

# ANOMALOUS BILL ON RED-WINGED BLACKBIRD

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On the evening of July 16, 2014, we were birding in the area around the north end of Blackstrap Lake, southeast of Saskatoon. At about 20:00 h, we stopped at the intersection of Highway 663 and Township Road 334 (a location known to local birders as the 'four corners sloughs') for a final scan for waterfowl. On a stop sign across the road, a male red-winged blackbird (*Agelaius phoeniceus*) made his presence known by singing and calling repeatedly. From our location it appeared that he was holding a black feather in his bill. We crossed the road for a closer look and discovered that the feather was actually a wafer-thin extension of his maxilla (aka upper mandible), that was more than twice as long and wide as his bill.

The bills of birds consist of a bone structure covered by a keratin layer. The keratin layer grows continuously during the life of the bird, but normal wear maintains the shape and size. Recently, bill deformities were reported in 30 wild bird species along the northwestern coast of North America.<sup>1,2</sup> The deformities resulted from accelerated growth of the keratin on the maxilla, the mandible, or both. The abnormal growth patterns reported included simple elongation as well as significantly curved and crossed bills. Affected birds were seen to have difficulty feeding, and were unable to preen themselves to maintain plumage quality and remove external parasites. One of the studies noted



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that a few birds with deformed bills exhibited a normal bill shape when later recaptured, suggesting that such deformities are not always permanent.<sup>2</sup>

Neither study reported the type of bill anomaly we saw with the red-winged blackbird. Other than the growth from the tip of the maxilla, the rest of the bill appeared to be normal. Although this blackbird appeared healthy, it seems likely that the growth would interfere with feeding, preening and other tasks. It may be that the extension periodically breaks off, allowing the bird to function in a normal manner.

While much of the current research into this phenomenon is centred in Alaska, avian bill deformities have been reported worldwide. The Cornell Lab of Ornithology and Bird Studies Canada have asked Project FeederWatch participants in the United States and Canada to report affected birds,<sup>3</sup> and

in the United Kingdom the British Trust for Ornithology has asked Garden BirdWatch participants to do the same as part of their Big Garden Beak Watch project.<sup>4</sup> Data from citizen scientists should help identify those species most affected and possibly reveal a geographical aspect.

1. Van Hemert C, Handel CM (2010) Beak deformities in northwestern crows: evidence of a multispecies epizootic. *The Auk* 4:746-751.
2. Handel CM, Pajot LM, Matsuoka SM, Van Hemert C, Terenzi J, Talbot SL, Mulcahy DM, Meteyer CU, Trust KA (2010) Epizootic of beak deformities among wild birds in Alaska: an emerging disease in North America? *The Auk* 4:882-898.
3. Cornell Lab of Ornithology (2014) Deformed Bill Research in Alaska. <<http://feederwatch.org/learn/articles/deformed-bills-alaska/>>
4. British Trust for Ornithology (2014) Big Garden Beak Watch. [www.bto.org/volunteer-surveys/gbw/about/background/projects/bgbw](http://www.bto.org/volunteer-surveys/gbw/about/background/projects/bgbw) 