

Surfing the tsunami of change: following up with Plan B preparations

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Culture Change Letter #105 - July 18, 2005 - Comments from readers

In this edition: Future government; Which Plan B; "Depaving" via house moving; Fostering food and water systems; The conservation message; Overpopulation; Hemp; Rail debate; Transportation, and Medical issues

Distractions from the need to slash petroleum consumption continue. Boom! Wow! Okay, war is bad and must be opposed, as must the unjust economic system burning up our planet. But meanwhile, where did your burger come from? And when will I ever get rid of my computer addiction? The question, "Will weaning off petroleum be voluntary and planned, or sudden and awful?" is being answered by our silence that says: "Bring it on."

Response to last week's "Preparations and policies for petrocollapse and climate distortion - Welcome to Plan B" were heartfelt. The sentiments out there seem to fall into two main groups: (1) We despair and are doing something, at least, by talking about the issues of peak oil, climate change, etc. (2) We are preparing and resolute, and more philosophical than afraid.

Many citizens who don't bother to read challenging material, and don't write to us, appear to belong to a large segment of the population we can call The Confused. A perfect example is the owner of a huge new SUV in Berkeley, California that has a bumper sticker proclaiming "Bush is Evil" (in burning font).

That kind of activism is counter productive and hypocritical, in contrast to an artistic graffiti slogan outside the Berkeley post office: "Torture for Freedom." Still, the whole political realm as we know it, including these eye-catching slogans, is not going to be the vehicle to get us to a post-petroleum, sustainable society. For our society's growth is hitting a wall, and the impact will shake us to our core.

To round up our category of confused citizens reacting to Culture Change reports, one angry writer convinced of imminent die-off accused us of being only in it for the money. Then there was the grandfatherly reaction of an old man who was absolutely sure there would always be indoor running water systems for the rest of time without interruption. These folk do not seem confused to themselves, so it is hard to make any inroads with them until the faucet runs dry.

There was one crank who wrote in, using words like "drivel" and "garbage." Holders of such judgments are the tiny majority, as most people have noticed serious crises getting out of control. Yet, the overwhelming mass of modern consumers -- under the barrage of corporate media -- do not know how much of a transformation they are in for, nor do they comprehend the reasons for its swiftness. They are not very up on the issues, but they are not cranks.

How many people can be reached, what with so many distractions -- the main one being trying to survive? One reason so many people are in a position of struggling to survive is that the economic system keeps them deliberately busy instead of dealing with society's contradictions and hypocrisies. Denial of our common plight, even without petrocollapse, is rife and is aided through the array of seductive distractions. It is somewhat easy for many to survive if they give up enough, as people locked into aspects of the economy can be very bound to their path even if they're "rich." The delusion of wealth will evaporate when "just-in-time delivery" (convenience of business and consumers in a 24-7 global marketplace) fails and thus trips up the whole distributive system. It will pinch so very hard when it crashes.

Almost everyone realizes we need community rather than competition and conflict, but at the same time most of us anticipate some unfun times and unpleasant animal characteristics coming to the fore when the trucks stop pullin' into the Walmart and Safeway stores.

The latter prediction, given to Congress on C-SPAN on May 12 (quoted from Culture Change's "Peak oil in a nutshell") by Congressman Roscoe Bartlett, does not appear to have prevented me from being selected to speak at his energy conference later this year in Frederick, Maryland. I will learn a lot; as a physicist, Congressman Roscoe Bartlett is a fount of energy knowledge and wisdom. For example,

"I will give you some idea of the energy density of crude oil, one barrel of crude oil, 42 gallons, represents the energy from 25,000 man-hours of labor. That is about 12 man years of labor. That is the equivalent of having 12 people that work all year for you. And what will it cost you for that? \$100 today, about \$50 for the barrel of oil and maybe \$50 to refine it and distribute it. So that is the kind of energy density that we get from fossil fuel." [House of Representatives - May 11, 2005]

I met with my mayor, of Berkeley, California, on peak oil issues today, July 15. As long as I'm already going to be sharing the meeting's highlights with the East Bay Post Carbon Solutions Group at a public picnic on July 17, I may as well inform Culture Change readers of current attempts to involve local leaders. My hope for Mayor Tom Bates' involvement is greatest now, as most of us feel the world boiling over with oil. I was inspired to meet with him due to numerous conferences being held this year on the "Crude Awakening," to name the one in Ottawa, Canada on November 19, 2005.

This September I am taking a train trip from the West Coast to the East Coast and back, to give talks on petroleum dependence. To lighten up certain audiences I will have my guitar and ecorock tunes as usual. I am glad not to do these trips by car or airplane.

Future government

Going to DC twice in one summer seems like I'm more focused on government than I wish. One Culture Change editor asked me about petrocollapse's effect on government: "What will happen to government, especially federal government, voting, elections, the law, the Constitution (which for all intents and purposes is pretty much already shredded). What will it look like? How will it get from here to there? This may be material for a different letter." A good stab at this question came from Jason Meggs of Plan B Project:

"The Plan B Project needs to prepare for the best and the worst, using what exists as a starting point. Much depends on how petrocollapse comes on and how people react to it. Much depends on how those now in power react and respond. Many scenarios are possible, running a very wide range from dystopia to utopia. We can be creative. Remember the Iroquois Confederacy which informed the U.S. Constitution. After Peak Oil, U.S. society may be much more like the native cultures that came before it, as native activist Zachary Running Wolf announced at a public showing of "The End of Suburbia." Perhaps the breakdown of the U.S. Constitution is indicative of its unsustainability without the core tenets held by indigenous cultures, particularly at its present scale and separation from nature."

Regarding the possibility of restructuring society post collapse, Meggs clarified that "The Plan B Project does not assume that the existing legal system will survive a petrocollapse scenario, but that preparing to change the existing system for sustainability is an important part of disaster planning and transferrable to other scenarios. "

Before I give you the rundown on public comment and innovative ideas received on our previous essay on preparing for petrocollapse and Plan B, let me remind ongoing readers that we do have minimal costs to cover. No one here owns a car or house or boat. So please assure our continuity and involvement in this monumental societal adventure, if you believe we are needed. It would be nice to hand over to our webdesigner some compensation for his ongoing assistance. We can also use a booklet of postage stamps. And you can help by forwarding our messages and website to anyone you know to be interested in oil. "Thanks" to all you supporters and subscribers. To join this circle, Please visit

<http://culturechange.org/funding.htm>

Points of debate for ushering in sustainability

Which Plan B?

The mainstream has a version of peak oil and plan B that calls for switching machines if possible, which implies continuing massive entropy known as "growth." In the opposite camp are those aware of the need for a complete cultural change, but they have to simply admit that most people adhere to the technofix worldview. One reader typifies this when he wrote in, "You seem to ignore actions that the mainstream will (might) be doing to revise the electrical grid, (superconducting technology), expanding electrical power production from renewable, abundant fossil fuels, and nuclear power over the next 25 years. I think we need to more clearly address the need to find substitutes for automobile and truck transportation. Our refusal to give up on the auto for intercity transportation is what will drag us down during this transition period and not increased use of alternate transit inside the urban centers. This is the plan 'B' that I see people like Matt Simmons will be promoting to the people currently in power. - Rick Haard" We thank him for the latter observation especially.

Moving houses onto pavement

Depaving via house-moving was met with skepticism from James Howard Kunstler, author of *The Long Emergency*: "This one seems like a non-starter to me. It would be hideously expensive to move all these houses in a time when incomes were plummeting -- not to mention all the other liabilities of the suburbs."

Jason Meggs agrees that the concept is not totally advantageous. He responds: "It is still easier to move a house with automobile jacks and human power, rolling the house onto a new foundation, than to tear up a road bed and import soil in order to grow food. There would be foundation work to do on the new site especially as roads have slopes on each side for runoff."

If Meggs' concept were to be applied widely, one can foresee a less grid-like pattern to neighborhoods, and more closeness of neighbors, when houses are grouped for food production instead of cattle stalls for machines called workers. The houses would not all in one row with straight asphalt fields between, because not all houses would move, and some would move more than others. Meggs elaborates:

"There are foreseeable sets of circumstances wherein house-moving would be ideal, whether for one house or for an entire city, and as such it should be in the Plan B Toolkit. I hope the idea fosters other thoughts about how to best use the remaining infrastructure in a post-carbon world.

Problem: need arable land.

Possible source: streets.

Potentially better source: land now covered by houses.

Solution: move houses to street.

"The U.S. is not able to maintain the existing road system, so we can count on asphalt coverage to degrade precipitously in most any peak oil scenario. When human power becomes the dominant travel means within cities-come-villages (a positive scenario), organic networks of pathways much more narrow than existing streets will emerge and the defunct, petroleum-based streets will be more and more unusable for anything more than a rough foundation for housing or perhaps a linear orchard of fruit trees.

"Moving houses to closely interleave or face one another at street's center may provide an intimacy many "New Urbanists" will find they were craving despite best efforts at reforming the automobile-based town, and further may support a lifestyle of mutual aid amongst neighbors not possible when segregated by the automobile-delineated streetscape. As a practical matter, clustered housing would provide windbreaks while reducing shadow on the newly reclaimed planting grounds."

However, if pesticide is as ubiquitous and deadly as some fear, the house moving could turn out to be a rare procedure. It partly depends on how well bioremediation can get going. One reader wrote in, "Hello, You can't move the houses. Most houses have had their foundations treated with Chlordane to kill termites. It was designed to be lethal for 50 years and needs to be contained under the house in the foundation. Chlordane has been banned, but almost all houses with a concrete first floor have it. I would be very careful even touching the dirt under a house so treated." Another reader vastly preferred depaving and using lawns for growing food, to house moving. She advises, "Plant every vacant lot. To help deal with toxins left in the soil, look at the work of Paul Stamets, 'the mushroom guy.' He's done remarkable things with myco-remediation, neutralizing some pretty nasty stuff."

Meggs responded that "yes, there are many considerations with the house moving idea, including contamination such as pesticides or lead from paint; building practices and site histories vary. A post-peak oil world will have many toxic remediation issues to deal with, and people may not have much luxury of choice. Desperate times require desperate measures -- the point was to think outside the box."

"The house moving idea is kinda ridiculous. However, there are simple, doable changes, which can make a real impact. Like a state-wide amendment removing the ban on growing food on any land in the state, except land which would provide a pollution risk, or is protected for preservation reasons. This would override any ban which could be made by townships, homeowner's associations, etc. Next, you could expand this into poultry keeping, under certain mandated conditions. Plus tax breaks for NOT growing a lawn, and instead growing a free-growing ground cover like Boston Ivy, Bamboo, or Hemp. No money down. All costs borne by the innovators. To each his own - it's the American Way. -Leon in Kansas."

Fostering food and water systems

Permaculture is frequently pointed to as a way to let the land provide for us. More than a landscaping/farming method, it is a philosophy. One adherent wrote in runningonempty2 at Yahoogroups.com and provided it to us with a vote for Permaculture:

"Bring animal allies back to the city lot: worms (vermiculture), bees, chickens, rabbits, goats would all be suitable, perhaps in future bigger beasties, horses and cows. Worms boost your composting capacity enormously (and of course people will compost EVERYthing!). Cover crops and green manures --any nitrogen-fixing plant (legume family) will help, winter barley, etc. Daikon radishes as green manure breaks up compacted soil. Sheet mulching with newspapers and cardboard and leaves. You'll need to also think of providing food for the critters, for example, plant cover crops, then let the goats and chickens at it at later stage. Also check out Jenkin's Humanure book--yes, your poop can be used for soil fertility instead of flushed away to be treated (if at all) as waste. (An addition to Jenkin's: We build composting toilets on a barrel scale and use worms to help compost poop, let sit covered in barrels for 2-3 years, then use.) Not often mentioned, but girls, your menstrual blood is both sacred and useful, try collecting, diluting, and feeding to your special plants. Yes, use diluted urine on plants, but sparingly (it can bind up nutrients in soil, needs to be balanced out). Worm/compost teas are incredible, containing all these helpful microbes--yes, microbes are allies too. We also make fermented comfrey tea--comfrey is SO easy to grow, it bio-accumulates soil minerals, and fermentation releases the good stuff (put fresh leaves in bucket, cover with water, stir & mash occasionally--when foams and gets slightly stinky, it's ready). Now heating with wood? Wood ashes are great source of potash. Live near the ocean? Gather seaweed. Eating the occasional chicken, goat, old cow? All the bones, blood, and squishy bits need to go back into the soil. Humans die (let's hope naturally and gradually, we all die) -- rethink the way we handle bodies; with reverence and love, we need to be buried deep in our gardens. The ingredients for fertility are all around us, and we need to reconnect the cycles. In nature, there is no waste, everything is food for something else."

A wormy reader contributed this from guess where: "Aloha!

I believe that it would be helpful if you began to assist the effort to get urban people and farmers using composting and tilling worms. We breed and sell composting worms (Indian Blues and several other composting worm types) to people for recycling their residential organic trash into fertilizer for their gardens. We believe that we are saving the planet one worm bin at a time. Waikiki Worms sells a worm bin suitable for use in the home in a residential area. Not everyone has room for a compost pile, but everyone has room for a worm bin (even a flower pot can be a worm bin). The worm castings are so rich in nutrients which are available to growing plants that plants can grow in straight worm castings without fertilizer, or the worm castings can be mixed with the soil or top dressed around existing plants or trees. In the post-oil scenario, people will need fertilizer to grow things, and chemical fertilizers, transported thousands of miles, just won't be available. - Liz Martinez"

"Is there any DANGER of obtaining water from asphalt roofing? When I move into (reuse) a house with asphalt roofing, I will not replace with metal roofing until it is time - otherwise it is a waste of resources. I already have a large plastic animal feeder bin for collecting rainwater that I obtained years ago, but I will not throw it away to buy something new. Again, that would be a waste. Are you suggesting plant-based tubing like bamboo to transport water?"

On securing water, an innovative prototype for utilizing air-earth temperature differentials comes from R. Forrester. He developed his latest invention on paper for Culture Change called "Deep Soil Condensers" whose Abstract states, "A triple synthesis of three ancient freshwater technologies is proposed as a cost-effective means of addressing global freshwater shortages. It is

also suggested that wide roads built across former farm-land might once again be used for food production in the context of the outlined water technology." [Look for this paper on the culturechange.org website's Tools for Sustainability page whenever we can afford to complete our website conversion - ed.]

The conservation message

A reader preferring to be anonymous wrote this essay [excerpt]: "How to avoid shipwrecks, foundering, drowning". Using the example of Robinson Crusoe, the writer asks, "Could it be that our society's on-rushing runout of oil is a similar "reef," which will require us to salvage bits and pieces of the 19th, 20th and 21st century if we are to avoid quick death by deprivation?... During the 20th century the small family farm was sucked under by the pounding surf of mechanized farming's diesel engines which pumped irrigation water, plowed and harrowed. drove the harvesters and fueled the 18 wheelers that brought Mexican tomatoes to Boston." The writer's message is to conserve energy: "It is not the money. It is energy. Not because I wanted to, but because I could. You could too. You may have to. Or else."

Fidel Castro made headlines from the Petrocaribe Energy Summit earlier this month. One of our old Auto-Free Times correspondents wrote to us this week, "Two weeks ago they talked about PEAK OIL on Cuban nightly news...as a reality. Wow, what a difference a Revolution makes... i am sending some of your pieces to Cuba. they are great. the other night, fidel talked about the water/energy connection and the need/interacion of conserving both."

Overpopulation

The overpopulation of the U.S. and the modern world was not dealt with head on in the Plan B Project and in our essay #104 that announced it. We received an emphatic review: "Jan , great writing as usual but plan b of essay #104 will never happen. If the subject isn't about overpopulation lets not discuss. Situation Hopeless. Plan A is what will happen and face it!!"

Another writer illustrated the overpopulation problem this way: "The population IS exploding. Prehistoric man grew at the rate of less than three a day. It took two million year (some say) to reach the three hundred million world inhabitants at the time of Christ. By 1804 the world made a billion for the first time. By my birthday in 1928 we were at two billion. In the next 73 years, by 1999 we had grown to six billion, tripling in my single lifetime. Remember the two million years of population growth of three a day? It is now over 265,000 a day during the next 20 years. Is it that our government fears that the people will panic if our leaders even mention this deadly serious problem? Was it a "big deal" during the last presidential campaign? Mentioned by either one of the Skull and Bones candidates?"

In "Peak Empire", our correspondent Dark Matter described peak capitalism's connection to population growth: "The overclass or the top one percent of the population now makes more than the bottom 95 percent. The unaccounted 4 percent are of course the pit-bulls, also known as the middle managers or pastors, who serve their masters for a little bit more than nothing. Capitalism loves people, it feeds on people. Peak Capitalism runs on disposable workers and cheap energy. It thrives on relentlessly escalating consumption to serve ever-increasing consumer population. Its mantra of success is exponential growth: exponential growth in the use of resources and energy, exponential growth in the production of goods and money supply, exponential growth in the worker-consumer population. The rabbit is safe, but only if he runs faster than yesterday."

Hemp hemp hooray?

The notion of meeting many of our plant-based needs by "sowing much hemp" (as George Washington supposedly advised) was to some a significant omission in both the debut of Plan B Project and its announcer Culture Change Letter #104. However, the multi-use hemp plant, closely related to the controversial marijuana plant, is just one of many useful plants that must and will be grown as people get cut off from plentiful petroleum.

It appears certain that hemp growing will ensue and make a big comeback as it did during World War II in the U.S. But until the next time (starting tomorrow?) there will be those who suppress the plant and go along with restrictive laws and social pressures, in order to appear more respectable and credible. The nation's innocent youth must not be corrupted, supposedly, while they are securely fed petrochemical pharmaceuticals to control behavior and achieve conformity.

Some priorities that will be abandoned, flowing from the loss of petroleum, include the drug war on marijuana, because it is too closely associated with the far more useful hemp plant. The resources will not be present to pursue a drug war, especially when the culprit -- a plant with a long tradition for making paper, cloth, rope and providing food and oil -- is defended with suddenness come petrocollapse.

Upon learning of the

suggestion that Hemp be included in future planning, Plan B Project's coordinator, Jason Meggs, immediately added the issue to the draft brainstorm of areas of law and policy which must be changed to allow a sustainability economy to develop.

(<http://www.planbproject.org/legal.html>) "The PBP is very open to expanding the scope of the study and encourages any and all to submit not only general categories for study but specifics as to what the public needs to know, and how existing laws and policies need to be changed," said Meggs to Culture Change.

Rail for whom and for how long? How?

In our Auto-Free Times throughout the 1990s we searched for renewable-energy railcar technology, but it never got off the ground. Giving it another try, we just heard from rail expert Jerry Schneider:

"Regarding development of renewable-energy rail transportation: One that comes to mind is called Interstate Traveller - it uses solar power. It is only conceptual and not very far along in the development process. Most of the others are electric and the sources of power are not usually discussed. They could be many and varied, from the grid or from distributed sources. They all represent attempts to find substitutes for the internal combustion engine while offering considerable mobility, not as extensive as the auto but capable of dealing with our dispersed settlement patterns, which we are likely to have to restructure in a grand scale. You can find links to this and all of the systems I monitor at my techtable.htm webpage. The problem with rail mass transit is that it has only a few access/egress points and is not suitable for serving the needs of the dispersed metropolis. Buses are far better but even they provide limited accessibility. Smaller systems that are far less costly and can be built quickly provide better solutions and several are being developed around the world. I hope you will include some info about them in your future post-oil transportation segments."

From several states to the east we are reminded, "Rail could use much lighter rolling stock than what we see and remember. Those

enormous iron wheels and axles needed to be big enough to carry ore to the smelter, even if you usually carried hay. With collapse there may be less bulk and weight to move around, and everything could be scaled down. At the extreme, think of a kind of four-wheel version of a bicycle, running on narrow gauge rails, set up so all the passengers had to pump, with the freight load adjusted to the passenger power available. You mention rail as a useful corridor facility in the future, but it might also be useful now to support "developmental corridors." All the settlements along a rail line could become special candidates for a Plan B development zone. We think of a small town as a zone for integrated, coherent relocalization, partly because its elements are closely connected in space. We might want to see a rail line as another opportunity for connection, allowing for additional forms of coherent integration. Thanks for your work, John Havey"

A pro rail advocate from Lake Tahoe got his dander up on our alleged failure to include rail -- even if it were a pre-extinction act of pride perhaps. Gunnar Henrioule wrote: "Dear Plan B Task Force, Refresh your recollection of the 1838 Railways = Post Roads Mandate from Congress. This is a crucial element in even a best case unwinding from the Oil Tarbaby, for the reason of corridor safety (from highwaymen & extortionists)... US dependence on import oil was exactly in step with the dismantling of America's Branchline rail infrastructure. Secondary rail lines & Interurban Electrics were not productive because of cheap fuel, just in time goods restocking practices & inventory tax. it would be most appropriate for Culture Change, Post Carbon Institute & Rocky Mountain Institute to pay more than Lip Service to requisite Railway Renaissance! The USA cannot avoid disintegration without vastly expanding rail capacity & reach, to the 1940 footprint at a minimum."

James Howard Kunstler received The Gunnar's above missive, and seconded its additional sentiment of "the most/only sensible way to the localized economy is to replace the rail network, branchlines & electric interurban lines, that are on the pre-WWII Thomas Bros. Maps..." with "The restoration of the US rail system is crucial for one other reason beyond the obvious benefits vis-a-vis energy use: it's the one project that the American people could accomplish that would give them some confidence in facing this very difficult future of a permanent global energy crisis."

Jason Meggs had included "mass transit" in his debut of Plan B Project, and then specifically added the word rail. [At this writing the planbproject.org website has been simplified and details withheld while they are being refined.] Culture Change reiterates that powering the rail transport will be very hard when petrocollapse hits, so the idea of putting a huge investment into rail is practically out of the question. It would be nice, but it appears to be too late to even attempt -- unless the nation bought into Plan B heart and soul while the trains are still running, so to speak.

Meggs adds, "While it is true that the reckless decimation of the rail system in the U.S. will cause great hardship, and that a comprehensive rail network could soften the blow of petrocollapse, the chances of implementing rail before an imminent petrocollapse are nil due to politics, right of way, funding, and other barriers, and the resources to implement such a tremendous (trillions of dollars) infrastructure project after a full-fledged petrocollapse are also nil, even in a state of emergency, at least in the short to mid-term.

"It is true that the original rail network began with human power (essentially expendable slave labor), and was powered largely by wood and coal, yet much has changed since then. For one, the U.S. population was much smaller and much more bioregionally self-sufficient. Its population centers were not only fewer but also much less dispersed. Industries grew up around rail centers, just as they had around rivers."

"While 'freeways' are the new 'rivers' in terms of continental distribution and have the benefit of having created right of way opportunities for future rail (much of the original network is now unavailable), those 'freeway rivers' gave rise to sprawl rather than centers. Trains used to pull up to processing centers and to town centers, but less and less.

"In the short-term, building a new system of the magnitude required in a time of collapse, and then orienting farming, industry and local distribution to its interface, will be less doable than sending rail to the moon. The best we can hope for is that industry will move to what remains of rail centers to produce a fraction of what the economy currently uses. While there is much room for conservation, such a reorganization, even if successful, will take considerable time and likely make the Great Depression seem minor in comparison. This on top of the constantly shrinking economy due to declining oil supply.

"Rail is romantic, more in harmony with nature, and much more energy-efficient than cars and trucks. But we must be realistic that a rail-based economy will be a tremendous challenge in the short term in the rosiest scenarios, and may prove all but impossible as peak oil unfolds."

With letters like this from Alan MacKay, it seems like rail will continue in some parts of the world, come hell or high water: "Is anyone else old enough to remember the steam locomotive? Before coal became available, they used to run them on wood, which is still, I believe, a renewable resource. Pillage the railroad museums! Back in the 60's Mother Earth News offered plans for a home-built, wood fired steam turbine generator."

The following comments are from this whole series of articles on petrocollapse, Culture Change Letters 100-104:

Transportation

Daniel Jennings wrote an essay on what happens when he, a middle class worker who happens to get along fine without a car, suddenly becomes the norm: "I imagine there will be riots at bus stops when twenty or thirty people show up and

try to get on at once. Some of them will push and shove each other and bus drivers will start carrying loaded guns. The short term effects will be terrible, riots, panics, hysteria, high prices. The long term effects will be good decreased auto ownership less money wasted on cars and freeways..."

Culture Change's Bike Blogger offered his "Words of wisdom: It is better to have a friend with a boat, than to own a boat. Also: A bicycle is to a Hummer what a sailboat is to a Cruise Ship. Bikes are bountiful and bikers have greater strength in numbers. 'Government must help to eliminate cars so that bicycles can help to eliminate government.' (- Advocacy slogan in Holland) - James Doherty"

Miscellaneous contributions

A concerned citizen touched on the medical issue:

"I have been interested in self-sufficiency for most of my life, but it seems that we are certainly approaching a time to be quite serious about it. I have not seen anyone writing about those of us living with life threatening illnesses. My life span would be only two or three days without insulin, manufactured in some large pharmaceutical lab, shipped across the country or world, and must be refrigerated until used. I believe the shelf life is only about 1 year. I suppose it is time to return to wholistic medicines, but I wonder that no one is writing about this aspect of survival."

On the matter of personal and family survival, growing numbers of worried citizens wonder how they will ever get to the sustainable future when petrocollapse first must result in upheaval, deprivation and culling of the surfeit of consumers. We received many letters expressing fear, and others revealing strategies and kinds of possessions. Just how to live, and where, and how to have a piece of countryside instead of an urban trap -- and whether it is best to do go rural or wild -- will be dealt with in an upcoming Culture Change Letter.

Because information is power, and wisdom can see us through crises, we blessed with more great reports: From David Pimintel, "I have been enjoying reading your thoughtful and insightful editorials. Congratulations! Your editorial on water and oil prompted me to send you our water paper. You are correct about all the plastic and petrochemical pollution. The U.S. produces and uses 85,000 different chemicals. The U.S. and world are in crisis situation, I agree with you. I am attaching copies of our population, energy conservation, and ethanol papers for your information."

Andrew McKillop, co-editor of the recent book *The Final Energy Crisis* (Pluto Press) reacted to an early draft of this essay with "Good stuff!"

Links and further reading

Plan B Project:
<http://www.planbproject.org/>

"Preparations and policies for petrocollapse: Welcome to Plan B"
Culture Change Letter #104 July 8, 2005

Cultural Revolution, American Style: Unpetroleum? #103 July 4, 2005

Emergence of active citizenry prior to petrocollapse? #102 June 30, 2005

Petrocollapse: Can you live without indoor running water? #101 June 27, 2005

End-Time for U.S.A. upon oil collapse - A scenario for a sustainable future #100 June 20, 2005

Congressman Roscoe Bartlett's website:
<http://www.bartlett.house.gov/>

Richard Register on Plan B - see paragraphs 10 and 11:
<http://www.ecocitybuilders.org/design.html>

Carole Brouillet's alternative currency treatise:
<http://www.communitycurrency.org/reweaveWeb.html>

Jerry Schneider's website for rail:
<http://faculty.washington.edu/jbs/itrans>

Sustainable-living related groups and info:

<http://www.ecosustainable.com.au/links.htm>

A peak oil website for "The collective farm of Jews and non-Jews in America: the kibbutz"
<http://www.kibbutz.us/>

Peak Oil and Community Solutions - second annual conference, Sept. 23, 2005, Jan Lundberg and Richard Heinberg among speakers. Yellow Springs, Ohio
<http://www.communitysolution.org/05conf1.html>

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