## Chris Taggart

**From:** bjhoy@localnet.com
**Sent:** Sunday, November 6, 2022 8:48 PM
**To:** Ravalli County Commissioners Office
**Cc:** bjhoy@localnet.com
**Subject:** [EXTERNAL] New information on Imidacloprid

Dear Ravalli County Commissioners and Board of Health,

A conservation organization, Environmental Action is attempting to get neonicotinoids banned before it is too late to save the wildlife that are being driven to extinction by exposure to neonicotinoids, especially the insecticide, Imidacloprid. Interestingly, this conservation organization is light years ahead of government agencies with regard to the effects of Imidacloprid on white-tailed deer, birds and fish, all of which are supposed to be protected by MDFWP in Montana and the Environmental Protection Agency in the entire United States.

Scientists have done new testing of the spleens of white-tailed deer in Minnesota. The neonicotinoid pesticide that the scientists tested the WTD for in Minnesota was imidacloprid. There is an interesting reason for the researchers to do this testing. In 2019, researchers in South Dakota did a study on WTD deliberately exposed to imidacloprid that was published in Nature. That study received world-wide attention. What should be of interest to you is that the study was based on the two studies that Bob Hoy and I and our colleagues published in peer reviewed journals on the two main types of external birth defects in wildlife that Montana Department of Fish, Wildlife and Parks' biologists Bob Hoy and John Firebaugh first reported on wild ruminants from here in Ravalli County in 1996. After the original South Dakota white-tailed deer and imidacloprid study was done, the researchers measured the amount of imidacloprid in the spleens of WTD in North Dakota. After finding higher levels in spleens of wild deer there than they found in the spleens of their study animals that were deliberately given the highest level of imidacloprid in their water, the researchers began studying the WTD spleens in Minnesota. They tested deer spleens from near where the imidacloprid was applied and in remote regions far from fields. They found high levels of imidacloprid in spleens in all areas, no matter how remote. Their latest report is that 94% of deer spleens from Minnesota tested positive for imidacloprid. (See links to articles below.)

All of this testing and research happened because of what we published in our first two studies on the birth defects documented here in Montana, and especially in Ravalli County. Unfortunately, as of late 2019, the person I contacted in Helena told me that all the conditions Bob Hoy originally reported and that we reported to the scientific world in our studies are "normal variations." Interestingly, the conditions (birth defects) that Bob Hoy and John Firebaugh brought to the attention of the MDFWP in 1996 have prompted a much wider concern and greater amount of testing and research than any "normal variations" ever would.

Both underdeveloped facial bones and reproductive malformations, especially ectopic testicles, are considered by most medical professionals and medical books to be extremely serious birth defects on mammals. For some reason, most wild rodent species have a fairly high prevalence of male reproductive malformations, but not underdeveloped facial bones. Underdeveloped facial bones are also considered to be serious conditions on birds and other vertebrates. A vertebrate that has been somewhat affected by underdeveloped facial bones is the canine such as wolves and dogs.

Of course, human children have been badly affected by underbite and overbite in the same time period, with overbite (underdeveloped lower jaw and chin) being more common in recent years. Between 1995 and 2013, underbite was common on newborn children. Since 2014, overbite is more common on children according to dentists consulted. Prevalence of cryptorchidism is fairly high (30%) in premature male babies but not high in full term human babies.

Studies have shown that fetal exposure to imidacloprid and other pesticides can result in premature birth, so that is not surprising.

New articles on the results of the more recent Minnesota WTD spleen tests on white-tailed deer are referenced by Environmental Action below. Also important is the fact that we examined samples of wild ruminants other than WTD. Some of those, especially, pronghorn antelope, bighorn sheep and mule deer had a higher prevalence of the examined birth defects than the WTD. Elk have a lower prevalence of underdeveloped facial bones than smaller ruminants. Bison appear to have a high prevalence of male reproductive malformations and at least some bison calves are being born each year with an underbite. I have not observed a bison with an overbite or seen one in a documentary or a photo, so I am assuming that there are not many bison born with an overbite. However, if the calves with overbite die soon after birth, they would not be observed or photographed.

Obviously, all uses of imidacloprid should be banned as soon as possible to keep from damaging more human newborns. Anything that causes such severe damage to fetal WTD is very likely damaging human fetuses. For example, since neonicotinoids began being used, Autism has increased dramatically and it will not be long before 1 of every 2 children born in the United States will have Autism. They also say that prevalence of Autism will severely damage the U.S. economy.
Autism prevalence is 1 of 33 now and going up each year.
Neonicotinoids damage the brains of bees and birds and there is strong evidence that they are damaging the brains of other vertebrates, including human children. Studies have also shown that the neonicotinoids are not necessary for crop production and the food crops are much safer for human consumption if they are not used.

All the best,
Judy

This is the Forwarded message from Environmental Action <action@environmental-action.org> -----
Date: Thu, 6 Oct 2022 10:09:34 -0400 (EDT)

Subject: White-tailed deer and bee-killing pesticides

Nearly all white-tailed deer tested in Minnesota had neonicotinoid pesticides in their system -- the same pesticides that are killing bees.

Three years ago, scientists reported that more than two-thirds of examined white-tailed deer in Minnesota had neonicotinoid pesticides in their systems.[1]

Now that number has risen to 94%.[2]

Neonicotinoids -- or neonics -- are toxic to bees, birds and mammals.
The evidence is clear: The Environmental Protection Agency (EPA) should ban the worst uses of these toxic pesticides.

White-tailed deer are majestic forest creatures. It's just magical to happen upon a spotted fawn while walking in the woods.

But on the edge of the woods where deer love to graze, widespread neonic use is contaminating the deer's food. And neonics can lead to organ damage, birth defects, and lethargy in deer.[3]

What's alarming is that neonics aren't just found in deer near agriculture where neonics are regularly applied. Deer in as remote places as the Boundary Waters were found with neonics in their system.[4]

Deer aren't the only wildlife suffering from neonics. Birds and fish are showing signs of damage.[5] And of course, they have a devastating effect on bee populations.[6]

We're still working to stand up for wildlife and the wild places they call home, but with this new evidence, we must act to ban the worst uses of neonicotinoid pesticides.

Thank you,
The Environmental Action team

1. Rob Beer, "Study shows widespread neonicotinoid exposure in Minnesota white-tailed deer," Twin Cities, March 1, 2021.
https://www.twincities.com/2021/03/01/study-shows-widespread-neonicotinoid-exposure-in-minnesota-white-tailed-deer/amp/

2. Paul Richards, "Biologists in Minnesota are Finding More Insecticides in Whitetail Deer Than Ever Before," Field & Stream, August 29, 2022.
https://www.fieldandstream.com/conservation/whitetail-deer-insecticide-exposure/

3. Rob Beer, "Study shows widespread neonicotinoid exposure in Minnesota white-tailed deer," Twin Cities, March 1, 2021.
https://www.twincities.com/2021/03/01/study-shows-widespread-neonicotinoid-exposure-in-minnesota-white-tailed-deer/amp/

4. Paul Richards, "Biologists in Minnesota are Finding More Insecticides in Whitetail Deer Than Ever Before," Field & Stream, August 29, 2022.
https://www.fieldandstream.com/conservation/whitetail-deer-insecticide-exposure/

5. Mia Rabson, "No doubt that neonicotinoids are killing birds, bees, scientists say,"CBC News, September 17, 2019.
https://www.cbc.ca/news/politics/pesticide-bee-bird-deaths-neonicotinoids-1.4296357

6. Lauren Aratani, "Pesticide widely used in US particularly harmful to bees, study finds," The Guardian, August 6, 2019.
https://www.theguardian.com/environment/2019/aug/06/us-pesticide-neonics-toxic-harmful-bees-study