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The **Parthenium Plant**

An Environmental Problem Widespread in Dhofar Governorate

Monitoring of Excesses in Burning Old Trees

Social media users traded pictures and video clips of a perennial Juniper tree in Hail Al-musubt at Al-Jabal Al-Akhdhar while it was burning, in what appeared to be a death certificate for a tree that may be more than a hundred years old or more. This happened as a result of the low awareness of many individuals camping in some natural sites that God gave for this country. Meanwhile, His Excellency Dr. Abdullah bin Ali Al-Amari, Chairman of the Environment Authority and a group of specialists in the authority, visited the Green Mountain Prosecution office, to find out about some of the violations that the authority monitored. This visit comes as a result of the incoming reports and the repeated cases of wild trees burning, as well as the violation of wildlife at Al-Jabal Al-Akhdhar area. Accordingly, His Excellency directed the specialists to expedite work to find quick and appropriate solutions to this problem and to take preventive and legislative measures in an urgent manner to reduce these repeated violations that threaten the rare and important elements of the Omani environment.



Includes Scientific Lectures, Practical Workshops and a Field Visit

Office for Conservation of the Environment Organizes the Veterinarians Forum



The Office for Conservation of the Environment at the Diwan of Royal Court organized a forum for veterinarians, in Al Wusta Wildlife Reserve. The forum included 25 veterinarians. The program included scientific lectures, practical workshops, and a field visit to the reserve's breeding centers. The scientific lectures focused on the methods of breeding wild animals in the reserve, getting acquainted with the project of bringing in the Arabian oryx from the United States of America, and learning about the challenges and diseases that afflict animals and methods of treatment, in addition to how to hold the Nubian ibex in order to install collars. On the other hand, the workshops, dealt with the application of practical aspects in prevention methods. The office also organized a working tour around the Reserve's Breeding Centre, which contains more

than 11 species of wild animals, including the Arabian oryx, the Arabian Gazelle, the Reem Gazelle, the Porcupine, the Nubian Ibex, the Lynx, the Red Fox, the Honey Badger, the Mongoose, the Ostrich, the Blueberry and the Black Eagle, in addition to a night tour in the Reserve to enumerate and monitor nocturnal animals such as the wild rabbit. Regarding the tracking collars, the office indicated that they are a round device in the form of a collar, which is placed around the neck of the animal to track its movements. The device sends data via satellites to computer devices, including the animal's whereabouts, living conditions, knowledge of its movement paths, blood samples taken for genetic analysis, as well as knowledge of the risks it faces, and other data that ensure the formation of a database for the animal. The collar also helps in studies and scientific research.



point of view

A Proposal for an Environment Police

Dr. Dawood Sulaiman Al Balushy
Editor-in-Chief

Recently, a number of environmental and natural issues have become a constant concern for the environmental authorities in the Sultanate in light of the remarkable increase in the prevalence of these environmental issues. Failure to resolve these environmental issues will lead to an exacerbation of the situation in the future. It is imperative, then, to exert efforts for the finding of optimal solutions to such issues and to punish the violators who cause them. At the same time, we emphasize that these issues have many negative impacts on wild, terrestrial and marine life, as well as affecting species threatened by degradation and extinction if the situation continues in the same manner.

Therefore, the time has come to establish a specialized police force in the Sultanate under the name of "the Environment Police", to be affiliated with the Royal Oman Police, and to support and assist the environmental authorities to achieve environmental justice, implement laws and legislations, and monitor violations of individuals and institutions that mess with the Omani environmental system. This police should work side by side with the authorities concerned with the environment, and its goal should be to preserve the Omani environment and its natural resources and systems. The work of Such police force should be to solve many environmental issues by directly applying laws and legislations on issues such as the throwing of waste on beaches, wadies and tourist places, illegal hunting of animals and birds, cutting and burning of trees, pollution of all forms, by liquid and solid materials, noise and air pollution from all industrial establishments, as well as monitoring the marine environment and the associated violations, such as waste oil and balance water, in addition to monitoring the air, land and sea outlets to control the entry of all activities and materials related to the environment into the Sultanate. Such police force should tighten control over the wrong uses of chemicals for various industrial and agricultural purposes and activities, and monitoring all private sector facilities in terms of applying all environmental laws ... etc.

There are many experiences in many countries on the global, Arabic and Gulf levels regarding the establishment of environment police. These experiences have proven to be successful and have enabled these countries to reduce environmental and natural violations within them. Environmental crimes and unjust encroachments on the natural elements have decreased in such countries. In addition to that, there has become a wide awareness among the population on the importance of preserving the environment and not throwing waste in various places. Rather, residents support specialists in such police forces by reporting environmental violations that occur either by individuals or institutions so that work has become integrated between citizens and environment police in preserving the general environment.

It is of utmost importance that this proposal meets positive resonance by the concerned authorities, because Oman 2040 vision puts the environmental dimension and the preservation of natural resources as one of its main axes. In order for this vision to be implemented, we must have a strict future outlook towards the importance of implementing environmental laws and legislations, and to ensure the preservation of the Omani wildlife and ecosystem at all levels from the risk of deterioration and extinction.

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We always thought that all the lakes are blue, as is known to everyone, but what some people do not know is that there are several pink lakes in some countries, even one of them is in Gulf country. The reasons for changing the color of some of such lakes are due to algae, but for others, the reason for changing their color is not known yet.



The Pink Lakes

in the World

By: Fatimah Al Zidjali

Interpretation of the Phenomenon

The lakes are not originally pink, but the known color of the water changes as a result of green algae (Dunaliella Salina, Halo-Bacteria and Halo-Bacterium coterobroom), which is a high salt concentration. Once the lake water reaches a salinity greater than the sea level, the temperature will be high enough. With adequate lighting conditions, the algae begin to accumulate the red pigment (beta-carotene). Pink roots grow in the salt crust at the bottom of the lake and the lake changes color as a result of the balance between Salina and Coterobrum. The following are the most prominent pink lakes around the world:

1. Lake Retba, Senegal

It is a pink lake. Its salinity is very high, so everyone can be easily floated. The lake is located in Dakar – Senegal. The reason for this color is due to the presence of algae known as Dunaliella Salina, which dyes the water with that color. The pink color appears clearly in the dry season, due to the high percentage of the bacteria that produce pink dyes.

2. Thesty Rose Lake, Canada

This pink lake does not contain any algae, and there is not even any salt content in the lake water to appear in this color. No one really knows the reason behind the pink lake, but this masterpiece attracts visitors every year, despite it being considered one of the most difficult pink lakes to reach to, due to its remoteness.

3. Lake Masazir, Azerbaijan

The reason behind the appearance of this lake in pink is the salt in the lake, which is used by the local people commercially to harvest more than a billion tons of salt that exists in the water and the surrounding lands, as well of the existence of the smell of moldy eggs.

4. Lake Salina de Torrevieja, Spain

It overlooks the Mediterranean Sea, and is characterized by the fact that the salt content in the lake is not high. It is possible to fish there. It is considered one of the best pink lakes in the world today.

5. Lake Hillier, Australia

It is considered one of the most famous pink lakes and it was discovered in 1802. Scientists say that the reason behind the pink color of this lake is the presence of a kind of algae and harmless bacteria in the Lake Hillier maintains a pink color throughout the year. It is strange that the color of the lake water is constant and does not change, even if the water was transported to another location.

6. Hot Lagoon, Australia

Pink Hot Lagoon gets its color from algae in the water, in addition to the salinity of the lake. This is due to the ocean water that feeds the lake.

7. Pink Lake, Western Australia

It is called the pink lake, but it turns pink when salt and sunlight interact with the algae that are sheltered by this lake. The lake looks gorgeous in appearance, because the sand surrounding it, also takes a pinkish tinge of different degrees.

8. Laguna Colorada, Bolivia

Lake Laguna Colorada is located in Bolivia, Mexico. It is a salty lake characterized by its pink color that tends to red. This lake is one of the important tourist destinations in Bolivia and the area is considered a protected area, especially as there are crocodiles and various types of birds and other wild animals.

9. Pink Lakes, Sultanate of Oman

The colored lakes in the Sultanate are known to be distinguished by their pink color and are located in the village of Al-Suwaih, which belongs to Jaalan Bani Bu Ali. It is considered as rare lakes in the country. The creek in which they are formed represents one of the oldest creeks in the region, as it was an ancient marine trading centre for the neighboring coastal villages. The interruption of the entry of sea water and the interruption of the flow of the valley connected to the creek is considered the main reason for the formation of these lakes. They are pools in which salt water collects. They appear pink due to the nature of the soil. They are considered as a natural wonder,

surrounded by green mangroves on one side, and white and blue sand on the other. These Pink Lakes have acquired their color from the lack of oxygen, which causes the death of the bacteria, algae and marine plankton. These lakes are popular with tourists passing through this region. That is because they are close to the main street that connects Ras Al Hadd with Al Ashkhara. In addition to that, these lakes are a resting point for many migratory birds, such as the bright flamingo bird with its pink colors and many other birds. There are oysters in those lakes that have also acquired a pink color. They are considered as a source of food for sea birds, especially migratory flamingos. The pink color of the lake disappears or changes directly upon the entering of the sea water or the flowing of the wadi. In the same area there is also a green lake newly formed due

to the entry of sea water into it and its lack of connection with the previously formed pink lakes. It is also due to the presence of sand barriers and marine organisms such as marine plankton, algae and bacteria. With the passage of time, the percentage of oxygen in this green lake starts to decrease, the matter that causes the death of algae, plankton and any marine organisms living in this lake, and then it begins to change to a pink color. This information leads us to the fact that these lakes acquire their distinctive colors due to their lack of contact with the water of the nearby sea or the water of the wadi in addition to the lack of oxygen and other environmental and biological factors. Therefore, they quickly return to water natural color and lose their special colors when they come into contact with the water of the sea or the wadi.



The results of a study conducted by Dr. Mahad bin Issa Shammas, Assistant Professor in the Department of Civil and Environmental Engineering at Dhofar University, revealed that the Parthenium (*Parthenium hysterophorus*) poses a threat to human and animal health, local biodiversity and agriculture. The spreading of this plant over large areas in the mountains of Dhofar Governorate, prompted the Professor to conduct a study aimed at finding practical solutions to eradicate this harmful plant, combat its spread, and limit its damage.

The

Parthenium Plant

An Environmental Problem Widespread in Dhofar Governorate



The study conducted by Dr. Mahad Shammas from the University of Dhofar took into account the availability of the necessary resources for the study, the level of awareness of the population of the region, and the socio-economic situation of the affected areas in which it is spread. The study confirmed that the Parthenium plant is classified as an exotic, harmful and poisonous plant that can contribute to the destruction of the ecosystem of the place in which it grows. In addition to that, it poisons livestock. On August 30, 2020, the researcher recorded, for the first time, the presence of the Parthenium plant in a farm at Al-Qabil, North Sharqiyah Governorate. No researcher has previously recorded the presence of the plant in the Omani governorates, except for the entry of the plant in the Dhofar Governorate by Dr. Shaheen ghadhanfar in 1998. The concerned authorities in the Sultanate are making unremitting efforts to deal with this plant, as a Ministerial Decision by the number 189 / 2020 was issued to form a joint working group to deal with the Parthenium plant in the Dhofar Governorate headed by His Excellency the Head of Dhofar Municipality and the membership of representatives of the following entities: Dhofar Municipality, The National Field Research Centre for Environmental Conservation (NFRCEC) at the Diwan of the Royal Court, the General Directorate of Agriculture in Dhofar Governorate, the Ministry of Agricultural, Fisheries and Water Resources, the General Directorate for the Environment in Dhofar Governorate, the Environment Authority, the General Directorate for Nature Conservation in the Environment Authority, the Ministry of Higher Education and Scientific Research and Innovation, Sultan Qaboos University, Dhofar University, and the Municipality Council in Dhofar Governorate. This team undertakes the tasks of setting a timetable for combating the plant, conducting the necessary research study for this plant, specifying its damage to the environment and human beings, taking the necessary measures and procedures to get rid of it, and coordinating with private sector institutions to support the efforts to get rid of the plant, as well as supporting community initiatives of citizens and providing the required support for the continuity, and activating the community's awareness of the danger and harm of this plant.

Characteristics of the Plant

Parthenium is a cotton plant that has been adapted in its life cycle through its small size. It is scientifically called «Parthenium hysterophorus», or Congress grass. It is an annual herb, often branched and intertwined, and it scatters its seeds in high density that reach to 15 thousand seeds and large ones reach to 100 thousand seeds. Their seeds are buried under the soil at a depth of 5 cm, and they change the properties of the soil until they are suitable for them only, in addition to that, the percentage of germination is higher than the rest of the herbs, as it can live up to 10 years For germination. The temperature from 22 to 25 degrees Celsius is considered suitable for its germination, which applies to the Governorate of Dhofar, that is affected by climatic conditions. The Americas are the original home of the «Parthenium» plant, and it has spread in the world in different stages since the beginning of the last century. According to a study conducted by researchers «Adkins and Shappir» in 2014, the plant is found in many countries spreading over five continents.

The Speed of the Plant's Propagation

It was noticed that Dhofar Governorate has witnessed a wide spread of harmful plants, including the notorious Parthenium plant, which germinates and

grows very quickly, as it ripens and sets its seeds in just four to six weeks.

Through following up the growth stages of the Parthenium plant, since it appeared in the mountains of Dhofar Governorate, it was found that they usually germinate during the monsoon period, which begins at the end of June of and ends before the beginning of November each year. It has also been proven that Parthenium plant produces its flowers and seeds throughout its short life, until it dies as soon as the hot spring season arrives in Dhofar Governorate. It was also observed that this type of weeds grows whenever the rains fall on that area, as well as whenever a climate saturated with humidity prevails in the region, in addition to the presence of other factors that help the rapid spread of its weeds, such as machines used by residents and farmers or local residents grazing their livestock. All these factors increase fears from the harm of this plant on the environmental diversity due to the easiness and speed of its spread.

Damages Caused by Parthenium

The study aimed to find solutions to control the Parthenium «Hysterophorus», by

helping with contribution of (255) people to learn about its effects and harms. The results of this step concluded that the plant poses a threat to human health, agriculture and the ecosystem. In addition to that, it also causes poisoning to livestock when grazing on it. It also can cause health problems if ingested by humans, according to study of participants. It has been shown that this plant causes harm to human health upon contact. Appearance of rashes is noted, especially on the face and hands, as well as constant coughing. That is in addition to nausea and dizziness, confirmed through the researcher's observation during his participation in the campaigns to combat the plant in the Dhofar Governorate. This plant also has serious impacts on vegetation, pastures and agriculture, as it was observed that it reduces the level of growth of plants and trees, affects the growth of seeds, affects the quality of crops in general and also threatens fruit and vegetable crops. At the same time, the study researchers agreed on the existence of a dangerous effect of the plant on animals, as it was observed that it causes dermatitis to cattle, and it also affects

- » It is classified as one of the plants that can contribute to the destruction of the ecosystem of the place where it grows
- » They germinate and grow very quickly, as they ripen and set their seeds in just four to six weeks
- » They pose a threat to human health, agriculture and the ecosystem, as well as poisoning livestock which graze on it
- » Among the most prominent recommendations to combat this harmful plant is to planting beneficial crops in place of these plants, spreading awareness of their damages, and activating the role of society and environmental volunteer teams to eliminate them



Recommendations

The study conducted by the researcher came out with several recommendations to control the Parthenium plant and limit its damages. Such recommendations include:

- To conduct in-depth studies on the spread of these harmful plants and their impact on humans and the environment throughout the Sultanate
- To remove this type of harmful plants by following the mechanical removal method (with specialized equipment) before the flowering stage
- To plant common plants immediately in place of uprooted weeds
- To activate the role of the community and volunteer teams in protecting the environment and spreading awareness of the harmfulness of the Parthenium plant
- To establish an integrated research center dedicated to controlling harmful plants
- To benefit from the experiences of other countries that fought this harmful plant
- To ban the import of livestock fodder and forage grasses unless there is a prior permit with the importance of obtaining a certificate that they are free from the Parthenium "Hysterophorus"
- To obtain governmental support to conduct extensive studies and come up with new ideas on how to combat the spread of this plant

cows with severe disease when they feed on grass mixed with Parthenium, as they infect them with mouth ulcers that causes increased salivation. Through experiments of some locals, the plant makes camel milk bitter when you test it.

The environmental impacts of the Parthenium "Hysterophorus" extends to the ecology of grasslands by reducing the quality of the ecosystem and crowding out other types of harmless plants, the study participants observed that the Parthenium grasses constitute more than 95% per square meter compared to other native species, thus affecting abundant and palatable native plants for livestock, as well as reducing nutrient levels in the soil.

Anti-Parthenium Campaigns

With the beginning of this study of the Parthenium plant, which began to spread in the Governorate of Dhofar, citizens and interested people formed since mid-July 2020, more than 100 volunteer teams to carry out environmental campaigns to uproot and remove the plant on a daily basis, as well, the author of

this study participated in some of these campaigns. Many ways of trying to eradicate the Parthenium plant in the Governorate of Dhofar were used by the volunteers participating in the campaign, such as manual uprooting before flowering and before it spreads its seeds, as well as working manually to remove and burn many of this harmful plant, in addition to planting other plants to replace the Parthenium. No others methods, such as chemical pesticides or biological pesticides were used. The Environment Authority appreciated the efforts of the local community in the Governorate of Dhofar for their cooperation and participation in the voluntary campaigns to eradicate the Parthenium plant, as several studies indicated the presence of this plant since the beginning of the nineties of the last century in the Governorate of Dhofar, but it was not of the present size, though increase in its spread was noticed during the periods that followed the climatic conditions that affected the Governorate.



» «Bee'ah» Company Activates a Campaign for Collecting Green Waste from Homes

Oman Environmental Services Holding Company (Bee'ah) has implemented a campaign entitled «With Us», targeting the general public and municipal services, and health care in private and government hospitals, in addition to private clinics, with regard to following up on contracts, payments and requests. The campaign also targets businesses such as factories that wish to dispose of hazardous waste and waste streams, etc. Khamis Marhoon Al-Siyabi, Head of Operations Department for the Municipal Waste Sector at Bee'ah Company, said that the types of green waste that Bee'ah collects are waste from homes only, and do not include waste from farms, green waste resulting from commercial activities,

street afforestation, public places or over-sized quantities. Regarding the utilization of this waste, Al-Siyabi explained that at present, it is being cut to pieces in some sites in order to reduce its volume and benefit from it, but if it is not utilized, it will be disposed of directly in the engineering landfills. Al-Siyabi added that, with regard to construction and demolition waste, if it is the result of simple maintenance work in the house and its quantity is small, then «Bee'ah» company will transport it by calling the «with us 1881» call center of the «Bee'ah» company on the toll-free number 1881 during all days of the week from 8:00 am until 10 pm, but if it is the result of extensive construction or demolition works such as building a house and others, then

the responsibility for transporting that waste rests with the contractor or the stakeholder, and they must transfer it to the nearest site of the sites designated to receive this type of waste from Bee'ah and the competent authorities. The head of the Operations Department for the Municipal Waste Sector at «Bee'ah» company, confirmed that the company deals with the service requests concerning transporting dead animals, with the exception of those resulting from commercial activities or dumped on the streets and public places, noting that the company is transporting dead animals that are placed next to its containers and that will be done according to the waste collection program for the concerned area.

Bahrain

Faisal bin Rashid participates in the meeting of GCC's Ministers Responsible for Environmental Affairs

His Highness Sheikh Abdullah bin Hamad Al Khalifa, the Personal Representative of His Majesty the King and Chairman of the Supreme Council for the Environment, deputized His Highness Sheikh Faisal bin Rashid Al Khalifa, Vice President of the Supreme Council for the Environment, to participate in the twenty-second meeting of the Ministers Responsible for Environmental Affairs in the GCC Countries. The meeting was held through visual communication to discuss a number of topics on the agenda that was raised by the environment ministers aiming at enhancing cooperation in all matters related to preserving the environment in light of the Corona pandemic. During the meeting, the responsible ministers approved a number of topics and recommendations related to the global challenges facing the environment, including the GCC Countries, as well as the developments in the areas of sustainable development, related to the implementation of the decisions of the Supreme Council of the GCC Countries regarding the promotion of joint environmental action, the follow-up of operational plans for the environmental strategy of the GCC Countries, the development of the Gulf environmental portal, and the measures that will be taken in the next phase to face the Corona pandemic.

UAE

Launching a National Electronic Platform for Monitoring Air Quality

His Excellency Dr. Abdullah bin Muhammad Belhaif Al Nuaimi, Minister of Climate Change and Environment, witnessed the launch of the first national electronic platform for monitoring air quality in the United Arab Emirates, as part of an official event held on this occasion at the headquarters of the National Center of Meteorology in the Capital Abu Dhabi. The launch of

the platform coincides with the world's celebration of the International Day of Air Freshness for a Blue Sky under the slogan «Clean Air for All». According to the official website of the event which belongs to the United Nations, the event aims to build a global community of work that encourages cooperation at the national, regional and international levels.

Kuwait

The Environment Public Authority Participates in the Campaign: «Kuwait is Clean with the Arms of its Citizens»

His Excellency Sheikh Abdullah Al-Ahmad Al-Hamoud Al-Sabah, Director General of the Environment Public Authority and Chairman of the Board of Directors, participated in the campaign «Kuwait is Clean with the Arms of its Citizens», which was organized by the «Nuair Initiative». The campaign is considered the largest voluntary national cleaning

campaign in Kuwait's history. The campaign coincides with the International Cleaning Day, in cooperation with a number of environmental activists and thousands of volunteers in Al Khuwaisat and some other areas in Kuwait. The authority seeks from this participation to promote positive environmental culture and spread environmental values among the community.

Qatar

A Campaign for Cleaning Umm Bab Beach on the International Day of Cleanliness

The Ministry of Municipality and Environment represented by the Public Cleaning Department, carried out a cleaning campaign for Umm Bab Beach in cooperation with the «Doha Environmental Works Project». This comes as part of the occasion of the «International Day of Hygiene». This campaign comes within a number of activities implemented by the Ministry, as part of its interest

in maintaining public cleanliness in all regions of the country, especially beaches, and using such international events to increase public awareness of the importance of hygiene. On this occasion, the Ministry of Municipality and Environment, represented by the Public Cleaning Department, honored a number of cleaning workers in appreciation of their daily efforts in maintaining public hygiene throughout the country.

KSA

Launching New Identity for Five Environmental Centers and an Environment Fund

His Excellency the Minister of Environment, Water and Agriculture, Eng. Abdul Rahman bin Abdul Mohsen Al-Fadhli, inaugurated the new identity of the Environment Fund, the National Center of Meteorology, the National Center for Plant Cover Development and Combating Desertification, the National Center for Monitoring

Environmental Compliance, the National Center for Wildlife Development in addition to the National Center for Management Waste. The event took place at the Ministry's headquarters, in the presence of the executive heads of the environmental centers, the Environment Fund, and a number of the ministry's leaders.

Australian Biologists Reveal the Secret of the Extreme Poison of the Australian Gummy Tree

Canberra - ONA: Australian biologists from the University of Queensland have discovered that the cause of the intense pain caused by touching the Australian Gimpi-Gimpy tree, which lasts for a long period of time, is a new class of toxins that directly affect nerve cells. The Science Advances Magazine pointed out that the tropical forests in northeastern Australia are not the best place to hike, as there are abundant large spiders and poisonous snakes, in addition to six types of stinging trees, «Dendrocnide». The leaves and branches of these trees are completely covered with biting bristles, and any touching to them, no matter how mild, causes severe burns. The most dangerous of these are «D. excelsa» و «D. moroides», as the pain resulting from touching them can last for several days or even weeks. Scientists have long been interested in the poison of these «stinging» trees, although they had previously discovered histamine

and formic acid in their poison, which is found in the poison of the common nettle plant. Biologists have now

discovered the secret of the toxicity of these trees, as they have isolated a new class of neurotoxins, called «Gimpietids», in honor of the Gimpi-Gimpy tree. These toxins are short chains of amino acids (peptides) that directly affect nerve cells, causing severe pain for a long period of time.



Environmental Vocabulary



The Glare

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In our daily life, we stopped by many birds by their movements, sounds and colors, some of which have become familiar to us with their distinctive qualities that distinguish them from other species of birds. Standing on the branches of trees and electrical wires as if they watching the movements and habitation of humans. They may have spiritual signs understood by both sides, and apparently the bird has greater possibilities in understanding the purposes of the other side of human beings, whether friendly or aggressive, so some birds were able to adapt themselves amid the noise of cities and the movement of people but in a way that obscures themselves from the danger. This is in such a way that feel live in an age where man is more secure than of their own kind, so they have given the human enough proximity to explore their qualities and enjoy their beauty.

It is not hidden to our eyes the sight of a bird landing on the electricity wires or on the branches of tree, whose unaesthetic appearance is imposed on people's eyes. Its beauty is not in its full body, which weighs about 90 grams and its length of up to 27 centimeters, but its beauty is concentrated in its wings and tail mixed in shades of blue. As its spreads its wings, its blue beauty is revealed, emitting flashes that resemble electric flashes, spreading a color glow like the glare of light bulbs installed on the streets. These exquisite lyrical colors that exposed the beauty of this bird during its flight hid the suggestion that it is a raptor bird because of its sharp look that may take some of its qualities because it feeds on all kinds of insects, reptiles, moths and rodents and tops of this list is its favorite meal of frogs. It craves its food when lands down to the ground in the late evening, especially in the hot summer.

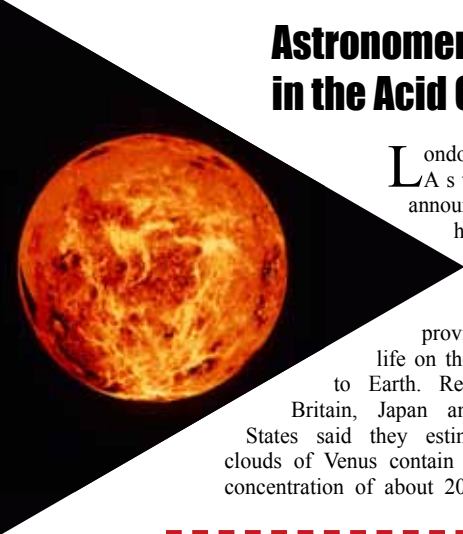
It is known as a rotary bird through its acrobatic performances in flight, where they are more artful during the mating season (March-May) where it rises high in the sky and then descend downwards in a circular motion, fluttering at the speed of the wind, producing loud noises. Although this bird does not live in groups, it has small family group, which communicates with them with voices similar to those of crows. Males and females are so similar that they are difficult to differentiate. In the breeding season the female lays about 4 eggs in its nest in tree holes or tall buildings. The couple co-care for the young during the incubation period. Its life in the wild is about 17 years.

This bird is widespread in India until it is quoted as holy in some communities and taken part of the Country name. In Oman, it is frequently present in agricultural and residential areas in northern Oman and in Musandam. The Indian Roller (Bengali Roller or Indian Olive Crow) is not in danger of extinction, which encourages greater protection. When we talk about this bird we may think to the distant perception, but when its local name appears, known as (Adh Dhadhowa), we need no one else to print its image to express a thousand words about it due its widespread.

Astronomers Find Signs of Life in the Acid Clouds of Venus

London, ONA: Astronomers announced that they have identified rare particles in the clouds of Venus that provide signs of life on the nearest planet to Earth. Researchers from Britain, Japan and the United States said they estimated that the clouds of Venus contain phosphine at a concentration of about 20 molecules per

billion. They said the calculations seemed to rule out the phosphine being the result of non-biological processes, such as volcanic eruptions, storms, sunlight or suspended dust, and published their findings in the Nature Astronomy Journal. The researchers estimate that the non-biological sources are capable of producing less than one in ten thousand of the phosphine discovered through observatories in Hawaii and Chile. The researchers added that the discovery of phosphine, which is made up of hydrogen and phosphorous, could indicate the existence of such aerial life outside Earth.



New Discovery of Dinosaurs Buried Alive About 125 Million Years Ago in China

Beijing - ONA: Chinese scientists have found two dinosaurs that were sleeping in an underground burrow about 125 million years ago when a nearby volcano erupted and sent lava into the valley and locked them in an underground tomb. The story has been revived now that farmers in China have discovered organisms of unknown species. A team of scientists affiliated with several institutions in China, one in Argentina and one in Belgium identified the fossilized remains of dinosaurs previously unknown in China, and paleontologists noticed that the eyes of the dinosaurs were closed when they were buried alive. The scientists called them Changmiania liaoningensis, which means «the eternal sleeper.» in Chinese language. It is believed that the dinosaurs died of suffocation, toxins and infections due to the position of the skeletons.

Farmers who first discovered the Fossil were working in Liaoning Province, northeast China.

«It is assumed in principle that the Changmiania liaoningensis specimens were suddenly trapped in a collapsed underground hole while they were resting, which explains their ideal realistic posture and the complete absence of weathering and scavenging effects,» stated the study.





Marwa Al Mukhaini

Sidr tree

Sidr is a wild and agricultural tree plant found in the Arabian Peninsula and Yemen, the Sidr fruit is called buckthorn



Sidra is characterized by being an evergreen tree in areas where there is sufficient rainfall, while deciduous in dry areas during the dry season

The most important uses and benefits of the Sidr tree:



Sidr tree leaves are used during dry seasons as animal feed



The nectar of the Sidr flowers is a source for the finest, the tastiest and the most expensive types of honey



Sidr tree has a variety of uses in traditional medicine, as an anti-inflammatory for the eye, and as an analgesic for treating dental and stomach pain

