

## Helping layperson understand science of pollution and more

Wiltonian heads Center for Environment and Population

BY JEFF YATES

Twenty years ago sprawl wasn't a common term applied to residential development and recycling hadn't become a daily activity.

During the past two decades, however, abrupt changes have occurred; houses have started popping up with increasing frequency where hay fields once stood and traffic congestion has become the norm. At the same time, a growing understanding of the environmental effects of population and its movement has blossomed, spurred in large part by the changes people were seeing around them.

Now there are entire academic disciplines dedicated solely to studying how human actions can harm, or help, the natural world.

While there are reams of scientific documents out there that chronicle the changes development and population have caused in the environment, most are not accessible, or even comprehensible, to all but those with Ph.D.s.

This is where Vicky Markham and the Center for Environment and Population come in, taking all of that information and reducing it to more user-friendly language.

Founded in 1999 by Ms. Markham, who moved to Wilton with her family last July, the Center for Environment and Population is a non-governmental organization headquartered in New Canaan that acts as a clearinghouse of sorts, compiling all the best and latest scientific data on housing trends, population density and movement and the impact these things have on the environment.

"We try to find the best, most current scientific information that exists, and we distill it into publications and other types of forms so that everyone can understand it," said Ms.

Markham.

Recently the Center for Environment and Population and the World Wildlife Fund hosted a forum in New Canaan discussing the ways that population impacts the environment. The event was in coordination with and endorsed by the United Nations Environment Programme as part of World Environment Day, an environmental awareness campaign.

Ms. Markham has been doing environmental and population work for more than 20 years, earning her master's degree in environmental sciences from Yale University and

then working in the field. Over the years she has created documentary films on population and the environment for Turner Broadcasting, worked for Planned Parenthood International, covering Africa and Asia, and worked in Switzerland for the World Wildlife Fund. The Center for Environment and Population began as a project of the Tides Center in San Francisco and an offshoot of the American Association for the Advancement of Science, a Washington, D.C., federation of scientists Ms. Markham had directed.

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Vicky Markham, pictured at her home in Wilton, is the founder of the Center for Environment and Population in New Canaan, which has produced numerous reports on the impacts that population has on the environment, including the one pictured below. Her group takes in the most recent scientific information and distills it into user friendly reports that may be read by anyone and don't require specialized degrees to understand. —Bryan Haefle photos

## Vicky Markham heads Center for Environment and Population

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For years, people couldn't see the effects their actions were having on the environment because Mother Nature is good at buffering toxins and pollutants, said Ms. Markham. Fertilizers, pesticides, sewage, and other pollutants created by people were readily absorbed by vegetation in upland areas and around watercourses, filtering the harmful elements out of rain runoff, but eventually the human output began to show as the natural world became saturated and couldn't keep pace, she said.

"Now people are waiting in traffic longer, or they're seeing houses pop up all around them," she said. "It's getting to the point now where we're hitting thresholds, the scientists tell us, that we can't go anymore."

Warnings about mercury in fish, acid rain, these are all visible signs that humans are increasingly putting out more toxins than the environment can take in, but the trade-off is that with these increased levels of pollution people are beginning to realize the impact they have, and looking for ways to reduce the strain on the environment, she said.

"I really think people are starting to see things differently," said Ms. Markham, pointing out the recent Wilton Garden Club seminar on lawn care pesticides and health. "Kids are starting to learn environmental ethics."

While there's much that may be done on the advocacy side of environmental politics, pressuring for clean air bills or pollution-reducing measures, Ms. Markham's goal is simply to get the facts out to as many people, policy makers and advocacy groups as possible.

Her publications, including the U.S. State Reports on Population and the Environment, Issues on Population and the Environment, a report on the entire United States due out in September, and a planned report on the state of Connecticut soon after that, pull together the knowledge and case studies of the best experts in the various fields, from freshwater ecosystems to housing trends.

The reports are then used by advocacy groups such as the World Wildlife Fund, the Nature Conservancy and others to increase awareness of the problems caused by land use, habitat fragmentation and other impacts caused by a growing population.

"We present the scientific basis, they come in more on the advocacy side, the policy side," said Ms. Markham. "We're not partisan. We try our hardest to stay balanced."

Because the center doesn't create reports promoting or decrying population trends and their impacts, but just presents the numbers without the scientific jargon, the publications can be understood and used by most.

In fact, when Ms. Markham completed a report on the population of New Hampshire and its environmental effects, the board of realtors actually used the report and its analysis of housing trends to determine where the best locations were for new home development. It might not have been the type of use Ms. Markham expected, or even encouraged, but it was a valid use of the information her group had compiled, she said.

Ms. Markham has hosted numerous lectures, roundtable discussions and presentations on the ways that population affects the environment. On Earth Day she was one of the featured speakers at a

United Nations Association of the United States of America event in New York looking at the role of America in a global context.

The United States, the third most populated country in the world, is the only industrialized country expected to see increased population growth in the coming years and decades, said Ms. Markham.

"Per capita the U.S. by far has the largest resource use," she said. "We have the largest ecological footprint."

While it is typically affluent areas, such as Wilton, that use the most resources, such as building material for larger homes, more fuel for vehicles, and fertilizers and pesticides for lawn maintenance, Ms. Markham said the affluent communities are often the ones most able to adopt environmentally friendly alternatives.

"When you have a more affluent population, you are able to try more environmentally sound options," such as organic food, said Ms. Markham. "You're getting people who are able to buy hybrid cars. They'll try these more expensive commodities in the market."

Even in towns where the population is growing rapidly the amount of environmental impact may be dramatically smaller than in other, smaller towns with poor land use practices. If a town decides to develop cluster housing as opposed to residential sprawl, which breaks apart larger tracts of land and decreases biological diversity, or adopts energy-efficient equipment in schools, municipal buildings, supermarkets, and homes, the impact on the land is greatly decreased, said Ms. Markham.

"A lot of people in one area can have a smaller impact based on the choices they make," she said.