

Application

Regional Essay Competition for the Youth

"Saving our Sea: New Ways to Reduce Marine Pollution in the Black Sea"

Black Sea: Some Ideas to Decrease Pollution

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*"It takes all the running you can do, to keep in the same place.
If you want to get somewhere else, you must run at least twice as fast as that!"*

- Lewis Carroll, Alice in Wonderland

To stop littering the Black Sea the speed is vital and important. Let's begin! Six o'clock. Get up. In a few minutes, I jog along the beach. Waves caress my feet. I duck like a dolphin into the marine water. Stop. I haven't seen dolphins in an extremely long time. What is the reason? Why did the dolphins stop splashing near the beach?

Paiu Romulus-Marian, Panigada Simone wrote, "According to the results of these aerial surveys, Black Sea common dolphins seem to be rather scarce in the north-western part, as only a few sightings were reported from the Ukrainian and Romanian waters." (Pg. 50) In my point of view, the declining dolphin population is an indicator that shows us something is wrong with the marine ecosystem. Sometimes water pollution occurs through storms when the waves stir the water as a result, marine life suffers from a lack of oxygen because the lower layers of the Black Sea contain huge amounts of hydrogen sulfide. This deficiency of oxygen could be one of the reasons for decreasing population of dolphins in our sea. However, contamination occurs due to human activity for example sewage - that is not always properly treated, pesticides from farms that enter into the sea along with rainwater through the rivers, wastes from marine ports or construction sites, an oil spill that is spilled during accidents on ships, and trash that people produce. All of this causes many devastating consequences for marine animals, plants, and even people; this can be a foundation to stimulate all kinds of diseases.

More beaches human-inhabited and made attractive, comfortable for visitors than it was in the past. Nowadays at the beach, there are many kinds of establishments build so you can buy a delicious meal, play basketball, ride a jet ski, ride a bicycle, dance, and rent all kinds of beach accessories. Those formations covered most parts of the beach and installed buoys for fences into the water. Are these modifications safe for the seaside? No, it is not. In my point of view, they create rubbish, noise, and pollution, especially in summer when tourists are interested in

attractions. In support of this Vasilii Bogoslovskiy states, “There is a lot of trash in the Black Sea: both separate floating objects like ropes, buoys, pieces of fishing nets, plastic, and accumulations of trash that create islands.” (Pg.1)

Just imagine, tens of millions of cigarettes, millions of plastic bottles, hundreds of thousands of auto parts, several thousand household appliances floating in the sea. A lot of rubbish ends up in the sea because people do not throw it out properly in the bin. After the rain, lots of trash goes down water drains which then gets swept out into the sea. This trash is incredibly dangerous to marine life.¹ Dolphins are often caught up in the fishing nets perceiving plastic bags as prey, and fish end up eating little bits of garbage as a result that trash is stuck in their stomach. In addition, algae and plankton suffer from marine debris; that litter can prevent receiving enough sunlight which is necessary to produce oxygen and nutrition for other sea life such as fry and jellies. Consequently, predators, for instance, dolphins, who eat fish, are put at risk due to poor quality or lack of food.

Moreover, water pollution is permanently growing up. So, it became particularly important for everyone to reduce this threat to marine life to keep our clean. We can make our sea cleaner and safer by doing some simple actions, such as:

- Informing people.
- Posting signs at the beaches.
- Contacting your city administration with proposals.
- Grouping volunteers together.

The information about the consequences of water and sea beaches pollution will give the knowledge that can help people reconsider their pollution habits to create less rubbish. Sings will

¹ As S. E. Nelms, et al. wrote, “Plastic pollution represents a pervasive and increasing threat to marine ecosystems worldwide.” “Microplastics in Marine Mammals Stranded around the British Coast: Ubiquitous but Transitory?” *Nature News*, Nature Publishing Group, 31 Jan. 2019, www.nature.com/articles/s41598-018-37428-3,1.

be reminder to visitors how important it is to keep the beach clean. Sings examples: “Marine life: give them a chance to live. Take the trash out” or “Do not feed dolphins with plastic bags and cigarettes. Put it in the bin.” All of these sings might motivate people not to litter on the beach. Proposals to the administration could be to equip the beach with baskets for recycling. Those bins will remind us that recycling is a great way to decrease pollution. Also, the cities can make laws that allow businesses next to the beach to use only straws made from paper but not plastic, this action will save marine life from the straws stuck in their noses. Gathering volunteers could be done by volunteers to ‘Clean up our beach’ events. This type of event will be not only a wonderful strategy to train, motivate people in a fun and joyful way but also a recipe to reduce pollution at the beach.

I surveyed seven friends to find out about their attitudes towards the Black Sea environment. Here are my findings.

Firstly, all seven believe that marine life is at risk, as a result, they are concerned about the future of our sea. Six of my seven friends believe that humans are responsible for harming the seawater (Appendix A).

Next, I asked what my friends were doing to help save the environment. All seven friends bring reusable bags to the supermarket to avoid using the disposable ones provided free of charge. Then I asked about water. Three of the seven friends drink tap water instead of buying bottled water (Appendix B). My next question was about which forms of transportation they use. Five of my seven friends walk or ride a bike as much as they can (Appendix C). Lastly, I asked my friends about cleaning up our beach. Three of them are ready to support this action with great pleasure (Appendix D).

The results of the survey show that my friends are helping tackle marine litter in various ways, however, there are more things they could do to stop the pollution. They could try to reuse old products and buy fewer new items.

In conclusion, human activities such as building roads, building cities, transporting all kinds of goods, overfishing, are creating pollution and restricting some types of organisms living in the Black Sea. In most cases, these organisms can adapt and restore a healthy balance to the marine ecosystem if we stop polluting it. However, people use the Black Sea as a source of food resources, so we must try to protect its marine life. Fortunately, there are many different ways to create a positive consequence on the Black Sea ecosystem! By doing something, as small as throwing your rubbish in the bin, - so it doesn't end up going down storm water drains and polluting the sea - reducing the amount of water that person uses at home by having a shorter shower and turning off running taps, lessening the amount of packaging that you use by buying a reusable drink bottle or plastic container instead of using disposable wrapping, telling other people about water pollution including how it is caused and what they can do to keep our water safe and clean, participating in a cleanup of a beach or waterway, we can help the ecosystem around us and ourselves, in particular, become happier and healthier. Let's start moving as fast as we can to reduce the pollution of our lovely, blue, water in the Black Sea! We are in this together, so each of us can take steps into improving the world we are living in.

Bibliography

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Appendixes

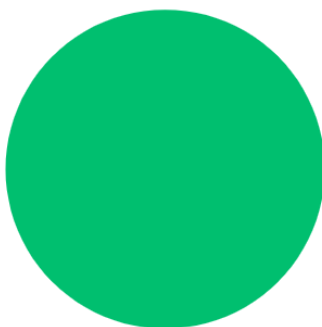
Appendix A

Survey Results: Your Attitudes Towards the Black Sea Environment 2 Questions.

How concerned are you about marine water pollution?

Answered: 7 Skipped: 0

7 (100.00%)

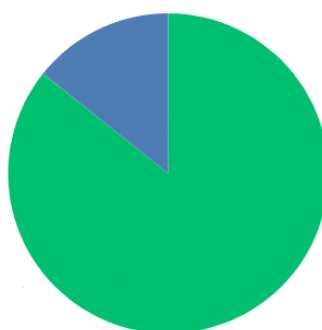


■ Extremely concerned
 ■ Slightly concerned
 ■ Not at all concerned

ANSWER CHOICES	RESPONSES	
Extremely concerned	100.00%	7
Slightly concerned	0.00%	0
Not at all concerned	0.00%	0
TOTAL		7

Who is responsible for harming the seawater?

Answered: 7 Skipped: 0



■ Human causes
 ■ Natural causes

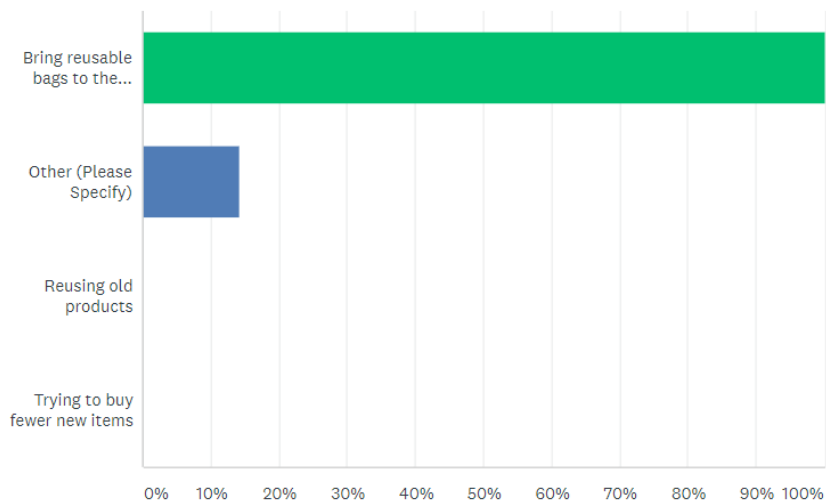
ANSWER CHOICES	RESPONSES	
Human causes	85.71%	6
Natural causes	14.29%	1
TOTAL		7

Appendix B

Survey Results: Questions Regarding Environment.

What are you doing to help save the environment?

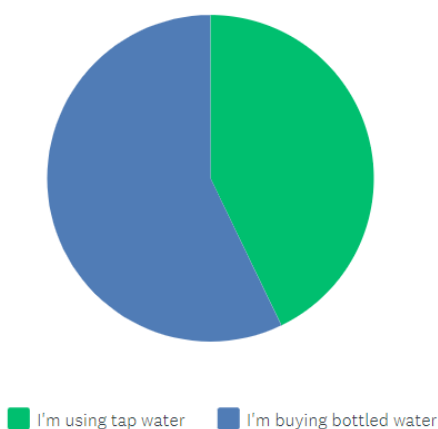
Answered: 7 Skipped: 0



ANSWER CHOICES	RESPONSES
Bring reusable bags to the supermarket to avoid using the disposable ones	100.00% 7
Other (Please Specify)	Responses 14.29% 1
Reusing old products	0.00% 0
Trying to buy fewer new items	0.00% 0
Total Respondents: 7	

What type of water do you use for drinking and cooking?

Answered: 7 Skipped: 0



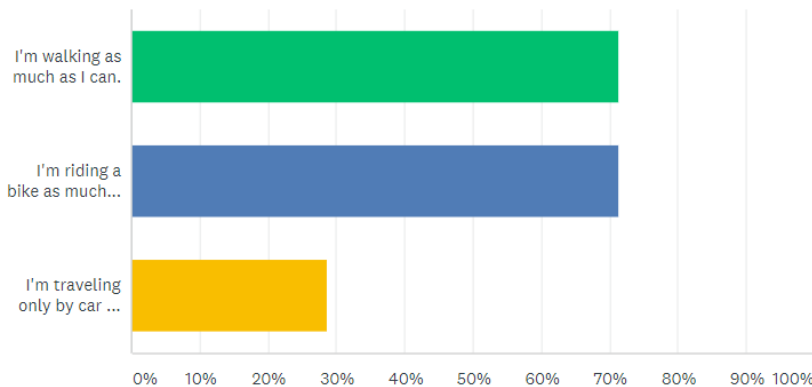
ANSWER CHOICES	RESPONSES
I'm using tap water	42.86% 3
I'm buying bottled water	57.14% 4
TOTAL	7

Appendix C

Survey Results: Questions Regarding Environment.

Which forms of transportation are you usually use?

Answered: 7 Skipped: 0



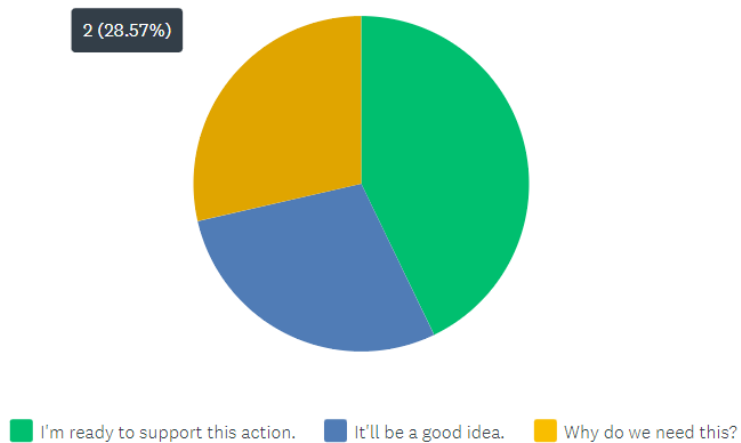
ANSWER CHOICES	RESPONSES
▼ I'm walking as much as I can.	71.43% 5
▼ I'm riding a bike as much as I can.	71.43% 5
▼ I'm traveling only by car or public transportation.	28.57% 2
Total Respondents: 7	

Appendix D

Survey Results: Question about the Beach.

What do you think about cleaning up our beach?

Answered: 7 Skipped: 0



ANSWER CHOICES	RESPONSES	
I'm ready to support this action.	42.86%	3
It'll be a good idea.	28.57%	2
Why do we need this?	28.57%	2
TOTAL		7