The Challenger

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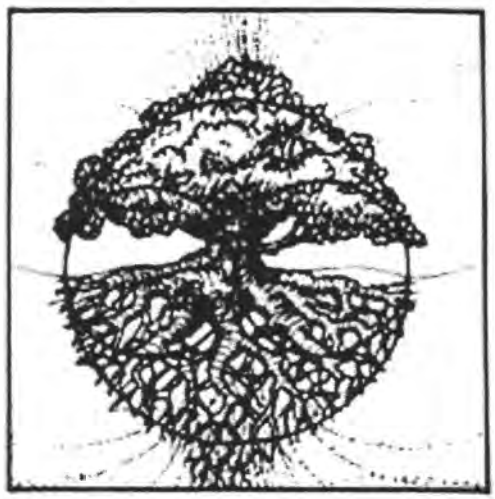
Deep Ecology & Permaculture Paradigm

by: Jessie Crow Mermel

Global warming. Pollution. Species extinction. Destruction of the rainforests. Depletion of fossil fuels. Overpopulation. The list goes on and on, and the more we know, the more helpless some of us are led to feel. Many people try to make a difference in small yet meaningful ways but are still completely wrapped up within the anthropocentric, commercial-industrial web with no clear vision of escape. Environmental pursuits such as recycling and increasing fuel efficiency are all noble causes, but they are really only technological band-aids for a system that needs a complete overhaul. Albert Einstein once said, "The significant problems we face cannot be solved at the same level of thinking we were at when we created them." Indeed, there is a necessity to dig deeper, to get our hands, hearts, and minds in the earth through a deep exploration of values, ethics, the nature of the world, the Self and the interrelatedness of all living things. The concepts of ecosophy, deep ecology, and permaculture address these issues.



The purpose of ecosophy is to explore the diverse perspectives on the contexts and interrelationships between humans and Nature. This mission fosters a more deep and harmonious relationship

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Peak Oil Production: Worldwide Economic and Political Apocalypse

by: Aleksey Maromyguin

Have you ever heard those wild, crazy stories about the end of the world — one of those "day after tomorrow" scenarios? There's a whole host of them. There's the runaway greenhouse effect, gamma ray bursts, the next Ice Age (we're still in one), that asteroid that killed the dinosaurs, volcanoes, nuclear war, megatsunamis, you name it! There's even something called the "Nemesis Theory" that says that the sun has a twin known as a Brown Dwarf orbiting somewhere about three light-years out in space that may be due to enter the solar system and create a massive swirl of comets that would last for thousands of years.

But anyway… there is one scenario that everybody agrees is inevitable, and it's due any day now. In fact, it may have already happened. I'm talking about the "Oil Peak." The oil peak is the point where the earth runs out of half of its oil supply. That's right, only half. It is estimated that the earth had about 2 trillion barrels of oil, and by 2003 we had already used 900 billion barrels.

Well, what's so bad about that? The bad news here is that the more oil you use, the harder it is to pump it out. A good metaphor for this is a cup of yogurt. When you first start eating, it's very easy to shovel spoonfuls of it out. But after a while, once you've eaten a bit, you have to scrape the sides to get the rest of it out, and you don't get nearly as much per spoon. Well, this is our oil crisis. And the only

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America and the Environment: What will it take?

by: Valerie Hubbard

Good morning, energy consumers. This is your seasonal tropical storm system, reminding you of the potential increase in the intensity and destructive nature of tropical storms as a probable result of global warming. Wake-up, America. It is time to open your eyes, pull the shade and expose the elements of the nature in all their gruesome glory. Wake-up! It's time for action.

The earth is fragile, and our environment is suffering from abuse and overuse by human populations. Dr. Bill Chameides, Chief Scientist for Environmental Defense, says: "the evidence suggests that human society is affecting the environment in ways that contribute to the destructive effects of hurricanes in general and Katrina in particular." As society progresses and technological production swells, air pollution also rises to damaging levels.

The emission of greenhouse gases into the atmosphere contributes to the depletion of the ozone layer, in turn affecting global climate change. Global warming contributes to an increase in sea surface temperatures, driving the energy that produces tropical

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Editor: Jessie Crow Mermel

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WE'RE ON THE WEB!
http://www.harpercollege.edu/cluborgs/honors

Recycling at Harper College

By: Valerie Hubbard

Perhaps you have heard the speculation among Harper students, faculty and staff members regarding Harper's illusive recycling procedures. I became curious when I encountered the rumor first hand. I noticed that, while the receptacles for plastic bottles and aluminum cans are prevalent throughout the hallways in most of Harper's buildings, the paper-recycling bins are often absent or out-of-sight. I asked a staff member if he had a recycling bin behind the counter where I could leave my paper trash. He responded that he did indeed have a recycling bin but doubted whether the material would actually be recycled. I thanked him and decided to bring my papers to my recycling bin at home.

The comment was discouraging, yet intriguing. I wanted to know whether my recycling efforts at Harper College were in vain. Upon searching for answers, I was directed to the Physical Plant (building B), where I spoke with Jon DeJonker, Manager of Custodial/ Food Service Departments at the Physical Plant/Auxiliary Services. DeJonker proved to be a valuable resource in my quest for information, even giving me a tour of the Physical Plant and explaining some of the college's internal recycling methods. Here's the 411 on recycling policies at Harper:

Harper College, like all Illinois colleges and universities, is mandated by the state to recycle 45 percent of the waste-stream it produces. Traditionally, Harper has been audited every five years to ensure that its recycling results comply with state-mandated regulations. Actually, Harper currently surpasses minimum requirements, recycling over 70 percent of its waste products. The materials that are recycled include paper, cardboard, plastic, metals, batteries and much more.

Although recycling itself is an expensive business, recycling efforts at Harper incur no additional costs to students. For external handling, Harper uses C & M Recycling Inc., a Chicago-based recycling company specializing in commercial and industrial facilities. Internal pick-up and delivery procedures are conducted by Harper's custodial staff.

As in any practice in which efficiency depends upon human efforts, recycling procedures are subject to error. One cannot be absolutely certain that every receptacle carrying recyclable materials will be disposed of properly.

However, for every one or two custodial staff members who might dispose of recyclables inappropriately, there are presumably dozens of students, faculty, and staff members who do not effectively utilize the recycling bins. There are plastic and aluminum bins placed throughout the hallways; yet, much of this recyclable material still ends up in the regular trash bins. While there are not paper recycling bins in every classroom or office, they are supplied in the library and in every departmental office. If one were so inclined, one could simply walk to one of these locations to unload his or her paper recycling.

While 77 percent of recycled waste-stream is an impressive figure against the state-required 45 percent, this number could be further improved with increased student involvement. Unfortunately, as is a common trend at two-year colleges, activities that are implemented one year may fizzle out in the years that follow. It is important to recognize this pattern and assess it realistically.

Very few of us would be willing to continue efforts of recycling reform at Harper after we have graduated or moved on to another institution. Therefore, take responsibility for your actions at Harper while you are here. For instance, walk through an extra hallway, even if it is slightly out of the way, to drop your paper in a recycling bin. Throw your plastic and aluminum in the proper receptacles. Ask you professors, who most likely remain at Harper for more than two or three years, if they have or are willing to take measures to ensure recycling efficiency. Remember that Harper's recycling system is active and reliable. Be a reliable consumer and contribute to the college's efforts in collecting recyclable materials. ■

Driving Informed

By: Oosa Sinrapanurak

The rise in gas prices have hopefully encouraged you to become more aware of the amount required to fill up your tank, the type of gas used, the m.p.g., and hopefully habits that could ensure better fuel efficiency.

First, it would most likely be wise to find out what type of fuel choices there are available. Biofuels are fuel alternatives that are composed primarily of plant components such as ethanol. There are currently new forms of biodiesel in development that could lead to a much more reusable source of fuel and lead to less toxic environmental outcomes. One type of biofuel, E85, is an ethanol mixture that is comprised of 85% grain alcohol from corn and 15% gasoline. This biofuel could save 30 to 60 cents per gallon, but as CNN reports, "a study published in the March 2005 Natural Resources Research found that 29% more fossil fuel energy goes into making ethanol than ethanol produces, meaning that burning a gallon of E85 actually consumes more fossil fuels than burning a gallon of gasoline." The fossil energy required for production is also higher for soybean oil and sunflower oil and is significantly greater than the fuel produced. According to CNN, refitted diesel engines are capable of running "on waste vegetable oil from restaurants" which will provide a cheap and environmental friendly alternative.

Ethanol requires a costly distillation process and consumes about the same amount of energy as it produces. A new catalytic process may be able to utilize a much more efficient means that will double the amounts produced, according to the Department of Energy. This new process will also utilize almost all of the plant matter, thereby eliminating more manufacturer waste.

Biodiesel allows for a greener alternative to fossil fuels that can "utilize more than 1.3 billion tons of waste" and consequentially help the agricultural industry. Currently, the type of fuel that is available at the gas station is highly influenced by the prices that the manufacturers are offering. The increase in gas prices and the changing economy may make it possible to offer alternative fuel choices such as biodiesel. Another option is a diesel-run engine, but diesel is equivalent if not more costly than regular unleaded gasoline.

Secondly, the cost and long-term gain from the vehicle needs to be considered. Diesel cars are usually more expensive, but they result in much better m.p.g. and better resale value due to more durable engines. Starting in 2006, diesel and fuel-efficient cars will begin to qualify for tax credits under the new tax rules for 2006. Also, hybrid resale value is uncertain in the long-term but more and more of the hybrids offer better fuel efficiency. For more details on our current fuel economy go to www.fueleconomy.gov.

Lastly, changing driving habits and driving more sensibly can improve overall gas mileage. Reduce the amount of gas you use and set a goal to obtain better gas mileage. To accomplish this drive more efficiently by observing the speed limit. Avoid aggressive driving such as speeding, rapid acceleration and braking that leads to wasted gas. According to the U.S. Department of Energy, your savings will be as follows: "Fuel Economy Benefit: 5-33%; Equivalent Gasoline Savings: $0.15-$1.01/gallon." Remove excess weight by eliminating unnecessary items from your vehicle. Savings for this will be "Fuel Economy Benefit: 1-2%/100 lbs; Equivalent Gasoline Savings: $0.03-$0.06/gallon." Avoid excessive idling, use cruise control when possible, use overdrive gears to save on gas.

Maintain your car by keeping your engine properly tuned. Also, check and replace air filters regularly. Maintain pressure in your tires and use the recommended grade of motor oil. Plan out routes and combine as many trips as possible; this can help save time and money. Driving when the engine is warmed up is more fuel efficient than starting from several cold starts. Commute and telecommute (work from home) as much as possible. Additionally, optimize use of carpools and ride-share programs and use public transit if possible.

Overall, by choosing a more gas-efficient vehicle you can save a significant amount of money over the course of a year. According to www.fueleconomy.gov, "the difference between a car that gets 20 MPG and one that gets 30 MPG amounts to $550 per year (assuming 15,000 miles of driving annually and a fuel cost of $2.20)." Hopefully by implementing some of these strategies your overall driving experience can become less costly and more enjoyable. ■

America and the Environment continued

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storms to intensify, as well as causing sea levels to rise through thermal expansion and melting of glaciers.

Of all the nations on this planet, the United States is the single largest producer of greenhouse gases released into the atmosphere. As documented by the Energy Information Administration of the Department of Energy, energy-related carbon dioxide emissions account for 83 percent of U.S. greenhouse gas pollutants, and transportation-related CO2 remains the largest source of energy-related CO2 emissions. But are Americans ready to acknowledge the role they play in ozone depletion? More importantly, are Americans ready to commit to making the changes necessary to protect the environment and prevent the threat of further damage?

Americans have grown accustomed to the luxuries afforded to such an advanced industrial nation. Heating and air conditioning units run continuously throughout the days and nights; automobiles are driven to destinations far and wide, or just around the corner; brand-new products are preferred over reused or recycled materials. And nobody truly wants to embrace this growing energy-inefficiency problem, because that would involve changing the lifestyles that have come to be so comfortable.

The American attitude toward environmental concerns has, in the past, been more idealistic than realistic. There is a general agreement among average citizens that our planet is inevitably threatened by the current atmospheric conditions, but there remains a lax level of initiative when it comes to taking measures toward rectification. It is much the same as the sociological phenomena of the bystander effect: the collective population believes that someone else is fixing the problem and they are thus free from the responsibility of helping.

It seems as though our government is helping to maintain this barrier of indifference by

implementing an energy policy that focuses primarily on *voluntary* participation and on increased spending for technological innovation to help eliminate the problem as it exists, rather than attempting to pass legislation that promotes preemptive planning to contain the problems before they are out of control.

On the other hand, it is possible our government recognizes that the American way of life necessitates an approach to environmental issues that does little to restrict the comfort levels of our nation's citizens; this approach emphasizes our position as a technological and economic superpower. Environmental Protection Agency Administrator, Stephen L. Johnson, contends that "By harnessing the power of the marketplace and technological innovations, we are proving that environmental results and increased productivity indeed progress hand-in-hand." Within the Energy Policy Act, new tax credits for installing energy-efficient windows and appliances, as well as tax credits for purchasing energy-efficient or clean-diesel vehicles, are available. In addition, with government-backed partnerships like Energy Star and Green Power, growing numbers of businesses and individuals are learning to protect the environment through more energy-efficient methods.

The most promising shift toward greater environmental awareness is the increased attention of the Senate toward issues of global warming. The Climate Stewardship and Innovation Act is a proposal that guarantees a decrease in global warming, sponsored by Sens. John McCain (R-AZ) and Joe Lieberman (D-CT). Although it recently failed to pass as an amendment to the energy bill, the discussions lasted over three hours, and the general consensus of the Senate was that America needs to put a mandatory cap on global warming pollution.

Perhaps if the United States government attacked the potential for environmental destruction with the same fierce resolve and steadfast financial support as they do the potential for hostile action by foreign nations, the health of our planet might not have suffered so drastically. One need only glance at the overview of the President's 2006 budget (at www.whitehouse.gov/omb/index.html) to see where the environment ranks among the top priorities in Washington. Nevertheless, it is what it is. Our environment, meanwhile, continues to decline regardless of which political ideology gains greater momentum. Whether we petition for and await new legislation, or support the existing policies, we need to take immediate action toward energy efficiency. What will it take for America to wake-up and see the damage that it has created? Hurricanes Katrina and Rita? Rising gas prices or rising cancer rates? A shift in the government's commitment to the environment? Whatever the motivation, American needs to take action now. ■

Getting Your Voice Heard

by Jessie Crow Mermel

Environmental activists employ various tactics for protecting the environment. Indeed, they are a widely varied group. Some make their voice heard through letters and phone calls to Representatives and Senators, others vote with their dollars. Yet others utilize a more direct action and occupy forest roads, intercept whaling ships, sit in trees, etc. If you are so moved to speak out for the earth, here are a few easy ways to do so:

Online Activism ~ You can sign up for email newsletters letting you where your help is needed. You can sign petitions, email letters, or write your own letter to send directly to your rep. *Remember that a phone call or letter to the government is much more potent than an email.*

Here are a few websites to try out:

- Environmental Defense: http://www.environmentaldefense.org/home.cfm
- NRDC: http://www.nrdc.org/, http://www.savebiogems.org/
- Rainforest Action Network: http://ga3.org/ran/home.html
- Save Our Environment: http://saveourenvironment.org/

Voting with your dollar ~ this means buying, whenever possible, organic food, organic cotton and hemp products that don't poison the land and water with pesticides. Become vegetarian or decrease meat in your diet. Buy local food that isn't shipped long distances. Buy recycled products and reuse whatever you can. Buy products with less packaging. Choose to bike, walk or use public transportation. If driving, choose a fuel-efficient vehicle. Here are a few of resources for green products:

- Aveda: http://www.aveda.com/ (Cosmetics, hair and body products)
- EcoBusinessLinks: http://www.ecobusinesslinks.com/categories.htm (directory)
- Gaiam: http://www.gaiam.com/retail/default.asp (home goods, cleaning products, clothing and more)
- Green Pages Directory: http://www.coopamerica.org/pubs/greenpages/
- Hemp: http://www.hemp.com/ (Hemp Products and activism)
- Living & Saving Green: http://www.suite101.com/welcome.cfm/ecosound_frugalliving

To find out how to contact your US Representatives and Senators:

- Congress: http://www.visi.com/juan/congress/ or http://www.senate.gov/general/contact_information/senators_cfm.cfm
- House of Representatives: http://www.house.gov/writerep/

If you are a bit more passionate and daring, find out more about direct action by checking out these websites:

- Earthfirst!: http://earthfirst.org/
- Ruckus Society: http://www.ruckus.org/

And for the ultimate database of EVERYTHING eco under the sun, visit:

- Envirolink Network: http://www.envirolink.org/index.html

Peak Oil Continued

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disagreement about this is exactly *when* it will happen. Some say that the world may have already reached the peak. The oil industry says we have until 2020. But most estimates, including the leading Association for the Study of Peak Oil (ASPO), predict that we will reach the peak sometime in 2008.

After the peak, oil prices will rise by about 1.5 to 3 percent per barrel per year. But this isn't taking into account the increasing demand. The world today consumes 75 million barrels per day, 25 billion per year. This is expected to rise by at least two-thirds within ten years. That's 135 million barrels per day. In addition, estimates of China's usage say that it may increase by as much as 4 times by 2025! Another good gauge is one best conveyed by Kjell Aleklett, the president of ASPO: "[During] the next 30 years we will find more than 150, maybe 200, but probably not, but 150 billion barrels of oil is roughly what you're going to find. And during the same period, we will consume 1,000 [billion barrels of oil]. So that means we are digging deep into reserves we have at the moment."

Want more facts? The same people say that six barrels of oil are now used for every new barrel discovered. And major oil discoveries of more than 500 million barrels (used in less than a week) are dying out, too. There were 13 in 2000, six in 2001, two in 2002 and none in 2003. Moreover, oil companies are now putting much more funding into developing existing oil wells and cutting the funding for exploration of new ones. They're putting their money where the oil is; that's *not* exploration.

So there's barely any new oil being found. Reserves are drying up and are harder and harder to extract. And the demand is skyrocketing.

In other words, *we will have an oil crisis*. According to some estimates, the price for a barrel of oil will increase *five-* to *six*-fold in only a few years time! What's more, have you seen the gas prices recently? This volatile rollercoaster ride of rising and falling prices is actually a disturbing sign of what experts predict will happen right before Peak Oil.

So let's put this in context. What will "Peak Oil" mean for us, exactly? Well, in short, we'd basically be going back the Middle Ages. The Great Depression, significant though it was, would pale in comparison.

The world runs on oil. Everything from cars, ships, and airplanes to plastic and even electricity is powered by oil. And everything is somehow affected by oil. *Everything* that you buy has to be shipped. Something like Nike shoes all the way on down to a loaf of bread may travel hundreds or thousands of miles until it gets to you. In the end, literally almost everything is "made" of oil! The website "www.exitmundi.nl/oilcrash.htm" says it best: "So when oil gets expensive, so does our world. Even seemingly innocent things like socks, drinking water and bread will become very expensive. Factories and businesses will go bankrupt. Unemployment will explode, pushing up the state deficit and deepening the crisis even more. Banks will shut down, thereby killing the savings of their clients. In the end, the Oil Peak will send massive shockwaves through the world's economies."

In other words, life as we know it will end. We will have to look for a new way of life, a mix of the old and the new. One of our main obstacles would be to find another source of energy, preferably renewable. There is already much research going on, but much of it is suppressed by the oil industry. And there has not been anything conclusive that solves our problems at all yet. There are a host of options, but they are mostly inefficient or have some major obstacles we will have to overcome.

One source that quickly comes to mind is wind power. But windmills/turbines are actually incredibly inefficient. Especially when measured up to oil, wind just doesn't compare. Besides, it would take an enormous effort to construct the windmills and built the materials, more energy than the windmills would ever produce. To replace the same amount of energy the UK produces now with wind turbines would take a park of turbines miles wide that would literally surround the island!

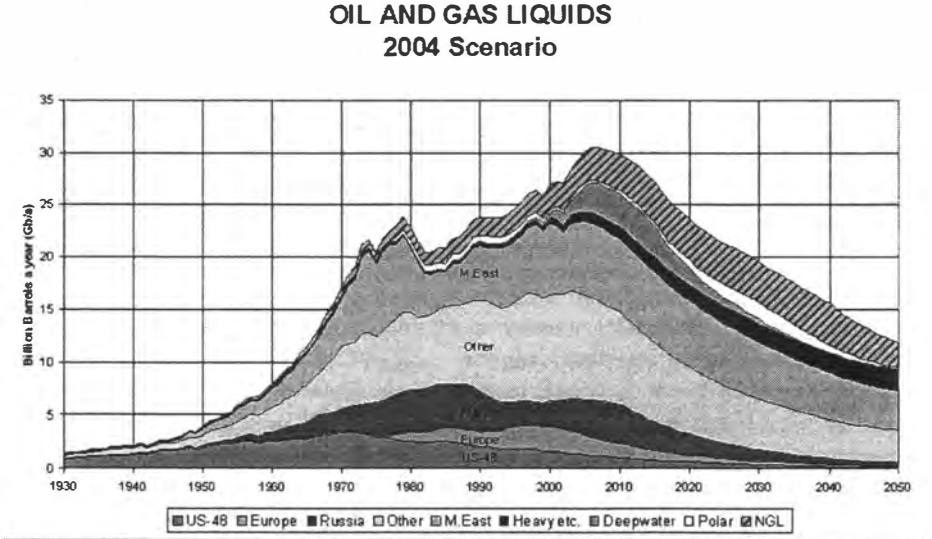
Same goes for solar power. It would take a space as large as the state of Colorado completely filled with solar panels to produce the same amount of energy the US uses now. In fact, it would take panels the size of six ping-pong tables to power a car. Also, much like the wind turbines, solar panels use up too much energy to build in the first place.

The same exact thing goes for Hydrogen power. It doesn't naturally occur, so you'd have to split H_2O into its component parts and that costs more energy. Then you have to compress the Hydrogen into a high-pressure tank, which costs even more energy.

Then there are other limited resources we could use, but the problem is still that they are *limited*. Sources such as gas are running out fast as well, and others such as orimulsion and tar sands are either too dirty to process in the case of orimulsion or too inefficient to process in the case of tar sands (a truck load produces half a barrel of oil). And coal, another major source of energy that powers 23% of all the energy of the world, is slated to run out in 18 years, it's also dirty, and it's very bad for the environment. Besides that, it would be too costly to switch all refineries and plain ridiculous to switch trucks to coal-power.

At this point our hope would lie in nuclear energy. It's limitless, steady, and reliable. Besides having a tendency to explode such as in Chernobyl and Harrisburg and creating a radioactive mud that can't be touched for hundreds of years, it does seem to be the most promising. And as for the rest of the energy sources, they haven't been properly researched yet (though I haven't seen any really promising work yet).

So, without taking into account the major political upheaval, the impending wars, especially with China, the nearly complete loss of mobility for the military and police, and the inability to enforce law in general, our lives are going to be completely revolutionized, perhaps and hopefully in more ways than one. ■



Peak-a-boo: The Oil Peak according to a recent prognosis of the Association for the Study of Peak Oil. Note that the US, Russian and European oil supplies 'peaked' years ago. After 2008, the global crisis kicks in.

Websites used in this article:

- http://ipsnews.net/news.asp?idnews=30183
- http://www.exitmundi.nl/oilcrash.htm
- http://www.atimes.com/atimes/Global_Economy/GA26Dj04.html

Deep Ecology and the Permaculture Paradigm continued

(Continued from page 1)
between Self, community, the natural world, and our place within it. Professor Arne Naess, a Norwegian philosopher and mountaineer, defines ecosophy as follows: "By an ecosophy I mean a philosophy of ecological harmony or equilibrium. A philosophy as a kind of sofia (or) wisdom, is openly normative, it contains both norms, rules, postulates, value priority announcements and hypotheses concerning the state of affairs in our universe. The details of an ecosophy will show many variations due to significant differences concerning not only the 'facts' of pollution, resources, population, etc. but also value priorities." Ecosophy emphasizes the human relationship to the natural world, particularly ecocentric values that have been largely ignored by western philosophy. The website Ecospheric Ethics describes ecocentrism as "Post-humanism, for it transfers the reality-spotlight from humanity to the Ecosphere, from the part to the whole. This outside-the-human focus brings with it new standards for thought, conduct and action on such seemingly intractable problems as world population, urbanization, globalization, maintenance of cultural diversity, and ethical duties to the Ecosphere with its varied natural ecosystems and their wild species."

Naess calls his own personal philosophy Ecosophy T. The 'T' refers to "tolkning," the Norwegian word for interpretation. One of the basic norms in Ecosophy T is Self realization! for all beings. The exclamation mark delineates the difference from a mere description to something which Naess felt ought to be. The Self Naess speaks of is the ecological Self, not the ego self. This ecological realization can come about in a myriad of different ways, says Naess. Largely this realization comes through an extension of identification. In order to realize the connection and relatedness to nature and the universe, one must be well integrated with a healthy ego in order to avoid projection of self and its shadows. If people are able to see themselves as a part of nature, we would be able to reconceive our mission from its historical roots to civilize and domesticate the planet to a new mission of becoming intregal with larger earth community without trying to control it.

Arne Naess introduced the deep ecology movement in 1973. As a mountaineer who had traveled around the world to climb mountains, Naess was able to witness and participate in a wide variety of social and political action in diverse cultures. From this vantage point, Naess was able to point out two very different, though not necessarily incompatible, variations of environmentalism. He called one the "shallow ecology movement" and the other, "the long-range deep ecology movement." Alan Drengson, emeritus professor at the University of Victoria, states that, "The short-term, shallow approach stops before the ultimate level of fundamental change, often promoting technological fixes (e.g. recycling, increased automotive efficiency, export-driven monocultural organic agriculture) based on the same consumption-oriented values and methods of the industrial economy. The long-range deep approach involves redesigning our whole systems based on values and methods that truly preserve the ecological and cultural diversity of natural systems." The "deep" movement involves questioning fundamental values and purposes on a human and comprehensive global context (which includes the diversity of cultures and beings). The following is the deep ecology platform, created by Arne Naess and George Sessions in 1984 while hiking in Death Valley, CA:

1) The well-being and flourishing of human and nonhuman life on Earth have value in themselves (synonyms: inherent worth; intrinsic value; inherent value). These values are independent of the usefulness of the nonhuman world for human purposes.

2) Richness and diversity of life forms contribute to the realization of these values and are also values in themselves.

3) Humans have no right to reduce this richness and diversity except to satisfy vital needs.

4) Present human interference with the nonhuman world is excessive, and the situation is rapidly worsening.

5) The flourishing of human life and cultures is compatible with a substantial decrease of the human population. The flourishing of nonhuman life requires such a decrease.

6) Policies must therefore be changed. The changes in policies affect basic economic, technological structures. The resulting state of affairs will be deeply different from the present.

7) The ideological change is mainly that of appreciating life quality (dwelling in situations of inherent worth) rather than adhering to an increasingly higher standard of living. There will be a profound awareness of the difference between big and great.

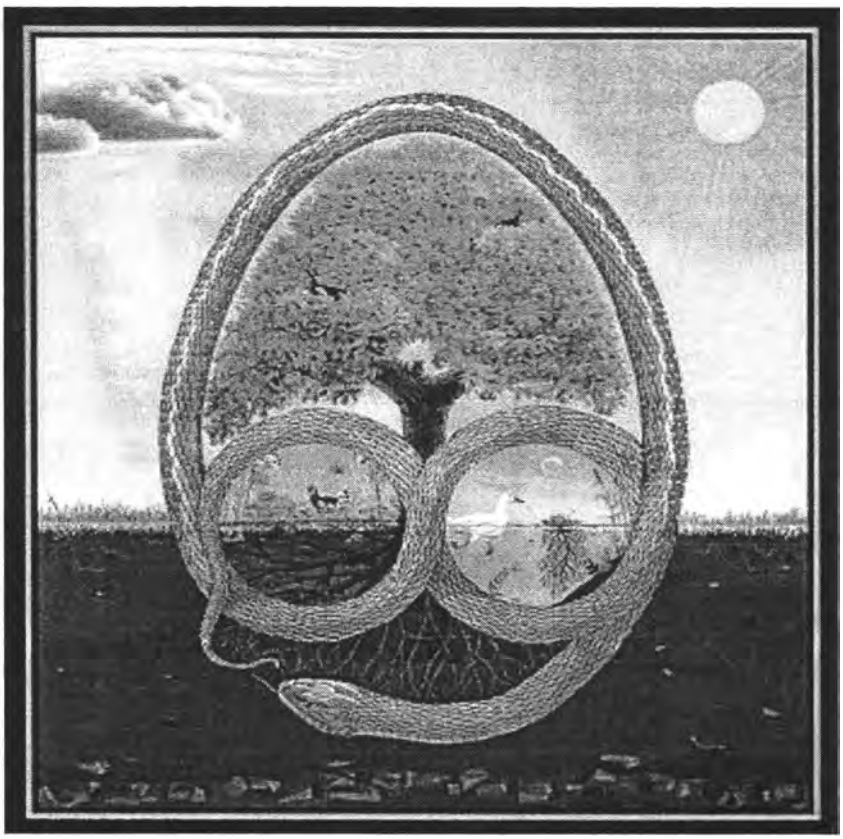
8) Those who subscribe to the foregoing points have an obligation directly or indirectly to participate in the attempt to implement the necessary changes.

Naess stongly believes that those who support these principles can do so from a wide range of different views and religious backgrounds.

Permaculture is a direct application of the platform principles of Deep Ecology. Bill Mollison and David Holmgren, the founders of Permaculture, coined the term 25 years ago. It is derived from the words "Permanent" and "Culture." Permanent comes from the Latin *permanens*, to remain to the end, to persist throughout (per = through, manere = to continue). Culture comes from the Latin *cultura*, which means cultivation of land, or the intellect. It has become generalized to mean all those habits, beliefs, or activities that sustain human societies. Therefore, in Bill Mollison's words, "Permaculture is the study

Deep Ecology continued

of the design of those sustainable or enduring systems that support human society, both agricultural & intellectual, traditional & scientific, architectural, financial & legal. It is the study of integrated systems, for the purpose of better design & application of such systems." This holistic design system works toward establishing productive environments that utilize food production, natural resources, landscapes, shelter, animal and plant systems, energy, waste recycling, material and non-material needs—as well as the social and economic infrastructures that support them. It aims to create systems that will sustain the present as well as future generations. Peter Bane's definition of permaculture is "the conscious design of `cultivated` ecosystems that have the diversity, stability, & resilience of natural ecosystems. It is a harmonious integration of people into the landscape in such a way that the land grows in richness, productivity, and aesthetic beauty. Permaculture is an ethical design system for creating human environments that are ecologically sound & economically viable. Permaculture systems provide for their own needs, do not exploit or pollute, & are therefore sustainable." These cultivated ecosystems possess diversity, stability, resilience and creativity. As with the basic tenet of deep ecology, Permaculture works with rather than against nature.



Permaculture is based on positive and creative ways of finding solutions that will benefit both humans and nature. Often, Permaculture principles are used to restore and rehabilitate land that has been abused, overused, and polluted. Through Permaculture, health to the land can be restored. Through healing the land, many people become personally and spiritually restored. It as if the rift that our industrial culture has created against nature has also caused wounds in our personal and collective unconscious, that can only be healed through working to restore vitality to the land. If we realize the connection between nature and ourselves and work to heal the earth, we are therefore also healing our Selves.

In our current way of thinking, our industrial, commercial culture is the only acceptable model for development and progress. Yet the application of this model results in destruction of habitat, extinction of species, pollution, and the demise of diverse indigenous cultures. Our ever globalizing, homogenizing, monoculture is destroying diversity and, in turn, will destroy itself. If we choose to reject this industrial model, then what? The deep ecology platform principles are a guide in a different direction. This ecocentric model is not misanthropic, but serves to support both human and non-human life. Our humanness in the deepest sense cannot be separated from the earth from which we have grown. As humans, we are collectively standing at an historical crossroads. The path we are on leads us further into the ecological destruction and inevitably self-destruction. There is another road, however. On this path, we could create a mutually enhancing way of living on Earth. An indispensable resource in fulfilling this Great Work is to learn the ecosophies of aboriginal and indigenous cultures who have understood the profound and integral relation between humans and the natural world. We must foster a love for nature in our children and nurture the connection in our Selves. It is through humans that the universe becomes self-aware. The challenge of the twenty-first century will be to create a new ecocentric vision and utilize the creative vision that is the universe's gift to humans to usher in the Ecozoic Era. ■

Resources used in this article:

* Berry, Thomas. *The Great Work.* New York: Harmony, 2000.
* http://www.ecospherics.net/index.html
* http://www.deepecology.org
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Conservation Tips

By: Oosa Sinrapanurak

To think "greener" requires an individual to find ways to reduce pollution. Here are some tips on ways you can think "greener" and to help increase our environment's life-span. To find the twelve principles to green chemistry go to http://www.epa.gov/greenchemistry/principles.html.

Buying and Using Smarter

- Use compact fluorescents instead of incandescent lights, especially for 60-100W bulbs that are used throughout a day. The incandescents may be slightly bigger so measure first. According to the Ecology Center, "Replace five bulbs and you can save 50 percent of your annual lighting bill." You can obtain cheap bulbs at www.energyfederation.org for $4-$11 each.
- Replace household appliances with more energy-efficient models and try to use energy-saving settings on your currently owned items.
- Wash clothes in warm or cold water and use cold water to rinse. Also, try to hang clothes rather than using the dryer. This will lead to savings on your energy bill.
- Maintain furnace, air-conditioner, and heat-pump filters by replacing or cleaning them monthly. It will lead to savings on your heating bill.
- Use an Energy Star-rated programmable thermostat and turn down the heat or air conditioner. This can save on heating costs. Also, close vents and doors of any vacant rooms.
- For the summer, turn off the air conditioner and opt to use a ceiling fan that can reduce up to half of your energy bill.
- Buy fruits and vegetables from local farmers; it will help to reduce fuel and shipping costs of trucked-in food and help the local agricultural economy.
- Use low-flow showerheads to "cut water usage by 20,000 gallons per year and save 10 to 16 percent water heating costs," according to the U.S. Department of Energy. Showerheads available at www.old-fashioned-values.com and www.smarthome.com.
- Seal all air leaks in your home to improve heating and air conditioning costs. Add insulation where needed.

Practice the 3 Rs:

- Reduce the amount of trash. Dispose of toxic items appropriately. Compost as appropriate.
- Reuse containers and products; repair and reuse.
- Recycle and buy products with recycled components.
- For more information go to http://www.epa.gov/epaoswer/non-hw/muncpl/reduce.htm

Drive Smarter:

- Slow down. By not revving up your engine you are reducing the amount of fuel burned.
- Use lighter vehicles that can improve fuel efficiency.
- Carpool or use mass transit.
- For more information see http://www.thegreenguide.com/doc.mhtml?i=110&s=fuel

FOREST CLEAN-UP

An opportunity to help restore the earth.

Saturday
November 5, 2005
10am - 12pm

Wear work clothes and bring a pair of gloves and a lunch if you wish to stay and picnic with the group.
Location TBA

Call or email Jessie for more information and to register:
(815) 955-0653
quercusalba@charter.net

Harper Environmental Club

Camping trip Nov 4-6
For more information on the camping trips and meetings, contact Craig Stettner 925-6214
cstettne@harpercollege.edu

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