

From: Francisco Sanchez-Bayo <sanchezbayo@mac.com>
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To: nature@nature.com
Subject: Letter to the Editor

Dear Editor,

A recent Letter in Nature (17th July 2014) by Hallmann et al.¹ does not mention even once the pioneer work on the same issue by Henk. A. Tennekes.

In 2010, Dr Tennekes alerted the world about the indirect impacts of neonicotinoid insecticides on birds by publishing his book "Systemic Neonicotinoids: A Disaster in the Making"². Although not a peer-reviewed work, the book made the claim, for the first time, that the recent decline of many species of birds in the Netherlands and other European countries is correlated with the increasing use of imidacloprid and other neonicotinoids during the last two decades. Insectivorous birds and waders were identified in that book as the species most at risk. In fact, 8 among the 14 species of birds studied by Hallmann et al. were explicitly named in that book. Even more interesting is that the declining populations of 5 bird species mentioned by Dr Tennekes were found, by Hallmann et al., to have a positive and significant correlation with neonicotinoid residues in waters. So, why the authors of that paper omitted to cite this source is incomprehensible to me and anyone who has been following developments on this controversial topic.

Science builds upon the foundations laid by previous researchers or people with vision who are able to point out the way forward. This is the main reason for including citations in the scientific literature, other than paying tribute to the authors. However, I wonder if the researchers from Radboud University could have ever thought about the impact that neonicotinoid insecticides may have had on bird populations. My doubts arise from the following:

- i) The only other report dealing with the effects of neonicotinoids on birds was released late last year³. Although that report focuses on the acute and chronic toxicity of such insecticides to birds, it also deals with the issue of indirect effects by depletion of the invertebrate food source, acknowledging Dr Tennekes as the promoter of this idea and citing his book as a reference.
- ii) neonicotinoid insecticides are not particularly toxic to vertebrates and, to my knowledge, no peer-reviewed papers have yet been published proving the contrary. There are a few studies about the sublethal effects of these compounds on birds, but they do not attract much attention from terrestrial ecotoxicologists for that very reason, let alone interest from ecologists and ornithologists.

It is very likely, therefore, that the authors of that Letter were prompted to thoroughly investigate this issue based on the insights of that book and the numerous public dissertations of Dr Tennekes on this matter. As far as I am aware, scientific citations do not need to be restricted to peer-reviewed papers or to work carried out only by experts on a particular field (note that Dr Tennekes is neither a professional nor an amateur ornithologist). Anyone who has the vision to suggest a new direction in research should be acknowledged and given the due credit.

Sincerely

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References

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- 2 Tennekes, H. A. *The Systemic Insecticides: A Disaster in the Making*. (ETS Nederland BV, 2010).
- 3 Mineau, P. & Palmer, C. *The Impact of the Nation's Most Widely Used Insecticides on Birds*. (American Bird Conservancy, 2013).