

Employment, Unemployment, and Misemployment in the United States

Building a new economic system based on useful jobs.

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The problem = the solution. The main thesis of this article is that there are large numbers of people not doing useful work and a large amount of useful work that obviously needs to be done. Let's put the two together.

Look at how many people are available for useful and needed work!
Unemployed, official and unofficial.
Unemployed because of mental or physical handicaps.
Underemployed.
Employed but doing useless work.
Employed but doing harmful things to the earth and/or people.

The biggest underutilized, resource in the world today is humanity. Incredible amounts of them are not being given the chance to be productive, and large amounts of them work at jobs which are counter-productive. Coun-

ter-productive jobs tend to be higher paid than productive occupations. Wall Street for example as compared to farmers.

A Pew Research survey found more than half of all adults in the labor force had either lost a job or suffered a reduction in income because of the recession. It is real hard for youth to get jobs. Times are tough for a lot of people. People with jobs are hanging on to them. The clamor comes up from the unemployed "Jobs, jobs, we want jobs! We'll do anything."

In the name of a job people will do things that
A) are bad for their health;
B) they will do things that hurt the environment;
C) they will do inane and useless repetitive tasks;
D) they will submit to bad bosses and dangerous workplaces;
E) people will commit crimes;
F) people will prostitute themselves in many ways.

How sad and insane is this?

The current US economic system is insanity. The 1% are rewarded with billions and trillions of dollars for doing what? The more useless the job the higher the pay? Useful workers are having their pay reduced. Millions of people are denied jobs while our cities and environment go to wrack and ruin around us.

**What kind of jobs do we want...?
That is what this article is about.**

Official US Job Categories. Standard Occupational Classification System
Each occupation in the SOC is placed within one of these 23 major groups:

3 columns for you to do it

	Useful	Useless/ Neutral	Harmful			
* Management occupations	50%	40 %	10%			
* Business and financial operations occupations	50%	40%	10%			
* Computer and mathematical occupations	50%	40%	10%			
* Architecture and engineering occupations	60%	30%	10%			
* Life, physical, and social science occupations	70%	30%				
* Professional gambling occupations		70%	30%			
* Community and social services occupations	70%	20%	10%			
* Legal occupations	10%	50%	40%			
* Education, training, and library occupations	90%	10%				
* Arts, design, entertainment, sports, and media occupations	50%	50%				
* Healthcare practitioners and technical occupations	80%	20%				
* Healthcare support occupations	70%	20%	10%			
* Protective service occupations	30%	60%	10%			
* Food preparation and serving related occupations	80%	20%				
* Building and grounds cleaning and maintenance occupations	80%	20%				
* Personal care and service occupations	60%	40%				
* Sales and related occupations	50%	50%				
* Office and administrative support occupations	50%	40%	10%			
* Farming, fishing, and forestry occupations	70%	10%	20%			
* Construction and extraction occupations	60%	30%	10%			
* Installation, maintenance, and repair occupations	80%	20%				
* Production occupations	60%	30%	10%			
* Transportation and material moving occupations	60%	40%				
* Military specific occupations			100%			
Totals	1350	840	230			
Percentage overall	56%	35%	9%			

I saw a recent photo of a group of young adults in a yard in Spokane, Washington. They were holding big signs that said "Give Us Green Jobs!" They wanted jobs that they could wear with dignity and that contributed to society.

Here are some of the largest green job categories opening up that I see. A brief overview of each of these will be discussed in this article.

- A) Fixing up houses and natural building.
- B) Permaculturing the yards.
- C) Fixing up the environment.
- D) Infrastructure maintenance, roads, bridges, paths, bike trails, smart grids, decommissioning roads and streets,
- E) Fixing up people. Care of people.
- F) Growing nutrient dense foods.
- G) Handcrafts. Making things out of local materials.
- H) Recycling unused stuff into useful stuff.
- I) Entertainment & Arts.

In 1971, when I was 22. I went to the University of Washington Library in Seattle and found the lists of all the job categories in the United States and how many people were employed in each category. I then proceeded to divide all the jobs into three types:

- 1) Useful jobs. Jobs that accomplished something useful. Jobs like farming, forestry, teaching, care-giving, etc. A job that is positive for society.
- 2) Useless jobs. Jobs that were meaningless (not useful) but weren't harmful. Many bureaucratic and clerk jobs. Jobs that have a neutral value.
- 3) Harmful jobs. Mis-employment. Jobs that are harmful to other people or to the environment. I put in military, herbicide manufacture, armaments manufacture. currency speculation. Jobs that have a negative value in that they destroy human capacity, infrastructure, and/or damage the environment.

At that time, according to my calculations the useful job category was about 30% of the employed people in the US. This is a subjective listing and everyone will do their division differently. It is a fun exercise. You can do it too. See the graph at the beginning of the article. What % of each job category would you estimate is useful, useless or harmful?

I just repeated that exercise and the results are in the graph. What I haven't researched yet are how many people are in the work force for each category. If each category was equal in size then my estimates are that today approximately 56% of US workers are doing useful work. 35% are doing useless work and 9% are doing counterproductive work. My guess is that a closer look will give even worse figures.

If I am right that means that about half of the work force could be re-purposed to doing useful work. That is a lot of labor, skills and brain power.

Now that I am older and wiser, things aren't so black and white as when I was a young idealist. Many jobs have aspects about them that are useful, aspects that are

neutral and sometimes aspects that are negative. So I will have to come up with some sort of % score for each. I might put basket weavers as 100% useful. The job category of farmer in this time of industrial farming I might put at 80% useful because farming does so much damage to the environment and current practices are degrading a lot of farmland. Theoretically I should be able to give a 100% useful category to farmers if everyone farmed in a way that improved the land and the environment. This is totally possible but is certainly not the case at the moment.

In my simplistic world I have divided the 311 million US population into a number of categories.

- * Usefully employed 25% (77.5 million)
- * Uselessly employed 10% (31 million)
- * Mis-employed, 5% (15 million) (do more harm than good)
- * Unemployed 20% (62 million)
- * Handicapped 10% (31 million) (includes all age groups and categories). According to numbers released by the US Census Bureau, 2008, more than 54 million Americans have some form of disability, (which is 17.3%). What I don't know is what % are employed full or part-time. According to the U.S. Bureau of the Census, as of 2004, there were some 32 million disabled adults (aged 18 or over) in the United States, plus another 5 million children and youth (under age 18). If one were to add impairments or limitations that fall short of being disabilities-Census estimates put the figure at 51 million. The US Counts One in 12 Children As Disabled
- * Retired 9% (35 million)
- * Children 26% (80 million under age 18)

Another piece of useful information is what % of our workforce is employed by government. This varies depending on whose figures you use but research indicates that somewhere around 20% of the employed are working in government when you add up federal, state, county, municipal and city jobs. This is not sustainable and in fact workers are being shed at a fast pace, however cutbacks tend to cut some of the useful workers and keep far too many of the useless workers. Lots of room for argument here, but almost everyone would agree that some deeper trimming is needed and it needs to be given much more citizen input. it is somewhere around 20% of the workforce.

In the US today we could say that "Never before have so few supported so many". Of course it is not just the useful workers in the US that are supporting our lifestyle. We must keep in mind that a lot of the world's natural resources and products of human labor flow to the US. In a sense we (the USA) as a country, live on the backs of the poor in many other places and to the detriment of ecosystems near and far. It looks like the era of US empire is drawing to a close.

I recently saw an email that the US government had made it illegal for teenagers to work on their family farm. This is clearly a case of insanity. The idea that people should not be allowed to be productive until after they have graduated from high school, or college, is absurd.

How do we unleash the unused human potential in society? How do we turn the problem into the solution? This is our conundrum.

There are two sides to this conundrum.

- 1) There are a lot of people in society that are not contributing (many of them are employed) or are being counter-productive (usually get paid well).
- 2) There is a lot of useful work that is crying out to be done.

How do we evolve a system that rewards people for doing useful work instead of for doing useless or counter-productive work? If we can unleash the full human potential of all the unemployed, underemployed, misemployed or blah-employed the human race and the earth would flourish. I would call for full employment including lots of self-employment. Including all the handicapped inasmuch as possible. Children's education can include some productive work. Children learn useful skills from their parents.

There's lots to do. Let's roll up our sleeves and get to work. Those of us who see what needs to be done should get to it. What mechanisms can we set up that reward useful work? Building local economic exchange systems is something that we can do from the bottom up.

A) FIXING UP HOUSES.

Our current society is too quick to demolish buildings that could be restored. It is also too quick at building shoddy buildings out of toxic materials. Many rentals are not maintained well. And many private landowners don't have the cash to keep up with maintenance.

We need teams of people who can do house assessments and design upgrades. The teams could include carpenters, plumbers, electricians, architects, engineers, natural builders, permaculturists and health care/toxicologists. Each house is assessed and recommendations made. How to improve the structure? Are their toxic building materials that need to be removed and replaced? Molds, allergens, that could affect the health of the inhabitants? What are the non-toxic paints, finishes, etc that can be used? Where can energy efficiency be gained? Does it make sense to put in a solar hot water heater? Is an attached greenhouse or solar room beneficial? Does the foundation need any work? Etc, etc.

- * Double paned window installation.
- * Natural plasters
- * Non-toxic insulation. Removal of toxic insulation and replacement.
- * Solar add-ons
- * Solar hot water heaters
- * Trellising for vines on exterior walls (moving into gardening)

After the assessment is done, the people involved in the house make a plan and prioritize what needs to be done first. The work can be done by a combination of homeowners, landlords, renters or outside workers. Can you imagine the amount of people it would take to

do this for every house and commercial building in the US?! A comprehensive overhaul of the nation's buildings. Tackled of course, locality by locality with local control of the process. This isn't going to happen overnight, even if everybody agreed to the idea. How about a 50-year plan to get the job done of overhauling our building stock.

There are a lot of junk buildings built recently that will need to be phased out. There are buildings too far gone to salvage. Building dismantling should be planned by another team of experts who know how to salvage as much useful material as possible and how to safely recycle anything toxic. Less bulldozers and more teams of careful dismantlers.

New buildings.

There will continue to be a need for new buildings even if we repair our current housing stock. Replacement age of US houses is much less than in Europe. Future buildings can be built to last longer. There will likely be more out-migration to rural areas in the years ahead and so there would be need for more rural housing. Cities may not need many new buildings if they have a declining population. One would hope that population will start declining in more parts of the world. The population in Russia is already declining but we may not want to use some of the same methods. New buildings can focus on local materials, non-toxic materials, and less industrial products. More care, handcrafting and individuality in the houses. More owner-built houses. Affordable and generally smaller than today. In some cases built for longevity. On the other hand, low-cost, simple homes that don't necessarily have a long life span and the materials biodegrade easily, should not be frowned upon either.

These strategies of owner builders and self home repair would need large, training networks so that people can learn from experienced people. This educational work force is sizable in itself, most of whom would not be solely teachers.

One mechanism that would allow for this housing upgrading to happen on rental properties is that the rental money (or a portion of it) is set aside to finance the work. Or the renter gets their work time and materials deducted from rent. Of course, one could hope that the new paradigm has less renters and landlords in it and more home owner/stewards. Everyone becomes the steward of their buildings and land they live on.

Of course, not everyone can do their home upgrading themselves. Elderly, disabled, single parents, special cases. They are going to need help. This is useful work. It is good for society and people. People gain more skills and sense of accomplishment. Health care costs go down because of healthier homes and less toxics. There is less alienation, crime, etc.

Housing upgrades is a job that should be done. It is a job that can be done. It will keep a lot of people busy and be a major factor in local economics.

B) PERMACULTURING THE YARDS

In conjunction with upgrading the nation's housing stock, let's look at the potential for employment to upgrade the nation's yards. Anyone who studies permaculture very long will realize that the potential for food and resource production in yards is huge. Not everyone wants a food forest in their yard, but let's help everyone who does want one to have a good one. It doesn't need to look messy. Edible landscaping can look civilized and still be productive.

Yard assessment teams can be put together just like the house upgrade assessment teams. Permaculturists should be central on the team. One goal is to make yards/landscapes be as self-reliant on inputs as possible, including water and fertilizer. Yard waste becomes a treasure. Roofwater catchment, storage, rain gardens, swales, soil infiltration are all considered. One goal is to reduce expenses and unnecessary labor to the resident, and at the same time, give them the yard they want. Some people want more or less edibles. Some people want it more or less ornamental. Medicinal and other useful plants can be considered. How can vegetation assist in making the home more energy efficient and/or livable. How can the yard serve the needs of the residents? Outdoor shade or sun area, privacy, hedges, recreation, children, fragrance, color, wildlife, etc. So many things can be considered in a permaculture design for a yard.

So first we need assessment and design teams for yards. Then there are the implementation and system establishment people. They install the gardens and plants, put up trellises, build structures, install water features, install gutters on the buildings, tanks, etc. etc. Can you imagine how many people it would employ to do that for every yard in the nation?! Ain't gonna happen. So just like in the house upgrading. A lot of the yardwork will have to be done by the homeowners and renters. Help them with design. And have lots of training people and cooperative work networks. When you consider that the Russian people produce at the home scale 85% of their fruit and berries, 75% of their vegetables, 50% of their meat and 45% of their dairy products, you get an idea of what is possible. And you can bet that most of the gardening work in Russia is done within the family or extended family unit. Alas, in the US a lot of people wouldn't be capable of permaculturing their yard even if they wanted to. So the US has lost the food race to Russia. Permaculturing yards is a major source of employment, especially in urban areas. Permaculturing a yard is the right thing to do in the long run.

Of course, permaculture design should be applied to public areas, government buildings, and commercial and industrial properties. Permaculture design can be applied to every piece of property. The teams to do this sort of work are just coming into being. It is not that permaculturists know more than landscape architects or engineers, it is that landscape architects and engineers in conjunction with permaculture design can do a better job. Permaculture is whole-systems thinking and cross disciplinary. It partners up well with professionals in specific fields. The more complex the job, the greater range of skills is needed in the team.

It is easier to see how the people power could be made available for permaculturing yards than for permaculturing public places, commercial districts or industrial areas. Some of the work can be done by government employees. Civic organizations are a long-time US tradition and do a lot of useful work now and could do more. Every town and neighborhood should assess their potential for community gardens. Permaculture specializes in putting in plants and systems that will generate resources and hence income opportunities, which can accrue to the people who help implement the plan.

C) FIXING UP THE ENVIRONMENT

This is a big job category. The environment is everywhere, rural and urban. In urban areas it is a lot about edges: the edges of streets, the alleys, the vacant lots, the railroad right of ways, riparian zones, wetlands, abandoned places, hillsides, parks, etc.

Waterways. The goal is that all waterways are healthy. Identify sources of pollution and fix the situation. Stop erosion. Daylighting streams. Stewards and champions of every body of water. Fish people and water bug people.

There is a movement in Australia called Landcare. It helps farmers plant trees and much, much more. Busloads and thousands of volunteers come out to help get the work done. Their goal is to help restore the countryside and native species. Grazing, logging, farming and burning have taken their toll on a lot of Australia. Landcare is doing good things and permaculture is involved. There are good lessons in it for the US as we go down this path. www.landcareonline.com.au/

Think of how many jobs it would create to fix up every piece of land in the US!? We need a 100-year plan in some places. It is pretty daunting to think of land healing on a big scale, but it doesn't seem so hard if you just look at it property by property. I have looked at hundreds of properties with my permaculture design eyes on. How to improve the environment on that particular property is usually rather obvious. Sometimes restoration is possible with the resources available and sometimes it needs subsidizing with outside material and labor.

It is entirely feasible to turn the trajectory around of every property that is currently degrading. It is possible to take the ecosystems uphill. Richer soils, more biodiversity, higher productivity, better climate amelioration, more carbon sequestration. It is a win/win/win situation. It is making things better for the next seven generations and beyond. It is some of the most important work on the planet right now. We need owl champions, fish champions, orca champions, snake champions, insect champions, amphibian champions, eagle champions, etc. etc.

D) INFRASTRUCTURE MAINTENANCE

It is well-known to the world that the US has been neglecting infrastructure maintenance to spend its money on more important things like war and enriching the 1%. The US is so far behind on infrastructure maintenance that it is hard to conceive of catching up. Bridges alone for example. I read the US national report on the state of bridge

maintenance in the US a year or so ago and it gives one an idea of the magnitude of maintenance that we are behind on.

Road maintenance is another big-ticket item. After a century of intensive road building their maintenance is a big job. This could employ a lot more workers than is currently allocated. It makes sense to dismantle some infrastructure rather than keep repairing it. This includes decommissioning some roads and streets. Even decommissioning takes labor and resources. Dealing with infrastructure will likely be a big need for some time to come; although a more localized and less technologically-based society would have less infrastructure needs eventually.

In December of 2009 I took an Amtrak train ride across country. One of the most striking sections to me was going through the Ohio industrial belt. I was very impressed by the amounts of factories (many rusting away); the gargantuan bridges one after the other; and the amount of pavement. The maintenance costs are staggering for just that one industrial area of the country. Multiply that by all the others! I noted with great interest how weeds and weed trees were already growing in the un-maintained cracks in the infrastructure and were beginning plant succession. It did not take much imagination to see a new forest growing over the top of the current human-dominated landscape.

Here is my positive scenario. Dismantle part of the infrastructure with great thought being given to how best utilize the materials salvaged. Highest and best use with ecological safety being paramount. Concrete is heavy and expensive to move very far. Inclined concrete makes great mini-runoff pans for water collection, benches, low walls, etc, etc. Concrete is not forever! Industrial areas can become exuberant plantscapes. Parks, gardens, arboretums, natural areas, wildlife sanctuaries, walking trails, etc, etc. It has been done in lots of places. Lots more places need it. Permaculture would be very good for this kind of designing. There are lots of useful non-edible materials such as basketry materials that can be grown on contaminated sites. Most of the answers to cleaning up contaminants are biological - plants, fungi, soil micro-organisms, etc. Nature is an incredible healer given the chance.

At any rate, think of how many people it would keep busy to clean up all the brown-scapes, contaminated soils and abandoned infrastructure in the US?

As it turns out, there already are hundreds of examples of people working on this. One example is Greensgrow Farm in eastern Philadelphia which has created an urban farm and education center on a superfund site. At their site they are farming raised beds and greenhouses built on a concrete cap. www.greengrow.org

In my corner of rural, western America it would be a piece of cake to do infrastructure maintenance and remediation compared to the Ohio industrial areas. The Indians were doing a great job of managing the landscape when white settlers got here only 150 years ago.

We are a low population density county and have virtually no industry.

Decommissioning and scaling back roads, highways and infrastructure.

To start with, how about closing 10 to 20% of all city streets (and alleys) and repurposing them for multiple functions such as: wild areas, pathways, landscaping, community gardens, benches, kiosks, parks, playgrounds, play areas, food forests, bike paths, etc. Make the cities more livable for humans. Cul de sacs, speed bumps, vegetated roundabouts, etc are becoming more common in urban areas to reduce and slow residential traffic. This is already underway in parts of Seattle that I visit. Neighborhood community associations make these kinds of decisions. This will not be a burden because of less transportation needed in a localized society: better integration of housing, workplaces, marketplace, etc; and where needed, creation of new parking or garage spaces to compensate for areas lost.

In the rural areas where I live almost every local will fight over losing road density. Access is important for resource extraction, recreation, and management. As a restoration ecologist, I would prefer to have larger blocks of area that are not crossed by roads. Corridors for animal movement in the landscape. As a permaculturist I like to have access for sustainable resource extraction and management. The forest service and the big timber companies have been gating many roads in our region. A few roads are being decommissioned totally. In a rational world, roads would not be used for unsustainable resource extraction and gates would not be necessary for public exclusion. At this time the yearly road maintenance costs are high. It would be sensible to decommission some roads and scale back others. The rural road networks will be a source of employment into the foreseeable future, whether maintaining or decommissioning.

Roads can be destabilizing to slopes and cause erosion. Assessing all roads for erosion and subsequent fixing would occupy many more road workers than today. Regionally, the need for this varies widely. Northern California for instance has one of the highest erosion rates in the US. Bioengineering is a well-established technical field for fixing erosion and stabilizing roadsides.

To some extent we may be forced with some system of triage when it comes to infrastructure maintenance. Until the rational, useful job economy comes into being there will be a shortage of funds for maintenance. If the current economic paradigm take a big hit then there will probably only be energy to keep some parts of the system functioning. A fait accompli triage. Everything abandoned during the change-over period can be caught up on once we are solidly in the new paradigm.

E) FIXING UP PEOPLE - CARE OF PEOPLE

Our current, health care system has its pluses and minuses. Here is my view. Current health care is full of unnecessary human suffering and tragedies. Un-needed surgeries, mis-diagnosis, bad reactions to pharmaceutical drugs

and their interactions, doctors errors, MRSA in hospitals, high cost of insurance, health crisis bankruptcies, etc.

My vision of a new paradigm health system starts during pregnancy with healthy nutrient-dense food, low stress and a caring environment. It continues with adequate, nutrient-dense food during childhood years and throughout life. Healthy children and healthy adults. Even if we could get to such a world there would still be injuries and diseases. Everyone gets the best care possible by teams of experts. A healthier population would need less numbers of health care workers and facilities. The insurance industry would be unnecessary. Think of the savings there!

But let's backtrack to the present. Our nation is chock-a-block full of unhealthy, sick and suffering people. Some of them go to doctors and some don't. Some of them receive the most modern medical care available today and are still in bad shape. Many people have little, or no, access to medical care. They cannot afford it, whether alternative or conventional.

Alternative, or complementary, health care has grown hugely over the last 40 years. Chiropractors, massage therapists, acupuncturists, energy healers, reiki, polarity therapy, aromatherapists, herbalists, and dozens of other healing modalities. Some work on the physical level and others at the energetic level. The AMA/pharmaceutical/medical complex would like to brush them all off as a bunch of quacks, but are having a hard time doing so since many people are finding the alternatives work better, are less expensive, don't have bad side affects and are more humane. Preventative health care is the key word here. Work with people at the beginning of trouble so things don't deteriorate to a bad place. Most alternative health care is focused on human resources, training and local inputs (such as local herbs), so more of the health care dollars go to people rather than to industrial inputs and profit margins.

But let's not throw the baby out with the bath water. The current medical system is great at crisis intervention, injuries, stitches, reconstructive surgery, replacing hips, knees and ankles that don't work anymore, intensive care, etc.

Physical therapy has come a long way in the last 40 years also. Imagine how many more physical therapists it would take if everyone that would benefit from physical therapy could get treatment?! For as long as necessary. That is a lot of physical therapists.

Physical healing is just part of the healing backlog built up by our society. The amount of mentally ill people is large. As an indication here is a quote from a June 7, 2005 Washington Post article. "One-quarter of all Americans met the criteria for having a mental illness within the past year, and fully a quarter of those had a "serious" disorder that significantly disrupted their ability to function day to day, according to the largest and most detailed survey of the nation's mental health, published yesterday. Although parallel studies in 27 other

countries are not yet complete, the new numbers suggest that the United States is poised to rank No. 1 globally for mental illness, researchers said."

Obviously a lot of people in positions of power in the US are also insane, but I doubt they are counted in this tally. Our current paradigm is full of insanity. War, torture, crime, predatory lending, addictions and unhealthy lifestyles are all signs of insanity.

I remember a conversation with a German woman once and she said that in Germany, mentally ill people are given a job within their capacity. They are valued members of society. They are provided housing in group homes with house caretakers. She thought it was pretty barbaric how we treated mentally ill people in the US.

What if everyone who was mentally ill had people to support them and help them get better and become the best they could be. Imagine how many people it would take to do that job?! Is it a good thing to do? Absolutely. It fits my criteria of making life better for humans. In the future there would be a lot less insanity as people grow up in a sane paradigm, so this workload will lessen a lot after a couple of generations.

Here is a quote from Michael Van Ness, executive director of Lynchburg Grows which works with all sorts of special needs people in Lynchburg, Virginia. "...people who are marginalized, disabled, or at risk want to give and be a part of society: they want to do something important and feel that they are contributing."

All in all, the amount of need for health care practitioners is huge. Focus mostly on alternative healing modalities; preventative health care; and where necessary, the finest that modern medicine can offer.

F) GROWING NUTRIENT-DENSE FOODS

As a permaculturist, this is my area of expertise and I have written on this subject at great length in other publications.

Here is another large employment opportunity. Industrial agriculture has depopulated the farm landscape. But it is coming up against its limits in terms of soil fertility, pest control and dependence on industrial inputs. Organic agriculture and permaculture are higher-yielding, improve the ecosystems rather than degrade them; can be run largely on local inputs; and produce higher quality food (nutrient-dense foods). The industrial food system produces foods with low nutrient value and which contain built-in poisons from pesticides, GMOs, and antibiotics and hormones in the meat. More people are turning away from the industrial food supply and towards a local food supply. Some people argue that the industrial food supply works best, but if it ever fails, local food systems will be the best game in town.

Less than 2% of the US population are classified as farmers. The % that is involved in the food system is much higher if you count all the people who make the machines and inputs and all the people who work in the processing

plants, retail grocery stores, distribution, transportation, etc. It may be as high as 20%. of the jobs in the US are connected to the food supply. A much greater reliance on localized food systems would mean that a higher percentage of the people working in the food chain would be working on the land. Smaller scale, less input intensive and more labor intensive. More farmers and less factory workers making things for farmers.

Food security is a serious issue and more and more people are thinking about it. I was an early adopter in the "back-to-the land" movement. When I was small-scale farming in the 1970s we really thought we were the vanguard of a population shift to a more simple, agrarian, self-reliant way of life. We would learn how to do it and teach the people who came after. In the 1980s and 1990s there was the "back-to-the-city" movement. Some of us stuck it out however, but we didn't get many new recruits for a generation. Since the 2000s there has been a growing influx of a new generation of small farmers and our first wave of back-to-the-landers are getting to do the teaching we were consciously preparing for in the 1970s.

Finding land for all the new farmers is a tricky proposition and it is being worked at from a number of angles. There are a variety of FarmLink programs that hook up new farmers with retiring farmers. My personal experience is that there are lots of landowners that would welcome someone to farm their land in a good way. It is nice to own your own land, but you can be a small-scale farmer and lease land. For many years the policy in agriculture has been "get bigger or get out". Now the trend is going the other way, larger landowners cash in on their property by carving it up and selling it. Some of the small pieces are bought for farming and some are not, but the capacity remains if the will arises. Communities of people settling on the land makes good economic sense as there is a support group able to help take care of farm chores, animals, children, food preservation. It is possible to do it all yourself (and the pioneers used to do it regularly), but few of us are capable of it on our own anymore. Communities are capable of providing more material goods and a higher quality of life than people living in dispersed, isolated, one-family properties. At the moment we have all types.

Book Review:

RECLAIMING OUR FOOD. How the Grassroots Food Movement is Changing the Way We Eat. Tanya Denckla Cobb. Foreword by Gary Paul Nabhan. 2011, Storey Publishing. \$24.95.

The book helps capture the curling edge of the local food wave that is sweeping America. 60 organizations around the US are profiled and Cobb focuses on some of the most developed models. This book won't tell you how to garden but it does give you lots of ideas of how to better organize your local food system. If you are involved in building local food systems than read this book! Very heartening to get an idea how big the whole movement really is and how successful some organizations are. The local food movement is very decentralized. This book is well written and useful to community organizers.

HUNTER GATHERERS

Just as the recent organic farming and gardening movement is partially a return to old roots of traditional agriculture; the primitive skills movement is a return to our old roots of hunter/gatherer traditions. This really worries the starched shirts crowd.

There have been a lot of nomadic peoples in the world in the past and there are a few left, but many have been exterminated, settled or assimilated so this lifestyle is at a low ebb. Most indigenous people's territories have been degraded in terms of native foods, fish and game. Usually because of losing control of land management.

Of course, the world still has a hundred million or so hunter/gatherers today (or only several generations removed). Our Northwest Indian tribes still value their traditional ways and there is resistance by tribal people to take up gardening or farming. How can permaculture assist in enabling their traditional hunter/gatherer culture?

Nomads weren't just taking jaunts across the countryside for the fun of it, they were busy gathering resources. Wherever hunter gatherer societies abut or intergrade with agricultural peoples there was always trading between the two groups. Nomads had things to sell such as foods, livestock, medicines, hides, baskets, art, etc due to the specialties of their territory and their skills in making value added products.

I have a friend who wants to travel around the Inland Northwest with a couple of friends, gathering foods, drying them, collecting craft items, grasses, reeds, etc. These are shipped periodically to Portland, Oregon where they would spend their winter making value-added items out of their summer gathering. They live off of the land in the growing season, and they live off of their gatherings during the winter. If successful they would be an example of modern hunter/gatherers. Not an easy row to hoe, but perhaps just becoming possible again. Most people only dabble in wildcrafting. All traditional agricultural people do wildcrafting on the side to supplement their farming. If population pressures are extreme then there is a tendency to destroy the commons. There have been recent models in Africa and elsewhere of community control of land leading to improving the commons.

Another manifestation of our hunter/gatherer roots is the increasing interest in wild foods. I have several bookshelves of books on wild foods including some that focus on urban foraging.

I started wildcrafting commercially 16 years ago. One of my goals was to explore what sustainable wildcrafting would look like. As a result of my studies and hands-on experience I can now do property surveys for wildcrafting opportunities and what can be done to increase the resource. On every piece of land that I walk there is clearly lots that could be done to improve that site's wildcrafting productivity. To do this I am combining my skills of wildcrafting, permaculture, native plant propagation, ecosystem restoration and reading the landscape. A team with the right bunch of skills can work with landowners

to improve the health and productivity of their land. Of course, I can do this most effectively in my home bioregion and the program needs to be implemented and fine-tuned by someone in intimate connection with the land. If we do this sort of thing on a landscape level scale then the amount of hunter gathering that is possible would increase exponentially. Many land-owners are open to sustainable wildcrafting on their property and don't have the time to do it themselves but they would let local or nomadic people do careful harvesting for a fair exchange.

There is currently room for some employment in wildcrafting. Most wildcrafters are self-employed. Wildcrafting/gathering is traditionally a solitary or small group occupation. Of course there are large traditions in the US of wild gathering, hunting and fishing. Much still goes on. A world designed with permaculture and new paradigm thinking and employment would create landscapes and bioregions that are, once again, abundant in wild foods, game and fish.

Resource: Here is the best article I have seen on the topic. *"The Roles and Values of Wild Foods in Agricultural Systems"* by Zareen Barucha and Jules Pretty. In *Philosophical Transactions of the Royal Society*. 2010, 365, pages 2913-2926. It is published on the web.

G. HANDCRAFTS. MAKING THINGS OUT OF LOCAL MATERIALS

Items can be made that are long lasting, beautiful and rely mostly on local, renewable material and local labor. This is another green job category that is nigh endless. Metal and plastic have replaced many items which used to be made out of natural materials. Lately, a lot of the metal and plastic things have gotten chintzier and chintzier. People are turning more towards natural materials: wood, fiber, leather, rock, earth. Indigenous cultures almost always made utilitarian everyday items that were also works of art. People pay big bucks for that today. More of these hand-crafted items are now floating around the gift economy. A world made more by hand is now possible. Again, the primitive skills movement is recapturing many of these skills. In England there is an upsurge in coppicing, bodging, small wood turning and suchlike. The permaculture movement is another mechanism for moving some of these skills around. Of course, there are already many local, regional and national organizations focused on things like felting, weaving, dying, embroidery, basketry, etc, etc

H) RECYCLING THE WASTE STREAM AND REPURPOSING UNUSED STUFF INTO USEFUL STUFF.

The waste stream in the US is enormous. The garbage of current US society is a wasted opportunity. Policies such as envisioned here would cut this waste stream by a lot. Think of how many people it would take to make the best and highest use for all of the waste stream components? How many tinkerers would it take to repair things instead of throw them away? More repair shops and less garbage trucks.

When I was a little child I had a recurring dream of a machine that turned garbage into useful products. A conveyor belt carried the garbage into the machine and new stuff came out the other end. It is a permaculture principle that the waste products of one part of the system become the inputs for other parts of the system. There is no waste. All loops are closed. There is no pollution. I recently saw a presentation by Robert Meredith of Ark-itecture which featured housing that utilized large amounts of recycled material.

One of my favorite stories to illustrate this point is the Devonport Tip. Devonport is a neighborhood in the North end of Auckland, New Zealand. Tips are the Kiwi's name for garbage dumps. When I visited the Devonport Tip in 1989 they had a mountain of plastic bottles piling up, which eventually forced the authorities to start a plastic recycling plant. The tip had a fantastic windrow composting system which composted all the organic matter that came in. This was sold to local gardeners. They also had a fabulous, second-hand store full of useful items and building materials gleaned from the garbage. There was also a building on site where old retired codgers repaired broken appliances that people had thrown away. They trained young people how to repair things, made a few dollars and had a great time hanging out together. The garbage was brought in by the local public and had been trained to do some pre-sorting by a monthly tip newsletter. It wasn't brought in all crumpled up by big garbage trucks. It wasn't perfect but it was one of the best examples of productive utilisation of the waste stream I have seen.

The less resources are available the less waste there is in a society. Here in the US, we must be at the pinnacle (temporarily) of the ultimate throw-away society. This likely will not last much longer, but in the meantime, let's learn how to maximize the waste stream that we have available.

I) ENTERTAINMENT & THE ARTS.

I can imagine a world where almost everyone is involved in entertainment, music and art to some extent. A localization of live and participatory entertainment that replaces the current television, movie, electronic and mass media which grows increasingly abhorrent and filled with propaganda. A rich cultural life for all would create a rich source of livelihood for many people.

J) Let's not forget all the current useful work being done!

All this talk about new useful jobs is not to denigrate all those useful jobs out there in society that are currently being filled. Today's useful jobs still need filling. This article has focused on the new, green job opportunities that are just starting to come on-line. As we can see from this article there is lots of useful work to be done and lots of people that are currently idle or not productive. It is easy to see where we want to go, but it isn't easy to see how we will get from here to there. There are certainly lots of obstacles, not least is that society doesn't fund many green jobs in the current system and there is outright hostility to these ideas by many institutions. But nonetheless

some of us are embarked on this process. I say, let's just get on with it and learn as we go. As long as the stores are full of merchandise, people will continue to scoff at us. But if I am right and trouble lies ahead for the big global machine then these ideas may be looked on with more favor in the years ahead.

This article is just scratching the surface of a vast and complex topic. This is by no means a full listing of useful or green jobs. These are just a few of the larger job categories that come to mind. A capable team needs to look at the US occupations lists and how many people are in each category to get a clearer picture of how many people currently employed are doing useful, useless or destructive activities. It is always easier to critique current problems than to point to their solutions. Permaculture is about solutions. It is but one movement out of many - humanity pushing for an evolutionary change to a happier and greener world.

To be continued

Michael Pilarski - February 28, 2012

Anyone who would like to add to this discussion can contact me at: michael@friendsofthetrees.net

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