Abundance, Distribution, and Movement of Canada Geese (*Branta canadensis*) in Nanaimo, British Columbia

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As a result of introduction programs in the 1960s and 70s, the Canada Goose (Branta canadensis) has become increasingly abundant on Vancouver Island, and it has been implicated in causing significant damage to estuaries, crop damage, and human-goose conflicts in recreational areas. Communities like the City of Nanaimo are developing management plans to address these impacts, but these plans are limited by a lack of information about the abundance, distribution and movement patterns of local goose populations. The goal of this study was to assess the Canada Goose population in the Nanaimo area, in order to support a regional management strategy. This objective was achieved using a combination of regular count surveys, blitz surveys and bird banding. Abundance was primarily measured by a regular survey of 60 sites throughout Nanaimo at three-week intervals. Two blitz surveys were also conducted to provide an estimated probability of detection for the regular survey. To monitor their movement, 200 Canada Geese were captured and fitted with metal leg bands and plastic neck collars, which enabled the identification of individuals in the field. Results from regular surveys suggest that Canada Goose abundance in Nanaimo fluctuated seasonally (summer median: 929 geese; winter median: 1,621 geese). Traditionally, the majority of the Canada Goose population on Vancouver Island was thought to be resident; however, sightings of collared individuals indicate that the majority of the population (64.5%) may actually be migratory. This study identified seasonal trends in abundance and distribution of Canada Goose in Nanaimo, which will provide a basis for informed management decisions.