

# Cal/Ecotox Exposure Factors for Stephens' Kangaroo Rat (*Dipodomys stephensi*)\*

Page 1

Endpoint Type	Endpoint Value	Error	Range	Units	Sex	Life Stage	Location	Note	Reference
Age at Fledging, Metamorphosis, Weaning			18 - 22	d	B	Juvenile	Lab	a	1
Age at Sexual Maturity	3			mo	F	Adult	Riverside; CA	b	2
Body Weight - Mean	67.26			g	B	Adult	San Diego; CA	c	1
Body Weight - Mean	62.30	2.40 SD	59.9 - 64.4	g	F	Adult	Lab	d	3
Body Weight - Mean	65.83	1.19 SD	64.5 - 66.8	g	M	Adult	Lab	e	3
Body Weight - Mean	40			g	B	Juvenile	Lab	f	1
Body Weight - Mean	30			g	B	Juvenile	Lab	g	1
Body Weight - Mean	46.1			g	B	Juvenile	Lab	h	1
Body Weight - Mean	20			g	B	Juvenile	Lab	i	1
Body Weight - Mean	10			g	B	Juvenile	Lab	j	1
Body Weight - Mean	4.4		3.8 - 4.7	g	B	Neonate	Lab	k	1
Body Weight - Mean	62.2		45 - 73	g	NR	NR	Riverside; CA	l	4
Clutch or Litter Size	2.67			young/litter	F	Adult	Riverside; CA	m	2
Clutches or Litters per year			1.50 - 1.93	litters/yr	F	Adult	Riverside; CA	n	2
Dietary Composition	Erodium cicutarium leaf (19.4%) and seed (18.8%); Schismus barbatus non-seed (15.3%) and seed (2.8%); unidentified grass (14.1%); Bromus madritensis (7.1%); insect (8.1%); Hirschfeldia incana seed (4.7%); Eriogonum fasciculatum seed (3.5%); Salsola tragus seed (3.4%); Amsinckia menziesii seed (2.4%); Artemisia californica seed (0.9%)			%	NR	NR	Riverside; CA	o	5
Growth Rate	see citation			g	B	Juvenile	Lab	p	1
Growth Rate	19.00 (20-29g); 8.82 (30-39g); 8.80 (40-49g); 0.94 (60-69g)			g/mo	B	NR	Riverside; CA	q	2
Home Range			30.5 - 45.0	m	F	Adult	Riverside; CA	r	6
Home Range			22.7 - 30.0	m	F	Adult	Riverside; CA	s	6
Home Range			78.8 - 86.9	m	M	Adult	Riverside; CA	t	6
Home Range			30.0 - 33.5	m	M	Adult	Riverside; CA	u	6
Home Range			15.0 - 16.5	m	F	Juvenile	Riverside; CA	v	6
Home Range			22.4 - 30.0	m	M	Juvenile	Riverside; CA	w	6
Home Range	review				NR	NR		x	7
Longevity	19			mo	B	Adult	Riverside; CA	y	2
Population Density	36.1			#/ha	B	NR	Riverside; CA	z	8
Population Density	26.2			#/ha	B	NR	Riverside; CA	aa	8
Population Density	19.7			#/ha	B	NR	Riverside; CA	ab	8
Population Density	see citation			#/ha	B	NR	Riverside; CA	ac	2
Population Density	review				NR	NR		ad	7
Population Density			4.9 - 5.2	#/ha	NR	NR	Riverside; CA	ae	9
Population Density			< 1 - >10	#/ha	NR	NR	CA	af	10
Survival/ Mortality			0.79 - 0.85		B	Adult	Riverside; CA	ag	8
Survival/ Mortality			0.52 - 0.81		B	Juvenile	Riverside; CA	ah	8

## Notes

a N=NR

04/20/99



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### Page 2

b	N=NR; Motte Rimrock Reserve and San Jacinto Wildlife Area
c	N=14; Bonsall and San Luis Rey
d	N=5; captured 3 days prior at Lake Mathews, Riverside County, CA
e	N=3; captured 3 days prior at Lake Mathews, Riverside County, CA
f	N=16; Age=31 d
g	N=16; Age=22 d
h	N=16; Age=63 d
i	N=16; Age=15 d
j	N=16; Age=5 d
k	N=16; Age=0 d
l	N=40
m	N=6; Motte Rimrock Reserve and San Jacinto Wildlife Area
n	range over 2 yrs; N=8-14/yr; Motte Rimrock Reserve and San Jacinto Wildlife Area
o	annual % frequency of occurrence in fecal pellets; N=5-10 pellets/mo; Aug. - Nov.; Motte Rimrock Reserve and San Jacinto Wildlife Area; see citation for monthly changes in diet
p	figure relating body weight or length to age; N=16; Age=0 - 63 d
q	mass specific growth rates pooled by sex and site expressed as change in body mass per mo for 4 weight classes (20-69g); N=1-125/site and sex; Motte Rimrock Reserve and San Jacinto Wildlife Area
r	range of median maximum distance moved based on telemetry at 2 sites; 21 - 91 d observation; N=9; Motte Rock Ecological Reserve [lat., 33°o53'N; long., 117°o6'W] and San Jacinto Wildlife Area [lat., 33°o51'N; long., 116°o54'W]
s	range of median maximum distance moved based on monthly live trapping capture data at 2 sites; N=94; Motte Rock Ecological Reserve [lat., 33°o53'N; long., 117°o6'W] and San Jacinto Wildlife Area [lat., 33°o51'N; long., 116°o54'W]
t	range of median maximum distance moved based on telemetry at 2 sites; 15 - 127 d of observation; N=4-9; Motte Rock Ecological Reserve [lat., 33°o53'N; long., 117°o6'W] and San Jacinto Wildlife Area [lat., 33°o51'N; long., 116°o54'W]
u	range of median maximum distance moved based on monthly live trapping capture data at 2 sites; N=97 - 121; Motte Rock Ecological Reserve [lat., 33°o53'N; long., 117°o6'W] and San Jacinto Wildlife Area [lat., 33°o51'N; long., 116°o54'W]
v	range of median maximum distance moved based on monthly live trapping capture data at 2 sites; N=21-54; Motte Rock Ecological Reserve [lat., 33°o53'N; long., 117°o6'W] and San Jacinto Wildlife Area [lat., 33°o51'N; long., 116°o54'W]
w	range of median maximum distance moved based on monthly live trapping capture data at 2 sites; N=17-59; Motte Rock Ecological Reserve [lat., 33°o53'N; long., 117°o6'W] and San Jacinto Wildlife Area [lat., 33°o51'N; long., 116°o54'W]
x	N=NR
y	maximum time of persistence at site; N=NR; Motte Rimrock Reserve and San Jacinto Wildlife Area
z	average density over 19 mo study; N=125; Lake Mathews [lat., 33°o50'N; long., 117°o27'30"W]; see citation for figure of seasonal changes in population size
aa	average density over 19 mo study; N=96; Motte Rimrock Reserve [lat., 33°o47'30"N; long., 117°o15'W]; see citation for figure of seasonal changes in population size
ab	average density over 19 mo study; N=87; San Jacinto Wildlife Area [lat., 33°o52'N; long., 117°o7'15"W]; see citation for figure of seasonal changes in population size
ac	figure of monthly population densities at two sites; N=NR; Motte Rimrock Reserve and San Jacinto Wildlife Area
ad	N=NR
ae	range of densities estimated over 2 yrs; N=320 - 640 trap nights; Age=Feb. - Mar.; San Jacinto Wildlife Refuge
af	N=NR; Aug. - Dec.
ag	range of minimum rate of survival of individuals in the trappable population per mo, measured over 19 mo at 3 sites; N=110-234; Lake Mathews [lat., 33°o50'N; long., 117°o27'30"W]; Motte Rimrock Reserve [lat., 33°o47'30"N; long., 117°o15'W] and San Jacinto Wildlife Area [lat., 33°o52'N; long., 117°o7'15"W]
ah	range of minimum rate of survival of individuals in the trappable population per mo, measured over 19 mo at 3 sites; N=23-49; Lake Mathews [lat., 33°o50'N; long., 117°o27'30"W]; Motte Rimrock Reserve [lat., 33°o47'30"N; long., 117°o15'W] and San Jacinto Wildlife Area [lat., 33°o52'N; long., 117°o7'15"W]

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