

Status and Occurrence of Black Vulture (*Coragyps atratus*) in British Columbia.

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Introduction and Distribution

The Black Vulture (*Coragyps atratus*) is a fairly sedentary species found breeding in the southeastern United States from central and southwestern Texas, through southeastern Oklahoma, central Arkansas, western Tennessee, western Kentucky, extreme northern Kentucky, and extreme southwestern Ohio, through northeastern Tennessee, western Virginia and eastern West Virginia, central and eastern portions of southern Pennsylvania, and central and southern New Jersey, south to southern Florida, Gulf Coast, and Mexico (Jackson 1988b, Price *et al.* 1995, Buckley 1999). The Black Vulture is a rare summer resident and local breeder north to southeastern Missouri (Jacobs and Wilson 1997), southeastern Indiana (Buckley 1999), southern Ohio (Peterjohn and Rice 1991), southwestern West Virginia (Bucklew and Hall 1994), western Connecticut (Buckley 1999), and on the mainland of southeastern New York (American Ornithologists' Union 1998a). Within this area, the Black Vulture is most numerous in the southeastern coastal states from South Carolina to Texas (Buckley 1999). The species was most abundant in central and southern Florida, and locally in Louisiana, Mississippi, and Texas (Price *et al.* 1995, Buckley 1999).

In Texas, the overall numbers have greatly increased since the 1920's, due to the increase in farm animals in the region such as domestic sheep (*Ovis aries*) and cattle (*Bos Taurus*) (Parmalee 1954). The Black Vulture also expanded into northern Mexico and Arizona at about the same time as the Texas population was increasing (Wilbur 1983).

In the 1930s, Black Vultures apparently bred along the East Coast of North America only as far north as east-central Virginia (Bent 1937b). However, the species' range has expanded northward along the East Coast since the 1940s (Greider and Wagner 1960, Coleman and Fraser 1989b, Coleman and Fraser 1990). The Black Vulture was also first recorded breeding in southern Maryland in the late 1940s and by the mid-1950s, this species was breeding throughout Maryland, east of Hagerstown and probably nesting in most of Delaware (Coleman and Fraser 1989b). The Black Vulture was first reported breeding in Pennsylvania in 1952 (Grube 1953b). This species was first documented breeding in New Jersey in 1981, and sightings in that state have increased since the early 1980s (Leck 1984). There are no confirmed breeding records of the Black Vulture from New York, but increased frequency of occurrence there in recent years suggests that if breeding has not yet occurred, it likely will soon (Buckley 1999). Similarly, spring records have become more numerous in Connecticut since the 1980s (Zeranski and Baptist 1990), which is consistent with general northward range expansion along the East

Coast of North America (Buckley 1999). It should be noted that Black Vulture breeding numbers have steadily increased in eastern Maryland since the 1960s (Buckley 1999).

The Black Vulture breeds throughout Mexico, except for Baja California, but is found in northwestern Sonora, western and northern Chihuahua, and Valley of Mexico (Howell and Webb 2010). This species' range extends from Mexico north into south-central Arizona, south of Tucson (Monson and Phillips 1981). From Mexico, the Black Vulture's range extends south throughout Central and South America to southern Argentina and southern Chile (Meyer De Schauensee 1970). This species is absent from the Caribbean region, but does occur on Trinidad (Jackson 1988b).

The Black Vulture is not a particularly a migratory species and remains a resident throughout much of its range, but in winter many individuals withdraw from the extreme northern portions of its range and from higher altitudes (Buckley 1999). The Black Vulture also engages in short-term, local movements when the weather becomes unfavorable, retiring ahead of adverse conditions and returning when conditions improve (Jackson 1988b, Buckley 1999)

Although often scarce and local in northern portions of their range during winter, Black Vultures are regularly recorded on Christmas Bird Counts in New Jersey, West Virginia, Pennsylvania, Ohio, Indiana, Illinois, Missouri, and Oklahoma (Buckley 1999). Thus, at least some individuals occur throughout the year in all portions of current breeding range during most years (Buckley 1999). Most of the area where Black Vultures occur in winter has average minimum January temperature above -1°C ; exceptions are Mississippi River valley north to southern Illinois, and interior low plateau of Tennessee and Kentucky (Root 1988b). The densest concentrations of wintering birds occur in Alabama, south and central Texas, Georgia, parts of Florida, and Tennessee (Root 1988b). Many of these areas also support large populations during the breeding season (Price *et al.* 1995).

The Black Vulture has been recorded as an accidental vagrant well north of its current breeding range in North America. In recent years, apparently as result of an expanding population on East Coast of North America, vagrants have become increasingly common in New England, Quebec, Ontario (Godfrey 1986, Mactavish 1993, Petersen 1993), Nova Scotia (McLaren 2012) and Prince Edward Island (Vickery 1982). There are also accidental records from the mid-west states including Colorado, and North Dakota (Jackson 1988b). Along the west coast of North America, the Black Vulture is an accidental species. Even though California is right next to the breeding range of Arizona, there are only 7 accepted records by the California Bird Records Committee (Hamilton *et al.* 2007, Tietz and McCaskie 2014). There are no accepted records for Idaho (IBRC 2016), Oregon (OFO 2016), Washington State (Wahl *et al.* 2005, WBRC 2016), or

Alaska (Gibson *et al.* 2013). The Black Vulture is an accidental vagrant in British Columbia where there are a few photographed and well-documented records (Toochin *et al.* 2014). This species has even incredibly occurred once as an accidental vagrant to Klane Lake, on July 2, 1982, in southwestern Yukon (Godfrey 1986).

Identification and Similar Species

The identification of the Black Vulture is covered in all standard North American Field Guides. This species is fairly large measuring 59-74 cm, with an average length of 65 cm, a wingspan measuring between 141-160 cm, averaging 151 cm, and weighing between 1.7-2.3 kg, with an average weight of 2.0 kilograms (Clark and Wheeler 1987). In British Columbia, the larger winged Turkey Vulture (*Cathartes aura*), is the only regularly occurring vulture species (Campbell *et al.* 1990a). The Turkey Vulture, similar in body size, measuring 62-72 cm in length, with an average length of 67 cm, has a larger wingspan measuring 160-181 cm, with an average wingspan of 171 cm, and has a similar weight range between 1.6-2.4 kg, with an average weight of 1.8 kg to the Black Vulture (Wheeler 2003). The Black Vulture is superficially similar to the Turkey Vulture and several other related vultures that occur in Central and South America (Buckley 1999). The following description is taken from Buckley (1999). The Black Vulture is best distinguished from these other vultures in flight by its very short tail, whitish patch on undersurface of primaries, and slightly smaller size. In flight, Black Vulture also tends to hold wings horizontally when soaring, whereas Turkey Vulture and other related vultures tend to hold wings slightly raised, forming a V-shaped profile when soaring. In addition, Black Vulture tends to flap more often, and to have overall less rocking flight than other vultures. At closer range, adult Black Vulture is also distinguished by gray rather than red or yellowish head, less rounded head, longer and straighter bill, less prominent nostrils, more upright posture, black rather than brown plumage, and overall more smoothly feathered appearance.

The Black Vulture is a very distinct-looking species and should not pose any identification issues for knowledgeable observers.

Occurrence and Documentation

The Black Vulture is an accidental vagrant to British Columbia, with 4 provincial records (Toochin *et al.* 2014). The first provincial record was an adult bird found by the late Glen Ryder on May 3, 1975, north-east of Keremeos (Campbell *et al.* 2001). This record was documented by good illustrations that were published in the Bird of British Columbia, Volume 4 (Campbell *et al.* 2001). The second record for British Columbia was of an adult bird found by Daniel Brunton and Terry Pratt 1km south of Okanagan Falls (Brunton and Pratt 1986). The third record for British Columbia was also found in the south Okanagan on June 16, 1982, by B. Murphy who took full-framed photographs of the bird that were subsequently published in the Birds of

British Columbia Volume 4 (Campbell *et al.* 2001). The fourth record for British Columbia was an immature bird found and photographed by Delmer Duncan, and many other observers, near the mouth of the Nass River, in Kincolith, along the north coast (Toochin *et al.* 2014). A clear identifiable photograph was published on Flickr and can be viewed by following this link <https://www.flickr.com/photos/wcweber/2947429962/in/photolist-81yRc8-pQDLBQ-oshjE7-gVRR3S-R5qG3h-rdBsqg-4Yyt3B-7UPNUZ-5s1VVP-5BPNpb-Dh7wpJ-5usn55-awk6c8-nk95N5-5usmeY-7zwa5q-owLZq9-d39vwL-sapVGB-4T6MqV-oc8snR-8fjad9-obY8CN-chYNj3-a423Vo-L7M1z5-PTnHbB-anhctk-D8H5JJ-4UogPT-cvfvBy-8xqoyJ-apRDr5-ovg498-QWsTnF-MB4BSa-MB4C8F-wGjnAc-otGzfd-8xqoNL-7Wp7io>.

The Black Vulture could turn up anywhere in the province and there are not enough records to show any vagrancy pattern yet, though the month of June does have 2 of the 4 records (Toochin *et al.* 2014). It will be interesting to see if there are future records for the province and if they occur at that time of year. It is not clear where the birds from British Columbia originated, the closest region to British Columbia is Arizona, where the Black Vulture has spread throughout the south-central part of the state by the 1960s (Rea 1998), and has recently expanded northward to the Phoenix area (Corman Wise-Gervais 2005). However, this expansion has been slow and has not travelled as far north as the expansion northward of the eastern North American population of the Black Vulture (Buckley 1999). So it remains unclear as to where the birds that have ventured into British Columbia originated. The Black Vulture does wander enough in North America that future records in British Columbia are possible, but not expected with any frequency.

Table 1: Records of Black Vulture for British Columbia:

- 1.(1) adult May 3, 1975: Glen R. Ryder: north east of Keremeos (Campbell *et al.* 2001)
- 2.(1) adult June 25, 1981: Daniel Brunton, Terry Pratt: 1 km south of Okanagan Falls (Brunton and Pratt 1986)
- 3.(1) adult June 16, 1982: B. Murphy (BC Photo 1860) over Road 22, south of Oliver (Campbell *et al.* 2001)
- 4.(1) immature October 1, 2008 – February 6, 2009: Delmer Duncan, mobs (photo) near the mouth of the Nass River, Kincolith (Toochin *et al.* 2014)

Acknowledgements

I wish to thank Barbara McKee and Don Cecile for editing the original manuscript.

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