

LONGEVITY AND HOME RANGE OF A TOWNSEND CHIPMUNK

Examination of the literature has failed to reveal longevity information for the Townsend chipmunk (*Eutamias townsendii cooperi*). In fact, such records for the genus *Eutamias* are scarce. In California, Ross (J. Mamm., 11: 76-77, 1930) reported that captive chipmunks, apparently *Eutamias quadrimaculatus*, were lost in a fire after 8 years of captivity. More recently, Broadbooks (Misc. Publ., Univ. Mich. Mus. Zool., No. 103: 35, 1958) recaptured two *Eutamias amoenus* which were at least 5 years and 2 months old. Small mammal trapping studies by the author in Oregon revealed a longevity of at least 7 years for a wild male *E. t. cooperi*.

The studies were made on the H. J. Andrews Experimental Forest, within the Willamette National Forest in Linn and Lane counties, Oregon, from April 1954 to May 1965. During part of that period, the chipmunk, no. 2236, was captured 59 times. He was caught on two population grids: a mouse grid of 56 traps with a spacing of 50 ft, and a chipmunk grid of 48 traps with a spacing of 100 ft superimposed over the mouse grid. The grids were southerly exposed at an elevation of about 3,450 ft in old-growth Douglas-fir (*Pseudotsuga menziesii*) timber type about ½ mile from the nearest cutting. This animal was first caught 28 August 1955 and was considered to be a juvenile approximately 3 months old. He was last captured 24 May 1962, when about 7 years old; his testes were descended and he appeared in good health. His monel fingerling ear tag was in excellent condition and firmly attached to the ear. The area was trapped in the fall of 1962, spring and fall of 1963 and 1964, and spring of 1965, but the animal was not recaptured.

When no. 2236 was young he was caught from one to five times during each trapping period of 6 nights on the mouse grid. As he became older he was captured less often until 1959, when he was caught in May, June and September but not in July, August, October and November. From 1960 to 1965 the mouse grid was trapped only in spring and fall. In 1960 and 1961 he was taken only in the fall and was last caught in the spring of 1962. The chipmunk grid was trapped only in the fall, and the animal was captured eight times from 1954 to 1961. He was taken at least once annually except for 1956 and 1959.

Most of the captures on the mouse grid were clumped together in 14 adjacent traps which formed a nearly complete rectangle of 100 × 200 ft. However, 8 of the 51 mouse-grid capture sites were on the outer edge, suggesting the animal may have ranged beyond the border. On the basis of the exclusive boundary strip method described by Stickel (J. Mamm., 35: 2-3, 1954), the home range for the mouse grid was estimated to be 1.5 acres for the life of the animal, and the home range for the chipmunk grid was estimated to be 1.7 acres. None of the captures on the chipmunk grid was on its outer edge.—JAY S. GASHWILER, Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, U. S. Department of the Interior, Oregon State University, Corvallis. Accepted 10 January 1965.

