



Town of Newmarket Deputation

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North America has Lost Almost 3 Billion Birds in the Last 50 Years (3BillionBirds.Org)

We've Lost One in Four Birds Since 1970

ACROSS THE CONTINENT, NUMBERS HAVE PLUMMETED, EVEN AMONG COMMON SPECIES

In less than a single lifetime, North America has lost more than one in four of its birds, according to a report in the world's leading scientific journal.

Published in *Science* by researchers at seven institutions, the findings show that 2.9 billion breeding adult birds have been lost since 1970, including birds in every ecosystem.

The losses include iconic songsters such as Eastern and Western Meadowlarks (down by 139 million) and favorite birds at feeders, such as Dark-eyed Juncos (down by 168 million) and sweet-singing White-throated Sparrows (down by 93 million).

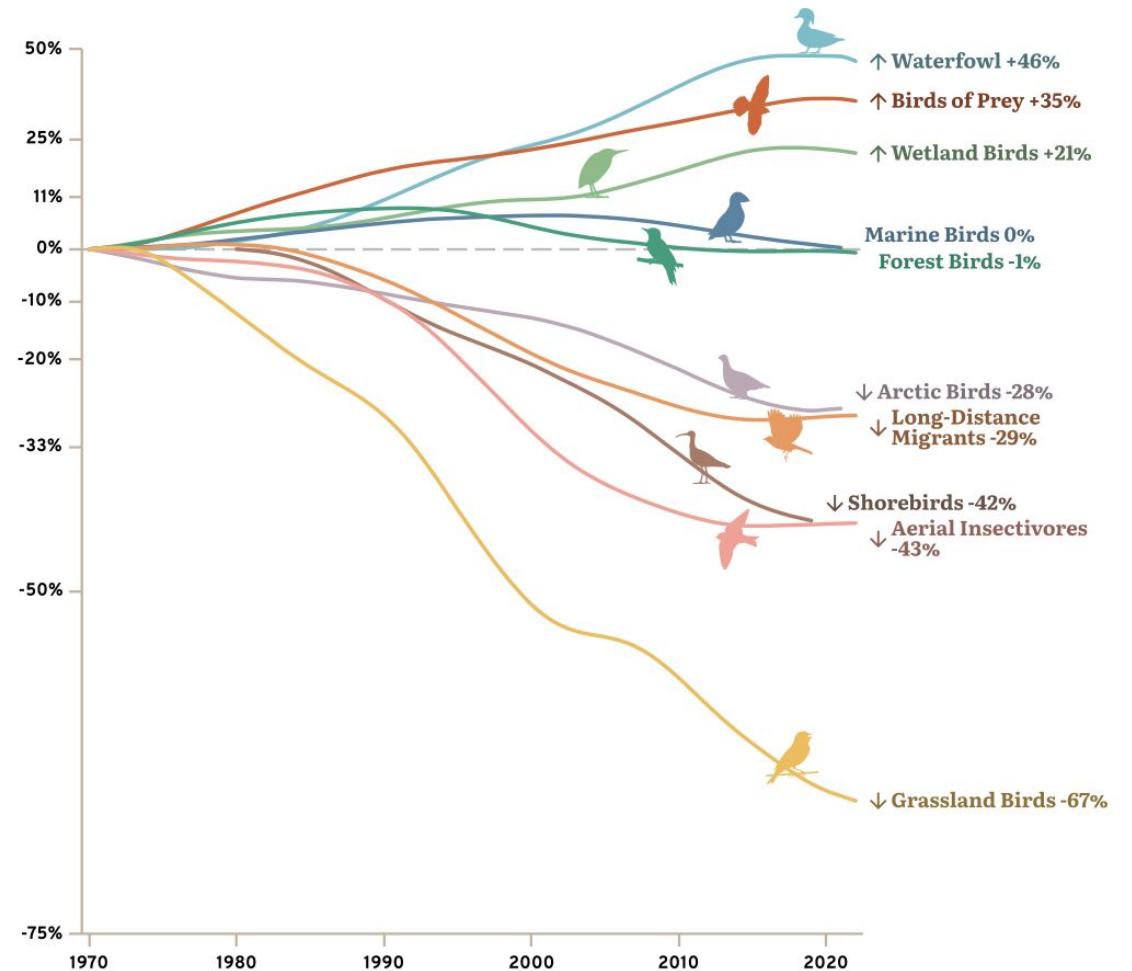
The disappearance of even common species indicates a general shift in our ecosystems' ability to support basic birdlife, the scientists conclude.



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- Habitat loss including development, window collisions and outdoor cats are all major contributors to this issue
- One of the easy ways that the average person can help to support wild bird populations in their communities is by offering supplemental food

Population change since 1970



Studies Show Feeding Benefits the Birds

- Recent studies have demonstrated that offering supplemental food (vs no food) for our backyard birds offers a huge number of benefits including:
 - Significantly greater body fat score (helps birds better prepare to buffer against environmental disturbances)¹
 - Reduced stress (heterophil to lymphocyte ratio- standard tool assessing long term stress in poultry)¹
 - Greater total antioxidant capacity (important to fertility, growth, immune function, resistance to aging, brightness of plumage)¹
 - Significantly enhanced body condition¹
 - More rapid feather growth¹
 - Significantly greater immune defense (greater microbial killing ability)¹
 - Higher % of young recruited into breeding population (higher survival rates of fledged young birds)¹
 - Survival rates 38% higher in areas where bird feeders are present¹



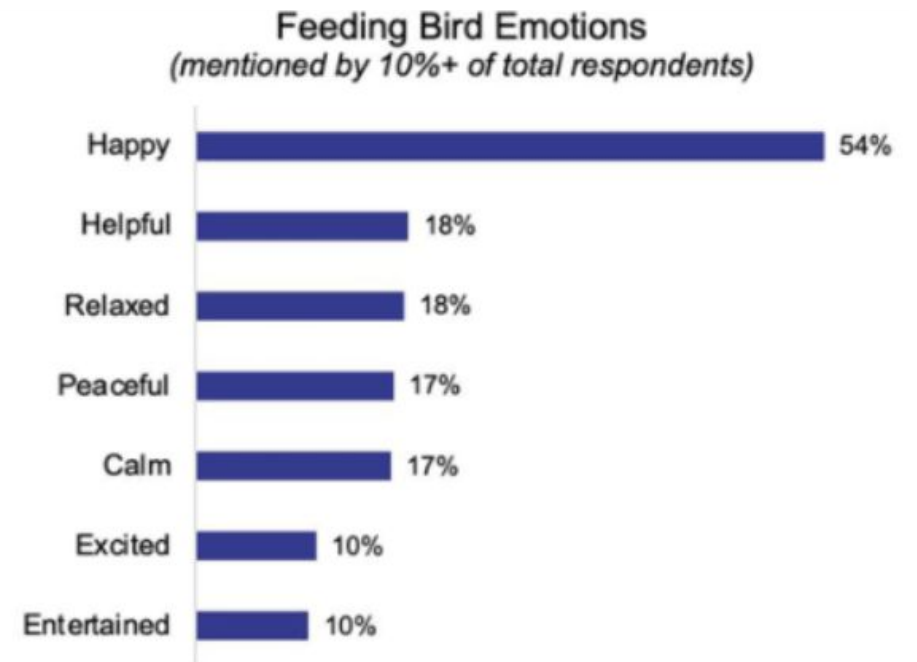
Feeding the Birds Provides Numerous Benefits to the People in Our Community

- Numerous studies in recent years have shown some really incredible, results in the mental and physical benefits to bird watching (particularly at home)
- Here are some of the findings from the latest studies on the topic of feeding and observing birds:
 1. **Birdsong reduces anxiety and irrational thoughts** ([Max Planck Institute, 2022](#))²
 2. Seeing or hearing birds is associated with an **improvement in mental wellbeing** that can **last up to eight hours**. ([King's College, October 2022](#))³
 3. People living in areas with **more birds** are **less likely to suffer from depression, anxiety and stress** ([University of Exeter, 2017](#)). You don't have to know anything about birds to benefit.⁴
 4. When we step outside into nature, chemical responses are released inside our bodies. Cortisol, the hormone that flips into overdrive when we are stressed, starts to lower. Studies show **20-40 minutes of nature exposure lowers cortisol rates**.
 5. Feeding birds may provide an important tool for engaging people with nature to the benefit of both people and conservation. ([Cox & Gaston, 2016](#)).⁵
 6. The intimacy of being in nature and having a careful and protective connection with the birds can make all the difference in your day. You will start to care for the birds and see them as friends in your life. Spending time outside for **10 minutes a day has been proven to boost serotonin and dopamine levels** (American Psychiatric Institute). ([Wild Bird Feeding Institute](#)).⁶



Feeding the Birds Provides Numerous Benefits to the People in Our Community

- Taking a chance on bird feeding can end up **changing the directory of thought patterns, emotion processes, and relationship management** according to the Audubon Bird Guide. ([Wild Bird Feeding Institute](#)).⁶
- Bird feeding helps protect and create a healthy environment for the birds and inspires you to create a **positive change in your mental health**. All these things can inspire a change and help influence long-lasting positive effects for both you and the birds in your neighborhood, and help you connect with others in the hobby. ([Wild Bird Feeding Institute](#)).⁶
- Studies show many benefits of nature and birds on mental and physical wellbeing, including: **lowering blood pressure, reducing anxiety, relieving stress, boosting the immune system, strengthening the vascular system, and boosting mood**
- **People who feed birds regularly feel more relaxed and connected to nature** when they watch garden birds and perceive that bird feeding is beneficial for bird welfare while investing time in minimizing associated risks. ([Cox and Gaston, 2016](#)).⁷
- Species likeability increased for people who fed birds regularly and who could name the species. **We found a strong correlation between the number of species that a person could correctly identify and how connected to nature they felt when they watched garden birds. Species richness was preferred over a greater number of individuals of the same species.** ([Cox and Gaston, 2015](#)).⁴



Base: Total Fed Birds P12M (n= 450)



Bottom Line...

Birds around the home and nature in general show great promise in preventative health care regardless of your household income, age and a wide range of other socio-demographic factors

We owe it to the birds and ourselves to encourage as many people to take up the hobby as possible to reap the incredible benefits the hobby provides us and the birds.



Will Limiting Feeders Make a Difference?

- Limiting the number of feeders to 6 doesn't necessarily equate to bringing less birds to a yard
- Birds are attracted to our yard for a multitude of reasons
- Birds source their food from bird feeders approximately 15% of the time year round
- 85% of the time they are sourcing their food in "nature" (the other areas in our yards)- non bird feeder related
- Only some species of backyard birds visit a bird feeder, but birds are attracted to our yards for a multitude of other reasons including the seeds, nuts and berries from gardens and trees
- Insects and invertebrates (including biting insects like mosquitoes) are another food source and reason for birds to visit yards
- To reduce the number of birds in an outdoor space would require that the yard be devoid of trees, shrubs, gardens and even the soil that houses the invertebrates they eat = ecological dead zone,
 - Not realistic or beneficial for anyone
- Birds are members of this ecosystem and also provide valuable services (pollination, pest control, benefits to physical and mental health as described etc.)



Downy Woodpecker

Bird Feeding Has Gone Through Many Advancements

- Not just “bird seed” anymore
- Different birds are attracted to different foods and feeders, allowing for multiple foods will support a variety of species and biodiversity (healthier ecosystems)
- Bird feeders and foods have come a long way
- You could have easily have 7-10 (or more) different feeders each with different foods
- We have great solutions to the common frustrations such as preventing mammals
- Education and community outreach is essential part of the hobby

By-Law Limitations

- The by-law does not take into account property size (balcony vs. several acres)
- The types of feeders are also not taken into account (i.e. hummingbird vs. seed feeders)
- May impact the Bird Friendly Cities application for Newmarket as the Town needs to demonstrate bird friendly practices including local by-laws



Final Thoughts

- Birds are part of our local ecosystem and neighbourhoods (whether we enjoy their presence or not)
- It's well understood that biodiversity results in healthier local ecosystems and communities which I believe collectively is an important goal for the Town of Newmarket.
- Thank you!



White-breasted Nuthatch

Sources

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6. Wild Bird Feeding Institute. "Why bird feeding is important." WBFi, 30 November 2021. <https://www.wbfi.org/2021/11/30/why-bird-feeding-is-important/>
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