California Wildlife Habitat Relationships System
California Department of Fish and Wildlife
California Interagency Wildlife Task Group

TIGER WHIPTAIL *Aspidoscelis tigris*
Family: TEIIDAE Order: SQUAMATA Class: REPTILIA
R039

Written by: S. Morey
Reviewed by: T. Papenfuss
Edited by: R. Duke
Updated by: CWHR Program Staff, August 2000

DISTRIBUTION, ABUNDANCE, AND MSEASONALITY

This whiptail is widely distributed but uncommon over much of its range in California, except in desert regions where it is abundant in suitable habitats. The species is found throughout the state except in the humid northwest, along the humid outer Coast Ranges, or mountainous regions above 2290 m (7500 ft). Also absent from much of the northern part of the Central Valley (Montanucci 1968). The species occurs in a variety of habitats including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, mixed conifer, pine-juniper, chamise-redshank chaparral, mixed chaparral, desert scrub, desert wash, alkali scrub, and annual grassland.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Whiptails forage actively on the ground near the base of vegetation taking a wide variety of ground-dwelling invertebrates including grasshoppers, beetles, ants, termites, insect larvae, and spiders (Stebbins 1954). Individuals often probe cracks and crevices and dig in loose soil as they forage. Whiptails occasionally appear to stalk larger prey items such as grasshoppers. Individuals have been observed breaking up termite galleries in dead vegetation. Vitt and Ohmart (1977) reported that the diet of whiptails may change seasonally to reflect the abundance of seasonally available prey items.

Cover: Whiptails are always most common in and around dense vegetation. They spend little time in open areas but will cross barren spaces in order to reach the cover of dense shrubs in sparsely vegetated areas. Initially they rely on speed or the cover provided by dense vegetation to avoid predators, but if pursued they will eventually seek refuge in burrows.

Reproduction: Little is known about habitat requirements for courtship, mating, and egg-laying. Loose soil for foraging and nest construction may be an important habitat element.

Water: No information on water requirements. This species is widely distributed in arid regions and does not require permanent water.

Pattern: Whiptails are always most common in and around dense vegetation. They are often found associated with sand areas along gravelly arroyos or washes (Stebbins 1954).

SPECIES LIFE HISTORY

Activity Patterns: Whiptails are primarily diurnal. In the deserts most activity occurs in the morning (Vitt and Ohmart 1977) except on cloudy days when individuals may be active all day. In northern California where summers are milder, the peak of activity occurs about midday (Johnson 1969). Adult whiptails usually become inactive by early fall, but juveniles

extend the period of activity until late fall or even early winter depending on local conditions.

Seasonal Movements/Migration: Pronounced seasonal movement or migration has not been reported for this species in California. Most or all essential habitat requirments are apparently found within the normal area of activity. When long-distance movements do occur they are unpredictable and related to food availability.

Home Range: Average home ranges for whiptails (excluding wandering individuals) have been calculated by Milstead (1957) to be about 0.1 ha (0.26 ac). Jorgensen and Tanner (1963) have reported home range sizes of 0.07 ha (0.18 ac) for males and 0.04 ha (0.10 ac) for females. Parker (1972) reported densities of whiptail lizards in the Sonoran Desert of Arizona to vary from 13-36/ha (5-15/ac). In Nevada Tanner et al. (1969) observed densities ranging from 7-19/ha (3-8 ac).

Territory: Observed overlaps in the home ranges of adult whiptails, coupled with an apparent lack of aggressive behavior between individuals, have suggested to some workers (Milstead 1957, Parker 1972) that there is a lack of male territoriality in this species.

Reproduction: The reproductive season for the tiger whiptail varies geographically and from year to year depending on local conditions. Reproductive behavior generally occurs from May to August. Parker (1972) reported the average clutch size to be 2.9 eggs with a range of 1-5. It is possible that females from the southern California desert regions may lay more than one clutch of eggs per year (Pianka 1970).

Niche: Vitt and Ohmart (1977) suggest that the active, constantly moving behavioral pattern of whiptail lizards makes them subject to a high frequency of predation attempts by diurnal predators. Such predators include snakes, larger lizards, and predaceous birds. Ohmart (1973) found that whiptails make up a large percentage of the food items consumed by roadrunners. Although the food habits of tiger whiptails at times overlap considerably with those of the zebra-tailed lizard (Vitt and Ohmart 1977), competition for food may be minimal since most of the dietary overlap is attributable to the common utilization of seasonally abundant prey. Different foraging microhabitat preferences by the two species further reduce competition where they coexist.

REFERENCES

Johnson, C. R. 1969. Observations on northern california populations of cnemidophorus tigris (Sauria: Teiidae). Herpetologica 25:316-318.

Jorgensen, C. D., and W. W. Tanner. 1963. The application of the density probability function to determine the home ranges of uta stansburiana stansburiana and cnemidoporus trigris tigris. Herpetologica 19:105-115.

Milstead, W. W. 1957. Observations on the natural history of four species of the whiptail lizard, cnemidophorus (Sauria: Teiidae) in Trans-Pecos Texas. Southwest Nat. 2:105-121.

Montanucci, R. R. 1968. Notes on the distribution and ecology of some lizards in San Joaquin Valley, California. Herpetologica 24:316-320.

Ohmart, R. D. 1973. Observations on the breeding adaptations of the roadrunner. Condor 75: 140-149.

Parker, W. S. 1972. Ecological study of the western whiptail lizard, cnemidophorus tigris gracilis in Arizona. Herpetologica 28:360-369.

Pianka, E. R. 1970. Comparative autecology of the lizard cnemidophorus tigris in different parts of its geographic range. Ecology 51:703-720.

Stebbins, R. C. 1954. Amphibians and reptiles of western North America. McGraw-Hill, New York. 536pp.

Tanner, W. W., et al. 1969.

Vitt, L. J., and R. D. Ohmart. 1977. Ecology and reproduction of lower colorado river lizards: ii. Cnemidophorus tigris (Teiidae), with comparisons. Herpetologica 33:223-234.

Life history accounts for species in the California Wildlife Habitat Relationships (CWHR) System were originally published in: Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California. Updates are noted in accounts that have been added or edited since original publication.