



The National Field
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Environmental Conservation
About innovative Environmental Research



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Issue 49

4500 Tons of Medical Waste Produced in the Sultanate Annually

Danger ..

«Under Control»



UNESCO Celebrates the Delivery of the Sultan Qaboos Prize for Environmental Protection

The Sultanate Supports Initiatives to Maintain Sustainable Environmental Development

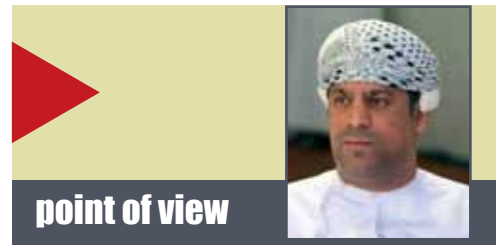


Entrusted by His Majesty Sultan Qaboos bin Said, Her Excellency Dr. Madiha bint Ahmed Al Shaibania, Minister of Education delivered the UNESCO - Sultan Qaboos Prize for Environment Protection in its fifteenth session for the year 2019 in the Hungarian capital Budapest. The Prize is won by the Ashkwa Fund Research in Ecology and Environment «ATREE», Republic of India.

The allocation of UNESCO Sultan's Prize for Environmental Protection comes as evidence of the Sultanate's attested positions in the service of environment and development issues as well as the soundness of the approach it adopts in the field of environmental protection and preservation, which is mainly based on the principle of achieving a balance between the requirements of comprehensive development and the protection and preservation of natural resources. This award plays an important role in encouraging the research and scientific progress necessary to ensure environmental sustainability. The Indian Ashkwa Fund has won the award, upon the recommendation of a jury prize. The award was granted to this institution for its outstanding efforts in the field of environmental preservation at the social level and the diversity of its activities related to sustainable development through the implementation of a wide range of environmental works that include the ecosystems in the Himalayas and the Western Ghats forests registered within the biosphere reserves and in the World Heritage sites of

UNESCO and the Grass Lands in Koch, the wetlands of Tamil Nadu and Kerala, urban landscapes in Karnataka and Tamil Nadu, as well as its ecology and environmental activities to raise awareness and training in environmental preservation.

The UNESCO - Sultan's Qaboos Prize for the Preservation of the Environment is the result of the sincere efforts adopted by His Majesty Sultan Qaboos bin Said, in preserving and protecting the environment at the local and international levels. Since its inception in 1989, the UNESCO-Sultan Qaboos Prize for Environmental Protection has honored many institutions, institutes, reserves, individuals, and groups in Africa, Asia, Europe, and Latin America, which have contributed efforts in scientific research, preservation, and preservation of sites registered on the UNESCO World Heritage List and nature reserves. This Global Arabia award has become a source of encouragement to the people of determination and endeavors to preserve the environment and resources of the planet for humanity. It is an important catalyst for making more and more effort and work to protect the biosphere in which we live. Her Excellency Dr. Madiha bint Ahmed Al Shaibania, Minister of Education, stated that the award is a lofty message that His Majesty the Sultan takes care to reach the whole world. It is an invitation to all institutions and individuals to exert more effort to achieve environmental safety and nature preservation in various parts of the world.



point of view

Two Faces

Dr. Dawood Sulaiman Al Balushi
Editor-in-Chief

The first: The one that hurt me a lot, is the piles of rubbish dumped on various beaches of the Sultanate and in the tourist areas in the wadies, mountains and sand, during the last vacation. That view generates sadness and pain for the soul. How not, and you see piles of plastic bags and food waste after the recreational trips and rest spent in the tourist and environmental areas. This phenomenon is of great concern to the various authorities responsible for hygiene, health and environment in the Sultanate, and it poses a real threat to tourism, living organisms and wildlife. It has negative effects on the ecosystem that cannot be ignored or hidden.

The second: is a scene that inspires joy and happiness when you see a group of foreign tourists and citizens carrying out voluntary clean-up campaigns for the waste and piles of garbage lying on the ground in the tourist and environmental areas during the same vacation period that we talked about above. Those volunteers collected the trash and carried it to the landfills in a beautiful gesture that showed environmental awareness and their eagerness to clean the place where they spent the most beautiful time enjoying landscapes and environmental beauty.

Two different types of behavior sending one message: the importance of maintaining public cleanliness and the environment in the Sultanate. This is a great responsibility of everyone, from governmental and private agencies, civil society institutions and individuals. Individuals play even a more important role because they are the main cause of this process. They are the ones who throw garbage and cause these bad views. On the other hand, there is a decrease in the number of landfills in the tourist and environmental sites in the Sultanate. Government agencies must provide such landfills in all places so that (the excuse would be not uglier than guilt) due to the lack of availability of landfills, when the fate of the garbage will be to accumulate on the ground.

We must erase the first ugly face, so that the beautiful one can shine for us. We must also strengthen the right behavior in the hearts of our children and families, because it means maintaining public cleanliness and environment around us. It is not a shame to always carry garbage bags with us in the cars, to throw waste in them after the completion of trips and recreation. It is not a shame to collect such bags and throw them in the dumpsters designated for them. The important thing is that we should not allow the opportunity someone to talk about foreign tourists collecting our waste. Rather, we, as sons of this dear country, must handle our affairs by ourselves. The environment of this country is a national responsibility in the first place.

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Climbing Plants

By: Fatima Al Zadgalia:

Liana is a varied wood climbing plants that have a long stem. They are characterized by roots that extend into the soil at ground level and using trees, in addition to other vertical support means, to climb outside the shade to reach well-lit areas.

The term «climbing plant» is a description of how the plant grows. Climbing plants may found in several different plant species. One way to distinguish plants that climb trees and shrubs, is based on hardness, specifically on Young's Modulus of multiple parts of a plant's stem. Trees and shrubs have very small branches and smaller growth parts such as stems and larger and stiffer branches. Climbing plants often have small growth and greater growth, at the base of the plant's stem, which is more flexible.

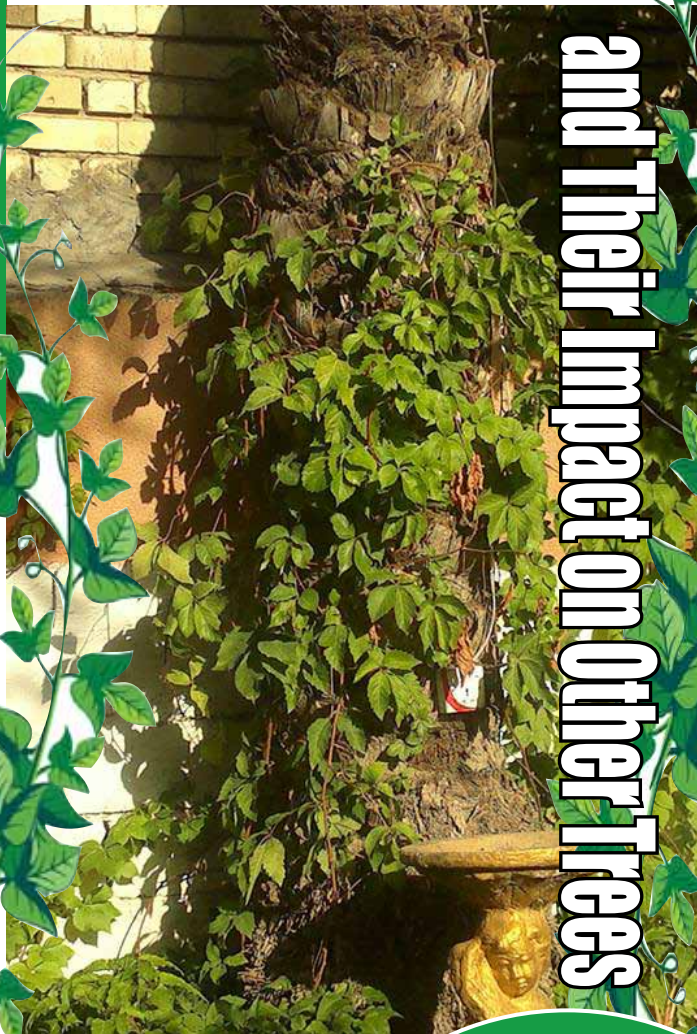
Climbing Methods:

Wrapping on Stems While they are Young

As in the case of (Ipomoea Tricolor), which is a climbing (seasonal) plant, it climbs trees branches, columns, fences and everything around it. Ipomoea Tricolor's stems are thin and the leaves are in the shape of the heart, while the flowers are soft and delicate in light colors. Flowers opened early in the morning and closed by turning petals internally at the end of the day and never repeat such process. Probably that is why they are called morning flower, which cannot be picked. They prefer sunny places and when planted in the shade, the flowers become smaller. There is also the Honey Rose plant (Lonicera Japonica), which is an evergreen, fast-growing climber which climbs by wrapping itself around the stems of other trees and its leaves tend to elongate. As for the flowers, they are found in the shape of armpits in the arches of modern branches. Flowers are in the shape a white tube that turns yellow and has a strong aromatic scent. The the Honey Rose plant grows by knots and labeling. It tolerates dry conditions and is suitable for most types of soil.

Stem turns spiral shaped stem or leaves:

An example of this is the (Antigonon leptopus) which is a half falling



and Their Impact on Other Trees

climber, fast growing plant that climbs with tendrils which are stems transformed into tendrils. The leaves are interchangeable, wavy, light-green> The roots are protruding. Flowers are flower-shaped, in clusters of pink color, and bloom in spring, summer, and autumn. Antigonone multiplies with seeds and thrives in sunny places. Flowers are mounted on the tendrils in the shape of clusters of pink color. They bloom in spring, summer and autumn. Antigonone multiplies with seeds and thrives in sunny places.

As for (Passiflora Amethyst), it is an evergreen climber, which climbs with stem tendrils that grow in the armpits of leaves. Its leaves are deeply lobed, with pointed dome and the flowers flourishes in winter and spring. It reproduces with seeds or knots. The flowers are attractive, so they are planted in visible places in gardens.

A Plant with Air Roots that Grows on Other Plant Stem and Can and Attach Themselves to Walls:

It is the Hedera Helix, which is a climbing tree whose leaves resemble the leaves of the grape tree, but it is smaller in size, it can be placed next to a pergola of wood with a beautiful shape and Hedera Helix climbs on it It is an evergreen plant, with a length ranges between 2 - 30 cm. The leaves cannot be measured; most of them are elliptic in shape. It clamps uncoated walls by aerial roots. Some of its leaves are heart-shaped or triangular with mutual positioning on the stem and it bears shade. They can be cut and formed. They are reproductive and able to cover large areas of buildings facades. Some types of Hedera Helix are evergreen, while some species lose their leaves seasonally. Some types of them are very toxic.

Climbers by the Help of Thorns:

Bougainvillea (Bougainvillea) is a plant that climbs with the help of thorns. Its flowers have several different colors, including white, pink, orange, and red, while flowers are very small and the color of some of them tends to yellowish white.

Climbing by Elongating the Necks of Leaves:

These are the Clematis, Dhayan or Jasmine plants. They consist of active and woody climbing vines. Dhayan Woody stems are fragile until the age of several years, and their leaves are opposite and divided into leaves with bronchioles that wrap around the supporting structures of the plant to gain strength while climbing the plant.

Other Types of Climbers (Argyrea Nervosa)

It is an ever-green, fast growing climber, with large-sized leaves of hearty shape. Its lower surface is silver and upper id green. Its flowers are of low importance; appear in summer and autumn with white color. It reproduces by cuttings. There is another type called A. Splendens. It is different from the previous kind with its small sized leaves and pink flowers.

Aristolochialittoralis

It is a fast-growing evergreen climber. Its leaves are heart-shaped and its flowers are pied crimson with multiple colors that appear in summer and autumn. It produces with seeds and grows well in light lands, especially with moisture.

Beaumontiagrandidiflora

It is an evergreen climber with strong growth. Its large sized leaves are shiny oval with wavy edges.

Its white flowers are bell-shaped and clustered and have an aromatic scent.

Jasmine Zafar (Clerodendroninmer)

It is an evergreen climber, fast growing, and used as fencing for it can be cut. Its leaves are simple and oval with a pungent odor. Its small white flowers come out in clusters during summer and autumn.

It multiplies with the cutting. It grows well in sunny or semi-shaded places. It grows in heavy wetlands.

Clerodendron splendens

It is an evergreen climber. It is somewhat slow growing. Its leaves are large oval and dark green. Its blossoms are red in clusters appearing in summer and autumn. It reproduces by stem and root cutting and layering.

The Negative Impact of the Climbing Plants on Other trees

- They reduce other trees growth
- The increase other trees rate of death
- They prevent young trees to growing
- They are proofed to have destructive effect on other trees when strong winds blow and when one tree falls, contact with climbing plants may cause many other trees to fall.
- The trees are destroyed directly by erosion
- Climbing plants make shade over other trees, making it easy for animals to eat the trees leaves.

Danger ..

4500

Tons of Medical Waste Produced in the Sultanate Annually

«Under Control»



The Sultanate has taken strong concrete steps in healthcare waste management. This is tangible from the efforts being made by various relevant authorities for safe handling of waste, as it has become the focus of attention for many local and international organizations such as the World Health Organization and the International Solid Waste Organization.



The average annual production of health care waste throughout the Sultanate is about 4,500 tons produced by establishments that provide health care services; most of them are concentrated in the Governorate of Muscat (55%), because of the large number of regional and specialized health care institutions, both governmental and private. Dhofar, North Al Batinah and Al Dakhiliya governorates rated second in terms of the production of health care waste. Hazardous types of production of health care waste, make up to 15 - 25% of all healthcare waste.

Health care waste is an important issue that has generated the concern of health leaders, experts and decision makers in the areas of public health and environment around the world. This concern which comes as a result of the expansion of health services at different levels and the use of modern technologies in preventive, diagnostic and therapeutic services at various levels of health care, have led to the emergence of many hazardous health waste within the components of health institution waste, which may pose a threat to the health of living organisms, and pollution of the environment. Failure to deal with this issue on correct basis may lead to many serious diseases.

“Health care waste” is defined as the waste produced by health care facilities such as hospitals, clinics, dental clinics, blood banks, and veterinary facilities, as well as medical research facilities and laboratories, including waste that comes within the framework of home-based health care such as dialysis waste self-injecting insulin etc. Because of

its nature, health care waste poses a high risk of infectious disease outbreaks and has a severe impact on environment.

Approved national strategy

Jassim bin Muhammad Al-Wihaibi, Head of the Health Care Waste Department at “be’ah”, said: “The Omani Holding Company for Environmental Services “be’ah” implements the approved national strategy for managing the health care waste sector in the Sultanate and provide its services to all governmental and private health institutions at a rate that exceeds 99% at the all of the Sultanate governorates. That includes the collection, transportation, treatment and final disposal of such wastes. For this purpose the company has established three main stations for treating health care waste in each of Al-Amarat Wilayat in Muscat Governorate, Liwa Wilayat in North Al Batinah Governorate, and Thumrait Wilayat in Dhofar Governorate. The company uses modern treatment technologies, namely: heat treatment technology (incinerator) that is allocated for pharmaceutical waste and waste toxic for genes and cells, and autoclave sterilization technology for the rest of health care waste types.

International Standards

“be’ah” follows the highest international standards in managing health care waste. The WHO Safe Waste Management Manual, which is issued by the World Health Organization, is one of the most important references that are followed by the company for health care waste management, as well as the Infection Control Guide of the Gulf Cooperation Council Countries and also the British (Health Technical Memorandum) said Al-Wihaibi, Head of the Health Care Waste Department at “be’ah”.

- » **“Health” We Rely on International and Local Regulations and Guidelines for the Proper Handling of Medical Waste**
- » **“Be’ah” implements the Approved National Strategy for Managing the Waste of the Healthcare Sector «Medical Waste», in the Sultanate According to the Highest International Standards**
- » **“Al-Khabouri” Private Health Institutions are obligated to sign Agreements with Bee’ah and the Assessment Teams Deal Firmly with Such Institutions and Refer the Violators to the Violations Committee**

Al-Wehabi emphasized that the establishment of treatment plants came to stop the random disposal of health care waste and also to stop chemical emissions from the old incinerators in some hospitals and replace them with modern treatment plants established according to the latest international standards and recommended by the World Health Organization in a way that ensures the safe management of the disposed health waste by using the latest safe scientific methods to protect public health and the environment” added Al-Wehabi.

The Efforts of the Ministry of Health

For her part, Salwa Al-Ashriah, Supervisor of the Medical Waste Section at the Environmental and Occupational Health Department at the Directorate General for Disease Control and Combat in the Ministry of Health, said: “There is no doubt that health services in all fields are one of the pillars of modern development, in order to preserve human health and provide a safe environment for life, but the rapid development in the medical field has been accompanied by a downside which is the amount of medical waste produced by health institutions. This problem has been a concern for many governments because of its harm to human health and the environment. Numerous studies have shown that improper management of medical waste plays a major role in the spread of a number of diseases and epidemics.”

Al-Ashriah added that, as a result of the recognition of the seriousness of medical waste, the Ministry of Health has established a department concerned with medical waste management in the ministry’s head quarter, and to establish similar departments in all its reference hospitals. The Ministry has also begun to enact regulations and policies in this regard. The Ministry has relied on two important poles in medical waste management so as to achieve the goal of safety for all:

First: ensuring the correct handling of medical waste within its institutions by setting policies and improving practices in this field and raising awareness among health workers, as well as raising the level of community knowledge in cooperation with the various relevant bodies and qualifying cadres to follow and develop the program in all health institutions with different services, and central control to ensure quality in implementation.

Second: The Ministry’s commitment to ensure the safe disposal of medical waste produced from its health and private health institutions, through a contract for the transportation and treatment of medical waste with the Omani Holding Company for Environmental Services “be’ah”, which handles the treatment of medical waste with the most recent scientific methods.

With regard to proper handling of medical waste, Al-Ashriah said that the ministry is totally dependent on international and local regulations and guidelines, where the supervisor or the person responsible for the medical waste management program in the health institution helps training those who deal with medical waste, and checks the safety conditions in assembly and internal and external transport. Such responsible person verifies the use of the correct containers, the use of personal protection methods, the collection of medical waste in storage places with specific specifications, and then transported them with vehicles authorized by the competent authorities.

Full Commitment

On the role of the General Directorate of Private Health Institutions at the Ministry of Health in safe disposal of health waste, Dr. Mazen Al-Khabouri, Director General of the General Directorate of Private Health Institutions, says that all private health institutions are subject to periodic monitoring by the central team of the General Directorate of Private Health Institutions as well as the monitoring teams from the governorates, to know the extent of compliance by such private health institutions, with the regulations and legislations adopted according

to the law of the Profession of Human Medicine and Dentistry Practicing. Among the overall themes of evaluation, the issue of infection control and its obligations related to dealing with medical waste and how to get rid of it, comes as one of the most important controls for intensive monitoring by these teams on private health institutions.

Al-Khabouri added: “We value the effort and work that “be’ah” is doing, as it is a government company concerned with the management of medical waste in the Sultanate for all governmental and private health institutions. All private health institutions are obligated to conclude agreements with Bee’ah and according to which medical waste of health institutions is transported and treated in safe ways at locations with international standards, covering the various governorates of the Sultanate.

The medical waste management process begins with professional procedures according to the policies approved by the Ministry of Health. Such procedures concentrate on how to deal with the various wastes of the health institution and sorting and collecting them in special containers according to the type of such waste (general and dangerous). Then such wastes is transferred by the competent companies, according to the terms of the agreement, to the treatment and filling sites.

Al-Khabouri stressed that there is a full commitment by private health institutions. They are obligated to sign agreements with an environmental company; thereby the violations are reduced and become very few. In case of they appear again, which is rare, except from some of them, that will be firmly dealt with by the evaluation teams and referring the violators to the Administrative Violations Committee and finance in the Directorate General of Health Institutions at the Ministry to take appropriate action.

The Disadvantages of Medical Waste

- » **Contributes to the spread of a number of diseases and epidemics**
- » **Infects with many dangerous diseases**
- » **Dangerous to the health of living organisms**
- » **It results in pollution for the environment**



» The «Green Schools» Initiative.. Educating Young People on the Importance of Preserving the Environment

Aiming at spreading the culture of environmental awareness, educate students and sensitizing on environmental and sustainability issues and affairs and to transfer knowledge amongst the surrounding community, Al-Batinah Hall in Al-Batinah North Education, witnessed an introductory workshop on the “Green Schools Initiative”, presented by Jawahir Bint Saif Al-Ghaferiya, an education coordinator at the Oman Environment Society, in cooperation with North Al Batinah Education represented by the Activities Section at the Department of Educational Programs. Speaking at the beginning of the workshop, Mubarak Al Qutaiti, a school activity supervisor at the Activities Department in the North Al Batinah Education,



welcomed the attendees, then presented a brief introductory on the initiative. After that, Jawaher Bint Saif Al Ghaferia, a coordinator of education at the Omani Environment Society, gave a detailed explanation about the mechanism of work in the initiative, including the objectives of the initiative which are to contribute to the implementation of the goals set by the United Nations on education for sustainable development. Al-Ghafriya added that through the initiative, students and teachers

alike are educated, made aware of environmental and sustainability issues to transferring such knowledge and awareness to the surrounding local community, in addition to enabling the new generation to take positive decisions in all matters related to environment and its protections. Then, she explained the evaluation stages to participate in the competition. Then the target group were to be clarified, as they included school principals, activity specialists, school students and parents. Jawaher Al Ghaferiya also drew attention to the fact that the primary goal of this initiative is to spread the culture of environmental awareness through three axes: Waste Management, Water Management and Energy Management.

Qatar

Qatar holds an exhibition on the sidelines of the Twenty-fifth session of the Conference of the Parties on climate change

The State of Qatar participated in the Twenty-fifth Session of the Conference of the Parties on Climate Change of the United Nations Framework Convention on Climate Change, which was launched in the Spanish capital, Madrid. On the sidelines of the conference, the Ministry of Municipal and Environment held an accompanying exhibition in which some parties in the state participated. The exhibition included presentations, video films and the activities on various parties inside and outside the State of Qatar, to show national efforts and projects and how to address the phenomenon of climate change, and enhance cooperation with international bodies to serve future projects in the State. Among the contents of the exhibition was the green cars initiative and the opening of the photovoltaic station, which is unique in the world, where electric cars are charged by solar energy that the station stores. The exhibition highlighted the efforts of civil aviation in the field of protecting the civil aviation environment in the State of Qatar, and achieving a safe civil aviation system that is efficient and sustainable. This part of exhibition aimed at enhancing the position of the State of Qatar in the global civil aviation industry map.

Bahrain

Opening of the First Bahraini-Korean Environmental Cooperation Forum

His Excellency Dr. Mohamed Mubarak Bin Dinah, CEO of the Supreme Council for the Environment, opened the first Bahraini-Korean Environmental Cooperation Forum under the slogan «Sustainable Development and Climate Change» in the presence of His Excellency Ko Hyun Mu, Ambassador of the Republic of South Korea to

the Kingdom of Bahrain and Yang Soo, Deputy Director of the Global Green Growth Institute (GGGI). Experts and specialists from the relevant government authorities and a number of representatives of international organizations, academia and environmental companies in Bahrain and South Korea participated in the conference.

UAE

Start of the Work on the Emirates Smart Map for Natural Capital project

As part of its strategy to achieve environmental leadership for sustainable development, the Ministry of Climate Change and Environment announced the start of the work on the Emirates Smart Map for Natural Capital project, with the aim of enhancing the balance between achieving growth, economic and social development, from one hand, and protecting the environment

and ensuring the sustainability of its natural resources on the other hand. The project will work to identify and evaluate the natural systems (areas and pools of biological diversity) that exist in the country and determine the ecological services provided by the local environment in general and the regions in which they are located in particular in addition to the economic value of these services.

KSA

The Board of Directors of the National Center for Waste Holds its First Meeting

The Board of Directors of the National Center for Waste Management held its first meeting, chaired by His Excellency Minister Al-Fadhli, in the presence of the newly appointed members of the Board of Directors. The meeting reviewed an overviewed the national environment strategy, the new institutional framework, the importance of focusing on

the national centers of environment and their important role in achieving the vision and advancing the environment system. During the meeting, it was agreed to assign Dr. Abdullah bin Faisal Al-Sibai to perform the duties of the CEO of the National Center for Waste Management, in addition to exercising his responsibilities as a member of the Center's Board of Directors.

Kuwait

The Environment Public Authority Meeting with the (ROPME)

Based on the care of the Environment Public Authority to develop monitoring activities for the marine environment, a meeting was held chaired by Dr. Abdullah Al-Zaidan, Deputy Director General of the Technical Affairs Sector and in the presence of Dr. Jassim Al-Bishara, CEO of the Regional Organization for the Protection of the Marine Environment (ROPME). The most

prominent coastal pressures on the marine environment and the observed changes on Jon Al Kuwait were reviewed. The meeting also discussed the organizing of a joint working mechanism to monitor the status of the marine environment through satellite imagery to assess environmental conditions and to predict recurring phenomena and incidents in the marine environment.



The Madrid Summit Emphasizes Adopting the Path of Hope for the Climate



MADRID - Agencies: The United Nations has opened a two-week climate summit in Madrid, as world leaders face growing pressure to demonstrate that they can muster political will to avert the worst catastrophic consequences of global warming. United Nations Secretary-General António Manuel Guterres outlines two paths for leaders attending the summit when it comes to implementing measures to tackle climate change: either the path of hope or the path of surrender. Representatives of some 200 countries gathered in Madrid were warned, «Do we really need to be reminded that we are the generation that buried its head in the sand, the generation that failed while the planet was burning?»

He explained that the path of hope includes using less fossil fuels and achieving carbon neutrality by 2050. For her part, European Commission President Ursula von der Line warned that failure to take action to tackle climate change would be more costly in the long run than adopting a preventive approach.

The Current Decade is the Hottest in History

The World Meteorological Organization said at the United Nations climate summit in Madrid, Spain, that the current decade is on its way to becoming the highest temperature ever in the history of the climate record. «We are in no way close to achieving the goal of the Paris Agreement,» said Secretary-General Petri Talas. «If we do not take urgent action on the climate now, we are heading to higher temperatures by more than three degrees Celsius by the end of the century,» he added. Delegations from about two hundred countries met in Madrid to set rules to reach the goal of the Paris Agreement to reduce global warming to less than two degrees Celsius above pre-industrial levels. The average global temperature until October of this year was 1.1 degrees higher than the levels recorded before the beginning of the industrial age in the late eighteenth century, according to the World Meteorological Organization.

the Polish city of Katowice last December, said the increasing youth activity against climate change highlights the urgent nature of the mission. «The world may not yet go at the pace we want, but my hope is still in young people,» he added at the official opening ceremony of the talks at a convention center in Madrid.

«We must always remember how much it will cost if we do not act now,» said Von der Line in her second day in office. She added that the commission will unveil a new pioneering environmental plan for the European Green Deal within ten days. Von der Line indicated that the commission will provide trillion Euros of investment to transform the European Union over the next decade through a sustainable investment plan. The talks began against the backdrop of the increasingly visible effects of global warming over the past year, as forest fires raged from the North Pole to the Amazon to Australia, while devastating hurricanes hit tropical regions. The Polish climate minister, Mikhail Kortika, who led the last round of UN climate negotiations in



Environmental Vocabulary

The Small Giant

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It is not its nature to be active at night, but rather that it takes the day as a living and the night as a dress. It comes out of its hole at the beginning of the day seeking for food and returns to it at the end for sleeping and rest. Its environment is mountains, covered by their rocks, protected in their holes and eats from their trees and plants. It is an herbivore animal. It chooses deep cracks and fractures in the rocks to make a safe home. The limestone rocks in Dhofar province give it its favorite place with its natural cracks and cavities without knowing that it has created a safe, warm and a haven for wild animals that have made them colonies and societies where they practice their social life with all their controls and events from birth to death.

Its rounded body, circular head and small size are external indicators that suggest at first sight that it is a wild rabbit, while its postpartum shape similar to rodents. It is neither a rabbit nor a rodent. It is no wonder that the digestive system of this small animal is similar to the digestive system of the giant wild Elephant. Although its stomach is small, it is very strong, digesting the leaves of trees of all kinds even the worst taste. What's more, its skull and front fangs are similar to the Indian Rhinoceros. The adult weighs about four kilograms. Its body is covered with thick fur tends to red and brown, and in the middle of its back is a scent editing gland that may use it to determine its living area. The four legs are short and almost equal. The front legs end with four fingers each while the back legs end with three fingers each. All fingers have rubber cushions that secrete some materials to help them climb the cliffs and smooth rocks quickly and easily.

This small wild animal lives in its own world according to a social system that has its own controls through colonies of up to 70 individuals led by the older and larger males. Each colony consists of several families, each family of one male and about five females. Males are not allowed to enter from other colonies. The chief male begins its mission from the early morning by first exiting the holes to secure the place from enemies, then it makes distinctive sounds of danger or safety and the herd goes out to the pasture. Sounds vary with events, as when the mating season between April and June males make specific sound to attract females. After a period of pregnancy of up to six months, the female escapes from the colony to give birth away to protect young from preying by the colony's males. The female returns to the colony with young after a period of lactation that stays up to five months. In this situation the young are able to resist the adult males. Despite its protection habits such as the strength of observation, the power of the senses of smell, vision, hearing and ease of rock climbing, the rock Hyrax is a delicious prey between tiger tusks, lynx and bird claws. However, its numbers reflect a safe and secure environment.

Arabian Leopard

Marwa Al Mukhaini



Do you know !
That the Arabian Leopard
is found in the Sultanate of Oman
exactly in the mountains of
Dhofar Governorate !

It is a large dotted Cat.
It is considered a powerful predator,
it is characterized by the presence of
spots covering its body.



The Leopard is active during the evening
and at night, it searches for its prey
by hiking. It feeds on Tahar and Gazelle
but most of its prey are Rabbits
and Gazelle.

As well as domestic animals
such as Sheeps and Camels.



The Leopard is present in small numbers
in its areas of spread.

The latest research revealed that
its numbers have decreased dramatically
as a result of killing and
the few prey that feed on it.

