



New Longevity Record for an Anna's Hummingbird from British Columbia

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If you live on the temperate southwest coast of British Columbia, Anna's Hummingbird (*Calypte anna*) is now a familiar year-round visitor at feeders (Figure 1). While seen daily, it cannot be assumed that the same bird is always present. The life span of any species varies greatly. Generally, the larger a bird is, the longer its life expectancy. Most small

birds, especially songbirds, have an average life expectancy of less than two years due to risks such as predation, disease, habitat loss, natural accidents, and collisions with windows in buildings and moving cars, inclement weather, chemical, and perils of migration (Welty 1975, Loss et al. 2015).



Figure 1. Anna's Hummingbird, one of two regular species of hummingbird in southwestern British Columbia, is the only one to visit feeders year-round. *Photo by Mark Nyhof.*

Most information on the life span of birds comes from recaptures and returns of banded individuals. The banded individual is either re-trapped later or found dead and with a record of the band number the age can be calculated. However, for birds found dead with bands, the calculation of total age may be less precise as the length of time the bird has been dead is speculative and the age is unknown (Campbell 2007). Both longevity records for Anna's Hummingbird are from banding recoveries. A bird banded as an immature male in Tucson, Arizona was 8.5 years old and another banded as a hatch year female at Point Reyes, California, was at least six years old (Clapp et al. 1983, Russell 1996).

Another reliable method to determine how long a bird lives is to note aberrant characteristics in its plumage, such as albinism and leucism, and follow the individual over time. These traits are rare in North American hummingbirds but various levels of full and incomplete albinism and leucism have been reported for Anna's Hummingbird (Allen 1878, McGregor 1900, Guzman 2016). For example, notes

for one Anna's Hummingbird bird was described by McGregor (1900) as "Hayward [California] July 10, 1886 ♀. Many feathers on head, and neck, and a few on back are white; primaries, their coverts, greater and middle coverts, and upper and lower tail coverts, white."

On 1 October, 1987, my daughter, Tessa, initiated a project "Taste and Colour Preferences of the Anna's Hummingbird" as a school activity for entry in the Vancouver Island Regional Science Fair in spring 1988 (Campbell, T.N. 1989a,b). The experiment was conducted at our home in Saanich, British Columbia (10U 477852E 5367893N; elevation 21 m). While testing her apparatus on 1 October (Figure 2), before starting actual observations on 19 October, I noticed a male Anna's Hummingbird with white speckles in its auricular patch. The bird appeared to be an adult, regularly fed at the feeders, and was affectionately named "white cheeks" in my notes. It was considered a partially leucistic bird that was lacking melanin in some of its facial feathers but other feathers on its body appeared normal (see Sibley 2011. Tessa's



Figure 2. To determine feeding preferences of Anna's Hummingbirds, solutions of sugar-water ranging from no added sugar to 90% sugar were monitored for activity. Results showed a preference for concentrations of one part sugar to one part water. *Photo by R. Wayne Campbell.*

initial 134-day project was expanded to include a full year, 1 October 1987- 22 October 1988 (Campbell, T.N. 1989), during which time “white cheeks” was a frequent visitor. Two commercial feeders replaced the experimental group in late October 1988. In autumn 1996, the experimental feeders were set up again from 15 September to October 15 to answer more specific questions on taste preferences, using statistics, for a Bachelor of Science (Honours) thesis (Campbell, T.N. 1996). During this entire period, late October 1988 to late October, 1996, “white cheeks” was recorded regularly year-round. The hummingbird was only recorded on 11 occasions in November 1996 and was last seen on 20 December 1996, the day before a blizzard and record snowfall hit Victoria that lasted into early January 1997 (Global News 1996, Heidorn 1996; Figure 3).

When first noticed on 1 October 1987, the uniquely patterned hummingbird appeared to be an adult male. The complete moult of Anna’s Hummingbird usually begins at about 3-4 months of age and can last 4-5 months (Russell 1996, Williamson 1956). In the late 1980s, Anna’s Hummingbird was already a

resident species on southern Vancouver Island with populations expanding locally and provincially (Campbell et al. 1990). At that time, the species nesting cycle only lasted from about mid-February through early July suggesting two broods were reared per year (Campbell et al. 1990, Campbell 2009). It appeared that the bird had fully completed its moult into adult plumage by October. Assuming “white cheeks” fledged locally during late winter of 1987, the bird’s age would be a minimum of nine years and seven months old. This calculated age is at least one year and two months older than the longevity previously reported (Russell 1996). †

Remarks: It has been widely suggested over the years in popular books and in instructions accompanying commercial feeders that the recommended formula for hummingbirds is four parts water to one part sugar (e.g., Stokes and Stokes 1989, True 1993). Rumors have persisted for decades that higher concentrations of sugar water may cause liver damage in hummingbirds. While research continues focused on understanding the effects of very high blood sugar



Figure 3. The male Anna’s Hummingbird, dubbed “white cheeks”, was last seen in Saanich, BC, just prior to a record snow storm in 1996/97. *Photo by R. Wayne Campbell, Saanich, BC, 1 January 1997.*

levels in hummingbirds, some results indicate that the bodies of these birds are well adapted to assimilate sugars (Hainsworth 1974, McWhorter and Del Rio 1999). In Saanich, on southern Vancouver Island, BC, two independent projects, conducted decades apart, suggested that Anna's Hummingbirds preferred a concentration of one part water to one part sugar (Campbell, T.N. 1989,1996, Kosgoda 2015). This formula was fed to "white cheeks" without apparent detriment for nearly a decade! Sugar water preferences may vary, however, for hummingbirds at feeders in the interior of the province.

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BRITISH COLUMBIA ROUND-UP

Compiled by R. Wayne Campbell

Some of the fascinating items included in this issue's Round-up: An announcement for an exciting new book on the birds of the Creston valley (Figure 1); encouraging and thoughtful comments from a diverse group of people on the unconventional approach to our seabird compendium; announcement of a new bird checklist and a study on a new mammal species for BC; and lots of anecdotes on new and interesting science oddities. An award-winning poem by teenaged hummingbird researcher, Wishva Kosgoda, is also included.

Over the past few years questions from members have been noted and I have neglected responding because of the time required to research the answers.

Slowly, one by one, I compiled enough reliable information to include a few in this round-up. The task made me realize how important a comprehensive library can be as well as the power of the internet as a search engine, and how easy it is for myths and misleading information to be perpetuated by social media.

Time afield is precious and we all have unique experiences and puzzling observations. Two examples are published from our holdings. One recounts a feral cat attack and the other concerns an observation of dwindling numbers of Rufous Hummingbirds 92 years ago that is still topical today.



Figure 1. It is anticipated that in 2020 Linda Van Damme's much anticipated book on *Creston valley birds* will be published. With over three decades of personal observations and detailed research, this book will be unique in BC ornithology. The breeding sections alone are based on a staggering 15,000 records of nests, eggs, and young. In this photo, Linda is measuring a Bald Eagle nest tree.