



Management and Restoration of California's Coastal Prairie

Point Reyes National Seashore National Park Service
U.S. Department of Interior
Point Reyes National Seashore




Grassland Toolbox: The Process of Grassland Management at Point Reyes National Seashore



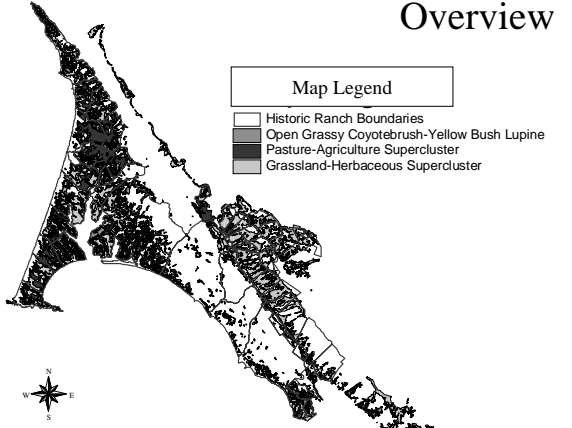
Jane Rodgers
Vegetation Management

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- Overview
- Current Management & Concerns
 - Building a toolbox
- Tackling “desired future condition”

Overview




Map Legend

- Historic Ranch Boundaries
- Open Grassy Coyotebrush-Yellow Bush Lupine
- Pasture-Agriculture Supercluster
- Grassland-Herbaceous Supercluster




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Defining Vegetation Types

- Pasture/Ag = Developed agricultural areas including silage fields & hay fields
- Grassland Superalliance includes-
 - Native-weedy grassland
 - Introduced perennial grassland-Deschampsia
 - Pacific reedgrass Carex-Juncus
 - Bullrush-Cattail
- Open Grassy Coyotebrush


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Current Management & Concerns

- 19,000 acres under grazing permits
 - approx 25,000 acres “Grassland”
 - approx. 4,300 acres “Pasture”
- Role/Use of fire
- Exotic plants comprise 30% of park *species*
- Rare plants - 50 listed species in park
- Wildlife species
- Future of ranching at PORE

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Building a Toolbox

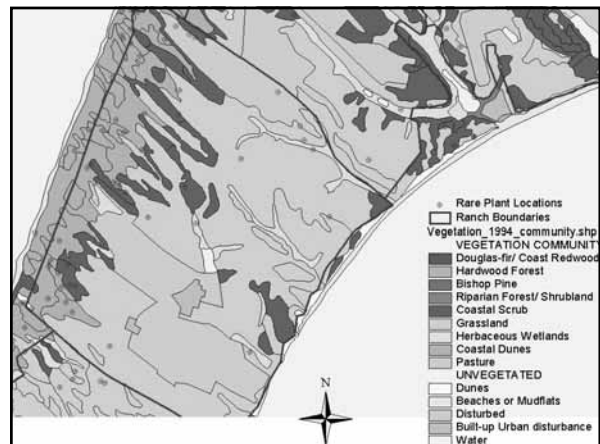
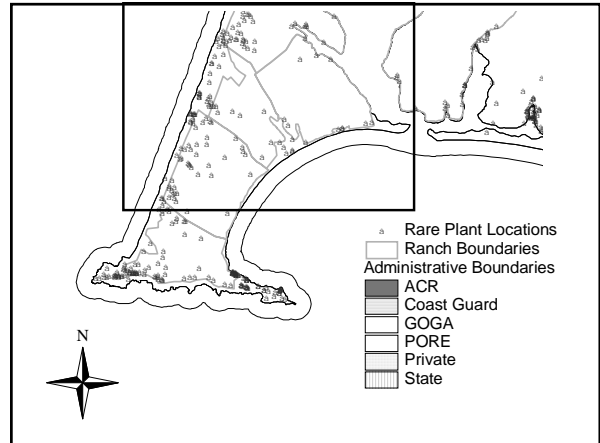
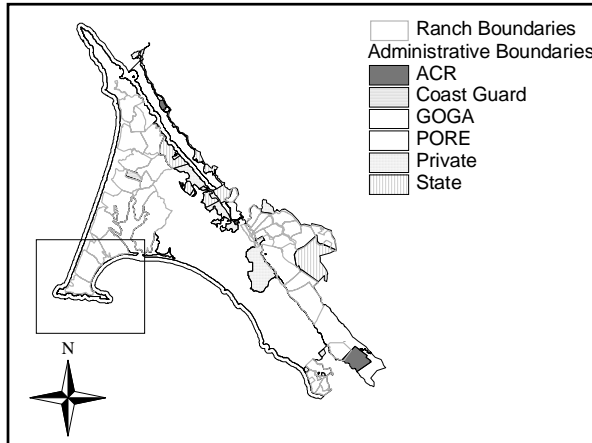
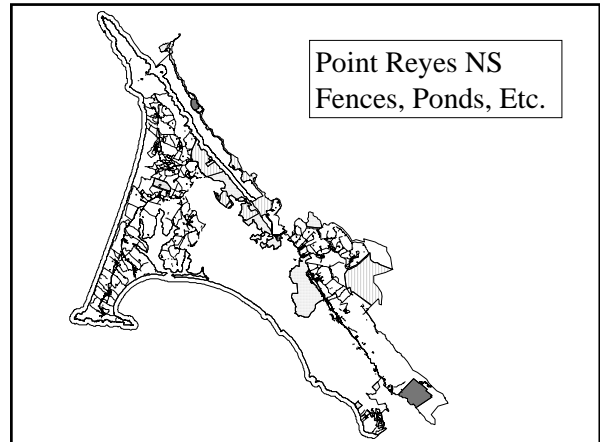
- Spatial Data
- Inventory & Monitoring data
 - Treatment options
- Opportunities to collaborate!

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Spatial data

- Vegetation Map
- Structural data
- Rare plant occurrences
- Other species data
- Raster Data



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Grassland Rare Plant Occurrence Data - 17 spp

Calystegia purpurata ssp. *saxicola* - Coastal bluff morning-glory
Fritillaria lanceolata var. *tristulis* (*Fritillaria affinis* var. *tristulis*) - Chocolate lily
Fritillaria liliaceae (found in PORE and No. district of GOGA) - Fragrant fritillary
Hemizonia congesta ssp. *leucocephala* (often in fallow fields) - White hayfield tarplant
Lasthenia macrantha ssp. *macrantha* - Perennial goldfields
Linanthus rosaceus - Rosy Linanthus
Perideridia gairdneri var. *gairdneri* - Gairdner's yampah
Piperia elegans ssp. *decurtata* - Point Reyes rein orchid
Plagiobothrys diffusus (*Plagiobothrys reticulatus* var. *rossianorum*) - popcorn flower
Triphysaria floribunda - San Francisco owl's clover

Sandy soils
Chorizanthe valida - Sonoma spineflower
Chorizanthe robusta var. *robusta* - Robust spineflower
Hesperivax sparsiflora var. *brevifolia* [< 200 m] - Short-leaved evax
Horkelia marinensis - Point Reyes horkelia
Linanthus grandiflorus - Large-flowered linanthus
Phacelia insularis var. *continentis* - North Coast phacelia

Moist places
Microseris paludosa - Marsh microseris

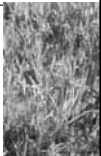



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Coastal Prairie - 6 spp.

Agrostis blasdalei - Blasdale's bent grass
Arabis blepharophylla - Coast rock cress
Blennosperma nanum var. *robustum* - Point Reyes blennosperma
Fritillaria liliaceae - Fragrant fritillary
Lilium maritimum - Coast lily
Perideridia gairdneri var. *gairdneri* (coastal flats)
 - Gairdner's yampah


Moist areas adjacent to grasslands/prairies
Alopecurus aequalis var. *vonomensis* - Sonoma alopecurus



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Inventory & Monitoring Data


- Legacy datasets
- NPS I&M Program
 - Expand veg map to a grassland/prairie map
 - Establishing Long-term Monitoring
- Maintain current monitoring

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Treatment Options

- Grazing regimes
- Application of prescribed fire
- Use of propagules
- Exotic plant mgmt
- Enhancement of resource "islands"



 **Ask For Help!**
Grassland Study Group

- Born from local Weed Management Area
- Local ecologists and managers identify needs
 - sharing information, regional perspective
 - research==> replicates across ownership boundaries
 - funding opportunities
 - legacy data
- Members : NPS, state, private, non-profit

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Desired Future Condition

- Park slated to rewrite Resources Mgmt Plan
 - opportunity to define DFC
 - could use TNC workshop for conserv. Planning
 - ID research needs
- Park currently updating General Mgmt Plan
- Park currently writing Wilderness Mgmt Plan

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