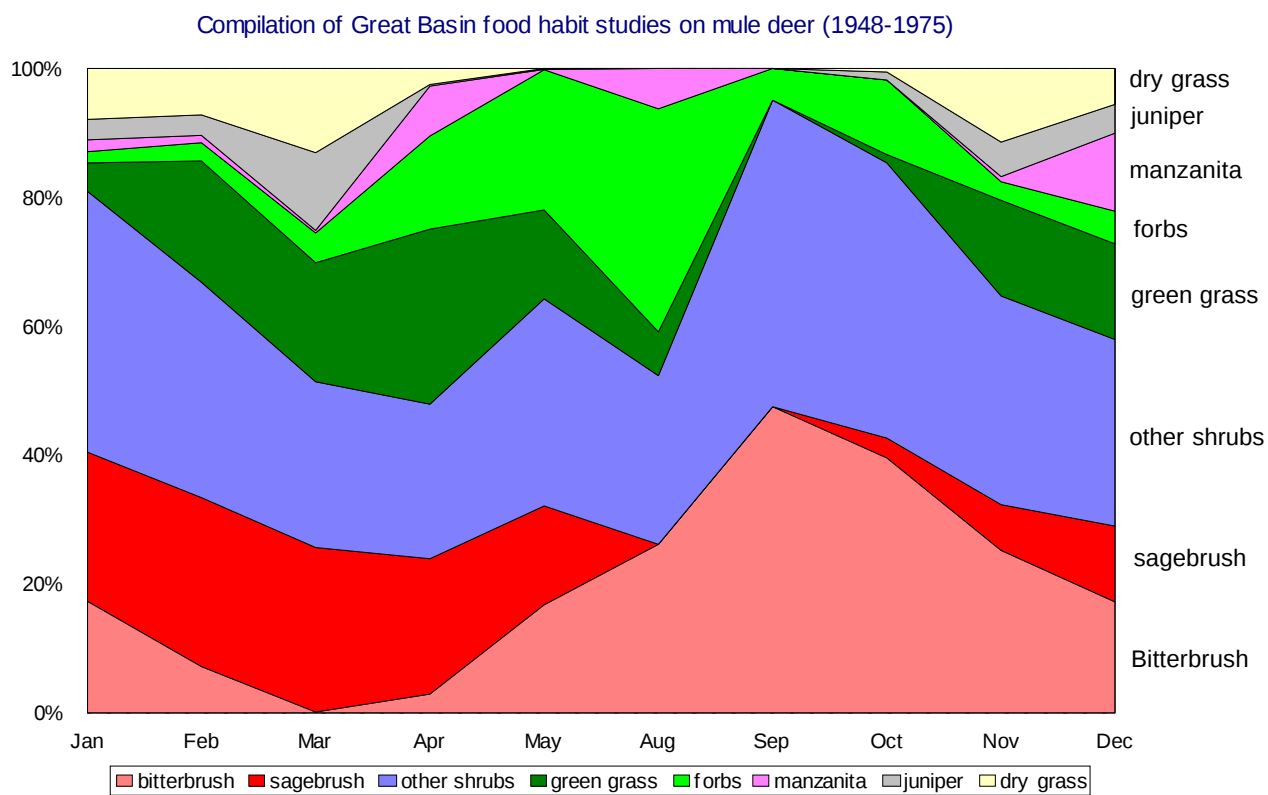




Other shrubs: Ceanothus, willow, serviceberry, mountain mahogany, bitter cherry,

Figure 14. Compilation of all deer food habit studies (does not include studies of deer die-offs) in northeastern California by month. Bitterbrush, sagebrush, and other shrubs dominate the deer diet, with lush green grass and forb being important during spring to mid-summer. (original studies by Howard Leach, unpubl. data; compiled by DFG 1997)



PHOTO 1a. The use of prescribed fire, stand thinning, or biomass thinning can result in the lack of understory vegetation as shown here. There is little food or hiding cover available for herbivores. As the stand continues to mature and the canopy further closes, habitat quality disappears for early successional favored species like deer, elk, and cattle.

These two digital photos from the Almanor Basin, September 1997.



PHOTO 1b. Nearby, a more open stand illustrates the abundance of grass and shrub vegetation that is associated with disturbance, as long as the disturbance is not followed by intensive site preparation for reforestation and timber stand enhancement.



PHOTO 2a. November 1997 digital photo of summer 1992 Fountain fire area along Hwy 299 in northern California. Herbicide spraying illustrates the impact on early successional vegetation and lack of shrub cover on hillsides in background. Note standing oak trees have resprouted. Smoke on left is a prescribed fire.

PHOTO 2b. Wildfire burned slope (1987 fire) on the Stanislaus National Forest. Use of herbicides as proposed here would be beneficial to reforestation effort. However, opportunities to develop a mix of reforested sites with shrub stands for wildlife habitat exist in such areas. Deer and other wildlife would benefit if spraying were not broadcast over the entire area, but rather, in a mosaic pattern to reserve some cover and browse. Untouched, areas such as this frequently come back in very dense cover of deerbrush (light green in background), more so than desired from a habitat perspective.



PHOTO 3a. Aspen stand in Modoc NF illustrating lack of understory typical of a grazed system. Over time, these stands may decline to the extent that aspen dies out.

Digital photos- 1997



PHOTO 3b. Aspen stand in Modoc NF illustrating down and dead logs indicative of a former stand. The presence of these logs on summer ranges is of concern in grazed systems in California.



PHOTO series 3c. Photo plots of aspen understory near end of grazing season under different grazing treatments (from Loft and Menke 1988) during 1983-84, Stanislaus NF; and again on October 1, 1997. Heavy grazing has contributed to a decline in aspen cover. Tree in right background is the same, although dead (left of center) in 1997 photo.

Moderate grazing in 1983; this approximated the USFS recommended stocking rate



Heavy grazing in 1984; this was approximately 1.5x the recommended stocking rate

1997 grazing season and influence of intervening 13 years indicate aspen is on the decline at this site





PHOTO 4a. Mountain meadow and willow-riparian site (October 1, 1997). Occurrence of bare ground and killed willows in background is indicative of severe grazing conditions over time. (the exclosure is no longer maintained). McCormick Creek, Stanislaus NF.



PHOTO 4b. Same mountain meadow and willow-riparian habitat under experimentally applied heavy grazing in 1983 (Loft and Menke 1988). Fenced area in middle of photograph is a livestock exclosure. Note herbaceous growth in area, and willows in background (beyond exclosure) in this late September photograph.

PHOTO 5a. Riparian drainage that provides vertical structure and cover as habitat in Great Basin communities. Drainages with adequate water can develop woody riparian cover as shown here. Willow and members of the rose family are common.



PHOTO 5b. Example of small Great Basin meadow/spring site receiving excessive use.

