

Eastern Chipmunk

Tamias striatus



Photograph by Laura Wagner, Clemson University.

Species Overview

Status: Removed from Florida's Endangered and Threatened Species List.

Current protections:

- 68A-1.004, F.A.C., Take – The term take shall include taking, attempting to take, pursuing, hunting, molesting, capturing, or killing any wildlife or freshwater fish, or their nests or eggs by any means whether or not such actions result in obtaining possession of such wildlife or freshwater fish or their nests or eggs.
- 68A-4.001, F.A.C., General Prohibitions and Requirement – Prohibits the take, transport, sale, and possession of wildlife.
- 68A-29.002, F.A.C., Rules relating to the Taking of Mammals – Prohibits take, transport, sale, purchase or possession of certain species of mammals unless authorized by 68A-9 or 68A-24, F.A.C.

Biological Background

This section describes the biological background for this species and provides context for the following sections. It focuses on the habitats that support eastern chipmunks, and the threats faced by the species.

The eastern chipmunk inhabits deciduous forests throughout its range in eastern North America. Preferred habitat in Florida is hardwood hammock and mixed hardwood-pine forests having oaks as the dominant species, especially in areas where those habitats are associated with mixed wetland forests along or near streams and rivers (Gore 1990, Winchester and Gore 2015). The eastern chipmunk is not evenly distributed across its range in the northwestern portion of the Florida panhandle, and much of the deciduous forest habitat that appears suitable remains unoccupied (Gore 1990; Winchester and Gore 2015). Multiple, secure refuges from predators (e.g., rock crevices) are expected to be important resources for individual chipmunks within their home ranges, along with elevated sites (e.g., downed logs) that provide a good view of the surrounding area (Snyder 1982). Chipmunks also may occur in urban, residential areas where hardwood trees, artificial refugia (e.g., under porches or sheds, or in rock walls), and supplemental food resources (e.g., bird feeders) are available (Ryan and Larson 1976, Yahner 1987, Winchester and Gore 2015).

Individual chipmunks live in separate burrows within home ranges that may partially overlap (Yerger 1953, Yahner 1978). Individuals are active during the day, mostly within 15 m (50 ft) of a burrow (Yahner 1978, Snyder 1982), which is considered the core area for that individual. Adult chipmunks will aggressively defend the core area of their range against other chipmunks (Yahner 1978). Yahner (1978) found that burrows of different individuals were separated by an average of 35 m (115 ft).

Density of eastern chipmunk populations varies over time and geographically, ranging from 0.3 to 37.6 individuals per 1 ha (2.5 ac; Yerger 1953). Adult breeding female density is probably determined by the availability of food resources, while male density seems to be dependent on female density (Galloway and Boonstra 1989). Clear-cutting of forests has no significant effect on eastern chipmunk population densities or age structure, but forest fragmentation decreases chipmunk survival rates (Mahan and Yahner 1998, Nupp

and Swihart 1998). In farmland woodlots, density decreases with increasing area and isolation of habitat (Reunanen and Grubb 2004).

Threats

A Biological Status Review (BSR; FWC 2015) found that the eastern chipmunk did not meet the criteria for state listing in Florida. A study by Winchester and Gore (2015) found that though chipmunks remain uncommon in Florida, the range had not declined since studies in the late 1980's, with chipmunks confirmed in several new areas within the range. In the more recent studies, chipmunks were often associated with residential areas, and increases in residential areas as well as increases in availability of hardwood hammocks may explain the range expansion. The eastern chipmunk is listed as a species of Least Concern by the International Union for Conservation of Nature (IUCN) because it is widespread, abundant, and subject to no major threats (Linzey and Hammerson 2008). A web-based survey (Winchester and Gore 2015) on chipmunk presence documented multiple instances of chipmunk mortality due to feral or free ranging cats. As residential areas expand, this threat may warrant future monitoring.

Distribution and Survey Methodology

The range map represents the geographic area encompassing all observations of individuals of a species, including intervening areas of unoccupied habitat. This map is informational only and is not for regulatory purposes.

Counties: Escambia, Holmes, Jackson, Okaloosa, Santa Rosa, Walton.

Recommended Survey Methodology

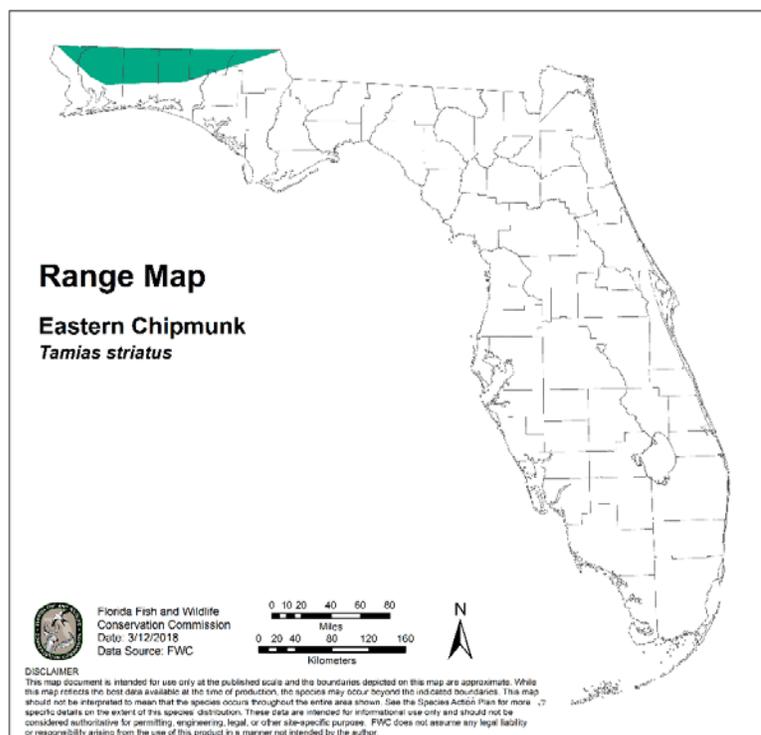
Surveys can be used to determine if eastern chipmunks are present in an area. Surveys are not required for any activity.

Winchester and Gore (2015) found that camera traps were as effective as live trapping to detect chipmunks. To maximize likelihood of detection, sites should be surveyed for 14 days using 5 cameras within a 250-m (820-ft) radius; cameras should be placed at least 50 m (165 ft) apart. Baiting cameras with food within a few meters of the camera can improve survey results. Use of camera traps does not require a permit.

Recommended Conservation Practices

Recommendations are general measures that could benefit the species but are not required. No FWC permit is required to conduct these activities.

- Retain/maintain hardwood hammocks in the northwest part of the panhandle, especially near areas of mixed wetland forest.
- Maintain or enhance habitat connectivity.



- Minimize mortality from cats by keeping cats indoors. Do not maintain feral cat colonies near or on public lands or near parks in residential areas.

Prohibitions and Permitting

Eastern chipmunks are protected by the general prohibitions outlined in Rule 68A-4.001, F.A.C.: no wildlife or freshwater fish or their nests, eggs, young, homes, or dens shall be taken, transported, stored, served, bought, sold or possessed in any manner or quantity at any time except as specifically permitted by these rules nor shall anyone take, poison, store, buy, sell, possess or wantonly or willfully waste the same except as specifically permitted these rules. They are also protected by 68A-29.002, F.A.C. which states that no person shall take, buy, sell, or possess more than one Eastern chipmunk. Take is defined in Rule 68A-1.004, F.A.C., as pursuing, hunting, molesting, capturing, or killing (or attempting to do those things). A permit is required for any other activity that involves the capture, sell, purchase, transport, hunting or killing of chipmunks. These permits are issued for justifiable purposes as outlined in Rule 68A-9.002, F.A.C. Justifiable purposes are scientific, educational, exhibition, propagation, management or other justifiable purposes.

No Permit Needed

The following activities could cause take, but are authorized in rule to be conducted without a permit:

- One eastern chipmunk may be maintained as a personal pet without a permit (Rule 68A-29.002 F.A.C.); however, take of individuals from the wild for this purpose is not authorized.
- Chipmunks may be taken as nuisance wildlife without a permit if following the methods outlined in Rule 68A-9.010 (2) and (3), F.A.C.

Permits for Justifiable Purposes - Scientific Collecting and Educational Use

Any survey methodology that requires handling or capture of a chipmunk will require a scientific collecting permit. Maintaining chipmunks in captivity for educational use also requires a permit.

- Scientific collection and educational use permits are no-fee permits. Applications must be submitted using the information provided in the [Scientific Collecting Permit Application Checklist](#).
- Trapping may impact the wild population's ability to forage, rest, and rear young. The trapping protocol must be included with the permit application, with sufficient detail to allow evaluation, and should identify measures to minimize mortality to chipmunks and non-target species.
- Applicants for scientific collecting permits should identify if trapping will occur on lands owned by other entities. Coordination with county land managers, state foresters, and national parks should be addressed in the scientific collecting application.
- Permit applications for educational use should include an educational purpose plan, the location of the educational facility and provide details on housing for chipmunks.
- A summary of the applicant's expertise relative to the proposed work must be included in the application.
- Applicants should have met all conditions of previously issued permits for fox squirrels or other species. Camera-based and walking transect surveys do not require a scientific collecting permit.
- A summary of any survey data collected at each study site should be reported to the FWC.
 - Standard data should include numbers captured by species, location information (GPS coordinates, county, property/site name), and habitat type.
 - Report standard data for every chipmunk collected or observed.
 - Any mortality should be reported immediately to the FWC. Specimens should be provided to the FWC or deposited in the collection of the Florida Museum of Natural History in Gainesville.
- Data gathered should be provided to the agency in the specified format.

Other Permits

For any other justifiable purpose permit that does not fall under scientific collecting or educational use, please submit your request to WildlifePermits@myfwc.com.

Additional information

Information on the economic impacts assessment of the Species Conservation Measures and Permitting Guidelines for the Eastern Chipmunk can be found at <http://myfwc.com/wildlifehabitats/imperiled/managementplans/>.

Contact

For more species-specific information or related permitting questions, contact us at (850) 921-5990 or WildlifePermits@myfwc.com. For regional information, visit <http://myfwc.com/contact/fwc-staff/regional-offices>.

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