

Long-tailed bats in Hamilton City – management challenges of a threatened species in urban environments

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Hamilton City provides habitat for a long-tailed bat (*Chalinolobus tuberculatus*) population that can mainly be found at the southern fringe of the city. The population has been studied for a number of years, yet many unknowns of their urban ecology mean management of this threatened species presents a wide range of challenges. Given the short-coming of the Resource Management Act (1991) to address adverse effects on indigenous fauna with complex and wide-ranging temporal and spatial habitat requirements such as bats, the Department of Conservation (DOC) is increasing the requirement to prepare and implement detailed management plans associated with permitting under the provisions of the Wildlife Act (1953), including for subdivisions and roading infrastructure. However, there is a discrepancy in this approach, particularly as it relates to long-tailed bats on where and how these requirements are placed. Addressing impacts at a site specific level does not address the long-term effects on bats at a wider landscape level associated with habitat loss, habitat degradation (e.g. increase in street lighting), or other less readily observed effects on bats, such as those caused by animal predators. Furthermore, the requirement for specific management does not include all land use activities. For example, large areas of riparian vegetation where bats are known to be present, such as treeland and plantation forests are cleared as permitted landuse activities under the regional or district plans. This calls for a more systematic approach of the management of this species, in particular in urban and peri-urban environments. How these habitats for bats are to be managed requires a high degree of acceptance and understanding across a wide range of public and private sector interests, such as DOC, councils, industry, developers, tangata whenua, and community restoration groups in order to ensure the on-going survival of this cryptic species.