Capers have been used for arteriosclerosis, as diuretics, kidney disinfectants, vermifuges and tonics. In Egypt, Bedouin use caper for treatment against rheumatic disorders.

The Ministry of State for Environmental Affairs has exerted a lot of effort to stop waste from entering the Protected Area. In March 2005, it managed to move all the illegal activities to outside the Protected Area. However, tons of accumulated plastic wastes are still there. This causes great harm both to wildlife and man, besides the visual pollution that reduces the numbers of visitors, depriving the Protected Area of one of its main sources of income.

The story sheds light on how we can deal with one of the many problems that affect the environment. It also encourages science trips for school and university students. These trips benefit both the students and the Protectorate, and both can cooperate in conservation.

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One day, El-Zohour school decided to take a trip to Wadi Digla Protected Area. Mr. Risha, the volleyball coach at school, announced the news to all the students. It was a reward for winning first place in the world championship. On hearing this news, everyone was really happy.

According to Mr. Risha's directions, Kareem, the team leader, asked everyone to bring food and drinks with them, and told them not to forget to wear clothes appropriate for hiking.

It was a beautiful day, and everybody was there in the early morning. Kareem brought Filfil, his dog, to get some fresh air and have a nice walk in the special places that allow dogs. Everyone got onto the bus to start their trip.
On the way there, Mr. Risha started to tell them more about the Protected Area, saying that it is in Maadi, about 10 km from Cairo, and covers about 60 km². The Protected Area is wonderful for its variety of animals, such as gazelles, wild hares, mice, red foxes and birds of prey, as well as many important plants.

The team finally arrived at the Protectorate. They took a good look around the visitor centre. Ahmed Salama, the manager, told them more about the place and he asked Kareem to make sure his dog stayed in the permitted areas.

Later, everyone went on a walk in the wadi, strolling along in the early morning breeze. They were amazed by the remarkable geological features, and were told that the Ministry of State for Environmental Affairs had noticed how important this place was, and had announced it as a Protected Area in 1999.
Everyone went through a rocky canyon between the high mountains, and noticed that there were a number of little caves on the top of the canyon. Mr. Salama then asked the students: "Do you know if animals live in these caves?".

"Yeah, bats live there, because they like to live in dark, closed places. I noticed some flying towards the caves when we first came here early this morning", said Habiba. Mr. Ahmed was impressed with Habiba's clever answer and her careful observation, so he rewarded her with a medal with the Protectorate logo on it.
As the children were playing, laughing and having fun, Kareem noticed that his dog was not there anymore. He rushed about looking for him everywhere, worried that he would leave the track.

He came to a dead end, all on his own, facing a huge rock. He tried to climb it, but stopped when he saw his dog standing among strange looking creatures. Kareem was scared to death, so he decided to watch from behind the rock and listen to what his dog and these creatures said.

Filfil: "Hey, my friends, why are you dressed in these awkward filthy clothes?".

The animals: "How did you recognise us, clever clogs? Since these clothes landed on us, the animals don't recognise us any more, and they even think we're aliens. They've started to treat us harshly. We are trying to convince them that we are their old friends, but they don't believe us."

Filfil: "'Landed on you'... how did that happen?"

The animals: "We will tell you, and hopefully you can help us..."

Filfil: "Ok, I will try my best, maybe there's something I can do."
"One day, a strong storm blew up, carrying loads of plastic bags in the wind. The bags are widespread in the wadi. Since us males have two long horns, the bags stuck to our horns and we couldn't get rid of them. When the storm was over, all the animals came back out and found us that way. They thought the wind brought us here. Since then, everyone's lives have been a real misery", a gazelle started to explain.

Filfil: "Why is that?"

"Male gazelles have long horns, while females only have little ones, so the bags stuck to males and not females, and we couldn't take them off. When the bags stuck to our horns, females couldn't recognise us. They thought we came from outer space, from other planets, and that's awful for us."
As soon as the gazelle finished, a lizard said "As you can see, my body is covered with scales for defence against predators such as wolves and birds of prey. When the storm finished, I found this cover stuck to my body.

"I wasn't the only one; all my friends had them too and we couldn't get rid of them. Other animals thought we were garbage collectors from other planets, and we now have to clean the whole wadi. The wadi is very large, and it takes great effort to clean it.

"We are depressed, as we never imagined that we would be working as garbage collectors on our own, without the help of the other animals.".
Then the spiny mouse spoke: "I am a rodent, but I am quite different from house mice. I live in mountain areas like Wadi Digla. My body is covered with golden spines to protect myself from animals like snakes who try to eat me.

"When the wind came, bags stuck to our bodies, and the other animals forced us to collect all the food and cook it, calling us the 'cooks'.

"I know that we are doing a great job, serving everyone, but there are only a few of us, and it is hard work collecting and cooking all this food.

"In the past, all the animals used to work together."
Then a plant took over: "I am the caper plant, sometimes called Lasaf. I've always lived in Egypt, in Wadi Digla. There are tiny sharp spines covering my stem, and I use them to defend myself against animals like gazelles and sheep. When the storm came, bags stuck to our stems, and our leaves could no longer see the sun. So we couldn't make our food anymore. The bags made us very hot, so our leaves went yellow and wilted and now we are very weak and tired.

"I am also unable to help my best friend, the wild bee. She used to visit my flowers and collect the nectar that I save for her. She uses it to feed her kids a delicious meal. Now, the bees can't get that meal and I hear them every day, flying over my covered flowers, unable to reach them. Their kids are starving.

"In return, the bees used to take our pollen grains from one flower to another, helping us to make new seeds that later fall onto the ground. When rain falls, our kids, 'the little seeds', grow to complete their own cycles. Since that terrible day, we haven't been able to make any new seeds, and we are deprived of having children."
"These plastic bags also decay and dissolve into the soil, and our roots absorb the poisonous elements that are then stored in different parts of our bodies, in the stems, leaves and fruits.

"The big problem arises when the Bedouin and herb therapists collect these parts and mix them with other elements to use them as creams for bone and joint problems. These poisons move into their bodies, and instead of curing, they add to his disease, sometimes causing cancer.

"Sinai Bedouin don't have turnips, cucumbers or carrots to pickle, so they use my scarlet cucumbers as a fruit instead. If the poisons were present, this could harm their health. I don't think this happens there because there are no such garbage problems in Sinai."
At that moment, Kareem realized that the animals and plants were in serious trouble and in need of some help. Kareem was late and afraid to be left behind by his friends, but he couldn't leave before he had helped them.

So he and Filfil started to take the bags off the animals and plants. It was not long before Kareem and Filfil were able to take all the bags away.

The animals and plants were very glad and thanked them many times. Kareem and his dog were ready to go, but the animals asked them to wait for a little while a longer. Their animal friends were still working in the wadi and would come back soon, before sunset.

They pleaded for Kareem to stay and help take the bags off their friends too. Kareem told them that it wasn't possible because they were late and would miss the group, but he promised he would bring all his friends back the next day. Filfil would show them the way to find them again and Kareem and his friends would take the bags off the rest of the animals.
Kareem quickly found Mr. Risha and the group. As soon as he got to them, he told them the whole story. On hearing it, all the students refused to leave before helping the other animals. They pleaded for Mr. Risha to allow them to stay to do this, but he refused as it was late and they had to leave before dusk.

At this point, Mr. Salama intervened: "We have already got rid of loads of rubbish dumps, and are still working hard on it. It would be very kind of you if you could take part in helping the Protectorate's animals and plants".

At the students' insistence, and with Mr. Salama's encouragement, Mr Risha agreed to stay. They all hurried along, led by Filfil, who guided them cleverly to where the plants and animals were.
As soon as the animals saw Kareem and his dog coming, bringing everybody along with them, they became very excited. All the students started removing the bags and cleaning the animals and the area.

The plants and animals were extremely happy, and the birds shared their celebration and sang in the sky.

The animals asked the students to come and see them every now and then. They promised to have a great celebration the next time they visited the Protectorate, in which they would all participate, dancing and singing for their entertainment.
Questions?

1. What is the name of the Protected Area the children visited?
2. Where is this Protectorate? What is its area?
3. What animals live there?
4. When was it declared as a Protected Area?
5. What is the animal that lives in the caves of the Protected Area?
6. How do the mouse and the lizard protect themselves from enemies?
7. Why couldn’t the bees visit the caper’s flowers?
8. What do the Bedouin use the caper for?
9. If you were Kareem, what would you do?
10. What would you say if you were one of Digla’s inhabitants?

"Also available: The claymation of this story featuring new characters"

The Ministry of State for Environmental Affairs

This work is a part of the BioMAP project, funded by the Italian government, in cooperation with the UNDP.

Coming Soon
"Egyptian Elba"
Extra information on Wastes

- There are two main waste types: solid and Liquid wastes. It is often the solid waste that causes greater problems to the environment. It takes more time to decay and therefore accumulates in the disposal areas. It contains toxic metals, such as copper and lead.
- Wadi Digla is an example of one of Egypt’s Protected Areas that suffers from waste disposal and recycling.

Information about Digla Protected Area

- Wadi Digla was declared as a Protected Area in 1999, area of 60 km². It is only 10 km from Cairo.
- The Protectorate is remarkable for its wildlife diversity: Ibex, Spiny mouse, Red fox, Gazelle and bats.
- There are 12 bird species (pigeons, doves, owls and hawks, etc), 20 species of reptiles (snakes, geckoes, etc) and more than 75 plant species.
- The Protected Area is remarkable for its geological features. Many fossils can be found in the rock formations of the wadi.
- Being only a few kilometres from Cairo, Digla is easy to visit to enjoy wildlife. Schools and universities arrange trips to Digla, as well as tourists who want to spend time outdoors.

Caper plant

- The caper is a small shrub that may reach a meter in length. Its round, dark green leaves are covered with spines on both sides.
- Caper has a long life span (20-30 years). It flowers and fruits in spring.

- Caper can grow well in rocky, dry soil. It has long spreading roots, thus helping in fixing the soil and protecting it from erosion.
- It is sometimes added to food for its remarkable spicy flavour. It is also cooked like a vegetable. In Egypt, the Bedouin of Sinai pickle it like carrots and turnips, while the Bedouin of Wadi Digla use it for diseases of the joints.

What can I do?

- If you see someone contravening the rules of the Protected Area, warn them, and if they don’t listen, go to the management in order to get action taken.
- Talk to your friends about how garbage can damage wildlife.
- Encourage your family and friends to go back to using cloth bags or baskets made of palm fronds instead of plastic bags for shopping. It is an old Egyptian tradition that is environmentally friendly.

How does waste accumulation affect the Protectorate’s nature and its biodiversity?

- Waste accumulation results in lowering the number of tourists and visitors to the wadi, reducing the income of the Protectorate.
- Such an accumulation of waste affects the caper negatively; it decreases its photosynthetic activity leading to decrease in plant growth.
- As the plastic decays, toxic elements and heavy metals precipitate into the soil where the caper absorbs them though its roots. This results in accumulation in the plant tissues.