

Locally Reliant Living for Challenging Times

Yuba Gals Independent Media

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Peak Moment Conversations: Locally Reliant Living for Challenging Times

Ride an electric bike. Tour a permaculture back yard garden. Peak Moment TV is cross-pollinating the most challenging shift in human history - away from endless growth to sustainable living. In each episode of **Peak Moment TV**, Janaia Donaldson hosts grass roots pioneers who are exploring locally reliant lifestyles to meet these challenging times.

Some topics include: local food production; renewable energy; transportation alternatives; sustainable building; preparedness; personal resilience, psychological and, business, and governmental responses. Programs are on the internet at www.peakmoment.tv/conversations, including audio files, downloadable via iTunes, and are cablecast on community access TV stations nationwide.

DVDs with four consecutive programs per DVD (1-4, 5-8 etc.) are \$20 each plus postage in North America. Annual subscriptions (24 programs) are \$110-135 plus shipping; choose from past and/or future programs. Quantity discounts are available. Community-access TV stations can download programs from TelVue connect for free. Contact us for information.

The program is produced by Janaia Donaldson and directed by Robyn Mallgren of Yuba Gals Independent Media.

Program Descriptions

- **1 Conserving Farmland.** Increasing local food production requires preserving agricultural land rather than developing it. Conservation easements on Bill and Anna Trabucco's ranch preserves agricultural land now supporting a grass-fed cattle operation.
- **2 Learning from Hurricane Katrina.** Three locals helping in the cleanup see firsthand the immense scope of the devastation, and affirm that locals need to be prepared for emergencies rather than depending on the government.
- **3 Saving Energy Dollars.** Solar installer Martin Webb advises to conserve for the easiest, cheapest savings. Then he demonstrates how to analyze your California utility bill to determine whether or not investing in renewable energy makes financial sense for you. His Petroleum Food-Print shows how to conserve on food energy costs.
- 4 Community Energy Projects. What can communities do collectively? Martin Webb and Marston Schultz discuss local energy inventories, energy coops, opting out of PG&E service, influencing local government to set renewable energy policy goals, and vulnerability to shortages.

- **5 Personal Responses to Peak Oil.** Mary Nelson reflects on community, neighborliness, attitudes, and opportunities in an energy-diminished future.
- **6 Self-sufficient Small Farms.** Small acreages can produce a lot! Janet Brisson shows the home-canned and -dried vegetables, fruit, and beans she cultivates along with chickens and bees. Renee Wade talks about practices that suit the land: her drier property is better suited to raising goats.
- 7 **Grass-fed Cattle Ranching.** Nevada County ranchers David & Barbara Gallino raise their cattle in the traditional way on natural pasture grasses healthier for the animals, their land, and the consumer. One of their challenges is transporting animals long distances to winter pasture and for processing.
- **8** The Future of Fruit. Chris Bierwagen's family farm has produced organic fruit since the early 1900s. Their challenges include weather, cost of labor, and marketing fresh fruit, including competition from cheap fruit products of other countries. Message: Buy from local farmers—that's where food comes from, not grocery stores!
- **9 Growing Grower's Markets.** Organic farmers John Drew and Mary Walker explores the power of growers markets where local growers sell to local

consumers—less fuel, fresher goods. Don't miss Mary's original song live in the studio!

- 10 **Waking Up to Peak Oil.** After sisters Loretta and Karen O'Brien learned of Peak Oil, their lives became transformed as they worked to gather their family, learn permaculture, move towards more self-sufficiency, and deal with emotional challenges.
- 11 Womens' Response to Peak Oil. Loretta and Karen O'Brien explores womens' emotional responses; concerns for children, family and health; nurturing activities like food-growing and building social networks in community.
- **12 Sustaining Food, Sustainable Food.** Shan Kendall discusses nutrition-dense foods that nourished traditional peoples. Usually high in quality animal fats, with fermented foods to aid digestion, these foods fostered low levels of chronic disease.
- **13 Peak Oil: Challenge and Opportunity.** Rick Hartmann covers the data about global oil production and consumption, while Michael Thompson envisions a healthier, better world on the other side of the peak.
- **14 Building a Relocalization Network**. Celine Rich and Julian Darley, co-directors of Post Carbon Institute, discuss their rapidly-growing Relocalization network supporting small groups worldwide to reduce consumption and produce locally.
- **15** Climate Change and the State of the World. Worldwatch Institute Director of Research Gary Gardner discusses challenges and opportunities as climate change accelerates, and hopeful responses from the grass roots level.
- **16 Climate Change Effects in the Sierra Nevada.** US Forest Service specialist Carol Kennedy's graphs show already-reduced snow pack, longer summers, drier forests. She emphasizes the need to plan for and adapt to changing conditions.
- 17 The Joy of Biking. Members of Nevada County's Alliance for People-Powered Transportation discuss biking as a viable alternative to cars; safety, timesaving perspectives, strategies for getting started, and being equipped.
- **18** The Powerdown Project. Students in New College of California's Powerdown Project are preparing templates usable by cities to assess how their core services will be affected by rising fossil-fuel prices and shortages.
- **19 Sebastopol: A Town Addresses Energy Decline.** City councilman Larry Robinson discusses how rising energy prices and availability might affect services like fire, water, wastewater, law enforcement—

and the citizen's advisory group starting to address these issues.

20 Citizens Advisory Group on Energy. Matt Stevens chairs the group formed to assess Sebastopol's electricity use and its ability to respond to price increases and supply disruptions, and to make recommendations to reduce the city's vulnerability.

21 Living within the Natural Economy. Brian Weller of Willits Economic LocaLization (WELL) discusses their community's process of building a secure, sustainable future based on RISC: Responsibility, Ingenuity, Security and Community. "When we depend on where we live for our livelihood, then we take care of it."

22 America's First Rural 'Green' Hospital.

Margie Handley illuminates innovative plans for the new Willits hospital, including LEED certification for resource-saving energy and materials, an organic garden to grow food for the hospital, a wellness center, and telemedicine.

- **23 Forging Common Ground on Energy.** Vice-Mayor Ron Orenstein worked with citizens to inventory Willits energy usage, including reduction strategies. Their work led to a unanimous council vote to install photovoltaics on city hall and more.
- **24** A Rural County at the Crossroads. Mendocino supervisor Hal Wagenet scans from this rural county's timber-extraction past to the challenges of a larger retired population's high service needs. Amongst critical "Land Use" issues he adds an idea for mixed-used-building in a walkable Willits.

25 MagneGas: From Sewage to Fuel Tank.

Watch Ron Cole demonstrate converting any liquid to a gas similar to natural gas—and then drive off in the compressed-gas vehicle so fueled! He envisions its use in sewage treatment and neighborhood 'gas production' units that could plug into the natural gas grid.

26 101 Solutions to Global Climate Change.

Author Guy Dauncey's lively, optimistic solutions for Peak Oil and climate crisis are do-able here and now. Conservation, efficiency, proven technologies, and emerging innovations will take us through this critical planetary energy transition. Full-length presentation DVD.

27 Learning from Cuba's Response to Peak Oil.

Megan Quinn of Community Solution discusses her visit to Cuba, a model for powerdown. This young woman sees Peak Oil as an opportunity to create the communities we want, but notes that we must reduce our consumption despite environmentalists' assurances that biofuels will save us.

28 Exploring the Terrain of Peak Oil. Michael Ruppert, publisher of From the Wilderness.com, has made connections between money, Peak Oil, and geopolitics for years. He discusses his move to Ashland and offers specific to-do's around money and investment "in light of the imminent collapse of the U.S. economy": invest locally.

29 An Island Eyes Energy Independence. Rita Schenck and Deirdre Grace advocate forming a Vashon Island public utility district to produce electricity locally from renewable resources, starting with an aggressive voluntary conservation program to improve building efficiencies. Check out the Institute for Environmental Research and Education's 10-year plan for community energy independence.

30 Cooperative Living, Cooperative Driving. Long involved with intentional communities, Tree Bressen discusses a shared-ownership cooperative household with ten residents, as well as a small, one-car car sharing cooperative. Carshare info and scheduling software available free online.

31 The Portland Peak Oil Task Force. Propelled by passage of the Portland Peak Oil Resolution in May 2006, a citizen's task force is developing recommendations for the city. With Brendan Finn, chief of staff to Commissioner of Public Affairs, and task force member Randy White.

32 The RE Store: a second life for building materials. Tour a fascinating building supply store whose materials are donated or salvaged from demolition sites, and recycled at bargain prices to homeowners, contractors and businesses. With retail store manager Nate Moore, deconstruction manager Erin Marden and Executive Director Robyn duPre.

33 MOBY: An Inner City Community Garden **Project.** This Vancouver, B.C., neighborhood is building community while transforming an abandoned lot in a crack neighborhood into a flourishing community garden. Join MOBY-lizer Jason O'Brien and folks of all ages for cob clay-stomping fun accompanied by music in an inner-city urban garden beneath the elevated skytrain.

34 Vancouver's Co-operative Auto Network.

A superb urban transport solution whose time has come. Founder Tracey Axelsson recounts the ins-and-outs of North America's oldest and largest car-sharing cooperative—membership, online scheduling, vehicle types, usage costs, preferred parking. Recorded August 10, 2006.

35 The Vancouver Food Policy Council Vancouver's food charter calls for a "just and sustainable food system." Council member Spring Gillard elaborates on city-wide collaborations to Peak Moment Conversations

improve access to groceries, waste management, institutional food purchasing, and a goal of 2010 food-producing garden plots by 2010.

36 An Urban Developer Goes for the Green Inspired by the book *Natural Capital*, developer Joe Van Bellegham transforms a toxic site into a green development that's totally backed by the city and community in Victoria, B.C. Conserves energy, water, heat, materials, and shares some with the neighbors.

37 Suburban Renewal - One Backyard at a Time. Jan Spencer shows his quarter-acre permaculture project transforming a typical suburban lot. Lawn and driveway were replaced with fruit and nut trees, vegetables, brambles, and native habitat, plus a 3500 gallon rainwater catchment system, a sunroom heating the house, and a small detached bungalow to increase residential density.

38 A Natural Builder Creates an Ecovillage. Tour an urban ecovillage on less than two acres only five minutes by bicycle from the center of Eugene, Oregon. Builder Robert Bolman uses natural materials like sensitively-harvested wood, earth and straw in the several beautiful, well-insulated, non-toxic structures surrounding the central shared gardens.

39 Permaculture for the Inner Landscape.

Facilitator and musician Melanie Rios believes life can be much richer after peak oil—with lighter living that gives back time and joy. She facilitates communication skills to help groups "work together to stay together." In performances like her "Three Little Pigs Meet the Peak Oil Wolf," she erases the boundary between audience and performer.

40 Go Electric: Bike Commuting Made Easy. Catch Sally Lovell's enthusiasm for her electric-assist bicycle. Her comprehensive primer covers bicycle types, battery recharging, practices and products for security, inclement weather, and road safety. Gotta love that trailer for hauling stuff!

41 San Luis Obispo's Smart Energy Summit.

How can localities buy and build local renewable energy generation capacity? Ken Smokoska describes the opportunities afforded by California's Community Choice law AB117. Nick Alter and Aeron Arlin Genet describe the coalition of business, environmental, university, county and city governments that took part in the summit, and where some of the outcomes can lead.

42 Yes! Building a Just, Sustainable, and Compassionate World. Yes! magazine counters mainstream media by giving us stories of people creating sustainable, just and positive futures. Executive Editor, Sarah Van Gelder discusses healthcare for all, alternatives to prisons, peak oil,

living democracy, climate change, working together, and how each of us can begin creating change.

43 Bainbridge Graduate Institute - Changing Business for Good. How can business help create the world we want? Jill Bamburg, Dean of Bainbridge Graduate Institute's innovative MBA program, examines its basic premise: that doing good for people and the planet is good for business.

44 The Small-Mart Revolution. Author Michael Shuman advocates "Going Local," showing how local businesses are beating global competition and helping to create self-reliant communities. One innovative idea: invest locally by moving a portion of pension funds into regional stock exchanges.

45 "Who Am I?" in a Post-Petroleum World. Joanna Gabriel feels the challenge of Peak Oil is an opportunity "forcing us to create the kind of world we wanted all the time anyway." The coordinator for Post Carbon Ashland explores the challenge of creating a new paradigm of sustainability and sharing while we're living in the old industrial-era paradigm of limitless growth and domination.

46 Business Alliance for Local Living Economies. Executive Director Don Shaffer recounts BALLE's vision of local living economies ensuring that economic power resides locally, where it can enhance community life and natural systems—as a counter to economic globalization. BALLE's autonomous networks of local businesses initiate programs like "Buy Local First."

47 The San Francisco Peak Oil Resolution. San Francisco is the first American city to formally address the challenges of oil depletion. Dennis Brumm and Allyse Heartwell recount how members of SF Oil Awareness envisioned, wrote and presented to the San Francisco Board of Supervisors a Peak Oil resolution, which was passed unanimously in April 2006. They explore next steps: public hearings and plans to create a task force to assess the city's energy vulnerability.

48 A Defining Moment in Human History. The planet is rapidly confronting us with limits to the exploitative, dominator system of the past 5000 years. David Korten, author of *When Corporations Rule the World*, and more recently *The Great Turning: From Empire to Earth Community*, implores us to replace the old dominator-control stories with new stories — affirming life values of cooperation, community and interdependence.

49 Local Currencies: Replacing Scarcity with Trust. Francis Ayley established over a dozen local currencies in the UK before moving to the U.S. He contrasts our standard, scarcity- and debt-based money system with local currencies in which "there's

always as much as you need." Local currencies like his Fourth Corner Exchange issue money when members trade goods and services. Communities with local currencies will be less affected when recession or depression hits the mainstream economy.

50 Land Trusts - Keeping Local Agriculture Alive. Land trusts are an important part of the voluntary protection of working agricultural lands, which can also protect water quality, habitat, and beauty, not to mention food production expertise. Land trust veterans Cheryl Belcher and Dan Macon, himself a farmer, discuss the critical role of small scale food producers in the local economy and the challenges they face — from misperceptions of farming to policies favoring big agriculture.

51 An Experiment in Back Yard Sustainability. Tour Scott McGuire's "White Sage Gardens" in the back yard of his rental home — a demonstration site for suburban sustainability. He ponders, "How might a household produce and preserve a significant portion of its own food supply?" Composting, a waterconserving greenhouse, and seed-saving are all facets of this beautiful work in progress.

52 Return of the Electric Car. Otmar Ebenhoech has worked with electric vehicles for decades, watching as popular commercial EVs were developed, then recalled when their legal mandate was overturned. He sees improved battery technologies as the catalyst to enable widespread acceptance of EVs. Peek under the hood and watch a test drive of his hot electric Porsche race car conversion (o-60 in less than 5 seconds!).

53 Community Responses to Peak Oil. Peak oil educator and author Richard Heinberg discusses what communities can do to prepare for peak oil. He covers transportation, including a novel ride-sharing scheme, assessing municipal vulnerabilities, local food and energy production, as well as the Hirsch report's conclusion that 20 years will be needed to make an energy transition — very possibly more time than we have.

54 Sustainable Ballard: A Blueprint for EveryTown USA. David Wright, Vic Opperman and Andrea Faste are "making ripples around Puget Sound" by empowering folks in their northwest Seattle community of 70,000 around "the one issue that unites us" — energy. Sustainable Ballard volunteers educate, facilitate, and collaborate — working with businesses and organizations on projects like going carbon neutral, a "Vehicle to Grid" conference, and having fun, too!

55 It's the Compost! Creating Abundance at K-JO Farm. Karen Biondo and Joe Walling take us on a tour of their big-backyard farm on Vashon Island, Washington. Pet the goats, watch chickens dusting in divots, and crunch a purple carrot. Karen's colorful

paintbrush and Joe's creativity with salvaged materials and hot compost combine to create plentiful harvests and playful beauty.

56 Fossil Free by '33. Tam Hunt outlines a strategy for regional independence from fossil fuels — and it centers around electricity. Start with efficiency & conservation, add renewables to replace fossil fuels for electricity, then add more renewables to electrify transportation such as plug-in hybrid and electric vehicles. The result? A program "to save America's Environment and Economy one region at a time."

Todd Cory lives in a zero energy home. He started by conserving a whopping 70% of his energy use. Then he installed solar hot water and electricity connected to

57 Conserve First! Saving Energy in the Home.

installed solar hot water and electricity connected to the grid. This renewable energy installer brims with enthusiastic ideas about having fun consuming less energy, starting with "the low hanging fruit" — what's easy and cheapest to do.

58 The Worm Guy. Watch a worm birth from a cocoon. See compost produced from food scraps, horse manure, and lots of worms. See the machine that separates castings (worm poop) from compost. The Worm Guy, Mark Yelken, says that worms are "the intestines of the Earth", fertilizing and activating microbial activity. Stick around to learn about the "Worm Wigwam" and "Worm Tea".

59 BriarPatch Co-op — **Building for the New Century.** Manager Paul Harton welcomes us to the newly-built BriarPatch Co-op Natural Foods Community Market. It's built to qualify for LEED™ certification (Leadership in Energy and Environmental Design) and incorporates innovative design throughout. Architect Jeff Gold shows state-of-the-art water and space heating, lighting and skylights, and a polished concrete floor with a "river" running through it

60 The Elephant in the Peak Oil Living Room. Richard Katz and Dennis Brumm burst the technofix dream-bubble by naming the hard stuff: the lack of sufficient alternatives to oil and gas at the enormous scale needed. Overpopulation exceeding the planet's carrying capacity. Potential collapse. But wait! they close with ideas for positive individual responses.

61 Sustainable Vashon - A Learning and Action Network. Three women envisioning a sustainable island share their activities: Sustainable Vashon's Merrilee Runyan describes "Edible Island" and "Green Seed grants." Farmer Lisa Mathias of Vashon Island Growers Association envisions more neighborhood food production. Hillery Crocker coordinates the annual 3-day island Earth Fair celebrating local food, arts, wellness and community.

62 Brookside Farm - Growing Food, Growing

Energy. Take a whirlwind tour of the one-acre Brookside Energy Farm with Jason Bradford and Christoffer Hansen at planting time. Along with perennials, annuals, a food forest, and dryland crops (grains), they're growing Jerusalem artichoke and dale sorghum to produce both food and energy (ethanol). Watch Chris cut sod with a Swiss glaser hoe — a 1/6 horsepower guy!

63 Peak Oil, Peak Coal and Beyond. Hot topics from Richard Heinberg: record-high U.S. fuel prices; the ethanol big-business boondoggle; coal projected to peak about a hundred years early (around 2020); what the climate change discussion is missing; and enjoying ourselves as we "go local."

64 A Second Life for Garbage

When you go to the "dump" on Orcas Island, you get a bonus. Along with dropping off your recyclables and trash, you can leave your re-usables and pick up what you need at The Exchange. This thrift + building materials + appliance + home furnishings + sporting goods store has no set prices; you pay "what it's worth to you." Founder George Post recounts how The Exchange grew out of the scavenging of useful "stuff" that occurred all the time at the informal dump of days gone by.

65 Singing Minstrels - Teaching Kids About Climate Change

Enjoy toe-tapping tunes as environmental educators Sharon Abreu and Michael Hurwicz regale us with songs like "Penguins on Thin Ice." Their shared goal is for education to be fun and entertaining. Their catchy lyrics bid "Goodbye, Oil" and ask "How do we find the balance?" Their answer: "The economy depends on the ecology." Sing along!

66 Boulder County Going Local!

Michael Brownlee didn't stop after creating the Boulder Valley Relocalization group. He's catalyzing Boulder County's Going Local! campaign, encouraging residents to buy local first, eat and grow local food, create local energy and local currency. The community will celebrate at a "Renaissance of Local" festival, conference and expo with a feast prepared by the local Slow Food group.

67 Human Scale Tools for a Sustainable World At Smith and Speed Mercantile on Orcas Island, hand tools line the walls and tables along with organic wool comforters and non-toxic paints. It's an extension of Errol Speed and Kathleen Smith's off-grid homestead where they work at "the speed of living," using hand tools that reconnect them to the earth.

68 Bullock Brothers Homestead - A 25-Year Permaculture Project

Take a tour with Joe, Doug and Sam Bullock on their Orcas Island property, site of a yearly Permaculture design course. Using nature as their model, they create edges and wildlife habitat, move water through the landscape, promote diversity, and raise an astonishing variety of plants from sub-arctic to tropical — a wise investment in these climate-changing times.

Cal Broomhead and Melissa Capria of the Energy & Climate Program discuss the rationale, aggressive plans, and activities for city-wide energy self-reliance and greenhouse gas reduction. Tools include energy efficiency in buildings, transit alternatives, alternative vehicle fuels, generating electricity with renewable energy, and solid waste reduction.

69 The Social Effects of Peak Oil

How will rising oil prices affect low- and middle-class lives? Sociologist and professor Rowan Wolf sees atrisk populations growing while government services and class divides are increasingly strained. A member of the Portland Peak Oil Task Force, she discusses relocalizing our economies, to counter globalization based on an unsupportable grow-or-die economic model.

70 The Inside Scoop from a Biodiesel Pioneer

Russ Teall has developed biodiesel production equipment since the industry was in its infancy. He discusses biodiesel's advantages over petroleum diesel, and the land-for-food vs. fuel issue. His projects involve small scale refineries using multiple oil feedstocks, decentralized production facilities, and oilrich plants grown on marginal lands.

71 Restoring Native Landscapes - From a Dump to a Park

A closed landfill in Santa Barbara county is not just being restored with native plants. It also has a pilot project growing oil-rich jatropha for biodiesel. Restoration horticulturists Karen Flagg and Don Hartley of Growing Solutions do restoration education and remediate damaged landscapes — bringing them back to life.

72 "What a Way to Go" - Meet the Filmmakers

Tim Bennett and Sally Erickson discuss the influences behind this heartfelt and riveting documentary on "Life at the End of Empire." Framed in Tim's personal story of awakening to the big global issues threatening everyone's survival. It will touch you and make you think.

73 Post Carbon Cities - Planning for Energy and Climate Uncertainty

Smart municipalities are planning and preparing for energy vulnerability and climate change. Daniel Lerch, manager of the Post Carbon Cities project, has prepared a guidebook including case studies of cities large and small planning how to maintain essential services in the face of energy and climate uncertainty.

74 San Francisco Takes Action on Climate Change

75 Sustainable Connections - Transforming a Community Through Local Business

Michelle Long shows us how a highly successful local independent business network has transformed Bellingham, Washington, while inspiring other communities. From an initial "Think Local First" program, they have expanded to business peer mentoring, and support for local food producers, sustainable buildings, and green energy. An astounding sixty percent of their community are not only aware of the "Think Local, Buy Local, Be Local" campaign but have changed their buying habits.

76 City Repair - Permaculture for Urban Spaces

What happens when citizens apply permaculture principles to a city grid? They create friendly places within the grid that invite people to come together. Mark Lakeman, co-founder of Portland, Oregon's City Repair Project describes these "creative intervention" projects as placemaking at its best. People learn to work together, build trust and have fun. The results, from painted intersections to cob benches and other organic structures, invite people "to inhabit the planet on our own terms" rather than the grid-locked culture imposed by the city.

77 Climate Change, Despair and Empowerment — A Roadshow from "Down Under"

After summarizing the facts of deepening global climate chaos, Australian Kelly Tudhope notes that our psychological response is often overlooked. Feeling powerless, many people stay in denial. But if we acknowledge our feelings, we can find empowerment arising from our hopelessness. Kelly identifies "false solutions", which are forms of business-as-usual, in contrast to "true solutions", which ask us to change our behavior.

78 Alcohol Can Be a Gas, Part I

The first automobile fuel was alcohol, which could be produced by most farms. Permaculturist David Blume discusses the history, production and properties of alcohol. He notes that plants are more efficient in producing sugars (used for alcohol) than oils (biodiesel). If corn were first fermented, its starch could be used for alcohol and the remainder fed to cattle — far more efficient for food, fuel and land use.

79 Alcohol Can Be a Gas, Part II

Permaculturist David Blume discusses alcohol's low emissions, and producing alcohol as a biological complex in which wastes become raw materials for other processes. He claims that with one year of the U.S. Defense budget, the entire world could be set up to produce alcohol and permanently replace oil for transportation. He discusses vehicle conversion, and how citizens can undertake alcohol fuel distribution.

80 Protecting Water in the Face of Climate Change

Water is a precious resource we can't live without—nor can the salmon. Pat Pearson educates Olympic Peninsula citizens with a "Water Matters" campaign and "Shore Stewards" program for shoreline residents. New homeowners receive a "Welcome to Your Watershed" packet, while volunteers build rainbarrels to catch roof rainwater for gardens.

81 A No-Nonsense Look at Climate Change and Petrocollapse

Former energy analyst Jan Lundberg opens by singing "Have A Global Warming Day" and closes with "Schoolmaster." In between is an unabashed look at climate distortion, peak oil, and declining ecosystems, all bringing a necessary collapse of our "pigging out" economy. He envisions a future with radically curtailed energy use, and people coming together groping for local solutions.

82 People-Centered Developments for Reduced-Energy Living

Developer Steven Ribeiro is re-creating traditional towns, that put "waste" resources to good use. A mixed-use three-story building augments power from its solar panels (which provide shade and collect rainwater) with a tugboat engine (running on local biodiesel), using engine heat to warm the building. Cars are secondary in a 68-acre village, whose dwellings of all sizes are walkable to retail, offices, schools, entertainment, and open space.

83 Practical Tools to Grow an Intentional Community

Communities Magazine editor Diana Leafe Christian concisely spells out what the successful 10% of intentional communities do: common vision and purpose, fair participatory decision-making, clear agreements in writing, good balance of right and leftbrain knowledge, methods of staying accountable to agreements, criteria for new members, good communication and processing skills. She also discusses peak oil effects on the wider community.

84 Creating the Impossible - O.U.R. Ecovillage

O.U.R. stands for "One United Resource," expressing how interdependence and inclusion undergird this 25 acre demonstration sustainable community on

Vancouver Island. This model ecovillage comprises natural buildings, a school, long- and short-term residences, extensive gardens, greenhouses, and even a bed & breakfast. Brandy Gallagher MacPherson describes how they created an entirely new zoning category by building relationships with regulatory agencies that go beyond "us versus them".

85 Energetic Students Empower Cal Poly

The future's environmental leaders are here now! Student leader Tylor Middlestadt recounts how Empower Poly (San Luis Obispo, CA) is bringing students to the table—with staff, faculty, and local communities — to shape a greener future. Students successfully pushed for environmentally-friendly design for the nation's largest student housing project. Inspired by the UC Go Solar campaign, students formed Renew CSU to advocate renewable energy projects on campuses statewide.

86 A Cutting-Edge Architect's Eco-Friendly Home

As an organizer in the American Institute of Architects, Chris Stafford has long promoted sustainable design. As a natural builder, he worked with straw bale and clay in Greece and Saudi Arabia. For his Port Townsend home, he considered site, size, materials and energy. The 1500 sq. ft. home uses mostly nontoxic materials (and fewer of them), foam insulation, metal roofing, solar hot water for space heating, photovoltaics for electricity, and an innovative rainwater collector for landscape irrigation.

87 How Much Food Can I Grow Around My House?

In summer 2006 Judy Alexander embarked on an experiment to see how much food she could grow, and how many neighbors could benefit, from the garden around her house. Check out her homegrown rainwater collection and irrigation system — watering her 60+ edible crops. Meet the bees, the chickens and the worms. And catch her joy in producing so much food for so little effort.

88 Make Way For Bikes

City Councilor Scott Walker of Port Townsend, Washington is working to build a walkable, bikeable community where the car is not essential. As a result, the town has designated many undeveloped streets and "connectors" as non-motorized routes. He says, "Build safe, convenient facilities for walking and biking, and they sprout people." Watch Janaia test ride Scott's electric bike, which "flattens the town" as if there were no hills.

89 Affordable Homes Forever -Opal Community Land Trust

This land trust is creating permanently affordable homes amidst increasingly-expensive real estate on beautiful Orcas Island, Washington. Co-founder Michael Sky explains how they provide 99-year leases on the homes built on land trust property. Restrictions limiting the resale value allow owners to sell at a reasonable profit while keeping the homes affordable forever.

90 What Can One Person Do?

If you enjoyed Sally Lovell's over-the-top treatise on her electric bike (episode 40), she's back, telling us other ways one person can make a difference - from fresh water to humanure. Her focus on water includes educating herself on where it comes from, effects of pollution and climate change, and conservation — pressurized toilets, choice of washing machine, and ways to use that not-so-hot water while it's getting hot. As for humanure, listen in and find out!

91 A Sustainability Renaissance Man

Earth needs humans to figure out our shared destiny, says Alan Seid, whose interest is both the outer and inner dimensions of sustainability. Outside there's ecology, social systems and economics (e.g., in Permaculture). Inside is the psychological dimension of personal and group values and intentions. How do we meet people where they are, engender respect, promote crucial information-sharing, and motivate change?

92 A Community Car Share Hits the Road

Lorraine Wilde's non-profit Community Car Share organization in Bellingham, Washington received startup help from many quarters. Established carsharing organizations mentored her, individuals offered low-interest private loans, a state grant enabled them to purchase a hybrid, and the city provided a fixed parking place by the bus station. Learn how she did it, then set one up in your community!

93 Mendocino Renegade

Els Cooperrider is an energetic lady. She co-founded the Mendocino Organic Network, which began an organic peer-certification service for local growers. Their Mendocino Renegade label means products are "beyond organic" and local. She also led Mendocino to become the first U.S. county to be GMO-free — genetically-modified organisms cannot be grown there. Her restaurant is America's first certified organic brew pub, with mostly local ingredients.

94 Facilitating Economic Localization in Willits, California

Jason Bradford and Brian Weller, co-founders of Willits Economic LocaLization (WELL), discuss their group's approach to educating and enrolling their townsfolk about declining oil and the imperative to reduce dependencies on imported energy, food, and other goods. They view their group as a mid-WIFE: a Watchdog, Incubator, Facilitator and Educator.

They're pioneering "rediscovering where we live—and it's exciting."

95 Economic Localization - A Community Rediscovering Itself

In this freewheeling conversation, Jason Bradford and Brian Weller, co-founders of Willits Economic LocaLization (WELL), discuss local food security, creating a farm at a nearby grade school, being rooted in community, urban / rural friction in wealth and land use, regional trading partners, reinventing local public transportation, and more.

96 Reconnecting with Our Roots - Food for Body and Soul

Linda Buzzell-Saltzman and Larry Saltzman of Santa Barbara share a love for their garden in more ways than one. Larry is creating a lush food forest and teaches permaculture to promote local food security. Ecotherapist Linda helps people heal their relationship with nature, noting that many problems are rooted in this disconnection.

97 Toward New Models of Shared Leadership

Mediator Anne Oliver would have us move back to our wisdom and forward to new social forms that are inclusive, respect all voices, and share leadership. She uses "Appreciative Inquiry" where we tell each other our stories, and out of our successful experiences, find values that can lead us into the future.

98 Energy Independence - America's Road Not Taken

Energy researcher Glenn Rambach's charts show how America budgeted for energy independence following the OPEC embargo in 1973. Then the Reagan administration switched to having "the market" create research incentives, so federal funding declined severely. He says we've lost 30 years, are spending in the wrong places, and need to get back to serious research in energy development.

99 Hope Dances Eternal for This Media Maven

For over a decade, Bob Banner has brought documentary films to his region, and published a bimonthly tabloid HopeDance, "Radical solutions inspiring hope." Ahead of many, he brings "disturbing" information as well as solutions and positive visions. Bob discusses the massive failure of media, spiritual films, relocalization, peak oil, and myriad other topics.

100 Suburban Permaculture with Janet Barocco and Richard Heinberg

Tour Janet and Richard's quarter acre for an example of what's possible in suburbia. Their front yard of edible plants also provides habitat for birds and insects. The backyard radiates out from an herb and kitchen garden to vegetable beds and containers; 25 fruit and nut trees; and a restful Zen garden. Near a future pond is a "three sisters" spiral of corn, beans

and squashes. Check out their rainwater catchment barrels system, solar ovens, grid-tied photovoltaics with backup batteries, a low-energy house, solarheated garden room, and a comfortable "summer palace" of natural & salvaged materials.

101 Energy and Climate Initiatives in Santa Barbara

Santa Barbara is lowering carbon emissions starting with a greenhouse gas emissions study; adding solar panels to city buildings; requiring lower energy usage for new buildings; converting vehicles to biodiesel and/or hybrids; giving free bus passes to downtown workers. City councilmember Das Williams urges citizens to push officials to make substantive (i.e., funded) changes to mitigate the effects of peak oil and climate change.

102 To Be of Use - Serving the Community

A vocal proponent of going local, Dave Smith cofounded the Briarpatch Cooperative Market, cofounded "Smith & Hawken" and now owns a book store he can walk to. His book *To Be Of Use: The Seven Seeds of Meaningful Work* honors "creative action heroes" who meet real needs rather than just desires. He suggests judging others not by their stated values but by their virtues — their character and actions.

103 Building An Ecologically Sensible Home

Wanting to live a "reasonable, comfortable life" in tune with nature, Ann and Gord Baird are building a "net zero energy" home on rural Vancouver Island. Their plans: a thick-walled cob house with passive solar heating. Wind and solar panels to provide electricity. Solar thermal hot water for domestic use and radiant heating. Composting toilets to enrich the earth for orchard, gardens and chickens. Rainwater catchment and a well for domestic and irrigation water.

104 A Green-Built, Solar-Powered, Biofuels Station

From an early start producing biodiesel from used cooking oil in his garage, Ian Hill was instrumental in creating a market for biofuels in the state of Oregon. Now Managing Partner of SeQuential Biofuels in Eugene, he has gone on to build the first retail biofuels station in the state — and it's not an ordinary fueling station: A solar panel canopy provides 50% of the needed electricity. The convenience store is a passive solar design to help with heating and cooling, and stocks as much locally produced food as possible. Its "living roof", of mostly native plants, helps cool the building in summer, and slow and filter stormwater runoff. This optimistic enteprenuer says he has found greater happiness in learning to consuming less.

105 For the Love of Trees

Though born and raised elsewhere, Jerry Becker is now a de facto indigenous member of Oregon's Elk Peak Moment Conversations River watershed. The credo he lives by is Respect. He and his family have lived lightly "long before it was cool." An ecoforester, Jerry manages the woods sensitively with an eye to its wholeness. For the past thirty years he has worked with Friends of Elk River to protect wilderness regions in the watershed. In the last decade he formed the Elk River Land Trust, working with private landowners to protect agricultural and forest lands from development. Ripples of his gentle respectfulness permeate an entire watershed.

106 Community Gardens Grow Communities

Patrick Marcus and other motivated citizens sprouted a community garden on city land slated to be a park in Ashland, Oregon. When the garden was threatened by plans to develop the park, they got active. Their research and advocacy led to official policy supporting community gardens in city parks. As the volunteer garden manager, Patrick affirms gardening isn't just for leisure — it helps build community. It creates bonds among people from diverse social spheres — through shared work, classes, potlucks and, most of all, shared passion.

107 Plug-In Hybrids Power the Grid

Professor Andy Frank, Director of the UC Davis Hybrid Vehicle Research Center, has a plan to power more than just our cars. In his vision, plug-in hybrid vehicles can be used as mobile batteries, contributing solar power to the grid, and helping to "load balance" the demand. Roofs built over our parking lots contain solar panels that charge the cars' batteries in daytime. At home, the same batteries can help power a house, or feed energy back to the grid. The result: fewer power plants.

108 Sustainable Bellingham - Grassroots Organizing is Key

Sustainable Bellingham has built a solid infrastructure to be as effective in their community as possible. Team members Sandy Hoelterhoff, Lynnette Allen and David Kowalsky discuss their decision-making tool QET (a Quick Effective Tool), as well as a natural-systems model to define roles for producing events. Called ACORN, it includes roles based on directions of the compass (e.g., physical logistics tasks are in the south, oversight in the north). With a mission of education and communication, they network people, projects and groups with similar interests. Among Sustainable Bellingham 's activities are film showings and a Sustainable Transportation Fair.

109 Powering the Rain Shadow

Most of Washington State's San Juan Islands don't have grid electricity. Many people have relied on generators, but these days, an increasing number are turning to solar. Renewables installer Eric Youngren discusses how net metering works to pay individual energy producers for power they put back into the grid,

and other incentives for small-scale renewable "power plants". He tells us about "run of the river" hydro, powered by diversions rather than dams in creeks. A strong advocate for conservation and efficiency, Eric says we could be running everything in the home on a fraction of the energy we now use, just with rooftop solar.

110 Advice to Parents and Teens - Preparing for Peak Oil

As a mom of two teenagers, Deborah Lindsay is deeply concerned about their future. As a peak oil educator, she paints a vivid picture of a post-petroleum world, with an emphasis on preparedness. With teens she talks about career choices and practical life skills. With parents, she focuses on safety, economic and energy contraction, and steps to begin now. In 2006 she began the daily talk radio show "Tomorrow Matters - Giving a Voice to a Better Tomorrow" to amplify her message.

111 We Make the Path by Walking: White Oak Farm CSA

Amidst cob-wall plastering in the background, codirector Stacey Denton relays the story of the first years at White Oak Farm and Educational Center in Oregon: Acquiring the 62 acres of food and pasture and protecting it through conservation easements, creating their non-profit organization. See food baskets for their CSA (community supported agriculture) program, visit their abundant permaculture-based farm; attend a workshop in natural building; and delight with kids in an educational program "down on the farm."

112 Learning From the Collapse of Earlier Societies

According to Professor Guy Prouty, every civilization rises, evolves, and then collapses to a simpler structure — and this will include our own. Comparing America with the Western Roman Empire, Prouty notes the over-reach of our military, the unsustainability of capitalism, peak oil, and climate change. And, this time, we may see a global collapse. Transitioning to a simpler society will require us to change behavior and consciousness: decrease energy, get out of debt, decentralize, de-consume, grow our own food, build community, see ourselves as connected to the planet. Collapse is not the end, he says. It's part of a natural cycle.

113 "Team Fate" - Designing the Next Generation Hybrid

Students at UC Davis Hybrid Vehicle Research Center have been creating plug-in hybrids for national competitions for some time. "Team Fate" members Bryan Jungers and Patrick Kaufman describe how they "gut" the drive train of a standard vehicle, replacing it with an electric motor, a bank of batteries, continuously variable transmission, and some clever

electronics. The resulting vehicle runs on electricity, assisted by a much smaller flex-fuel internal combustion engine only when needed. Bryan and Patrick also enlighten us on topics ranging from battery technology to hydrogen fuel cells.

114 "Team Fate": Under the Hood of a Next-Gen Plug-In Hybrid

Take a tour of a plug-in electric hybrid modification of a 1996 Mercury Sable, with UC Davis graduate students Patrick Kaufman and Bryan Jungers (interviewed in episode 113). Under the hood you'll see modifications and some interesting new components. Unlike commercial hybrids — primarily combustion engines with an electric-motor assist — theirs is primarily an electric vehicle with a small combustion engine to extend its range beyond the all-electric 60-70 miles. Batteries recharge in 6-8 hours with electricity costing about 75 cents per gallon of gas equivalent (2006 prices). Don't miss Janaia's first-time drive of an electric vehicle.

115 Calm Before the Storm

Richard Heinberg, author of "Peak Everything", reviews the accelerating events since mid-2007. including the credit crunch and fossil fuel price volatility, noting that we've missed most of the best opportunities to manage collapse. He asks, "how far down the staircase of complexity will our global civilization have to go until we're sustainable?" His answer: when managed properly, with deliberate simplification, not as far as we might otherwise. In addition to long term efforts to relocalize our economies, he advocates developing community "resilience" to withstand short-term catastrophic events like food shortages or extreme weather. Noting that healthy fear can move us into action, he encourages an attitude of clarity, concern and informed action in this "calm before the storm" that he feels is soon coming to an end.

116 Looking at The Big Moral Question

"What's going to happen to our kids?" When Bruce Anderson read "The Limits to Growth" in the 1970s, he learned that nothing in nature grows forever — including the human economy. As we rapidly use everything up, we're now reaching those limits and entering a crisis of adaptation. He raises the moral, ethical and emotional aspects of a challenge humans have never faced before. He feels we're up against limitations of thought, of the heart, almost at a mythic level. He asks: Can we mature from our childish consumerist narcissism to compassionate adulthood? Will our inbuilt caring for our children propel us to quickly take action so they have a future? While facing what's before us, how can we keep our spirit and heart alive, not succumbing to denial or despair?

117 The Bicycling Horticulturalist

Ryan Nassichuk builds food gardens for people. His bicycle and trailer are the sole transport for himself, tools, and materials - including soil and plants! This horticulturist also builds container gardens and composters. Tour a backyard garden in which a 6-week class of students filled raised beds with soil, compost and fertilizer, did succession planting, and built a low-cost composter. Recently Ryan has added free seed-sharing to his wisdom-sharing, while continuing to propagate food gardens throughout Vancouver. This man has a low ecological footprint — or should we say bike tire tread?

118 Protecting Your Money in a Declining Economy

Are we in the perfect financial storm? Marc Cuniberti, a market analyst and host of "Money Matters" on our local community radio station KVMR, thinks so. Marc talks about the cause of inflation (rising prices are just a symptom) and how you can stop it with a candy bar! He discusses strategies to protect and even make money in a weakening economy — like getting out of debt and investing in physical things you really need. In the stock market, he suggests dividend paying stocks, stressing the importance of using interest compounding in your favor: \$100 saved today with an 8% return will grow to \$200 in 9 years.

119 Little House on a Small Planet

Builder and author Shay Salomon finds that the happiest home builders are often the ones with the smallest houses. They're less costly to build and maintain, more likely to be finished, use fewer resources and help people simplify their lives. One version of "smaller" is to share a house, which can ease our loneliness while building our social network. Cofounder of the Small House Society, Shay notes that scaling down can enable a ratcheting up of our whole lifestyle, as we revalue quality over quantity. Declaring "Enough", she says, is the most ecological thing one can do.

120 Go-Getter Gets Governments Going on Sustainability

Energetic Kris Holstrom is the first Sustainability Coordinator for Telluride and a smart Colorado county. The action plan she developed encompasses energy efficiency and renewables, green building, food and water security, economy, and recycling/resource recovery. She enlightens us about green codes, incentives and rebates, a household energy audit program, public education speakers and conferences, even farm tours for schoolkids. For Kris, what's at the heart of sustainability is building relationships within the community and with the land, wherever we live.

121 Helping Local Food Businesses Thrive

Wendy Siporen coordinates The Rogue Initiative for a Vital Economy (THRIVE), which helps small locally-

owned businesses not just to thrive, but be more sustainable as well. A "Food Connection" directory enables local businesses to buy from one another. Their "Rogue Flavor" campaign helps consumers find locally produced food at farm stands, restaurants, and markets. Tasty ideas from the one-week "Eat Local Challenge: cooking classes, films, and cooking a meal made from all-local products from the growers market. Yum!

122 An Inside Look at an Emergency Survival Kit

If an emergency forced you to evacuate your home, would you be prepared? Matt Stein, author of *When Technology Fails*, shows what to pack in your 72-hour emergency survival kit — and why. Check out the first aid kits, sleeping bag and space blanket, LED flashlight, hand-crank disaster radio, portable stove and cook set, freeze-dried food, multi-tool, compass, water holder, and essential water treatment items; plus sewing, repair, and health items. The packing list is on his website (www.whentechfails.com).

123 Cultivating a Suburban Foodshed

Landscape architect Owen Dell has a vision: transforming suburban neighborhoods into shared "foodsheds" with food-bearing and native plants, and even chickens. Neighbors can start by finding edible plants already growing in their yards, maybe remove fences, plant what works best in each location. Best of all, share the resulting food abundance with one another ("Hey, it's lemon time. Come and get 'em!") and build the social network with shared food potlucks. Tour Owen's own edible landscape yard, including a rooftop container garden complete with visiting cat.

124 Creating our Own Neighborhood — Bellingham Cohousing

Kathleen Nolan helped shaped the beginnings of Bellingham Cohousing, based on a neighborhood design of private homes and shared buildings, managed by residents in participatory decision making. Their 5.74 acre plot originally had one farmhouse, which they modified to become the shared community building with dining, kitchen, laundry, craft, office, guest, and other rooms. The individual townhouses make a small footprint, leaving open space for gardens and a natural wetland. She stresses the importance of agreeing on shared values, and how the social connections enhance and challenge personal growth.

125 An Engineer Examines a Town's Energy Future

How much energy does a town consume? Brian Corzilius sleuthed that out for Willits, California, and got a big surprise: in this community of 13,000 people, nearly 25% of after-tax revenue leaves town to pay for energy--gas, diesel, electricity and natural gas. His inventory grew into an energy independence report which identified opportunities for local fuels to replace the external inputs. His local "energy mix" considers solar, wind, hydro, biomass, wood gasifiers, cogeneration, and sewage plant methane to create electricity. A model for any community, his energy report is online at

www.greentransitions.org/Papers/Papers.htm.

126 A School Garden Brings Learning to Life

Come along on a tour with team-teachers Glenda Berliner and Jeralyn Wilson, as they show us their elementary school garden bearing many fruits. It's an important part of the curriculum: children make mason bee boxes, grow colonial medicinal plants, learn of other cultures, and put science to work. It builds community: parents work together, students form a bucket brigade to transport wood chips. It's a site for celebrations like a pumpkin harvest or a play. Whether it's the flower and vegetable beds, or the restful Zen garden, the garden is a favorite place to be, and to grow from.

127 Middle Class Lifeboat: Careers and Life Choices for Staying Afloat

Paul and Sarah Edwards are authors of a timely book "Middle-Class Lifeboat: Careers and Life Choices for Navigating a Changing Economy." In a world of decreasing resources, they ask, how do we financially support ourselves while moving towards sustainable lives? Emphasizing independent income sources, they consider dozens of possible careers from basic services to local-scale technologies. Life choices include lowering costs through simplifying, getting out of debt, and demonetizing (e.g., bartering). Or one can consider an "off-the-map" lifestyle like living abroad, off-grid, or an intentional community. This downturn is not just a cycle, they emphasize: it heralds a sea change.

128 Finding Opportunity in Peak Oil

Molly Brown sees Peak Oil as both a challenge and an invitation to create a better world. After awakening to Peak Oil, she explored her own responses — inner attitude and outer action. Personal changes include creating a vegie garden and bicycling. Noting that individual survivalist mentality is insufficient ("we are all interconnected"), she helped form a local group to awaken and prepare her community. As a therapist, Molly sees this predicament on several levels, noting how crises have the potential to bring out the better part of human beings.

129 Meeting the Energy Challenge

Richard Heinberg, author of *Powerdown*, makes plain the dire situation we're in as declining oil supplies fail to meet demand. He notes there are no easy "supply side" solutions (like substitute fuels): we must reduce demand, initially through conservation and efficiency. Julian Darley, president of Post Carbon Institute observes that while personal action is very important, individuals can only do so much. A deeper response must come at the municipal level — to change infrastructures on how we heat, transport, and power our society. Sharing, he notes, can bring enormous energy reductions almost immediately: after all, two people rather than one in a car cuts energy use per person in half. Bottom line: Americans love rising to a challenge. And this IS a challenge!

130 Oil and Gas - The Next Meltdown?

Drawing parallels with the current financial meltdown, Matthew Simmons, the CEO of Simmons & Company International, expresses his alarm about gasoline stocks being the lowest in several decades and refinery production down following recent hurricanes. He warns that if there were a run on the "energy bank" by everyone topping off their gasoline tanks, the U.S. would be out of fuel in three days, and grocery shelves largely emptied in a week. In an interview plus excerpts from his presentation at the Association for the Study of Peak Oil (ASPO-USA) conference on September 22, 2008, Matt highlights the risks and vulnerabilities in the finished oil products system, and answers audience questions.

131 Making Financial Sense of the Coming Energy Crisis

"We are living in historic times", says financial consultant Jim Puplava. As reflected in his weekly Financial Sense Newshour, actually several hour-long podcasts, Jim has been factoring peak oil into his financial picture for several years. In this interview plus excerpts from his presentation at the Association for the Study of Peak Oil (ASPO-USA) conference in September 2008, Jim talks about the "crisis window" opened by the current 2008 global credit crunch, and deepening over the next several years as oil supply begins its permanent decline. He provides some basic investment guidance for navigating the coming "perfect financial storm," noting that our society will move of necessity from consumption to conservation.

132 Peak Oil and Its Effect on Climate Change

The peak oil message is slow to gain acceptance, says energy analyst Randy Udall, because it's at odds with our optimistic It's-Morning-in-America mentality. Politicians "Don't Do Depletion." Randy describes challenges, mitigations, and exciting opportunities to create a prosperous path to a lower-energy future. In an excerpt from his presentation at the Association for the Study of Peak Oil (ASPO-USA) conference in September 2008, the co-founder of ASPO-USA points out cornucopian myths about energy that are being shattered by reality. His concern is that the peak oil crisis, while less known than the climate crisis, will impact us sooner, and is not being factored into climate policy decisions. Peak Oil may in fact help moderate the climate crisis.

133 Two Views of a Post-Oil Future

From the ASPO-USA 2008 conference: two long-standing peak oil awakeners: author James Howard Kunstler (*The Long Emergency*) and Post Carbon Institute Founder and President, Julian Darley. Darley, founder of Post Carbon Institute, is big on sharing: Sharing ideas to quickly inform a public largely unaware of peak oil. Sharing cars as a quick way individuals can get fuel usage down. He notes the "Re" in Relocalization means positive actions we can

revive from the past to enable the powerdown transition.

Kunstler describes his recent novel *World Made by Hand*, a richly textured life in a post-oil agrarian community where electricity and phone are rarely working, and people must of necessity rely on each other. He compares America's current financial and political "fiesta of dishonesty" with the 1850s, which preceded the "last great U.S. convulsion."

134 Shocks, Shortages, and Scenarios - Planning for a Post-Oil Future

Responding to peak oil will require reshaping our communities. These two interviews, taped in September 2008 at the ASPO-USA conference, are with Megan Quinn Bachman of Community Solutions, and Bryn Davidson of Dynamic Cities Project.

Megan observes that while the ASPO-USA conference focuses on the energy depletion problem, what's needed are solutions and strategies for communities and people. Her town's anxious response to a recent power outage provided a lesson, as many people didn't know what to do, nor had they built a network of mutual support. We need community contingency plans for sharing and surviving with less energy.

Focusing on urban planning, Bryn Davidson uses scenarios to test strategies for an energy-constrained future, particularly for infrastructure like roads. He asks, how do we invest today that'll pay us back in multiple plausible futures -- from "business as usual" to long-term energy decline and shortages. He notes wryly that as a result of peak oil, we may have also reached "peak roads".

135 Broadening the Peak Oil Conversation

Senior energy analyst Robert Hirsch reflects on the immediate liquid fuels problem, and the rebuilding of our entire energy system which will take at least twenty years. He reflects on comments made during the ASPO-USA 2008 conference presentations, noting that he remains optimistic about American response to the daunting challenges ahead.

Political science professor Kyle Saunders is the "Professor Goose" behind the Oil Drum website. He champions the need to learn from one another about complex, interdependent topics like the economy and energy, noting that every piece of information we can get can reduce uncertainty.

In the question-and-answer session at the close of ASPO-USA's 2008 conference, presenters respond about the current financial chaos and resource scarcity, how to encourage intelligent political action, the need for a peak oil high-visibility champion, peak oil's relationship to climate change, and suggestions for household energy reduction.

136 Energy Investment, Energy Return

Independent financial consultant Jim Hansen runs every investment through the "peak oil test". In this presentation from the ASPO-USA 2008 conference, he explores traditional energy investments; opportunities in renewables, rail, and electrifying the transportation system; areas to avoid like airlines and trucking; and what to watch, like electric cars and the unwinding of globalization.

In this interview, ecologist and professor Charlie Hall looks at energy return on energy invested. Whether it's a cheetah chasing antelope, or humans making ethanol -- the energy we get back has to exceed the energy we put in, or the story is over. He compares oil's energy return in the 1930's (1 calorie invested returned 100 calories of energy) with the current situation (1:12) and still declining.

Presenters respond to the final question in the Q&A session at the close of ASPO-USA's 2008 conference: how do we better harness the intellect, energy and commitment at this conference, and what one thing would you have people ask an elected official to do about peak oil?

137 Peak Oil - Politics, Geopolitics, and Choke Points

These four presentations were taped at the ASPO-USA 2008 conference. Morey Wolfson shows a stunning Google Earth presentation of oil's planetary transportation Choke Points, primarily in the middle east. Jeff Vail discusses how our energy future is not controlled solely by what's possible economically, technologically and geologically but, equally importantly, geopolitically. He notes we will increasingly produce less because of geopolitical problems—as in Nigeria, Iraq, and elsewhere.

Editor Tom Whipple discusses two significant publications available free on the ASPO-USA.com website and through email subscription: daily Peak Oil News and the weekly Peak Oil Review. He describes how oil scarcity is already being felt in island nations and other less-developed countries.

Connecticut State Legislator Terry Backer provides sound advice on how to get a peak oil resolution through a legislative body: through someone experienced in getting legislation introduced, and by speaking the language of legislators. He succeeded in his state by framing peak oil within economic issues and government's responsibilities to the people of his state.

138 The Twilight of an Age

In his book, *The Long Descent*, John Michael Greer observes that our culture has two primary stories: "Infinite Progress" or "Catastrophe". On the contrary, he sees history as cyclic: civilizations rise and fall. Like others, ours is exhausting its resource base. Cheap energy is over. Decline is here, but the descent will be a long one. It's too late to maintain the status quo by swapping energy sources. How to deal with this predicament? He lays out practical ideas, possibilities, and potentials, including reconnecting with natural and human capacities pushed aside by industrial life.

139 The Transition Movement comes to America

One response to the global crisis that is gaining enthusiastic momentum is the Transition Towns movement. Jennifer Gray, a pioneer in the Transition Initiative in the UK and cofounder of Transition US. describes it as "a community-led response to the twin crises of peak oil and climate change. It's ... positive, pro-active [and] engages the whole community in building resilience into their world." Sharing highlights from The Transition Handbook by founder Rob Hopkins, she elaborates on a flexible twelve-step process to empower community organizers in unleashing the creative genius of their community and building an Energy Descent Action Plan. One innovative aspect is backcasting: envisioning one's community in 20 years, and then designing steps to get from here to there.

140 Transit on Demand (Have Cell Will Travel)

What if you could make a call at any time on your cell phone and have a vehicle come to you within minutes, take you to your local destination, and cost about as much as a bus ride? Allen Hancock's notion of demand-responsive transit fills the gap between the private automobile and public transit. Rather than fixed routes and schedules, smaller vehicles guided by intelligent software with gps (geographic positioning system), circulate to where riders are and want to go. Flexible, efficient, low-cost, it uses existing vehicles and roads. Where's the town that will implement this exciting pilot project?

141 Creating a Home Graywater System

Trathen Heckman takes us on a step-by-step tour of how to make a safe, ecological and legal suburban home graywater system. Follow the water as it drains from the bathroom tub (and sink and laundry) through a unique valve leading into the backyard garden. It flows into an optional wetland and underground pond for filtering. The water is then piped below ground to several destinations in the yard, where it will supply water for plants growing above it. Trathen discusses the process with local government agencies, the system design and construction (with pictures), costs, resource books, and why to undertake a graywater system in the first place.

142 Energy Co-op Brings Power to the People

What if a community owned its electric utility cooperatively, rather than paying a for-profit company? Plumas-Sierra Rural Electric Cooperative could be a model. Energy Services manager Jessica Nelson describes how this locally owned, democratically governed non-profit serves the good of the community. Besides lower rates, customers benefit from incentives to conserve electricity, install geothermal heating/cooling systems, and solar panels (photovoltaics). The coop's dream? To not only distribute power but to generate it -- through a wind turbine project.

143 Corporate Couple Become Permaculture Activists

Asking "wouldn't it be wonderful if our city could feed itself?" Joe Leitch ponders everybody in Portland planting a chestnut tree. Pam Leitch relates how they both left the corporate world after reading the book Your Money or Your Life. As educators on sustainability and resource depletion, permaculture and social justice, they soon learned of Peak Oil. Pam initiated bringing a Peak Oil resolution to the Portland City Council, who passed it unanimously in 2006 and set up a citizen task force to make recommendations for city action. See a bit of the permaculture farm Pam and Joe are creating in residential Portland, cultivating fruit trees, vegetables and compost, rainwater catchment, and innovative neighborhood cooperation. If every city were full of such projects, maybe they really could feed themselves!

144 Local Living Economies — Protecting What We Love

Judy Wicks' love of place has made widening ripples on a global scale. She's the founder of BALLE (Business Alliance for Local Living Economies), a national network of sustainable, small businesses. After moving onto a quaint street in Philadelphia, she learned it was slated to be torn down. Organizing her community, she saved the block as a walkable community. She opened White Dog Cafe coffee shop on the first floor of her home, which grew to a large restaurant proudly serving food from local farmers.

Reading John Robbins' *Diet for a New America* about the cruel treatment of factory farm animals, she located small family farmers and created a cruelty-free menu. Rather than hoard this proprietary information, she founded a local sustainable business network based on cooperation between businesses, and later the national organization, BALLE.

145 Resourceful Guy Builds Solar House, Solar Power, Solar Car

John Weber's Boise, Idaho house with south-facing windows rarely needs heat and never air conditioning. Meet a man who has built a passive-solar house with solar electric power and solar hot water; plus a solar-powered electric car — and who rides a bike! With photovoltaics tied to the grid, he sells surplus electricity back to the power company. John shows how he converted his "Sun Car" from a junked Festiva to all-electric, with added solar panels on top to extend its range. Ride with us — and hear how quiet it is!

146 Permaculture for Humanity

The future is abundant, asserts permaculture designer Larry Santoyo. His vision of living in the present provides a wonderful antidote to fear about uncertain futures. People need to rediscover that we're part of the ecosystem, and apply permaculture design principles to the many problems we face. Larry teaches sustainable permaculture design as a discovery of the world around us. He notes that trying to be self-sufficient is really anti-permaculture. Instead, we need to develop self-reliance skills. Then as we find others in our communities to interact with, everybody gets to play!

147 A Geodesic Greenhouse — Year-Round Gardening at 6000 Feet

In Colorado it's cold for much of the year, but inside this cozy dome greenhouse, the plants are growing happily. Take a grand tour with Buckhorn Gardens manager and permaculturist Breigh Peterson: the greenhouse structure with its interplay of light and water, warmth and air; curving raised beds of vegetables and flowers; fish tanks moderating the temperature; vertical trellises and shelves to use vertical space. Outdoors a huge garden of row crops and a young orchard are complemented by freeroaming chickens and ducks.

148 Finding an Ecovillage / Sacred Activism — Love, Grief, and Empowerment

Diana Leafe Christian, author of *Finding Community: How to join an Ecovillage or Intentional Community,* zeros in on how to find an ecovillage. Once you determine what you want, what are the criteria to explore whether an ecovillage is a good fit/match for you?

Bob Banner, publisher of Hopedance magazine, shares insights from Andrew Harvey's Sacred Activism workshop: "What breaks your heart, what you really love, is the thing that will sustain you. That's what you ought to be doing." For Bob, it's using media to bring together the political with the spiritual; the environmental and business.

149 Santa Barbara Students Lead the Way to Sustainability

Take a personal tour with members of Santa Barbara City College's Student Sustainability Coalition. They're propelling action — like bringing fresh, local organic produce daily to the salad bar, and placing recycling bins in the cafeteria. They're educating the campus all year round and especially during Sustainability Week — on the climate crisis, renewables, and campus transportation alternatives. Now their advisor, professor Adam Green, has formed a Center for Sustainability for the college campuses, curriculum and community.

150 The Waking-Up Syndrome

Ecopsychologist Sarah Edwards, PhD, explains stages people often go through when facing the implications of climate change and resource depletion. She outlines various aspects of Denial, Anxiety, Awakening, Despair, Powerlessness and eventual Acceptance. Differentiating these from the normal grief process, Sarah emphasizes how we can face inevitable feelings of grief and free our energy for positive, practical action in our personal and community lives.

151 Baked in Telluride: Making Dough in a Tough Economy

Biting into a fresh-baked cookie from "Baked in Telluride" is a double treat — a yummy goody that also supports a local independent business. Owner Jerry Green has been going "green" for decades before it became fashionable. He shares the challenges of running an independent business in a tourist town while competing with bakeries thousands of miles away. While a town councilor, Jerry helped shape projects like affordable public housing and public transportation.

152 The Placemeant Project: Stories of Why "Where" Matters

Kate Magruder feels that "Opinions make walls. Stories make bridges." Using narrative, music and images, Placement Project participants create short stories that not only empower the tellers, but also elicit respect, admiration and tenderness from listeners. Kate hopes that telling our stories can build an honest sense of community in her town of Ukiah and beyond. Watch some digital stories at http://www.storymapping.org/placemeant.html.

153 How Do I Invite You to Grow Food?

Jenny Pell's infectious enthusiasm will sweep you up into creating a future that's beyond sustainable — to one that's "additive." This lively permaculturist suggests that you belong where you live and get (re)connected to your "chain of inputs and outputs". She invites us to to regain skills, especially in food production, and to participate in creating abundance, which is "the only way forward, the only way for the human family to survive."

154 Bicycling on Three Wheels — Transportation of the Future?

In Peak Moment's very first field production, bicycle enthusiast Galen Shumacher takes us for a spin on a three-wheeled "tadpole." This human-powered vehicle (HPV), built for competition by the Chico State University HPV club, has two wheels in front and a single in back. Janaia's unrehearsed ride shows that it's easy to learn, comfortable to ride, stable, highly maneuverable, and fun! Galen also shows us the improved model being built for the upcoming competition. (P.S. they won!)

155 Peak Oil - Adapting for Big Changes Ahead

With a long-time eye to declining energy resources, Bart Anderson envisions a very different society in five years. The former editor of Energy Bulletin.net offers advice for post-oil living: Understand the problem. Prepare psychologically for big shifts and the unexpected. Find your niche and get good at it. See what your great grandparents did as a model for living well within limits. "Live poor and learn to do it well" as Bart did as a graduate student. Things will be very different, he said, but we'll make it through.

156 High on Permaculture in the Rocky Mountains

Kris Holstrom's off-grid permaculture farm at 9000 feet high is living proof that food can be grown nearly anywhere. Managing with a very short growing season and water constraints, she and her interns have created magic. Tour the sun-warmed, insulated greenhouse where greens are grown year-round. It's home to a waterfall and pond with fish, trellises for grapes and seedlings, artwork for the soul, and mushrooms growing from straw. The outside garden offers herbs, berries, greens and prayer flags. Kris sees herself as a steward of the land, and delights in sharing it with kids and interns in a spirit of love and reciprocity.

157 The Heart of Permaculture

Former truck driver Bill Wilson tells an insightful story about the energy packed in a gallon of gas — which we won't always have in cheap abundance. Now a permaculture educator, he sees permaculture as a viable, realistic way to use nature to provide the abundance we really need — harvesting sunlight, food, wind, water and more. Can you guess what the magic stuff is that we all can't live without? (No, it's not oil.) In his classes, Bill not only passes on a bounty of practical, common sense ideas, he also inspires people to experience being alive on the planet, finding their connectedness with life, their passion and ways to make a world that works for everybody.

158 A New Paradigm for Development

The corporate capitalist system is destroying people and the planet. Can we imagine alternatives? Ravi Logan and Jason Schreiner's model is based on valuing our interrelatedness and interdependency within the natural world. It replaces profit-driven with cooperative enterprises, and emphasizes a balance between local self-reliance and bioregional networks, with some global structures to meet global needs like telecommunications. They describe applying permaculture principles like the zone approach in onthe-ground projects in Eugene, Oregon.

159 Reflections on the End of the World As We Know It

Taped in late 2005 before Peak Moment Television began, this conversation feels eerily prescient about the effects of the 2008 financial collapse. William Stewart reflects on the shadow side of the fossil fuel bonanza, which enabled hyper-individualism and mobility that have shredded our connections to community and place, along with increased violence and dysfunction. Likening our oil-dependent culture to an addict who must first bottom out, he suggests there may be a silken lining after collapse: the possibility of more communal and connected ways of life.

160 A Young Couple Find Freedom in Simple Living

Rather than follow the customary American dream, Tammy Strobel and Logan Smith sold their car, and moved to a small apartment in a bikeable/walkable neighborhood in Sacramento, California. After reading Derrick Jensen's writings, this couple used *Your Money or Your Life* as a means to get out of debt and, they feel, regain their lives and their future. While they recount the psychological challenges of facing a future of declining resources, the catalyst that continues to move them forward is a dream of living in an affordable tiny house within a supportive community.

161 Local Food — By and For the People

What if the food system benefited local producers, nourished nearby people, and built a stronger community? Krishna Singh Khalsa of Eugene, Oregon wants to turn the food system on its head. He wants it to be run by, and for the benefit of, ordinary people — not corporate profit. He's exploring models of local cooperative, entreprenuerial organizations where people provide the labor, share and hire resources, caretake the land, use all of nature's abundance, support farmers and food producers, distribute food so that no one goes hungry, and build strong social bonds. Empower people, not profits!

162 Innovation Bears Fruit for Family Farm

Tour the century-old organic Chaffin Family Orchards where even the animals are "farm hands." Visit chickens in their egg-mobile, scratching for bugs and pooping fertilizer in the heirloom stone-fruit orchards. Goats chomp off low branches from the olive trees, so no fuel or human labor is needed. This certified predator-friendly enterprise includes 200 acres of olive trees plus various fruit and nut trees; sheep, goats, broiler and egg-laying chickens. They distribute only locally through fruit and meat CSAs (community-supported agriculture), growers markets and a farmstand, providing fresh foods that burst with flavor and nuance.

163 Economy, Ecology, Social Equity — Empowering Future Leaders

What if future leaders became sensitive to local environmental and social issues before stepping into leadership roles? Tanya Narath describes nine daylong events in the Leadership Institute for Ecology and the Economy's program: Students visit a watershed for ecological context; tour an organic farm (sustainable agriculture); take a walking tour from which students' urban design ideas are presented to the mayor; explore social issues like racial injustice, homelessness, and poverty; consider water ecology, local economy, transportation and land use. (www.ecoleader.org)

164 The World of Ecovillages

The ecovillage movement is gaining a lot of traction and in some surprising forms, says Diana Leafe Christian, the author of *Finding Community: How to join an Ecovillage or Intentional Community.*Drawing from ecovillages worldwide, she describes many examples of these "human-scaled, full-featured settlements." Ecovillages aim to integrate human activities harmlessly into the natural world and be sustainable indefinitely. To succeed, they need to have multiple centers of initiative (e.g., business enterprises), and support healthy human development (like cooperation and having fun).

165 Finding Excitement Creating a Life-Sustaining Society

Lavendar farmer Dana Illo and her partner Catherine Johnson will infect you with enthusiasm. They've turned their initial response to resource declines from "it's horrible and overwhelming" into "we can create new ways of doing." Dana is bringing "Dragon Dreaming" to her community. This organizing model starts by having a group totally buy into a specific dream, like being locally food self-sufficient. Then in every cycle of implementation, members Dream, Plan, Do and — just as importantly — Celebrate! Why not have fun while we build community and security?

166 The Crash Course — Exponential Growth Meets Reality

"The next twenty years will be totally unlike the last twenty... We'll face the greatest economic and physical challenges ever seen by our country, if not humanity." So opens Chris Martenson's much-viewed online Crash Course illuminating the relationship between economy, energy and the environment. Starting with the power of exponential growth, he tidily sums up our economic problems: Too Much Debt. Chris discusses the implications if we continue the status quo, and ways to prepare. He believes that "if we manage the transition elegantly we can actually improve things."

167 Bag It! Packaging Bulk Foods with Nitrogen

Nevada County locals Loraine Webb and Jim Wray demonstrate the how and why of packaging bulk foods with nitrogen. They're using equipment available for community members to use at minimal cost. Jim demonstrates packaging: make plastic bags using a heat sealer, fill with foodstuffs, suck out the oxygen with a small vacuum, then replace the air with nitrogen and seal.

Loraine, organizer of The Neighborhood Readiness Project, has arranged with several locally-owned grocery stores to sell 25 pound bags of grains, beans and other bulk foods at just above cost. Loraine's vision is our having food caches in every neighborhood in the county, so that, if the trucks stop rolling in an emergency, we'll have food for ourselves AND to share with our neighbors.

168 Four Acres and Independence — A Self-Sufficient Farmstead

Take a tour, accompanied by curious sheep and geese, of Mark Cooper's self-sufficient small farm. Over several years, he transformed a rundown house and hillsides of berry brambles into pasture and gardens where he produces and preserves most of his family's food. Visit the Goose Grotto in a constructed pond, a heritage fruit tree orchard, logs producing shiitake mushrooms, and a cheap-and-easy container kitchen garden. Mark gives us a close-up view of the solar dehydrator he constructed from salvaged materials — and his tips on food drying. He has husbanded up to fifty animals at a time, including two Tibetan yaks! This farmstead in Rough and Ready (CA) lives up to

the town's name — and is a testament to hard work, wide-ranging construction skills, and love.

year or more until it has composted fully. What a way to go!

169 The Sacred Demise of Industrial Civilization

As a historian, Carolyn Baker has a keen eye for current events that are indicators of the collapse we're seeing all around us. But she's also a psychologist concerned about how we personally navigate the turbulence and find meaning within it. The author of Sacred Demise: Walking the Spiritual Path of Industrial Civilization's Collapse, she describes the old story that isn't working anymore (humans are separate from nature), and the new story we must live by for real sustainability. Her Speaking Truth to Power website is a rich collection of articles reflecting both collapse and preparedness action.

170 Preparing for Disasters and Hard Times

In this animated dialogue, natural resource analyst Sean Brodrick provides a sharp-eyed perspective on what may be coming in this precarious economy and how to prepare for it. The author of *The Ultimate Suburban Survivalist Guide*, Sean is hip to peak oil and other resource declines as well as the Katrina hurricane lesson — don't rely on government to save you during disasters. Urging us to prepare for hard times while we're in good times, he covers smart money moves, food and water storage, basic preparations in case you have to evacuate, and creating bonds with your neighbors to increase home security.

171 A Permaculture Course for Busy People

Bill Wilson and Wayne Weiseman pour their hearts into their permaculture design courses, changing lives as well as landscapes. In a unique format, students do initial course work online and then attend a one week hands-on course. In this chat along with Sivananda Yoga Farm sponsor Vidya Chaitanya, Wayne discusses principles starting with with observing elements like wind, water, sun and topography in a specific property. Bill provides alarming information on "peak soil." Together they note that permaculture's goal is to create small, intensive ecologies, a foodweb where everything is exchanging with everything else. Eat and Be Eaten, and Share the Bounty.

172 The Pee and Poo Show

Laura Allen gives an intimate tour of a home-built composting toilet in her Bay Area urban home. The nutrient-rich composted "humanure" is used to enrich the lush, edible landscape, and doesn't waste precious drinking water like flush toilets. The co-founder of Greywater Action shows the throne-like toilet compartment whose distinctive feature is a urine diverter. Pee and poop are collected in separate containers beneath the toilet, and are accessed outside the house. Sterile pee is watered in at the base of plants, while poop is collected in barrels and aged for a

173 Transitioning to the Elm Street Economy

How can you contribute your skills towards meeting real needs now and in the future? Paul and Sarah Edwards , the authors of *Home-Based Business for Dummies*, focus on the "Elm Street Economy" of locally-owned businesses rather than "Main Street", which we hear so much about, but is comprised mainly of franchises. In the Elm Street Economy, local businesses meet local needs — for food, shelter, clothing, heating, electricity, healthcare, and other products. Sarah and Paul suggest: Keep your job and pay off your debts, while gaining enduring skills for the future. A large number of today's professions won't be around in five years.

174 The Power of Neighbors

Jan Spencer didn't stop with a permaculture makeover of his suburban home in Eugene, Oregon. Now he's taking on the neighborhood! As a result, his neighborhood association is teaming up with city programs like Neighborhood Watch and Emergency Response to empower neighbors to work together. They're transforming lawns and abandoned lots into edible gardens, and sharing knowledge about energy efficiency, permaculture, and preparedness. These grass roots endeavors help people feel more secure in their homes, because they're connected with neighbors they can rely on.

175 Time's Up! An Uncivilized Solution

What kind of life do you want, and what are you willing to do to get it? Author Keith Farnish sees industrial civilization as the most destructive way of living yet devised by humans. And it's over: environmental degradation and depletion tell us it can't continue. The system has myriad ways to make us believe we can't live without it. But Keith believes we can - there are countless ways to move forward into contented, happy, and full lives. We can "disengage" and reconnect with the natural world, ourselves, and others.

176 How We Live at Lone Bobcat Woods

Peek behind the scenes at Peak Moment TV's home base. Janaia Donaldson shows guest host Ivey Cone the solar power system, woodstove for heat (and winter waffles), and super efficient refrigerator. Choosing to reduce their footprint, she and Robyn Mallgren, Peak Moment videographer, don't feel deprived at all. Janaia discusses what led them to leave the Bay Area, what it's like to live on 160 acres of forestland, which they've preserved "in perpetuity" as a wildlife sanctuary, and shows us some of the members of the natural community they live in.

Thirty-Seven Views from Lone Bobcat Woods

An artistic prologue to "How We Live at Lone Bobcat Woods" (Episode 176). Ever wonder how an artist sees the world? In 1998 Janaia created an image from each window in her Sierra Nevada home. Her paintings in many styles emerge from a photographic backdrop in a music video panorama created by Robyn in 2004. Sharing what attracted her eye as the artworks pass by, Janaia reveals her own imaginative response to the natural world. An official selection of the 2004 Wild and Scenic Environmental Film Festival.

177 Hooked on Growth - Meet the Filmmaker

Dave Gardner's upcoming documentary looks at modern society and asks, why are we behaving irrationally? There's overwhelming evidence we've reached the limits to growth, yet continue in our addiction to it. In a search for the cure, Dave starts with the need to tell different stories and shares examples from several folks he's interviewed. He highlights an amusing segment which depicts a family's impacts remaining in their yard! This "crowd-produced" film will also show activities at the community level which could make a huge positive difference.

178 Beyond Back Yard Sustainability

Four years ago (episode 51), Scott McGuire asked "how much food can I grow in my back yard to feed my family?" In this episode, we learn the results, and that food supply is not an individual project — it takes a community to feed one another. Scott's garden later became a CSA (community-supported agriculture) for eight families. Scott is a co-creative gardener — he asks the plants where they want to grow. When plants participate in the design of a garden, they build in energy meridians (like acupuncture lines in our bodies) for optimal vitality and health.

179 Fences Down! Fostering Community in an Urban Neighborhood

Gardens replace driveways, a chicken coop replaces a garage, and personal relationships are deepening. Meet the residents of three adjoining houses, who removed the fences and talk about shared projects (and their one auto!), meals together, ecological living, and treasured conviviality. This idea could transform urban and suburban neighborhood life anywhere.

180 Taking Back Our Lives from the Wall Street Mafia

"Get rid of Wall Street!" says David C. Korten, author of *Agenda for a New Economy* and *The Great Turning*. Wall Street is about phantom wealth — real wealth is about happy, healthy families, local living economies in balance with Earth's resources, and caring, resilient communities that provide life's basics, like food, shelter, and education. To do that, we must change the rules to reduce the power of corporations, the politicians in their pocket, and a destructive money system.

181 Partners in Preparedness: Neighborhoods and Emergency Responders

The last thing "Dr. Doom" Bob Hamlin expected was citizens offering to help his county Emergency Management Department. But when Deborah Stinson from Port Townsend's Local 20/20 came to Bob's office after Hurricane Katrina, they formed a partnership. Citizens are organizing and educating neighborhoods to be more self-reliant in emergencies. And they're at the table with emergency responders in planning for disasters.

182 Changing the World One Bike Rider at a Time

A weekly free bike coop where you can use mechanics' tools and expertise to fix your bike? Free clinics where schoolkids or neighbors learn to maintain or build their own bikes from used parts? While Chauncey and Dash Tudhope-Locklear make a living repairing bicycles, volunteer projects support their mission of empowering "social change through bicycles." With an eye to local food self-reliance, they even repair farmers' bicycles for free.

183 Navigating the Decline

This time Janaia's in the hot seat! In this interview by Jim Fritz on Port Townsend Television, she tackles corporate control and a dysfunctional system that profits from increasing unhealthiness and consuming the planet. She points to Peak Moment guests as models for the average family to gain genuine security. They're withdrawing from the money system, growing food, and joining neighbors to prepare for emergencies.

184 YES! Ready for Anything

"An awful lot of what we've taken for granted about the future can't continue," says executive editor Sarah van Gelder of YES! Magazine, whose fall 2010 issue is about people creatively building resilient families and communities. Publisher Fran Korten describes local food as an important avenue into a much larger vision of what we can become. Fran and Sarah discuss sources of real happiness that don't destroy the planet, an upcoming YES! Magazine issue on families, their weekly "YES! This Week" e-newsletter, and the YES! emphasis on possibilities and positive initiatives.

185 Claiming the Commons — Food for All on Haultain Boulevard

Rainey Hopewell's crazy idea has ended up feeding a neighborhood and creating community. She and Margot Johnston planted vegetables in the parking strip in front of their house. They offer them free for the taking — to anyone, anytime — with messages chalked on the sidewalk noting when particular vegies are ready to pick. Neighboring children and adults are joining in to work on the garden, harvesting fun along with food, and even handing fresh-picked vegies to passers-by.

186 Your Money, Your Life, Your Happiness

Published 20 years ago, Your Money or Your Life was written for these times, asserts co-author Vicki Robin. Following its nine steps has transformed our own lives and those of some of our Peak Moment guests. People examine their assumptions about money, decide what is "Enough," get out of debt, and free up life energy to invest in what matters most to them. Vicki discusses applying these same tools to relationships with our time, opportunities for creativity and exchange, building community, and her ten-mile food diet.

187 How to Boil a Frog - Meet the Filmmaker Filmmaker Jon Cooksey is one funny guy, even while presenting the most serious problems facing humanity. In this fast-paced conversation, he gallops all over the map with five big problems, five big solutions, and a playful and heartfelt approach. Wacky, sobering, full of animations, with Jon in dozens of personnas, "How to Boil a Frog" is a film to view and discuss with friends.

188 Your Personal Baker - A Bakery CSA

Watch baker Jen Ownbey whip up a batch of zucchini bread while she talks with Janaia about doing what she loves. Every week, members of her bakery CSA (community supported agriculture) get a handmade, local, mostly organic, and even personalized box of breads and bakery desserts. Jen talks about getting started, selling wholesale and at growers markets, plus the joys, lessons, and challenges of running a solo business.

189 Menu for the Future - Bringing Farmers to the Table

What happens if you create 25 small groups to discuss food values and issues, and include a local farmer or food producer in each one? Innovative organizers Judy Alexander, Dick Bergeron and Peter Bates facilitated the "Menu for the Future" groups to support local farmers and educate eaters. Results? Eaters changed their food choices, and the market for local food products expanded. Winners all around!

190 Reclaiming Childbirth

Why does industrial culture consider this natural event a medical problem? People in the radical birth movement want to broaden the conversation about options for families giving birth. Squat Birth Journal co-editors Jaydee Sperry, Meghan Guthrie, and Danny Scar want families to know they can choose birth processes in which they develop ongoing relationships with midwives and doulas. They also discuss medical costs, safety, health insurance, legal hurdles, and educational challenges.

191 The Vegetarian Myth

What we eat is destroying both our bodies and the planet, according to author Lierre Keith, a recovering twenty-year vegan. While she passionately opposes factory farming of animals, she maintains that humans require nutrient-dense animal foods for good health. A grain-based diet is the basis for degenerative diseases we take for granted (diabetes, cancer, heart disease) - diseases of civilization. Annual grain production is destroying topsoil and creating deserts on a planetary scale. Lierre urges the restoration of perennial polycultures for longterm sustainability.

192 Managing the 21st Century's Sustainability Crises

"There are no real solutions, there are only responses." So say the expert contributors in The Post Carbon Reader, pointing to society's complex, interdependent systems squeezed by growing demand and declining resources. Co-editor Daniel Lerch tells us renewable energy will never be able to replace fossil fuels. Thus resilience — the capacity of a system to withstand disturbance while retaining its fundamental integrity — needs to replace sustainability as a guide to action.

193 Sharing Gardens — Giving and Receiving
More than a community garden, this sharing garden
provides fresh produce for all who've contributed to it,
with surplus going to the local food bank. Coordinators
Chris Burns and Llyn Peabody note that with one large
plot rather than separate plots, Alpine Sharing Garden
enables more efficient food production — from
watering to optimizing for pollinators. They share tips
for getting started, garden planning, communicating
with volunteers, garden practices like deep mulch, and
especially the joy of giving without expecting a return.

194 Portland's Neighborhood Tool Sharing Libraries

Need a tool for a few days? Don't have it? Neighbor doesn't have it? Borrow it from your neighborhood tool library! No tool library? Check out Portland, where several neighborhoods have started successful tool libraries just in the last few years. Organizers Tom Thompson, Karen Tarnow and Stephen Couche discuss how they got started, stories of community generosity, and the enthusiastic response of all who stop by. In these neighborhoods, there's no reason not to grab the tools you need and do that project!

195 This Old House — Rethink, Reuse, Remodel

Turn a century-old Seattle house into an efficient, energy-producing home using repurposed materials. Owner-builder Jim Bristow's creativity extends to reclaiming dead spaces, jacketing his house with exterior insulation, and modernizing the kitchen with sleek previously used cabinetry and low-power LED lights. But he's not stopping there. Along with maintaining a prolific front yard vegie garden, this green-minded guy is working with neighbors and the city to construct a storm water drainage and traffic circle at the nearby street intersection.

196 Arrival of the Post-Petroleum Human

"Petroleum Man is dead. Infinite Growth Man is dead. Post Petroleum Human is alive," announced Michael C. Ruppert on May 22, 2011. Members of this emerging "species" know they must live in balance with the Earth, while remembering the lessons of industrial civilization. The star and subject of the documentary "Collapse", Mike founded CollapseNet.org in 2010 to empower people to connect and relocalize.

197 Portable House, Simple Life

Embarrassed by her middle class affluence after a visit to Guatemala, Dee Williams grabbed her hammer, built a tiny house on wheels, downsized to less than 400 possessions, and parked her house in a friend's yard. Her living arrangement then blossomed into a multi-generational family / community. Dee shows us her warm and comfy 7x12 foot house, how she meets city codes, and some unusual ways this life has affected her. Her advice to wannabe tiny home builders: Take on the experiment. Just do it!

198 How Many Community Gardens?

Having learned "How Much Food Can I Grow Around My House?" (Peak Moment 87), Judy Alexander kept right on going. As chair of the Local 2020 Food Resiliency Action Group in Port Townsend, WA, she helped initiate 25 community gardens in her county within four years. Sitting in her own neighborhood's garden, she talks about the power of cooperative gardens compared with individual plots. There's something for people of all ages and skills to do (even non-gardeners), while enjoying learning from one another, and building closer neighbors and a more secure community.

199 Peak Oil Blues — We're All Bozos on this Bus

"My own reaction seemed so crazy to me," says psychologist Kathy McMahon of her response to Peak Oil. Wondering if she was the only "wacko," she started the Peak Oil Blues blog to explore her own and readers' responses. As the "Peak Shrink," Kathy formulated a delightfully tongue-in-cheek "Panglossian Disorder" — an unrealistic optimism about the future. She will soon publish "I Can't Believe You Actually Think That!" A Couple's Guide to Finding Common Ground about

Peak Oil, Climate Catastrophe, and Economic Hard Times.

200 How the West HAS Won

"Is the world a better place because you were born?" asks author Derrick Jensen. He contrasts sustainable indigenous cultures who enrich their habitat with the current "dominant culture destroying everything." He explores how industrial civilization is inherently violent, turning people into objects and the earth into stuff. His books include A Language Older Than Words, The Culture of Make Believe, What We Leave Behind and Endgame.

201 Local Investing Made Easy

We're "keeping money flowing locally so we're more prosperous as a community," says James Frazier, cofounder of the Local Investment Opportunities Network (LION) in Port Townsend, WA. LION is a clearinghouse between business owners like Matthew Day and potential investors like Kees Kolff. A business owner presents an investment opportunity to LION members. It's all based on one-to-one personal relationships, so support can be more than monetary, says Kees — such as interest paid in locally-produced cheese and cider!

202 Collapse of the Titans

Learn from the Soviets — personal relationships are the best currency, says Russian-born Dmitry Orlov, the author of *Reinventing Collapse: The Soviet Example and American Prospects*. The American empire is following the USSR into collapse, he asserts, with financial collapse happening first, followed by commercial and then political collapse. Dmitry, an America resident for several decades, suggests lowering our needs and expectations and replacing money transactions with barter and exchanges.

203 Soccer Mom Prepares for the Unexpected

"I have a ball preserving food with my friends!" And at the same time Kathy Harrison is making sure her kids can eat if storms knock out power or roads. The author of *Just in Case: How to Be Self Sufficient when The Unexpected Happens* gives practical tips on storing food without getting overwhelmed. She looks at dehydrating, canning, and root cellaring; finding and preserving local food, and buying food at discount. For Kathy, preparedness is an empowering, community activity.

204 Oil Puts the Squeeze on the Economy

This turbulent, troubled global economy is precisely what Chris Martenson predicted in early 2010, "When Exponential Meets Reality" (episode 166). He asserts that we can no longer look at the economy without factoring in the terminal decline of its master resource — oil. The author of *The Crash Course: The Unsustainable Future of Our Economy, Energy and Environment* believes that, as "the generation that gets to deal with hitting up to resource limits," we first need a new cultural story to inspire appropriate action.

205 Undriving™ — Changing the Way We Think

Be the first in your group to get your Undriver LicenseTM — it's great fun! You pledge to reduce automobile use — yours or others'. Seattle founder Julia Field's creative project is sparking imaginations and creativity by changing how people think about getting around — be it skateboards, sailboats, or just plain skipping the trip! Undrivers of all ages are jumping on the bandwagon, changing assumptions, and telling their empowered stories. (Janaia's outrageous Undriver LicenseTM goes wherever her bike goes). You can get your own Undriver LicenseTM at http://www.undriving.org.

206 Awakening the Village Heart and Mind

From their zero-mile bistro to zoning and financing innovations, O.U.R. Ecovillage in BC, Canada has paved the way for many communities worldwide. For Brandy Gallagher, the story on the planet right now could be a shared ethos of caring: "Everyone is fed. Everyone is taken care of." Asserting that "No is just an uneducated Yes," Brandy shows how a village mindset can transform individuals, preserve land, reduce resource use, apply permaculture principles, change laws, and even the way money works.

207 Planting the Seeds for a New Society

"We're a conduit and a packager of important cutting edge material that people need to do the work that they're engaged in." Judith Plant and the New Society Publishers (NSP) team are social change agents bringing emerging ideas and authors to the forefront. They converse about the need for women's voices in social change; rootedness in place, and how their boots-on-the-ground, solution-oriented books are antidotes to fear. They deliberately go out to talk to their readers. Hearing what they want, then search for authors to address topics readers are asking for.

208 Sail Power Reborn - Transporting Local Goods by Boat

"We are revitalizing an ancient form of transportation ... using just the power of the wind and the tides ... to move goods and people," says skipper Fulvio Casali. In their CSA (community supported agriculture), the Salish Sea Trading Cooperative uses nearly no petroleum to transport organic produce and other goods from the north Olympic Peninsula to northwest Seattle. By sea they use community volunteer sailboats, and by land an electric delivery truck. Come on board with cofounders Casali, Kathy Pelish, and Alex Tokar, who are patiently redeveloping the skills and infrastructure for the return of "a whole fleet of sailboats blanketing Puget Sound" in the post-petroleum era.

209 Growing Up in the First Great Depression

Janaia's mother Rowena grew up in a blue collar family during the 1930s. The kids helped their mom in her own pie delivery business while their dad did construction odd jobs. In this cash-only society, they lived on what they could pay for. She recalls losing her only pair of shoes and envying a school girl's daily peanut butter-and-jam sandwich. But she didn't feel deprived: people generously gave groceries and hand-me-down clothes. Kids entertained themselves with outdoor games, and later, from adventures emanating from the home-built radio. Her frugality, self-reliant attitude and do-it-yourself skills went on to enrich the family Janaia grew up in.

210 Young Lawyers Lower the Bar to Sharing Economy

"Sharing really is going to save the world!" declares Janelle Orsi, author of *The Sharing Solution*, noting that it's fun, doesn't require special skills — and we can start now. She and Jennifer Kassan co-founded the Sustainable Economies Law Center to help people formalize collaborative structures like producer cooperatives, cohousing developments and tool lending libraries. They're working to reduce the hurdles to investing in locally-owned and locally-controlled enterprises. No wonder law students are excited to intern with them!

211 The Straight Poop on Sustainable Farming

Innovative farmer Joel Salatin says sustainable agriculture requires both perennials (like native grasses) and herbivores (like cattle) to build soil. Mimicking patterns from nature, this maverick Virginia farmer rotates cattle followed by chickens into short-term pasture enclosures, where their poop fertilizes the earth. His new book "Folks, This Ain't Normal" is a critique of the industrial food system, and envisions a future where humans are participants in a regenerative, sustaining community of abundance.

212 The Armed Man: A Mass for Peace

"This is a very important piece of music, a very powerful piece of music," says Ken Hardin, conductor of Sierra Master Chorale. In advance of their performances on May 17 and 20, 2012, he provides a musical guided tour of this contemporary work by Karl Jenkins, commissioned by the Royal Armouries Museum for their Millennium celebrations. Although outside of Peak Moment TV's normal scope, this music can move us beyond our heads and into our hearts. With texts drawn from many continents, and musical idioms from the middle ages to modern, this music is challenging, moving, inspiring, disturbing, and uplifting. As one chorister notes, "It's like nothing I've ever done musically."

213 Two Households, One Car

At first Judy Alexander was reluctant to share a car with neighbors Richard and Sue Dandridge. But their invitation intrigued her, especially since her aging car felt unsafe for long trips. After a trial year, she found the arrangement freeing and sold her car. Judy and Richard discuss their process — the agreement, scheduling, upkeep, and changing life circumstances. Beyond saving money on maintenance and insurance, there are a lot of unexpected benefits: shared errands, closer relationships, and simpler living.

214 Rocket Stoves — Hot, Healthy, Efficient

Mike Hatfield says the magic of a rocket stove is getting the heat into what you're trying to heat. His tour of a rocket stove reflects designs perfected for decades at Aprovecho Research Center in rural Oregon. They also test and suggest improvements to stoves from developing countries, aiming to reduce smoke to help children's respiratory health. Fred Colgan shows specialized stove parts and assembly jigs he ships to developing countries, where local people construct rocket stoves from mostly local materials. Appropriate technology at its best!

215: An Earthen House Built by Hand

"I think it's very very important to know you can provide things for yourself... build your own house... grow your own food... make your own medicine." Walking his talk, Greg Crawford shows the magical wattle-and-cob house he built with hand tools using local materials: alder trees in the surrounding forest, and clay from what later became the house floor. Building his house was an "experiment in intuitive architecture ... using common sense while "letting the building evolve, change and grow on its own."

216: Titanic Lifeboat Academy — Navigating a Path to Resilience

Caren Black and Christopher Paddon couldn't find mentors to teach them self-reliant living when they became aware of peak oil. So they created a homestead and opened their doors to training others. People can take a personalized Lifeboat Course online or in person, where hands-on learning includes food production with domestic animals and gardens, renewable energy, and carpentry skills. "We're all in this together," Christopher notes, so the couple educate, volunteer and share to also make their community more resilient.

217 Portland's Backyard Fruit — From Waste to Feast

"We look forward to a time when we're really able to harvest all of the fruit trees in the city that aren't being fully utilized," envisions Katy Kolker, founder and executive director of Portland Fruit Tree Project. Volunteer groups harvest trees whose fruit would otherwise go to waste. Half of the fruit goes to neighborhood food banks, and the remainder goes home with the volunteers. Tree Care workshops offered to the public cover pruning, thinning and pest and disease control. They also train Tree Care Teams who adopt clusters of fruit trees in a neighborhood. From harvesting 8000 pounds of fruit in 2008 to three times that in 2010, this growing project is bearing fruit and benefiting thousands.

218 Solving the Environmental Crises — We Can Do It!

Futurist Guy Dauncey's enthusiastic determination is absolutely infectious! The author of *Climate Change:* 101 Solutions to Global Warming sees multiple environmental crises descending on us all at once. He points to numerous historical examples of our coming together around critical issues. "We can do this!" he insists. We can "change, adapt, innovate and build an entire economy operating in harmony with nature." Tools like the internet and cellphones enable us to amplify organizing worldwide, so we can follow our ancestors' lead in "not wimping out."

219 Prairie Fire — Revolutionize the Food System

Novelist Dan Armstrong's *Prairie Fire* is a fast-paced thriller whose characters forge unlikely alliances to revolutionize the American food system. It's spearheaded by farmers squeezed by skyrocketing oil prices while marketeers get whopping price gains. This revolution is unlikely to succeed, yet... well, we won't spoil it! In Dan's *Taming the Dragon*, climate change causes Chinese grain production to plummet, bringing the world to the brink. Dan illuminates the real-world backdrop behind both novels. His solution? Localize food production. Meet farmer Harry MacCormack with exciting results in central Oregon.

220 Simplicity, Joy and Social Change

When Cecile Andrews asked herself, "What matters?" the answer popped up: "Having time to do the things you want to do." She simplified her life, quit her full-time job, and started simplicity circles to support others in savoring life. Now she has expanded into neighborhood stop-and-chats and a Gross National Happiness movement. Her latest book advocates broadening the joy in our lives — Less is More: Embracing Simplicity for a Healthy Planet, A Caring Economy, and Lasting Happiness.

221 Human-Powered Machines — Can Pedals Power the World?

Jump on that bike and power up the blender for your morning smoothie! Matthew Corson-Finnerty shows several machines he has developed while at Aprovecho Center in Oregon. Watch us pedal power an electricity generator, a grain mill, a blender, and a strawchopper. Matthew notes there's "considerable difference between the power that one person can generate, and [what's] generated by a fossil fuel engine or a coal-fired plant to provide electricity." After watching these machines, what do you think?

222 Applying a Peak Oil Filter to Financial Choices

"If peak oil occurs, it will dominate most everything else that we do, because energy drives everything." Financial consultant Jim Hansen's peak oil filter doesn't just guide investment decisions for his client portfolios. He applies it to his personal lifestyle (you may be surprised to learn what car he drives). He's also concerned about community impacts when fuel prices are higher, like centralized hospitals dependent on people driving to them, rather than many smaller localized facilities. Jim makes an important point: "If I get it right but my community gets it wrong, it could overwhelm everything I've done personally."

223 Dignity Village — A Community By and For the Homeless, part 1

"Anybody can come through our gates 8 am-10 pm and use all of our facilities. We have hot showers, a telephone, free computers internet-ready, our commons, offices, [and a free store of donated items.] Anybody has access to this." Tour guide Jon Hawkes highlights this community's generosity to the larger community: its residents well understand what homeless people need. Visit their greenhouse, gardens, houses, and business enterprises — all built with ingenuity on a city-owned site.

224 Dignity Village — A Community By and For the Homeless, part 2

"No violence. No theft. No drugs or alcohol. No constant disruptive behavior. Everyone must contribute to the village." While finishing our tour, Jon Hawkes lays out the five agreements residents must abide by, all forged by real-world experience. What would it be like if our entire society followed these rules? Celebrating its tenth anniversary, Dignity Village is an organically evolving, self-organizing intentional community — and a model for others.

225 Preparing Emotionally for the Coming Chaos

"The external growth of a budding economy is over. The focus on growth now needs to be on the inner world." Carolyn Baker's *Navigating the Coming Chaos* is a toolkit to prepare emotionally and spiritually for the collapse of industrial civilization now underway. First build an "internal bunker," she suggests, to begin healing the fear, grief and despair that immobilize many people in our "culture of numbness." From that foundation, she invites us to look at who our allies are — people, places, possessions. Carolyn observes that many people experience a level of joy by doing this work.

226 Inspiration Farm — Cultivating Nourishing Food and Creativity

"Changing times calls for changing lifestyles." says Brian Kerkvliet. "So [we've] put more energy into the land... The more you get your fingers in the soil, the more endorphins rush through your head. You get excited by all of that." Using permaculture and biodynamic practices, Brian's family is endlessly experimenting and innovating to find what works. His wife Alexandra and daughter Rosalie introduce us to the goats, pigs, and cows who are essential players in their farm's web of life. Don't miss the outdoor shower with water heated by microbes in the compost pile!

227 Farm Camp — Connecting Kids to Their Food

Join the kids at Farm Camp! You'll watch them care for turkeys and rabbits, listen to a harvest season story, and cook up applesauce. Campers have fun growing and preparing food and, best of all, eating the results. They raise veggies from seed to harvest and take field trips, like the Camp Pizza kids who visit a cheese maker. It all started because founder Laura Plaut wanted her son to have joyful food experiences. "We do [this] because it feels good. It makes us happy, takes care of the planet, [and] takes care of communities."

228 Free Geek — Reviving Computers, Empowering People

Take a whirlwind tour of Free Geek, powered almost entirely by volunteers. Free Geek keeps electronic stuff out of the landfill while refurbishing computers. "Volunteer for 24 hours, and you get a free computer, a class on how to use it, and a year of free tech support," says Reuse Coordinator Alison Briggs. Her tour starts with volunteers receiving used equipment donations at the front door. After initial testing, stuff gets deconstructed. Recyclable materials are separated out. Computers are refurbished in a Build Room — even laptops. Finished computers go to volunteers, nonprofits, and Free Geek's thrift shop. They're living up to their byline: "connecting our community one computer at a time."

229 Tools to Turn Dreams Into Reality

How do you turn wishful thinking into goals and concrete steps to achieve them? Alan Seid shares insights for "visioning and manifesting" that have helped him and others. It starts with imagining, Alan says, and thinking "outside the box." Then you set up structures and steps to get you there. He used the book "What Color is Your Parachute?" to develop a "flower diagram" to guide his search for a piece of land. "Creating Your Future: A guide to long range visioning" helped create structures and specific tasks. "Your Money or Your Life" focused his life energy (money and time) to align with his values. The best advice he's ever gotten? "Dream Big and Go for It!"

230 An Eco-Sense House — Natural Building, Natural Living

The Eco-Sense House is alive! From dream (see episode 103) to reality. Its curving cob walls embrace Ann and Gord Baird's three-generation family. A living roof offers summer cooling and filters winter rains stored for garden water. The composting toilet provides rich soil for the veggie gardens, which supply much of the family's food. This "net zero energy" house uses the sun for electricity, hot water, and warm floors. Tour this small-footprint house, designed as part of the ecosystem surrounding it.

231 Columbia Ecovillage — From Apartments to Community (part 1)

What if you could turn an apartment complex into a houseful of friends? Joe and Pam Leitch did. They purchased the apartments adjoining their farmhouse in metropolitan Portland, with the vision of creating an intentional community. While retrofitting the apartments to modernize and increase energy efficiency, they met weekly with prospective members to discuss visions and values. As Pam notes, "By the time we moved in, we were bonded.... Nobody moved in as a stranger."

232 Columbia Ecovillage — Shaping a Life Together (part 2)

What's it like, living in an urban ecovillage? Barbara Ford finds that this size community enables people to contribute while doing what they love. Dennis Karas and his wife had to adjust to noise levels with more children around, but enjoy having many friends with shared values. All community members are trained in consensus decision making and conflict resolution, and work on teams for the common good. Noting the contrast with so many breakdowns in our culture, Lisa Weasel values people coming together and working across differences, while downscaling and being sensitive to the environment.

233 Seeking the Happy Story (part 1) — But What Do You Feel?

We live in a culture that wants only the upbeat response, the story with the happy ending. We marginalize people who express anger or grief about the impossible predicament we're in — societal and ecological collapse. Clinical psychologist Kathy "Peak Shrink" McMahon, uses empathy and humor to encourage people to really feel their emotions about having their worldview shattered. She responds to the myth that technology will save us, explains why politicians won't talk about the predicament, and supports people to see what's going on in spite of the cultural denial.

234 Seeking the Happy Story (part 2) — Reality Ain't What You Believe

"If you really grasp the idea that this is not suddenly going to turn around, in six months or a year, you begin to look at your life very differently," says Dr. Kathy McMahon, clinical psychologist and self-named "Peak Shrink." Despite government silence, she declares, the US is in a Great Depression. Collapse is happening now, not in the future. She empowers people to face reality. When they do, she finds they are freed to take appropriate action for themselves, their loved ones, and their communities. And therein lies her hope for the uncertainties looming ahead.

[note: episode 235 is with 238-240]

236 Gourmet Cooking for the Paleo Diet (part 1) — Meet the Chef

Longtime chef and caterer Pauli Halstead had drafted her cookbook "Cuisine for Whole Health" when her personal diet took a U-turn. Working with nutritionist Nora Gedgaudas, she removed gluten and sugar from her diet. In a few months, a lifetime of sugar addiction and depression was behind her. She revised her cookbook to become "Primal Cuisine: Cooking for the Paleo Diet." In our chat, she noted how the paleo diet reflects the foods we evolved with, especially animal protein and fats that our body and brain require. We discussed which foods are eliminated (primarily grains and vegetable seed oils), and which are emphasized (animal products). In part 2, Pauli takes us into the kitchen for a survey of good natural fats. She demonstrates how to make ghee (clarified butter), and her favorite dip.

237 Gourmet Cooking for the Paleo Diet (part 2) — In Pauli's Kitchen

You'll wish you could taste this video! Longtime caterer Pauli Halstead makes her famous Magical Muhamara dip from her cookbook *Primal Cuisine: Cooking for the Paleo Diet.* Using toasted walnuts instead of chickpeas, she credits its authentic Middle Eastern flavor to a touch of pomegranate molasses. Noting that fat is what makes food taste good, she shows a rich array of healthy natural fats and oils like coconut, olive, and avocado. Meanwhile on the stovetop, she makes a batch of ghee (clarified butter)

start to finish. According to Pauli, "Cravings come from a nutrient-deficient diet. Our body is going to continue to crave until we give it what it needs... The right vitamins and minerals—and nutritious fats."

235 Living with the Predicament

Janaia's the guest this time! She tells host Ivey Cone: "This is not a problem. A problem can be solved. This is a predicament. We can't solve our way out of this one, with technology or any other mythic fix. It's something we have to live with." She sees multiple collapses happening simultaneously: the American empire, industrial civilization, and planetary ecosystems - especially rapidly accelerating climate change. After sharing a few ideas on how we might respond personally, she closes with heartfelt tips from the author of "Practice random kindness and senseless acts of beauty."

238 Splendid Bicycles for Cargo and Kids

Picture a sofa perched on a bicycle for its move across town! That's how Portlanders Joel and Barb Grover transport items too big or awkward for a car. More and more folks in bicycle-friendly terrain are using cargo bikes for their in-town transportation needs — carrying kids, groceries, purchases and goods for market. Creative cycle design is thriving, as Joel shows in numerous cargo cycle models, and local builder Joseph Ahearne shows with his Cycle Truck. Take a test spin with Janaia, who is having too much fun in a box-fronted tricycle and learning how to steer a "long tail."

239 Earth, Wood and Sun — Natural Building, Local Style

"When we're able to successfully work with local ecologies to meet our needs, we do the Earth a better service. And we are becoming empowered in our own lives." Natural builder Chris Foraker gives a tour of work-in-progress at Aprovecho Center, Oregon. The structure's clay, straw, sand, and wood come primarily from their own land. Much of the work was done by amateurs using techniques that don't take industrial levels of technology. Aprovecho builders pioneered using small diameter flat-sided poles to replace dimensional lumber — a technique accepted into the local building code. Chris dreams of reintroducing "regional vernacular architectures." This building beautifully expresses that dream.

240 What Do You Think Is Worth Fighting For?

"There are very sober people talking about the possible death of entire oceans. The end of fish. If that's not worth fighting for, what is?" Activist and author Derrick Jensen asserts that industrial civilization is murdering the planet and it must be stopped. We need to decolonize our hearts and minds. As soon as our allegiance is to the real world and not industrial capitalism, things become more clear. His books include *A Language Older Than Words, The Culture*

of Make Believe, What We Leave Behind and Endgame.

241 Things Are Cookin' at Wallingford Community Kitchen

One night a month, join your neighbors to cook up a meal. Eat together and take some home. We had great fun at this 2010 community kitchen in the Wallingford neighborhood of Seattle. Coordinator Rachel Duboff and Kathleen Cromp of the Community Kitchens Northwest steering committee tell about people learning new ways to eat and cook healthily, share resources, and collaborate while building community. The city boasts about a dozen neighborhood community kitchens, each with a unique flavor suited to its members. Create your own: they offer inspiring stories, tips and logistics to get you started.

242 Small Scale Aquaponics — From Fish Poop to Seafood Dinner

Tour a closed-loop water system where one critter's wastes become another's food. Inside a steamy greenhouse, Jeremy Roth of Aprovecho Center's Aquaculture Project shows us fish tanks containing tilapia just like you might order in a restaurant. Water from the tanks is pumped through troughs where pond plants take in the nutrients from the fish. Plant material is then returned to feed the fish in their tanks. The nutrient-rich water is also diverted to nourish veggies like chard, tomatoes, and water chestnuts rooted in a shallow gravel bar. In this cycle, aquaponics yields generous quantities of high quality protein from a very small footprint.

243 Seeing the Forest Community Through the Trees

Restoration forester Matthew Hall has a vision for the Aprovecho woods: a managed ancient forest. Weaker trees are made into products while the larger trees stay in the forest forever. He retains nature's changes (like storm-dropped trees). He recruits snags. Tops snapped off of larger trees stay on the forest floor "to create a bank account of large woody debris." He's managing not just for the trees, but for the other communities who live here — soil, bugs, birds, and humans.

244 A Longtime Farmer Shares His Wisdom (part 1)

Nash Huber is famous for his delicious carrots — crunchy, sweet and alive. He started farming in Washington state's northeast Olympic Peninsula by cultivating backyard gardens and many relationships. His team grows over 100 varieties of vegetables, fruits, grains, seeds and pork all year round. When suburban sprawl started eating up nearby farmland, Nash dedicated himself to growing a stable base of land for farming. He partnered with PCC Farmland Trust to buy and protect farmland in his region. He was designated Steward of the Year 2008 by the American Farmland Trust.

245 A Longtime Farmer Shares His Wisdom (part 2)

For over forty years, Nash Huber has grown healthy plants, soil, seeds — and now future farmers. He nurtures soil fertility with compost, cover crops and chicken tractors. He saves seeds from plants that are best suited to local growing conditions — that's how he developed his own variety of purple kale. He rotates crops in various plots, so soil can be given a rest and replenish depleted nutrients. As for future farmers, Nash says it takes ten years minimum for young folks to learn how to farm — all hands-on, of course.

246 Natural Buildings for Urban Living (part 1)

Wanting to demonstrate that "cities can be less impactful on the planet," natural builder Lydia Doleman bought and remodeled a Portland house to demonstrate her values. Composting toilets reduce water usage while feeding the soil. Growing food shortens dependencies. Building materials were recycled and/or less toxic. She revised the floor plan to create spaces which encourage shared living rather than separate spaces. She also built Portland's first permitted straw bale residence and a cob studio.

247 **Natural Buildings for Urban Living — The Tour** (part 2)

The Craftsman-style bungalow looks normal on the outside, but the surprise is on the inside: straw bales inside the framing provide super insulation. Natural builder Lydia Doleman designed this 800-square-foot small-footprint house to last centuries, with its metal roof and strong foundation. She used reclaimed lumber and recycled materials extensively. Hot water pipes warm the earthen floors and replace energy-intensive concrete. Day-to-day usage is low impact: composting toilet, vegetative roof and rainwater catchment, LED lighting, and solar hot water.

248 The Bean and Grain Project — Outperforming Chemical Agriculture

The Bean and Grain Project is exploring bean, grain, and edible seed varieties which can be added to those already grown in Oregon's Willamette Valley. Oregon Tilth co-founder and farmer Harry MacCormack shares wisdom and stories about farms transitioning from chemical to organic farming. His book The Transition Document: Toward a Biologically Resilient Agriculture is a compendium of organic practices, like using compost tea to feed soil micro-organisms. Dan Armstrong, the author of Prairie Fire, notes that the project aims to increase the diversity of staple crops and add resilience to the regional food system.

249 Green Burial and Land Conservation

"I want to die and be returned to the earth so that I have the least harmful impact... Not just to live that way but to die that way. I'd like to become the compost for a beautiful tree that bears fruit to feed the next generation." Brandy Gallagher of O.U.R. Ecovillage relates how land trusts are protecting land for future generations by providing spaces for green burials. Green burials are an environmentally-conscious alternative to costly and toxic funeral products and processes. For our final act, we can "use our dying for the living." (O.U.R. Ecovillage's Commemorative Legacy Project and Green Burial Scattering Grounds, the first of its kind in Canada, opened early in 2011).

250 How Shall We Live, With the Earth in Crisis

When we actually face what's happening on the planet, the picture isn't pretty. Author Carolyn Baker (Speaking Truth To Power) is concerned by rapidly-unfolding climate change, and the fragile Fukushima reactor situation. Systems thinker Dave Pollard (How To Save the World) sees endgames for three interrelated systems—economic, energy and ecology—any one of which could lead to civilizational collapse.

We're in a predicament we can't fix, but we can choose how we respond. Carolyn suggests thinking of the Earth community, of whi ch we are a part, as being terminally ill. Take time to reflect on our lives, make amends, and value the time we have. Both guests suggest learning how to live in community, being present for one another. Dave is intrigued to create stories envisioning life in a century or so, stories that can inspire the resolve to directly face these turbulent times.

251 Climate Change and Fukushima — Radio Ecoshock Paints the Big Picture

Two ongoing environmental events are affecting all life on the planet, even if it's not yet noticeable where you live. Alex Smith of Radio Ecoshock is watching climate change and Fukushima very closely. In this program, he summarizes the latest reports and predictions. Extreme weather events are increasing and worsening. Ocean dead zones are growing. Methane from melting permafrost is warming the atmosphere faster than carbon dioxide.

The Fukushima nuclear site has already increased airborne radioactivity in the northern hemisphere. Ocean-borne radioactivity will be hitting the North American west coast by 2014. And no one knows what to do about it. But Alex has ideas on how we can respond individually and positively.

252 Monroe's Sharing Garden — The Giving is Growing

"We're enjoying the abundance and the feeling of richness and generosity along with everybody else," say Sharing Gardens coordinators Chris Burns and Llyn Peabody. During this four-year experiment in the giving economy, the garden has tripled in size. Sharegivers (volunteers) of all ages work in the gardens. They share the bounteous harvest with food bank recipients, churches, gleaners and others in their community. No money is exchanged. Materials and labor, and even use of the property, are freely given and showing up in abundance. Llyn and Chris are now living rent-free in a house owned by a volunteer. Observing that "giving keeps coming around full circle," they offer advice for stepping into the giving economy in our lives today, starting small and simply.

253 Smart Choices for Meeting the Coming Bust, part 1

Most people are woefully unprepared for the depression that is now unfolding, says economic analyst Nicole M. Foss, senior editor of <u>The Automatic Earth</u>. In a depression, there's not enough money in circulation. "But by using alternative currencies, we can provide our own liquidity and support economic activity in local areas."

Her colleague Laurence Boomert, the founder of <u>The Bank of Real Solutions</u>, shares several success stories. When government spending dried up, his town of Golden Bay, New Zealand used their alternate currency to keep educational programs going.

"If we didn't have crises, we wouldn't change," Laurence asserts. "It's a great time" to take action now before things get difficult. One guide is Nicole's "How to Build a Lifeboat" to cope with the difficult years ahead.

254 Smart Choices for Meeting the Coming Bust, part 2

"How do we cooperate and build a collaborative culture now?" asks Laurence Boomert, founder of The Bank of Real Solutions in New Zealand. Local currencies, barter cards, and Time Banks not only create alternatives when money systems collapse, they allow people to get entrepreneurial and innovative. He gives examples of people sharing physical spaces equipped with tools and project materials, as well as people sharing their time.

One example is a story of idle young people doing weekly projects, even taking wheelchair-bound folks for a day of surfing! Everyone was a winner, feeling good about themselves and more connected to their community.

"It's vital to get young people involved," concurs his colleague Nicole Foss, senior editor of The Automatic Earth, "No more throw-away people." They both view the resource and money crises as an opportunity to move out of the "sick" existing system and into the healthier, happier world we want to live in.

255 Catch the Rain

Savvy Seattleites are capturing rain from their rooftops not only to water their yards, but to slow runoff into the streets. Jim Bristow gives a gutter-to-ground tour of a residential system, including small-profile cisterns tucked beside the house. Jim also shows a "rain garden," which acts as a catch-basin beside the sidewalk. It collects and drains rainwater, which only spills over into the street during severe rain events. Government agencies subsidize the cost of these small systems, which reduce the amount of storm water flooding the city's sewage system, and ultimately flowing into Puget Sound.

Update: Jim's house has since received a permit to use appropriately-filtered rainwater to supply the whole house—including drinking water, laundry and toilets. His system design is setting the standard for the city.

256 Living Tiny, Finding Community

When we met Logan Smith and Tammy Strobel in "A Young Couple Find Freedom in Simple Living", they'd already gotten out of debt and simplified their lives. (Tammy's book *You Can Buy Happiness (and It's Cheap)* recounts how they did it.) Fulfilling a long-held dream, they're now homeowners—of a tiny house. It's affordable and mobile. In Logan's tour, visit the galley kitchen with alcohol cookstove—a safe, cheap, portable fuel. Opposite is the composting toilet and shower, and above is a sleeping loft. Spaciousness in the multi-use great room is magnified by skylights and sunshine streaming through French doors. "Have House, Can Travel" could be their motto, but for now they're planting themselves in their new community's life.

257 A Locavores' Potluck

We attended a delicious potluck dinner from foods produced around Victoria, Vancouver Island, B.C. Too bad you can't taste this video - it was a locavore's delight! Small-scale food producers brought freshcaught salmon, pastured pork and lamb, eggs, winter squashes, jerusalem artichoke puree, and fermented vegetables. We talked about producing food in their region: using animals to clear brush, water storage, and creating edible food landscapes on residential parcels. Sadly, land is financially out of reach for many would-be small farmers. (A locavore eats mostly local food).

258 Local Communities Dismantling Corporate Rule, part 1

Community Rights educator Paul Cienfuegos explains how "We The People" are exercising the authority to govern ourselves and dismantle corporate rule. When small farmers in rural Pennsylvania wanted to say "no" to a corporate factory farm coming into their community, they learned they couldn't, because it would violate the corporation's rights and state preemption laws. So they did something technically illegal - their town passed an innovative ordinance banning

corporate factory farming.

It worked! The corporation left town. Pittsburgh upshifted the approach: Rather than define what we don't want, define what we DO want. Their "Right to Water" stopped natural gas fracking in the city. Ordinances like this have been passed in over 150 communities in 9 states. Tune in to learn how this works.

259 Local Communities Dismantling Corporate Rule, part 2

"I'm not aware of any other social movement going on in the US today that has the power to challenge and win against corporate rule, push back and dismantle corporate rights, and enshrine rights for actual human beings," asserts Community Rights educator and organizer Paul Cienfuegos. Local Community Rights ordinances are not only stripping "rights" from corporations, but asserting that nature has rights.

Two Oregon counties have submitted a "Right to Local Food Systems" ordinance which forbids genetically modified organisms (GMOs) and protects heritage seeds. Even more, it asserts the right to fully-functioning natural communities, even requiring a corporation to restore whatever it has disrupted. Are these ordinances being challenged? Yes they are, but Paul explains how corporation leaders who want to sue are forced to do so on the community's terms - a brilliant strategy.

260 A Primal Diet for Modern Times, part 1

Nora Gedgaudas used to believe a plant-based diet was the healthiest. That belief got turned upside down when she spent a summer studying wolves near the North pole. "We are fundamentally ice-age huntergatherers," states the nutritionist and author of *Primal Body, Primal Mind*. She points out that our genes are 99.9% the same as our ancestors - they haven't yet adapted to the relatively recent agriculturally-based lifestyle based on grains. As a result, our bodies have no need for dietary carbohydrates. By contrast, "Fat, to us means survival.... Dietary fat is the most nutrient-dense thing we can consume, rich in fat-soluble nutrients, and essential for the functioning of our brain and nervous systems."

261 A Primal Diet for Modern Times, part 2

Is our ancestors' hunter-gatherer diet the best for optimal health and longevity, in our stress- and pollution-filled world? Not entirely, says Nora Gedgaudas, author of Primal Body, Primal Mind. She advocates a ketogenic diet, where fats are the primary fuel source rather than carbohydrates — moderate protein (from grass-fed or wild caught animals), very low starch and natural sugars, plentiful fibrous green vegetables, generous natural fats, and no vegetable oils. "Once [our ancestors] adopted ketones as a primary source of fuel, our cerebral blood flow and oxygenation increased by over 39% in normal human brains." Returning to a ketogenic diet improves brain function and can help treat or even prevent diabetes and Alzheimers.

262 Climate Change and Human Extinction — A Personal Perspective

"Just one source, methane from the arctic...leads us [by 2030] to...a temperature beyond which humans have never existed on the planet." Guy McPherson, professor emeritus of University of Arizona in Environmental Studies, shares highlights from his compilation of recent reports on climate change effects. Their number and extent have grown exponentially since he began five years ago. In this interview, he shares his personal journey through despair and deep grief to recent acceptance. "I suspect we get to see the end of this movie... Nobody else in human history [has]... We get to see how humans act in the face of their own demise."