Roosevelt Elk / Íshyuux / *Cervus occidentalis*

Photo: Kirsten Vinyeta

Cultural Importance

Elk are important game traditionally used for food, clothing (hides), regalia, and implements, as well as in their role in shaping ecosystems. The management of elk populations, and the protection and restoration of habitats that elk depend on are of vital importance to the Karuk Tribe. (Karuk DNR 2010)

Life Cycle & Habitat

Elk are associated with a mosaic landscape that combines open areas for foraging, and forested areas for cover. They are gregarious animals that navigate in herds year-round. The nature of these herds changes depending on the time of year and the reproductive cycle. Dietarily, elk prefer grasses, followed by forbs, then deciduous browse, and as a last resort, coniferous browse. (Innes 2011)

Íshyuux and Fire

Íshyuux has been described as a "fire-follower" as it benefits from the effects of fire on plant communities that are important food sources (Patton and Gordon 1995). However, high-intensity fire that burns entire stands may reduce covered habitats that are important to elk for protection.

Effects of High Severity Fire Across Time

Immediate	2-Year	Long-Term
• Heard or individual displacement, stress, and death from wildfire. Removal of forage and cover habitat.	• Burns that destroy entire stands may force elk to find other forested areas in which to find cover. Browse/forage may be increased. Fuels (down logs/limbs) may inhibit access and travel mobility.	• Elk may re-inhabit former high severity patches as conifer and shrub species (browse) are reestablished.
Sources:	Sources: Swanson et al. 2014	Sources: Karuk TEK

Effects of Karuk Cultural Burning Across Time

Immediate	2-Year	Long-Term
• **Ash and charcoal provide opportunities for elk to reduce parasites.** Regrowth of vegetation provides forage.	• Conifer encroachment of meadows is controlled, thereby protecting critical íshyuux calving and winter habitat	• A diverse landscape mosaic that fosters the various habitat needs of íshyuux is promoted through fire management
Sources:	Sources: Sachro et al. 2005, Swanson et al. 2014	Sources: Lake 2007

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

Prior to Fire	During Fire	After Fire
• Suppression-based practices have led to the tree encroachment of meadows, thereby reducing elk habitat	• Fire suppression activities my displace elk from desired habitat.	• Fire lines may increase or inhibit elk travel and mobility. • BAER or other associated erosion control treatments may hinder elk feeding and mobility
Sources: Karuk DNR 2010, Norgaard 2014	Sources:	Sources: