# Status and Occurrence of Vermilion Flycatcher (*Pyrocephalus rubinus*) in British Columbia. By Rick Toochin and Don Cecile. Submitted: April 15, 2018.

## **Introduction and Distribution**

The Vermillion Flycatcher (*Pyrocephalus rubinus*) is a spectacular plumaged passerine that is found from the arid deserts of the southern United States, throughout Central America, and throughout South America, including the Galapagos Islands (Fitzpatrick *et al.* 2004). This species breeds in Arid scrub, farmlands, parks, golf courses, desert, savannah, cultivated lands, and riparian woodland, and is usually found near water (Sutton 1967b, Oberholser 1974c). There are many recognized subspecies that could one day end up as separate species and it is recommended reading Clements *et al.* (2017) to find out all the various forms of this species. In this account, the focus will be on the more widespread North American subspecies.

In North America, there are 2 subspecies of Vermilion Flycatcher (Clements et al. 2017). The first subspecies of Vermilion Flycatcher is (Pyrocephalus rubinus flammeus) which is a localized subspecies found in the lowlands of south-central and southeastern California (Crouch 1959). Current breeding locations in California include San Bernardino, Riverside, San Diego, Los Angeles, Santa Barbara, and Ventura counties, north to Kern County (Rosenberg et al. 1991, Small 1994, Myers 2008). This subspecies also breeds in southern Nevada, where it is locally common, and is generally found north to 37°N (Ellison et al. 2009), with one nesting record north near Reno (Ryser 1985). The range of the Vermilion Flycatcher extends up into the extreme southwestern corner of Utah where it is rare (Behle et al. 1985). This subspecies also breeds in northwestern Arizona and the Mogollon Rim south throughout the state; it is common along the base of the Huachuca Mountains, but absent from the south-western corner of the state (Coues 1874a). The Vermilion Flycatcher is also a rare and local breeder along the Salt and Colorado Rivers (Monson and Phillips 1964, Rosenberg et al. 1991). It is found as a locally common breeder on the lower Verde and Salt Rivers, in Maricopa County in Arizona (Ellison et al. 2009). This subspecies is also found breeding in southern New Mexico in the Pecos from Roswell south, in San Francisco, in Gila, and lower-middle Rio Grande Valley, with occasional summer records from northeastern New Mexico in the San Miguel and Union counties (Ligon 1961, Hubbard 1978c).

The second subspecies of Vermilion Flycatcher found in North America is (*Pyrocephalus rubinus mexicanus*) which breeds in western and central Texas, mainly in the central and southern Trans-Pecos and the Edwards Plateau, and north into areas south of the panhandle and southeast to the lower Texas coast (Oberholser 1974c, Sexton 2001b, Clements *et al.* 2017). This subspecies also breeds south into Mexico in Guerrero, Oaxaca, Puebla and Veracruz (Clements *et al.* 2017).

The Vermilion Flycatcher is an occasional breeder in central and western Oklahoma near the boundary of Major-Woodard Counties, and in Lincoln, and Cimarron Counties (Baumgartner and Baumgartner 1992). This species is a rare breeder in Colorado in Washington County (Downing 1981) and in Kansas where the first breeding record was found in 2006 in Morton County, which is 100 km east-north-east of Cimarron County, in Oklahoma where they are found breeding (Corder 2006).

The Vermilion Flycatcher has an extensive range throughout Mexico and Central America (Fitzpatrick *et al.* 2004). This species breeds in Baja California from southern Baja California Norte south and throughout Mexico (except in the Caribbean lowlands of the Tamaulipas and northern Veracruz), but is found in northern Chiapas, Quintana Roo, central and eastern Campeche, northwestern Sonora, the Pacific coast of Sonora and the Pacific coast from Jalisco south to Chiapas (Rowley 1966, Howell and Webb 2010, Sibley 1997). The Vermilion Flycatcher also breeds in Belize, parts of northern Guatemala, and in the lowland pine savannah of eastern Honduras and northeastern Nicaragua (Fitzpatrick *et al.* 2004, Howell and Webb 2010).

In South America, the Vermilion Flycatcher breeds in 2 very separate regions of the continent (Fitzpatrick *et al.* 2004). The northern range includes Guyana, Venezuela, and arid parts of northern and western Colombia, western Ecuador, western Peru, and extreme northern Chile (Fitzpatrick *et al.* 2004). The southern range includes eastern Bolivia, southern Brazil, Paraguay, Uruguay, and northern and central Argentina, south to Río Negro (Fitzpatrick *et al.* 2004). It also breeds on the Galápagos Islands (Ridgely and Tudor 1994).

The Vermilion Flycatcher is a mostly resident species, but the northernmost breeding populations in the southern United States and northwestern Mexico and southernmost breeding populations in southern South America are migratory (Fitzpatrick *et al.* 2004). Migratory distances range between 0 and 4,000 km (Elphick 2007). Some individuals occasionally winter in the northernmost portion of the breeding range (Elphick 2007). Breeding birds depart from southern California by late August (Small 1994), and depart from the northern Sonora by late September and October (Russell and Monson 1998). Migrants arrive in the lower Colorado River Valley by mid-September (Rosenberg *et al.* 1991). Examples of extremely late departure dates include a record from October 19 in Arizona, (Phillips *et al.* 1964a) and a record from September 12 in Texas (Oberholser 1974c).

The migration routes of the Vermilion Flycatcher have remained largely unstudied; at least a few individuals regularly migrate east to overwinter along the northern Gulf Coast, as far inland as the Mississippi Delta (Elphick 2007). In addition, individuals have occasionally appeared at widely scattered locations in North America north and east of breeding range during migration

(Ellison *et al.* 2009). Fall downslope movement of resident populations is known to occur. In Colorado, the Vermilion Flycatcher is a very rare migrant in the early spring and in the late fall, primarily on the eastern plains (Andrews and Righter 1992). There is only a single documented record from California offshore islands on San Nicolas Island, September 29, 1974 (Garrett and Dunn 1981).

During the austral winter, southerly breeders migrate north as far as Amazonian Brazil, southeastern Colombia, and southeastern Ecuador (Ridgely and Tudor 1994).

The Vermilion Flycatcher's winter range fluctuates with winter conditions; in some winters the species will wander along river corridors outside its normal range (Grinnell and Miller 1944). Resident throughout all, but the northernmost portion of its breeding range in the United States, Mexico, and Central America (Ellison et al. 2009). It winters outside of the breeding range throughout the coastal plain of Texas (Oberholser 1974c), in deserts of southeastern California north to southern Inyo County (Garrett and Dunn 1981) and southwestern Arizona (Russell and Monson 1998), and in eastern Nuevo León, Tamaulipas, northern Veracruz, and southern Sonora, Mexico (Howell and Webb 2010, Russell and Monson 1998). There are a few winter records along the coastal plain of Sonora (Russell and Monson 1998).

A few individuals winter regularly along the California coast north to Ventura County and occasionally to San Luis Obispo County, along the Gulf Coast of the United States, rarely north to southern Arkansas, and throughout mainland Florida, but not recorded in the Florida Keys (Robertson and Woolfenden 1992a, Small 1994, American Ornithologists' Union 1998a). The species is casual in the winter north to northern California (Small 1994), southwestern Utah (Behle *et al.* 1985), New Mexico (Hubbard 1978c), Texas north of 37°N (Oberholser 1974c), northeastern Oklahoma (Baumgartner and Baumgartner 1992), and south to southern Guatemala and northern Honduras (American Ornithologists' Union 1998a). The Vermilion Flycatcher will spend the winter season where the average minimum January temperature is usually above –1°C (Root 1988b). Range extensions of this temperature gradient are along protected river valleys, including the Mississippi, Brazos, Pecos, Rio Grande, and Colorado rivers (Root 1988b). High numbers are seen in the winter in southern Texas, around Nogales, in Arizona (Root 1988b), and along the Colorado River in southern Arizona (Phillips et al. 1964a).

In South America, all populations are resident except the southernmost ones; these migrate north as far as Amazonian Brazil, southeastern Colombia, and southeastern Ecuador during the austral winter (Ridgely and Tudor 1994). The Vermilion Flycatcher is casual in Panama with records from Canal area and from west Panamá province and there are sight reports from Colón and Chiriquí provinces (Ridgely and Gwynne 1989).

The Vermilion Flycatcher has undergone a slight push northward in its breeding range over the past 100 years (Ellison *et al.* 2009). It was Unrecorded in Oklahoma prior to 1949, but since that time has been recorded throughout the state, with nesting attempts in 1956, 1960, 1982, and 1985 (Baumgartner and Baumgartner 1992). The first nesting record in the Texas Panhandle was in Amarillo in 1959 (Baumgartner and Baumgartner 1992). The first nesting records for Colorado were in 1981 and 1994 (Kingery 1998f). Since 1983, the Vermilion Flycatcher has become much more widespread on the Edwards Plateau and in the southern Texas brush county (Oberholser 1974c, Sauer *et al.* 2008a). Prior to 1940, there was only one record in Florida from 1901 (Stevenson and Anderson 1994b). Since 1940, this species has been recorded in increasing numbers there with at least 130 reports and 20 specimens by 1992 (Stevenson and Anderson 1994b).

The Vermilion Flycatcher is a casual vagrant throughout most of eastern North America with records coming from many States and Provinces including: northern Minnesota with 3 fall records (Brashear *et al.* 2014), Wisconsin with several records, mostly in the fall (e-bird database 2017), Iowa with a couple of records in summer and fall (e-bird database 2017), Illinois (e-bird database 2017), Ohio (e-bird database 2017), southern Ontario with 4 records from the fall and winter (Burrell and Charlton 2016, Pittaway 1995), New York with 1 fall record (Bull 1988), Pennsylvania (e-bird database 2017), West Virginia (e-bird database 2017), Maryland (e-bird database 2017), Kentucky (e-bird database 2017), Tennessee (e-bird database 2017), Georgia (e-bird database 2017), Wyoming (WYBRC 2017), North Dakota with 1 fall record (NDBS 2017), northern Michigan with 6 records mostly in the fall (MBRC 2017), and Nova Scotia (American Ornithologists' Union 1998a).

This species is an accidental vagrant along the west coast north of California. There are only 5 accepted records for Oregon by the Oregon Bird Records Committee (OFO 2016). Surprisingly there are more accepted records from Washington State with 7 accepted records by the Washington Bird Records Committee (Wahl *et al.* 2005, WBRC 2016). The Vermilion Flycatcher is an accidental vagrant in British Columbia with 2 late fall records (Toochin *et al.* 2014).

#### **Identification and Similar Species**

The identification of the Vermilion Flycatcher is covered in all standard North American field guides. This species is a small flycatcher measuring 15 cm in length, with a wingspan of 25 cm, and weighs 14.5 grams (Sibley 2000, Dunn and Alderfer 2011). If encountered anywhere in British Columbia, adult and immature male Vermilion Flycatchers are very distinct and are not easily confused with other species. The salmon or yellow belly and streaked breast of adult and immature females are also distinctive, but females could potentially be confused with the larger Say's Phoebe (*Sayornis saya*) which measures 19 cm in length, with a wingspan of 33 cm, and

weighs 21 grams (Sibley 2000, Dunn and Alderfer 2011). Say's Phoebe has belly and undertail-coverts uniformly cinnamon, orangish, or tawny, not whitish with dusky streaks; lacks whitish supercilium; and has blackish tail that contrasts with upperparts (Ellison *et al.* 2009). The Vermilion Flycatcher dips and spreads its tail while perched which is a similar behaviour to Say's Phoebe (Sibley 2000).

The following description of various ages of the Vermilion Flycatcher is taken from Ellison *et al.* (2009) unless otherwise stated.

Adult males hold their spectacular plumage year round once they are fully mature. The top of the head and the entire underparts are a bright vermilion, scarlet, or orange. The lores, ear coverts, and nape together form a dark blackish-brown mask. The remaining upperparts including the wings and tail are blackish brown. There are 2 faint white wingbars and white edges found on tertials. The bill is brownish black, and is shorter than the head. The bill is moderately broad and basally depressed, with rictal bristles moderately to strongly developed. The eyes are dark brown. The legs and feet are black or brownish-black.

Adult females are more subtle-looking than the adult males. This plumage is also kept throughout the year once birds have fully matured. The top of the head, ear coverts, and remaining upperparts including the wings and tail are grayish brown, becoming darkest on the tail. The forehead and indistinct supercilium stripe is grayish-white. The remiges and wing coverts are margined paler which forms wing-bars on the greater-and-median coverts. The underparts are whitish becoming pale red to salmon-coloured posteriorly, and finely streaked with gray on the breast, sides, and flanks.

Immature females are similar to adult females, except their posterior underparts are yellowish. Immature males show delayed plumage maturation making these birds look similar to an adult female throughout summer of second calendar year, but the underparts are extensively suffused with salmon pink or pale orange-red.

Juvenile plumage is held from May to September (Sibley 2000). At this age birds are grayish brown above, the feathers are margined with a pale buff or whitish colouration, producing a more or less conspicuously scaled effect; the larger wing coverts and inner secondaries are conspicuously edged with a pale buff. The remiges and outer rectrices have pale buff or whitish edges, and the outer web of the outermost rectrix sometimes is wholly pale buff or whitish. The underparts are white, the chin and sides are marked with elliptical streaks of brownish gray. Overall, juveniles appear to have scaly brown upperparts and white underparts with dusky oval spotting below. Sexes alike, except some males may be tinged pink below or have 1 or more pink or reddish feathers in the breast.

#### **Occurrence and Documentation**

The Vermilion Flycatcher is an accidental vagrant anywhere in British Columbia with only 2 records (Toochin et al. 2014). The first record for the province was a female bird found by Marc-Andre Beaucher along Highway 21 in the Creston Valley on December 6, 1997 (L. Van Damme Pers. Comm.). The second record for British Columbia also comes from the same region and was also a female plumaged bird found by Ed McMackin at Duck Lake, in the Creston Valley on October 30, 2000 (L. Van Damme Pers. Comm.). Both records were well described, but not photographed (L. Van Damme Pers. Comm.). The timing of these records fits perfectly with when vagrants have turned up in not only Oregon and Washington State, but also across eastern North America (Sibley 2000, OFO 2016, Wahl et al. 2005, WBRC 2016). Records from Oregon and Washington number 12 with dates ranging from October 10 – March 17 (OFO 2016, Wahl et al. 2005, WBRC 2016). There is a photographed record of a male from Oregon at Vanport Wetlands, in Multnomah County, on April 26, 2011 (OFO 2016). Amazingly there are single wintering records from both Oregon and Washington State from the months January – March (OFO 2016, Wahl et al. 2005, WBRC 2016). The majority of records for both states, have occurred in the late fall from October into December with 9 records (OFO 2016, Wahl et al. 2005, WBRC 2016). The British Columbia records both fall perfectly into this late fall pattern of birds wandering north. Records in both Oregon and Washington State have involved both immature and adult birds (OFO 2016, Wahl et al. 2005, WBRC 2016). There is good habitat for this bird to be found in the Lower Mainland, Fraser Valley, south Okanagan and in the east Kootenay region. This species is highly likely to occur again the province and should be watched for in the future.



Figure 1: Vermilion Flycatcher adult male near Sedona, Arizona on May 10, 2015. Photo © Michael Ashbee http://www.mikeashbeephotography.com/.



Figure 2: Vermilion Flycatcher adult female near Sedona, Arizona on May 10, 2015. Photo © Michael Ashbee http://www.mikeashbeephotography.com/.

# <u>Table 1: Records of Vermilion Flycatcher for British Columbia:</u>

- 1.(1) female December 6, 1997: Marc-Andre Beaucher: along Highway 21 Creston Valley (L. Van Damme Pers. Comm.)
- 2.(1) female October 30, 2000: Ed McMackin: Duck Lake, Creston Valley (L. Van Damme Pers. Comm.)

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http://www.mikeashbeephotography.com/. All photos are used with permission of the photographer and are fully protected by copyright law. Photographs are not to be reproduced, published or retransmitted on any website without the authorization of the photographer.

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