



SPRNCA Uplands Working Group Meeting March 26, 2024

The SPRNCA Allotments Lease Renewal EA was signed April 7, 2023 and the renewed leases with updated terms and conditions were issued July, 2023 (Babocomari, Brunckow Hill, and Lucky Hills) and September, 2023 (Three Brothers).

The purpose of this presentation is intended to share upland objectives of the SPRNCA allotments and data to determine if allotments are meeting objectives.

*link to ePlanning site with final EA and Decisions: <https://eplanning.blm.gov/eplanning-ui/project/2013674/570>

SPRNCA Allotments Objectives

Adaptive Management Objectives:

- **Perennial Grass Foliar Cover** and **Bare Ground**
- Tied to grazing management
- On the SPRNCA portion of the allotments

Desired Plant Community Objectives:

- **Perennial Grass Foliar Cover** and **Shrub Cover**
- Tied to vegetation management and restoration
- On SPRNCA and non-SPRNCA portions of allotments

Both assessed using Assessment, Inventory, and Monitoring (AIM)

*link to ePlanning site with final EA, Decisions, and Land Health Evaluations – provide context for how objectives were developed: <https://eplanning.blm.gov/eplanning-ui/project/2013674/570>

Terrestrial AIM plot layout and methods

3 Transects (25 m)

Line-point intercept:

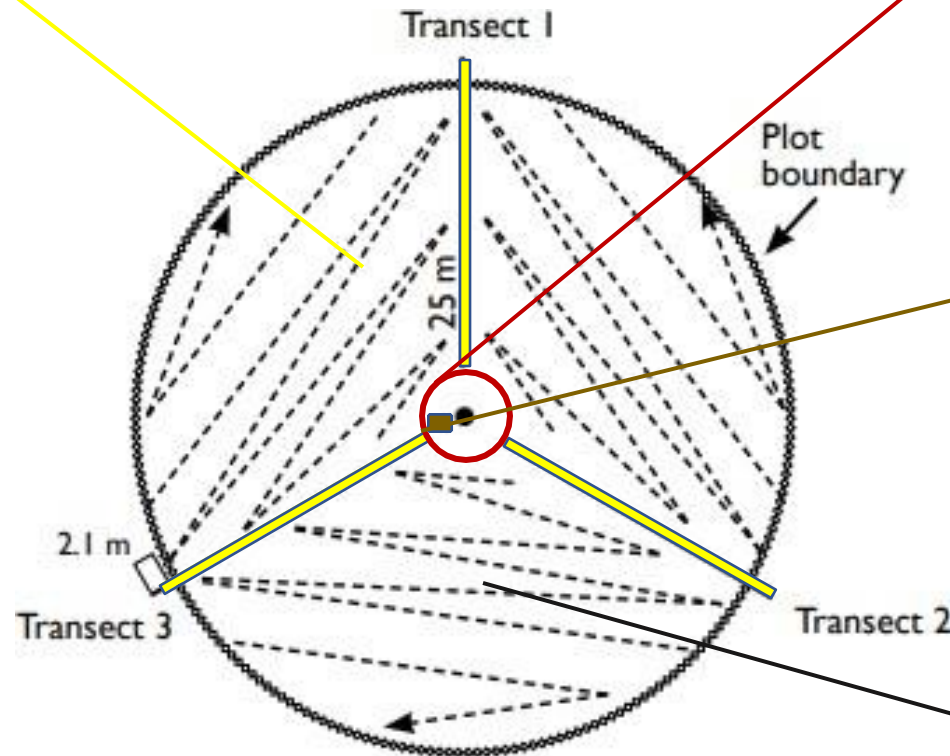
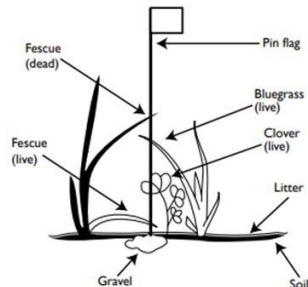
- every 0.5 m
- plant foliar cover
- ground cover
- plant height

Canopy gap intercept:

measuring gaps in plant canopies larger than 20 cm

Soil Stability: 6 samples on each transect (18 total)

Photos



Plot center with
5m "trample zone"

Observation/Characterization:

Landscape position, slope, aspect, other observations

Soil pit – soil texture, color, effervescence, and rock content at different horizons for ecological site verification.

Species Inventory – list of all species within the plot boundary

Terrestrial AIM methods and indicators

AIM Method	Indicator – What does it tell you?
Line Point Intercept – along the transects	<ul style="list-style-type: none"> • Plant Community Composition – Tells you relative and absolute foliar cover of plants by species. • Total plant foliar cover • Ground Cover – % bare ground, litter, plant base, rock cover etc.
Plant Height – along the transects tallest herbaceous plant and tallest woody plant.	<ul style="list-style-type: none"> • Vegetation Structure – Heights of the dominant woody and herbaceous plant species.
Species Inventory – throughout the entire plot	<ul style="list-style-type: none"> • Plant diversity - List of plant species found within the plot
Canopy Gap – along the transects	<ul style="list-style-type: none"> • Proportion of soil surface in large intercanopy gaps. Generally bad if there is a large proportion of large gaps.
Soil Stability – along transects	<ul style="list-style-type: none"> • Ranked on a scale of 1-6 (6 being the most stable). Estimates how susceptible the soil surface is to erosion.

Babocomari

Babocomari Objectives Table				
	2019	2021	2022	2023
Limy Upland Objectives				
Key Area GRZ-02 DPC Objectives				
Perennial grass foliar cover of $\geq 10\%$	12	30.7	39.3	15.3
Bare ground $< 26.7\%$	26.7	10.7	3.3	8.7
Shrub foliar cover $< 30\%$	39			42
Key Area Babo-05 DPC Objectives				
Perennial grass foliar cover of $\geq 1\%$	0	0	0	0
Bare ground $< 25.3\%$	25.3	24	14.7	24.7
Shrub foliar cover $< 30\%$	55			36
Shallow Upland Objectives				
Key Area Babo-03				
Perennial grass foliar cover of $\geq 20\%$	18.1	56.7	56	39.3
Bare ground $< 19.3\%$	19.3	3.3	4	4.7
Shrub foliar cover $< 10\%$	20			25
Key Area GRZ-05				
Perennial grass foliar cover of $\geq 20\%$	3.4	24.7	34.7	26.7
Bare ground $< 30\%$	30	3.3	1.3	24.7
Shrub foliar cover $< 10\%$	31			40

Green = meeting adaptive management objective, Red = not meeting adaptive management objective, and Orange = not meeting desired plant community objective.

*See final decision documents on eplanning: <https://eplanning.blm.gov/eplanning-ui/project/2013674/570>

*Link to public AIM data hub: <https://gbp-blm-egis.hub.arcgis.com/pages/aim>



Brunckow Hill

Brunckow Hill Objectives				
	2019	2021	2022	2023
Limy Upland Objectives				
Key Area BK-023				
Perennial grass foliar cover of $\geq 2\%$	2	5.3	7.3	0.7
Bare ground $< 31.3\%$	31.3	32	10.7	20
Shrub foliar cover $< 30\%$	39			20
Shallow Upland Objectives				
Key Area BK-01				
Perennial grass foliar cover of $\geq 20\%$	12.7	28.7	20	6.6
Bare ground $< 14\%$	14	5.3	0.7	3.3
Shrub foliar cover $< 10\%$	36			23.3



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Lucky Hills

Lucky Hills Objectives				
	2019	2021	2022	2023
Limy Upland Objectives				
Key Area LH-042 Objective				
Perennial grass foliar cover of $\geq 24\%$	24	31.3	38.7	24
Bare ground $< 12.7\%$	12.7	30	4.7	12.7
Shrub foliar cover $< 30\%$	45			54

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Three Brothers

Three Brothers Objectives				
	2019	2021	2022	2023
Limy Upland Objectives				
Key Area TB-01 Objectives				
Perennial grass foliar cover of $\geq 11\%$	11	20.7	24	15.3
Bare ground $< 41.3\%$	41.3	32.7	10	30
Shrub foliar cover $< 30\%$	33			38
Key Area TB-081 Objectives				
Perennial grass foliar cover of $\geq 8\%$	8.7	17.3	26	16
Bare ground $< 34\%$	34	21.3	6.7	18.7
Shrub foliar cover $< 30\%$	36			37
Key Area GRZ-04 Objectives				
Perennial grass foliar cover of $\geq 2\%$	2	8	3.3	0.7
Bare ground $< 25.3\%$	25.3	6.7	1.3	14
Shrub foliar cover $< 30\%$	49			70

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