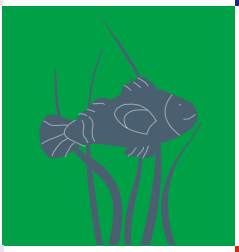
Young Reporters
for the environment

YOUNG REPORTERS FOR THE ENVIRONMENT

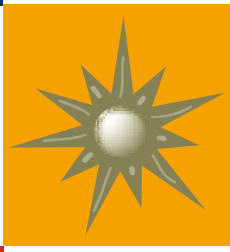
BOOK 2009

THE BEST ARTICLES AND PHOTOS OF NETWORK

Energy



Water



Agriculture & Nature

Climate Change

Coastline

Biodiversity

Waste

Cities

Young Reporters for the Environment (YRE)

In 2008, more than 13,000 students from 21 countries investigated and reported on local environmental issues. By participating in the Young Reporters for the Environment (YRE) programme, students with an interest in the environment and/or print and photojournalism connect with a press agency that specialises in producing and delivering feature articles about current local issues to an international audience. All the articles and photos submitted by Young Reporters are available at www.youngreporters.org.

Every year, a maximum of three articles and five photos are selected at the national level for submission to the international competition. These submissions are published annually in the YRE Book.

Members of the YRE International Jury for 2009 Awards:
Mr. Bernard Combes – UNESCO
Ms. Fabienne Pierre – UNEP
Ms. Morgan Strecker – UNEP
Mr. David Ainsworth – Convention on Biological Diversity
Mr. Peter Herbert – Feet of Green
Mr. Richard Hale – Feet of Green
Mr. David Solon – Redactor of the "TerraEco" magazine
Mr. Thierry Lerévérend – of-FEEE Director
Ms. Sarah Winterton – FEE representative for YRE

For more information on the YRE Programme contact Sophie Bachet, International Coordinator at sophiebachet@youngreporters.org.

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The YRE Programme is administered by the Foundation for Environmental Education (FEE).
Visit www.fee-international.org for more information.

EDITORIAL

Welcome to the new look for the YRE Book 2009 !

This year we are excited to present a new look for the YRE annual publication. With this new design we are also publishing exclusively on-line, in order to do our part to reduce our CO_2 emissions that result from printing and distribution. In fact, with this change we are saving more than 19 tonnes of CO_2 !

Celebrating success in 2009

We congratulate all participants in the YRE programme this year for their fantastic submissions and efforts to raise awareness about an environmental problem in their community. In the YRE Book, we want to make as many articles available as possible, so each article has been edited for length. You can read the full submission at www.youngreporters.org.

The YRE programme requires submissions at the international level to be written in English. This is an extra challenge for many young reporters who are learning English as an additional language, and we applaud their efforts. Consequently, when the International Jury reviews the final submissions, they take other qualities of the project into consideration, such as, does the project draw from transdisciplinary knowledge, does it offer a new perspective, does it represent teamwork ?

Young Reporters for the environment is not only a press agency in English. Since many projects have a strong local dimension, aimed at informing the local community, Pangea includes articles written in the different languages of the YRE network.

With over 13,000 students from 21 countries participating in 2008, we believe that more young people are taking an interest in solving environmental problems and learning to live in ways that protect the earth. We encourage all participants to build on this interest, to educate their family and friends, and to take positive action within their communities. Through the YRE Network, we can share knowledge and success stories, and, most importantly, inspire each other to go further.

We would like to thank the French Ministry of the Environment for its financial support of the international YRE program as well as the members of the 2009 jury, who represent UNESCO, UNEP, Feet of Green, Convention on Biological Diversity, Terra Eco, Foundation for Environmental Education (FEE) and of-FEEE.

Last, but not least, we would also like to thank the national organisations and teachers who help to connect students with the YRE programme, and to extend our appreciation and congratulations to every Young Reporter whose wonderful work is fundamental to the success of our international network.

We look forward to receiving great submissions again this year !

Sophie Bachet, YRE International Coordinator

SHORT NEWS

On-line voting for the best YRE article and photo in Montenegro

On Earth Day, June 5th, NGO ECOM, as a YRE national operator in Montenegro, declared winners in on-line voting for best environmental artical and photo among all works submitted by Young Reporters from Montenegro.
Photo story „Spring", by Milos Nikolic, won with 37,9 % of all votes in photo category, and „Majestic lady", by Larisa Desic and Jelena Djordan with 48,6 % of all votes won in article category. The winning students are all from Secondary Agricultural School in Bar.
Public opinion was almost the same as the National jury selection.
During the two months, from beginning of April until June 5th, we received 9.423 votes total for 28 photos and 7 articles in national selection for 2009, posted on Montenegrin YRE website: www.mladi-ekoreporteri.org.me.
On Ocean Day, 8th June, during Blue Flag ceremony, diplomas for awarded photos in YRE competion 2009 were delivered to students Jelena Maslovar and Lea Prorocic (second prize for „Environmental kitchen") and Nikolina Vujovic (artictic award for „Mirror, mirror").

Sasha Karajovic, YRE national operator in MONTENEGRO.

Kids Summit in Malta

On 7th March this year a Kids Summit was held under the auspices of the Ministry for Resources and Rural Affairs, and HSBC Bank Malta, together with YRE and Eco School national Operators.
Secondary school children from all over the island participated in this first Kids School Eco Summit and discussed 3 topics: Transport, Waste and Energy.
The outcomes of this day-long seminar were presented in a report to the Minister. Early in the afternoon, the Prime Minister of Malta also attended and discussed certain issues with the students.

Annick Bonello, YRE national operator in MALTA.

Greek "Young Reporters for the Environment" website

The new upgraded website of the **Hellenic Society of the Protection of Nature** (HSPN) provides useful material for all those involved with Environmental Education (EE).
Moreover the site serves as a resource for FEE Environmental Education networks which HSPN supports at national level and it contains useful links for all interested schools engaged in this field.
A special space is given for the "**Young Reporters for the Environment"** network (http://www.eepf.gr/pe/yre.html) in which educators and school students, members of the network, are invited to enrich the site with educational activities and news related to local environmental activities or collaborations at international level.

Georgia Fermeli, YRE national operator in GREECE.

YRE National Operators Meeting, November 2008

The national operators from the YRE programme met on the November in Rabat, Morrocco. They discussed the programme's methodology and shared experience during this day. The International Coordination warmly thanks the "Fondation Mohammed VI pour la Protection de l'Environement" who generously hosted this very successful meeting!

Sophie Bachet, YRE international coordinator.

Winners of the CYTA Competition

Results of CYTA 2009 Photo Competition
A. GYMNASEUM (12 -15)
1° Prize : Marcos Loizou - Grammar School
2° Prize : Kyriaki Kavazi, Michael Harilaou, Modestos Topouzis, Anna Procopiou, Irini Charlambidou & Stella Michaelidou Katholiki Gymnaseum
3° Prize : Irini Isaia - Grammar School
Honorable Mention : Emily Iacovidou, Mariella Minter, George Petsas - Katholiki Gymnaseum
B. LYCEUM (16-19)
1° Prize : Andreas Matheou – Vergina Lyceum
2° Prize : Sotiris Poullas – Agios Neophytos Lyceum
3° Prize : Loucas Mavris, Stefanos Andreou, Theodosia Christou – Pagkyprio Lyceum Larnaka
Honorable Mention : Constantinos Harilaou - Agios Neophytos Lyceum

Results of CYTA 2009 Article Competition
A. GYMNASEUM (12 -15)
1° Prize : Episkopi Gymnaseum
2° Prize : Vergina Gymnaseum
3° Prize : Drosia Gymnaseum
Honorable Mention : Kokkinohoria Gymnaseum & B Regional Gymnaseum of Nicosia
B. LYCEUM (16-19)
1° Prize : Agios Ioannis Lyceum
2° Prize : Akropolis Lyceum
3° Prize : Aradippou Lyceum
Honorable Mention : Grammar School, Vergina Lyceum & Pallouriotissa Lyceum

Michael Ierides, YRE national operator in CYPRUS.

YRE in Wales

We have just completed our pilot project in Wales where we invited 7 schools from across Wales to be involved. There were 3 written articles and 2 photographic articles submitted to our National Jury. The winning article 'Alien Invasion' was written by Ysgol Brynhyfryd in North Wales. The runners-up article was 'Hedgehogs in Hiding' by Ysgol Dinas Bran. The chairman of our funding partner presented certificates to the two schools at the International Eisteddfod in North Wales in July. The winners were interviewed by BBC Ffeil which is a TV news programme for children and the runners-up visited the BBC for a tour around their news studios! We are now starting our second year where we are running a second pilot project inviting about 40 schools from across Wales to investigate projects from 5 topics – Agriculture & Nature, Coastline, Biodiversity, Cities and Climate Change.

Linda Wood, YRE national operator in WALES.

Mission in Portugal, March 2009

Manteigas, Gouveia and Seia welcomed the Young Reporters for the Environment (YRE) from schools across the country and a young Cypriot who also participated in the International YRE Mission - Estrela 2009 which took place between the 29th of March and 4th of April.
The activity in which these 16 youths took part in, under the guidance of 4 ABAE tutors, consisted of environmental research in the region of Serra da Estrela (in the Centre-North of Portugal). The communication of this research was in the form of newspaper articles and photojournalism.

Margarida Gomes, YRE national operator in PORTUGAL.

YRE and Feet of Green

In 2009, Feet of Green were invited to make a special Feet of Green Climate Change award in the YRE International Jury.
Dr Richard Hale said of the event: "Sitting on the jury was a tough challenge given the quality of submissions which demonstrated the real concern of the young to publicise issues of environmental concern in the categories of Water, Waste, Energy,Climate Change, Cities, Biodiversity and Agriculture and nature. I am so excited that our relationship with the Foundation for Environmental Education continues to grow and we are inviting Young Reporters to visit the Feet of Green team in order to research and report the many valuable experiences from the Crossing of Greenland."
Find out more information about Feet of Green here: www.feetofgreen.com

Sophie Bachet, YRE international coordinator.

YRE Seminar in France

As a result of the pilot in France on "YRE and professionals", on May 19th, the French YRE groups who worked for this pilot presented their productions in Lyon, to the professionals which had asked them to find solutions to their own environmental problems. Teachers, professionals and young reporters were all very happy about this event, which outlined the great qualitative work the young reporters had been producing during the year.

Sophie Bachet, YRE national operator in FRANCE.

In the 2009 Article competition, one article per category was awarded, and amongst those awards, one was given the Super Award. This year, in addition to these awards, the jury decided to give an "Innovation Award" to an article for its innovative solution towards a global problem.

St. Peter's forest angels

Live to help, live to protect. Living like an angel.

On one hand there was a burnt and neglected forest, on the other, a well treated forest as a result of the work of St. Peter's firemen of Manteigas. The tiredness took over us as we were walking up the hill. The fireman, however, was energetic; a consequence of going up and down the hill day after day.

The beginning

[…] In 1979 the first Forestry Firemen Association was created and a few years later the local inhabitants managed to gain back the lands from the state with a court order. The deal was that they would manage the land via a partnership where 60% of the profits gained with those lands would be used by the Forestry Firemen Association and the remaining 40% would be given to the State.

Different types of Firemen

It's important to say that there are two distinct types of Firemen: The Wasteland firemen for the people; and the Natural Forest's firemen. The first take care of the forest fields that don't belong to anyone. The latter act in private terrains and consequently are conditioned by the owner's orders.

Angels called firemen

The firemen's work has been applauded by the population. They have been developing a set of activities that are both economically and environmentally beneficial. These activities include: maintenance of roads, awareness-raising activities (in order to alert the population for the multiple dangers of fires), fires to "clear ground", maintenance of water points', etc.

The use of counter-fires was not very welcomed at the beginning. "They called us maniacs. Then, when they saw the disaster we avoided, they congratulated us and agreed with our mode of action" states Sérgio Almeida, speaking about the fire which occurred in 2005 that was stopped due to the use of a counter-fire.

Support

[…] The work developed by the firemen is of extreme importance for this region. Adding to the fact that they care for the region's fauna and flora, they also help humans and they do so with a great sense of responsibility. Angels exist, but sometimes they assume human forms just to be closer to us.

Miguel Dias, Jéssica Rodrigues, Ariana Pereira, Francisco Moser, YRE Mission 2009 Serra da Estrela - PORTUGAL.

The exceeding pasturing in the Mount Psiloritis

Papanastasis

Low intensity pasturage that occurred up until 30 years ago, was not a negative phenomenon, on the contrary it was beneficial to the ecosystem, due to the consumption of dry wood, with result the avoidance of fires. This however, abstains a lot from the current situation in Psiloritis, where according to the National Statistical Service it is observed almost a six time increase of the pasturing animals that exceeds 4 times the bearing resilience for pasturage of the land ecosystems, that is to say the number of animals that the place can handle to feed.The exceeding pasturing emanated mainly from the bad management of subsidies and has the following consequences :

A. Reduction of biodiversity and survival only the durable in the pasturage of plants.

B. Divestment of ground with result his erosion

C. Reduction of the ability of reproduction of certain plants with seed, because of the harshness of ground from the continuous steps of animals. Moreover, the disappearance of desirable plants leads to the reduction of productivity, with result many shepherds, not only to set fires aiming at the fast creation of new tender plants for pasturage, but also not to wait for the required time to grow new trees, until they put the flock for pasturage. In this way, the keenness of the ecosystem to produce high vegetation is gradually reducing and it is progressively led to the partial transformation of the landscape into a rocky and finally deserted landscape as it appears in the picture. Because of this devalorisation, we observe the phenomenon of barned livestock-farming that is to say the animals do not pasture but are fed with forages with unfavorable consequences in the quality of products.

Dimos Karalis & Kiriakos Katsaragakis (14 years old)
2nd High School of Rethymno - Crete island - GREECE.

Organic Farming

Organic Farming is an agricultural system that seeks to provide us, with fresh, tasty and healthy food while respecting natural life-cycle systems.

Typical organic farming practices include: Crop rotation where farmers use soil for different types of crops each season. This way they avoid the build up of pests in their crop that often occur when they plant the same products over and over again. Through this practise the exhaustion of soil is avoided. [...]

In Malta we find some farmers that use the Organic Farming Method. Some of these farmers are found in Ghajn Tuffieha. Organic Farming is beneficial to the land, the farmer and consumers. I suggest that Organic Farming is used more. Organic farmers respect the environment through the use of energy and natural resources. They maintain the biodiversity and ecological balances. They improve and strengthen the soil quality. We consumers will have better fruit and vegetables which are more good in taste and also beneficial for our body with high level of nutrients. Organic products are more expensive than other products but once you know the benefits you are taking you will continue to buy these products.

Organically grown potato field

Francesca Maria Vella, St Monica School Gzira – MALTA.

Forest fires

Cyprus has a typical Mediterranean climate that is characterized by hot, dry summers that last from May until October. Nearly half of the area of the island is covered by natural vegetation that unfortunately has been degraded by human activities.

Fire is by far the most destructive single agent threatening the forests of Cyprus. The long hot and dry summers, the frequent strong winds, the configuration of the ground and the flammability of the vegetation favour the outbreak and quick spread of fires.

The biggest percentage of forest fires in Cyprus and especially the destructive ones are of human origin. [...] Each fire is devastating and the consequences are multidimensional. They may be ecological, social, financial, materialistic, aesthetic and cultural.

[...] After a fire, productivity of the land decreases, the ground is eroded and the soil loses its capacity to absorb water. Therefore, the underground water of the area is not enriched and this is a serious problem especially for our country as enrichment of underground water is vital due to water insufficiency.

The destruction of vegetation in the forest areas contributes to the creation of torrents and floods, which ruin houses, roads, agricultural products; in short, all man-made efforts to improve lifestyle and well-being.

The financial consequences of a fire are vast because of the huge expenses needed to extinguish fires and restore the damages. The burning of timber and other forestry products, the loss of crops and livelihood as well as the impairment of the chances for employment lead to a financial chaos in the area.

The destruction of the beauty of the area has a serious repercussion on the physiological and mental world of the locals. When devastation occurs people lose their recreation grounds; the environment becomes a polluted area and people lose precious ground for physical and mental relaxation. Moreover, smoke can impair human respiratory system and cause many health problems.

Even though in a Mediterranean ecosystem like ours fire could be beneficial by helping early revival of some species, like Pinus brutia, we ought to protect our forests from such terrible catastrophes.

Since the majority of forest fires is due to human negligence the Forestry Department takes many preventive measures to inform and warn the public about the dangers of forest fires. [...]

We inherited the natural environment from our ancestors and we are obliged to protect it for our descendants. Clearly the protection of the natural environment is our responsibility.

YRE Team of Lyceum Kykkos A' (17 years old) - CYPRUS.

Organic Farming

In an isolated valley lost in the world the job of a shepherd still continues to manifest itself in terms of traditions.

Manuel Silva dos Santos, well-known as Manuel "Grazina", lives with his wife and his 18 years-old daughter in Amoreira valley in Serra da Estrela. It is in this place that every day dozens of sheep and goats go out to get some fresh air and get food.

This place is rounded by a very pleasant landscape where in a delightful afternoon Manuel offered a little bit of his time for an interview, always with a good disposition and humour.

Young Reporter Environment - Good afternoon Mr. Manuel.

Manuel Grazina - Good afternoon people.

YRE - So, as you know, we would like to ask you a few questions about your job that doesn't find many followers nowadays. Since when are you a shepherd?

M.G. - I've been a shepherd since I was born! My parents were shepherds and I was raised in my mother's lap while she was taking care of our sheep and goats. It's a family tradition: almost all my brothers and sisters have these animals too. [...]

YRE - Were you always a shepherd?

M.G. - Despite always having flock, this wasn't enough to gain my life. I worked for the forest service for over 30 years as well.

YRE - How many animals do you have?

M.G. - I've about 110. About 90 sheeps and 20 goats.

YRE - And with what do you feed your animals?

M.G. - I give them corn, hay and pasture.

YRE - How is your day-a-day life?

M.G. - I get up always at 6.00 am. I milk my flock getting about 15 litres of milk. At 9.00 am I go and give the milk. Every day I let my flock go out with me and my wife is nearby. My animals are also milked at night. This happens every day of the year; we can't have holidays or weekends. It's a very repetitive day-to-day life, but I'm not changing it for anything. Now I'm changing, but for old age!
[…]

YRE - Is the number of shepherds diminuishing in this region?

M.G. - Yes, yes, definitely! In the past, there was a shepherd every 500 meters, now, there's only one shepherd every 10 kilometres.

YRE - To conclude: do you like what you do for living or would you trade it in for the city life?

M.G. - I love to live in the mountains and I wouldn't change it for anything. Despite this life being very complicated, I really like what I do. I like to plough, to seed, to milk, to take care of the animals… And eating their meat, too!

Miguel Dias, Jéssica Rodrigues, Ariana Pereira, Francisco Moser, YRE Mission 2009 - Serra da Estrela - PORTUGAL.

Young Reporters for the environment

The palm grove between extinction threat... And protection efforts

The palm grove between extinction threat... and protection efforts

If the oasis of Deraa river are distinguished with the singularity and attraction of their natural landscape, and they hold an environmental heritage with a world value represented in palm trees, they are suffering today from an extreme vulnerability threatening their continuity, imposed by climate changes, Fusarium disease spread, besides other human factors.

Situation diagnosis

To make a diagnosis of the palm grove situation and to know the challenges that the inhabitants of the region are facing, we have carried out a field tour inside the palm trees fields. During our observation of the site, we had an interview with two farmers from a family who has been working in palm trees agriculture for many decades; we asked them in the beginning about the site where we were and the date in which they started plantation:

What is Fusarium disease ?

Fusarium is a transmissible disease that affects the palm tree, hence its leaves become dry and fall down, its production stops and then it dies.

Do you know how Fusarium disease is transmitted ?

Most of the farmers have no idea about how Fusarium disease is transmitted. There are those who say that it is transmitted through the wind?! And those who say that it is transmitted via insects?! Or irrigation waters.

Have you tried to fight this disease ?

All we do is burn the trees affected by the Fusarium so that the infection would not spread to the other trees.

What is the fate you are suspecting for the palm grove ?

If the situation continues as it is, after 10 years or less there will be no farmer in this region; everybody will migrate and hence the oasis will disappear. What we are asking from the authorities is to help us protect what remains from the palm trees as we do not possess anything else. If they die, we will have no other source for living and hence we will be obliged to migrate as the others did. […]

Ongoing research... and available solutions

After we have noticed the losses caused by Fusarium disease and drought, we went to the experimentation field in Zagoura so as to know the efforts carried out by this Center to beset Fusarium disease spread and mitigate drought effect.

Upon our arrival to the Center, we made a tour inside it with Mr. Mbarek Ben Zine, in charge of the Field, with whom we had the following interview :

What is the Fusarium disease ?

At the end of the 19th century, a microscopic fungus called Fusarium oxysporum f.sp aldedinis has infested the palm groves in Morocco, known locally by the Fusarium disease. It has led to the extinction of a big number of palm trees, as its number has decreased from 12 millions palm trees to 4.5 million now. It mainly affects the good types and those producing dates.

What are the symptoms of the Furasium disease ?

Due to this fungus the palm tree leaves become dry and hence die. This disease can be transmitted through many factors, mainly: irrigation waters, soil, the use of the flower of an infected palm tree, bringing the parts of an infected palm tree beside a safe one, using plough tools polluted 0with the fungus and so on.

Is there any remedy for this disease ?

The main goal of the Agricultural Experimentation Field in Zagoura is to find a solution for Fusarium disease. This solution resides in carefully choosing the types of palm trees which produce good fruits and have a natural resistance to the disease. […]

What are the results you have reached after these tests ?

Six types with high resistance to the disease have been selected and they have been multiplied through the tissue culture and distributed to farmers for the palm grove reforestation.
Over 50 strains with supposed resistance to Fisarium disease and desired characteristics have been selected, some of which exist in the different stages of multiplication through the tissue culture or in the stage of getting reassured about their resistance.
Also, a new type has been selected and multiplied constituted in "Help" (INRA-3014) which is characterized by its resistance to Fisarium disease and by its high quality fruits (over 100.000 plants).

Fatima Zahra El Ghazali, Fatima Zahra Benmoussa, Meryem Ouafiq, Imane El Ayachi, Hafsa Aït Mouna, Lamia Boutdghart, Jaouad Boudouar, Slimane Hanin; Under the supervision of Life and Earth Sciences teachers: Mr. Adil Moumen, Mr. Abdelhaq Sayhi, Mr. Merouane El Hamdani - MOROCCO.

Hedgehogs in Hiding

Hedgehogs are amazing creatures. There are only about 15 species of hedgehog and they only live about for about 5 years but could we change that? If we change the way we think and be more respectful to these incredible animals then they could live longer and that means we would all be able to see more hedgehogs in an areas around us. We need to know how to encourage them in to our gardens and parks and not to scare them off, so where have they all disappeared too ?

According to our research the last time people saw a hedgehog was between 5 to 10 years ago in the countryside, but in the town over 10 years ago. If these numbers keep decreasing, hedgehogs could become extinct. This means that they are either changing their ways of living or they are slowly decreasing in number.

Firstly hedgehogs live in hedgerows, forests and overgrown grass in gardens. One reason they could be disappearing could be because we are removing our hedgerows and cutting down the forests. They live in these places so we need to protect them or they will move on to the roads and could easily get hit by cars. Another reason is that we are not leaving overgrowth in our gardens; we just mow the whole lawn. Hedgehogs need places like that to build their nests. Why not try to attract hedgehogs by building them a simple home out cardboard boxes or wood and put it in a quiet place in your garden. They need areas to live or we could be putting their lives in danger.

[…] Another reason they are decreasing in number is because they eat infected insects. Usually when you find pests in your garden such as slugs you would put down slug pellets. When a hedgehog comes to eat the infected slugs it dies of the poison as well. Try to use natural pest control such as salt or coffee grounds that do not harm the hedgehogs. If you want to attract hedgehogs to your garden try putting out tinned dog food for them but don't leave the can out as they could get stuck in it. Hedgehogs are not pests they just want a place to live.

Hedgehogs do not make ideal pets, as they need to be carefully looked after. They are wild animals and not very practical to have in your house. They prefer to roam free in the wild.

Hedgehogs are very gentle creatures and quite harmless to humans and pets. Their spines are only for protection as they are not predators of large animals. If a predator comes they will roll up in to a ball with their spines on the outside and stay in that position until they think it is safe to come out. The animal would not be able to reach the hedgehog and would give up and leave.

So, if you want to see more hedgehogs in the future, do not throw litter, leave them a place to live, be more careful on roads and don't put down harmful unnatural pest control.

Polly Harrison, Eluned Ashwood, Emma Howe and Jillian Howe all aged (13 years old) from Ysgol Dinas Bran - NORTH WALES.

Young Reporters *for the environment*

Siret - The environment

Protecting the environment has become a preoccupation for the mankind only since the human beings conquered Terra's entire space, a space propitious for life.

Nowadays, the riches and energy resources are affected so much that we can perceive a quick decrease of some of them, while other essential conditions to mankind existence, as water or air, show signs of being poisoned. […]

Siret town is situated in Bukowina, at half the distance between Suceava and Cernauti, on the right side of the river that has the same name. Siret lies in the north-eastern part of Romania,that is in an extracarpathian region, in a plateaux.

Here you can find a big number of species of plants or reservation protected by law. To help them protect and preserve the environment, the town-hall signed a partnership with Dendro-Ornamental Association "Anastasie Fătu" from Iaşi and together they elaborated a project "Let's arrange the Public Garden Siret!" How? By "mixing styles" technique on 3 hectars: the eastern half of the garden will be in a "free style" regarding the landscape and the west side will be "classical", geometric.

Before:

By this transforming process 4 areas will be created. *Their final purpose is creating a proper place for people* to relax by practicing different activities or only by enjoying the landscape. Furthermore, it is taken into account the need to *reduce the pollution* in this region, *to protect the ecosystem, to provide the right conditions for teaching and educating the young generation to respect the nature.*
[…]

So, we have one problem: do we have the right to offer to our successors one barren, exhausted and polluted Earth ?
The human being must realize that if we still (for now) can be able to repair or even avoid some of the damages, there will be some species which cannot be brought to life so we must protect them while they still exist. We must learn to be moral and to protect the environment.
The *moral behavior* must be a preoccupation for the mankind, for each country on this planet, for each human being.

Breaban Adrian, Humeniuc David, Nejnec Danut, Iaholnic Cosmin, Ciobotar Bogdan and Ursachi Ilie. Teachers : Bologa Sorin, Filipiuc Mihaela "Latcu Voda" Highschool Sire town, Suceava district - ROMANIA.

Alien invasion !

Invasive species are taking over Britain, killing our native plants and animals and destroying our natural heritage. Should we be welcoming them as proof of Darwin's theory of survival of the fittest or should we fight back ?

Invasive species are the second biggest threat to biodiversity worldwide. These aggressive non- native plants and animals thrive in our wet and mild climate, spreading throughout the UK and killing our native species in the process. They impact not only upon our environment, but also the economy and human health; yet the majority of these species were introduced to the British Isles by humans, both intentionally and unwittingly. There are 3000 invasive species recorded in Britain. They cost the economy £2bn every year. This is not only the cost of control programs but also the cost of their impact on agriculture, forestry and fisheries. Worldwide invasive species are one of the greatest threats to the economic well-being of the planet.

In our recent survey of the Ruthin area, 30% of those questioned did not know what an invasive species was. As they have such a huge impact on the UK shouldn't the general public be more aware of them ? One alien species that most people should know about is the grey squirrel, famous for terrorising our own native red squirrels to a point of near extinction. They also spread the squirrel pox virus which is fatal to red squirrels who catch it, but to which the greys themselves remain immune. However, in our survey we found that at least 22.5% of those questioned were not aware that the grey squirrel was an alien species.

The Himalayan Balsam is a problem in Denbighshire. A tall plant, growing up to 2m high with pink flowers that in shape resemble a policeman's helmet, it is destroying our local riverbanks.

However, one group in particular maintains that last year the Balsam was the only plant keeping their businesses alive. South Clwyd Beekeepers found that their bees used Himalayan Balsam as a major nectar source, especially if other sources were rare; but without the balsam other plants would still exist and the bees would not have to rely on this invader. An added problem to the already bitter struggle to reduce the number of alien species is climate change. As our winters become milder and our summers hotter, more and more alien species are able to survive the winter and spread uncontrollably during the summer. Conservationists claim that swift action is necessary in the fight against invasive species to prevent a long-term or complete loss of our native species. But what can we do ? In Denbighshire, the environmental charity 'Keep Wales Tidy' works with local communities and interested groups to organise pulls to remove the Himalayan Balsam in an effort to stop it spreading.So what can you do if you think that you have seen an invasive species ?

Himalayan Balsam (source Kate Taylor)

- Inform your local council, as they may have strategy in place to remove it.
- Contact a conservation agency – do not try to tackle the problem alone, as many alien species can have adverse effects on human health.
- Make sure that you completely destroy alien species as they could reproduce elsewhere, including in your compost heap. The main problem with invasive species is that they have no natural predators in the UK.

Purpils from Ysgol Brynhyfryd identify the Balsam (source : Ysgol Brynhyfryd)

One solution could be to purposefully introduce small numbers of their natural predators; but this could easily exacerbate an already huge problem of controlling non-native species. Last year we heard about black squirrels; a vicious mutation of the grey squirrel. The introduction of predators could easily result in the blacks surviving and the greys being exterminated, allowing the blacks to spread across the UK unchallenged and further threatening the red squirrels.

At present the government is working towards preventing the further spread of invasive species by banning the sale of dangerous plants. Denbighshire and Flintshire County Councils are also working together to organise a pull of Himalayan Balsam in June – keep your eyes and ears open for ways to get involved.

Volunteers clearing the Balsam (source : Kate taylor)

Ysgol Brynhyfryd - WALES.

Pour manger sans danger ? Il faut changer !

Que mangeons-nous ? Au menu : salade d'obésité et de famine, pesticides à la sauce soja, OGM à l'étouffé. Le sujet fait recette... Nous vous avons préparé un cocktail d'informations. À votre santé !

Lycée professionnel Jacques Cœur, classe de BEP Hôtellerie (15 - 18 years old), Bourges - FRANCE.

Un dictionnaire des polluants alimentaires ? Non, vous ne rêvez pas : cet ouvrage paru en 1973 recense près de 380 pages de substances chimiques utilisées dans l'alimentation, les références des textes les autorisant ainsi que les doses mortelles.

Aujourd'hui, la production mondiale de viande est responsable de près de 18% des émissions de gaz à effet de serre devant les transports (13%) : produire un kg de veau équivaut à parcourir 220 Kms en voiture ! Partant de ces données, Rajendra Pachauri, prix Nobel de la paix en 2007, appelle les habitants des pays « riches » à manger moins de viande. La consommation mondiale devrait doubler d'ici à 2050 !

Pour nourrir ce cheptel, l'Amérique Latine subit une déforestation intense : En 30 ans, plus de la surface de la France a été rasée, provoquant une perte de biodiversité, l'amplification du réchauffement climatique, l'épuisement des sols et l'expropriation de paysans, livrés à la famine.

Ailleurs, par contre, c'est l'abondance : 260 g de viande consommés par jour et par habitant aux USA, 210 g en Europe... L'excès de viande rouge a pourtant été relié à certains cancers.

Que dire de l'épidémie d'obésité qui frappe l'Amérique du nord et se profile en Europe ? N'est ce pas un système de surconsommation qui est à remettre en question ?

Certains accusent les fast-food et l'agro-alimentaire : trop de sel, de sucre et de gras, au service des profits.

Quelle conduite adopter alors ? Manger moins de viande et plus de fruits et légumes ? Il est permis de se demander le bien fondé d'un tel choix, quand on sait comment ces derniers sont produits. En effet, chaque européen consomme de grandes quantités de légumes de serre produits dans de la laine de roche et transportés sur des milliers de Kms vers des supermarchés. Ces derniers « déboredent », imposent les prix bas, les hauts rendements et l'agriculture chimique aux producteurs.

« Ainsi, ce sont les agriculteurs qu'on remplace par des molécules »

La France est d'ailleurs le plus gros consommateur de pesticides, alors que chaque année on déplore 1,1% de cancers en plus chez les enfants.

Ainsi parle Mme Amouriq, chargée de la promotion de l'agriculture « bio » dans le Cher. Cette dernière n'utilise ni engrais ni pesticide, privilégie les circuits de distribution courts qui évitent les traitements nécessaires à une longue conservation. Elle s'appuie sur des pratiques respectueuses de l'environnement : M. Nivet, agriculteur biologique, protège son maïs contre une chenille grâce à... des mouches. Elle nécessite plus de main d'œuvre et coûte donc plus cher. Aussi, beaucoup d'agriculteurs hésitent à franchir le pas ; il y a des problèmes de délais, de paiement de la certification et de perte des subventions de l'agriculture conventionnelle. Aussi la demande de bio dépasse-t-elle l'offre.

Et au lycée ? M. Plessis, le gestionnaire, se concerte avec le chef cuisinier pour l'équilibre des menus. Manger moins de viande est possible, mais un repas entièrement bio reviendrait trop cher actuellement ; il faudrait réserver le bio à certains produits. Par ailleurs, 15 à 20 % des adolescents ne mangeant pas de poisson, « il est permis de se demander si manger moins de viande et bio serait bien accueilli ».

Ce que confirme M. Joblin chef cuisinier. Actuellement 260 g de viande par jour et par élève fournissent beaucoup plus que les 40 g de « protéines de bonne qualité » préconisées par les textes. En ce qui concerne le bio, il vient de recevoir une liste de producteurs éditée par la région centre, qui confirme ainsi la volonté de cette dernière d'améliorer l'ordinaire (programme Self'o centre). M. Joblin se demande lui aussi comment de tels changements seraient reçus par les élèves.

Après sondage, près d'un tiers ne sont pas prêts à manger moins de viande, par contre, ils sont favorables au « bio » à plus de 80 %.

Entre santé publique et équilibres mondiaux, l'alimentation de demain conditionnera notre survie dans le monde. Si des décisions importantes doivent être prises au niveau mondial (limitation de l'élevage, arrêt des subventions agricoles...) c'est à l'échelon local que beaucoup de solutions seront à développer, conformément au rapport Brundtland.

Young Reporters for the environment

With hatchet, shovel and love for work, it has been transformed from seeds to trees

My Name : Zat Forest
Date of birth : Friday April,16 th 2005
Place of birth : Abttih High School
My parents are my sons
My function is different from my fellows

I am a small forest inside Abttih Qualifying High School. I grow thanks to the love and work of those belonging to this institution, who have taken care of me. They irrigated my seedlings with their small hands and I shade them with my big trees. They take care of me and I give them the greenness and the clean air. I inspire the viewer, the researcher and the visitor to take a photo beside me or to sit under my shade in autumn and summer, or to take a rest, from a course full of concentration and discussions, in a silence which music comes from the gardens' trees.

Non-stop maintenance and cleaning work

El Houssine Aït Hmad, one of the members of the environmental team, tells about two workshops organized on Sunday March 1st and Sunday March 8th, 2009. He says: "we have started work since the first hours in the morning and we finished the work about Al Asr prayer (mid-afternoon). The tasks to be performed were hard, nonetheless,they were carried out with enthusiasm, optimism and in a collaboration atmosphere. Everybody has participated with his/her energy and has enriched the workshop with his/her ideas, suggestions, touches and work.

This is Anass, Hind and Sakina who have removed parasite plants, and that is Youssef and Aliya who have rearranged the stones and the paths, but in the front angle, there is Othmane, Abdellatif and El Hassan writing on the wall with their paintbrushes a verse from the Quran showing the importance of water and trees. Wafa, Meryem and Safae have whitened the trees roots and their sides with the plaster solution. The aged men, Saleh and El Houssine, the two agents known for their good work in favor of environment, have been working on the land surrounding the small trees and encouraged the good initiative spirit within the young environmental team.

Of course, we do not neglect the female magical touch, the environmental participants have respectfully recognized the role of their colleagues and their true and efficient initiative, as the Woman World Day has constituted the best opportunity to present their best wishes to the girl students of the club who were present with their work, and to thank them for their struggle against the prevailing society conditions, so as to make of this forest a small paradise on Abttih High School land.
[…]

Abtih Qualifying High School, Regional Academy for Education and Training, Marrakech-Tansifet- Al Haouz Region, Delegation of Al Haouz Province - MOROCCO.

Focus on the Protection of the Natural Landscape and Pursuit of the Harmony between Man and Nature

The On-the-spot Report of the Building of the Road around Mount Tai

On April 18, 2009, some of the YREs, together with tutors in Tai'an No. 2 High School, investigated Road around Mount Tai which is still under construction. During the course of the investigation, the reporters saw the layer of the road surface had already been completed, which makes it possible to be open to traffic in near future, and the virescence, beautification and the building of the support facilities on both sides are still in progress. Standing on the side of the road, we can both see the beautiful scene of Mount Tai on the north and the city on the south.

From the headquarters of the road building, we learned that Tai'an city government paid close attention to the construction of the Road around Mount Tai and kept it as a major measure of building of strong economic and cultural city and creating a famous international tourist destination, proposed a construction with a high starting point, high standard of planning, high-quality and high-level, and built it into a road of a smooth travel road. With the development of Tai'an City, the city road traffic and road network gradually appears unreasonable, the planning and construction of Road around Mount Tai will play an important role in alleviating traffic pressure.
Tai'an City is located in the centre of Shandong province, and Mount Tai is the world natural and cultural heritage as well as a world geological park, which lies in the north of Tai'an City, while the Road around Mount Tai is just on a combination between Mount Tai and Tai'an City.

[…] The construction sector attaches great importance to the protection of the natural landscape in the planning of the line of the road, which makes it possible for the road to run smooth near the landscapes above. And in this way the world natural heritage was preserved and at the same time it is convenient for the study and outlook of the natural landscapes. In some sections of the road, in order to dodge the geological landscapes, much money has been spent so that the road can bypass.

[…] We believe that the completion of the Road around Mount Tai will enhance the city construction management, the city image and the development of the tourism industry, and therefore the road will become a tour landscape main road with practical use, beautiful scenery and leisure. Meanwhile it can also better protect the unique harmony between the mountain and its style of history and culture so that the service network can be improved, which will provide a prosperous cultural, healthy, comfortable and safe social environment to the local people and visitors all over the world, and boosts the sustainable development of Tai'an City as well.

"God Boot Stone" before construction
"God Boot Stone" after construction
Well-preserved "Dai Daoan Fault Scarp"

Xu Xuezhi, Liu Yin, Li Shengguo, Wang Yuhao (all 17 years old) Tutors: Xia Xinyu, Jia Qingwen, Shan Dong Tai'an No. 2 High School East Road of Hushan, Tai'an City, Shandong Province - CHINA.

Young Reporters for the environment

Urban Development's Pressure on Endangered Species

80 meter trees tower above and I cannot hear myself think over the chatter of birds. This is Zealandia 1,000 years ago in its pre-human state. However, over the centuries, animals were hunted to near extinction, forests were felled and native animals became prey for pests brought in by the early settlers. This valley then became the water supply for much of Wellington during the 19th Century.

This sequence of events severely damaged the native bush and wildlife population in and around the Wellington areas, bringing the wildlife population down to a record low. Many native species of New Zealand were endangered including the Weka, Tui, North Island Robin, Tuatara and the New Zealand icon, the Kiwi.

One man's vision, along with five years worth of council proposals, surveys, and fund raising was all it took to start Zealandia. Formerly known as Karori Wildlife Sanctuary, Zealandia is a sanctuary situated in New Zealand's capital city, Wellington. It focuses on restoring and recovering the native wildlife and bush life species of New Zealand.

Zealandia has a 500year goal - to return the valley to its pre-human and uninhabited state, with the wildlife population and native bush that predated European settlement.

The environmental outcome of all the hard work put in by 5,000 members, 450 volunteers and countless supporters is easy to see. The Tui population has increased seven fold. There is now 15 times more Kaka than when they were first released in 2002. The Little Spotted Kiwi, which was extinct on the mainland, is now thriving in its new environment with over 40 having been released. The North Island Robin, Kereru, Scaup, Brown Teal and many other bird species have also been breeding successfully and are now common sights in and around the sanctuary area.

The Tuatara, which is often said to be New Zealand's dinosaur, was faced with extinction before the Sanctuary opened. In October 2003, some Tuatara eggs were accidentally uncovered in the Sanctuary. This was the first time Tuatara eggs had been found in the wild on the mainland in over 200 years.

Although with all of this success, there have also been problems. The first of those was gaining consent from the City Council and getting community approval. It did eventually obtain both, and now the Council and the community are both firmly behind the Zealandia mission. Next came the designing of the fence. The fence had to keep 13 species of pests and predators out of the 225 hectares that has become to be known as Zealandia. It was the first of its kind anywhere in the world, and building and maintaining it is the biggest challenged faced to date.

The next challenge was the eradication of pests and introducing the endangered native animals. Another hurdle was attracting visitors and gaining financial backing.

There will be many more problems to be faced, but with all the support and innovative ideas so far, there will no doubt be more achievements and successes to come. In many centuries from now, we hope and believe that future generations can stand where their ancestors stood a millennium before them and not be able to tell the difference.

Bethany Copsey, Rebecca Ashcroft, (15 years old) - NEW ZEALAND.

Visitors Encounter the Kaka
Visitors to the Karori Wildlife Sanctuary, or Zealandia, have the chance for a one-on-one interaction with endangered wildlife, safe in a man-made haven away from the city.

Working Bees of Zealandia
The working bees are a group of volunteers that aim to better the quality of the sanctuary by doing tasks such as weeding, removal of invasive pests, and tracking endangered birds. Volunteers are an essential aspect of the sanctuary's functionality and effectiveness.

Little Spotted Kiwi
The Kiwi, a New Zealand icon that was nearly brought to extinction due to man, has flourished in the sanctuary of Zealandia. Through patience and persistence, the Kiwi population is on its way to being rehabilitated.

Young Reporters for the environment

New Type Cigarette Case is correct way of cigarette ends

I.Background

Beibei, my town, is cleanness, people have high sense of environmental protection. If there is no dustbin, there will carry the litters in the bag and take them home. In spite of this, I am surprised to find that there are many cigarette ends littered on the ground in the parks, parking lots, streets. I realized that the disposal of cigarette ends is a serious problem of keeping a clean living environment. After observing the behavior of smokers, I found that if there is no cigarette dustbin on the street, smokers have no way but to litter the cigarette end on the ground and stub out the cigarette spark by stepping on it. Because they couldn't stub out the cigarette spark by their hands and put it in the bag. That's why even people have high sense of environmental protection, there are still so many cigarette ends littered on the street.

I have ever interviewed a city cleaner about her experience of the cigarette end in our city, she replied: "We have to clean countless cigarette ends every day. It seems that we can never finish cleaning these cigarette ends." We can see that the cigarette ends littered everywhere is a serious problem that destructs our living environment.

II.Design Concept

The one who caused that problem should be responsible for solving the problem. Besides the measurements we taken to increase the awareness of environment protection of the smokers, we have to provide an easy method for them to deal with the cigarette end properly. My idea is to invent a new type of cigarette case, which is a cigarette case with a special-designed ashtray for cigarette ends.

III.Product introduction

[…]

IV. Product Significance

Provide a convenient and environmental friendly solution to avoid the littering of cigarette ends and keep our living environmental clean. It is a solution for the tobacco manufacture to make up for the trouble they caused.

V. Additional Statement

According to the statistics of America Heart Association, there are 1.3 billion smokers all around the word. This is a fact that we can't deny. This invention is not to encourage the smoker, but to provide a workable solution to reduce the environment destruction caused by the 1.3 billion smokers. […]

Senior High School, Grade 1, Class 7, Le Yipeng - Mentor: Huang Shiyou. High School Attached to Southwest Normal University, Chongqing - CHINA

Abandoned friends

From the first years of life everyone knows that a dog is the best friend of a man. It always helps and protects us. The cat keeps our home comfortable, gives us warmth of feeling. Everyone knows that the cat can stop the pain and prevent you from feeling tired. During the ages these animals are home residents. It often happens that cats and dogs become real members of family.

But why some of them don't have home to live and food to eat? How could it happen, that the creatures that should live with people and give them warmth of feeling have to be homeless beggars. They called "domestic animals" because they should live at home.

Everyone will agree that the problem of homeless animals is evident and requires measures to be taken. But before looking for the solution of the problem we should find the reasons of it's appearing.

Thus, the family of homeless animals gets new member. Surely, most of us have been in such situation when sweet kitten or puppy has grown to adult animal and requires more care. And from day to day it is more and more difficult to take care of it… 44% of respondents agreed, that such situation can be the reason of homeless animals problem.

But, unfortunately, this is not the only reason for this problem to appear. Animals are wonderful creatures; they touch us and make admire them. It is not so difficult to take care of 1 pet, but if one day you find 3 or more pets instead of one, you will understand that it is a problem. In such situation people have to find the way to get rid of little pets, and usually it seems that the kindest thing is to leave them on the street. 43% of respondents confirmed that such situation can become a reason of appearing homeless animals.

[…] Unfortunately, all these situations happen rather often. The number of homeless animals grows bigger every year. And as the result we can see dirt and diseases that are successfully spread by animals, cases of aggressive behavior towards people and lots of other troubles.

No one wants his baby to play with dirty, probably ill dog. City authorities have found their own way to get rid of undesirable homeless pets – special organization shoots them. This method is not only cruel, it is also useless. They get rid of effect, but do nothing with cause, that's why the effect appears again.

There are other methods to solve this problem. Experience of European countries gave us the idea of asylum for homeless pets. We decided to find out if there was such asylum in Karaganda region. The answer was found in the Internet. We found the web-site of Social Homeless Animal Protection Fund "KARE-Zabota". They work in Almaty and Karaganda city. We arranged meeting with them in order to find some information on the theme. We were suggested to meet at one lady's place. She takes homeless dogs to her home and gives them a place to live at her home yard. The "KARE-Zabota" fund does its best to help this lady. […] People living in that district applied to the organization shooting dogs several times with request to get rid of these dogs. Now the fund's workers and volunteers help this lady to solve several problems - they help to repair the fence around the house, so that dog's couldn't go out when they want to. They also help to find food and vitamins for these dogs. […]

Dear friends, we'd like to ask you not to deprive animals of care and happiness you gave them. Be strong and kind, make your step to the solution of homeless animals problem. It depends on each of us how will "tomorrow" look like.

Shakibayeva Galiya, School №15, Shakhtinsk town; Neplyueva Olga, School №2, Shakhan village; Syakki Sofia, School №62, Karaganda city - KAZAKHSTAN.

Young Reporters for the environment

Majestic lady, the pride of our town

Old Olive tree

One of the important tourist destinations in the town of bar is the olive tree, over 2000 years old. The gorgeous „lady„ has perimeter over 10m and is protected by the state since 1957. Although a homeless person once set on fire inner part of the olive tree to warm himself, this long living wintergreen plant was not destroyed.

Each year, to celebrate the old olive tree, we have a manifestation called „the olive tree - peace and friendship", when young people present their literary talents in the honor of the olive tree. For this plant we can say it is the protector of health. the fruit of olive tree are very healthy, and besides, they often serve as decoration and taste of many meals. the oil that is made from olives is irreplaceable and is widely distributed in world market.
The more we care of this plant, it will care about us even more. The benefits that are offered to us by nature, we should use and save in the proper way, and it can become a famous trait of one town, like this old olive tree is of town of bar.

Larisa desic and jelena djordan ii 3 (16 years old) secondary agriculture school bar. Professor Merima Djukic - MONTENEGRO.

Mellieha Road Proposal

The Ministry responsible for Infrastructure, Communications and Transport has proposed the construction of a new single carriage road linking Mellieha to Cirkewwa instead of the existing four lane road. Since this proposal falls within the Ten-T European Network of Roads, the European Union can fund up to eighty percent of the money required to build this road. By building this road, the older road would be removed and the beach would be enlarged. The new road proposal indicates that it will be situated just a few meters away from the Għadira nature reserve which is currently being managed by Birdlife Malta. This nature reserve attacts more than 200 species of birds including some rare ones. Birdlife Malta in fact have already indicated that such a project will definitely harm the surrounding habitats (such as garigue) which are protected by EU legislation and therefore it will be quite difficult to obtain EU funding. In addition, the government has already stated that if this road is to be constructed some trees are going to have to be removed. These trees are part of the Foresta 2000 project – an afforestation project which the Ministry for the Environment embarked on a few years earlier and which unfortunately fell victim to vandalism in 2007. This is obviously going to have a huge impact on the organisms living there and their habitat.

The photo shows Ghadira Nature Reserve. The already existing road is on the left of the Nature Reserve. The one proposed will be towards the right hand side.

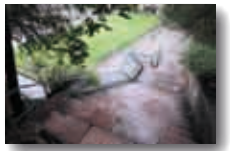
Nicola Mallia, Petra Cassar, Nicole Micallef, Jonathan Brincat - MALTA.

Young Reporters for the environment

Our pride – our shame

Herceg Novi, one of the most beautiful towns in Adriatic, the town of writers and painters, slowly looses these titles. One of our town's symbol, the famous „Boka" park was, for decades, a reason for many tourist to visit Herceg Novi to enjoy its beauty; today its completely deteriorated. This park, of which we all proudly spoke about, with palm trees rising above the town, with unique architecture that does not exist in any other town in this part of the Mediterranean, now is the palace that is avoided.

The "Boka" park, real botanical garden with over 80 different species of plants, beautiful fish pond, is located in the Center of Herceg Novi, built in 1908, today is completely deteriorated.



"Its time we should take the matter in our own hands, it is time tho heal suffering of planet Earth"

"Nothing can repay the damage, noone can return the lost time, this is the future we leave to our children !"

While walking around the park we stumble down the ruined stairs, broken trees and broken benches. Ruined glycinia, that used to make shade in the warmest summer days, just adds to the apocalyptic view of the park. In what used to be a beutiful fountain full with goldfish, today you can find garbage and broken glass.

..because for the Nature we are
JUST A DISAPPOINTMENT!"

We, young people have a desire to enjoy the beauties of this park just like previous generations. However, it is impossible to do that now, partly by our own fault. Destruction and poor environmental conscience of the citizens caused the today's state of the park. Now we are left with a question: Are we going to shamefully leave the Nature to cry for help, or we are going to take action !?

Masa Laban and Ana Krivokapic IIa (16 years old) Gymnasium "Ivan Goran Kovacic", Herceg Novi.
Mentors: Ljubo Ljubisavljevic, Slavica Zoric, Vesna Banicevic - MONTENEGRO.

A heavy environmental bill

Before starting

The city of Oujda is a victim of a poor geographical site. It is traditionally considered in the memory as part of what the colonization called "the non useful Morocco", and perhaps this might be the cause behind contraband and the fact that the Moroccan-Algerian frontiers are open despite politics, and gasoline is at the head of the goods smuggled to Oujda, which requires the consideration of contraband issue from the environmental side and not only the socio-economic one.

We did not believe that our decision to write a report about the smuggled gasoline coming from Algeria and its environmental impact on the Oujda City and its people, would arouse a storm of feedbacks and too many question and exclamation marks. We did not also think that we would go in an adventure to unveil an absent truth as whenever we present the topic of our report to a body or an administrative official, we notice astonishment signs and sometimes frustrating words aiming at weakening our will in making investigations. However, our convictions have been strengthened to go in this adventure and to confirm that the environmental bill of the smuggled gasoline is so heavy and that Oujda city with its limited natural potentials cannot bear it [...].

In search for an impossible equilibrium

Oujda city's cars never stop day and night. Their number is continuously increasing. Cars owners drive all the time, they do not care for the gasoline barrel's price in the world markets, their purchasing power is not affected by the increase or decrease of this vital and dangerous material's price, as this permanent movement is due to the presence of the gasoline smuggled in huge quantities at low prices which encourages road traffic.
The Oujdi citizen does not find any harm in using his car to go to the café though it only some meters far from his home .

[...] The Oujdi citizen's appetite is open for driving cars more than the Moroccan citizen's, the rate of cars driving is higher in Oujda than in many big Moroccan city and to confirm this truth, we have carried out a questionnaire, via an electronic magazine, which has concerned a category of citizens and the results were surprising as 75% of the Oujdis questioned drive their cars all the week while the percentage has reached 68% in Casablanca, 57% in Rabat and 73% in Fez.

In the light of these data, it is clear that Oujda city and its people bear a heavy environmental bill due to the gasoline smuggled from Algeria and sold with cheap price.

To know the magnitude of the environmental problem in Oujda, we went to the Customs Department in order to know the volume of the smuggled gasoline, we came to know the efforts deployed by the Customs staff to stop this phenomenon that exceed their human potentials and according to the available data, the quantity of the smuggled gasoline exceeds 250 thousand liters per day and some sellers confirm that the quantity is more than what has been stated.

Cars registration department also has the true information and can help us and tell us the real number of cars in the city, but getting the exact statistics is considered an impossible matter and the number of cars in Oujda was considered among the State's secrets. A civil servant gave us an estimation according to the green cards drawn per day, he said : " in Oujda there is a huge number of cars that can be estimated between 75 thousand and 100 thousand cars."

And to know about the mechanical status of cars and their contribution in the environment pollution, we went to the technical control station, we asked the person in charge who said : "most of Oujda's cars longevity exceeds 5 years and a huge number, about 78%, have 10 years" and concerning the effect of old cars and the use of smuggled gasoline on environment, he said : "The more the car gets older, the more it contributes to the pollution, as it emits more quantities of CO2 and the more it runs, the more it constitutes a danger on environment and man.

If we consider that each driver uses his car about 10 km per day, the total of CO2 tons emitted daily is 100 tons....So does the city has an environmental structure strong enough to absorb these tons of this poisonous gas? No doubt, that these numbers are huge and constitute a danger, represented first in respiratory diseases and cancer, this is what is confirmed by a doctor, specialized in respiratory diseases, whom we visited in his private hospital.[...]

The Oujdi citizen has the right to the lesser surface of green spaces in comparison with the national surface the Moroccan citizen has the right to, as it reaches half of a meter for each citizen, whereas the world standards insist on 6 meters [...]

Is there any alternative? We have to think about our future, we are men and women of tomorrow, we have assumed and we will assume our responsibility through raising the consciousness about the environmental issues that can destroy our dreams and our ambitions. We call the authorities to stop the smuggled gasoline, and call the local authorities to take care of trees, protect the forest and provide us with green spaces because we need nature and not tiles and armed concrete.

Omar Mahmoussa, Naima Salam, Nassima Derkaoui, Sara Cheklal, Samia Cheklal, Zineb El Ayachi, Hasna Rghioui, Fatima Zahra Mbarki, Jihane Azza; Supervisor: Abdelmajid Taam - Isli club for environment and the school surroundings, Academy of the Oriental Region for Education and Training – Delegation of Oujda Angad – Isli Qualifying High School Oujda - MOROCCO.

Young Reporters for the environment

Record-breaking temperatures will initiate international food crisis

In the summer of 2003, over 50,000 Europeans died from heat-related illnesses during an incessant heat wave with temperatures 3.6 °C higher than normal. But with global warming on the rise, increasing temperatures now pose an even bigger risk, this time on the world's supply of food and crops. Scientists say the record-breaking temperatures will become the norm for summertime temperatures that will trigger multiple crop failures and produce an international food crisis.

The Science

Earlier studies have focused on the effect of droughts on the production of crops. However, the recent study, authored by climate researchers David Battisti and Rosamond Naylor, focused on the effect of rising temperatures on the world's supply of crops. Published in the journal Science, the study suggests that with global warming on the rise, unusually hot temperatures will become the new summertime temperatures within 30 to 50 years, and certainly a global phenomenon within 70 to 90 years.

The study also found that a hotter environment will have the same destabilizing effects on crops as droughts. Plants have optimal temperatures for producing seeds. If the environment temperature exceeds the optimal temperature, there will be a reduction in leaf development and the size of kernels, two aspects that are crucial in determining crop yields. […]

What's going to happen?

The study's authors emphasized that the food crisis is by far the largest threat enabled by global warming. Dr. Battisti asserted that global warming's effect on world crops is a larger threat to humanity than rising sea temperatures due to melting ice sheets in Greenland and Antarctica. […]

The looming food crisis poses an especially massive risk on the 3 billion people living in tropic and subtropic areas. The study also noted that regions with the most severe decrease in crop yields would be in the tropics and subtropics, where millions are already malnourished.

A further reduction in crops would provoke food riots in previously struggling countries such as Bangladesh, Haiti, Egypt and the Philippines. Dr. Battisti himself emphasized the enormous risks the people in affected regions face. "The impacts we will see on yield, combined with a growing population that depends greatly on agriculture for food and income, will demand a profound level of adaptation, which might include moving hundreds of millions of people," he said.

Michelle Mun Hee Lee, Sir Winston Churchill Secondary School - CANADA.

Young Reporters for the environment

Climate change or... whom to blame

It was just a year ago (August 2007) when strong fires burned and destroyed the magnificent natural beauty of our area. Almost 10% of Peloponnese was burned and we mourned the loss of at least 63 citizens.

As you can see in the map below, showing the burned ground, areas protected by Natura 2000 like Kaiafas lake and the mountains of Parnon and Taygetos suffered great losses.

According to Mr. Kosmas K., professor of the University of Athens, the area will be under the threat of desertation unless the appropriate steps are taken in order to protect it. So far no action has be taken to this direction. Reforestation still remains in theory and measures to avoid soil erosion are in a primitive stage. […]

That was our motive to organize an environmental week in our school from 3rd to 7th of October 2008. Professors were invited from Universities and Environmental Centers who gave us lectures about the climate change phenomenon, renewable sources of energy and the pollution produced out by human activity.

[…] Acid rain destroys every day the ancient ruins exposed to open ground while gases released in the atmosphere threaten our everyday life and health. All the above will continue happening unless we minimize the energy we use by following the Reuse-Reduce-Recycle way in our everyday activity according to mr. Bazanos, teacher of Lyceum of Filiatra Messinias. As Mr. Kyritsis from the Centre of Renewable Sources pointed out, new ways to produce clean energy (geothermic systems, aiolic systems, sun energy systems) are now in our disposable, comparable even in prices to the traditional ones that use oil or coal.

But the most important activity we had was the tree planting in the burned area by the village of New Figalia which is located about 25 km away from Kyparissia. We planted almost 500 new trees upon the hills around the village trying to reforest a part of them in cooperation with the municipality of Kyparissia and Figalia.

To sum up, in light of this week, we realized the need of protecting actively the environment and it raised awareness of our responsibility to improve the future of our planet by preserving the quality of our life. Although government insists that it takes lot of time to solve such an "uncomfortable" problem we believe that we have already contributed a little.

Giannikopoulou Eleni, Georgakopoulou Eirini, Zoumbouli Niki, Theodosopoulou Konstantina, Tzoni Georgia, environmental team of General Lyceum of Kyparissia (16 years old) - GREECE.

Climate change

Küresel Isınmayı Suyla Serinletelim !

Küresel ısınma dünyayı değiştirmeye devam ediyor ve biz bu dünyada yaşayanlar bu değişimi engellemek için gerekli önlemleri almıyoruz. Çevresel sorunlar için bir çok çözüm öne sürülebilir fakat yenilenebilir enerji bu çözümler içinde en etkili olanıdır. Günümüzde kullanılanlan enerji çeşitlerinin çoğu çevrenin dengesini olumsuz etkileyen sera gazları salgılamaktadır. Ayrıca bu enerji türleri yenilenemez enerjilerdir, bu da çevrenin korunması ve bu enerjiyi üretmek için gerekli olan maliyeti yükseltir. Yenilenebilir enerji ise doğal kaynakların çevreye uyumlu bir şekilde kullanılmasını sağlar. Yenilenebilir enerji su, elektrik, ısınma ihtiyaçları ve bir çok endüstriyel amaçlar için kullanılabilir. Bunun için su, güneş, rüzgar gibi doğal kaynaklar kullanılır.

Şimdi yenilenebilir enerjinin türlerinden hangileri için su kullanır öğrenmeye ne dersiniz? Hidroelektrik enerji, okyanus enerjisi ve jeotermal enerji su kullanan yenilenebilir enerjilerden bazılarıdır. Hidroelektrik enerjisi su akımının çekim gücüyle elde edilen enerjidir. Hidroelektrik enerji Türkiye'de ve tüm dünyada en yaygın olarak kullanılan yenilenebilir enerji çeşididir. Hidroelektrik santralleri kurulduktan sonra nükleer santraller ve kömür madenlerinden farklı olarak başka harcama gerektirmez. Türkiye'de elektrik üretimi için su kaynaklarını kullanılabilir hale getiren birçok baraj vardır. Fakat hidroelektrik enerji, bu barajların büyük yapılması durumunda ekolojik sisteme karşı bir tehdit oluşturabilir. Türkiye'de ve diğer ülkelerde çevreye zarar vermemek için bu barajların boyutları küçük tutulmalıdır.

Okyanustan elde edilen enerji, suyun kullanıldığı başka bir yenilenebilir enerji türüdür. Okyanus bizlere akıntı gücü sağlar ve insanlar Gulf-Stream akıntısında olduğu gibi bu akıntıların gücünü kullanabilir. Buna ek olarak derin ve sığ sulardaki sıcaklık farkları, gel-git olayları ve dalga gücü temiz enerji elde etmek için kullanılabilir.

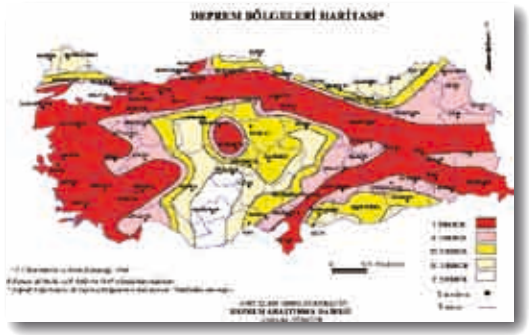
Ne yazık ki Türkiye'nin okyanusa kıyısı olmadığı için okyanustan enerji üretmek bizim için mümkün değildir. Yine de Türkiye'nin temiz enerji elde etmek için daha iyi bir fırsatı var: Jeotermal Enerji.

1998 istatistiklerine göre enerji kaynakları dikkate alınarak karbondioksit salınımı aşağıda gösterilmiştir:
Kömür: 900 - 1300 g/kWh,
Doğal Gaz: 500 - 1250 g/kWh,
Jeotermal: 20 - 35 g/kWh (Farkı görebiliyor musunuz?)
Elektrik üretiminde fosil yakıtlar kullanılmadıkça, azotdioksit ve karbondioksit salınımı olmayacaktır.

Jeotermal enerjide ısı sıcak su pompaları sayesinde elde edilir ve bu ısı elektrik üretiminde, ısınmada ve endüstride kullanılabilir.

Ayrıca jeotermal su, kimyasal ve mineral üretimi bakımından da çok zengindir. Birçok insan mineral suyu içer, tedavi amacıyla kaplıcalara gider. Boruların kurulum maliyeti yüksek olmasına rağmen, genelinde diğer enerjilere kıyasla maliyeti daha düşük bir enerji kaynağıdır.

Jeotermal enerjide tehlikeli gaz salınımı olmaması da çevremiz için faydalı bir unsurdur. Doğal gaz ve kömürden farklı olarak jeotermal enerji oldukça güvenlidir ve insan sağlığı için tehlike içermez. Taşınamayan ve sadece yerel olarak kullanabilen bir enerji kaynağı olduğu için ülkeler arasında bu enerji için herhangi bir çatışma yaşanma olasılığı yoktur. Kömür ve fosil atıktan farklı olarak taşınma problemi yoktur ve kullanımı çok basittir.



Jeotermal enerji'nin tek dezavantajı sadece tektonik plaka sınırları içerisinde kullanılabilmesidir, ancak Türkiye'de tektonik plakalar ülkenin tamamında görüldüğü için jeotermal enerji Türkiye için her koşulda avantajlıdır. Özellikle Ege Bölgesi'nde kullanımda olan birçok jeotermal enerji projesi vardır. Balçova ve Narlıdere'de (İzmir) jeotermal enerjiyle ısınan 15.000 ev vardır.

Bütün jeotermal kaynaklar verimli bir şekilde kullanıldığında, sadece İzmir 220.000 evi ısıtacak kapasiteye sahiptir.Türkiye jeotermal enerji kullanan yetmiş ülke içinde sadece onaltıncıdır.

Bu ülkeler arasında daha iyi bir seviyeye çıkmak için daha fazla şeyler yapılmalıdır. Jeotermal enerjinin etkili kulanımı Türkiye'nin diger ülkelerden enerji ihracatı yapmak yerine kendi kaynaklarından faydalanmasını sağladığı için çok önemlidir.

Türkiye ihraç edilmiş enerjiye yatırım yapmak yerine jeotermal enerji santralleri kurulumuna yatırım yapmalıdır. Bu Türk hükümeti tarafından yapılan akıllı bir hareket olacaktır. Bu hareketiyle hem kendi ekonomisini kalkındırıp hem de dünya ekolojisine yarar sağlayarak bir taşla iki kuş vurmuş olacaktır.

Sonuç olarak eğer Türkiye enerji ve küresel ısınma sorununa ekonomik bir çözüm bulmak istiyorsa, yenilenebilir enerjiye bağlı olan su üzerine odaklanması gerekecektir.

Suya dayanan çözümler arasında çok amaçlı, ucuz ve sağlıklı olan jeotermal enerji Türkiye için en önemlisidir. Biz Türk Gençleri olarak, Türk Hükümeti'ni dünyanın geleceği için öncü olması ve harekete geçmesi için çağırıyoruz.

İzmir Saint Joseph Fransız Lisesi - TURKEY.

Young Reporters for the environment

FEET OF GREEN AWARD

Feet of Green was launched in 2008. The first initiative took place in May 2008 and was the crossing of Greenland by Alan Chambers and Peter Herbert. They led the largest ever British polar expedition focused on education. The objective was to cross one of the world's largest glaciers and bring the experience to the classrooms of the United Kingdom and beyond.

The journey was 550 kilometers and lasted 26 days. The team endured some of the most extreme weather conditions known to man whilst on the ice cap and their challenge was increased by the visible effects of climate change experienced on the ice cap. During the adventure, students followed through an ice-log, videos and photographs which can be seen on the website.

Their action raised awareness in schools, students and teachers regarding the reality of climate change and the importance of taking positive environmental initiatives at all levels. This is aligned with the YRE programme mission and is why we have decided this year to invite "Feet of Green" to review the works of young reporters around the world. For their action towards environmental education and their support to the YRE programme, the climate change award is named after « Feet of Green ».
www.feetofgreen.com

The victims of Climate change

Global warming has had an impact on forest's biodiversity. Forest fires and storms destroy about 20 000 hectares every year, in France. These events have a link with global warming.

Higher temperatures increase Forest Fires...
Factors which trigger forest fires are: climate, temperatures, frequency of the precipitation, types and intensity of winds. Heat and drought promote forest fires, even if they are also often caused by human activity.
There is no scientific evaluation of the evolution of forest fires in connection with climate change. However, during the heat wave of 2003, 72000 hectares burned in France according to O.N.F. (National Forest Office). And numerous forest fires arose in areas which are not usually affected by this kind of events, such as the Chartreuse Massif in the French Alps.

Nowadays, there are only assumptions about an evolution of forest fires, in a context of climate change. But situations similar to the heat wave of 2003 could occur often during the 21st century. And even if the forest turns back "green" a few years after burning, the areas disturbed need decades before recovering their original species composition.

... And Storms
Between 1950 and 2000, there wasn't a real evolution of storm intensity. But the number of storms increased. One factor of this increase: global warming.
If the climate gets hotter, there should be more steam in the atmosphere. If there is more steam, the weather will become more unstable and the risk of storm will increase.
In France, on December 26th and 27th 1999, from Brittany and the Golf of Gascony up to the banks of the Rhine, two storms swept the country before crossing Germany, tearing away roofs and eradicating trees.
Approximately two centuries will be necessary for forests to recover from these storms. They showed an exceptional violence. Moreover there were about 90 deaths in France. According to some specialists, these two storms, which Meteo France now calls "hurricanes", find their origin not only in the natural phenomena but also in human activity.
Every year in France, about fifteen storms destroy forests. In most cases human activity is the main cause: deforestation, mobilization of water resources, introduction of exotic species which are more sensitive than local species...

Solutions are in our hands
Even if we are reluctant to admit it, global warming is our responsibility. But the solutions are in our hands too. We just have to be determined to make them happen. Protecting and caring for our forests is one of these solutions.

Some figures:

- *Only 10% of forests in the world are protected.*
- *Some winds, during storms, can reach 300km/h.*
- *Approximately 2.6 million hectares of forest burned between 1980 and 2000 in France.*

Pauline Billion (16 years old), Pauline Croze , Virginie Charlon (15 years old). Lycée G. Faure, Tournon - FRANCE.

Young Reporters for the environment

The last watermill in danger

Concerned about the environmental problems caused by the excessive consumption of fossil energies, we aimed to look for a watermill, one of the most ancient structures regarding kinetics energy use from the rivers' water. Thus, we have found an active watermill.

Although it happens to be the only one in S. Roque and Nogueira do Cravo villages, it is still working, full of vitality. However, there are some threats hanging over it. The Young Reporters for the Environment wanted to understand the reasons why this watermill hasn't disappeared yet and has persisted in spite of the technological development that has occurred in the last decades, in a place where industry has appeared as the main economical activity.

Mrs. Celeste Resende received us with an expression on her face that shows the great pride and consideration she has for this watermill. "It is over 100 years old", she says. […]

Mrs. Celeste Resende doesn't want to let die what still remains from those times when farmers produced their own bread.

From the sowing of the corn and wheat to its grinding in the watermills which made use of the small rivers nearby. Then, they baked the bread in wood ovens, using thus the forests' wood. Mrs. Celeste still grinds the cereal she sows in the old watermill and

then uses it to bake the bread that suits her daily eating needs. This mill, a heritage from previous generations, is a way of keeping these old healthy habits alive.

Nevertheless, the future seems uncertain to this watermill that doesn't want to become a museum piece of art. People talk about a project for the construction of a new motorway that will cross the region. Mrs. Celeste shows her disapproval fearing that this project will change the course of the river that feeds the watermill. It is the price we somehow pay for progress that persists in crashing, silently, the cultural traditions of our ancestors.

Young Reporters For The Environment, E B 2, 3 Comendador Ângelo Azevedo, Oliveira de Azeméis - PORTUGAL.

The use of solar energy in schools

The young reporter's group of our school dealt with the above subject because we consider it a current and important issue. The solar energy is an important renewable source that will never be lost, that has low cost and is friendly to the environment because it is noiseless and does not emit pollutants. In the site of YRE we found an article of two students of secondary school in Lisabon of Portugal which suggest using a photovoltaic panel to give electricity for the information panel at their school.

In Cyprus, people and mainly the children in schools, suffer from the unbearable heat during the summer months, and thus, the use of air conditioners in classes is necessary. These results to the increased consumption of electric current with an increased monthly cost. For the reduction of this cost serious measures should be taken. A great solution is the use of solar energy in schools and the exploitation of solar energy because in Cyprus there is a big sunlight and plenty of sun's radiation which the island receives (up to 2000KWh/m2).

[…] For further investigations of the topic, we visited a photovoltaic park in the University of Cyprus in Nicosia interviewed Mr. George Makridi. We also communicated with E.A.C., the Department of Energy at Ministry of Commerce, Industry and Tourism. Solar panels have been installed in 29 schools with total power 129,91KW, of which the 3 are in Larnaca with total power 15,08KW.

Beginning from 2009 the installation of photovoltaic element is programmed to take place in 48 schools in Cyprus, of which 9 of them are in the province of Larnaca. One of these schools where it will be done installation of photovoltaic is ours. We tried to calculate what benefit we can have if we will use the ceiling of our school to put photovoltaic. […] We calculated the total energy that can be produced by photovoltaic plates in one year: 1500KWh x 134 = 201000KWh per year. This energy will be enough in order to cover the needs of our school in electric current (79 882KWh for school year 2007-2008).

We can see that by using solar energy we can completely cover the needs of our school in air conditioning and we can save a good amount of energy which we can sell.

By installing photovoltaics in our school we can significantly contribute to protecting the environment. We will limit the carbon dioxide release in the air by 221100kg per year. […]

Our recommendation is that photovoltaics should be installed in every school in Cyprus in order to make a good investment with our government's money. The responsible authorities should motivate everyone to install photovoltaics in all the buildings of our country.

Interview at photovoltaic park of the University of Cyprus

Giannis Ionas C1, Marilena Hadjiprodromou C1, Rafaela Koulia C1, Georgia Philippou C2, Irene Sykopetritou C2 (15 years old) - Teacher: Tatiana Nicolaou "Vergina Gymnasium" Larnaca - CYPRUS.

Young Reporters for the environment

From plastic waste to energy

We started researching the topic "waste to energy" with creating a project from the idea of connecting two environmental issues: solid waste (especially the plastic bottles that are everywhere) and the need of sustainable use of energy.

The fossil fuels are non-renewable resources, therefore we are supposed to find another way of proving our energy supplies. Wind energy is non polluting, save, renewable. The plastic waste are very difficult to collect, treat/reuse. Most of the plastic bottles end up in garbage dumps without any possibility of recycling its. We suggest a method that allows us to solve both environmental issues - waste and energy, by using plastic bottles for manufacturing a small and affordable wind plant, a Savonius turbine. Savonius wind turbines are a type of vertical-axis wind turbine, used for converting the power of the wind into torque on a rotating shaft. They were invented by the Finnish engineer Sigurd J. Savonius in 1922.

[…] Savonius turbines are one of the simplest turbines. Aerodynamically, they are drag-type devices, consisting of two, three scoops. […] The production and use of plastics has a range of environmental impacts. […] It is estimated that 4% of the world's annual oil production is used as a feedstock for plastics production and an additional 3-4% during manufacture. In addition, plastics manufacture requires other resources such as land and water and produces waste and emissions. The overall environmental impact varies according to the type of plastic and the production method employed. The disposal of plastics products also contributes significantly to their environmental impact. […]

With more and more plastics products, particularly plastics packaging, being disposed of soon after their purchase, the landfill space required by plastics waste is a growing concern.

The world's annual consumption of plastic materials has increased from around 5 million tones in the 1950s to nearly 100 million tones today. One ton of plastics is equivalent to 20,000 two liter drinks bottles or 120,000 carrier bags. Plastics consumption is growing about 4% every year in western Europe.

In order to try to solve this two environmental issues we followed the steps:
The structure can be put on a pillar. We attached the dynamo on the frame and assure the connection with the transmission belt.

We also registered the wind speed and air temperature for almost a year in order to determine if the average wind speed is appropriate to our goals.

[…] With this project that was apply in our schools for the cover some energy consumption of our institution with our turbines, we wanted to show that it is not very difficult to take actions in order to solve an environmental issue even it is at local level.

Monica Scarlat and Adrian Scarlat, teacher Carmen Bucovala "Ovidius" Highschool, Constanta town, Constanta district - ROMANIA.

Is the mobile phone really dangerous ?

In our consumer society, the mobile phone, at first a utility object, has been transformed progressively into a fashion and luxury article, a little bit like trendy tennis shoes in college.
[…] Nowadays what teenager could do without their mobile? The answer is simple, none, or hardly. But who's talking to us about the dangers and the limits of mobile telephony? We, the students of the Lycée Roger Verlomme, have investigated...
Headaches, hearing problems, skin tingling, memory loss, loss of concentration, buzzing in the ears… Studies about the dangers of mobile phones are multiplying. Are the electromagnetic waves emitted by the phones a health risk? The controversy is on-going, and a lot of people are worried, while the scientists are divided.
This year, we have focused on several articles. The majority show that electromagnetic waves can have negative effects.
In "l'Express" of July 2008, Martine Hours, the French representative in charge of the international report INTERCOM, financed by WHO, emphasizes an "increased risk of appearance of tumours of parotid [the salivary gland nearest to the ear] for two categories of the population. Initially, in people using their mobile intensely on the same side as the tumor. Then, in people living in the countryside, where the relay aerials are further apart and therefore more powerful." But, near the ear there is also the brain and it was shown that the hemato-encephalic barrier (which protects the brain from external aggression) sees its permeability increasing following exposure to electromagnetic waves, especially among the children.
Seeing these results, we could be worried. Nevertheless, the specialists have slightly differing opinions. Why? One of the answers is provided by the "Appel des 20" 2 (call of the 20):
The risk appears above all 15 to 35 years later."
This is why it is too early for definite conclusions.
But the dangers are contested by the industrialists of the sector whose influence is very strong2.
Indeed, as a Swiss investigation3 shows, the studies are often financed by the operators.
Moreover, it is the same for measurements in the field4. Thus, is it not surprising that the results tend to indicate that mobiles are not dangerous.
For the manufacturers, mobile telephony - which conforms to national standards - does not present an proven risk. As studies continue, they encourage however, implementing the minimum precaution principle5.
During this debate, we wondered about the possible risks of the mobile phone. Thus, we carried out our own 20 question survey (using Sphynx software) among the students of our school. […]
We have also, with the assistance of ERASMUS students from the Lycée d'art ESTIENNES, designed a leaflet which we distributed during the « Health Day » at our school (on April 2, 2009). We included advice, often given by doctors and associations (ref.), for the better use of mobile and limiting their dangers

To conclude, the problem of the danger of electromagnetic waves and the mobile phone in particular, generates more and more media coverage and raises questions in Government.
From our point of view, this is quite positive.
However we note that France takes far less precautions than its neighbours.

Thus, wouldn't it be appropriate that some directives be issued at a European level and that the population be informed?

Article translated by Leora Eor, Clémence Gaumont, Élodie Bernier - Cooperative work from 1ère STG2 School : Lycée Roger Verlomme – Paris - FRANCE.

1.« Ça m'intéresse » N°327 de mai 2008
2.« Le JDD » du dimanche 15 juin 2008
3.« Ça m'intéresse » N°327 de mai 2008
4.« L'Express » N°2976 de juillet 2008
5.« Mon mobile et ma santé » (dépliant de l'Association Française des Opérateurs Mobiles)
6.« L'Appel des20 » voir : Le JDD du dimanche 15 juin 2008
« L'Express » N°2976 de juillet 2008 ; « Ça m'intéresse » N°327 de mai 2008

A world of sciences

Dams, a solution for uncertain future ?

With its 250 important dams, the Rhône-Alpes region is the French region which produces the most hydroelectricity. Hydroelectricity has got advantages, like in Québec, where 97% of the electricity is hydroelectricity. However, it has also got disadvantages, like in China, where the Three Gorges Dam has forced 1.2 million people to relocate.

The Grand'Maison dam, in Isère, is the most important in France.

Image: Wikipedia

The Rhone Alpes region is the first French energy producing region. In 2007, it accounted for 50% of the French photovoltaic energy production, and, thanks to its 250 dams, 40% of the hydroelectric energy production.
The Rhone is the river which is the biggest producer of electricity in this region: with its installations, it accounts for 45% of the Rhone Alpes hydroelectric energy production.

In Rhone Alpes, this sector represents more than 25,000 jobs. It's a long story: the first dam on the Rhone was built in 1874. Now there are 18 hydroelectric complexes on the Rhone.
The biggest dam in Rhone Alpes is the Grand'Maison dam. Situated between two massifs, Belledonne and Grandes Rousses, it retains a huge amount of water (137 million cubic meters of water).

All is not well...
But dams have disadvantages. There are, for example, consequences for the population: People who lived in the valley where the dam is built must go to another place, because their village will be swallowed by the lake formed by the dam.
So, in Rhone Alpes, the 400 inhabitants who lived in the valley where the Chevril Dam was built were evicted from their village. And in China the Three Gorges Dam has forced 1,2 million people to relocate; it has swallowed many cities, many villages and 1,300 historic and archaeological sites.

The Three Gorges Dam, it's:
-39 billion US Dollars
-a huge reservoir of 39,3 km³ of water
-14 building years
-6 hydroelectric turbines
-3% of the Chinese consumption
-1,2 million relocated inhabitants
-1300 flooded archaeological sites

Dams have bad ecological consequences too. It disrupts many migrating paths for fish in the river, and it breaks ecosystems created by the river and its floods.
It helps many invasive species to infest regions around the river: The invasive species proliferate in the barrier lake. Sediment transportation is also altered. Particles transported by the river (sand and gravel) are stopped by the dams and cannot reach the sea any more. One of the consequences is the increasing erosion of beaches, with a negative impact on the tourist industry.
A dam is a risk too: if it breaks down, the valley below can be swallowed, and many people can die.
There is another risk: many scientists think that dams could have geological consequences. For example, the Three Gorges Dam is suspected of provoking the huge seism which killed 50,000 people in 2008. In fact, since the beginning of the filling of the dam, there have been many small earth tremors, but, we haven't enough information on the geological and seismic situation of this region, that's why this assumption could be wrong.

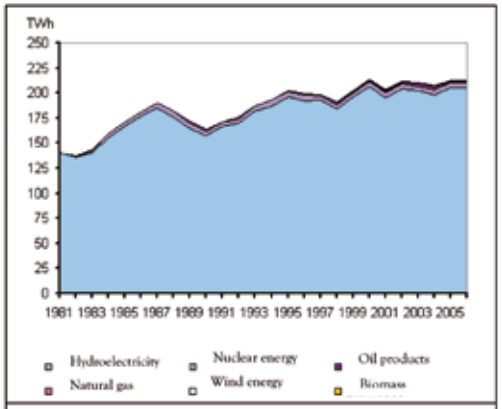
A possible solution...
However, the use of dams for electricity production has some advantages: it eliminates many pollutant energies, like in Québec, where 97% of electricity production is hydroelectric.
Hydroelectricity is one of the energies that produce electricity without releasing toxic waste and air pollutants.
The few greenhouse gases which are produced come from the plants decaying in the water. But this production can be reduced if some measures are adopted, like clearing in the regions concerned.
It's a renewable energy because it uses a natural resource, water, without wasting it or using it up.
Dams have positive consequences. They regulate the course of the river: it avoids floods and the damage which accompanies them.

A Three Gorges Dam model

Image: Wikipedia

The problem of the disruption of migrating paths can be partially solved by creating fish ladders.
However sediment deposition due to the dams cannot be prevented. Therefore, careful selection of the region where the dam is built is essential.
In the US dam removal has even caught the attention of water resource managers as a strategy for river restoration. Ensuing ecotourism creates as many jobs as dams.

Increases in the capacity of existing hydroelectric-generating equipment could be a transitory solution until other technologies such as photovoltaic systems become more efficient and profitable.



Quebec electricity production the last twenty five years

(Sources : Ministère des Ressources naturelles et de la Faune du Québec et Statistiques du Canada
Site: http://www.mrnf.gouv.qc.ca/energie/statistiques/statistiques-production-electricite.jsp)

Tom Le Divellec (15 years old), Jonas Seignover (16 years old), Thomas Vivier Boudrier (16 years old) Lycée G.Faure, Tournon - FRANCE.

Young Reporters
for the environment

From Waste to Electricity

Since the beginning of Industrial Revolution, most of the cities in industrialized countries, have been struggling with the wastes that are released by the factories. Besides the unwanted industrial wastes, which may cause irrepairable effects to the environment, the municiple wastes are also a problem that has been faced with. Thanks to the brainstormings of environmentalists all around the world, many different ideas have been found, in order to prevent the landfill problems.

Problems with waste management:
Like all industrialized cities, Ankara and Seixal have been having a waste management problem since they became one of the most populated cities of Turkey and Portugal. This problem has been gradually increasing as well as the population of the cities. For long years, the two cities have not recycled their wastes, instead they collected them in landfill sites which are not far away from the city centers. This not only caused some pollution problems but also threatened the lives of people living close to the areas with the risk of explosion, caused by the increasing amounts of methane gas.

Solutions:
In order to solve the waste management problems, in both cities a recycling facility have been built up, in which the gases that are produced from municipal and industrial wastes are converted into electrical energy. The recycling plants (Amarsul Landfill Site in Seixal and Mamak ITC Landfill Site in Ankara) also have impacts such as the removal of the risk of explosion, emission of odor, providing employment opportunities and reduction of gases that cause climate change in the landfill sites. Besides, they aim to decrease the amount of waste that has to be piled in the landfill area.

Mamak Landfill Site

Further research and development studies are ongoing for the application of innovative technologies for energy production from waste.

How the system works in a recycling facility: When the waste starts to decompose it produces gases. These gases are pulled out of the landfill to avoid combustions and explosions. There is a system of perforated tubes where the gas is drawn out - biogas wells. This biogas is made of a mixture of gases, carbon dioxide (CO_2) and methane (CH_4). Methane is used as an energy source, so it's important to know if there is enough amount of it in that mixture, so that about 45% to 50% can be dragged out.
In order to check the correct amount of methane in the biogas, there is an automatic system that measures it and controls the opening or closing the wells according to the amount needed. This system is controlled by technicians that can adjust the parameters of control. Ultimately, the biogas is compressed, burnt in motogenerators and converted into electric energy.

Biogas Well-Amarsul Landfill Site

The improvement of the environment in the landfill sites and in the surrounds is an important aspect, because in the Energetic Use of Biogas, the compounds that cause unpleasant smells, are drawn out and destroyed during the process. This is a means to reduce the unpleasant smells. Another important thing is that it helps reducing the greenhouse effect caused by gases with methane.

The recovery of biogas represents an energetic advantage to the economy in both countries: taken from waste products in landfill sites it generates power that can be used for self-consumption or/and sale to the National Energy Company. Moreover in Ankara the waste heat and energy yielded during the transformation of biogas is used for a greenhouse which is used to grow tomatoes.

Automotion- Amarsul Landfill Site

Greenhouse-Mamak Landfill Site

Cooperation article written by :
Pina Uslu, Gökalp Günes, Doruk Uz-METU High School - TURKEY.
Alef Salles, André Soromenho - Coordinator teachers: Meral ,Yilmaz, Alexandra Figueiredo
Escole Secundaria da Amora - PORTUGAL.

A New Fashion Collection 2050/2051?!

Are we going to need so much time to come to our senses? At the end, the only thing that will be left is adoring with our own rubbish. It is constantly rustling about the adopted laws or how they are adopted because of the protection of the environment, but we are witnesses of a factual condition that there is just a little change. They approach to laws as to the dead-letter on the sheet of paper for the sake of the fulfillment of the EU standards, while our trees suffocate in the plastic waste which decorates them instead of the greenery. It is a mournful picture for the tourists which we intend to attract by the fascinating scenery.

What is the origin of a plastic bag?
Plastic is a petroleum product – it is made of oil. As we all know, the oil industry is not a negligible problem and the cause of the world's financial and political disturbance.
Plastic is a by-product of the oil refinement and 4 % of the world's oil production is spent on its production. […]
The encouraging fact is that the paper bags are not the solution either. Even though they are decomposable, by which they are less harmful to the environment, the consumption of the resources is considerably higher. In essence, the best option is a linen bag or one made of plastic web or rope. They are made of renewable resources, their production requires far less energy, they are light, strong (capacity up to 15 kg) and they last for ages. They can be washed in the laundry-washer and it is nice to have them in the trunk. You can use them on the beach, market and supermarket too.

THE DESINTEGRATION OF AN ORDINARY BAG TAKES 1000 YEARS. DO WE REALLY WANT TO BE MENTIONED FOR THE PLASTICS?

The New Collection spring/summer 2050/51

These "wonderful" details that you see on our model, cracking and colorful like this, are the products of the oil derivatives. Strangely, once those were bags, plastic bags for one-time use for packing various things. Today, it is a fashion craze. Just the collar of our model costs a fortune, but do not let that confuse you. It will only cost us THE PLANET EARTH. Why? You dare to ask! It is simply imperishable; it will outlive you and your children because its lifespan is insured for 1000 years. And this fabulous "sun protector", it will outlive the UNIVERSE.

Ana Miranovic and Almira Skenderovic, IV grade (18 years old) Mentor: Jadranka Trsic Gymnasium "Niko Rolovic" Bar - MONTENEGRO.

Mobile Phones, Our Perilous Toys: Waste Pollution or Perfectly Recycled Tools ?

No doubt mobile phones are becoming more and more indispensable part of our lives. Due to unconscious usage, these perilous toys radiate deadly electromagnetic waves which end up harming the environment as well as human health. The starting point of our project was to raise awareness of the dangers of mobile phones and as electronic wastes to decrease the hazard they cause and recycle them.

Are you aware of the SAR value that surrounds you?

SAR (specific absorption rate) is an indication of the amount of radiation that is absorbed into a head whilst using a cellular phone. Once we set out on our project we realized that we do not hesitate to jeopardize nor our health or our planet. The striking outcome of the questionnaire we carried out on 200 people (high school students and teachers) in our school was thus:
The majority of people : kept their mobile phones under their pillows, had their mobile phones on for 24 hours, did not discard the mobile phones which no longer were in use but kept them as wastes, knew nothing about SAR value, yet they were selecting their mobile phones by their appearance or functions.

How to Exterminate Our Bad Habits

On realizing the usage error, we urged vigorous action to be taken immediately. To have our friends more aware of this delicate issue, we distributed brochures, settled a stand and had informative presentations. […] The impact of our action was amazing: the applicants started to use mostly Bluetooth or headphones. They quit keeping their mobile phones on for 24 hours. They stopped putting their mobile phones near their heads and hearts while sleeping. But above all, they did not keep their useless mobile phones at home, nor did they throw them out in the means of wastes! Fortunately, they became more conscious.

Spreading Our Cause

As Istanbul Cevre (Environment) High School students, we decided to arouse awareness of more and more people. The government supported us and arranged a meeting at « Mehmet Ipgin Primary School », a public school in Istanbul. We had the chance to make three sessions of presentations to nearly 350 students in the 5th, 6th, 7th, and 8th grades. As a result, they wanted to be part of this project by collecting electronic wastes.

Electronic Recycling Process

We had an interview with Feridun Topçu, the Head of Environmental Protection, on 17th of November in Sarıyer Environmental Protection Headship to develop our awareness about the project of electronic wastes to find out what the enterprises we could do. […]
Having gathered all the information, we put recycling boxes to all floors at school and collected electronic wastes. We gave these wastes to government for recycling. We had an information stand to display and dispense our numerous items. Pressed media supported our project by giving place to us in their local newspapers such as "Kadıköy Gazetesi" and "Kartal Gazetesi".
We strongly believe that our project will result in making people profusely conscious of the usage of mobile phones so that the production and waste rate will decrease.

Istanbul Cevre (Environment) High School - TURKEY.

Waste Problem

Have you ever seen such situation: sudden visit of guests, and the room, for some reason, needs cleaning? It usually makes the host feel uncomfortable, he starts searching for the excuse and blushes. It is normal and natural – everyone wants to look the best way in front of the others.

So what about the city? Why seeing dumps not far from the house we live in, we are not ashamed? Why did the thought that trash problem is unsolvable make us get so accustomed to it, that we do nothing to solve it?

[…] Let's take our settlement – Shakhan – as the example. Having carried out the investigation, we found out that street cleaners clean only the territory around town akimat [town hall] and three schools. Average wages of the street cleaners is 12025 tenge.

What do the citizens of Shakhan think? We've asked the people and got many controversial answers, but all of them lead to one point: the garbage problem is very important but nobody wants to solve it.

[…] So what should we do? Scientists consider that there is no universal way of solving garbage problem, and there can be none. What can we start with? First, garbage must be brought to the place, where its damage to people and nature will be minimal. There are very few wasteprocessing factories in Kazakhstan, and that means that garbage will be brought to the dump. Of course, it shouldn't be the "wild" dump, but the specially equipped dump.

How can dump be organized? Artificial waste heaps grow all over the planet. Average annual amount of garbage for every person is about ton, which is more than 5 billion tons in sum.

Some people may ask: what is the "life-period" of garbage?

Waste problem is becomes more complicated with the fact that natural decomposition of some materials takes some time. In nature dying plants and animals are decomposed with the help of the bacteria and become the particle of the soil. But recently the man had invented many synthetic materials, which can not be decomposed with the help of the bacteria.

Here is the table of decomposition period for some types of packages:

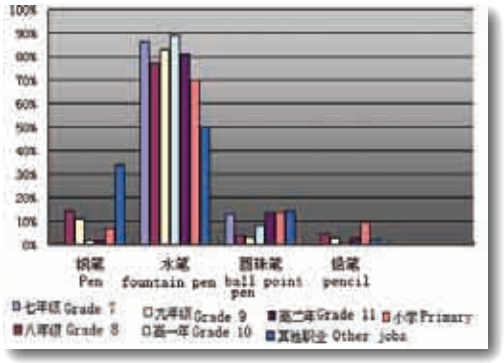
Paper	2-10 years
Can	~ 90 years
Cigarette filtertip	~ 100 years
Plastic bag	~ 200 years
Plastic	~ 500 years
Glass	~ 1000 years

Pereturin Bogdan, Gainullin Ildar
School №2, Shakhan settlement
Karaganda region - KAZAKHSTAN.

Report on refills

Pens play an important role in our life and study. A pen is a very small thing. But the waste it has caused is much. Refills are made of plastic pen tubes and metalline nibs. Not only the outer covering of the fountain pen but the outer covering of the refill is made of plastic and some other materials. Less makes more, it would waste a lot of materials.

From December,2008, we began carrying out the research in Sanming City. It took us one month. We mainly chose students, officials and businessmen as the interviewees. We use the sampling method to make the survey. We issued 1,300 copies of the questionnaire and took back 1226 valid copies. The questionnaire 'effective rate is 94.3%.



What kind of pens do you often use ?

According to the graph, we can find that pen, fountain pen, ball point pen and pencil are all being used. And among them, fountain pen is used most frequently.

How often do you use up a pen or change a pen ?

The service life of a fountain pen is short. It usually varies from 6 to 10 days. […] If we could recycle and reuse these pens, the waste would be cut down a lot.

When you chose a pen what do you think is the most important thing you need to consider ?

Most of the interviewees pay more attention to the function and quality when they buy a pen. This shows that consumers generally are more rational. Meanwhile there are some consumers who value the appearance and whether it is convenient to change the refill or not. […]

When you use up a pen, you will ?

According to the form, many people choose to keep the outfit, and change the refill, after their get-ink pen is out of ink, only the exquisite refills are saved. It reflects that most people have the sense of saving. […]
What we want to achieve is to recycle the numerous refills that have been wasted. Reusing refills can recycle material,and achieve the target of reducing the waste of resources. Manufacturers can also reduce their production costs and benefit from it. On the other hand, we want to inspire the environmental protection consciousness among high school students by recycling refill.
Come on ! Let's join in the environmental protection cause by recycling the refills.

He Wei (18 years old), Zhang Ziwei (17 years old), Huang Ting (18 years old), Guo Hongmin (18 years old), Shi Fei (18 years old). Fujian, Sanming, No.1 Middle School - CHINA.

Hunters of Waste frying oil

We all know about the sad story of our mother earth which is slowly coming to a bad end because of its residents who are its actual pollutants. As you all know, there are different types of pollution which can be summed up as air pollution, land pollution and water pollution.

We mainly focused on 'waste fried oil disposals' which is related to all of these types and how to recycle it as an alternative source of energy. As we found out, biodiesel is a renewable energy source and its production from recycled waste fried oils decreases carbon dioxide emission and prevents the reuse of these oils ,which shows ecotoxic properties after 2 or 3 times usage, in other foods and cosmetics . That's the reason why we started this project and try to enlighten people who don't know the importance of recycling 'the waste frying oils' First, we should be aware of how waste fried oils pollute the environment:

- 1 liter of waste oil can pollute 1 million liters of drinking water.
- Waste vegetable oils constitutes 25% of the domestic waste waters
- Waste oils cover the water surface and the oxygen transfer between water and air is obstructed.
- Waste oils block the drainage and the water collecting systems.

In time these systems can stop working properly and waste water treatment becomes more expensive. Basing on these facts, we decided to learn more and inform people living in ACARKENT site in which our school placed and about 10000 inhabitants live.
First we joined a symposium about biodiesel held in Istanbul by The Ministry of Forestry and Environment and we met the the authorities of ALBIYOBIR , a Biodiesel Producers Association and learned 350 000 tons of fried-waste oils is thrown yearly in Turkey and only 1% (one percent) of these oils are recycled, if these oils are converted into biodiesel, 750 000 tons/year carbon dioxide emission would be prevented and when it's expressed by numerical values 500 million Euro energy would be obtained.

We also learned that there are firms who have license to collect waste fried oils. Then we got in contact with the management of the site and wrote a paper about advantages of biodiesel and disadvantages of waste fried oil in the site magazine issued monthly .

We prepared a questionnaire about biodiesel, asking whether they know what 'biodiesel' means, that biodiesel can be produced from waste fried oils, that 1 liter fried waste oil pollutes 1 million liters of drinking water, that waste oil narrows and blocks the waste water collection systems (drainages and collectors) and makes waste water treatment systems work harder more than %25, that Ministry of Environment and Forestry of the Republic of Turkey has organized a new regulation which forbids to throw the used-waste-fried oils to garbage, water, soil, drainage, bans to re-use in the food and fodder industry and also use them in cosmetics or not, posted this on the internet to the inhabitants of our site and put this questionnaire on our school web site to be answered.

Lots of people got interested in our project and they contacted with us. The results of the questionnaire proved that more people have to be informed about biodiesel. We informed them how to collect waste fried oil.

We also got in contact with the 'Biodiesel Producers Association' and invited to our school to give a seminar. Prof.Dr. Selma Turkay who is a teaching member of Istanbul Technical University and also a board member of ALBIYOBIR accepted our invitation .

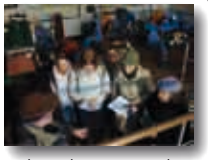
She gave us training on biodiesel production. After that, we visited a biodiesel plant and observed production. We got in contact with Beykoz Municipality and we had an interview with the authorities to learn what their projects are about biodiesel in the future.

We also visited McDonalds and KFC (Kentucky Fried Chicken) and asked whether they were collecting the used frying oil. We were happy to hear that they were recycling fried oils. As a result of our studies inhabitants of our site became familiar with biodiesel, the management got in contact with a licenced firm to collect waste fried oils and used fried oils are not being wasted in ACARKENT anymore and are being collected to be converted to biodiesel.

We promoted the thought of protection of nature by simple-solutions and we also made people realize that they could do a lot by just collecting their waste oils. People understood that biodiesel is an opportunity to turn an environmental problem into a environmental and economical advantage and we learned that education and taking action to protect environment ends with good results.

TED Istanbul College YRE team : Sacide Filiz Bilaloglu, Bikem Sonmezler, Ahmet Aslan, Furkan Kavak, Ezgi Gurtay - TURKEY.

The way of water



The primary school of Aizupe is the small school in Livberze district. And still 2006 our school is Ecoschool as well. This year we investigated what happens with waste water from our school.
We discovered that one people in one time in the school's bathroom use around 5-10 litres of water. This year in our school learn 199 students. The water treatment plant is 0,7 km far from the school where the water is treaten in mechanical and biological way. Later the treated water is drain in the ditch. Analysis shows that treated water is clean enough. Sewage sludge farmers use as fertilizers.
But we find out also several problems that might be solved. For instance, in the school we use non environmental friendly liquids. We think that in general situation with school waste water is satisfactory. To make situation better in the school and also in all rural district, we suggest to use environmental friendly products and more active inform people of these questions.

Santa Cimdina, Kristine Calite, Annija Embreksa, Inga Sika
Primary school of Aizupe, Livberze district - LATVIA.

Water management in Berzgale district

The water is our national wealth, but the amount of drinking water is limited therefore we must use it with care. People understand that nature resources are not endless. The result of unreasonable and considerate use of nature resources can be dramatic. Natural resources can be impoverished of unfair consumption and run low. The international environment protection organization WWF in report from 2002 says that because of intensive use of natural resources in next 50 years we can run off not only those natural recourses we use to get energy and food, but also drinking water. We would like to inform people of water quality in our district and also to get to know that people think about water quality and ways how to make situation better. We did survey for 70 people in our district and later met chairman of Berzgales municipality to inform him of results of poll and we told him about possible solutions in the future. Within the investigation we find out that people in our district are satisfied with quality of drinking water. Analysis shows that drinking water meets the sanitary requirements. The biggest problems are old sewers, which must be changed. As chairman of municipality informed us, municipality plans to do it in short future. We also conclude that the amount of drinking water use in our district is not so big, but still there are more possibilities to save it. We hope that people will understand how important is this problem and will more think about water saving. We hope also that they will understand the real value of water. And we are sure that our investigation can promote environmental friendly solution for water problems in our district.

Authors: Santa Reksne, Evita Kuzmina, Ruta Ivone, Edgars Sepovalovs, Signe Kroice (15 years old).
Primary school of Berzgale, Berzgale district - LATVIA.

Whom to blame... sometimes ourselves

Organic waste coming out of the elaboration of olives to produce olive oil is usually thrown into the sea from November to January when oil production is in process.

Their polluting capacity is much stronger than those of human waste but fortunately the weather conditions when it happens are appropriate to be moved away from the coast and accelerate their fission.

Besides the usual factors of sea pollution in the gulf of Kyparissia (pollution from olive waste, human waste and from waste (mainly oil) coming out of the passing ships, another one was revealed the last two years during the construction of the new pier.

Rain water that falls in the city area is reaching the sea through underground tubes.

Since the whole system of rain tubes is old it seems that some of our fellow citizens used (and some still do) to throw their everyday human waste in those tubes.

This polluted rain water reached the sea without anyone noticing what has happened so far because the sea currents were leading them far away from the seashore while dissolving them. […]

Measuring the pollution of the water in February (23-2-2009) we found out that the pollution level is almost 30 times greater than the accepted upper limit of pollution.

Fortunately only 100 m from the polluted area the pollution level is within the normal boundaries (table 1) since the sea capacity to dissolve the waste is very strong.

Upper limit of pollution 0,05 mg/l
Camping area-100m away from the rain tube exit to the sea : 0,02 mg/l
Rain tube exit to the sea : 1,52 mg/l

The mayor of Kyparissia informed us that the problem is known to the authorities and an effort has already been made to find those who pollute the rain water tube system but with small results.

The tube system is very old and it is difficult to explore it even with modern devices as robots. Instructions were given to the citizens to avoid throwing their waste in to the rain waters tube but little happened.

So for the time being the best solution proposed is the construction of a new tube system for the rain waters, something that demands at least one year to be completed.

We proposed to the mayor that signs of pollution should be put at the polluted area and actions should be taken to avoid further deterioration of the situation.

So far we have the mayor's promise that measures will be taken to restrict the problem before summer.

Until then we will continue measuring the pollution level of the sea and inform people and authorities about our actions and results.

Giannikopoulou Eleni, Georgakopoulou Eirini, Zoumbouli Niki, Theodosopoulou Konstantina, Tzoni Georgia, Dionisopoulou Marina, Katsarou Athanasia (16 years old). Dionisopoulos Anastasios members of the environmental team of the Lyceum of Kyparissia – GREECE.

Young Reporters for the environment

We depend on water to live

Water is a vital ingredient for both the diversity of life on Earth and for human well-being. Water is an indispensable element for life, where there is no water no life can thrive and exist. Where there is abundance of water we find thriving jungles and forests and therefore we obviously find an abundance of species. It is a well-known fact, where water is found abundantly the land will be much more fertile. Two of the most fertile valleys that are found in Malta are without doubt the Pwales Valley and the Burmarrad Valley. To summarize, water is a source of life that no living specie can live without. The water cycle scientifically known as the hydrological cycle is exactly what it is: a cycle where there is no beginning and no end. Water circulates round the earth. The driving force for this cycle is the sun.

1. Water vapour in the atmosphere comes from a number of sources mainly from evaporation; there we find heat from the sun which evaporates water from the sea and ground causing water vapour to float up into the air and form clouds.
2. We also find respiration where all living things burn up food forming Carbon Dioxide and Water which are expelled into the air.
3. There is also transpiration: there we find that in plants water is drawn up from the soil through the roots and evaporated from the leaves. As the water vapour in the atmosphere cools, it condenses forming tiny water droplets and then clouds are formed. Further cooling causes these droplets to fall as rain. This rain goes down through streams and rivers into the sea and as mentioned before the cycle begins again. […] Drinking water is taken from the sea and reservoirs and pumped through a Reverse Osmosis where it is treated and cleaned so that it is suitable for drinking. The water is then pumped into people's homes by pipes and can be used for drinking. […] The water is taken from taps and, when it has been used, goes down drains. The waste water finds its way to a Waste Water Treatment plant where it is treated before being discharged back into the sea. Industrial Factories sometimes take water directly from the sea and reservoirs. The water is used for many different things such as cooling, driving machinery and a diversity of activities. Again used water is sent to the Waste Water Treated plant. For agricultural uses farmers take water directly from the sea or reservoirs to water their crops. Sometimes farmers use pumps or machinery to get this water from reservoirs. Water purification generally means freeing water from any kind of impurity it contains, such as contaminants or micro organisms. The purification process contains many steps. The steps that need to be progressed depend on the kind of impurities that are found in the water. This can differ very much for different types of water. […] Little do we know or appreciate this source of life, it is such a commodity to us that we turn on a tap and water comes flowing out, but are we fully aware that these serious environmental issues that are going on in the world could dangerously effect water supplies such as pollution and deep evaporation from the UV rays.

Krista Degabriele and Dionne T. Gatt Form 4 Beta St. Monica School, B'Kara - MALTA.

Young Reporters for the environment

Water defense wall

Water is not just a simple "body" as philosophers thought, but it is one of the most complicated "bodies" (regarding its physical and chemical component), is one of the things difficult to obtain in "pure shape", if we can say so. Excepting the unsolved matters regarding the water's geological age on our planet, we observe that water is participating at the environment's profile.

We consider to be polluted that kind of water that has its composition or physical "shape" directly or indirectly transformed/affected by human being's actions, so that it can't be used in natural state.

To understand better what a natural and clean water means, we underline that water is not only a liquid but also an ecosystem due to its content of oxygen, carbonic gas and mineral salts. The pollution stage and also possibilities of clearing the water are appreciated by using two terms: the water's oxygen content and the presence of some toxic and damaging factors. The highest level that the toxic element can get to (so that even water can support without affecting species) is variable. The reduction of the content of oxygen and the poisoning with toxic elements is usually combined with the dirty water thrown from industry or agriculture.

Rogojeşti barrage is situated at 12 km from the entrance of the river Siret on the Romanian territory. The barrage is placed upstream near Rogojeşti (Botoşani county) and Grămeşti village (Suceava county) and it has the role of supplying Bucecea with clear, potable and industrial water, of reducing the powerful floods but also producing electric power.

This accumulation has been used since 1986. It has on the right side a defense wall for Siret town (having 3335 m) and a limitation wall on the left side (having 4003 m)- Fig. 1.
With a surface of 930 ha and a depth of 7 m,

Fig. 1. Rogojeşti barrage

Rogojeşti includes a rich aquatic plants divided in 3 biological groups: grassed area, floating plants and underwater flora. Upstream and on the sides, the reduced depths are favorising the appereance of many other plants, so-called the "rough flora", composed of species of thatch (Phragmites), reeds (Thypa), bulrush (Scirpus). As the process of water filtration is intensifying , this kind of associations are more extended.

[…]And even so, the pollution is not a fatality; the man (who developed this enormous technology which pollutes water) has the power to take measures to stop this dangerous process but also has the power to find solutions to clear the used water. The clearing stations are representing the most efficient way (for now) to treat and clear the pollute water, specially to clear the water used in house. There are, even so, some salts, toxins, detergents, household chemicals, pesticides which are passing even trough this "filter". For now, the only way for doing all of this is to stop throwing garbage in the waters and, like this, the functions/purposes of Rogojeşti accumulation will have their finality.

Breaban Adrian, Humeniuc David, Nejnec Danut, Iaholnic Cosmin, Ciobotar Bogdan and Ursachi Ilie. Teachers : Bologa Sorin, Filipiuc Mihaela. "Latcu Voda" Highschool Sire town, Suceava district - ROMANIA.

Μονόδρομος η αφαλάτωση

Η ανθρωπότητα πληρώνει το τίμημα της υπερθέρμανσης του πλανήτη, λένε οι ειδικοί.

Η Κύπρος πληρώνει το δικό της τίμημα, την ανομβρία. Έτσι το Κράτος αποφάσισε να προχωρήσει στη δημιουργία μονάδων αφαλάτωσης, καθώς η πληρότητα των φραγμάτων μόλις ακουμπά το 27%. Ορισμένες από τις μονάδες έχουν ήδη λειτουργήσει, ενώ κάποιες άλλες βρίσκονται υπό κατασκευή.

Η δημοσιογραφική ομάδα του Γυμνασίου Επισκοπής έκανε τη δική της έρευνα, θέτοντας υπό εξέταση τα υπέρ και τα κατά, που θα έχει η Κοινότητα Επισκοπής από τη λειτουργία της μονάδας αφαλάτωσης.

Δεν υπάρχει άλλη επιλογή

Η δημιουργία μονάδων αφαλάτωσης είναι η μοναδική σωτηρία για τον τόπο όπως δηλώνουν όλοι οι αρμόδιοι φορείς. Όπως εξήγησε σε δηλώσεις του στους νέους δημοσιογράφους της Επισκοπής, ο εκπρόσωπος του Τμήματος Αναπτύξεως Υδάτων Μιχάλης Καραϊσκάκης, «παρά τα μέτρα που έχουν ληφθεί μέχρι σήμερα, όπως η μεταφορά νερού από την Ελλάδα, η ανόρυξη διατρήσεων και οι περικοπές νερού, το πρόβλημα παραμένει και για αυτό μια πολύ καλή λύση φαίνεται να είναι η δημιουργία πολλών μονάδων αφαλάτωσης».

Η λειτουργία τριών μονάδων στην Κύπρο δεν έχει δώσει τη λύση που χρειαζόμαστε για αυτό κρίθηκε αναγκαία η δημιουργία και άλλων εγκαταστάσεων για αφαλατώσεις. Έτσι, εγκρίθηκε ως κατάλληλος για δημιουργία μιας τέτοιας μονάδας ο χώρος κοντά στην Κοινότητα της Επισκοπής.

Το 30% των κατοίκων ανησυχούν

Η απόφαση αυτή του Κράτους δεν προσέκρουσε σε αντιδράσεις από πλευράς της Κοινοτικής Αρχής. Ωστόσο, μια μεγάλη μερίδα των κατοίκων ανησυχεί. Σύμφωνα δε με τα αποτελέσματα μιας μικρής έρευνας που η ομάδα μας διενήργησε, περίπου το 30% των ερωτηθέντων, πιστεύουν ότι η μονάδα αφαλάτωσης θα προκαλέσει περιβαλλοντικά προβλήματα.

Όμως, όπως ανέφερε σε δηλώσεις του ο Κοινοτάρχης Χριστοφής Αντωνίου, «καταλήξαμε στο συμπέρασμα ότι δε θα πρέπει να υπάρξει περαιτέρω αντίδραση».

Σύμφωνα με τον κ. Αντωνίου, «το αντλιοστάσιο, θα γίνει 100m μακριά από τη θάλασσα, για να μην επηρεάζονται οι χελώνες που γεννούν εκεί και οι αγωγοί του αντλιοστασίου θα είναι υπόγειοι».

Παράλληλα, είπε, «στη μονάδα θα εφαρμοστεί η μέθοδος της αντίθετης όσμωσης που είναι φιλική προς το περιβάλλον».

Και η ασφάλεια του νερού;

Το αφαλατωμένο νερό προκαλεί από μόνο του μια «δόση» ανησυχίας για την καταλληλότητά του. Μιλώντας στη δημοσιογραφική μας ομάδα, η προϊστάμενη του Εργαστηρίου Γενικών Αναλύσεων Νερών του Γενικού Χημείου του Κράτους, Ελένη Λοΐζου ανέφερε ότι, «το αφαλατωμένο νερό θεωρείται πόσιμο, αφού πριν δοθεί για κατανάλωση ελέγχεται για καθορισμένες χημικές και μικροβιολογικές παραμέτρους».

Η διαδικασία της αφαλάτωσης δε μειώνει την ποιότητα του νερού, αφού όπως είπε η κ. Λοΐζου, «το αφαλατωμένο νερό, περιέχει τα ίδια χημικά στοιχεία του φυσικού νερού και ο καταναλωτής δεν πρέπει να το φοβάται».

Διστάζουν, αλλά αποδέχονται

Οι κάτοικοι Επισκοπής, όπως προέκυψε από τις απαντήσεις που έδωσαν στα ερωτηματολόγια που ετοίμασε η δημοσιογραφική μας ομάδα, αν και παρουσιάζονται κάπως ανήσυχοι για τις επιπτώσεις στο περιβάλλον από τη λειτουργία της μονάδας, θεωρούν ότι το αφαλατωμένο νερό θα βοηθήσει στην αντιμετώπιση της λειψυδρίας.

Συνολικά ερωτήθηκαν 90 κάτοικοι. Οι 39 πιστεύουν ότι με τη δημιουργία της μονάδας θα επηρεαστεί το περιβάλλον και θα δημιουργήσει προβλήματα στην περιοχή.

Η συντριπτική πλειοψηφία των ερωτηθέντων γνώριζε τι είναι η αφαλάτωση (81 ναι, 9 όχι), ενώ στο ερώτημα, εάν συμφωνούν με τη δημιουργία της μονάδας αφαλάτωσης στην Επισκοπή, μόλις 11 απάντησαν αρνητικά.

Στην ερώτηση, εάν πιστεύουν ότι η μονάδα θα ωφελήσει την περιοχή, 75 απάντησαν θετικά. Τέλος, οι 79 υποστήριξαν ότι η μονάδα θα βοηθήσει πολύ στο θέμα της ανομβρίας και μόλις 11 απάντησαν αρνητικά.

ΓΥΜΝΑΣΙΟ ΕΠΙΣΚΟΠΗΣ

Των μαθητών:

Νικόλα Κουρρή, Γ1
Σοφίας Γεωργίου, Γ4
Λουκά Λουκά, Γ3
Άντριας Πρώτου, Γ6
Ραφαέλας Ηλία, Γ4
Ιφιγένειας Χατζηγιάννη, Γ6
Ανθής Χατζηκυριάκου, Γ2

Υπεύθυνη Καθηγήτρια: Στέλλα Περικλέους
Γενική Επιμέλεια: Μαρία Πολυκάρπου Β.Δ - CYPRUS.

Sea pollution

The readers of this article may be expecting to read about the now well known problems of sea pollution. They will think that we, like millions of others, will talk to them about the endless rubbish on the shores, the oil spillages and anything else that causes sea pollution. People already are aware of these. They know about the consequences…

Have we ever thought about what the sea really is, what's hidden within it? The sea isn't just a huge area covered by water. It's a source of life. A weird yet magical place. Fish of different species and colour. Seaweed that decorate the depth of the sea with their colour, making it magical and wonderful. Something that human imagination can't reach.

We, however, do not appreciate and do not hesitate to go into temptation to help aggravate this problem. How many times have we rejected a beach because it was dirty? Choosing another, and upon departing we leave it in the same state as the ones we reject due to the amount of litter found there? How many times have we denied that we have polluted a coastline, pretending to be ecologists? But then how does all the rubbish fill up the shores every day?

We always blame others. […] This, is a tragic mistake and it is a sign of being irresponsible on our part. We have to wake up from our eternal slumber and become more sensitive to the issue. We must find some effective solutions for this problem.

According to the statistics yielded from the poll of the "Young Reporters For The Environment" team of our school, only 5% of women and 15% of men admit to polluting the sea in any way. Additionally, everybody is willing to walk 15 metres to find a garbage bin to throw away their rubbish. The question is then: how is it possible that our coastlines are full of garbage when no one is littering? The answer is simple, few people care to admit to this mistake, which means that subconsciously are aware that while they are polluting they know it is wrong to do so.

Furthermore, according to our research, the most polluted beach in Larnaca is Finikoudes, because of the many people that go there as well as the marina that is located there. Second to that is the Dhekelia beach, due to the oil refineries and lastly is the Mackenzie beach, due to the airport.

There are many solutions to these problems, but the most important is to keep these simple so that each and everyone can help. For example helping to clean up the beach. Some schools in Cyprus have organised 'beach cleaning days', where the students pick a beach in their town which they clean. That, can be a beginning but it is not enough. Another way is by picking up and throwing away any rubbish we may find, but most important is to dispose of our litter correctly.

Municipalities should also become more involved, after all they gain the most. Fine systems (which can be set up so that they are relative to the problem caused)can be implemented specifically for (a)individuals, so that they avoid throwing any rubbish away, (b) businesses such as hotels and restaurants, so that they are prevented from disposing their rubbish near the coastline and (c) larger industries such as ports and refineries which can be fined every time a leak is detected.

[…] It is upsetting and worrying that what really doesn't exist is the willpower humans need to solve to these problems. We mustn't just say that we want to help, but we must show it in our actions. The time has come for both the strong and the weak to work together and fight against the sea pollution problem. Otherwise the consequences will be severe.

By Aggelidi Natalia, Athanasiadou Maria, Arabova Kristina, Georgiou Marita, Karaoglidou Christina, Patsia Despo, Patsias Michalis & Tosounidou Maria Age: 15 - Evriviadio Gymnasio Larnaca - CYPRUS.

Modna kolekcija 2050/2051 ?!

ZAR ĆE NAM STVARNO TREBATI TOLIKO DUGO DA SE OSVESTIMO ? Na kraju jedino sto će nam preostati jeste da se kitimo sopstvenim smećem. Stalno se šuška o zakonima koji se usvajaju ili koji su usvojeni zarad zaštite životne sredine a svedoci smo činjenišnog stanja da se slabo šta mijenja. Zakonima se pristupa kao mrtvom slovu na papiru zarad zadovoljavanja standarda EU,a naše drveće se guši u plastičnom otpadu koji ga krasi umjesto zelenila. Otužna slika za turiste koje želimo da privučemo zanosnim pejzažima.

Kako nastaje plastična kesa ?

Plastika je petrolejski proizvod - pravi se od nafte. Kao što znamo, naftna industrija nije zanemarljiv problem i uzrok je svetskih finansijskih i političkih nemira. Plastika je nus-proizvod rafiniranja nafte i na njenu proizvodnju se potroši 4% svetske proizvodnje nafte. Ona je 'biogeohemijska' manipulacija odre enih svojstava nafte u polimere. Ne propušta vodu i može biti otporan na UV zrake. Bilo šta se može odštampati na njemu i može biti recikliran. Sa sudbinom plastičnih kesa smo upoznati. **Pa i sve da hoćemo da ih ignorišemo, slike pored puta se same nameću. Ali podsetimo se još jednom.**

Kao papir, plastične kese mogu završiti na dva mesta: na deponiji ili u centru za reciklažu. Ako završi na deponiji, ostaće nepromenjena hiljadama godina. Plastika se ne raspada. Pomiješano sa plastičnim proizvodima, ubre ne može da se raspadne tokom vremena. Deponije su hermetične, što objašnjava fenomen da posle 20 godina možete naći hot dog ili novine sa savršeno čitljivim člancima.

Ni spaljivanje plastičnog otpada nije rešenje. Mastilo i aditivi u plastici mogu stvoriti dioksine kada se spaljuju kao i emisiju teških metala. I sam pepeo je otrovan i treba ga odložiti u deponije za toksične materije. Postavlja se pitanje, da li to opravdava dalje korišćenje ograničenih prirodnih resursa ?

Obeshrabljujuća činjenica je i to da papirne kese nisu rešenje. Iako su razgradljive, a time i manje štetne po okolinu, potrošnja resursa je znatno veća. U suštini, najbolji izbor je platnena torba ili ona od plastične mreže ili kanapa. Napravljenje su od obnovljivih resursa, njihova izrada zahteva veoma malo energije, lagane su, izdržljive (nosivost im je i do 15 kg) i traju godinama. Mogu biti prane u mašini i zgodno ih je držati u gepeku. Možete ih koristiti na plaži, pijaci i naravno supermarketu.

ZA DEZINTEGRACIJU OBIČNE PLASTIČNE KESE POTREBNO JE 1000 GODINA. ZAR STVARNO ZELIMO DA NAS PO PLASTICI SPOMINJU ?

Ana Miranović i Almira Skenderović, IV razred, Gimnazija „Niko Rolović", Bar
Mentor: prof. Jadranka Tršić - MONTENEGRO.

PHOTOGRAPHY COMPETITION

In the 2009 Photography competition, five Awards were given. For the first time, the jury could not achieve a consensus on the award for Best Picture. They were equally divided in two groups, so they decided to award both pictures first prize.

ENERGY SAVING AND FRIENDLY ENVIRONMENTAL WATER MILLS - CHINA

There are two water mills in Anning urban area .there is a beautiful river called Tanglang River which is around the town experts on environment would like to suggest that architects set some watermills to generate electricity. As we know, water mills can generate electricity by running water. It's a good way to generate electricity for sustainable development. The two water mills are also a beautiful landscape in the local place at the same time. The two water mills can carry water to irrigate the farmlands which are around. So there are many Cole farmlands around the two water mills. Every spring, there are many beautiful Cole flowers; they look like a yellow flower sea. It's very beautiful and it's a wonderful place to your trip. Do you like the two water mills? Would you come here to visit it ?

Yang Yajun (17 years old) School: Anning middle school .

GRASSHOPPER IN STOLEN MULBERRY ! WATCH IT ! ROMANIA

By visiting and observing biotopes encountered in some of the protected national from Romania we can meet and admire the many species of animals and plants... The National Park "Buila-Vanturarita", Romania

Irina Marinescu & Georgiana Oproiu, 8th grade - Teachers: Sorina Victoria Grosu & Corina Arghira, Eco-School No. 11 Mihai Eminescu, Pitesti, Arges .

RAINBOW – GREECE

During the educational trip of our environmental group from Ios island to Piraeus, on the 18th of February 2009, our ship put in at the port of Naxos. The weather was wet and foggy, but, when we arrived in Naxos we where welcomed by a multicoloured rainbow which appeared suddenly near Portara, the big marble portal of the temple of Apollo. Through the dreary, cloudy weather, the rainbow entranced us with its dazzling beauty, with its red, yellow, orange, blue and violet colours. This image did not only remind me of the scientific explanation of the natural phenomenon of the rainbow, but also brought to my mind the Greek mythology according to which the rainbow is considered to be the path between the sky and the earth.

Stavraki Georgia (16 years old) "Valetio" High School.

BEES : BLOSSOMS IN JAIL - CYPRUS

On the east coast of Cyprus, two endemic species (Pancratium maritimum and Euphorbia) of the sandy beaches of Cyprus struggle for their survival. This tragic outcome is due to intense human activity and the cataclysmic development of tourism along the coastline. The greedy approach of humans has forced the local authoritiesto take some curious but drastic measures. The plants are put in "jail" as the only means of their protection. What must be done for these wonders of nature to blossom freely?

Georgiana Panteli, (15 years old), Gymaseum of Peace and Freedom, Dherynia.

PICNIC AREA AND RECYCLING – TURKEY

We thought with my friends that picnic areas are the best places to recylce. We can save our world if we recycle even the smallest particles. Throwing the garbage away doesn't mean that it's worthless, in fact it is very valuable.

4th PRIZE

WHITE CLOUDS ON THE RIVER – CHINA

This picture was taken by accident at a certain part of the Tanglangchuan River. The scene was very fearsome though it doesn't look always like this. From the picture, we can see the water in the river was dirty and smelly. It was obvious that the river had been badly polluted. There was a lot of rubbish in the water and thick foam was floating on the water. A strong wind was blowing the foam into the air at that time and some of it was blown onto the trees on the banks. The scenery nearby along the river was beautiful but it was destroyed by the terrible river.

Chen Hong, Anning Middle School.

SCENERY & GARBAGE - CHINA

Look at the beautiful river landscape and the city scenery on picture, but through a low wall, there is a lot of garbage in the left side .It's really a poignant contrast. It shows that we has developed natural environment and economy, but we forget the garbage. It seems that no one care about it, just leave it stay there. Well, our aim is to keep development and ecological environment balanced and overall, and follow sustainable development. So the government should make a plan in order to clean the city thoroughly. Later, our city will be more beautiful and really clean everywhere.
Get out the stain, cleaning is coming.

Yunjie Yang - Class 5, Grade 1
Tianjin Experimental High School.Tianjin.

DANGEROUS WASTE – CYPRUS

Empty sites in the cities or even in the countryside are places where old cars are usually carelessly dumped. Other materials such as empty gas cylinders are also dumped in the same way threatening human safety and health.

Saint Neophytos Lyceum, Paphos .

THE PLASTIC BAG – LATVIA

The way how we use plastic bags are so different – usually we put there products, but somebody use them as umbrella. But anyway we must remember that plastic bags are serious threat for nature.

Oskars Vasiljevs, Rezeknes 6th Secondary school, Rezekne .

ALIEN SPECIES : A THREAT TO INDIGENOUS SPECIES – MALTA

Biodiversity is the variety of living things in an area. This includes the relationships between living things and their environment. However, biodiversity is being threatened by human activities and its importance is worth more than we think.

With biodiversity, we are able to have food, clothing, medicine, and fuel. It also provides us with clean air and water. Without biodiversity, it would be hard or impossible to survive. Threats to global biodiversity include natural extinction, an event that occurs to species yearly, as well as human activities such as pollution, habitat destruction, deforestation and invasion of alien species. The introduction of non-native species to an ecosystem is one of the major causes of decreased biodiversity. These species do not belong to ecosystems in which they are **either** intentionally or unintentionally placed. They tend to disrupt the ecosystem's balance by multiplying rapidly.

One of the alien species common in the Maltese islands is the Cape Sorrel (Haxixa Ingliza). It was actually introduced into a Botanical garden in 1811 and spread not only all through Malta but also all through the Mediterranean. The seeds are blown away by the wind and one can see it growing everywhere, even in areas where it is difficult for any other plant to grow.

Other alien species common in Malta are the Common Poppy, Crown Daisy, Prickly Pear, and Eucalyptus.

• One of the most important ways to help threatened plants and animals survive is to protect their habitats permanently in national parks, nature reserves or wilderness areas. There they can live without too much interference from humans. Also they are protected from the spreading of alien species.

• If you can, plant native plants instead of non-native in your garden. Native grasses, flowers, shrubs and trees are more likely to attract native birds, butterflies and other insects, and maybe even some threatened species.

Marie Claire Zammit and Michela Galea St Monica School Gzira.

FUNGUS THAT CUT HIGH – ROMANIA

By visiting and observing biotopes encountered in some of the protected national parks we can meet and admire the many species of animals and plants ...

Fungus that cut high.
The National Park "Buila-Vanturatita", Romania

Irina Marinescu & Georgiana Oproiu, 8th grade Teachers: Sorina Victoria Grosu & Corina Arghira, Eco-School No. 11 Mihai Eminescu, Pitesti, Arges.

PALM TREES GRAVE - MOROCCO

A field in Deraa palm grove was destructed by fusarium disease and sand encroachment, and has become a mass grave for the palm trees, so we sound the alarm... to protect this environmental heritage from extinction.

Hafsa Aït Mouna, Fatima Zahra Ghazali, Fatima Zahra Benmoussa, Lamia Boutedghart, Meryem Ouafiq, Imane EL Ayachi, Jaouad Boudouar, Slimane Hanin - Supervisors: Adil Moumen, Abdelhaq Sayhi, Merouane Hamdani, Sidi Ahmed Bennacer High School.

2nd PRIZE

"ENVIRONMENTAL" KITCHEN - MONTENEGRO

An interesting idea of „environmental" kitchen! But, DOES it fulfill ALL standards ?

Jelena Maslovar and Lea Prorocic III grade (17 years old) mentor: prof. Fikreta Adrovic - Gymnasium, Kotor.

SCRAP THE OLD POWER STATION ! – MALTA

Pollution is the process of polluting the earth or atmosphere with dangerous substances. Trucks, factories, hotels, power stations, hospitals, cruise ships and other industrial sites produce pollution. Trucks, cars, buses and other transportation cause bad fumes. Power stations and factories pollute the atmosphere. In Marsa, there is a power station that generates electricity. It is situated at the Marsa end of the Grand Harbour near the houses. This old power station in Marsa is causing damage to the people who live nearby. It causes dirt and breathing problems to many people. They suffer from respiratory problems such as asthma. The power station also messes up the environment. To solve this pollution problem, the Marsa power station should be removed and closed down forever, so that people can have a healthier life. It is cleaner and healthier to use solar and wind energy. Enemalta should use solar panels and wind turbines to produce electricity. I can reduce pollution if I use electricity only when it is needed and reduce waste of energy.

Mariel Bartolo St Monica School, Gzira.

FREEPORT OF RIGA – LATVIA

Lately in the Freeport of Riga increased cargo turnover. People who live near by the Freeport area are concerned because so near from their houses are woodworking enterprises, where every day goes lot of trucks with timber, and oil terminals. They can smell oil in their houses what can harm their health.

Anastasija Fadejeva (17 years old), Riga Rinuzu Secondary school, Riga.

CHIMNEYS IN THE SEA – LATVIA

In photo you can see Mazeiku oil factory in frontier area of Latvia and Lithuania. Near by this factory is also small rural district Ezere – the place I live. It seems that amount of emissions in Mazeiku oil factory is not exceeded, but very often we can smell in the air the oil. There is not possible to air houses or just walk in the fresh air. More often people are ailing with respiratory diseases, but nobody actually hasn't investigated reasons of it.

Liga Krumale (18 years old), Secondary school of Ezere, Ezere, Saldus district.

ISTANBUL FROM THE EYE OF SEAGULL – TURKEY

I'm a seagull,a seagull that flies around Istanbul since its ancient times.I got old and I have to rest.I compare the first sight and the last view of Istanbul and I see a lot of difference.We used to swim here,now we can't because it's too unhealty.The polution destroyed our meals.We are weak and exhausted now but in order to make our lives better we must leave here.

RECYCLING THE FUTURE - CHINA

Cans and plastic bottles are two most commonly found items of classroom garbage. Innovative students spontaneously collect and send them to the recycling center and add the money coming from selling such items to the class fund for more environmental projects. Thus by improving details in their daily life students not only contribute to the sustainable development, but also keep in mind the responsibility everyone shoulders for creating a better planet. Moreover, as time goes by, small but persistent everyday efforts may ultimately lead to huge, far-reaching differences.

3rd PRIZE

WATER, SOURCE OF LIFE ? – PORTUGAL

The human action, through the substances that it releases to the river or the practices of an intensive agriculture, has led to the growth of both organic and inorganic matter that exists in the water courses.

This excess of nutrients causes a large growth of algae and others microorganisms, lowering the available oxygen what's meaning reduction of the quality of the water. This phenomenon is known as eutrophication. The fact that the water is covered by all these decomposed substances makes it difficult to move the oxygen and the entry of sun light disturbing the species which make that their habitat.

Daniela Afonso, Joana Lopes, Tiago Damião. Escola Artur Gonçalves, Torres Novas.

THE BEAUTY – MONTENEGRO

The beauty is something we should believe in Traveller, stop for a moment in front of it, rest your eyes and let beauty fill your soul

Milica Djurović and Tijana Tomašević
Mentor: prof. Radojka Karanović
Gymnasium "Petar I Petrovic Njegos".

POLLUTION IN COUNTRYSIDE – CYPRUS

The number of vehicles which complete their circle of life and are out of circulation every year in Cyprus, has enormously increased. These cars as well as old tyres become waste and are carelessly dumped in the countryside causing serious polluting effects.
Saint Neophytos Lyceum - Paphos.

1st PRIZE

BEES : THE COLOUR CATALYSTS - CYPRUS

Aren't they fascinating? There are 20,000 known species of bee and they are found on every single continent of earth except Antarctica...
One theory states that cell phone radiation seriously interferes with bee's ability to navigate through the air. The theory is that signals from mobile phones interfere with the bee's natural radar, the in-built satellite-navigation systems that guide them to their hive.
Without their help in carrying pollen from plant to plant as they gather nectar, hundreds of different species of flowers, fruit and vegetables would be facing extinction. Without the humble bumblebee we would soon go hungry at the very least.
Einstein once said "If the bee disappeared from the surface of the earth, man would have no more than four years to live." No more bees, no more pollination ... no more life! Bees have gone missing from hives around Europe. Shouldn't this buzz an emergency bell ?

Marcos Loizou, 3C, (14 years old), The Grammar School.

OLD CAR DUMPED IN THE FIELDS - CYPRUS

The sudden and continuous increase of the number of new cars in Cyprus has led to incontrollable abandonment of old cars, which have reached the end of their useful lives and are out of circulation. Abandoned cars are usually left in empty sites in the cities or even in the countryside.

Saint Neophytos Lyceum - Paphos.

WORKING WITH NGOS – MALTA

As GeoClub members we have been working in collaboration with various NGOs in regards to Global issues. The initiatives carried are in relation to Global Education Week organised by the North South Centre of the Council of Europe, Connectando Mundos of Inizjamed, Global Action Schools of KOPIN, Young Reporter for the Environment organised by Nature Trust and Water for Life of SOS Malta. We also cooperate with the Geography teachers in order to set up displays at school to raise awareness amongst students and visitors regarding issues such as Climate Change, Fair Trade, Poverty, Inter-Cultural Dialogue and Water. We have also attended seminars organised by the SKOP Platform of NGOs.

Vella Kurt , Farrugia Clifton, Baldacchino Stefan , Schembri Bonnici Dylan ,Xuereb Izakiel, Farrugia Jeremy, DeBattista Nathan ,Micallef Marvin St Margaret School.

THE FOREST IS OURS - MOROCCO

Our bodies are small but our wall is strong. Why do we deprive the forest of its life, while it is our life too, and the source of our wealth?
How come we do not hear the tree's cry asking only for a painless body?
We will stop and continue in building a strong wall, as our hearts bleed from hearing the tree's moaning.

Meryem Bounhir, Anass Mouaatik, EL Houssine Aït Hmad, Khaoula Boulkid, Mohamed Lamqadem, Sakina Idbouyassine, Abdellatif Bayfou, Aliya Merdoudi, Soufiane Chabnid, Khadija Melk Rouss, Mutapha Essalhi - Supervisors: Khadija Zekrit, Khadija Hinai, Mohamed Toulout, Mustapha Snoussi Abtih, High School.

THE GREEN SPACE IN SAKIA AL HAMRA RIVER, STUCK IN THE MIDDLE BETWEEN SAND AND WASTE WATERS - MOROCCO

Mechanical stablization is one of the most effective preventive measures to repel the continous sand encroachment in the affluents of Sakia Al Hamra river. However, in front of the strong sand dunes, which are approximately like waves, such measures are still unable to repel them, and despite the tremendous efforts made by the local authorities including the biological stabilization and sweeping sand on the river's twists and turns, besides exporting , stuck in the middle between sand and waste waters, and hence, the first and the last to be mostly affected is environment..

Saïd El Koubi, Mohamed Lhirhar - Supervisors: Abdelaziz Faarass, Lemsalla High School.

ROUGH STREET - CHINA

The street has seen the development of the city. The ground used to be tidy and even and played an important role in people's life. However, the bricks lose the former beauty. What's more, there is some potential danger lurking everywhere. People should take cake and mind their steps.

1st PRIZE

A BLACK HOLE IN THE CLOUDS – PORTUGAL

The 225 meters tall chimneys from a thermoelectrical central in Sines, Portugal, supposedly prevent pollution from contaminating the surrounding areas. However, miles away some other small town feels the pollution it causes. Will we see the day when this no longer needs to happen ?

Escola Sec. 3º CEB Al Berto, Sines.

MAY THINK ! A WORLD FULL OF GARBAGE – ROMANIA

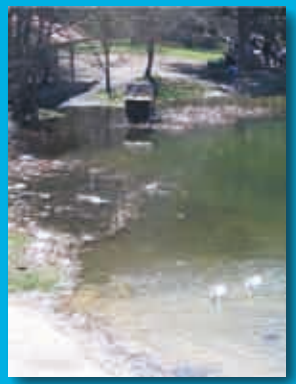
Many people do not respect nature. When people want to throw out something, they mostly don't think that it could be recycled. This is a very serious problem in our country. Try to imagine a world full of garbage, unbreathable air and water that you can not drink... a hell on earth. Try to change some things for a cleaner and more healthy life! People should be more careful when they want to throw out something. They should think more about the environment, because their life depend on that.

Abrudan Sergiu, Ursulean Tiberiu, Nicula Andrada - Teachers: Letitia Morariu, Cerasela Lascu, Ramona Gancea "Tudor Tanasescu" High- School Timisoara town, Timisoara district.

FIGHT FOR SURVIVAL BETWEEN HOUSING AND ARGANIA - MOROCCO

As a result of housing crisis in Essaouira, urban encroachement has been extended to the South (Al Ghazoua Region) to the detriment of forest space, which has been subject to uprooting and deterioration to the extent that the forest has become surrounded by cement. This situation leads to many drawbacks among which:
*Reduction of forest space for Argania
*Surface erosion contributes to the increase of earth temperature
The extinction of the region's animals
It has become obligatory to take some measures now that the world suffers from greenhouse effect, among which, we suggest the following:
Enforcement of laws stipulating the protection of forest area,
Reconsideration of urban planning so that the extention of the city will be achieved in bare regions
Establishement of a green zone around the forest to protect it.
We wish that the forest will succeed in surviving against the ghost of real estates speculators.

Charifa El Hili, Khadija El Ghalbi, Adil Amara, Ayoub Ouakrim - Supervisor: Hassan Khertat, Sidi Mohamed Ben Abdellah High School.



WHAT A BEAUTIFUL PLACE TO LIVE – TURKEY

This photo was taken near a lake in Gölcük. As you see, there are ducks which try to survive in the lake full of garbage. On the background a group of people, who came to this area, intead of throwing their waste into the rubbish bin, they prefer to throw it into the lake. That's why ducks and garbage live in the same place. We, as humans, don't let them live in their natural world. Can you imagine living in such a place ? Don't they deserve to live in a better world ?

FROM THE STONE, LIFE WAS BORN… – PORTUGAL

A plant grows at the seaside among the volcanic lava vestiges that long ago flowed into the Atlantic Ocean. Life appears from the heart of the basaltic dead nature to collide with the saps that surround it. During our research we found a richness of species, some of them endemic from the Azores, around the island's coastline. This picture is a reflection of the most pure and precious our island offers: our landscape! And it is this nature that the inhabitants of Pico must strive to protect and safeguard for themselves, for those who visit the island and for the future generations.

Young Reporters for the Environment from Escola Profissional do Pico, Azores.

RED BUG FLOATING ON THE GRASS IS A THREAD – ROMANIA

By visiting and observing biotopes encountered in some of the protected national parks we can meet and admire the many species of animals and plants ...

Red bug floating on the grass is a thread.
The National Park "Buila - Vanturatita", Romania

Irina Marinescu & Georgiana Oproiu, 8th grade
Teachers: Sorina Victoria Grosu & Corina Arghira,
Eco-School No. 11 Mihai Eminescu, Pitesti, Arges.

« LET'S TALK TRASH ! » – MONTENEGRO

Milica Barada, Nemanja Radonjic, Martina Odžic, Nikita Supic, II mt (16 years old)
Secondary school "Mladost", Tivat.

DONT' BE AFRAID TO MAKE THE WORLD GREENER ! – LATVIA

What you do if you see the plastic bottle on the ground? Don't afraid to bring it up and throw it into write recycle bin!

Arturs Kitrovskis (18 years old) , Rigas 2nd Secondary school, Riga.

5th PRIZE

A MIRACLE WORKER – PORTUGAL

This man is separating paper and carton for recycling. If we separate correctly we can help him and, at the same time, save hundreds of trees.

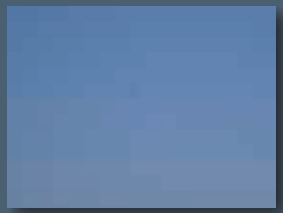
Escola Sec.3º CEB Poeta Al Berto, Sines.

WASTE OF ELECTRICAL ENERGY – MALTA

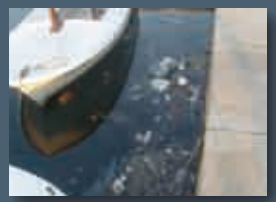
This picture is showing the lights in the street still on during daytime. This photo was taken at around half past ten in the morning and all the lights in Birkirkara were still on.
We aren't actually responsible for the lights in the streets; however we can call the Local Council and let them know about the electrical waste. Nonetheless, we can still prevent light wastage in our homes. We can do this by turning the lights off when they are not needed and using sunlight as much as possible. We can use dimmers, low-wattage bulbs or fluorescent light bulbs in areas where bright light is not necessary. We can use ceiling fans instead of air conditioners, and use gas heaters instead of electric heaters. Also only heat the room which you are using. We should always hibernate or shut down our computer when we aren't using it. The saved electricity is "stored". It's stored in the coal or other fuels that didn't have to be burned because we would have used less electricity than normal.

Nicole Marie Fenech Form 2 Emeralds St. Monica School Gzira.

PHOTO STORY « SPRING » – MONTENEGRO

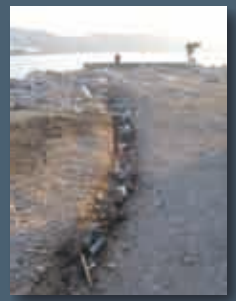


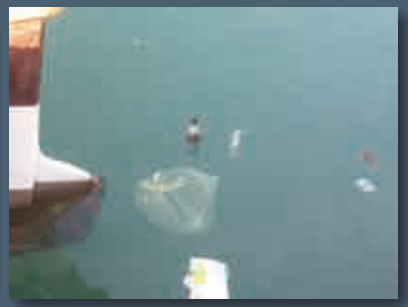
Its spring and they are coming



Here they will drink water, perhaps ?

Maybe they will nest here ?





We are ecological state, we readily wait for them...

Student: Milos Nikolic I-5 (15 years old) Professor: Merima Djukic Secondary agricultural school Bar.

ENJOYING THE NIGHT SKY BY REDUCING LIGHT POLLUTION – MALTA

Dingli cliffs must be the best place to observe the sky at night. On November 21st 2008 Mr Azzopardi from the Science Department of our College in collaboration with members from the Astronomical Association organised an Astronomical Night so we students could learn more about the planets and the constellation that surrounds our world. This year 2009 happens to be the 400th anniversary since Galileo Galilei first pointed his telescope towards the sky. This night prepared us for this memorable event. Even though it was very windy and quite cold, I must say it was a remarkable outing where experts talked to us about the stars, their names and how they came to be. It was a very interesting experience.
However, unfortunately, we find that light pollution can prevent us from seeing the night sky as clearly as we would like it. By light pollution, also known as photo pollution or luminous pollution, we mean excessive or obtrusive artificial light including poorly designed street lights, glary decorative lights on billboards, football grounds and shop signs. We can define this as bad lighting. Good lighting is properly shielded light that does not leak upward or sideways. When well designed and properly installed, outdoor lighting can be and is very useful in improving visibility thus minimizing energy waste paid by you and me. Furthermore, people can continue to enjoy the beauty of the night sky even if they live in the centre of urban areas.

Christopher Busuttil.

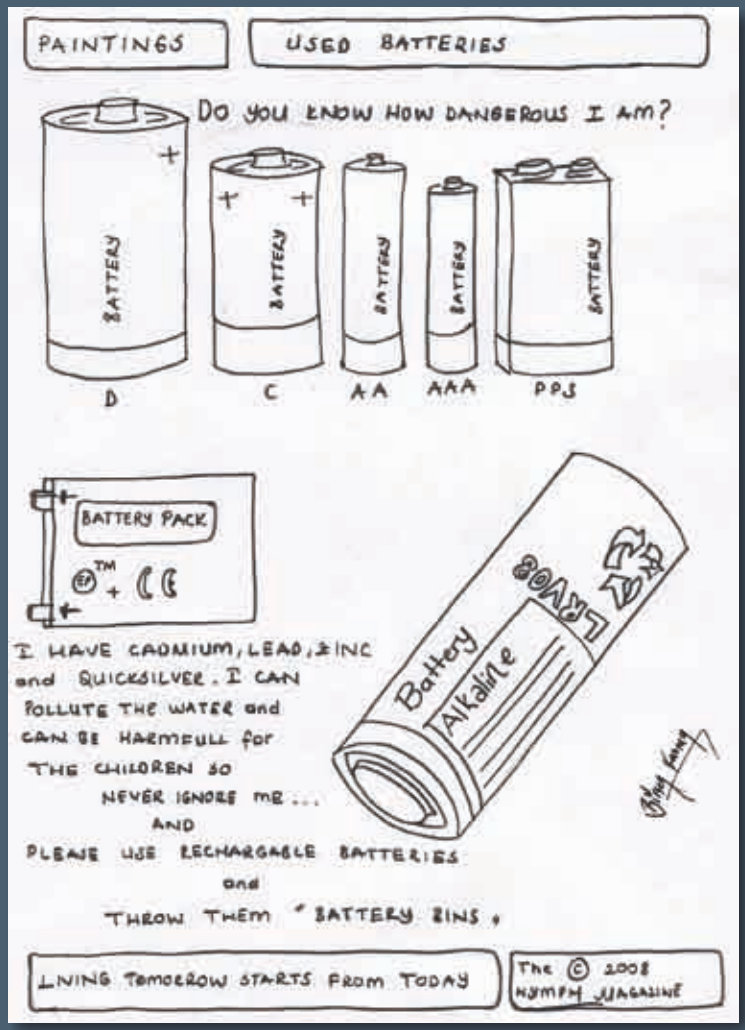
TRACES IN THE WOODS : THE WOLF AND THE INTRUDERS – GREECE

The wolf and the intruders.The wolf can cover long distances in the woods leaving just traces. We, however, by walking just a few kilometers in the forest we moved with our shoes every kind of seed microbe, bacteria, and who knows what else. We brought these stuff all the way from our homes down to the forest, hundreds of kilometers away

Evdokia Panagou. Age:16 .2nd Lyceum of Trikala.

BATTERY – TURKEY

Do you know how harmful batteries are ?



BUTTERFLY TO REST, LOOK AT HIM ! – ROMANIA

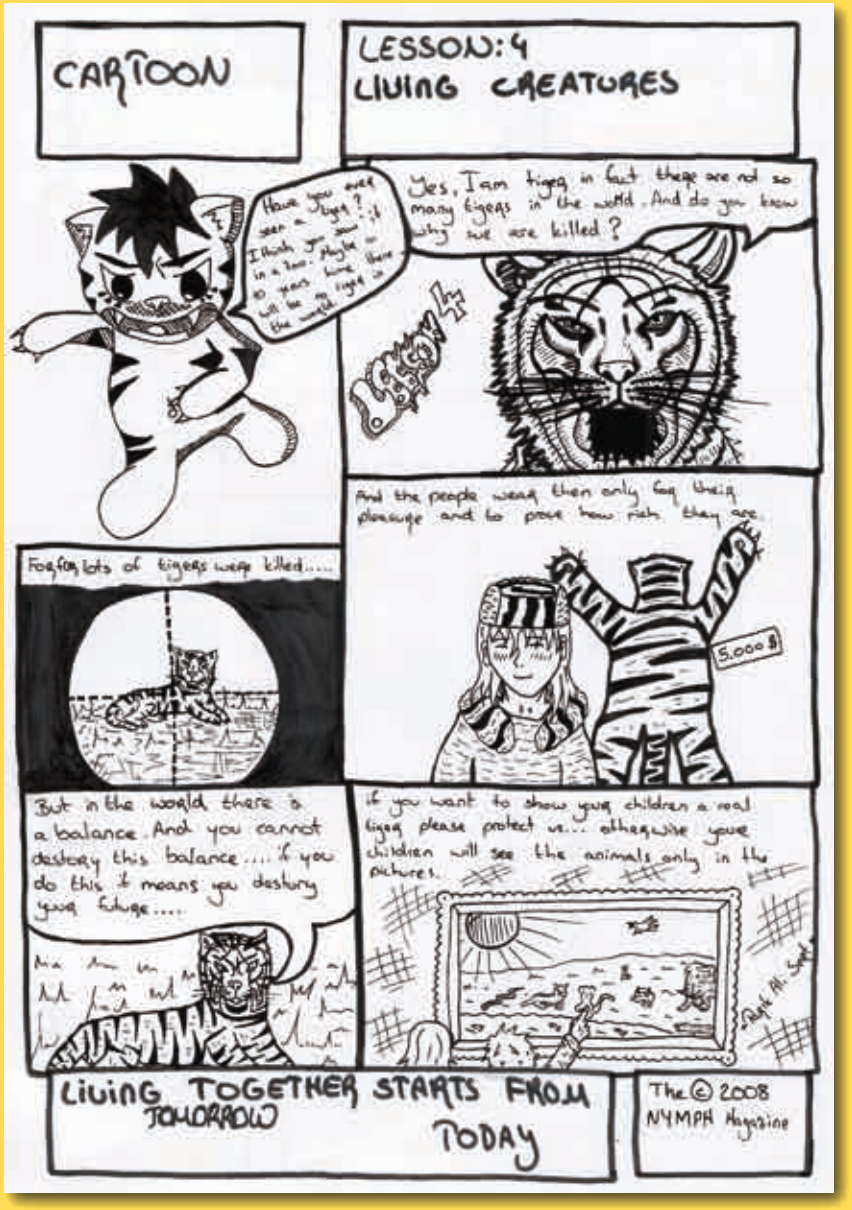
By visiting and observing biotopes encountered in some of the protected national parks we can meet and admire the many species of animals and plants ...

Butterfly to rest. Look at him!

Irina Marinescu & Georgiana Oproiu, 8th grade - Teachers: Sorina Victoria Grosu & Corina Arghira, Eco-School No. 11 Mihai Eminescu, Pitesti, Arges.

LIVING CREATURES – TURKEY

We do have the right to live.



Artistic Award

MIRROR, MIRROR – MONTENEGRO

"Mirror, mirror, who is the cleanest here !?"

Nikolina Vujovic, IIg1 (16 years old) Mentor: Ruzica Lazarevic Secondary school "Mladost", Tivat .

TIME IS RUNNING OUT… – PORTUGAL

Every five months the thermoelectrical station in Sines (Portugal) consumes approximately 1,5 million tons of coal. This station can produce up to 25% of the total electrical energy in the country.
Despite all the efforts made in order to neutralize pollutant substances, such as sulfur and toxic ashes, there is no technology which allows an efficient control of carbon dioxide emissions. In 2007 this central was considered to be the 13th most pollutant in Europe. What will happen to it? Will it ever be viable for this and other stations to be replaced by renewable sources of energy?

Escola Sec.3°CEB Poeta Al Berto, Sines.

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