

## ERRATUM

# Erratum for the Research Article “Reducing food’s environmental impacts through producers and consumers” by J. Poore and T. Nemecek

See all authors and affiliations

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**Article**

**Info & Metrics**

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In table S16 of the Research Article “Reducing food’s environmental impacts through producers and consumers,” the authors erroneously reported a published number from the IMAGE integrated assessment model, indicating that the land no longer required for food production under the “no animal products” scenario could remove 30 Gt CO<sub>2</sub>-C from the atmosphere (5.5 Gt CO<sub>2</sub> yr<sup>-1</sup> over 20 years) as it naturally succeeds to forest, shrubland, or grassland. However, the authors misunderstood the reported number, which also included CH<sub>4</sub> and N<sub>2</sub>O emissions, and they considered a time frame that was too short to reflect the carbon dynamics of revegetation.

Again, by using data from the IMAGE model, the potential uptake is 221 Gt CO<sub>2</sub>-C over 100 years, or 8.1 Gt CO<sub>2</sub> on average each year, with continued but lower uptake after 100 years. Seventy-four percent is uptake by vegetation biomass, and 26% is soil carbon accumulation. This carbon uptake is additional to the 6.6 Gt yr<sup>-1</sup> of avoided agricultural CO<sub>2</sub>eq emissions that the authors reported (which is a 49% reduction in the annual emissions of the food sector). In total, the “no animal products” scenario delivers a 28% reduction in global greenhouse gas emissions across all sectors of the economy relative to 2010 emissions (table S17). The scenario of a 50% reduction in animal products targeting the highest-impact producers delivers a 20% reduction in global greenhouse gas emissions.

Because of the error, the authors did not recognize the true scale of the carbon sink and therefore only included it as a sensitivity in table S16. They have added a sentence to the main text [“In addition to the reduction in food’s annual GHG emissions, the land no longer required for food production could remove ~8.1 billion metric tons of CO<sub>2</sub> from the atmosphere each year over 100 years as natural vegetation re-establishes and soil carbon re-accumulates, based on simulations conducted in the IMAGE integrated assessment model (17)”]; adjusted the text describing the second scenario [to read “This achieves 71% of the previous scenario’s GHG reduction (a reduction of ~10.4 billion metric tons of CO<sub>2</sub>eq per year, including atmospheric CO<sub>2</sub> removal by regrowing vegetation)”]; and changed the sensitivity in table S16 to report a sensitivity on the carbon sink, rather than reporting the sink itself. In accordance with these changes, they have also replaced reference 146 and added a new reference, numbered 151.

An unrelated error in the legend to Fig. 3 has also been corrected, replacing “The gray line represents 10th-percentile emissions” with “The gray line represents average emissions.”