Green Bike Tour Seeks European Alternative Energy

Early Iowa immigrants, finding a landscape much like the one they left, named two of their new communities Schleswig and Holstein. A group of modern-day Iowans recently saw firsthand how our state could adopt something else from that region of Germany, wind power. One visible difference today between Iowa and the German state of Schleswig-Holstein is a profusion of wind turbines. The German state is getting 18 percent of its total electricity from wind power, while Iowa is getting less than 3 percent. In February of this year, wind produced 50 percent of Schleswig-Holstein’s electric needs and on one day, February 26, wind power supplied all of the electricity used by the entire state. Another difference in the two states is that Schleswig-Holstein plans to boost wind power production, while Iowa has no plans at all. All over Europe, in both rural and urban areas, government policy is setting a course for increased use of renewable energy sources, a course that makes good sense both environmentally and economically. Learning more about Europe’s new energy and bringing the information home to Iowa was the purpose of the Green Bike Tour - a trip by bicycle to alternative energy sites in Northern Europe. We rode through Holland, Germany, and Denmark from June 17th to July 8th. One of our visits was with...
Karl Martin Hentschel, minister of Finance and Energy in the State Parliament of Schleswig-Holstein. Mr. Hentschel, who leads the Green Party, told us that 15 years ago people laughed at the Greens when they said wind could provide substantial energy. Now, wind power is credited for giving the German economy a shot in the arm. In addition to making the country less dependent on imported fuels, wind-machine manufacturing and installation have created many jobs, and now is second only to the automobile industry in its demand for steel. Schleswig-Holstein has a goal of providing 50 percent of its electrical needs from wind energy by 2010. The present government considers this goal very achievable if offshore wind development works out. Much of the other 50 percent will come from organic waste from farms, homes and restaurants which will be separated to become a source of biomass energy.

Due to the extensive similarities in geography and population, Iowa can learn a lot from this rural German state. Farming there is heavily subsidized so new sources of income for farmers make them more independent. Wind is called the farmer’s second harvest. Biomass will become a third. Iowa can become more like Europe if we demand a new state energy policy with a pro-renewable and pro-efficiency energy policy. Instead of seeing our energy dollars shipped out of state to buy coal that pollutes our air, Iowans will see jobs and spinoff benefits in our local communities.

The Green Bike Team outside Apeldoorn City Hall. Pictured from left to right; Gail Barels, David Osterberg, Joe Bolckum, Jim Cooper, and the solar bike.

Environmental Health Science Institute for Rural Youth

The 2002 Environmental Health Sciences Institute for Rural Youth (EHSI) was held from July 15-19th at The University of Iowa. This program is a one-week residential program for fifteen of rural Iowa’s gifted students who are currently enrolled in 9th grade and have a strong interest in learning about environmental health sciences. Students from rural school districts often have fewer opportunities to learn about science and environmental health. Therefore, applicants must be from a community of 2500 people or less. This year’s participants traveled to Iowa City from all four corners of the state, including the communities of Lamoni, Stanwood, and LeGrand.

Students participated in a variety of learning activities including lectures, laboratory experiments, and field exercises. Internationally recognized researchers taught at EHSI and discussed topics such as water and air quality, toxicology, epidemiology, bioterrorism and environmental policy. “EHSI gives our faculty the opportunity to translate environmental health research to these budding young scientists,” said EHSRC director, Peter Thorne. “Their enthusiasm is palpable and infectious. How many 15-year-olds get to do science along side world class researchers?” EHSI students participated in hands-on learning activities in Dr. Thorne’s Inhalation Toxicology Facility. They were able to evaluate lung cells and learn about the health effects of inhaled agricultural dust.

2002 Pilot Grants Awarded

This past June, the EHSRC awarded $126,000 to investigators through the center’s pilot grant program. The program’s goals are to enhance and promote research and training in the environmental health sciences, and is open to all UI researchers interested in environmental health, with priority given to junior investigators. Three grant programs are available to applicants: environmental health research, community-based participatory research, and international environmental health research.

Following are the 2002 grants and recipients:

Environmental Exposure Assessment of Perfluorooctane Sulfonate in Various Environmental Matrices
Bryan Boulanger, graduate student; Jerald Schnoor, Ph.D., professor of civil and environmental engineering; and Keri Hornbuckle, Ph.D., associate professor of civil and environmental engineering. ($16,000)

Effects of Early Life Endotoxin Inhalation on Murine Hyperresponsiveness in Adulthood
Caroline George, M.D., assistant professor of pediatrics; Katarina Kulhankova, M.D., research assistant, occupational and environmental health and Peter Thorne, Ph.D., professor of occupational and environmental health. ($20,000)

Ambient Air Quality in the Vicinity of Concentrated Animal Feeding Operations
Brad Lester, graduate student; Peter Thorne, Ph.D., professor of occupational and environmental health; Aaron Peck, graduate student; Keri Hornbuckle, Ph.D., associate professor of civil and environmental engineering; Kelley Donham, D.V.M., professor of occupational and environmental health; Patrick O’Shaughnessy, Ph.D., assistant professor of occupational and environmental health; and David Osterberg M.S., associate professor of occupational and environmental health. ($20,000)

Application of an RA/GIS Methodology to Evaluate Sanitary Risk Factors and Water-Related Disease
Shannon Marquez, Ph.D., assistant professor of occupational and environmental health; Ousman Sowe, The Gambia College School of Public Health; and D.M.B. Jagne, The Gambia College School of Public Health. ($10,000)

Understanding Selenium Levels in Iowa and their Association with Prostate Cancer
Leslie Dennis, Ph.D., assistant professor of epidemiology; Linda Snetelaar, Ph.D., associate professor of epidemiology; and Peter Thorne, Ph.D., professor of occupational and environmental health. ($20,000)

Association Between Multiple Chemical Sensitivity and Anxiety Disorders
Catherine Woodman, M.D., associate professor of psychiatry; Greg Couser, M.D., resident; and Donald Black, M.D., professor of psychiatry. ($20,000)

Exposure of Grain Dust and Ammonia to Asthmatic Subjects: A Concentrated Animal Feeding Operations (CAFO) Model
Sigurur Sigurdrason, M.D., pulmonary fellow, internal medicine; Joel Kline, M.D., associate professor of internal medicine; Patrick O’Shaughnessy, Ph.D., assistant professor of occupational and environmental health. ($20,000)

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