Challenging the view that invasive non-native plants are not a significant threat to the floristic diversity of Great Britain

Conservation scientists and practitioners have long recognized that not all non native species pose a threat to biodiversity, yet some ecologists still fail to grasp this message (1). The conclusions drawn by Thomas and Palmer (2) that non native plant species are not a threat to floral diversity in Britain highlight how this lack of understanding can lead to inappropriate analyses and mis leading inferences regarding the impacts of non native species. Thomas and Palmer base their conclusions on an analysis of the Coun tryside Survey (CS): this valuable dataset depicts large scale vegetation changes in com mon habitats, but its stratified random de sign does not provide a comprehensive as sessment of the impacts of non native plant species on native biodiversity.

First, CS records only about 10% of the non native flora of Britain and so cannot be considered representative of all non native species, having an emphasis on casual plant species, feral crops, wayside weeds, and planted trees. Second, of 1,377 established non native plants in Britain, only 103 (6.3%) are perceived as having ecological impacts (3). However, Thomas and Palmer (2) over look previous research highlighting that, because the CS is a broad scale survey, it undersamples non native plants regarded as having significant ecological impacts (4). The Wildlife and Countryside Act* enacts legislation to manage 23 widespread terrestrial non native plant species simply documents previously reported trends (4) and further does not adequately characterize the hazards posed by non native plants to species and ecosystems of greatest conservation concern in Britain. A major conservation goal is to understand, predict, and mitigate the biodiversity threats posed by non native species. Research on the impacts of non native species therefore must move away from correlative approaches and instead increasingly focus on the non native species causing the most significant harm to threatened species and ecosystems (5). Thomas and Palmer (2) fail to contribute to this goal and if conservation bodies and gov ernments simply take their headline provocations and apply them to the management of plant invasions, then this will be to the detriment of conservation worldwide.

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fig (Rhododendron rhododendron (are a major threat: for example, hybrid rhododendron (Rhododendron × super ponticum) in Atlantic oakwoods, Hottentot fig (Carpobrotus edulis) in coastal cliff communities, and pirir pirri burr (Acaena novae zelandiae) in sand dunes. Thomas and Palmer (2) suggest that such non native species remain too localized to have no tional scale effects, but simply because they are not widespread does not mean that they should be disregarded. Rhododendron threatens one of the few endemic plant spe cies to Britain, the Lundy cabbage (Coincya wrightii), even though this native species only occurs on one small island.

Given these caveats, Thomas and Palmer’s (2) unrefined exploration of an extensive stratified random sample of plant species simply documents previously reported trends (4) and further does not adequately characterize the hazards posed by non native plants to species and ecosystems of greatest conservation concern in Britain. A major conservation goal is to understand, predict, and mitigate the biodiversity threats posed by non native species. Research on the impacts of non native species therefore must move away from correlative approaches and instead increasingly focus on the non native species causing the most significant harm to threatened species and ecosystems (5). Thomas and Palmer (2) fail to contribute to this goal and if conservation bodies and gov ernments simply take their headline provocations and apply them to the management of plant invasions, then this will be to the detriment of conservation worldwide.

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