

GOLDEN-CHEEKED WARBLER: NEW MAXIMUM LONGEVITY RECORD

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The Golden-cheeked Warbler (*Setophaga chrysoparia*) breeds exclusively in juniper-oak woodlands in central Texas (Ladd and Gass 1999). It was listed as endangered in 1990 because of habitat loss and fragmentation (Smith 1990). Much of the research on the Golden-cheeked Warbler's demography has been part of long-term monitoring at Fort Hood Military Reservation and at Balcones Canyonlands Preserve (see Groce et al. 2010). The species has been banded and monitored at other locations as well, including Kerr Wildlife Management Area (WMA), Kerr County.

On 19 April 2013, we observed an adult male Golden-cheeked Warbler at Kerr WMA with a single aluminum U.S. Geological Survey band on his left leg. On 14 May 2013, we captured the banded male by placing a mist net near him while he was singing and playing a recording of the species' song to lure him into the net. With the bird in hand, we recorded the number on his band (2410-77143) and added three auxiliary color bands so that he could be identified later by sight. We continued to monitor the male over the 2013 breeding season (March to July). In 2014, five different observers independently identified the male on 12 separate occasions and accurately recorded his unique combination of color bands. He successfully paired and fledged young in both years. On 9 May 2015, Colón and Holden observed the male again and independently recorded the correct color band combination. The male was foraging quietly in the company of a female, an unbanded male, and fledglings.

The bird was originally banded at Kerr WMA on 19 April 2006 (D. A. Cimprich pers. comm.). We first located him in 2013 in the southern portion of Kerr WMA and found him in the same small patch of vegetation again in 2014 and 2015, supporting previous observations that the site fidelity of male Golden-cheeked Warblers to their breeding grounds is high (Pulich 1976, Peak and Thomas 2010). On the basis of his plumage, the male was at least two years old when banded in 2006. We last observed him on 9 May 2015, inferring a minimum age of 11 years.

Despite the Golden-cheeked Warbler's endangered status and long-term efforts at banding and monitoring at other locations, little information exists regarding the species' maximum longevity (see Groce et al. 2010). The oldest male and female Golden-cheeked Warblers previously reported were 8 and 6 years old, respectively (Ladd and Gass 1999, R. G. Peak, unpubl. data). Our observations extend the known maximum longevity of male Golden-cheeked Warblers beyond earlier reports. Our observations also place the Golden-cheeked Warbler among the few *Setophaga* warblers known to be capable of living to over 10 years. To our knowledge, longevity of ≥ 10 years has been reported for only six other species of *Setophaga*: Adelaide's (*S. adelaidae*), Prairie (*S. discolor*), Townsend's (*S. townsendi*), Yellow (*S. petechia*), and Yellow-rumped Warblers (*S. coronata auduboni*) and the American Redstart (*S. ruticilla*) (Kennard 1975, Klimkiewicz et al. 1983, Lutmerding and Love 2014).

Longevity is an important demographic trait with consequences for population dynamics. Long-lived species, for example, may be less sensitive to demographic variability and fluctuations in population size over time (Garcia et al. 2008, Morris et al. 2008). Our single record provides only a glimpse into the Golden-cheeked

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Warbler's maximum longevity. Continuing long-term monitoring, however, offers the possibility for further observations of this demographic variable. Future records may prove useful in models of population viability or growth, which can help improve conservation planning and management.

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