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Abstracts

FEATURE ARTICLES

A COMPARISON OF THE CHARACTERISTICS AND FATE OF BARROW'S GOLDENEYE AND BUFFLEHEAD NESTS IN NEST BOXES AND NATURAL CAVITIES

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Abstract. Barrow's Goldeneye (*Bucephala islandica*) and Bufflehead (*B. albeola*) are cavity-nesting waterfowl that have received considerable attention in studies using nest boxes, but little is known about their nesting ecology in natural cavities. We found larger clutch size, lower nesting success, and different major predators for Barrow's Goldeneyes nesting in boxes versus those nesting in natural cavities, but few differences for Bufflehead. These differences are attributed to the location and physical differences between Barrow's Goldeneye nest boxes and natural cavities that affect their conspicuousness to predators and conspecific nest-parasitizing females. Goldeneye boxes were concentrated in highly visible locations such as trees at water or forest edge. Natural cavity nests, on the other hand, were often abandoned Pileated Woodpecker (*Dryocopus pileatus*) cavities, which were more dispersed throughout the forest interior and concealed under dense canopy cover. Bufflehead natural cavity nests were typically closer to edges, which may account for their similarity with boxes. We conclude that in some respects, studies of Barrow's Goldeneye that use nest boxes may not be representative of birds nesting in natural cavities, whereas those of Bufflehead are more likely to be so.

Key words: Barrow's Goldeneye, Bufflehead, natural cavities, nest boxes, nest success, predation.