

## TWO EXTRALIMITAL BREEDING LOCATIONS FOR COMMON GRACKLE IN BRITISH COLUMBIA

Kevin S. Knight<sup>1</sup> and R. Wayne Campbell<sup>2</sup>

<sup>1</sup>1330 McDonald Avenue, Fernie, BC V0B 1M1

<sup>2</sup>2511 Kilgary Place, Victoria, BC V8N 1J6

### Abstract

Two out-of-normal breeding range locations for Common Grackle in British Columbia are presented. A small nesting population became established in Fernie, in the extreme southeastern corner of the province, in the early 1990s and now breeds annually. The second location, west of Williams Lake in the Cariboo region of the province, appears to be an isolated nesting. The records also include new habitat and altitudinal limits for the species in the province.

### Introduction

During the twentieth century, Common Grackle (*Quiscalus quiscula*; Figure 1), considered a common bird of eastern North America, expanded its breeding range westward and northward following the clearing of forests for agricultural activities (Marzluff et al. 1994). Today it breeds from northeastern British Columbia, extreme south-central Mackenzie, northern Alberta, northwest and central Saskatchewan, central Manitoba, Ontario, southern Quebec and the Maritime provinces south through the eastern two-thirds of the United States to the Gulf Coast (Peer and Bollinger 1997).

In British Columbia, the species was first reported in May 1938 at Tupper Creek in the Peace River region (Cowan 1939). Thirty years later, in 1968, Common Grackle had reached the Fort Nelson area, about 400 km to the north (Erskine and Davidson 1976). By the 1990s, it was well established as a local breeding species in suitable habitat throughout much of northeastern British Columbia and numerous extralimital records had been reported throughout the interior of the province, as well as vagrant occurrences for the south coast (Campbell et al. 2001).

Breeding has been suspected, but never confirmed, for several southern locations outside the grackle's breeding range in northeastern British



**Figure 1.** Since first being recorded in British Columbia in 1938 at Tupper Creek in the Peace River region, Common Grackle has successfully expanded its breeding range throughout the northeastern portions of the province and now has established a small breeding population in the extreme southeast at Fernie. 6 June 2009 (Kevin S. Knight). BC Photo 3735c.

Columbia. These include Shuswap Lake (RWC pers. obs.), Columbia River valley (R.S. Ferguson pers. comm.), and the Revelstoke area (D. Powell pers. comm.). Recently breeding has been confirmed at two widely separated locations in southern British

Columbia which is the purpose of this note. All observations for Fernie are from K.S. Knight and for Swan Lake by R.W. Campbell.

Through the 1990s, Common Grackle was reported from at least 28 widely scattered locations in British Columbia outside its breeding range, but was not known to occur in the extreme southeastern corner of the province (Campbell et al. 2001). It should have been expected there, as the species was invading the eastern boundary of adjoining Idaho beginning in the late 1960s and carrying through to the mid-1980s. It was first discovered breeding in the state in 1977 (Taylor and Trost 1985). A possible reason for the invasion includes the adaptability of the Common Grackle to new habitats created by an increasing human population which provide dispersal corridors in urban forest environments. A similar increase was noted during the same period in adjoining Montana (Skaar 1975).

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### Fernie, British Columbia

At Fernie, in the southeastern corner of British Columbia, the first Common Grackle (a pair) were noticed at the feeder of the senior author, in residential Fernie, in spring 1981 and each spring thereafter through 1984. The birds may have used the Elk Valley as a corridor as they continued to explore more suitable habitat in the Rocky Mountain Trench and beyond. During the remainder of the 1980s, Common Grackle was a regular sight at bird feeders in Fernie each spring with five the maximum number seen at any one time.

Common Grackle became established in Fernie as a breeding species in the early 1990s. A pair was first noticed taking up residence in the neighbour's spruce (*Picea* sp.) trees. They clearly had set up a territory since it was easy to see how they reacted to the presence of American Crows (*Corvus brachyrhynchos*) with vigorous pursuit and physical threat. It wasn't long before the raucous calls of

nestlings could be heard demanding to be fed. The parents were seen making the regular and frequent trips to foraging sites in the neighbourhood and back to the nest.

Breeding numbers increased slightly during the 1990s and early 2000s, during which at least three breeding territories have been established in residential yards using spruce trees (*Picea* sp.) as nest sites. A general annual chronology and noteworthy activities for Common Grackles during their period of summer residency follows:

- Common Grackles arrive each spring as singles or pairs between 20 and 30 April. They associate with Brown-headed Cowbirds (*Molothrus ater*) and Red-winged Blackbirds (*Agelaius phoeniceus*; Figure 2) at bird feeders.



**Figure 2.** A pair of Common Grackles feeding on a lawn with foraging Red-winged Blackbirds and a Brown-headed Cowbird. Fernie, BC. 2 May 2009 (Kevin S. Knight). BC Photo 3735a.

- As May progresses numbers increase. The usual flock size ranges between five and 10 birds, but up to 30 grackles (see Figure 7) have been recorded in rather loose aggregations. Some individuals may be exploring nesting territories. The males increase their sneeze-like calling and courtship activities begin. This often involves displaying males perching slightly away from a small flock that contains females. The males then begin their calling/displaying behaviours as if to give a nearby female a chance to bond.

- From mid- to late May activities include conspicuous shadowing of females by males as pairing and copulation occurs. Territories are well established as evidenced by spruce trees used as perches by males and the gathering of nesting materials. Males also use other structures, such as telephone wires (Figure 3) to maintain territorial boundaries.



**Figure 3.** Male Common Grackle on telephone wire, near a nest site in spruce tree on right, from which intruders, especially American Crows, are vigorously confronted. Fernie, BC. 15 June 2009 (Kevin S, Knight). BC Photo 3735e.

- By late May nesting grackles get fiercely protective, especially when American Crows are nearby, suggesting that incubation is underway at the end of May.

- During the first two weeks of June adults are busy feeding nestlings which are quite vocal. Adults can be seen gathering food as well as removing fecal

sacs which are promptly discarded some 15 to 25 m from the nest site.

- During the third week of June, the drab nestlings (Figure 4) start leaving the nest and can be seen perching on telephone wires and branches of surrounding trees. Some may move to wetlands to hide in thickets where their distinctive calls give away their presence.



**Figure 4.** Between 12 and 15 days after hatching the young leave their nest. The fledglings may stay near the nest for several days before departing with their parents to adjacent foraging areas (R. Wayne Campbell).

- In July, the parents are still feeding their young but with less urgency. Young become more noticeable as they become more independent. By mid-July, young of separate nests seem to begin gathering in mixed groups with adults. These small flocks rove about foraging throughout the remainder of July and into August. Towards the end of August, Common Grackles appear in mixed flocks of European Starlings (*Sturnus vulgaris*), Brewer's Blackbirds (*Euphagus cyanocephalus*), Brown-headed Cowbirds, and Red-winged Blackbirds.

- By September all Common Grackles have left the Elk valley.

In 2009, details for three Common Grackle nest sites were recorded as follows.

**Nest Site 1** (1330 McDonald Avenue; 11U 639301E 5484747 N; 991 m elevation).

### **Habitat**

Urban and residential with large yards, lawns, gardens and many trees and shrubs. Located to the south is a Beaver (*Castor canadensis*) wetland composed of alder (*Alnus* sp.), willow (*Salix* sp.), black cottonwood (*Populus balsamifera*), and emergent vegetation such as cattail (*Typha latifolia*).

### **Nesting Evidence**

**30 April:** a male was perched in neighbour's spruce tree that has been used for at least the past 15 years for nesting (Figure 5).



**Figure 5.** Since the early 1990s, a pair of Common Grackles have nested near the top of this spruce tree in residential Fernie, BC. 15 June 2009 (Kevin S. Knight). BC Photo 3735f.

**2 May:** a male and female, probably a pair, were at the front bird feeder. Occasionally the male displayed (Figure 6).

**6 May:** at least three males, of the five or six frequenting the neighbourhood, are calling and displaying in the tree above the nest site, creating quite a commotion. Some chasing is involved. Also foraging in the immediate area was a loose flock

of Brown-headed Cowbirds, Brewer's and Red-winged blackbirds. A passing Sharp-shinned Hawk (*Accipiter striatus*) created a stir but birds swirled about to avoid being attacked.



**Figure 6.** Male Common Grackle, vocalizing with fanned tail and ruffled feathers, displaying to a nearby female feeding on the lawn. Fernie, BC. 2 May 2009 (Kevin S. Knight). BC Photo 3735b.

**8 May:** noted five grackles in neighbourhood, staying within 250 m of the nesting site calling to one another. In evening four roost atop the spruces.

**14 May:** males have increased call frequency, alighting atop various tree tops and circling about.

**17 May:** observed a male and female feeding in the wetlands, vigorously turning over the leaves with their beaks. Male would occasionally call in response to another male calling nearby. The male feeding with the female was clearly shadowing her, for when she flew he would follow closely. In the evening four grackles were roosting in Lombardy Poplars (*Populus nigra*) across the street. Three were calling so the group may have consisted of three males and one female.

**18 May:** a male was perched above a female in the nest spruce tree. He was making unusual whining noises in between calls. No sign of carrying nesting material and I wonder if traditional nest site is going to be used. In afternoon, male was exhibiting extreme display behaviour to a female. Another male

showed up and the first male turned his attention to the newcomer with a neck-stretching behaviour and ruffled its feathers while calling. After a minute the territorial male chased off the interloper and returned to its mate.

**19 May:** two pairs at feeder with males displaying to the females with neck-stretching postures. Males shadow females with increased intensity.

**23 May:** much ruckus atop nest site. Males continue to shadow females with calling and displaying. Territorial male harassed American Crow flying by, suggesting that nesting had begun. Other grackles heard calling from a few streets away.

**29 May:** female not seen so probably on nest incubating (see Petersen and Young 1950). Male is quite noticeable perched high atop spruce and vigorously defends area within 60 m, especially from American Crows.

**6 June:** male feeding on lawn near bird feeder, filling his beak to capacity and then flying off likely to feed young (Figure 7). Male continues to react violently to the presence of American Crows.



**Figure 7.** Male Common Grackle gathering invertebrates and seeds to feed its young. Fernie, BC. 6 June 2009 (Kevin S. Knight). BC Photo 3735d.

**10 June:** female noticed packing off fecal sac which was dropped approx. 15 m away. Nestlings clearly heard raising a ruckus. Feeding trips by both parents are numerous.

**13 June:** nestlings quite vocal as feeding by adults continues. Noted three grackles coming to and from the nest site which suggests either two nests or a third helper.

**20 June:** nest site quiet and no activity seen the last few days. Today an adult was seen carrying food south of the nest site into the nearby wetlands. When investigated, was chastised by four adult grackles then briefly saw one apparent fledgling flush but swiftly disappear into the alders.

**23 June:** two fledglings perched on wires being fed by adults; adults briefly fended off an American Crow.

**28 June:** drab-looking juveniles flying about still being fed by parents.

**2 July:** family still in neighbourhood. Female noted at feeder collecting seeds and then flew off. Adults still harassing American Crows when they get too near the young.

**14 July:** male and female visited yard collecting food then flew off, likely to feed their young.

**30 July:** small mixed flocks of juveniles with a few adults are still in the neighbourhood.

**24 August:** large mixed flock of 30 Common Grackles, with a few European Starlings and Red-winged Blackbirds, in yard (Figure 8).

**Nest Site 2** (Dickens Road; 11U 641822E 5489064N; 1,020 m elevation)

#### **Habitat**

Small urban and residential area surrounded by open agricultural lands. Yards are well treed with lawns and gardens. Large adjacent hay fields are edged by a variety of shrubs. A small creek flows





**Figure 8.** Prior to departure in August, Common Grackles often associate in mixed flocks with European Starlings and Red-winged Blackbirds feeding on the ground on seeds from bird feeders. Fernie, BC. 24 August 2009 (Kevin S. Knight). BC Photo 3735h.



**Figure 9.** At least two pairs of Common Grackles nested in spruce trees behind the foreground fence in this residential section of Fernie, BC. 15 June 2009 (Kevin S. Knight). BC Photo 3735g.

through the area with the Elk River running further to the east.

#### *Nesting Evidence*

**15 June:** this site, north of town, had two nests in spruce trees (Figure 9) identified from vocal nestlings and adults seen carrying food. There could have been other nests as nestlings were heard at a different site. These nests, and their proximity to each other, are more like small colony (see Peer and Bollinger 1997).

**23 June:** all sites were quiet and no activity was noticed. Nestlings likely fledged. A few adults were foraging in adjacent farmlands.

**29 June:** a few drab juveniles were perching on telephone lines near the Dicken Road site and were being fed by adults. The adults flew off to nearby farmlands and east towards the river.

**Nest Site 3** (Annex Park; 11U 639665E 5485886N; 998 m elevation)

#### *Habitat*

An urban, wooded park (Figure 10) sandwiched between a river and a community with mature black cottonwood trees, lawns, gardens, and a long pond with a small strip of emergent vegetation around its perimeter. The Elk River, to the west, flows from north to south.

#### *Nesting Evidence*

**12 May:** two Common Grackles were found in a mix of other blackbirds and European Starlings.

**5 June:** a group of three grackles were noted. One bird was gathering what appeared to be mud and grass alongside the pond. It flew off east towards 11<sup>th</sup> and 12<sup>th</sup> Avenue where it was suspected of nesting in large spruce trees in a residential area.

**14 July:** a group of five grackles, some clearly dull-plumaged juveniles, were perching on telephone lines on 11<sup>th</sup> Avenue. Adults were foraging nearby in residential yards.

#### **Swan Lake, Cariboo, British Columbia**

During surveys of wetlands for colonial-nesting waterbirds in the Cariboo region of central British



**Figure 10.** Common Grackles likely nest in Annex Park in Fernie, BC., with its lawns, fields, and waterways for foraging and mixed woods for nesting. 24 September 2009 (Kevin S. Knight). BC Photo 3735i.

Columbia on 14 June 2009, the co-author noticed a male Common Grackle being harassed by two male Red-winged Blackbirds as it was flying. The grackle appeared to be carrying food in its bill. The location was near Swan Lake, 34.3 km along the Dog Creek Road from Highway 20 west of Williams Lake. The small cattail and willow marsh was located 15.8 km along the Place Lake Service Road.

The marsh had a small population of Red-winged Blackbirds nesting in the cattails. The marsh was too deep to check for nests without a canoe but both male and female grackles were seen flying into cattails with food, presumably for their nestlings, over 30 minutes of observation.

On 5 July, the marsh was visited again and an adult male Common Grackle was seen feeding, and flying short distances, with two recently fledged young. The female was not present. The empty grackle nest, similar in shape and construction shown in Figure 11, was located attached to stems of dead cattails about one metre above the water. The closest Red-winged Blackbird nest was about four metres away, also in cattails.

Another pair may have nested in the Cariboo in 2009. On 4 July, a male Common Grackle was found gathering food at the base of dead willows and fallen branches in a roadside swamp 8.6 km west of

Williams Lake along Highway 20 (10U 556921E 5770864 N; 891 m elevation). While foraging it was harassed by Red-winged and Brewer's blackbirds and an Eastern Kingbird (*Tyrannus tyrannus*). Eventually the grackle flew off to the southwest with a bill full of food. The patch of dead flooded willows at the east end of the swamp, a good place for a pair of Common Grackles to nest, was searched without success.



**Figure 11.** A Common Grackle nest, found in a marsh, is a large bulky, cup-shaped structure composed of narrow strips of dead cattail leaves and the leaves and stems of coarse grasses. The nest is always lined with finer dry grass stems. Bear Flat, BC. 23 June 2008 (R. Wayne Campbell).

### ***Summary of New Breeding Information from Fernie and Swan Lake***

A small breeding population of four to six pairs of Common Grackles are presently breeding within the urban and residential sections of Fernie, the first such location and habitat reported for British Columbia (Campbell et al. 2001). While the species is known to nest in tall conifers in urban settings elsewhere in North America (Peer and Bollinger 1997) most nests in British Columbia have been found in emergent vegetation in marshes and along rivers and lakes in riparian willows (Campbell et al. 2001). The ornamental spruce nest sites are unique in the province.

The elevation for one nest site in Fernie, at

1,020 m, increases the known altitudinal limit in the province by 220 m (Campbell et al. 2001).

The occurrence and breeding of Common Grackle in the Cariboo region of central British Columbia is new for the region (Roberts and Gebauer 1992; P. Ranson and J. Simms pers. comm.).

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#### *About the Authors*

Kevin is a lifelong Fernie resident whose family has been in the Elk Valley for over 100 years. He is a keen outdoor enthusiast and became interested in birds at an early age. He participates in the Fernie Nature Club, British Columbia Nest Record Scheme, Project Feeder Watch, the Christmas Bird Count, the British Columbia Breeding Bird Atlas, and has contributed to the now defunct House Finch Disease Survey. He is currently a Director of the newly formed Elk River Alliance, a group formed to increase riparian awareness and conservation.

Wayne is a Director of the Biodiversity Centre for Wildlife Studies.