# Update on CNLM-Managed Preserves in Carlsbad

Presentations by Preserve Managers: Brooke Prentice-Dekker and Kathleen Balazs



#### Outline

- Brooke Prentice-Dekker
  - Biomonitoring and Preserve Results
  - Planting
- Kathleen Balazs
  - Restoration at Rancho La Costa
  - Thread-leaved Brodiaea surveys
  - Post-fire monitoring (Poinsettia fire)
  - Cowbirds
  - Effects of heavy rains
  - Volunteer events and newsletter



#### San Diego Thornmint

- Rainfall ~20 inches
- Above Average Counts (2nd Highest on Record)
- Rancho La Costa (1454)
  - Uphill Outseed RLC (8)
  - RLC 1 (15), RLC 2 (81), & RLC 3 (13)
- Carlsbad Oaks North (1115)
  - Outseed EFTS (0) & EFTN (7)
  - Uphill Outseed CON (270)
- Seed Collection





#### Blochman's Dudleya

- Three quadrats
  - High Vegetative Count 10 occurred in April
  - Total 5 Flowering in June
- Site Flowering total 177
  - 2-27 Flowers/plant





#### Coastal Sage Scrub Monitoring



## 19 Total Transects in Carlsbad Results

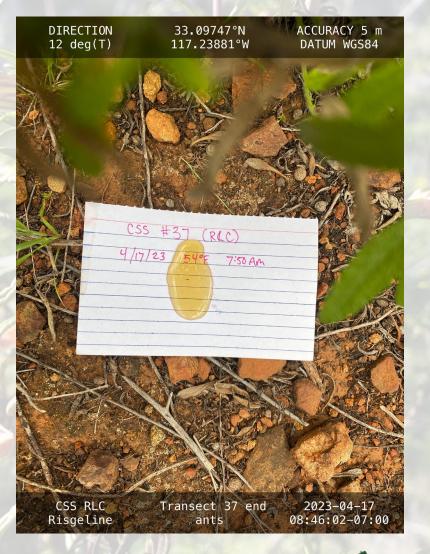
- Increase in Shrub Cover (78.6%)
- Highest native forb cover (43.9%)
- 58 Native Forbs Species (Narrow Leaf Bedstraw, Wild Cucumber, Granny's Hairnet/Fairy Mist)
- 11 Nonnative Forbs (Tocolote)



#### **Argentine Ant Surveys**

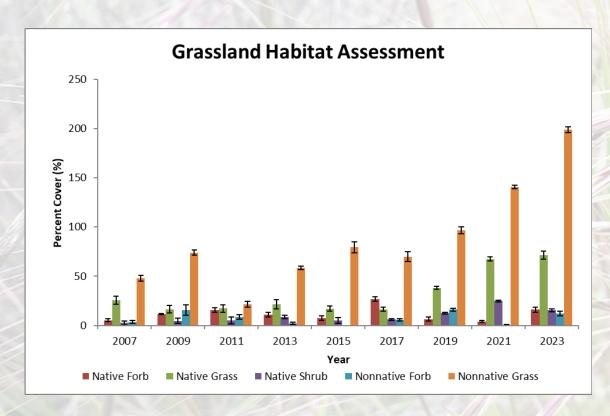
- Focused Surveys Argentine Ants
- 19 Bait Cards; 1 Positive
- San Diego Coast Horned Lizard







### **Grassland Monitoring**



4 Transects at Village H North at Calavera Hills

#### Results

- Highest Native and Nonnative Grass Cover on Record
- 4 Native Grass Species (Blue-eyed grass)
- 6 Nonnative Grass Species (Purple False Brome)



#### Wildlife Movement

- Wildlife Cameras
  - Calavera Hills
  - Carlsbad Oaks North
    - Faraday (EW-2-9)
    - Faraday (M7-1)
    - Pond
  - Rancho La Costa
    - Copper Creek
    - RLC Greens
  - Encinas Creek

#### Faraday Tunnel Wildlife Movement (EW-2-9)

Year	Bobcat	Coyote	Mule Deer
2010*	0	7	0
2011	1	24	1
2012	31	83	0
2013	105	55	0
2014	18	7	0
2015	21	12	11
2016	74	65	221
2017	52	118	200
2018	15	15	207
2019	2	8	100
2020^	27	36	32
2021+	19	89	150
2022*	20	93	114
2023	22	92	129

#### Wildlife Detection at CON Pond

Year	Bobcat	Coyote	Mule Deer_		
2018	4	2	28		
2019	3	13	21		
2020	22	11	22		
2021	31	6	9		
2022*	6	7	3		
2023**	3	14	39		



#### Wildlife Movement Rancho La Costa





## Wildlife Movement Carlsbad Oaks North Pond



Center for Natural Lands Management

#### Wildlife Movement Carlsbad Oaks North M7-1





#### Wildlife Movement Carlsbad Oaks North (EW-7-2)





#### Orcutt's Hazardia



- Rancho La Costa
  - Counts (135) Slight decrease but stable
- Kelly Ranch
  - Counts (116) Slight increase (first increase since 2012)
  - Three Transects

Year	Orcutt's Hazardia Cover (%)			
2010	2.63%			
2011	5.26%			
2023	5.98%			

Center for

Natural Lands Management

#### California Baja Oat Grass



- Rancho La Costa
  - Discovered on Preserve in 2022
  - First year of IMG Monitoring 2023
  - 100's of individuals (largest known population)
- Carlsbad Oaks North
  - Attempted Discovery Survey
  - None detected



#### **Bats Surveys**

Date	Species	Number of Species Passes	Relati ve Activi ty (%)	
March-April 2023	Mexican free- tailed bat	302	73.7	
March-April 2023	Yuma myotis	12	21.1	
March-April 2023	Western red bat*	5	5.3	

- Buena Vista Creek Ecological Reserve
  - Deploy Anabat in Spring
  - Send Data to SDNHM
  - California Species of Special

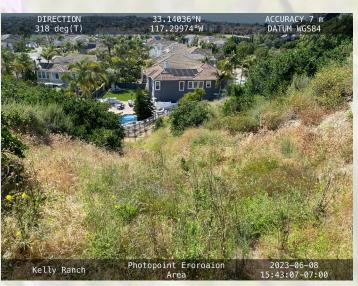




#### Planting

- Carlsbad Oaks North
  - Added to Restoration Area
- Kelly Ranch
  - Planted in Erosion Area
- Calavera Hills
  - Village H North Grassland
- Rancho La Costa
  - Gibraltar Restoration









## Habitat Restoration – Grassland Restoration at Gibraltar St. (La costa Greens)









### Thread-leaved Brodiaea (Brodiaea filifolia)

Approximate flowering totals (flowering individuals range from 0-35% of total population):

• Buena Vista: 450

Calavera Hills: 60

Carlsbad Oaks North: 475

• Rancho La Costa: 35,000

• City – Lake Calavera: 30

New population: 95



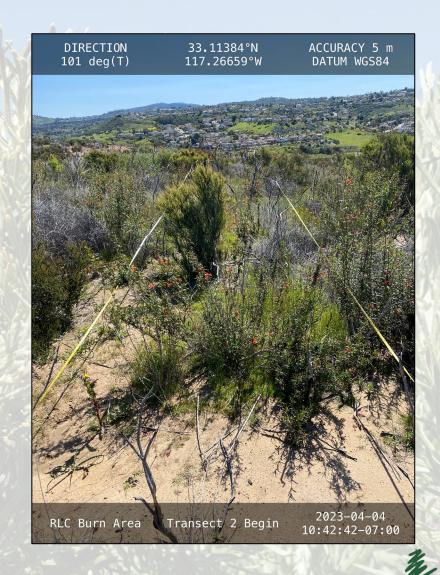


#### Post-fire monitoring

(2014 Poinsettia Fire)

- Rancho La Costa "Greens"
- Increase in cover and diversity!

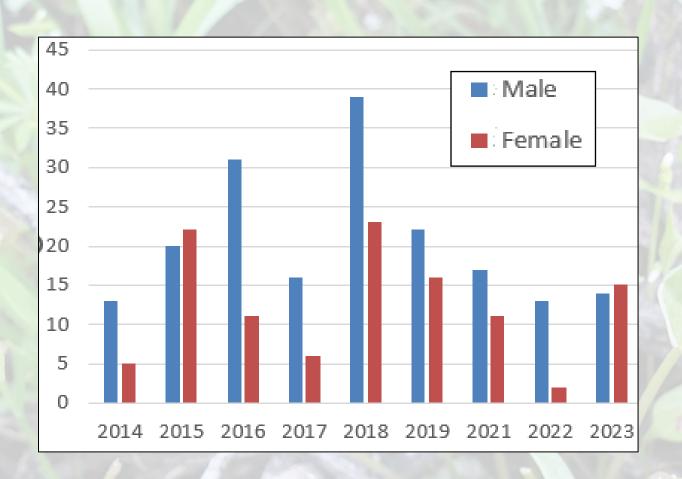
UT AS COMMON AS A STATE OF	perce	nt					
transect	cover			1/1/		1	
Category	2015	2016	2017	2018	2019		2023
bare ground	70%	81%	78%	43%	81%		70%
litter	9%	8%	21%	27%	16%		29%
native annual forb	3%	3%	9%	10%	25%		30%
native annual grass		WXC				Vi	18%
native perennial forb	6%	11%	35%	24%	33%		13%
native perennial grass	y Nos	( WA		176		7-7	3%
native shrub	3%	13%	20%	19%	23%		27%
non-native annual forb	3%				3%		7%
non-native annual grass	3%				7%		23%
non-native perennial grass							7%



Center for Natural Lands Management

#### Cowbirds

- Cowbirds are brood parasites on sensitive species such as least Bell's vireo and coastal California gnatcatcher
- Live traps deployed April 1-May 31
- 2 locations at The Crossings Golf Course





## Heavy Rains!

- Erosion control
- Flooding
- Weed control











### Volunteer Events and Newsletter Development



#### First Friday Volunteer Events

Find out more and sign up for our volunteer newsletter here:



https://www.cnlm.org/ san-diego-volunteer-sign-up/

Email: sdvolunteers@cnlm.org



#### **Future Plans**

- Invasive Species Removal
- Continued SDTM Enhancement
- Restoration via Planting
- Coastal Sage Scrub Monitoring
- Bat Surveys
- Vegetation Mapping
- Pollinations Studies
- San Diego Horned Lizard and Ant Surveys
- Wildlife Movement Studies

