

## We Chose This?

Karl Wagener Executive Director Council on Environmental Quality CT Invasive Plant Symposium October 11, 2066

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Karl Wagener Executive Director Council on Environmental Quality CT Invasive Plant Symposium October 11, (2066)







## "It's difficult to make predictions, especially about the future."



The pairs of figures above indicate by their comparative sizes the populations that will be supported eventually by different regions. North America will support 600,000,000, of whom 200,000,000 will be in the United States. The equatorial regions will be densest

## City Populations Predicted from Study of Flies

Experiments with Pumpkins, Yeast and Rats Make Possible Forecasts of Cities' Growths

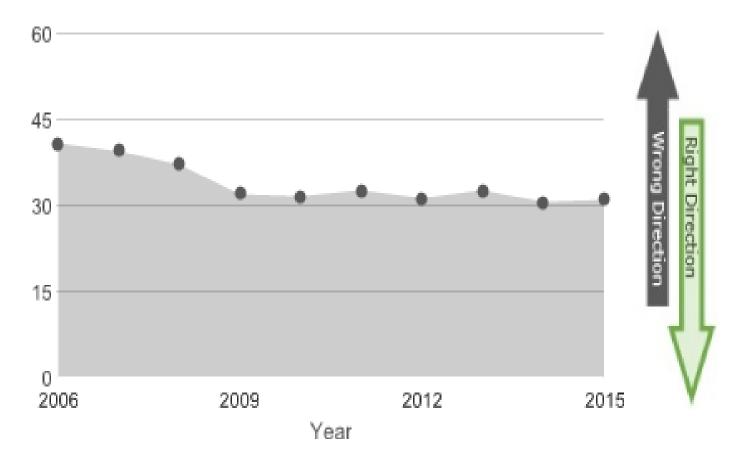
By MYRON M. STEARNS

HEY were weighing a rat in one of the research laboratories of Johns Hopkins University at Baltimore. Weighing it with particular care, for a strange reason—to find out what the population of New York City would be in A.D. rapid. Finally, after it reaches maximum speed, it begins to slow down again, the slowing-down rate almost exactly reversing the acceleration. The division of cell becomes less frequent, until the pumpkin reaching full size, stops growing.

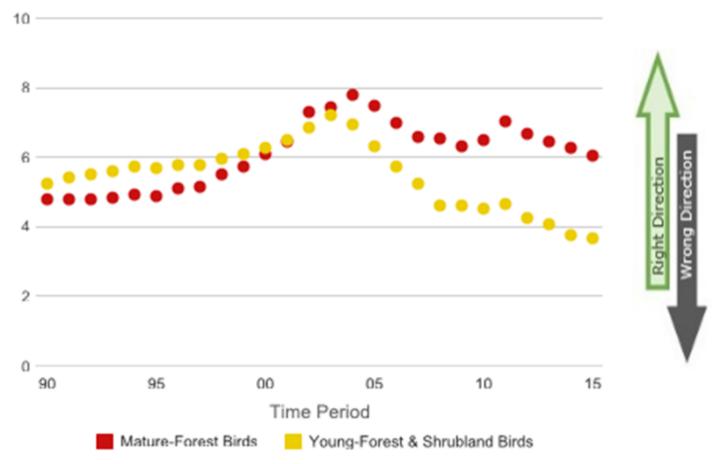
avestigation shifted to the tail

who the whole rat or the wine sampkin. But Dr. Pearl was cudeavoring to trace a similarity between the growth of the rat, the pumpkin and the tadpole tail in an effort to establish that the seemingly haphazard increase in the number of people in the world in

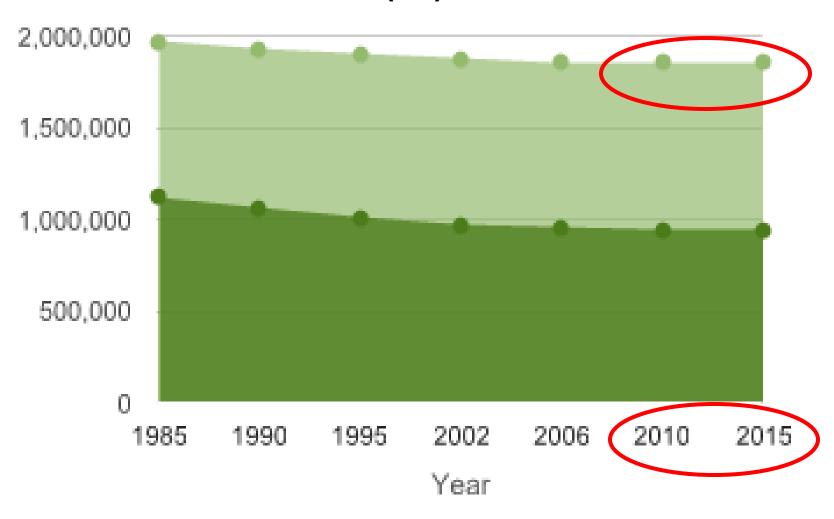
#### **CEQ Annual Air Pollution Index**



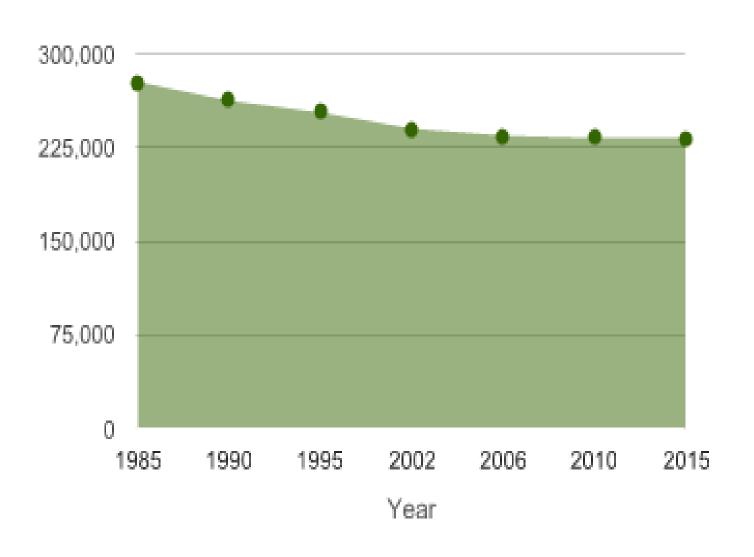
#### **CEQ Forest Bird Population Index**



#### Forest Acres (All) Core Forest Acres



#### **Acres of Agricultural Fields in CT**



Land development is no longer the number one threat to habitat and natural systems in Connecticut.

So what is #1?





#### **Factors and Choices**



### Energy Sprawl Is the Largest Driver of Land Use Change in United States

Published: September 8, 2016 • http://dx.doi.org/10.1371/journal.pone.0162269

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Abstract

Introduction

Methods

Results

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#### **Abstract**

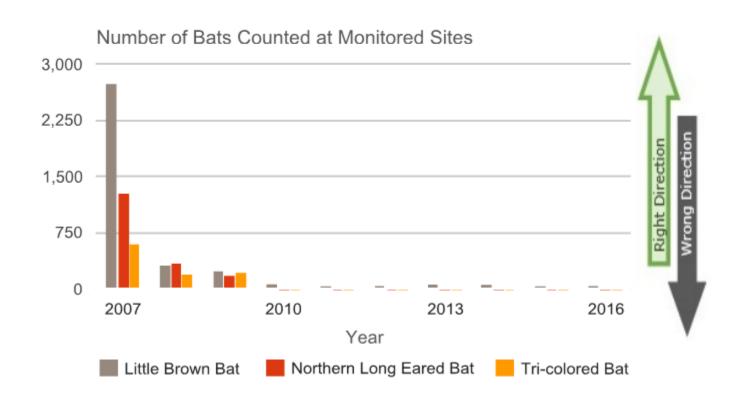
Energy production in the United States for domestic use and export is predicted to rise 27% by 2040. We quantify projected energy sprawl (new land required for energy production) in the United States through 2040. Over 200 000 km<sup>2</sup> of additional land area will be directly impacted

"In my view, it's the greatest threat to agriculture and the land available for farming today."

Steven Reviczky
Commissioner of Agriculture
August 1, 2016

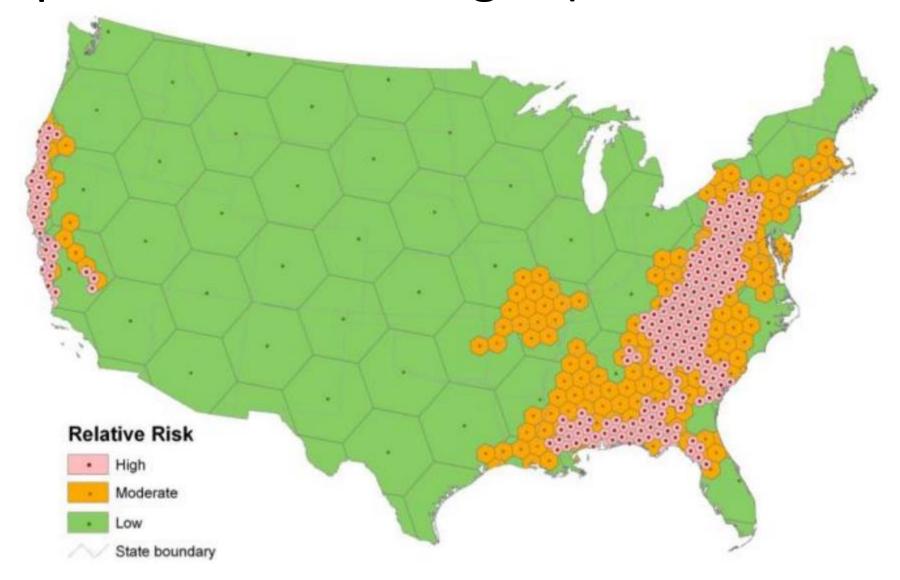
#### **Bats**

Cave-dwelling bat species have declined catastrophically.





#### Risk Map for Ramorum Blight (Sudden Oak Death)





This place is gorgeous!

## Election 2016, when it comes to invasive species the silence is almost deafening

Posted on 9 June, 2016 by Andrew Cox in biosecurity, Blog, Feral Herald, law & policy



"We're more than halfway through Australia's marathon federal election but yet to hear what the major parties will do to confront the environmental threats posed by invasive species. The silence is almost deafening."

# Trump surrogate says Donald would make the Great Lakes 'great again'



**Invasive Species and Disturbances: Current and Future Roles of Forest Service Research and Development** 

Mary Ellen Dix1, Marilyn Buford2, Jim Slavicek3, Allen M. Solomon4, and Susan G. Conards

"The success of an invasive species is in large part due to favorable conditions resulting from the complex interactions among natural and anthropogenic factors such as native and nonnative pests, fires, droughts, hurricanes, wind storms, ice storms, climate warming, management practices, human travel, and trade. Reducing the negative effects of invasive species and other disturbances on our natural resources is a major priority."

"Meeting this goal will require an understanding of the complex interactions, development of tools to minimize new invasions, and effective management of systems that have already been changed by invasive species.

Resources needed to accomplish the foregoing outcomes include the following:

- 1. Modelers skilled in multiobjective stand dynamics and forest management modeling.
- 2. Integrative specialists whose expertise incorporates ecological, social, and economic effects.







Six factors	Our choices	
The climate will change.	?? (probably not our choice)	
<ul> <li>Rate of land disturbance</li> <li>vs.</li> <li>Rate of land conservation</li> </ul>	Conservation, Regulation and Incentives: Our choice!	
More international trade and travel	Will education and voluntary efforts be enough? (No evidence for that)  If not, then we must elevate this as a public issue, and devote an appropriate level of state resources, or	
People and preferences will change		
• Indifference		
<ul> <li>Political will to spend to: regulate, educate and respond to invasions</li> </ul>		



#### Some things do get better.

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#### for Radio

osits of magagnet Cove,
Hot Springs.
Waves with
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or having the

the belief that ninety percent of accidents are due to the pilot and not the plane.

#### Why Candy Explodes

COMETIMES candy explodes, and now and then confectioners find whole shelves of chocolate creams that have burst open. The cause, according to scientists of the U. S. Bureau of Chemistry, is yeast in the sugar filling. Ordinary yeast, like that used for making bread, will not grow in sugar; but there is a special yeast that finds the sweet creamy mixture ideal. Its fermentation produces gas that bursts the candy.



D shines, the bird recently str biegel, German b spectacle when w liant dye of its pale pink, the le ammonia in rain eats probably fur of the natural Dr. Krumbiegel. dye is a compoun



## What do You have to say

when you are with interesting people?

Can you hold up your end in a general conversation—or are you tongue-tied when with people?

AFTER the weather has been discussed and exhausted it is only the well informed man—the good talker —who can hold the attention and interest of his friends.

Everybodyenvies a good talker. You



What Worth-While People Are Talking About

Today the most entertaining, the most fascinating subjects are those that deal with applied science—radio... aeronautics... the automobile: new discoveries in health have been condensed all that you probably will ever want to know about science.

You are assured of the accuracy of the answers in THE POCKET GOIDE TO SCHNEE, as it was edited by Dr. E. E. Free, who has a remarkable genius for condensing the known facts about the world we live in

## Council on Environmental Quality

www.ct.gov/ceq