

Productivity of Dusky Canada Geese Nesting on the Copper River Delta and on Middleton Island, Alaska

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Dusky Canada geese (*Branta canadensis occidentalis*) nest on the Copper River Delta (CRD) and have declined in abundance to historically low levels of 5,392-8,281 birds. The population is considered vulnerable because of its current small size and long-term decline. The decline has been attributed to recurrent low productivity and recruitment resulting from increased depredation of adults, eggs, and goslings. The proportion of young (adjusted for visibility) since 1992 varied considerably, averaging 20.5% (SD = 12.3; range = 3.9%-47.2%) with an estimated average annual production of 1,244 goslings (SD = 957; range = 227-3,416 goslings). **Productivity during the last five years was high, averaging 33.5%. Years of high gosling output have just recently led to an increase in the number of adults.**

Canada geese nesting on Middleton Island (MI) are considered a sub-population of the dusky goose and were not always summer residents on MI. A breeding population established and grew rapidly to its current size (1,400 adults). Productivity is high because mammalian predators are absent. The proportion of young (no visibility adjustment) is consistently high, averaging 39% (SD = 5.5; range = 31.0%-48.2%) with average production of 890 goslings (SD = 173; range = 673-1,220 goslings). The rapid growth of the population to its current size indicates previously high recruitment. However, the number of adults has stabilized during the last 12 years. Years of high gosling output have not led to an increase in adults.



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