Deliberate feeding of wild birds is common in urban Australia and supposedly has both costs and benefits for the birds and the humans that feed them. If urban domestic garden food stations are dominated by common exotic species, they may ultimately not promote, or even reduce, urban native bird species diversity. However, too few investigations have been conducted in Australia to permit a thorough evaluation of this possibility. Twelve established bird food stations in suburban gardens in Melbourne, Australia were visited in one winter by 18 bird species, five of which were exotic. Introduced Spotted Doves Streptopelia chinensis, Common Mynas Sturnus tristis and Rock Doves Columba livia, together with native Noisy Miners Manorina melanocephala, were the most prominent users of stations providing bread. Spotted Doves numerically dominated feeding at stations that provided seed, but three native species were also quite prominent feeders at some such stations. Bread and seed stations were exploited by fairly distinct bird species assemblages. On average, approximately six high-intensity inter-specific agonistic interactions per hour occurred at a food station, involving 20 species combinations overall. However, only one third of encounters were between an exotic and a native bird. Displacement of native birds from food stations by exotic birds was substantially less common than the reverse event. Thus feeding at urban garden food stations was dominated by exotic birds, but some native birds also exploited them substantially and were not disproportionately aggressively displaced from them by exotics.