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Why Do We Care about California's Coastal Prairie?
Dr. Grey Hayes, Restoration Ecologist, Elkhorn Slough Reserve

In a very brief presentation, Dr. Hayes outlines some of the central concerns facing conservationists working to maintain biological diversity in California's coastal prairie. A wealth of rare plant and wildlife species is found in this increasingly threatened plant community. Even when 'protected,' coastal prairie managers are afforded little funding and even less scientific certainty about how to manage this system. Will we find a way to care enough to save California's coastal prairie species?

Characteristics and Dynamics of California Coastal Grasslands
Joe McBride, Professor, Department of Environmental Science, Policy, and Management, University of California, Berkeley

Grasslands of the coastal zone in California vary in species composition in relation to environmental gradients and grazing history. Studies of grasslands in Mt. Tamilpais State Park demonstrate the importance of the summer fog gradient in controlling species composition. The elimination of grazing from the park in the 1950s resulted in the "recovery" and/or "return" of native bunch grass species. The grasslands in Mt. Tamilpais State Park are now being invaded by coyote brush and Douglas-fir. A similar invasion has been noted in coastal grasslands in parks and open space areas of the San Francisco Bay area where livestock have been removed.

Vegetation Community Change and Special Status Species in the Rangelands of Point Reyes National Seashore
Amelia Ryan, Wetland and Plant Ecologist, Point Reyes National Seashore, National Park Service

Point Reyes supports over 60 plant species that are considered rare, threatened, or endangered, including many that occur in grazed lands. This talk will briefly cover the distribution of rare plants in grazed and ungrazed lands, and then discuss two specific endangered plant species that occur on grazed lands: *Chorizanthe valida* and *Alopecurus aequalis* var. *sonomensis*. Evidence suggests both these species may benefit from being in grazed habitats. Focusing on these two species, the talk will highlight past and planned future studies examining the effects of grazing, and the way in which our current understanding has informed recent management actions and collaboration with ranchers.

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A Bird's Eye View of Grasslands and Shrublands on the California Coast: What bird monitoring can tell us about rangeland management and habitat succession in a dynamic landscape
Ryan DiGaudio, Ecologist, PRBO Conservation Science

In the absence of disturbance such as fire or grazing, coastal grasslands in California can transform into scrub and potentially forest through the natural process of habitat succession. But what does this mean from a wildlife management perspective? In 2010, we surveyed the breeding bird community along with vegetation characteristics at a cattle-grazed 1190 acre coastal grassland site in Sonoma County. To evaluate how grazing may influence the grassland bird community and their habitat in this region, we also conducted a subset of surveys in an area of un-grazed grasslands on an adjacent property. We found that the grazed site supported more grassland bird specialist species and less shrub cover than the un-grazed site. However the un-grazed site supported a greater abundance of Song Sparrows and White-crowned Sparrows-species that are closely associated with coastal scrub habitat. Land managers should consider managing for a habitat mosaic of different habitat types and successional states within grassland and coastal scrub landscapes. Determining what the mosaic should look like largely depends on your management objectives, such as target species or grassland acreage targets.

Impacts of Brush Succession on Endangered Butterfly Species, San Bruno Mountain, California
Patrick Kobernus, Coast Ridge Ecology, San Francisco, California

Management of invasive species to protect endangered species habitat on San Bruno Mountain has been largely successful over the past 30 years, however coastal scrub succession in combination with expanding populations of invasive species continue to overtake grassland habitat on the mountain. The future conservation of three endangered butterfly species and their habitats now, more than ever, depends upon implementation of a more comprehensive habitat management program to protect these species for future generations.

A Case Study in Managing Woody Species Encroachment on Grassland and Oak Woodland Resources at Redwood National Park (tentative)
Leonel Arguello, Chief, Vegetation Management, Redwood National Park

Redwood National Park protects and manages many habitats and vegetation types beyond the old growth coast redwood forest from which the park takes its name. For example, there are 4200 acres of grasslands and oak woodlands that drape the park's southeastern ridgeline, in an area locally known as the Bald Hills. High in plant and wildlife species diversity and rich in cultural history and heritage, this community of Oregon white oak woodland and transitional grasslands offer the visitor a respite from the magnificent yet closed-in feel of the redwood and associated coniferous forest. The Bald Hills, however, are not in pristine condition and require park

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attention. Exotic plants dominate the landscape and woody species encroachment continually threatens the habitat and vegetation associations that embody the Bald Hills. Park management has adopted a plan to manage the Bald Hills and all the resources therein, to prevent type conversion and loss of this exceedingly important community, as had already occurred on approximately 1000 acres after settlement of the area in the 1850s and up to park acquisition in 1978. Management includes (but not limited to) manual removal of encroaching woody species, manual or chemical removal of invasive exotic species, and application of prescribed fire. The park has to date successfully treated nearly 2500 acres with manual removal of woody species (follow-up required), removed up to 500 acres of invasive exotic species (maintenance required), and have treated most of the Bald Hills grasslands/woodlands with fire at least once. The results, while positive, can be easily undone if focused management efforts cease.

Stewarding Soil: promoting soil quality to meet management objectives
Jasmine Westbrook, Samuels Ranch, Assistant Manager

Discuss the definitions of soil health and soil quality. Define soil quality indicators, and discuss which indicators are most sensitive to management efforts. I would then like to look at several common management objectives, and discuss the actions managers can take to promote soil quality for each. I would also like to point out which management objectives conflict or complement each other, time permitting.