

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

AMERICAN PIKA

Ochotona princeps

Family: OCHOTONIDAE
M043

Order: LAGOMORPHA

Class: MAMMALIA

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The American pika is a common resident of rock and talus slopes of the Cascades and Sierra Nevada from the Oregon border south to Tulare and Inyo cos. Populations are highly restricted to rock and talus slopes. Feeds at the edges of other habitats, principally alpine dwarf-shrub, subalpine conifer, lodgepole pine, wet meadow, and montane chaparral. Also feeds in perennial grassland, montane riparian, eastside pine, low sage, sagebrush, pinyon-juniper, red fir, Jeffrey pine, mixed conifer, and aspen. Many populations are insular, particularly those below timberline (Smith 1974a, Orr 1977).

SPECIFIC HABITAT REQUIREMENTS

Feeding: The American pika eats a wide variety of plants, including grasses, sedges, forbs, and shrubs. Shrubs eaten include rabbitbrush, big sagebrush, and bitterbrush. Forages on the ground surface, primarily within 6 m (20 ft) of rock or talus in alpine meadows and other adjoining habitats. Well known for storing harvested vegetation in "hay piles". The haying season peaks in August, lasting from June to October. Plants in hay are higher in protein, lipids, and calories, and lower in fiber, than plants not selected (West 1980). Known to reingest fecal pellets, presumably to gain vitamins and protein, and to collect and eat marmot scats.

Cover: Colonizes rocky slopes, talus fields, or lava flows with many holes and openings to use as shelter. May inhabit abandoned mining sites or other suitable human-made debris. Markham and Whicker (1972) found that captive pikas in Colorado burrowed.

Reproduction: Uses crevices or holes among the rocks as nesting sites.

Water: Water needs are met from available drinking water and food.

Pattern: Prefers rock or talus bordered by alpine meadows or herbaceous understories of forest edges. The extent of rocky perimeter may be a good predictor of pika density, except for small insular populations (Smith 1979). The lower limit of pika distribution may be set by excessive heat (MacArthur and Wang 1973, Smith 1974b).

SPECIES LIFE HISTORY

Activity Patterns: Yearlong diurnal activity. Some nocturnal vocalization has been reported (Orr 1977). Diurnal activity periods tend to be a function of temperature and altitude, with higher altitude populations foraging for longer periods and farther from cover (Smith 1974b). Activity is limited by high temperatures (MacArthur and Wang 1973, Smith 1974b).

Seasonal Movements/Migration: None.

Home Range: Reported home ranges include 0.3-0.5 ha (0.74-1.24 ac) (Barash 1973) and 0.26 ha (0.63 ac), varying from 0.04-0.30 ha (0.1-0.75 ac) (Kawamichi 1976). Reported densities vary from 4-22 per ha (1.6-8.8 per ac) (Millar 1974).

Territory: Pikas defend most of their home range, except during the mating season, when male territories expand to overlap with a female's. When the haying season starts, territories become more exclusive and more energetically defended. Reported territories are smaller than home ranges: 0.07 ha (0.18 ac), varying from 0.03-0.14 ha (0.08-0.34 ac) (Kawamichi 1976). Barash (1973) suggested that feeding areas are not always defended.

Reproduction: Mating occurs in the spring, and occurs later at higher altitudes. Gestation is about 30 days, and the young are born from March to August; most births occur from May to July. Litter sizes are usually 3 or 4, ranging from 1-6. There may be 2 litters per yr, but the second has lower survival than the first. The altricial young are weaned after 30 days, and lactation ends in September. The young breed for the first time as yearlings. Juvenile mortality is low, and pikas may live to 7 yr in the wild, though most do not survive past 5 yr (Millar 1972,1973,1974, Smith 1978, Svendsen 1979, Nowak and Paradiso 1983).

Niche: This diurnal herbivore occurs with the yellow-bellied marmot, Belding's ground squirrel, and various species of microtus on feeding areas. Predators include weasels, martens, and hawks.

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