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## Field Report

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# Old-aged coyote in an urbanised landscape

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## Abstract

There is a paucity of information on longevity in coyotes, and no age information is available for coyotes inhabiting urbanised areas. This note reports on the death of a 10-12-year-old female eastern coyote (*Canis latrans* var.), radio-collared on suburban Cape Cod, Massachusetts.

## Introduction

No definitive information is available about longevity in wild coyotes and there is a lack of data for most other canids including grey wolves (*C. lupus* - Mech 1988). In addition, little or no age-related information for coyotes inhabiting urbanised landscapes is available, except for an estimate of a 9-12-year-old radio-collared female coyote (Way 2003). Knowlton (1972) reported a 15-year-old female from western Colorado and a 14-year-old male from Texas. The oldest coyotes that Nellis and Keith (1976) found in their central Alberta study were

a 12-year-old female and a 14-year-old male. J. Sheldon (pers. comm.) reported three 11-12-year-old (one female, two males) coyotes in Yellowstone National Park including one female that reproduced at 11 years of age. Berg and Chesness (1978) found an 11-year-old female in northern Minnesota and reported coyotes (no sex mentioned) reaching 12 years of age. Andrews and Boggess (1978) documented 12-year-old males but only 6-year-old females in Iowa. Parker (1995) reported a 15-year-old captive male from Michigan. Young and Jackson (1951) reported an 18-year-old raised in captivity; the next oldest coyote in their captive sample was 15 years of age. Finally, Bernstein and Schelling (1999) reported a 19-year-old spayed female, the oldest coyote found in the literature. These authors, citing Jones (1980), reported the oldest coyote (dying in 1904) on record as 21 years and 10 months of age. Thus, it would appear that 10 years is a very old age for a coyote, especially for a wild female. Old-aged canids may contribute very significantly to local population dynamics if they sustain reproduction over the course of their lives (e.g. Way 2003); thus, it is important to report older

animals in different environments in order to get a sense of the age structure of various populations.

## Results and Discussion

On 8 June 2001 we captured a 17.7kg eastern coyote (#0110) in the town of Barnstable, within suburban Cape Cod, Massachusetts. Her age was estimated from tooth wear (Bowen 1982, Landon et al. 1998) as 9-12 years old (Way 2003). From June 2001–September 2002 we located her 429 times, travelling regularly through a 24.4km<sup>2</sup> home range. She gave birth to four or more pups on a golf course in late March 2002 and they were observed at her group's traditional rendezvous site (Way et al. 2001, Way 2003) through July 2002<sup>3</sup>. In early fall 2002 #0110 was observed and appeared robust. We did not track her from September 2002 to June 2003, when we found her body under a shed next to a large open cranberry bog, having apparently died of natural causes. Judging by the age of decomposition it appeared that she had died during the late winter. We extracted one lower canine and had it aged (Matson's Laboratory, LLC, Milltown, Montana). The result indicated that #0110 was 11 (+/- 1) years old and the testing had the highest reliability (certainty code = "A") associated with the laboratory's cementum aging analysis. This laboratory result supports visibly assessing tooth wear as a reliable indicator for estimating age in older canids. Because #0110 probably died during late winter 2002 (i.e. before the whelping season for coyotes) but was not recovered until early summer 2003, we suspect that she may have been up to 11 years and 8 months old, assuming coyotes are born in early April in our study area (Way et al. 2001). She gave birth and successfully reared pups during her last year of life.

<sup>3</sup><http://www2.bc.edu/~wayjo/2002updates/7-16b-02.html>

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