

**COMMON RAVEN STEALS AND CACHES  
EGGS OF THE DOUBLE-CRESTED  
CORMORANT IN THE CRESTON VALLEY,  
BRITISH COLUMBIA**

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Although well known for its scavenging behaviour with regard to human garbage and animal carcasses the Common Raven (*Corvus corax*) has an extremely diverse diet. It includes most animal groups such as arthropods, amphibians, reptiles, small to medium-sized mammals, birds (adults, chicks, and eggs) as well as grains, buds, and berries (Boarman and Heinrich 1999). The diet varies regionally, seasonally, and between individual birds but less known is the caching behaviour of Common Ravens. Of all birds, caching by the corvids is the most studied (Vander Wall 1990). It is generally agreed that animals cache food for later consumption and that caching behaviour varies significantly between different species (de Kort and Clayton 2006). This note describes observations of predation and caching behaviour by a Common Raven at a Double-crested Cormorant (*Phalacrocorax auritus*) nesting colony in the Creston valley, British Columbia (Figure 1).

On 21 April 2005, at 1030 hrs, I arrived at my viewing location adjacent to Leach Lake and noted that the colony of nesting Great Blue Herons (*Ardea herodias*) were squawking loudly with many standing upright in their nests. Eighteen adult Double-crested Cormorants, all in breeding plumage, were observed swimming in the Kootenay River and four additional adults were observed in flight. The source of the disturbance was an immature Bald Eagle (*Haliaeetus leucocephalus*) flying low over the nesting colony. The eagle landed on a dead branch of a live black cottonwood (*Populus balsamifera*) tree amidst the heron colony. An Osprey (*Pandion haliaetus*), standing in its nest at the northern boundary of the colony, was galvanized into defensive action and repeatedly dove at the perched eagle. One heron called and circled overhead. The diving behaviour of the Osprey displaced the eagle, which flew in a northerly direction away from the colony. The



**Figure 1.** Double-crested Cormorant nesting colony in black cottonwoods. Creston valley, BC. 7 July 2006 (Linda M. Van Damme). BC Photo 3277.

vocalizing herons quieted down immediately upon departure of the eagle.

During the disturbance created by the eagle no cormorants remained at the colony. The single adult that had been incubating since 6 April had abandoned its nest, as did three other pairs which had been observed nest-building on my previous visit. Amidst the chaos, a Common Raven was observed flying from the colony with a bluish coloured egg in its bill. It flew to the eastern shoreline of the Kootenay River and was observed caching the egg beside a beached log. The raven proceeded to cover the egg with a clod of dirt and dry leaves. Once this egg was hidden the raven returned to the colony and landed in a shallow stick nest built at the bifurcation of outer branches in the upper canopy of a live cottonwood tree. The raven leaned forward and with its bill picked up a bluish egg. Again, it flew to the eastern shore but was hidden from my view behind a steep bank. After a couple of minutes the raven departed with an empty bill and flew 700 m northeast into a stand of black cottonwoods where its mate was sitting in a nest.

The one cormorant known to be incubating returned to its nest following the eagle disturbance, and stood looking around before settling back on to its egg(s). Approximately 10 min after the eagle departed, a cormorant carrying a short twig in its bill arrived at the nest site where the raven was observed stealing an egg. The bird added the twig to the nest then sat in the nest and proceeded to pull and bend existing branches that formed the shallow platform.

Ultimately, this nest failed.

It is not known if the raven had taken the two eggs from the same nest as the bird was in flight when the first observation was made. The first cached egg was retrieved for identification purposes and was determined to be that of a Double-crested Cormorant (R. W. Campbell pers. comm.). The egg measured 65 mm x 43 mm and had a blue shell with a chalky texture. The egg was submerged in water to test for stage of development and was determined to be “fresh” (Campbell and Preston 2001).

Throughout the summer, Common Ravens were observed patrolling the heron and cormorant colonies and landing in abandoned nests, in nests where young had fledged, and in nests where young had perished. However, this was my first observation of a Common Raven stealing and caching eggs from the Double-crested Cormorant colony in the Creston valley during 400 hrs of observation between 6 June 2003 and 30 June 2005.

A second incident was observed on 9 June 2006 when an immature Bald Eagle landed in the nesting colony causing the majority of cormorants to leave their nests. A Common Raven was observed flying east from the colony with a cormorant egg in its bill. The raven landed in a barley field and cached the egg. Returning to the colony the raven was observed removing an egg from a cormorant nest built on a dead upper cottonwood tree branch (Figure 2). A second raven was observed flying northeast from the colony, also with an egg in its bill. There is so much chaos when an eagle enters the nesting colony that it is impossible to know just how many eggs were taken by the ravens. It was obvious the ravens exploited this disturbance by the eagle to opportunistically steal cormorant eggs.

In south coastal British Columbia predation by Glaucous-winged Gulls (*Larus glaucescens*) and Northwestern Crows (*Corvus caurinus*), following disturbance by either Bald Eagles or human activities, appeared to be the most serious limiting factor to nesting success of Double-crested and Pelagic cormorants (*P. pelagicus*), both of which lost more eggs to crows when Bald Eagles were present than when they were not (Moul and Gebauer 2002).

A third incident was noted on 11 July 2006, when two ravens arrived at the nesting colony and perched in the nesting trees. One adult flew to the



**Figure 2.** A Common Raven holding a cormorant egg while perched above a Double-crested Cormorant nest. Creston valley, BC. 9 June 2006 (Linda M. Van Damme). BC Photo 3278.

south nesting tree and swooped low over cormorants sitting in nests, causing three of them to flush. The raven hopped into one vacated nest, picked an egg up in its bill and flew out of sight southeast over the cottonwoods. The second raven eventually departed with no attempt at predation.

The Common Raven is an opportunistic predator throughout the year. Stiehl and Trautwein (1991) found, by pellet analysis, that 38% of the spring and summer diet of the Common Raven in Oregon consisted of birds and their eggs. Among colonial nesting birds, Ewins (1991) noted that Common Ravens, along with American Crows (*C. brachyrhynchos*), ate so many eggs at several Ring-billed Gull (*Larus delawarensis*) and Herring Gull (*L. argentatus*) colonies on Lake Huron that they may have been responsible for the complete failure of three colonies. It is apparent that the Common

Raven is having an impact on the successful nesting of some pairs of Double-crested Cormorants at the Leach Lake colony.

The Double-crested Cormorant was only recently discovered breeding in the Creston valley, on the eastern boundary of the Leach Lake Unit in the Creston Valley Wildlife Management Area, on 6 June 2003 (Van Damme 2004). Since nesting Great Blue Herons and Double-crested Cormorants are monitored annually for breeding success, colony expansion, habitat deterioration, and behaviour, the impact of Common Raven predation will now be noted each season.

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### ***About the Author***

Linda Van Damme enjoys initiating her own research projects that provide a great learning opportunity into the behaviour of birds. The rich biodiversity of the Creston valley has much to offer this enthusiastic naturalist.