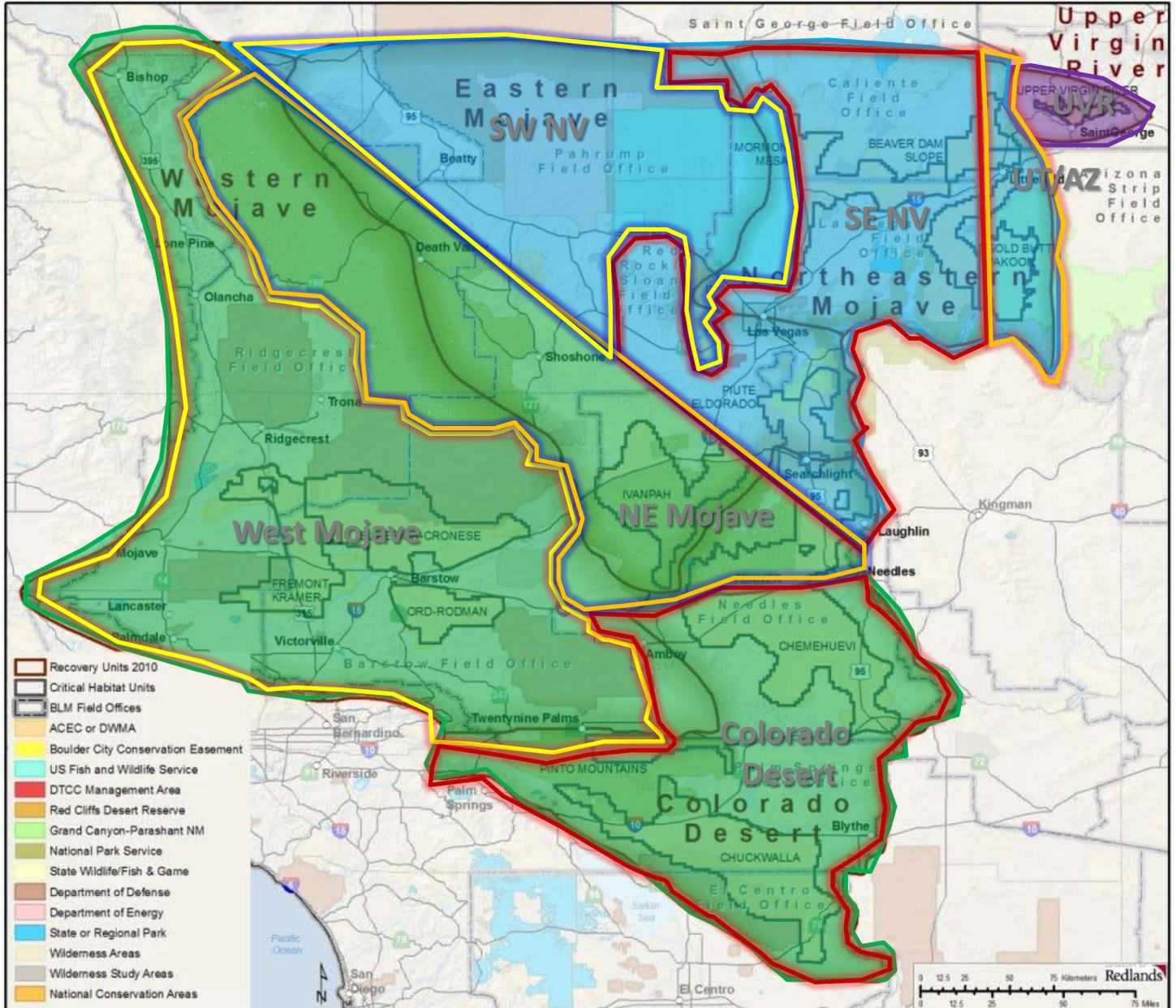


Recovery Implementation Teams



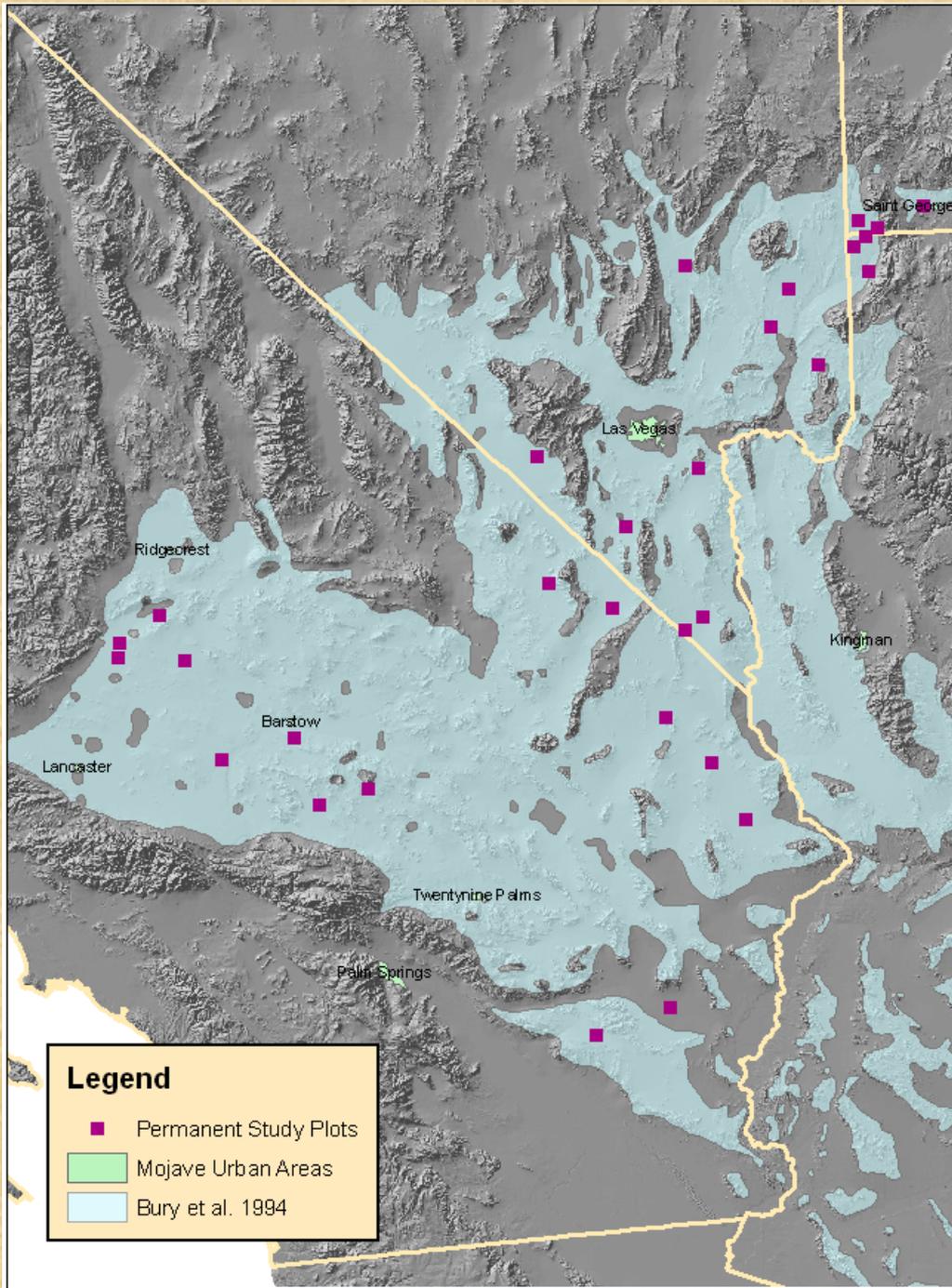
Desert tortoise monitoring

Using regional information to
increase the value of local data

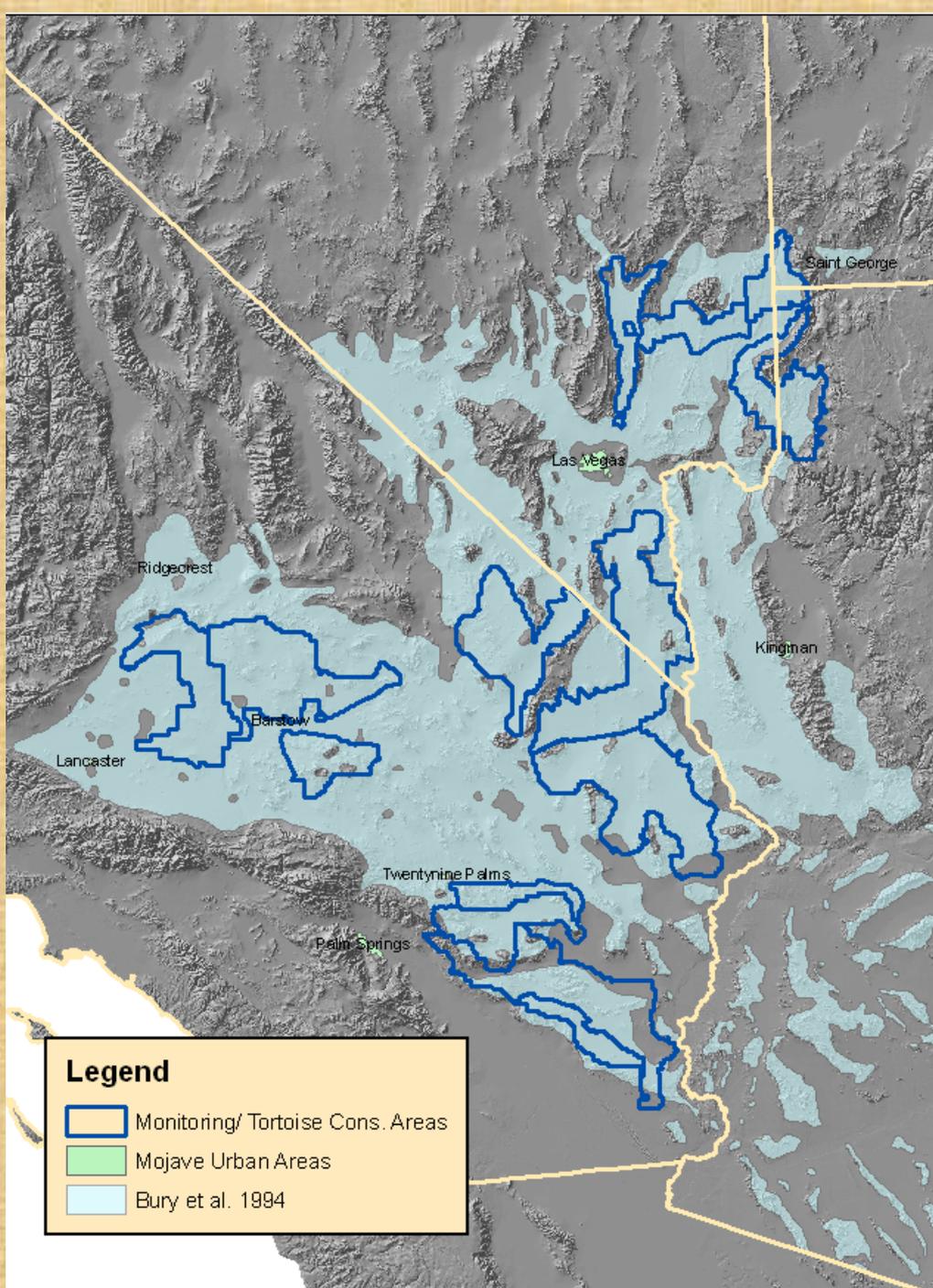
Linda Allison
US Fish and Wildlife Service
Desert Tortoise Monitoring Coordinator



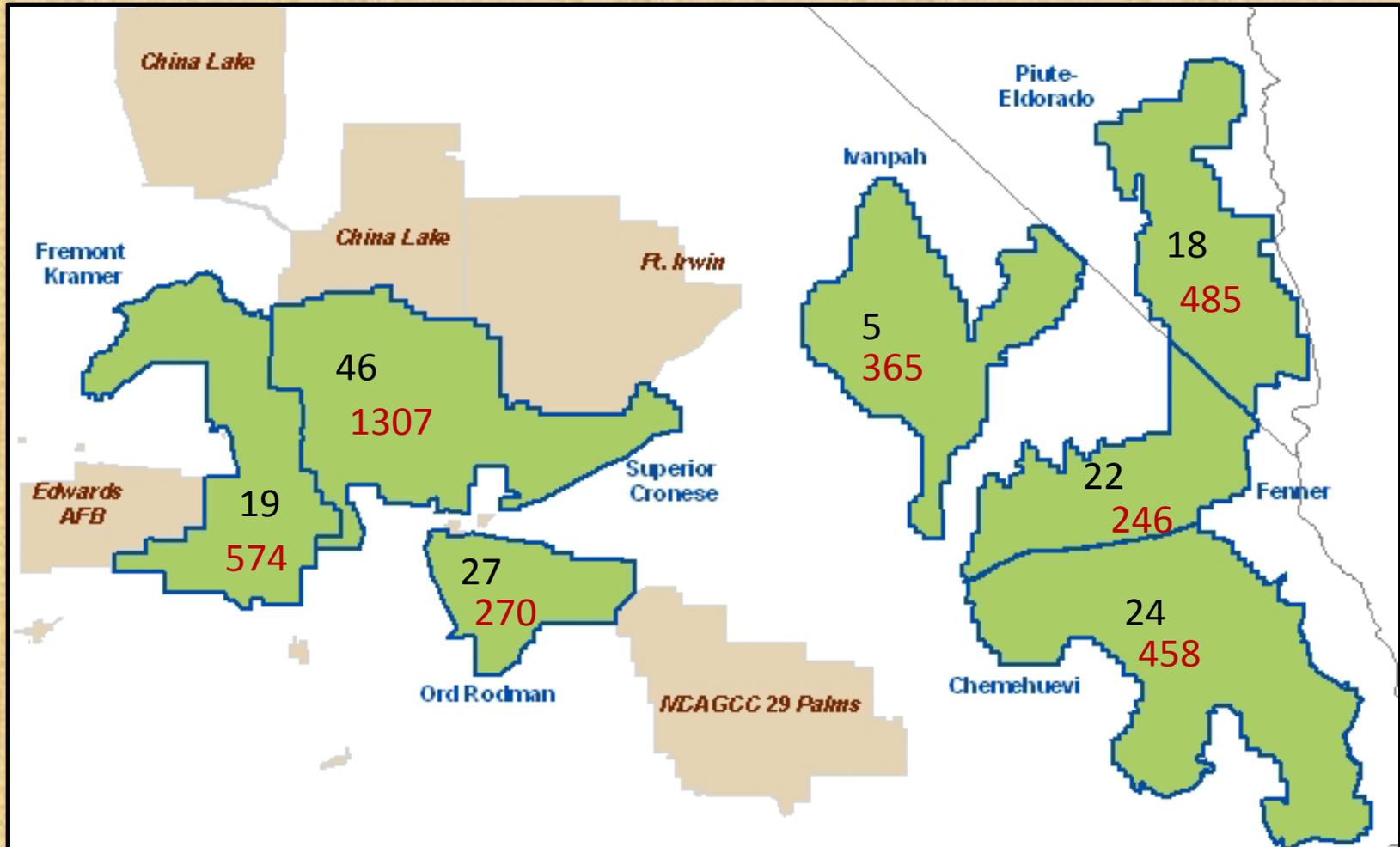
Tortoise status described with permanent study plot data



Tortoise Conservation Areas



Lots of kilometers walked Few tortoises encountered 2010

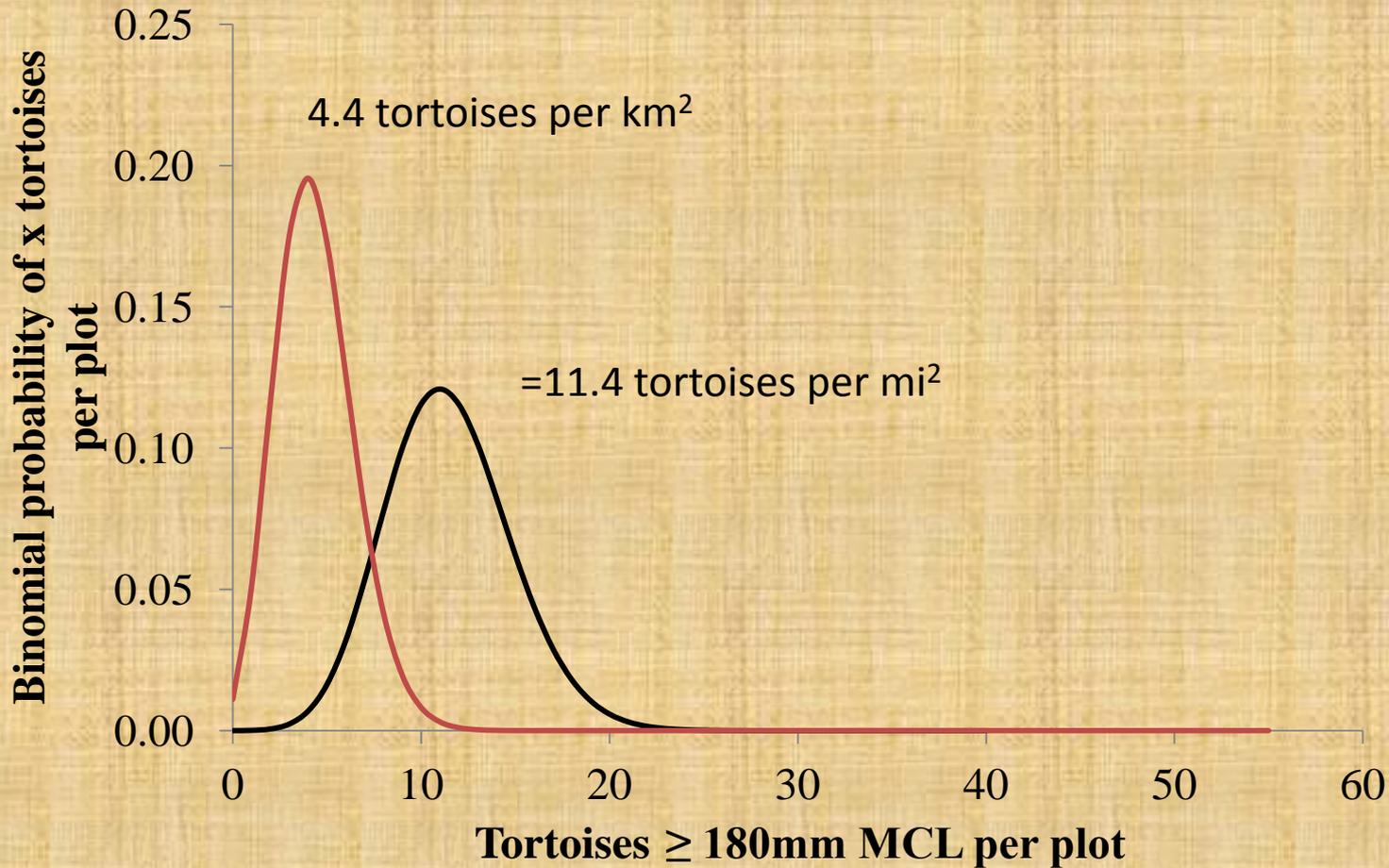


Recovery Unit	Area (km ²)	Transects	Tortoises	Density
NE Mojave	4889	425	164	3.2
Beaver Dam Slope	828	66	23	3.3
Coyote Springs	1117	99	43	3.6
Gold Butte – Pakoon	1977	128	22	1.8
Mormon Mesa	968	132	76	5.5
E. Mojave	6763	95	45	3.6
Fenner	1862	20	22	7.5
Ivanpah	2567	31	5	1.1
Piute-Eldorado	2334	44	18	3.1
N. Colorado	4038	40	24	4.4
Chemehuevi	4038	40	24	4.4
W. Mojave	9351	234	105	3.2
Fremont-Kramer	2462	50	19	2.5
Joshua Tree NP	1567	25	6	2.8
Ord-Rodman	1124	25	27	7.5
Pinto Mountains	751	21	7	3.4
Superior-Cronese	3447	113	46	2.6
E. Colorado	4263	94	72	5.8
Chuckwalla – DoD	755	33	50	13.8
Chuckwalla - BLM	3509	61	22	3.7

2010



High counts are possible on large and small plots



Could 52 tortoises on a 1mi² permanent study plot* occur today, when densities in Chemehuevi average 11.4/mi²?

Tortoises per 1 mi ² plot (n)	Probability a plot will have more than n tortoises	Plots with n or more tortoises in Chemehuevi TCA
0	1.000	1553
5	0.974	1512
10	0.595	924
15	0.113	175
20	0.006	9
25	0.000	0
30	0.000	0

*Schneider, (1980). Desert Tortoise Council Symposium Proceedings



Project Impacts

Health status – what is normal?



How can we judge their health and ability to thrive?

Training in collaboration with the San Diego Zoo staff, at the Desert Tortoise Conservation Center



What body condition tells us that tortoises cannot/will not

- Is this tortoise too compromised to attempt successful translocation?
- Is this tortoise in better condition than the residents where we intend to relocate it?
- What sort of body condition do tortoises have normally?
- What is normal variation year to year or across space?
- Is this area functionally at full capacity to hold tortoises?



The "Knight Viper" team, from left: James Miller, Kirsten Dutcher, Simeon Caskey, Daniel Leach, Corrine Michaud and Dave Ellis

The Searchers

By Joseph Langdon
Desert Companion
Oct 2011, pp 48-53.

Low pay. No benefits. Long days in the lonesome desert. Why do field biologists do it? A thirst for adventure — and a sense of purpose **BY JOSEPH LANGDON**

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