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Effective wildlife management requires understanding the basis and consequences of species’ habitat selection decisions (Luck 2002). Habitat selection is a hierarchical process which occurs at multiple spatial and temporal scales and involves multiple habitat components (Johnson 1980, Orians & Wittenberger 1991). Individuals select habitat that maximizes survival and reproductive success (Orians & Wittenberger 1991, Martin 1998). However, selection pressures may vary in strength at each scale and selection decisions may affect different aspects of fitness (Chalfoun & Martin 2007). Correctly identifying the appropriate scale of selection and the relevant aspect of fitness is therefore crucial to understanding habitat selection and the pressures that drive it (Pribil & Picman 1997).

In territorial species, established territory holders may monopolize preferred, high-quality habitat and force newcomers to occupy lower-quality habitat (Fretwell & Lucas 1970). These established territory holders are often of higher quality than those they displace (Sergio & Newton 2003). As a result, a small number of high-quality territories frequently occupied by high-quality individuals can act as a “source” for the population, while low-quality territories, occupied only during periods of high population density, act as “sinks” (Newton 1991, Rodenhouse et al. 1997). This has critical implications for species of conservation concern, as changes in habitat quality in a limited area may have a substantial impact on the larger population (Ferrer & Donazar 1996).

The northern goshawk (*Accipiter gentilis*) is a large forest-dwelling raptor with a Holarctic distribution (Squires et al. 2020). Habitat used across the goshawk’s range is highly variable, with goshawks nesting in large stands of mature conifers (Daw & DeStefano 2001), fragmented stands of aspen (Younk & Bechard 1994), and small patches of urban parkland (Rutz 2006). Habitat used for foraging is even more variable, but there is a consistent preference in both nesting and foraging habitat for closed-canopy forest stands containing large-diameter trees and open understories (reviewed in Andersen et al. 2005, Squires & Kennedy 2006). Selection for this type of forest appears strongest at small scales close to the nest and weaker within the larger foraging area (Daw & Destefano 2001, Finn et al 2002?, McGrath et al. 2003). While this pattern of habitat selection at multiple spatial scales has been widely documented for goshawks, it has rarely been linked to measures of habitat quality such as occupancy or productivity (but see Finn et al. 2002?). As a result, it is difficult to identify what selection pressures are strongest at larger scales relative to smaller scales or to understand how the results of selection affect different aspects of fitness.

In North America, the goshawk’s preference for mature forest has placed it at risk of population declines due to habitat loss from industrial timber harvest, and resulted in its status as a species of conservation concern (Reynolds et al. 1992, COSEWIC 2013). The coastal population of northern goshawks in British Columbia, Canada, is the subject of federal and provincial management efforts. Current management plans focus on the protection of breeding habitat at small scales around individual nest areas (FLNR 2018), a strategy which has met with some success in other raptors (that one golden eagle paper). Under this management strategy, correctly identifying high-quality territories for protection is crucial. However, plans do not address forest management at the larger scale of the foraging area, which may affect territory quality and, ultimately, population demographics, in ways which are still poorly understood.

Here we describe the distribution of several habitat variables, measured at four spatial scales, for goshawk territories in British Columbia, Canada. We then explore which scales best describe the relationship of these variables to one indirect and one direct measure of habitat quality. Finally, we discuss the role of different selection pressures on goshawk habitat selection and fitness.