

## Petrocollapse for change of culture - Jan Lundberg speaks at Manhattan peak oil conference, Oct. 5

Contributed by Jan Lundberg  
04 October 2005

The Petrocollapse Conference The Community Church of New York, Unitarian Universalist on October 5, 2005  
[Culture Change Letter #111]

Many in this audience have done their homework on the basics of peak oil. I will summarize the concept and offer evidence, very briefly. Then I will quickly move on to the larger issues at hand highlighted by peak oil. I've given a lot of talks lately, all ad lib, but this one I must read.

I wrote this on the train here, as poor as this country's rail service is. Besides poor subsidies, Amtrak has to be sidelined frequently by freight trains unpredictably. But reflection and making notes have flowed from my tour around the country by rail, the nation's safest, most energy efficient and least polluting motorized transport. Out the windows I saw nature mostly raped and buried, and in the train I lamented the artificial and toxic environment I was breathing in. Since I stopped analyzing the petroleum market on a daily basis in 1988, I have observed other aspects of our world and learned far more about petroleum and energy after leaving the industry.

I will impart to you some of what I learned in my for-profit career, then in my nonprofit career up against oil industry expansion, and now as a writer as likely to make songs as compile my culturechange.org essays into a book. Some years ago I dedicated my life to a revolution in cultural values. When I realized this, I wanted people to define real cultural change in terms of no longer paving over the good Earth or driving around in deadly, isolating machines. This is mostly why I'm in front of you today.

I have observed petroleum closely and from a few steps back, during my whole adult life. My former firm, Lundberg Survey, predicted the Second Oil Shock in 1979 from our data revealing that a nine percent shortfall of gasoline would hit in March of that year. I no longer do primary research, but I appreciate others' good efforts. I do see tight supplies today as real and deep-seated, and I fear a cold winter can help trigger a sudden global shortage. This could bring on petrocollapse: a breakdown of the whole socioeconomic structure that has an unhealthy relationship with the only reality, our ecosphere wherein economics must function sustainably. In trying to understand the big picture, I do not closely monitor oil industry developments except in broad strokes. Many of us are so distracted by myriad details that our general direction remains unclear or misunderstood. We need to look beyond the current phase of history and forget about news headlines.

USA Today had a headline in 1988 that said "Lundberg Lines Up With Nature." The story could have predicted he was ignorant until a reader of that headline had him write a review of *Beyond Oil - The Threat to Food and Fuel in the Coming Decades*. My huge review, in *Population and Environment*, started with the announcement "Party's over!"

There comes a time that the crude oil of a field, nation or the planet reaches its maximum rate of extraction. It follows a predictable, rough curve, although according to my analysis we may see instead a sudden drop off in the case of the world's oil "production." This would be if the market's reaction and resultant hoarding, followed by economic collapse, bring on a swift and messy end to the oil age. The market in terms of soaring demand has helped bring the time of peak forward, but we can also note some serious developments indicating peak has arrived or will hit very soon.

About twenty oil-exporting nations are reported to be in decline and are past their peak. World discovery peaked four decades ago. The U.S., for decades the top oil exporter, peaked in extraction in 1970 about four decades after its peak of discoveries. Globally, reserves are not being replaced to keep pace with consumption. The world uses about four barrels of oil for every one barrel discovered. The lower and lower energy production ratios of new wells, and more dry holes, indicate the world has been thoroughly exploited for oil. Less and less net energy yield from oil can be an accelerating factor in permanent shortage, and serves to raise costs hidden in countless goods and services. Although oil companies' data are misleading, these entities' preference to buy other oil companies rather than explore for more oil is an indication of the long-term global supply picture.

The invasions of Afghanistan and Iraq had petroleum considerations driving the decisions, and, petroleum helps dictate the military occupation, "privatization," and policing of the region. There appear to be no huge oil discovery bonanzas possible that could change the basic depletion trend, so the violent, illegal seizing of Middle Eastern oil makes sense - especially since the White House, for example, has been aware of peak oil longer than the general public. Lastly, OPEC cannot seem to open the spigot further, although one may debate what is really the interests of nations and corporations profiting off high oil prices; prices could become still more lucrative yet backfire and be a total damper on global economic growth. As you may know, OPEC nations jacked up their oil reserves on paper massively in the 1980s and '90s. Smoke and mirrors will not change peak or prevent the final energy crisis, as Andrew McKillop described the world's coming situation with the title of his recent book.

This conference is not so much an exercise in proving peak oil has occurred or will occur soon, but rather an attempt to explore our post-peak options and fate as individuals and communities. Clearly, the government is offering no leadership other than war and social control. Even if Bush's new conservation option sticks after the recent hurricanes, it is too late for the U.S. to recreate its infrastructure to a non-petroleum infrastructure, and it is inconceivable that the government would start facilitating local economics at the expense of the transnational corporations. With the U.S. gobbling up one fourth of the world's 80-plus million barrels a day of oil demand, and no sensible policy-change in

sight, we are all consigned to involuntary and sudden change through nature's force and/or global financial events reflecting monumental debt and deficit situations.

Even the environmental groups paid to tout the renewable energy technofix have to admit that the substitutes for petroleum are not ready. Such boosters are engaging in the same promotion tactics as the coal and nuclear industries. These technologies, along with heavy oil and tar sands, are not ready to substitute for today's preferred petroleum sources. If the alternative fuels were ready to go on stream massively today, then and only then might we see the widely assumed gradual, downward curve for post-peak petroleum.

The prestigious insiders in the peak oil "movement," Matthew Simmons and Robert Hirsch, want to see economic growth continue. I do not. Such members of the establishment as Simmons and Hirsch want the present industrial society to continue. I want to see a transformation, and it so happens that the effects of peak oil promise to provide it.

Several other well-known peak oil authors and activists prioritize "regime change" in the U.S., or at least a host of policy reforms. I do not. Such authors and activists would do better to fully understand the implications of peak oil and what is likely to happen that will sweep away agendas. We don't know what is ahead, but it might be unrecognizable to the typical oblivious citizen who ought to be learning here today with us.

One reason for my stance is that petrocollapse, like peak oil, is inevitable and is right up ahead. There is little the government can do about it except to try to protect the most powerful elites. This will not work in the long run, and more equitable means of people helping one another will jump in. I'm accused of being too optimistic about a new culture of egalitarianism and mutual aid, when I predict cooperation and solidarity will be the order of the new day. I frankly do not see any alternative if we are to survive as a species, and if peace is the only path we can allow at this juncture.

Fossil-fuel intensive societies may be ten times beyond their ecological carrying capacity, if cheap energy is finite which it is. Such a measurement is made in a crucial book, *Overshoot*, by William Catton. This realization gives us an idea of the potential for die-off.

A bigger reason for my possibly unique stance on growth and reformism is that I'm promoting fundamental, system-change. The idea of returning to our species' former, complete reliance on nature during our long prehistory, instead of relentlessly exploiting nature — at a time of apparent incipient ecological collapse — and the idea of returning to a real community-based culture (e.g., tribal), are heresy here in the land of techno-worship. The Western Civilized world is still revered by those who approve of destroying nature and driving countless species extinct, or by those who believe Western Civilization is its own cure. I do not. I believe petrocollapse can cure the Earth of this civilization, such as dissolving the U.S. because only local bioregions can correctly and efficiently address their own problems.

Individually, all of us are suffering the same fate as nature. We hope, in our immersion in high-tech plastic convenience and pesticide residues, that the epidemics of, for example, breast cancer and prostate cancer don't get us. But we, like nature, are being raped constantly in every orifice. We don't even know all the ways, when a safeguarding government is an anachronism or a myth. Chemicals such as plastics — petroleum — and their additives amount to the unlearned lesson of *Silent Spring* by Rachel Carson.

We continue to tolerate the poisonous chemicals spewing into our ecosphere and into our bodies with hardly an objection. These are mostly petrochemicals that were developed from left-over crude oil refining after kerosene and other early products were made. With the scientific revolution and materialism that had taken place previously, we were all set up to buy into endless progress. Progress is a new idea, and a dangerous one as history has shown if we read between the lines. Nature does not need progress. Tribes that survived for millennia did not need progress, although there was some very, very slow "progress."

Human beings have clearly gotten out of control starting about 10,000 years ago. Not all humans are out of control; the dominant culture of exploiting nature and consuming the Earth is the subset of humanity creating havoc. But even though not all humans and cultures are guilty of civilization, humans as a whole through their sheer numbers are out of control. I believe the Earth will be lucky soon to accommodate one billion people, considering the crash in energy supply and the rapidly declining state of the ecosystem.

There are three ways to deal with overpopulation and population growth:

Plan a reduction of population — size that would be fair, gradual and effective, with some compassion to encourage voluntarism. Enforcing it might not be gentle or evenly applied, however. The elites simply bring about involuntary population reduction of huge segments of peoples by nation and/or genetic traits. This would probably be without warning. It may be disorganized and sloppy, as in the current damage done to the ecosphere by depleted uranium on the other side of the world.

People do themselves in as a species via environmental destruction or starvation, whether it be by climate destabilization, petrocollapse, or enough nuclear bomb explosions to poison the globe virtually forever.

Of these three possibilities, the last looks operative already. The first one seems idealistic and would require much less corruption than prevails today. There would have to be a chance to try such intelligent design in advance of some shattering event. To avoid the second "option" of top-down culling through violence, the first option (compassionate planning) would have to start soon.

The only good aspects of the last "option" are (1) that it could preempt the top-down violent option -- an option that requires nation-wide government control though having plentiful energy -- and (2) that petrocollapse is the scenario that the human race can recover from.

Therefore, the whole range of possibilities seems to offer petrocollapse as the most hopeful or desirable approach or

outcome that is a realistic scenario for population reduction. However, so much would have to be learned from petrocollapse that other means of die-off would be avoided somehow. It may be too late to prevent total climate destabilization due to positive feedback loops.

Civilization is the threat. Civilization is what brought about nuclear bombs and the commodification of nature. Culture change is the cure. Today we will be hearing about models for sustainability such as urban gardens, pedal power produce delivery, depaving and lawn conversion to gardens and farms, and more. Cuba has gone through its own petrocollapse and we are fortunate to have a new film that will be shown during the lunch break. Petroleum-dependent societies urgently need Citizen Petroleum Councils, to survey the problems and possible solutions. It is up to you to pursue implementation of common sense approaches to energy and land use, even though we run up against bureaucracy, and there are notions of individualism, private property, and other abused concepts often cloaked in patriotism. The idea of our country may be redefined back to love of the land.

The frequent concern voiced by well-meaning people is that there are threats to civilization. The assumption these folk make is that alleged progress has been a positive thing. But the very idea of improving on pristine nature is the classic mistake of fixing something that is not broken, and it's the height of god-playing.

Now that we have broken nature, or broken a good part of the ecosystem, it is assumed that we can only fix it by going "forward" and abandoning natural living as simplistic or impossible or dangerous or savage. This linear thinking is what got us into hot water in the first place.

The people most responsible for our problem believe they are in charge of solving it. As long as the rest of us accept that irrational, authoritarian, and unjust notion, we are all in danger of being victimized with extinction.

We can examine other approaches or leadership that rejects linear thinking and the idea of progress. However, this contains a contradiction we must address: a way out of this dilemma in today's world of empire and globalization most likely is linear and authoritarian, even if through an activist movement. In any case, there is almost no opposition movement. Upon petrocollapse, there could be a hopeful embracing of non-linear living within the cycles of nature as well as a hopeful adoption of community-based or tribal culture that rejects with finality materialism and exploitation.

Our time as a species in a favorable, biodiverse ecosphere is about up. Without a positive scenario attempted soon, there appears to be little hope for a viable future. Instead of waiting for a sustainable culture brought along by petrocollapse, it is possible for people to stop buying their executions by ceasing the purchase of new cars. It is true that these consumers would still be buying gasoline, and when they react to the coming oil shock they will fill up their vehicles' tanks and thus exacerbate the shortage. But en masse a buying pattern of only used cars, by enough people who might have bought new cars, can cause immediately the proactive termination over a few months of the main threat to life on Earth: the growth economy.

In anticipation of your wanting elaboration on my predictions of petrocollapse and a positive recovery for a sustainable culture, let me summarize:

Rather than just a geological phenomenon, peak oil and its effects can turn out to be a function of the oil market acting as its own executioner. As alternatives to petroleum do not quite exist -- on the scale and cheapness necessary to allow the growth economy to perpetuate -- there will be nowhere for "petrosociety" to go but down and out. Reasons for the likelihood of rapid collapse include hoarding of fuel which will create artificial shortage. Businesses and people already hurting from post-hurricane petroleum prices and from the anticipated much higher-to-come oil prices, will not be able to stay on the road and on the job. As Congressman Roscoe Bartlett quoted me at the House of Representatives in May, "the trucks will not be rolling into Safeway and Walmart." As he added, "the veneer of civilization is very thin."

The U.S. government and other leading institutions are not willing or able to provide leadership, as evidenced by the lack of any learning from the hurricane's effects on society and energy. Just as the warning on Katrina was not heeded, the warning from Katrina's and Rita's effects was not heeded. These hurricanes may be the straw that broke the camel's back. Now the Energy Secretary is warning of high prices and shortages. We may be being prepared for rationing, and military management -- or the attempt -- of the nation under emergency conditions, although rejected by governors a few days ago. But the government will not be able to manage long without energy, especially when the population is no longer busy using energy as before. Congressman Bartlett told me last month that police and firemen are known through studies to abandon attempts at public order when the conditions of a given situation are past a certain point.

Although there will be insufficient food and therefore massive upheaval culminating in die-off, there will be plentiful land and housing. A new society will come together on a local-ecosystem basis. Cooperation and sharing will be necessary for survival, to make urban and suburban land productive and to assure water is as clean as possible. Petrocollapse along with climate distortion shall be such an historic learning experience that a completely different approach to human relations and economics will be adopted. There will be a perhaps universal rejection of the ways and values of petroleum society, and those who do not adapt will fail in contrast to strong, tribal communities. A lifestyle of separateness or non-community behavior, so rife in today's dominant, mainstream culture, would be seen as threatening the common good and a throwback to history BP: Before Petrocollapse. The bright side is that we will be taking care of the Earth in order to survive. This is how it always was, and appreciation of the long-term for the common good will return as a basic cultural value.

All the best of luck to every one of you. I will answer questions after we show a short documentary on plastics pollution [Our Synthetic Sea].

Links:

[www.petrocollapse.org](http://www.petrocollapse.org) - (Soon see conference papers and details for availability of webcast and video)

Peak Oil Poster: \$10 from [www.oilposter.org](http://www.oilposter.org)