

Middle Elevation Forest: Chinquapin Band

Pacific Fisher / Tatkunuhpíithvar / *Pekania pennanti*



www.fws.gov

Cultural Importance

The fur of tatkunuhpíithvar is traditionally used in Karuk regalia. The Pacific fisher has experienced significant declines in Karuk territory (Zielinski et al. 2010). The Tribe seeks to facilitate range expansion or reintroduce fisher into the landscape. (Karuk DNR 2010)

Life Cycle & Habitat

Tatkunuhpíithvar prefers hardwood forests with significant canopy cover, with large trees and snags where it convert large cavities into a den. More open habitats may be used for hunting and foraging. Among the most important prey for fishers is porcupine, a species that has also experienced regional declines. The restoration of porcupine is vital to the successful reintroduction of fisher. (Golightly 2006, Hanson 2013, Karuk DNR 2010)

Tatkunuhpíithvar and Fire

For some time, the assumption among Western scientists had been that fire represents a significant loss of habitat for tatkunuhpíithvar. However, a recent study (Hanson 2013) reveals that fishers may actually benefit from managed wildfire and mixed-severity prescribed burns. The study reveals a "bedroom and kitchen" effect in which fishers prefer recently unburned forest for denning and resting, while preferring burned areas for foraging and hunting.

Effects of High Severity Fire Across Time

Immediate	2-Year	Long-Term
<ul style="list-style-type: none"> Dens may be destroyed and fishers killed during fire event Loss of habitat and prey for immediate use. 	<ul style="list-style-type: none"> The destruction of large hardwood stands reduces fisher denning habitat Burned areas may attract fisher prey and enhance hunting 	<ul style="list-style-type: none"> Extensive high severity burned landscape may affect fisher hunting and denning opportunities and reduce habitat connectivity
Sources: Hanson et al. 2013	Sources: Hanson 2013, Zielinski et al. 2010	Sources: Hanson 2013, Zielinski et al. 2010, Davis et al. 2007

Effects of Karuk Cultural Burning Across Time

Immediate	2-Year	Long-Term
<ul style="list-style-type: none"> Either avoids burning in known fisher denning areas, or burns at lower intensities so as to protect dens and canopy cover. Cultural burning at a specific season (e.g. fall) would reduce impacts to mothers and juveniles. 	<ul style="list-style-type: none"> Burned areas attract prey that fisher depends on, benefitting fisher hunting habitat. Some hardwoods with recent burns may have enhanced new or existing cavities. 	<ul style="list-style-type: none"> Creates a burned/unburned mosaic that improves fisher hunting habitat while preserving denning habitat Maintenance of oak dominated woodlands serve multiple fishers life history requirements
Sources:	Sources: Hanson 2013	Sources: Hanson 2013

Effects of Federal Fire Management Strategies on Species' Climate Change and Fire Resilience

Prior to Fire	During Fire	After Fire
<ul style="list-style-type: none"> Fire suppression may reduce fisher hunting habitat while promoting high value denning habitat at a high risk of fire. 	<ul style="list-style-type: none"> Snags needed for denning often cut as preemptive fire fighting tactic. 	<ul style="list-style-type: none"> Salvage logging removes standing wood, and future wood debris that is important to fisher habitat
Sources: Hanson 2013, Slauson and Zielinski 2016, Zielinski et al. 2010	Sources: Lake pers. obs. As READ on local wildfires	Sources: Slauson and Zielinski 2016, Zielinski et al. 2010