

Summary of Steve Sandstrom's public lecture on Thursday, April 12, 2007 - Paul Whitaker

As part of the Affluenza Shared Reading - Shared Thoughts program, Steve Sandstrom came to UWMC on April 12 & 13, 2007. Steve is the Environmental Education Coordinator for the Sigord Olson Environmental Institute at Northland College and has extensive professional and personal experience in environmental education, green building techniques, and green consumerism. In addition, he and his wife Nancy operate the Pinehurst Inn, an award-winning green bed and breakfast in Bayfield. Steve also has been actively involved in the eco-municipality movement in Bayfield and the surrounding communities. During his visit to UWMC, Steve presented a Soapbox Lecture on this eco-municipality work for the College of the Emeriti, was a guest instructor in three courses, and gave a public evening lecture. All were very well received. What follows is a brief summary of his public lecture entitled "Global Climate Change and the American Consumer: How You Can Make a Difference."

Steve began by connecting global climate change to consumerism. "We have met the enemy, and he is us," he stated. We should not point the finger at the manufacturers of consumer goods, because they only produce goods that we are willing to buy. He then went on to summarize some of the evidence for global climate, including key findings from the recent IACC reports on climate change, Al Gore's film *An Inconvenient Truth*, data from ice cores and melting ice caps, and so on.

Critics of actions to slow or reverse climate change often claim that such actions would harm the economy. However, as Gaylord Nelson stated in *The Bankruptcy Files* (1994), the economy is a subset of the environment. Steve showed a Venn diagram of three partially overlapping circles labeled "social equity," "economy," and "environment." The center region, containing portions of all three circles, was labeled "harmony." And surrounding them all was a circle labeled "spirituality/moral compass." Clearly, Steve's view of the environmental crisis and potential solutions is more encompassing than just the physical environment and economic growth. We have to consider social justice in our approach to solving these complex problems.

With this introduction, Steve moved into the "what can we do" part of his talk, which was organized around three major ways that we, as individual consumers, have major environmental impacts: food production, transportation, and household operations. The overall approach he presented in each of these areas was simple: use less stuff. However, we are often unaware of the full extent of our resource use, given the way our goods and energy are produced and distributed. Awareness of these "hidden" uses of resources is essential.

Food production uses 73% of the Earth's fresh water, occupies 45% of its land area, causes 38% of the common water pollution, and is responsible for 12% of greenhouse gas emissions and 17% of fossil fuel use. An average of three calories of fossil fuels are consumed per food calorie produced. Manufacturing synthetic fertilizers consumes more energy than is required to till, cultivate, and harvest all crops in the U.S. The average food item in the U.S. travels 1400 miles from farm to plate. These impacts can be reduced by buying local foods, growing some of your own or joining a Community Supported Agriculture (CSA) farm. And if we Americans reduced our consumption of feedlot-produced beef by just 10%, we would save enough grain to feed 60 million people for a year!

Production and use of cars and light trucks use 2% of the Earth's fresh water, occupy 14% of its land area, cause 7% of the common water pollution, and are responsible for 48% of toxic air pollutants, 24% of common air pollution, and 28% of greenhouse gas emissions. In 2006 alone, Americans purchased 17 million vehicles. Just over a quarter of these were SUVs, and 11.5% were truck-based

SUVs. We tend to overestimate the impact of large, showy SUVs – for example, just 30,000 Hummers were sold, representing just 0.002% of all vehicle purchases. Based on average mileage and 15K miles per year, SUVs consumed ~2 billion gallons of gasoline, whereas other cars consumed ~9.4 billion gallons. While drivers of non-SUV vehicles may be inclined to point the finger at SUVs, we have to recognize that non-SUVs still use more resources and have more environmental use overall. Clearly our choice of vehicle car has a major influence on how much gasoline we consume, yet we can reduce our fuel consumption by up to 20% simply by changing how we drive and maintain our car. For example, we should strive for slower starts, more gradual stops, regular tune-ups, weekly checks of tire inflation, and removal of unused roof racks (this alone can reduce fuel use by 12%!). Other ways to reduce our environmental impacts due to transportation include purchasing hybrid cars, converting cars to burn on used fryer grease, car sharing (see sharemycar.com), telecommuting, carpooling, bicycling, using mass transit, and flying less.

Routine household operations are responsible for 35% of greenhouse gas emissions and 32% of common air pollution, among other environmental impacts. Much of this is centralized and somewhat invisible to most of us, as in the production of electricity used in our homes. Some of the many actions we can take to reduce the ecological footprints of our homes include:

- purchasing toilet paper made from recycled fiber (would save almost 300,000 trees per year!)
- reading labels to ensure products are “Earth-friendly”
- recycling rather than discarding
- using a freecycle website to give away usable but no-longer-needed goods
- composting organic wastes
- choosing renewable energy if at all possible – solar hot water systems have big up-front costs, but can pay-off the investment fully in 8 years, after which all hot water heating is free
- replacing incandescent bulbs with compact fluorescents
- installing and using a programmable thermostat
- lowering your thermostat by 2 degrees in winter and raising it 2 degrees in summer if you have air conditioning
- cleaning or replacing furnace and air conditioner filters regularly
- choosing energy efficient appliances – use the Energy Star ratings
- using a clothesline instead of a clothes dryer when possible
- insulating and weather stripping our homes
- reducing hot water use
- planting a tree

In addition, we can encourage schools and businesses to reduce their environmental impacts, support organizations working to conserve forests worldwide, and consider the environmental consequences of our investments.

Throughout his talk, Steve Sandstrom documented the environmental consequences of the way we live our lives, yet was optimistic that there were many ways we can significantly reduce our ecological footprints. In this way, Steve differed from Bill Rees (on campus in November, 2006), who argued that individual actions are of limited use without centralized regulatory and policy changes that strongly enforce adoption of these footprint-reducing actions. In contrast, Steve has been active in encouraging small communities to adopt eco-municipality resolutions, which is sort of a grass roots, bottom-up approach that encourages communities and individuals to take positive steps like those he discussed in this public lecture. I think many audience members left Steve’s talk energized and committed to adopting some actions to reduce their ecological footprints.