

we expect that Central California tiger salamanders are forced naturally to move within or between burrows as they decay and collapse.

Control of vegetation by grazing livestock may encourage California ground squirrels to colonize areas they typically would not colonize due to the height and density of the vegetation. California ground squirrels are active during daylight hours and are preyed upon by diurnal raptors (birds of prey) such as red-tailed hawks (*Buteo jamaicensis*), and by larger predatory mammals such as coyotes (*Canis latrans*) and bobcats (*Lynx rufus*). Establishing home ranges in areas where vegetation is controlled by grazing livestock provides an advantage to California ground squirrels in being able to detect and avoid predation by their natural predators. Also, less vegetation may facilitate the movement of Central California tiger salamanders from upland areas to breeding ponds. Lack of vegetation is not anticipated to increase the risk of Central California tiger salamanders to predators as they typically move during hours of darkness, and most generally, during periods of rainfall. Nocturnal predators such as owls, skunks (*Mephitis* sp.), and raccoons (*Procyon lotor*) rely more on their olfactory and auditory senses to locate prey than their vision. Although the height of the surrounding vegetation may afford a slight advantage to Central California tiger salamanders in avoiding predators, we do not anticipate that vegetation height plays a significant role in preventing depredation of Central California tiger salamanders by nocturnal predators.

Central California tiger salamanders may be subject to take during routine control of California ground squirrel populations on private lands. The California ground squirrel can, in moderate to high-densities, significantly deplete forage for grazing livestock, thereby reducing the carrying capacity on rangeland as well as irrigated pasture land (Marsh 1994). Grinnell and Dixon (1918) calculated that 200 ground squirrels could consume as much forage as a 454 kilogram (kg) (1,000 pounds (lbs)) steer during the spring months (Marsh 1998). Most commonly, routine control of California ground squirrels and other burrowing rodents includes shooting individual squirrels, baiting squirrel burrows or colonies with poisonous grains, fumigating burrows with toxic or suffocating gases, and discing or blading over burrow openings to destroy burrow complexes and fill openings.

Shooting individual squirrels, while potentially harmful to other species

through secondary lead poisoning, is not expected to have adverse effects on Central California tiger salamanders. To be effective, a population must be kept under constant shooting pressure which is time consuming and not cost effective over the long-term. Discing and/or blading burrow complexes to destroy burrows and fill burrow openings may result in take of Central California tiger salamanders. Although the extent of this practice has not been documented, conversations with landowners lead us to believe this activity generally does not occur over widespread areas on any given parcel of land. Generally, this type of activity is limited to areas in or near ranch buildings, and in areas where livestock tend to be concentrated (e.g., corrals and watering areas). Poisonous grains such as Chlorophacinone® and toxic and suffocating gases (e.g., Phostoxin®) are regulated by the EPA, CDPR, and other county and local ordinances. Toxic and suffocating gases also may result in high levels of salamander mortality. In areas where federally listed species are known to occur, regulations on the use of toxicants to control California ground squirrels are more restrictive, and these restrictions should provide an “umbrella” protection for Central California tiger salamanders from take associated with routine ground squirrel control. In Counties where more stringent guidelines are not in place to protect listed species, we will continue to work with agencies to develop use guidelines for these products and activities.

California's annual precipitation ranges from less than 20 cm (8 in) in the San Joaquin Valley to more than 127 cm (50 in) along the northern coast range, western slope of the Sierra Nevada mountains, and parts of the Cascade Range (National Climatic Data Center 2003). Summers are dry with little or no rainfall, and abnormally dry winters can be disastrous on both summer water supplies and the quality of feeding ranges for domestic livestock. In some areas of California, spring/summer range usually does not support more than one cow-calf unit per 4 to 8 ha (10 to 20 ac) of range, with each cow being able to consume up to 57 liters (15 gallons) of water per day per 454 kg (1,000 lbs) of body weight (Ohlenbusch *et al.* 1995). Considering the limited availability of naturally occurring water across California's rangeland, routine management of stock ponds is critical to the economic success of ranching operations. During heavy winter rain events, stock pond dams and levees may be subject to overflows that cause severe

erosion (head-cutting) of the dam faces and containment levees. Without immediate repair, critical summer water supplies will be lost. Pond vegetation is typically controlled by grazing animals using the water supply. However, at times the vegetation must be controlled through mechanical means or herbicide applications to prevent excess loss of water supply through evapotranspiration, and to prevent aquatic vegetation from completely dominating the pond. In some ponds, fish are introduced to help control vegetation and insects. However, this practice is limited to year-round ponds which are typically not suitable habitat for Central California tiger salamander reproduction.

We propose to include in this rule an exemption for incidental take of Central California tiger salamanders during routine ranching activities by non-Federal entities on private and Tribal lands for the following activities: (1) Livestock grazing according to normally acceptable and established levels of intensity in terms of the number of head of livestock per acre of rangeland; (2) control of ground-burrowing rodents using poisonous grain according to the labeled directions and local, State and Federal regulations and guidelines. The use of toxic or suffocating gases is not exempt from the prohibitions due to its non-target specific mode of action; (3) control and management of burrow complexes using discing and grading to destroy burrows and fill openings is exempt. This exemption does not apply to large-scale discing or grading of rangeland (more than 4 ha (10 ac)) within any one-quarter section of a single township and range for burrow control and management; (4) routine management and maintenance of stock ponds and berms to maintain livestock water supplies at levels present at the time of the listing of the Central California tiger salamander. This exemption does not include the introduction of species into the stock pond that may prey on Central California tiger salamander adult, larvae, or eggs; or the introduction of chemicals into the stock pond during the general breeding season of the Central California tiger salamander that would result in the take of Central California tiger salamander adults, larvae, or eggs, or result in decreased reproductive success; and (5) control and management of noxious weeds.

Provisions of the Proposed Special Rule

We propose to exempt existing routine ranching practices from the prohibitions on take (see 50 CFR 17.31) for the Central California tiger