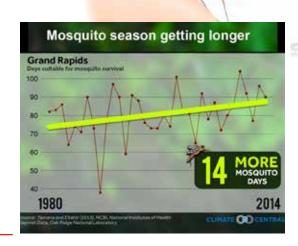
Nature Week at Heritage Village - August 16th

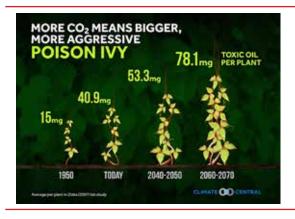
Pests in our warmer times

Scientific American just released a summary of predictions of the future of three of our favorite summer pests. These changes are driven by increased CO2 in the air and by warmer weather. I thought I would share the news.*

Mosquitoes

You know it is summer when you get that first mosquito bite. That irritant is arriving earlier and lasting later every year. Here is the data for number of mosquito days per summer for Grand Rapids, the nearest city cited by Climate Central. Fourteen more mosquito days per year is a 20% increase since 1980.





Poison ivy

The National Wildlife Federation reports that 350,000 cases of poison ivy occur annually in the U. S. "Poison ivy grows faster when there's more CO2", Doug Inkley, a National Wildlife Federation scientist, said. The bigger plants produce more leaves containing the toxic oils (2.5 times as many as 1950). In addition, the high CO2 levels cause the plants to produce a more toxic form of the inflaming oil.* So look forward to bigger and more toxic poison ivy.

Ticks

"Tick check" has recently entered Mackinaw's vocabulary. Both the new abundance of ticks and the potential health risk from Lyme disease makes this self-grooming inspection a routine chore after a walk in nature.

Projected Changes in Tick Habitat

Probability of expanded tick range

0-19 20-39 40-59 60-79 80-99

"The CDC estimates that about 300,000 people in the U.S. are diagnosed with Lyme disease each year, primarily in the Midwest and Northeast. Warming could also cause explosions in tick populations, as higher winter temperatures fail to thin out overwintering populations, Inkley said."*

Lyme Disease is becoming more likely because of:

- 1) changes in the geographic distribution of ticks,
- 2) a lengthened transmission season,
- 3) higher tick densities, and
- 4) changes in human behaviors causing us to spend more time outdoors.

Land use, pest control, increasing international trade, and increased travel to tropical and sub-tropical areas all will influence the diseases we might receive in future years.

Does this gloomy news make you eager for winter?



by Sandy Planisek 2015

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*http://www.scientificamerican.com/article/what-global-warming-means-for-4-of-summer-s-worst-pests/?WT.mc_id=SA_DD_20150731