THE CAPACITY OF URBAN RESTORED SITES TO SUPPORT NATIVE BIRDS: ECOLOGICAL OR SOCIAL RESTORATION?

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Restoration plantings. Photo supplied by Rekord for DairyNZ.

Today, over half the world's population lives in urban areas and the proportion of urbanites is even higher in certain developed countries such as New Zealand, where it exceeds 87 per cent. As the human population shifts to cities, so do potential sources of conservation action in the form of votes, finances, volunteers and future conservation leaders. Researchers have argued that direct, personal experiences of the natural world are necessary to foster a willingness to care for and about nature, and these experiences further promote human health and wellbeing. As the majority of people move to cities, it follows that most human experience of nature will take place in an urban setting.

Urbanization often results in biotic homogenization, or replacement of unique endemics with globally widespread species. For the avifauna of New Zealand cities, this has meant replacing the native tui, bellbird or kereru with the ubiquitous house sparrow, rock pigeon or European starling. City residents need to experience native species in their daily life if they are to care about their conservation in distant forest parks. There is also growing recognition of the potential contribution cities can make to the conservation and restoration of native biodiversity. Habitat restoration in urban areas has been championed as a means to improve bird conservation, and a number of studies have investigated how birds respond to both urbanization and the restoration process. Restored sites within urban areas may therefore perform the dual role of acting as refugia for native plant and animal communities, and as places where city residents can connect on a personal level with the natural world.

Restoration plantings in urban areas are often small, isolated patches of native vegetation surrounded by the impervious surfaces and high human population densities of the urban matrix. The question arises whether these small patches of native vegetation can provide suitable

habitat for native wildlife, an argument often made by restoration ecologists but rarely tested. According to the Society for Ecological Restoration (SER, 2004) and Dearborn and Kark (2009), a successfully restored ecosystem should:

1) Have similar diversity and community structure in comparison with reference sites

2) Be capable of sustaining reproducing populations of indigenous species

3) Connect people with nature and provide environmental education

My research proposes to investigate the capacity of urban restored sites to contribute to biodiversity conservation and to reconnect urban residents with nature by evaluating restored sites in Hamilton and New Plymouth in terms of the three restoration goals listed above.

In order to evaluate the potential of restored sites in these cities to support native bush birds, I will need to collect data on landscape composition and configuration, local habitat variables such as vegetation cover, leaf litter depth and presence of important fruit trees, and predation levels within study sites. In order to investigate the ability of urban restored sites to reconnect city residents with native nature, I will need to interview city residents and distribute an online survey. The generous support of the Birds New Zealand Research Fund (BNZRF) will provide some of the funds to cover these research expenses. If you would be interested in getting involved with the study and are living in Hamilton or New Plymouth, please contact Elizabeth Elliot (eee5@students.waikato.ac.nz).