# Status and Occurrence of Acorn Woodpecker (*Melanerpes formicivorus*) in British Columbia. By Rick Toochin.

#### **Introduction and Distribution**

The Acorn Woodpecker (Melanerpes formicivorus) is a common woodpecker of montane woodlands from southern Washington State (localized along the Columbia River at the town of Lyle), northwestern Oregon, south throughout California, with 2 localized populations in the Baja Peninsula in Mexico, Arizona, New Mexico, West Texas, and western Mexico through the highlands of Central America to the northern Andes in Colombia (Koenig et al. 1995, Wahl et al. 2005). Throughout its range, this species is closely associated with Oak Trees (genus Quercus) and is most commonly found in Pine-Oak Woodlands (Koenig et al. 1995). It is probably best known for its highly social habits and unique method of storing acorns in specialized trees known as storage trees or granaries, although colonial living and acorn storage are not characteristic of all populations (Koenig et al. 1995). This is generally a sedentary species, but at least one population, located near the Huachuca Mountains in southeastern Arizona, regularly migrates annually (Stacey and Bock 1978) although irregular migrations occur elsewhere when local acorn crops fail (Koenig et al. 1995). The Acorn Woodpecker is an accidental species to British Columbia and records could reflect either birds searching for acorns due to crop failure or a possible range expansion north (Koenig et al. 1995, Toochin et al. 2014, Please see Table 1). There is one accepted record by the Alberta Bird Records Committee of a bird photographed near Sundre, Alberta from July 1-9, 2006 (Hudon et al. 2008) There are no records for Alaska (West 2008, Gibson et al. 2012) or Idaho (IBRC 2011).

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

The Acorn Woodpecker is one of North America's most spectacular looking woodpeckers. This species is covered by all North American field guides. The facial markings give this bird a unique look often described as a "clown face" (Sibley 2000). There are 7 recognized subspecies of Acorn Woodpecker found from North to South America (Koenig *et al.* 1995). To date, the only likely subspecies of Acorn Woodpecker that has occurred in British Columbia is (*M. f. bairdi*) because it is the only subspecies that comes close to the Province, ranging from southern Washington and Oregon, south through California to northern Baja California (Koenig *et al.* 1995, Wahl *et al.* 2005). The following describes the various ages of Acorn Woodpecker and is adapted from Koenig *et al.* (1995). This species is so unique that any bird encountered should not present any identification difficulties for observers.

The juvenile plumage of the Acorn Woodpecker is similar to definitive basic or adult plumage. The Acorn Woodpecker in juvenile plumage has dull colors and lacks the glossy tones shown in adult birds. The belly feathers have a light tan colour rather than the clean white belly as shown

on adult birds. There are brownish breast streaks on juvenile birds instead of the black breast streaks found on the adults. The juvenile Acorn Woodpecker has dark eyes that will overtime fade to a lighter color similar to the adults. The eye colour of the juvenile Acorn Woodpecker changes colour before their first prebasic or post juvenile molt is complete (Bent 1939, Spray and MacRoberts 1975). The juvenile birds have solid red crowns similar to adult males. There are white spots or bars on the rectrices that are found in >70% of all first-year birds compared to only <30% of all adult birds. The juvenile Acorn Woodpecker is slightly smaller than adult birds in all measurements (Koenig 1980).

The prebasic I molt takes place 2–4 months after fledging and typically occurs between July–September. All flight and tail feathers are retained until the next prebasic molt during the following summer, and some juvenile body plumage is often retained through the early winter. Birds in basic I plumage are similar to definitive basic plumage except the flight feathers and the primary-coverts are uniform in color, shape, and wear. The primaries on these birds are tapered and pointed at the tip (Koenig 1980, Koenig *et al.* 1995).

The Acorn Woodpecker acquires its definitive prebasic molt from May-October with 1–6 juvenile secondaries and a variable number of juvenile primary-coverts that are typically retained symmetrically on both wings (Koenig *et al.* 1995). The retained feathers contrast markedly with the replaced adult feathers in the amount of wear. During subsequent prebasic molts, some secondaries and primary-coverts are again retained, often not symmetrically. Consequently, it may be possible to age many older birds based on the patterns of contrast and symmetry between new and old, worn secondaries and primary-coverts (Koenig *et al.* 1995).

The Acorn Woodpecker in definitive basic or adult plumage is a very spectacular and distinct looking species of woodpecker. The following plumage description is from Koenig *et al.* (1995) but is based on Short (1982). The back and wing-coverts are glossy black, the gloss varying from green to purplish blue; the rump and uppertail-coverts usually white, sometimes with narrow black shaft streaks. The rest of wings and tail above black or brownish black with less gloss; the bases of the primaries are white; the secondaries are barred black and white forming a conspicuous patch. The underwings are duller except the coverts which are black with white streaks. The tips of the central rectrices are pointed and commonly with white or gold spots or bars in young birds. The shafts are black above except whitish at the base of tail in some birds. The crown to the upper nape is scarlet red (extending from the top of the eyes to the nape in males, and reduced by a black forecrown bar with the red confined to the nape in adult females). The anterior forehead, base of the bill, chin, and the upper throat is black (rarely brown), bordered by a white band extending from the posterior of the forehead ventrally through the malar region where it broadens to join a broad yellow or yellowish white band

across the lower throat. There is a black mask that encircles the eyes and extends through the ear coverts where it joins the black nape and back; sides of the neck are glossy black. The breast is black but variable, usually broken up with white spots or streaks. The center of the breast at the border of the yellowish throat is marked by a small area of black feathers with red tips in some birds. The lower breast, sides, and flanks are variably streaked black on a white background, the posterior underparts are white. The undertail-coverts are white with black streaks or droplet-shaped marks.

#### Occurrence and Documentation

The Acorn Woodpecker is an accidental species in British Columbia with only 7 Provincial records of which 5 have occurred in the past 4 years (Toochin et al. 2014, Please see Table 1). Five records involve adult females with one record not giving the sex of the bird and the first record being identified as a male might actually have been a female (D. Bastaja Pers. Comm., Toochin et al. 2014, Please see Table 1). When groups of Acorn Woodpeckers exhaust their food stores they will often abandon their normal territories and wander in search of other food sources (Koenig et al. 1995). If there is a small local failure in acorns, birds will leave their normal territory to search for food in nearby areas not far from the territory of origin where they will likely return the following spring (Koenig et al. 1995). If the crop of acorns has a more extensive or massive crop failure, this can lead to birds permanently leaving an area with the results in the disappearance of an entire population (Koenig et al. 1995). It is in these "flight years" when birds are found out of range and out of normal suitable habitats (Koenig et al. 1995). The recent records in British Columbia are likely the result of a lack of food stores forcing birds to wander, but could also be the result of birds looking to expand their range northward. It is also possible that since female birds in the Melanerpes family of woodpeckers are known to wander in order to look for suitable nesting habitat as the males look after the young at the nest that there could be some sort of range extension happening (Koenig et al. 1995). So these occurrences could be the result of both factors. In the past 4 years, there have been two separate years of records were birds showed up together during the same time period (Toochin et al. 2014, Please see Table 1). There were 3 birds seen in 2010 and 2 birds found in 2012 (Toochin et al. 2014, Please see Table 1). There have been four different birds found between the dates May 17 – May 28 (Toochin et al. 2014, Please see Table 1). All but one was identified as an adult female. These birds were found in Princeton, Manning Provincial Park, Merritt and Hope (Toochin et al. 2014, Please see Table 1). The first 2 records for the Province were both June records with 1 bird found in Maple Ridge and another found near Oliver (Toochin et al. 2014, Please see Table 1). The only other Provincial record is of a female that successfully wintered in Abbotsford in 2010-11 (Toochin et al. 2014, Please see Table 1). So far this species tends to turn up in the southern interior which makes perfect sense because this region has the most similar preferred habitat that Acorn Woodpeckers like to live in. The Abbotsford bird

wintered in a hazelnut farm and had plenty of nuts to eat over the winter months. According to Wahl *et al.* (2005) the population in southern Washington is small but stable so birds coming into British Columbia might not necessarily be coming from this population but from farther south where there have been droughts and massive forest fires between the years 2010-2013 (M. Meredith Pers. Comm.). As it stands right now, the Acorn Woodpecker is an eruptive species that likely occurs as a result of food shortages rather than a true range expansion, but hopefully in time as more records accumulate, it will be possible to see what is actually happening with this species in the Province. It would be wonderful to see this magnificent looking woodpecker breeding in the southern interior of the Province. Observers should particularly watch bird feeders and areas of mixed Pine and Oak Trees for the signs that this species is around. If a tree or telephone pole is riddled with holes that have acorns in them, then there is an Acorn Woodpecker nearby.



Figure 1: Record 1: Acorn Woodpecker in Maple Ridge on June 15, 1996. 1<sup>st</sup> record for Canada. Photo © Amy Newman.



Figure 1 & 2: Record #3: Acorn Woodpecker adult female in Princeton on May 24, 2010. Photos © Rick Toochin.



Figure 3 & 4: Acorn Woodpecker adult female in Merritt on May 19 & 20, 2012. Photos © (left)Don Cecile and (right) Rick Toochin.



Figure 5 & 6: Acorn Woodpecker adult female in Hope on May 20, 2012. Photos © (left) Neil Hughes, (right) Rick Toochin.

## Table 1: Records of Acorn Woodpecker for British Columbia:

- 1.(1) original id as immature male but more likely an adult female June 15-16, 1996: Glen and Helen Carelse, Daniel Bastaja, mobs (BC Photo 1607) Maple Ridge (Kenzie 1996, Bastaja 1996, Davidson 1999, Plath 2000)
- 2.(1) adult female June 16-23, 2003: K. and M. Hutterli (photo) near Oliver, Okanagan (Cecile 2003, Toochin *et al.* 2014)
- 3.(1) adult female May 24-28, 2010: Dave and Sue Elwell, mobs (photo) 156 Tulameen Trail, Princeton (Charlesworth 2010a, Toochin *et al.* 2014)

- 4.(1) adult May 27, 2010: John Vooys: Manning Park Lodge (Charlesworth 2010b, Toochin *et al.* 2014)
- 5.(1) adult female December 27, 2010- February 5, 2011: Stan Olson, mobs (photo) end of Fore Road, Abbotsford (Charlesworth 2011, Toochin 2012)
- 6.(1) adult female May 16-20, 2012: Brain Carson, mobs (photo) 71710 Branch Bench, Sunshine Valley, outside Hope (Toochin 2012, Toochin *et al.* 2014)
- 7.(1) adult female May 17-27, 2012: Bob Scafe, mobs (photo) corner of Coldwater Road & Spanish Banks Pl., Merritt (Toochin *et al.* 2014)

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