July 27, 2012 Science, Certainties and Choices

Did you ever have a feeling in your gut, that you knew something, or at least strongly suspected something, but were unsure because you did not have the evidence? When the evidence does arrive, you have that satisfaction of, "Ah, ha! I thought so!"

For many years now I have observed the wild blueberry bushes flowering earlier than I had recalled. Were my early memories off because the child's sense of time is altered by the conviction that childhood is forever and summer is a lifetime in and of itself? We had long days of bike riding, kick-the-ball, making daisy chains and asking, "What do you want to do?" This was always answered with, "I don't know; what do you want to do?"

When I moved to Plympton as a young mother, I saw the local high bush blueberry plants sporting their little bloomer/Chinese lantern blossoms, and I thought for sure that it was early, but I doubted myself. How could I associate August with blueberries if the blossoms were beginning in June? I must have these memories of picking blueberries catalogued incorrectly, I thought to myself. And then I adjusted and began to enjoy the fact that blueberries would be available in July. I still wondered, though.

It was the panel of experts gathered by our State Department of Public Health who put this conundrum to rest for me; for one of the numerous topics discussed in connection Eastern Equine Encephalitis was climate change. One of the panelists specifically talked about the fact that blueberry bushes bloom earlier than they used to! He was stating a documented scientific fact; not just a gut feeling. Some aspects of nature have changed, just as we have observed, such as all those robins that, for whatever reason, do not bother to migrate as they used to and hang around all winter long. Or, are they really "our" robins? Perhaps they do migrate but don't have to go so far as they used to. Maybe my winter robin is a Canadian robin. I really like robins because I raised one as a pet one summer but I don't know them as individuals.

Robins eat a pretty good diet, with more protein in the morning and more fruit later in the day. We could learn from that! The robin's earthworm eating, lawn foraging habits leave them vulnerable to pesticide poisoning, though, and thus, are for chemical pollution, what the canary is to the miners. We need to learn from that! This is good to keep in mind when we are perusing the aisles of lawn care products, weed killers and pesticides. We, as individuals, are given a huge amount of trust, authority and ability to misuse and over-use poisons. And, yet, some people get very concerned and upset when there is an aerial spraying to reduce the risk of human cases of Eastern Equine Encephalitis (EEE).

When the State is trying to decide whether or not to conduct that spraying by airplane in order to save human lives, this matter is not taken lightly. The decision is not made as we might experience our choices and decisions when wanting to get rid of crabgrass, ants or caterpillars. At the State level, numerous departments are involved including legal, environmental health, public health, entomologists, toxicology, infectious disease, emergency preparedness and

response, and finally, the Department of Agricultural Resources having the say over the spraying itself, to name just a few. There's also involvement with the Massachusetts Division of Fisheries and Wildlife who, in 2008 voted to allow aerial spraying in priority habitat areas only if the Public Health Commissioner or the Governor declared a public health emergency.

While saving human lives is the main goal, the decision to conduct widespread aerial spraying is not approached without scientific data to support the decision leading to the declaration of an emergency and it is not decided without concern for the environment. The unprecedented numerous occurrences of EEE found in mammal-biting mosquitoes in mid-July provided the data. The product that is used for aerial sprayings is exactly the same (Anvil) as used by the Mosquito Control Programs and is applied at the same ultra low volume dose of about one half ounce per acre. If you are okay with ordering ground spraying, know that from an airplane, most of the tiny droplets don't even make it to your backyard; the few that do, quickly breakdown in sunlight, hours after the spraying has been completed.

I support this current method of response to outbreaks of EEE until the day arrives when we have a better choice that is just as effective. I'd rather see pesticides taken off the shelves for homeowner use than remove the ability for trained experts to save human lives.

To read the whole report from the panel of experts who gathered to share their knowledge in order to make our response plan the best it can be, read it at DPH's website:

http://www.mass.gov/eohhs/docs/dph/cdc/arbovirus/eee-expert-panel-report.pdf

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