Ecology: A tangled web for plant diversity (AOP)

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Results from an eight-year experiment examining the effects of biodiversity on functioning across the food web hints that plant diversity has strong bottom-up effects on biotic interactions.

Lower levels of the food chain are more susceptible to plant species loss than higher levels, suggests the study which analysed a range of above- and below-ground flora and fauna in specially seeded arable plots. And the effects observed in higher trophic levels were indirectly mediated through bottom-up trophic cascades, Christoph Scherber and colleagues reveal in this week's Nature.

Biodiversity is declining at unprecedented rates, yet our economy relies heavily on biodiversity-related ecosystem services such as crop pollination and pest control. This study hints that as primary producers disappear from terrestrial ecosystems, shifts in food web structure will occur, with particularly strong effects on the lower trophic levels.