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Chapter 1 : APC&E Commission Home Page

Ecology, Pollution, Environment. Turk, Amos; And Others Elements of environmental science and how the science is related to the more traditionally established disciplines are explored in this supplementary text.

Testimonials I was very impressed by the international scope of participants at the Chicago meeting and the quality of work presented. It speaks very highly of the organizers of this meeting as it is no small task to get medical researchers from around the world to gather at a single site for an exchange of ideas. The accommodations were wonderful and the noontime luncheons delicious. Congratulations on an exceptional conference. The attendance exceeded the expectation. Session went on time permitting ample time for questions and answers. Doctors from all across the World attending Endocrinology has made this conference a successful event. Everything was very well organized, and very important, members of the Conference Series were always present for support and help. I greatly appreciated this. Thank you very much again. It was my great pleasure to attend Endocrinology My husband and I really enjoyed the scientific programme, the positive international atmosphere and the welcoming spirit. We will recommend your coming conferences to our colleagues. Best wishes and good luck with future work. Ylva Vladic Stjernholm Karolinska University Hospital, Sweden The Conference Series llc LTD meeting "Translational Medicine " has been a very great meeting providing a comprehensive view on ongoing international clinical developments and gave me the option to make a lot of novel contacts to start collaborative research with people from all over the world. Discussion directly with almost all peoples in a familial atmosphere is very fruitful as well as the venue, time frame and organization has been very convenient Andreas Weinhaeusel AIT Austrian Institute of Technology, Austria This Conference was one of the best and even brilliant I have ever attended. There was very nice to have a mix between theory, basic science, sharing best practices and practical recommendations. The quality of the panels was outstanding, and I think you arranged a great cross-section of topics! I will help recruit speakers to the next meeting as an organizer member of the conference committee Shabaan Abdallah University of Cincinnati, USA It was a great pleasure for me to attend the conference. It was perfectly organized, I met many nice people and listen to many valuable talks. Elzbieta Jarzebowska Warsaw University of Technology, Poland Thanks for your kindly help and service during the conference. The conference was very interesting and also very useful for my academic research. So I will attend the Biostatistics next year if I have time. It was just excellent in all aspects. Annette Bentley President, American Celiac Society, USA Thank you for your email and for your well done job in organizing the Food Technology , All subjects in this conference was in depth knowledge from your good selections of international speakers and I expect conference will be in the same level of performers. I had a great time and thought the program was really nicely put together Trine N Jorgensen Cleveland Clinic Foundation, USA The recent Stem Cell Congress in Chicago, from the scientific standpoint, the highest quality and most useful of the three ConferenceSeries-sponsored conferences that I have attended. The presentations I heard were uniformly good. I would seriously consider participating in the Sept. My wife and me keep Endocrinology firmly in our hearts.

Chapter 2 : Ecology - Wikipedia

To see if they could confirm some of those predictions of "pollution ecology," more than a decade ago two researchers â€" Mikhail V. Kozlov and Elena L. Zvereva of the University of Turku in Finland - began the time-consuming task of assembling a massive database of studies.

Causes of Environmental Pollution Let us first take a look at the causes of environmental pollution: Industries have been polluting our environment especially since the beginning of the industrial revolution, as mentioned above, notably due to the increasing use of fossil fuels. In the 19th century and for a significant part of the 20th century, coal has been use to make machines work faster, replacing human force. Though pollution by industries mainly causes air pollution, soil and water contamination can also occur. This is particularly the case for power-generating industries, such as plants producing electricity May they be a dam, a nuclear reactor or some other type of plant. Also, the transportation of this energy can be harmful to the environment. We can take as an example the transportation of petrol through pipelines; if there is a leak in the pipeline, soil will automatically be polluted. At the same time, if the tanker transporting the petrol from its production plant to the place where it will be consumed leaks or sinks, the water will get contaminated. Ever since men abandoned animal power to travel, pollution of the environment has become higher and higher. Its levels have only been increasing until now. Similarly to industries, pollution caused by transport can mainly be attributed to fossil fuels. Indeed, humans went from horse carriages to cars, trains which, before electricity, used to be propelled by coal , and airplanes. As the traffic is increasing every day, pollution follows that evolution. Agriculture is mainly responsible for the contamination of water and soil. This is caused by the increased use of pesticides, as well as by the intensive character of its production. Almost all pesticides are made from chemical substances and are meant to keep diseases and threatening animals away from the crops. However, by keeping these forms of life away, harm is almost always made to the surrounding environment as well. Furthermore, as agriculture gets more and more intensive to feed the increasing world population , more environments and ecosystems are destroyed to make space for the crops. Some of them, like rapeseed â€"used to make oil â€" demand a lot of space for a relatively small output. Trading activities including the production and exchange of goods and services. Concerning goods, pollution can be caused by packaging which often involves the use of plastic, which is made from fossil fuels or transport, mainly. Finally, residential areas provide their fair share of pollution as well. First, to be able to build homes, natural environment has to be destroyed in one way or another. Wildlife and plants are driven away and replaced by human constructions. As it requires the work of industries, construction itself is also a source of contamination of the environment. Then, when people settle in, they will produce waste every day, including a part that cannot be processed by the environment without harm yet. Effects of Environmental Pollution Now that we have identified the main causes of environmental pollution, let us study the negative effects it has: The effects of environmental pollution on humans are mainly physical, but can also turn into neuro-affections in the long term. The best-known troubles to us are respiratory, in the form of allergies, asthma, irritation of the eyes and nasal passages, or other forms of respiratory infections. Notably, these well spread affections can be observed when air pollution is high in cities, when the weather gets hot, for instance. On top of that, environmental pollution has been proven to be a major factor in the development of cancer. This can happen for example when we eat reminiscences of pollutants used in the production of processed foods, or pesticides from the crops. Other, rarer, diseases include hepatitis, typhoid affections, diarrhoea and hormonal disruptions. Environmental pollution mainly affects animal by causing harm to their living environment, making it toxic for them to live in. Acid rains can change the composition of rivers and seas, making them toxic for fishes, an important quantity of ozone in the lower parts of the atmosphere can cause lung problems to all animals. Nitrogen and phosphates in water will cause overgrowth of toxic algae, preventing other forms of life to follow their normal course. Eventually, soil pollution will cause harm and sometimes even the destruction of microorganisms, which can have the dramatic effect of killing the first layers of the primary food chain. As for animals, plants, and especially trees, can be destroyed by acid rains and this will also have a negative effect on animals as well,

as their natural environment will be modified , ozone in the lower atmosphere block the plant respiration, and harmful pollutants can be absorbed from the water or soil. Effects on the Ecosystem: In short, environmental pollution, almost exclusively created by human activities, has a negative effect on the ecosystem, destroying crucial layers of it and causing an even more negative effect on the upper layers. More from the environment:

Chapter 3 : 66 best Ecology - Pollution images on Pinterest in | Ecology, Environment and Air pollution

The Ministry of Ecology and Environment, formerly the Ministry of Environmental Protection of the People's Republic of China (MEP), and prior to known as the State Environmental Protection Administration (SEPA), is a department of the State Council of the People's Republic of China.

Since that time, it has undergone significant changes - including a reorganization in The Commission is the environmental policy-making body for Arkansas. With guidance from the Governor, the Legislature, the EPA and others, the Commission determines the environmental policy for the state and the Arkansas Department of Environmental Quality implements those policies. Though the Commission and the Arkansas Department of Environmental Quality work closely, each is distinctly different. The Commission is comprised of 13 members, six representing state agencies and seven appointed by the Governor. The six agency representatives are directors - or their designee - of the: Each district must have at least one representative on the Commission, but no more than two representatives. The Commission employs two people: In practicality, they meet once a month with the exception of November. Its original membership consisted of the directors of four state agencies: The Commission also had three citizen members, each appointed by the Governor to represent interest areas of industry, municipalities and agriculture and livestock. Act of - Required the Commission to appoint a director "who shall handle such correspondence make and arrange such inspections or investigations, and obtain and assemble or propose such reports and data as the Commission may direct and authorize, and who shall be the executive officer and active administrator of all pollution control activities and shall have such other delegated powers and duties as the Commission may direct or authorize. The new composition of the Commission included the directors of five state agencies: The three appointed member representatives remained unchanged. Act of - Added two members to the Commission: The special-interest representative was appointed by the Governor. Act 38 of - State government reorganization act; created the Arkansas Department of Environmental Quality and provided that the Department Director would be nominated by the Commission and confirmed by the Governor with consent of the State Senate. Act of - Added another member to the Commission and clarified the qualifications of one of the positions to be appointed by the Governor. The additional member, appointed by the Governor, was required to be a member of an organization which belonged to the Arkansas Conservation Coalition. The change in the qualifications of another appointee, a representative of municipalities, was changed to the designation of a representative of city or county government. Act of - Restructured the Commission as follows: Increased the size of the Commission to 13 members by adding two positions to be appointed by the Governor and removed the specific interest area designations for the gubernatorial appointees and required that private citizen appointees " The new act required the presence of nine members as a quorum to conduct business, modified the procedures for issuance and revocation of wastewater discharge permits and for appeals of permit decisions involving wastewater discharges.

Chapter 4 : Ecology Ecosystem | Ecology Ecosystems Experts Meeting | Environmental Science Conferen

Reduce waste & pollution Managing the dangerous waste your business generates is critical to pollution prevention, but it's better if you can avoid generating dangerous waste in the first place. By eliminating dangerous waste at its source, you protect your workers, your community, and the environment from the hazardous effects of toxic chemicals.

Ecosystems, for example, contain abiotic resources and interacting life forms i. Ecosystems are dynamic, they do not always follow a linear successional path, but they are always changing, sometimes rapidly and sometimes so slowly that it can take thousands of years for ecological processes to bring about certain successional stages of a forest. A single tree is of little consequence to the classification of a forest ecosystem, but critically relevant to organisms living in and on it. Each of those aphids, in turn, support diverse bacterial communities. The former focus on organisms distribution and abundance, while the later focus on materials and energy fluxes. Biological organisation and Biological classification System behaviors must first be arrayed into different levels of organization. Behaviors corresponding to higher levels occur at slow rates. Conversely, lower organizational levels exhibit rapid rates. For example, individual tree leaves respond rapidly to momentary changes in light intensity, CO2 concentration, and the like. The growth of the tree responds more slowly and integrates these short-term changes. Hence, ecologists classify ecosystems hierarchically by analyzing data collected from finer scale units, such as vegetation associations, climate, and soil types, and integrate this information to identify emergent patterns of uniform organization and processes that operate on local to regional, landscape , and chronological scales. To structure the study of ecology into a conceptually manageable framework, the biological world is organized into a nested hierarchy , ranging in scale from genes , to cells , to tissues , to organs , to organisms , to species , to populations , to communities , to ecosystems , to biomes , and up to the level of the biosphere. Biodiversity Biodiversity refers to the variety of life and its processes. It includes the variety of living organisms, the genetic differences among them, the communities and ecosystems in which they occur, and the ecological and evolutionary processes that keep them functioning, yet ever changing and adapting. The term has several interpretations, and there are many ways to index, measure, characterize, and represent its complex organization. Natural capital that supports populations is critical for maintaining ecosystem services [20] [21] and species migration e. Habitat Biodiversity of a coral reef. Corals adapt to and modify their environment by forming calcium carbonate skeletons. This provides growing conditions for future generations and forms a habitat for many other species. Habitat shifts provide important evidence of competition in nature where one population changes relative to the habitats that most other individuals of the species occupy. For example, one population of a species of tropical lizards Tropidurus hispidus has a flattened body relative to the main populations that live in open savanna. The population that lives in an isolated rock outcrop hides in crevasses where its flattened body offers a selective advantage. Habitat shifts also occur in the developmental life history of amphibians, and in insects that transition from aquatic to terrestrial habitats. Ecological niche Termite mounds with varied heights of chimneys regulate gas exchange, temperature and other environmental parameters that are needed to sustain the internal physiology of the entire colony. Evelyn Hutchinson made conceptual advances in [32] [33] by introducing a widely adopted definition: The fundamental niche is the set of environmental conditions under which a species is able to persist. The realized niche is the set of environmental plus ecological conditions under which a species persists. A trait is a measurable property, phenotype , or characteristic of an organism that may influence its survival. Genes play an important role in the interplay of development and environmental expression of traits. This tends to afford them a competitive advantage and discourages similarly adapted species from having an overlapping geographic range. The competitive exclusion principle states that two species cannot coexist indefinitely by living off the same limiting resource ; one will always out-compete the other. When similarly adapted species overlap geographically, closer inspection reveals subtle ecological differences in their habitat or dietary requirements.

Chapter 5 : Causes and Effects of Environmental Pollution - Conserve Energy Future

Find this Pin and more on Ecology - Pollution by GeneÃ© Handley. Thousand Years Carbon Dioxide - Bing Images Greenhouse Gases Have Soared to Record Levels: WMO - The amount of planet-warming greenhouse gases in the atmosphere reached a record high in with rapid growth in both carbon dioxide and methane concentrations.

But if that sounds like another familiar cry for quick ecological solutions, it is not. We have enough of those. Unfortunately, ecology has become a fad. Murphy, a highly competent Latter-day Saint zoologist and entomologist who was serving as discussion leader for the workshop on ecology, pollution, and consumerism. As you might expect, the workshop was filled. Have the fad ecologists already muddled the real environmental picture? The students attending the workshop concurred, believing that a lack of facts often causes a polarization of enthusiasts, some of whom move so far out to one extreme or the other that they cease to be open-minded. Both extremes paralyze positive actionâ€”one through fear, the other through apathy. A citizens group that is uninformed about the true nature of the problem and its possible solutions may only prolong the time before improvement is made. However, the more we discussed the problem, the more apparent it became that we need to define ecology. Anytime any of us draws upon natural resources, we step into the ecology picture. One participant noted that rapidly increasing demands on resources are due not so much to the increasing population as to our increasing desires to consume the fruits of modern technology. Often, technology creates a device and then convinces the public that it needs the creation. In America, a black and white television set seems to be part of the minimum subsistence level, so far as many people are concerned. Not many are likely to agree with so extreme a statement, but quite a few, I think, would admit that, leaving the Indians out of it, we are not as much happier than our grandfathers as it would seem our gains in health, security, comfort, [and] convenience â€¦ ought to make us. Does this failure to pay off have something to do with a misjudgment concerning what man really wants most or, at least, a failure to take into account certain of the things he wants besides comfort, health, and the rest? All of our theology indicates that the earth is a very important place, spiritually and temporally. Brigham Young said this: There are the elements that belong to this globe, and no more. We do not go to the moon tomorrow; neither send to the sun or any of the planets; all our commercial transactions must be confined to this little earth and its wealth cannot be increased or diminished; and though the improvements in the arts of life which have taken place within the memory of many now living are very wonderful, there is no question that extravagance has more than kept pace with them. Progress, and improve upon, and make beautiful everything around you. Cultivate the earth and cultivate your minds. Build cities, adorn your habitations, make gardens, orchards, and vineyards, and render the earth so pleasant that when you look upon your labours you may do so with pleasure, and that angels may delight to come and visit your beautiful locations. In the meantime, continually seek to adorn your minds with all the graces of the Spirit of Christ. It is obvious that Latter-day Saints have ample precedence in the ecology thing. Our whole doctrine is based on giving man joy and upgrading his personality talents, traits, and environment. Latter-day Saints have special values to offer to any discussion or action dealing with these themes.

Chapter 6 : Research & Reviews | Ecology and Environmental Sciences | Open Ac

Environmental Pollution Environmental pollution has existed for centuries but only started to be significant following the industrial revolution in the 19 th century. Pollution occurs when the natural environment cannot destroy an element without creating harm or damage to itself.

Pollution is the contamination of the environment by introduction of contaminants that can cause damage to environment and harm or discomfort to humans or other living species. It is the addition of another form of any substance or form of energy to the environment at a rate faster than the environment can accommodate it by dispersion, breakdown, recycling, or storage in some harmless form. Environmental pollution is one the greatest challenges that the world is facing today. It began since industrial revolution, increasing day by day and causing irreparable damage to Mother Earth. Environmental pollution has its own causes, effects and solutions. Looking into these will help you identify the causes and what steps you can take to mitigate those effects. Broadly, environmental pollution consists of six basic types of pollution, i. When people think of environmental pollution, most focus on fossil fuel and carbon emissions, but there are different contributing factors. Chemical pollution in bodies of water contributes to illnesses. Electromagnetic pollution has effects on human health but is uncommonly considered in present times despite the fact we essentially expose ourselves to it on a daily basis. Taking a look at causes and effects of environmental pollution will pull any mind on a rapid downward spiral. Solutions are in the works and, if we work together across the world, there is hope remaining, at least for the time being. The environment will continue to deteriorate until pollution practices are abandoned. Skinner Causes of Environmental Pollution Pollution from cars, trucks, and other vehicles is and has been our major environmental pollution issue for almost a century now. The problem is we did not realize this until the problem had manifested to monumental proportions. Fossil fuel emissions from power plants which burn coal as fuel contributed heavily, along with vehicles burning fossil fuels, to the production of smog. Smog is the result of fossil fuel combustion combined with sunlight and heat. The result is a toxic gas which now surrounds our once pristine planet. Carbon dioxide is another product from all of the vehicles on the planet as well as unreformed power plants and other industrial facilities. A continually growing population of humans and clear cutting of forests has exacerbated this problem so natural defenses are no longer present and carbon dioxide levels are on the rise. Water pollution is a major issue. Many industries dump wastes into rivers, lakes, ponds, and streams in an attempt to hide wastes from EPA inspectors. These water sources feed major crops and food becomes contaminated with a variety of chemicals and bacteria, causing rampant health problems. Radiation comes into play as well. This is an exceedingly nasty pollution issue and requires extensive description. Primarily, there is radiation from the sun. As the natural ozone layer around the Earth has become depleted. The sun is wonderful, but the only reason we are able to survive on this planet so close to the sun is due to the fact of natural shielding against solar radiation. As the protective ozone layer around the planet has become thinner, ultraviolet radiation has risen significantly, causing increases in skin cancers and other types of cancer in all countries, killing millions of people every year. More radiation is a problem. The sun shining brightly on a naked planet is not the only source of radiation we are exposed to. Electromagnetic radiation is another insidious culprit. Once upon a time, the major concern around this type of radiation was due to high tension wires which carry huge amounts of electricity to cities. Now, we even carry sources of this radiation with us as cell phones, laptops, tablets and other wireless devices. Effects of Environmental Pollution The polluting gases mentioned above have an interesting effect on climate. Essentially, these gases form a veil around the planet which holds heat in, increasing the overall temperature of the planet. The rise in planetary temperature, or global warming, is not immediately noticeable. However, even a rise of a few degrees Centigrade causes catastrophic changes in weather. This is happening now. It is ironic, but even with fewer trees in the world; the increase of carbon dioxide emissions induces plants such as ragweed and many trees to produce more pollen than ever before. This has resulted in rampant allergies across the world, affecting the health of billions of people. One of the solutions to tamp out carbon monoxide emissions from coal burning power plants was and still is to use radioactive power plants. While this does cut

down on gas emissions significantly, there is radioactive waste which causes various cancers to bloom in major cities and small towns all around while destroying ecosystems entirely. Global temperature has risen significantly over the years. The protective atmosphere is further being polluted by methane gas released from melting icecaps. This is causing rampant weather issues around the planet. This all seems like a fairly bleak outlook for the planet and all the creatures on it. It is, in fact, a load of dark and very real truth. For much of it, there is little turning back. Being realistic, though solutions are in the works to combat global warming, the hope is dim. Radiation does not go away quickly either, especially in a technological age requiring more power, more gas, and intensified depletion of protective gases around the planet. We are on a significant downhill snowball ride to hell. There are things we can do. Let us take a look at some of the solutions which are currently being implemented to reduce pollution. Solutions to Environmental Pollution Gas emission pollution is being mitigated in a variety of ways with car emission control, electric and hybrid vehicles and public transportation systems. Not all major cities have successful implementation and decent public transportation in place, but the world is working on this issue constantly and we have managed to reduce emissions profoundly over the last decade. There is much catching up to do. The cost of radioactive power plants is becoming apparent and the days of coal power plants are nearly dead. The radiation is a serious issue. Radioactive leakage from power plants and nuclear testing have already contaminated oceanic life to such a degree that it will take hundreds of years to return to normal. More radiation solutions are in the works with various ecologically friendly power technologies being built every day. Solar power is a fantastic solution. Now that solar radiation is at a climactic peak, we can reap power from the sun using solar panel systems. These range from home systems to larger scale systems powering entire communities and cities. Wind power is coming into play. This may not seem like much at first, but when you get about feet off the ground, there is a great deal of wind up there. By building wind turbines to harvest natural wind energy, electricity is produced. Wind turbine power and solar power are both powerful forces against fossil fuel power and radioactive power. The one problem here is power companies. It has become the crusades of many individuals and small corporations to make the switch and there are plenty of people following this as populations cry out for help. Electromagnetic radiation ER reduction. Once major manufacturers of computers and electronic devices realized the blatant potential for huge ER emissions directly into the eyes and brains of users, they started to implement hardware protocols to minimize risks and reduce ER production significantly. Newer devices are in the lead to knock this problem out and, fortunately, this is working. Also, the Environmental Protection Agency EPA is well aware of all leaks and tricks industries are using to dump wastes. This agency now has extremely strict protocols and testing procedures implemented against such facilities so populations are not affected. Additionally, the EPA is measuring air pollution and implementing regulatory procedures for vehicle emissions. They also monitor pollen issues and, with the help of the Centers for Disease Control CDC , they implement solutions to reduce pollen in the air. Asthma and other allergic conditions are flooding medical care facilities and pharmaceutical companies with serious public health problems. The response has been swift and various methods to control emissions and reduce pollen counts are in the works. Children and elderly people are at the highest risk for environmental pollution related health problems. The good news is we are directly on the horizon to cut down the causes and risks while providing practical health solutions for the general public throughout the world.

Chapter 7 : Environmental news, opinion and analysis from Guardian US | The Guardian

2) Ecology defines pollution prevention in these criteria as reductions of hazardous substances and pollutants at the source (see) whereas the ISO standard includes control and treatment options in its definition of prevention of pollution.

The brainchild of John D. Rockefeller , Standard Oil enjoyed the blessings and handicaps of overwhelming powerâ€”on the one hand, an early control of the oil business so complete that even its creators could not deny its monopolistic status; on the other, an unending series of journalistic and legal attacks upon its business ethics, profits, and very existence. Exxon became the object of much resentment during the s for the huge profits it made from the OPEC-induced oil shocks. The uproar over the Exxon Valdez oil tanker spill in put the corporation once more in the position of embattled giant, as the largest U. In addition to its oil and gas exploration, production, manufacturing, distribution, and marketing operations, Exxon was a leading producer and seller of petrochemicals and was involved in electric power generation and the mining of coal, copper, and other minerals. Exxon was also once again making history, through a proposed merger with Mobil Corporation, to create the largest petroleum firm in the world in one of the biggest mergers everâ€”and to reunite two of the offspring of the Standard Oil behemoth. Rockefeller , was born in to a family of modest means living in the Finger Lakes region of New York State. His father, William A. Rockefeller, was a sporadically successful merchant and part-time hawker of medicinal remedies. Rockefeller was in his early teens, and it was there that the young man finished his schooling and began work as a bookkeeper in From a very young age John D. Rockefeller developed an interest in business. Although still very young, Rockefeller had already impressed Maurice Clark and his other business associates as an unusually capable, cautious, and meticulous businessman. He was a reserved, undemonstrative individual, never allowing emotion to cloud his thinking. Bankers found that they could trust John D. Rockefeller, and his associates in the merchant business began looking to him for judgment and leadership. The most obvious and exciting candidate was oil. Activity in the oil fields, however, was extremely chaotic, a scene of unpredictable wildcatting, and John D. Rockefeller was a man who prized above all else the maintenance of order. The discovery of oil wrought a revolution in U. It was a typically bold move by Rockefeller, who although innately conservative and methodical was never afraid to make difficult decisions. Creation of the Standard Oil Monopoly: With a flood of newcomers entering the field every day, size and efficiency already had become critically important for survival. As the biggest refiner, Rockefeller was in a better position than anyone to weather the price storms. Rockefeller and Henry Flagler, with whom Rockefeller enjoyed a long and harmonious business relationship, decided to incorporate their firm to raise the capital needed to enlarge the company further. At a time when the term was yet unknown, Standard Oil had become a vertically integrated company. The railroads would avoid disastrous price wars while the large refiners forced out of business those smaller companies who refused to join the cartel, known as the South Improvement Company. The following strategies have and will continue to guide Exxon as we strive to meet shareholder and customer expectations: The plan was denounced immediately by Oil Region producers and many independent refiners, with near-riots breaking out in the oil fields. After a bitter war of words and a flood of press coverage, the oil refiners and the railroads abandoned their plan and announced the adoption of public, inflexible transport rates. In the meantime, however, Rockefeller and Flagler were already far advanced on a plan to combat the problems of excess capacity and dropping prices in the oil industry. To Rockefeller the remedy was obvious, though unprecedented: Rockefeller approached the Cleveland refiners and a number of important firms in New York and elsewhere with an offer of Standard Oil stock or cash in exchange for their often-ailing plants. By the end of , all 34 refiners in the area had agreed to sellâ€”some freely and for profit, and some, competitors alleged, under coercion. All indications are that Standard regularly paid top dollar for viable companies. With great confidence, Rockefeller proceeded to duplicate his Cleveland success throughout the rest of the country. By the end of he had absorbed the next three largest refiners in the nation, located in New York, Philadelphia, and Pittsburgh. Rockefeller also began moving into the field of distribution with the purchase of several of the new pipelines then being laid across the country. Standard interests rapidly grew so large that the threat of

monopoly was clear. The years to saw Rockefeller push through his plan to its logical conclusion. At the age of 39, Rockefeller was one of the five wealthiest men in the country. In nine Standard Oil officials were indicted by a Pennsylvania grand jury for violating state antimonopoly laws. This move overcame state laws restricting the activity of a corporation to its home state. Rockefeller held the largest number of shares. Rockefeller reorganizes Standard Oil into a trust, creating Standard Oil Company of New Jersey as one of many regional corporations controlled by the trust. The trust has secured a quarter of the total oil field production in the United States. Lawsuit leads to dissolving of the trust; the renamed Standard Oil Company New Jersey becomes main vessel of the Standard holdings. Jersey becomes the sole holding company for all of the Standard interests. Federal government files suit against Jersey under the Sherman Antitrust Act , charging it with running a monopoly. Supreme Court upholds lower court conviction of the company and orders that it be separated into 34 unrelated companies, one of which continues to be called Standard Oil Company New Jersey. Company gains seven percent stake in Iranian oil production consortium. Company agrees to buy Mobil in one of the largest mergers in U. The s were a period of exponential growth for Standard. The trust not only maintained its lock on refining and distribution but also seriously entered the field of production. The overseas trade in kerosene was especially important to Jersey, which derived as much as threefourths of its sales from the export trade. In addition to producing and refining capacity, Standard also was extending gradually its distribution system from pipelines and bulk wholesalers toward the retailer and eventual end user of kerosene, the private consumer. Jersey at Head of Standard Oil Empire: As a result, the trust was promptly dissolved, but taking advantage of newly liberalized state law in New Jersey, the Standard directors made Jersey the main vessel of their holdings. The new Standard Oil structure now consisted of only 20 much-enlarged companies, but effective control of the interests remained in the same few hands as before. Jersey added a number of important manufacturing plants to its already impressive refining capacity and was the leading Standard unit. It was not until , however, that Jersey became the sole holding company for all of the Standard interests. Rockefeller had retired from daily participation in Standard Oil in at the age of More obvious were the frankly monopolistic policies of the company he had built. In relative terms, however, its domination of the U. By its percentage of total refining was down to 66 percent from the 90 percent of a generation before, but in absolute terms Standard Oil had grown to monstrous proportions. Therefore, it was not surprising that in a U. The commissioner of the Bureau of Corporations, James R. Garfield, decided to widen the investigation into a study of the national oil industryâ€”in effect, Standard Oil. Rockefeller, and others with running a monopoly. In , after years of litigation, the U. The Court ordered the separation from Standard Oil Company New Jersey of 33 of the major Standard Oil subsidiaries, including those that subsequently kept the Standard name. Notable among the remaining holdings were a group of large refineries, four medium-sized producing companies, and extensive foreign marketing affiliates. Absent were the pipelines needed to move oil from well to refinery, much of the former tanker fleet, and access to a number of important foreign markets, including Great Britain and the Far East. Archbold, a longtime intimate of the elder Rockefeller and whose Standard service had begun in , remained president of Standard Oil New Jersey. In , however, Jersey made a domestic purchase that would prove to be of great long-term value. Although only the fifth leading producer in Texas at the time of its purchase, Humble would soon become the dominant drilling company in the United States and eventually was wholly purchased by Jersey. Humble, later known as Exxon Company U. Despite initial disappointments in overseas production, Jersey remained a company oriented to foreign markets and supply sources. On the supply side, Jersey secured a number of valuable Latin American producing companies in the s, especially several Venezuelan interests consolidated in into Creole Petroleum Corporation. By that time Creole was the largest and most profitable crude producer in the Jersey group. In Creole produced an average of , barrels per day, far more than the , by Humble and almost equal to all other Jersey drilling companies combined. Jersey had also incorporated eight major marketing companies in Europe by , and these, too, sold a significant amount of refined productsâ€”most of them under the Esso brand name introduced the previous year the name was derived from the initials for Standard Oil. Even as late as , however, gasoline had not yet become the leading seller among Jersey products. That honor went to the group of residual fuel oils used as a substitute for coal to power ships and industrial plants. Distillates used for home

heating and diesel engines were also strong performers. Even in , when Exxon distributed its gasoline through a network of 12, U. In that proportion was about the same, indicating that regardless of the end products into which oil was refined, it was the production of crude that yielded the big profits. Indeed, by mid-century the international oil business had become, in large part, a question of controlling crude oil at its source. With Standard Oil Company New Jersey and its multinational competitors having built fully vertically integrated organizations, the only leverage remained control of the oil as it came out of the ground. Although it was not yet widely known in the United States, production of crude was shifting rapidly from the United States and Latin America to the Middle East. As early as oil had been verified in present-day Iran , but it was not until that Jersey and Socony-Vacuum, prodded by chronic shortages of crude, joined three European companies in forming Iraq Petroleum Company. Already in , Jersey and the other oil giants were stretching the very concept of nationality beyond any simple application. The latter companies, in need of both capital for expansion and world markets for exploitation, sold 30 percent of the newly formed Arabian American Oil Company Aramco to Jersey and ten percent to Socony-Vacuum in With a number of significant tax advantages attached to foreign crude production, Jersey drew an increasing percentage of its oil from its holdings in all three of the major Middle Eastern fieldsâ€”Iraq, Iran, and Saudi Arabia â€”and helped propel the year postwar economic boom in the West. With oil prices exceptionally low, the United States and Europe busily shifted their economies to complete dependence on the automobile and on oil as the primary industrial fuel. Exxon, Oil Shocks, and Diversification: Growing nationalism and an increased awareness of the extraordinary power of the large oil companies led to the formation of the Organization of Petroleum Exporting Countries OPEC. Later, a series of increasingly bitter confrontations erupted between countries and companies concerned about control over the oil upon which the world had come to depend. The growing power of OPEC and the concomitant nationalization of oil assets by various producing countries prompted Jersey to seek alternative sources of crude.

Chapter 8 : Ecology, Pollution, and Consumerism - new-era

By The European Environment Agency What we throw into the trash bin might end up into the sea. Our understanding is growing on the global issue of marine litter, which has impacts on marine wildlife but also human health and the economy.

Index Copernicus value ICV Survival of each species depends on its interaction with the surrounding environment and the ecology. Understanding the ever changing environmental and ecological conditions is of prime importance. The journal of Ecology and Environmental Sciences deals with publishing scientific information on ecological and environmental aspects. This journal is an authentic information source catering the readers with the latest trends in these important subjects. Journal of Ecology and Environmental Sciences. This quarterly periodical considers articles in the form of a research article, review article, short communication, perspectives and commentary. This is an open access journal which allows all content available freely without any charge to the individual user or any Institution. Users are allowed to read, download, copy, distribute, print, search, or link to the full texts of the articles, or use them for any other lawful purpose, without any prior permission from the publisher or the author provided the author is given due credit wherever necessary. Submit manuscript at https: Authors intending to share their valuable information in a universal podium are welcome to contribute their understanding in the specified form. This global platform disseminates knowledge and understanding on all aspects of ecology and environmental sciences. The journal is wide scoped and considers submissions of relevant articles encompassing molecular biological analysis, physiological changes, biochemical analysis, zoological studies, botanical studies, ecological studies, statistical analysis and computational studies in relation to ecology or environmental sciences. Articles will be considered in the following areas but submissions are allowed in all the allied disciplines related to ecology and environmental sciences. Ecology All aspects of basic and applied ecology, Community ecology, Wildlife ecology, Wildlife management, Invasion ecology, Theories in ecology, Ecological Modeling, Ecosystems, Ecological Succession, Human ecology, Animal ecology, Plant ecology, Policies in Ecology, Evolution, Systematics, Biodiversity,Marine ecology, Restoration ecology, Evolution of pathogens and relevant diseases, Management of Agro-ecosystem, Biogeography etc. Genus Genus or in plural genera is known as the taxonomical hierarchy above species containing one or multiple species under it. The further hierarchy in taxonomy contains family. For instance, Staphylococcus is an example of bacterial genus where it may have one or multiple species under it. Molecular evolution Molecular evolution denotes the study of evolution at molecular level of genes, proteins or genomes. Journal of Molecular Evolution. Practically, for specific calculations it is not feasible to consider the actual origin; therefore, out of a group of organisms under consideration the most recent ancestor from which all other might have descended is computed, thus, the organism which is comparatively oldest among the group is known as Most Recent Common Ancestor. Animal Ecology Animal ecology refers to the study of animals with reference to their respective environment which considers several aspects such as from environmental factors to evolution. Journal of Animal Ecology. Biodiversity Biodiversity refers to the richness of species on earth or for a particular geographical region. Understanding and assessment of biodiversity for different region is mandatory to obtain insight about the environmental changes and their impact on the local flora and fauna. Community Ecology In a specific time frame if two or more number of species is sharing a common geographical area that is known as community ecology. In other words, assembly of different species in a specific geographical area in a particular time and dwelling as a co-habitat is referred under community ecology Related Journal: Conservation Biology Considering the importance of multiple disciplines in biological sciences, conservation biology probably claims much attention due to its impactful presence. To do so, conservation of the endangered species and preventing species extinction to the highest level is of great importance. Managing those stressful situations and taking proper decision in such situations is necessary. Disease management requires proper preparation and mental ability and most of all perfect planning according to the situation demand. Depending on the epidemics and remedy available, quarantine and medication should be planned so that a particular outbreak

must not impact a larger population or spread through a vast geographical area. Ecological Modeling Measuring ecological behavior of a particular component in a real time scenario may be time consuming and requires ample efforts, in several situations results of such ecological experimentation is cumbersome. Mathematical modeling has become a better alternative in such conditions and may provide a deep insight for understanding the interrelation of different ecological components through computation and predict their future issues. Agent based model, partial differential equations along with other mathematical techniques are frequently used for this purpose. Ecological Succession Ecological succession is refers to the gradual alteration of a species structure habiting in a particular ecological community over a particular time period. The time frame could be in relation to some natural incidence such as natural disaster, mass extinction etc. Ecosystems Different interacting organisms co-dwelling in a particular geographical area and their relation with surrounding environment forms an ecosystem. Agriculture, Ecosystems and Environment, Ecosystems. Marine and Freshwater Ecosystems, Urban Ecosystems. Environmental Pollution Pollution refers to the alteration of the natural component proportions beyond a threshold limit specified by the assessment committee for a particular region. Environmental pollutions lead towards destruction of our ecosystem which eventually may become critical factor for our survival in this planet. Evolution Alteration of inheritable traits in a biological population over generations is known as evolution. Understanding molecular evolution has been an interesting branch of science where interdisciplinary approaches are implemented to understand the gradual changes and their impact on a species. Trends in Ecology and Evolution, Molecular Biology and Evolution, Annual Review of Ecology, Evolution, and Systematics, Evolution; international journal of organic Evolution, International Journal of Systematic and Evolutionary Microbiology Invasion Ecology Breaching the territory of a species by another one through migration, influential invasion due to any reason is considered as invasion ecology. Marine Ecology Marine ecology refers to the ecological conditions dealing with the marine life. As marine ecology is believed as one of the oldest ecology in the planet and is maintained in a different way rather than the terrestrial ecological aspects, therefore, deep insight in marine flora and fauna are important. Marine Ecology - Progress Series Marine Ecology Pest Management Pest management is important for the reduction in crops generated and stored for the consumption and disease causing carriers. Depending on the type of pest strategies are devised for the reduction of pest population which encompasses physical, molecular and chemical methods. Phylogenetics This subject is dealing with the techniques, applications and outcomes with relation to the evolution, to be specific, phylogeny deals with divergence of species with reference to their molecular, geographical and other properties. In general, divergence of different species are calculated depending on the synonymous and non-synonymous features of the sequences, estimation of evolutionary rate is performed and scientific understanding related to the selection pressure on particular genes, proteins or organisms following the neutral theory are considered under this subject. Molecular Phylogenetics and Evolution. Waste Managements Disposition of different types of waste including agricultural waste, electronic waste, toxic waste, chemical waste etc. Management of such conditions in a proper way requires a lot for efforts and interdisciplinary strategy for an effective solution. Proper disposition and recycling of the waste materials wherever possible is the need of the time Related Journals: Species A group of organisms those who are similar in phenotypes and genotypes and are suitable of mating and interbreeding are known as belonging to similar species in general. Species is considered as one of the most important and key taxonomical unit.

Chapter 9 : Ministry of Ecology and Environment - Wikipedia

The Arkansas Pollution Control and Ecology Commission was first established in as part of the Arkansas Water Pollution Control Act (Act of). Since that time, it has undergone significant changes - including a reorganization in

Environmental Pollution is an international journal that seeks to publish papers that report results from original, novel research that addresses significant environmental pollution issues and problems and contribute new knowledge to science. The editors welcome high quality papers where the pollutants Read more Environmental Pollution is an international journal that seeks to publish papers that report results from original, novel research that addresses significant environmental pollution issues and problems and contribute new knowledge to science. The editors welcome high quality papers where the pollutants are clearly defined and measured and can be directly related to biological, ecological, and human health effects. This includes air, water, and soil pollution and climate change. Emerging pollutions are of eminent interest, such as microplastics, electronic wastes, light or noise pollution as long as they can clearly be related to the biological effects mentioned above. Papers, such as meta analyses, that report findings from re-examination and interpretation of existing data are welcome. Modeling papers are welcome only to a certain extent, i. Critical review papers and commentaries are also of high interest as are letters to the editor. The editors do not wish to publish papers that describe results from routine surveys and monitoring programs that are primarily of local or regional interest. Descriptions of well-known pollutants, such as legacy pollutants, in yet another location are not of interest. Papers about sewage, waste and wastewater treatment and management as well as standard techniques in agronomy, remediation, biomonitoring, bioremediation and phytoremediation are not acceptable. However, papers on innovative techniques to combat regional or global problems are welcome; however, technical studies must show their field applicability. Eutrophication studies and secondary pollution by eutrophication are not covered by Environmental Pollution. In the same line, papers on ocean enrichment by CO2 will not be accepted. The abstract up to words , highlights and conclusions of papers in this journal must contain clear and concise statements. A graphical abstract is mandatory. A cover letter must be accompanied with each submission, containing clear and concise statements as to why the study was done and how readers will benefit from the results. The cover letter must explicitly express how the submission fits the Aims and Scope of Environmental Pollution. Failure to include the paragraph will result in returning the paper to the author. The editors welcome the following contributions: Results from completed investigations reporting original and previously unpublished work. A brief communication of urgent matter or the reporting of preliminary findings to be given expedited publication. In-depth critical reviews of special subjects. Authors planning reviews should contact one of the editors prior to submission. Special Issues will be published on emerging thematic issues and innovative conferences. An Editor or Associate Editor should be contacted early in the conference planning process to get approval and for guidelines on special issues of the journal.