



GIS for SKR HCP Coordination and Management

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Dipodomys stephensi

- ▶ fossorial rodent
- ▶ sparse grassland habitat
- ▶ uses bare ground for foraging, dust bathing and territory marking
- ▶ major threats: habitat fragmentation and non-native grasses



HCP Background

- ▶ 1988 Stephens' kangaroo rat Federally listed as endangered
 - ▶ 1990 RCHCA JPA formed to acquire and conserve 15,000 acres of occupied habitat in Western Riverside County
 - ▶ 1996 SKR HCP was adopted
 - ▶ BLM was intended to manage RCHCA lands for the species
 - ▶ 2006 RCHCA decides to begin managing their lands
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Reserve Management

- ▶ RMCC assists in the coordinating SKR habitat management and biological monitoring activities among the individual core reserves
- ▶ RCHCA, Riv. County, USFWS, CDFW, UC ext., State Parks, MWD, City of Riv. Parks and Rec., Riv. Cnty. Parks, UCR, and BLM
- ▶ RMC's oversee specific reserve management and monitoring activities
- ▶ approve annual work plans proposed by Reserve Manager
- ▶ unanimous rule of law
- ▶ LMR and SWMSR

Reserve Management
Coordinating Committee

Reserve Management
Committee

Database Purpose

- ▶ To archive and disseminate various management data to ALCON in order to reduce redundancy while promoting collaboration, useful adaptive management, and sustainable conservation techniques.
- ▶ “What works and where’s it happening!”

Database Need

- ▶ No central repository for management activities.
Ex: GRAZING vs. BURNING vs. MOWING vs. HERBICIDE
 - ▶ Restoration sites lacked consistent recording keeping – Ex. veg. target spp., treatment technique, restoration method.
 - ▶ Huge allocations of time, money, and resources were being invested in redundant management because everyone was trying to “reinvent the wheel” and storing information on personnel computers and personal reports.
 - ▶ Became apparent when writing annual reports to the regulatory agencies and during the 5 year listing review.
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It takes a village...

- ▶ RCHCA, MDEP, BLM, and USFWS cooperatively developed a geodatabase after consulting with Reserve Managers.
- ▶ Progress could only be achieved if we had access to what others had already tried. Those prior successes or failures allowed others to build upon or differentiate their management.
- ▶ KISS philosophy – so unwieldy and few will use it / so time consuming and nobody will even look at it

Exotic Vegetation Control														
Organization	R		RCHCA	RCA	CDFW	CDPR	UCR	BLM	TNC	RC Parks	City of Riverside	WM Inc		
Reserve	R		Lake Mathews / Estelle Mtn.	Lake Perris	March AFB	Potrero	San Jacinto Wildlife Area	Santa Rosa Plateau	Steele Peak	SW Multi-Species Reserve	Sycamore Canyon	Motte / Rimrock	RCA Lands	
Project Manager (POC)	R		TEXT											
Date	R		TEXT											
Management Unit	O		TEXT											
Removal Method	R		Fire	Mechanical	Hand	Grazing								
Exotic Species 1	R		Mustard Sp.	Non-native grasses	Wild Oats (Avena spp)	Globe chamomile	Perennial Pepperweed	Tamarisk (Salt Cedar)	Athel Tamarisk	Tree of Heaven	Russian Thistle	Giant Reed (Arundo donax)	Artichoke Thistle	Spanish sunflower
Percent Cover	R		<10%	10-25%	26-50%	51-75%	76-90%	>91%						
Plant Stage	R		Dormant	New Growth	Flowering	Seeds/Fruit	Resprouting	Other						
Natural Community	R		Grassland	Sage Scrub	Riparian	Oak Woodland	Cactus	Scale Broom Scrub (RAFSS)	Willow Scrub					
Benefit Species 1	R		SKR	BUOW	Grasshopper sparrow	LBV	CAGN	Quino	Cactus Wren					
Herbicide	R		Roundup (glyphosate)	Rodeo (glyphosate)	Aquamaster (glyphosate)	Garlon 3 (Triclopyr)	Garlon 4 (Triclopyr)	Pathfinder (Triclopyr)	Fusilade (Fluazifop-P_Butyl)	Polaris (Imazapyr)	Habitat (Imazapyr)			
Reveg Method	R		Hand seeding	Hydro seeding	Container Plants	Imprinting								
Reveg Method 2	R		Hand seeding	Hydro seeding	Container Plants	Imprinting								
Reveg Habitat Type1	R		Annual Forbs	Bunch Grasses	Coastal Shrubs	Chapparel Shrubs	Riparian Overstory	Riparian Understory	Cactus					
Reveg Habitat Type2	R		Annual Forbs	Bunch Grasses	Coastal Shrubs	Chapparel Shrubs	Riparian Overstory	Riparian Understory	Cactus					

Trimble Juno GPS Units

- ▶ Federal partnership for the use of 4 units to be shared by Reserve Managers
- ▶ Individual managers may purchase Juno and acquire software by becoming a Federal cooperating partner.
- ▶ Touch screen e-form capability
- ▶ Mobile upload to populate geodatabase fields



A landscape photograph showing a large, dark, craggy rock formation on a grassy hillside. The foreground is filled with a dense field of small yellow wildflowers. In the background, there are rolling green hills and a range of mountains under a hazy sky.

Questions?

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