Wilderness Stewardship Plan:
Stock Use and Grazing

National Park Service
U.S. Department of the Interior

Sequoia and Kings Canyon National Parks
California

Stock (horses, burros, mules, and llamas) have been used to support exploration, recreation, development, and administration in the remotest areas of the parks since their establishment. Stock use is a historically and culturally significant traditional use that is an appropriate means for fulfilling the purposes of wilderness. However, long ago, managers recognized that stock use and grazing has distinctive effects on park resources. These effects are analyzed and alternatives are considered in the Wilderness Stewardship Plan (WSP). The alternatives also evaluate the necessity of all stock-related structures and facilities.

Desired Condition for Stock Use – Visitors would have opportunities to travel with stock, from day rides to multi-day trips, in a manner that ensures the protection of wilderness character.

Why establish controls on stock use and grazing?

Stock can affect vegetation, soils, water, wildlife, and esthetics by grazing, trampling, depositing wastes, and interacting with wildlife and with visitors. A program to manage stock use is necessary to keep these impacts within acceptable limits.

Status Quo (Alternative 1)

Since 1986, stock use in wilderness, including grazing, has been managed through the Backcountry Management Plan (BMP) and the Stock Use and Meadow Management Plan (SUMMP). These plans establish controls that allow visitor use while protecting park resources. They also designate a number of meadows that are closed to grazing in order to maintain these meadows in a more natural state. Under current plans, grazing is allowed in most areas that are open to camping by stock. In areas that are closed to grazing but open to overnight stock use, stock users are required to hold and feed their animals. Use of certified weed-free supplemental feed is not required, but the National Park Service recommends its use. Developments in wilderness to help control animals and prevent resource impacts include 52 hitch rails and 54 drift fences, pasture fences, and gates.

Alternatives – Stock Use in Wilderness

Under alternatives 2-5, stock use and grazing would be managed according to the system described in Appendix D, including the implementation of grazing capacities (with the exception of those sections addressing grazing for alternative 4). Each alternative, along with the management and monitoring strategy proposed in Appendix D, incorporates current information on how best to control impacts while encouraging continued use of stock in wilderness. In addition, in order to prevent the introduction and establishment of nonnative plants in wilderness, commercially processed pellets, rolled grains, or fermented hay would be required whenever supplemental feed is used in lieu of or in addition to grazing. In frontcountry areas, the use of state-certified weed-free feed would be required.

Alternative 2 (*NPS Preferred): Emphasize Site-Specific Actions to Protect Wilderness*	**Alternative 3: *Emphasize Opportunities for Primitive Recreation***	**Alternative 4: *Emphasize Undeveloped and Noncommercial Recreation***	**Alternative 5: *Emphasize Opportunities for Solitude***
Grazing would generally be allowed in areas that are open to camping with stock (within ½-mile of maintained trails open to camping with stock or in off-trail travel areas). Grazing would not be allowed in areas open only to stock travel.	Grazing would generally be allowed within ½-mile of maintained trails that are open to camping with stock. Grazing would generally be prohibited in areas open to off-trail travel, with some exceptions. Grazing would not be allowed in areas open only to stock travel.	No grazing would be allowed in wilderness. In areas open to camping by visitors and park staff traveling with stock, animals would need to be held and fed.	Grazing would generally be allowed within ½-mile of maintained trails open to camping with stock. Grazing would not be allowed in areas open only to stock travel.

Alternative 2 (*NPS Preferred*): *Emphasize Site-Specific Actions to Protect Wilderness*	**Alternative 3: *Emphasize Opportunities for Primitive Recreation***	**Alternative 4: *Emphasize Undeveloped and Noncommercial Recreation***	**Alternative 5: *Emphasize Opportunities for Solitude***
The meadows closed to grazing by the 1986 SUMMP due to popular use and resource concerns would remain closed to grazing with one exception: Tom Sears Meadow would be reopened to grazing.	The meadows closed to grazing by the 1986 SUMMP due to popular use and resource concerns would remain closed to grazing.	Not applicable, as no grazing would be allowed.	The meadows closed to grazing by the 1986 SUMMP due to popular use and resource concerns would remain closed to grazing with one exception: Tom Sears Meadow would be reopened to grazing.
12 additional meadows with high use and resource concerns would be closed to grazing.	11 additional meadows with high use and resource concerns would be closed to grazing.	Not applicable, as no grazing would be allowed.	12 additional meadows with high use and resource concerns would be closed to grazing.
7 additional meadows along the John Muir Trail (JMT) and the High Sierra Trail (HST) would be closed to grazing in order to expand the network of meadows closed to grazing for scientific and social value.	7 additional meadows along the JMT and HST would be closed to grazing in order to expand the network of meadows closed to grazing for scientific and social value.	Not applicable, as no grazing would be allowed.	Meadows associated with areas or trails closed to stock under this alternative would also be closed to grazing.
23 hitch rails would be removed and 29 would be retained. 12 fences/gates would be removed and 42 would be retained.	14 hitch rails would be removed and 38 would be retained. 5 fences/gates would be removed, 49 would be retained, and one new fence with a gate would be constructed.	All hitch rails not associated with administrative facilities would be removed. All drift fences and gates would be removed.	28 hitch rails would be removed, and 24 would be retained. 18 fences and gates would be removed, 36 would be retained, and one gate would be added.

Why require processed-feed products in wilderness and certified weed-free feed in the frontcountry?

Products used to feed stock are a potential source of seeds and other parts of nonnative plants that can be brought into wilderness directly (as feed or attached to animals or gear), or indirectly inside an animal's gut. A number of pasture grasses used as animal feed have been detected in wilderness; in some cases they have become established in meadows and camps used by stock. Certain qualities make invasive plant species a cause of highest concern: they spread rapidly, form persistent seed banks, are difficult to detect and identify, and/or cause severe ecological impacts by displacing native species and habitats, reducing diversity, or altering ecosystem processes.

Processing helps to reduce these risks. The ingredients of feed pellets are finely ground, heat treated, and then compressed. This kills a very high percentage of viable seed that may be in the ingredients. Similarly, steaming and rolling grains and fermenting hay kills most viable seeds. Feed pellets, steamed rolled grains, and fermented hay products are the best option for preventing the introduction and spread of nonnative invasive plants. Although not as protective as the processed products above, using certified weed-free feed in frontcountry areas would also reduce the risk of introduction of nonnative invasive weeds into wilderness.

Where can I find more information?

Stock use is addressed as Element 8 in each alternative in the WSP/DEIS. Appendix D includes the proposed Stock Use and Meadow Monitoring and Management Strategy. The history and effects of stock use and grazing are discussed in Chapter 3: Affected Environment and in Chapter 4: Environmental Consequences.

The proposed strategy for preventing nonnative-plant introductions is in Appendix N. The effects of nonnative plants are discussed in Chapter 3: Affected Environment. The effects of requiring supplemental feed products are discussed in Chapter 4: Environmental Consequences.

An interactive map showing the alternatives and how stock use and grazing is addressed in each alternative is available at http://parkplanning.nps.gov/sekiwild under "Document List."