

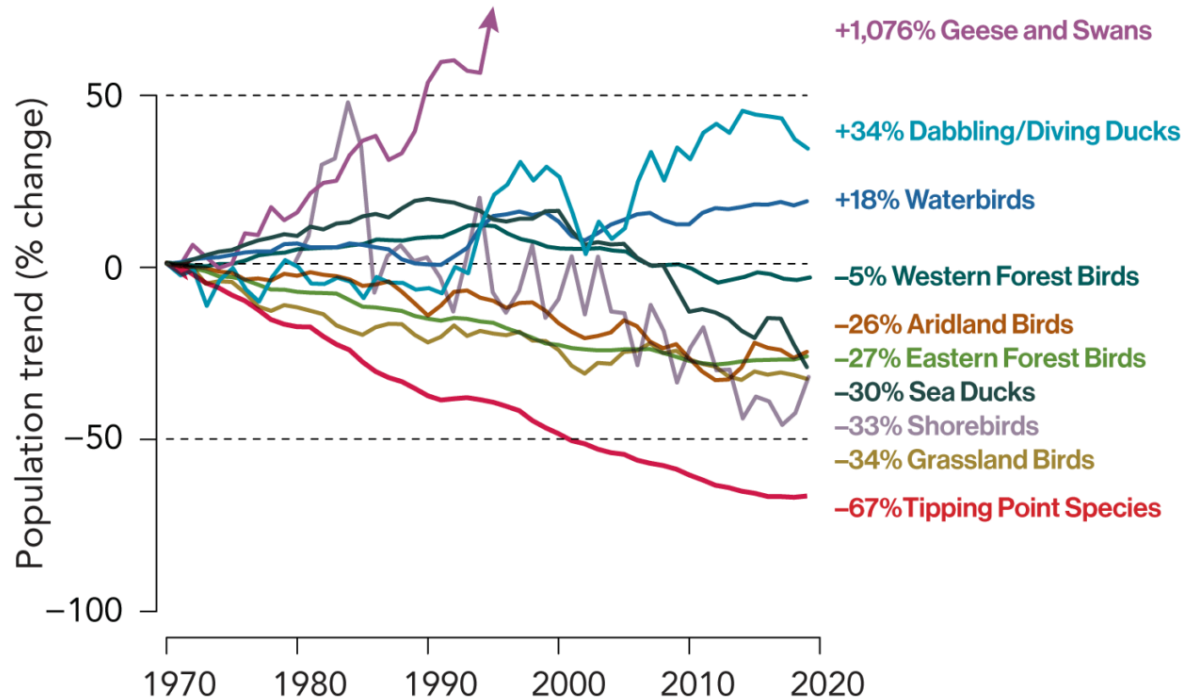


# Neonicotinoids and Birds

Testimony to Vermont House Committee on Agriculture, Food Resiliency,  
and Forestry

*Margaret Fowle, Conservation Biologist, Audubon Vermont*





## Three Billion Birds Lost – Cornell State of the Birds Report 2022

- 1 in 4 breeding birds have been lost from the US and Canada in the past 50 years.
- 70 Tipping Point Species in the US have collectively lost 2/3 of their populations in the past 50 years and are on track to lose another 50% in the next 50 years.
- Downward trends across the board
- Birds across the U.S. show downward trends in every habitat except in wetlands



Chimney Swift: 25% decline in Vermont

Common Nighthawk: 91% decline in Vermont



Purple Martin: 62% decline in Vermont

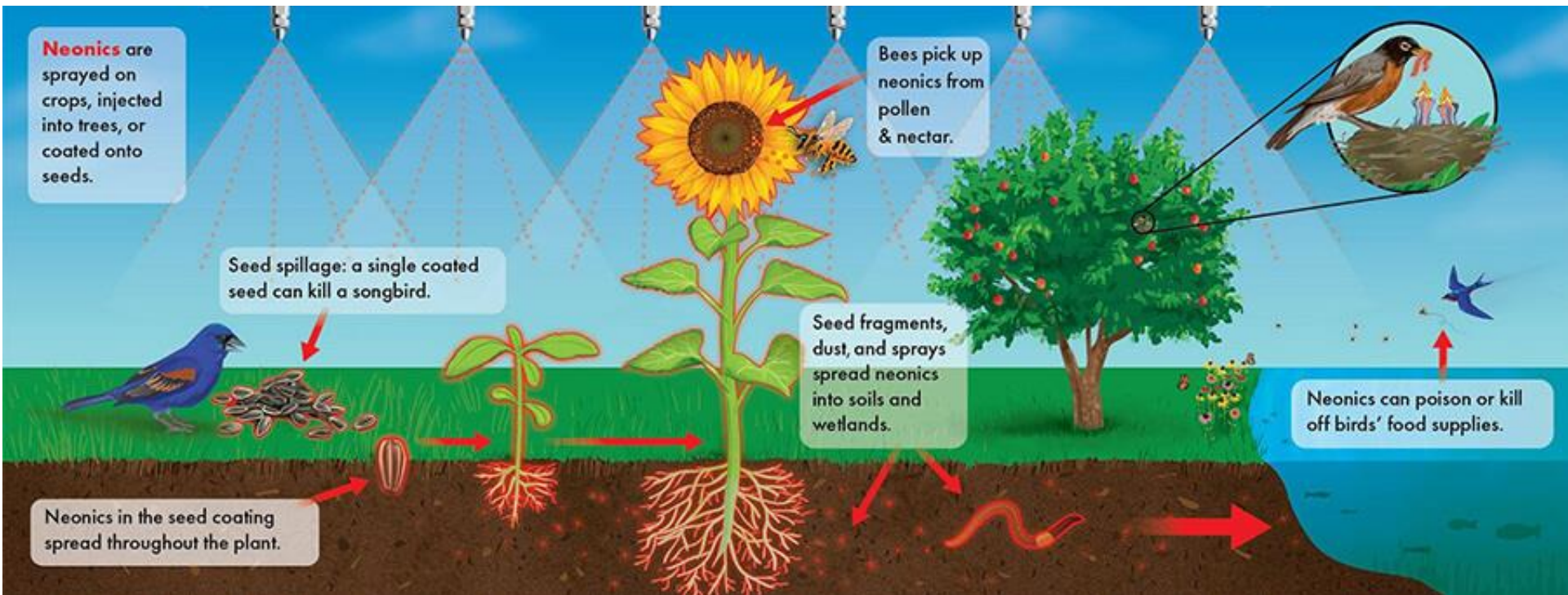


Eastern Meadowlark  
55% decline in Vermont









Source: American Bird Conservancy: <https://abcbirds.org/neonics>



## Direct Mortality

- One treated corn kernel could kill a bird the size of a Blue Jay
- 78% of 36 wild-caught White-crowned Sparrows had detectable levels of a neonic in their bloodstream
- Predators may consume neonics by eating other species that have died from exposure, and concentrations may increase as the chemicals move up the food chain



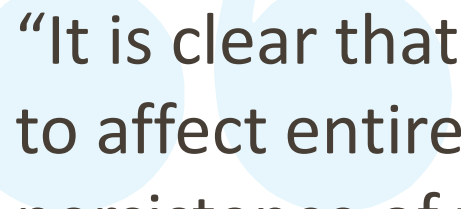
## Direct Sublethal Effects

- Disorientation
- Delayed migration
- Neurological convulsions
- Weight loss
- Interference with reproduction
- Effects on fertilization rate, development, immune system, chick and adult survival



## Indirect Effects

- Reduce insect prey availability
- Contaminate water sources



“It is clear that these chemicals have the potential to affect entire food chains. The environmental persistence of the neonicotinoids, their propensity for runoff and for groundwater infiltration, and their cumulative and largely irreversible mode of action in invertebrates raise significant environmental concerns.”

*American Bird Conservancy*



Questions