Cal/Ecotox
Exposure Factors for Desert Iguana (Dipsosaurus dorsalis)*

Endpoint Type	Endpoint Value	Error	Range	Units	Sex	Life Stage	Location	Note	Reference
Age at Sexual Maturity	> 4.5			yr	B	Adult	Imperial; Riverside; San Bernardino; CA	a	1
Age at Sexual Maturity			31 - 33	mo	NR	Adult	Riverside; CA	b	2
Age at Sexual Maturity	45			mo	NR	Adult	AZ	c	3
Body Weight - Mean	35.2		28.7 - 42.6	g	B	Adult	Lab	d	4
Body Weight - Mean	43.3	9.7 SD	30.0 - 57.0	g	B	Adult	Riverside; CA	e	2
Body Weight - Mean			42.7 - 50.2	g	F	Adult	Riverside; CA	f	5
Body Weight - Mean			32.2 - 47.8	g	F	Adult	CA	g	6
Body Weight - Mean	47			g	F	Adult	Riverside; CA	h	7
Body Weight - Mean	log weight = 0.013 SVL + 0.24			g	F	Adult	CA	i	8
Body Weight - Mean	log weight = 0.010 SVL + 0.46			g	F	Adult	CA	j	8
Body Weight - Mean			54.0 - 60.5	g	M	Adult	Riverside; CA	k	5
Body Weight - Mean	60			g	M	Adult	Riverside; CA	l	7
Body Weight - Mean	log weight = 0.011 SVL + 0.46			g	M	Adult	CA	m	8
Body Weight - Mean	log weight = 0.011 SVL + 0.37			g	M	Adult	CA	n	8
Body Weight - Mean	46.0	13.4 SD	23.5 - 65.6	g	B	Both Adult and Juv.	Riverside; CA	o	2
Body Weight - Mean	3.5			g	NR	Hatchling	Riverside; CA	p	7
Body Weight - Mean	5.2	1.0 SD	2.0 - 7.8	g	B	Juvenile	Riverside; CA	q	2
Body Weight - Mean	29.2	8.6 SD	14.5 - 47.0	g	NR	Juvenile	Riverside; CA	r	2
Body Weight - Mean	9.2	2.1 SD		g	NR	Juvenile	Riverside; CA	s	2
Body Weight - Mean	log weight = 0.017 SVL - 0.11			g	NR	Juvenile	CA	t	8
Body Weight - Mean	log weight = 0.017 SVL - 0.22			g	NR	Juvenile	CA	u	8
Body Weight - Mean	log weight = 0.011 SVL + 0.05			g	NR	Juvenile	CA	v	8
Clutch or Litter Size			3 - 5	eggs/clutch	F	Adult	Imperial; Riverside; San Bernardino; CA	w	1
Clutch or Litter Size			3 - 8	eggs/clutch	F	Adult	AZ; CA; NV	x	9
Clutches or Litters per year	1			clutch/yr	F	Adult	Imperial; Riverside; San Bernardino; CA	y	1
Dietary Composition	Plant Species: Ambrosia dumosa (4.8%); Coldenia palmeri (27.6%); Croton californica (2.8%); Dalea emoryi (24.7%); Dalea schottii (13.2%); Dicoria canescens (22.5%); Arthropods (1.3%); Rodent feces (2.4%); Gravel (0.6%)			%	NR	Adult	Riverside; CA	z	7
Dietary Composition	Plant Species: Ambrosia dumosa (19.6%); Coldenia palmeri (10.1%); Dalea schottii (14.4%); Euphorbia polycarpa (4.5%); Geraea canescens (3.1%); Larrea divaricata (32.7%); Palafoxia linearis (11.7%); Rafinesquia neomexicana (1.6%); Schismus barbatus (0.7%);Arthropods (0.5%); Rodent feces (0.5%); Shed skin (0.6%)			%	NR	Adult	Riverside; CA	aa	7
Dietary Composition	Plant Species: Ambrosia dumosa (15.4%); Coldenia palmeri (68.3%); Croton californica (2.8%); Dalea emoryi (5.9%); Dalea schottii (5.6%); Arthropods (1.3%); Gravel (0.8%)			%	NR	Hatchling	Riverside; CA	ab	7

Endpoint Type	Endpoint Value	Error	Range	Units	Sex	Life Stage	Location	Note	Reference
Dietary Composition	Plant Species: Ambrosia dumosa (6.1%); Coldenia palmeri (16.2%); Dalea emoryi (2.9%); Dalea schottii (26.7%); Geraea canescens (4.1%); Larrea divaricata (23.9%); Palafoxia linearis (3.4%); Rafinesquia neomexicana (0.4%); Unidentified vegetation (12.3%); Arthropods (3.0%)			%	NR	Hatchling	Riverside; CA	ac	7
Dietary Composition	see citation			%	NR	NR	Riverside; CA	ad	10
Dietary Composition	Plants: Dicoria canescens (50%); Flower heads of composite (25%); Dalea emoryi ? (10%); Coldenia sp. (10%)			%	NR	NR	Riverside; CA	ae	9
Dietary Composition	Plants: Dicoria canescens (45%); Flower heads of composite (10%); Coldenia sp. (5%); Trifolium sp. (20%); Animal: Grasshoppers (5%); Dipsosaurus (5%); Fecal pellets (5%)			%	NR	NR	Riverside; CA	af	9
Dietary Composition	Plants: Larrea divaricata (85%); Animal: Fecal pellets (10%); Bees (trace); Sand (trace)			%	NR	NR	Riverside; CA	ag	9
Duration of Incubation or Gestation	44			d	NR	Embryo	Lab	ah	11
Duration of Incubation or Gestation	86			d	NR	Embryo	Lab	ai	11
Duration of Incubation or Gestation	75			d	NR	Hatchling	Imperial; Riverside; San Bernardino; CA	aj	1
Food Ingestion Rate			15.2 - 17.1	mg dry food/g/d	NR	Adult	Riverside; CA	ak	7
Food Ingestion Rate			19.1 - 28.5	mg dry food/g/d	NR	Hatchling	Riverside; CA	al	7
Food Ingestion Rate	50			g fresh wt food//kg/d	NR	NR	Riverside; CA	am	10
Growth Rate			0.0003 - .145	g/d	NR	Hatchling	Riverside; CA	an	7
Growth Rate	2.7		0.0 - 5.1	mm/mo	NR	Juvenile	AZ	ao	3
Home Range			79 - 229	m2	F	Adult	Riverside; CA	ap	5
Home Range	1558		223 - 4244	m2	F	Adult	Riverside; CA	aq	12
Home Range			189 - 738	m2	M	Adult	Riverside; CA	ar	5
Home Range	1462		201 - 4365	m2	M	Adult	Riverside; CA	as	12
Longevity			7.5 - 8.5	yr	B	Adult	Riverside; CA	at	2
Metabolic Rate	see citation			cm3 O2/g/hr	B	Adult	Lab	au	4
Metabolic Rate			0.144 - 0.214	ml O2/g/hr	B	Adult	Lab	av	13
Metabolic Rate			1.369 - 2.104	ml O2/g/hr	B	Adult	Lab	aw	13
Metabolic Rate			0.152 - 0.295	ml CO2/g/hr	NR	Adult	Riverside; CA	ax	7
Metabolic Rate	0.110 (30C); 0.217 (35C); 0.238 (40C)			ml O2/g/hr	NR	Adult	Lab	ay	7
Metabolic Rate			0.350 - 0.380	ml CO2/g/hr	NR	Hatchling	Riverside; CA	az	7

Endpoint Type	Endpoint Value	Error	Range	Units	Sex	Life Stage	Location	Note	Reference
Metabolic Rate	0.180 (30C); 0.250 (35C); 0.279 (40C)			ml O2/g/hr	NR	Hatchling	Lab	ba	7
Metabolic Rate	0.357	0.024 SE		ml CO2/g/hr	NR	Juvenile	Riverside; CA	bb	7
Metabolic Rate	see citation			cc O2/g/hr	NR	NR	Lab	bc	14
Metabolic Rate	review				NR	NR		bd	15
Population Density			7 - 35	#/ha	B	Adult	Riverside; CA	be	5
Population Density	332			#/ha	B	Both Adult and Juv.	Riverside; CA	bf	2
Population Density	450		400 -700	#/ha	NR	Both Adult and Juv.	Riverside; CA	bg	16
Population Density			11 - 20	#/ha	NR	Juvenile	AZ	bh	3
Survival/ Mortality	43		40 - 46	%	NR		Riverside; CA	bi	2
Survival/ Mortality	46		44 - 50	%	NR		Riverside; CA	bj	2
Survival/ Mortality	60		33 - 80	%	B	Adult	Riverside; CA	bk	2
Survival/ Mortality	73			%	NR	Hatchling	Riverside; CA	bl	2
Time of Hatching or Parturition	Aug.				NR	Hatchling	Riverside; CA	bm	7
Time of Hatching or Parturition	Aug.				NR	Hatchling	Riverside; CA	bn	7
Time of Hatching or Parturition	Aug.				NR	Hatchling	Imperial; Riverside; San Bernardino; CA	bo	1
Time of Hatching or Parturition	Aug.				NR	Hatchling	AZ; CA; NV	bp	9
Time of Mating/ Laying	Apr. - May				B	Adult	AZ; CA; NV	bq	9
Time of Mating/ Laying	June - July				F	Adult	AZ; CA; NV	br	9
Time of Mating/ Laying	Apr. - July				M	Adult	Imperial; Riverside; San Bernardino; CA	bs	1
Time of Torpor or Hibernation	Sept. - Mar.				NR	Adult	AZ	bt	3
Time of Torpor or Hibernation	Oct. - Mar.				NR	NR	Riverside; CA	bu	7
Time of Torpor or Hibernation	Oct. - Mar.				NR	NR	Riverside; CA	bv	14

Notes

a N=NR; Dale Dry Lake, Palm Springs and Algodones Dunes
b N=NR; Thousand Palms
c minimum adult size at first reproduction, estimated from growth rate; N=22; Phoenix South Mountain, Maricopa County
d N=30; animals originally captured at Riverside County, CA
e N=5; Age=43-44 mo; Apr.-Sept.; Thousand Palms; snout-vent length averaged 112.4 mm (range; 107-120)
f range of averages for 3 sites; N=NR; Mar. - Apr.; Coachella Valley; snout-vent length 10.8 - 11.3 cm
g range of means during 5 stages of reproductive cycle; N=7-15/stage; June - Oct.; Southwest Herpetological Research and Sales, Calimesa; see citation for ovary, oviduct, liver and adrenal weights
h average snout-vent length = 11.2 cm; N=4 - 26/sampling time; Thousand Palms; see citation for figure of monthly changes in body mass
i relationship between body weight (g) and snout-vent length (SVL, mm); N=NR; spring; Palm Desert
j relationship between body weight (g) and snout-vent length (SVL, mm); N=NR; summer; Palm Desert
k range of averages for 3 sites; N=NR; Mar. - June; Coachella Valley; snout-vent length, 11.5 - 11.9 cm
l average snout-vent length = 12.1 cm; N=9-24/sampling time; Thousand Palms; see citation for figure of monthly changes in body mass
m relationship between body weight (g) and snout-vent length (SVL, mm); N=NR; spring; Palm Desert
n relationship between body weight (g) and snout-vent length (SVL, mm); N=NR; summer; Palm Desert
o N=11; Age=31-32 mo; Apr.-Sept.; Thousand Palms; snout-vent length averaged 110.1 mm (range; 85-126)
p average snout-vent length = 5.1 cm; N=5 - 52/sampling time; Thousand Palms; see citation for figure of monthly changes in body mass
q N=37; Age=0-1 mo; Apr.-Sept.; Thousand Palms; snout-vent length averaged 51.4 mm (range; 41-57)
r N=25; Age=19-20 mo; Apr.-Sept.; Thousand Palms; snout-vent length averaged 92.6 mm (range; 67-115)
s N=65; Age=7-8 mo; Apr.-Sept.; Thousand Palms; snout-vent length averaged 60.7 mm (range; 51-74)

t	relationship between body weight (g) and snout-vent length (SVL, mm); N=NR; spring; Palm Desert
u	relationship between body weight (g) and snout-vent length (SVL, mm); N=NR; summer; Palm Desert
v	relationship between body weight (g) and snout-vent length (SVL, mm); N=NR; winter; Palm Desert
w	based on eggs in oviduct; N=NR; Dale Dry Lake, Palm Springs and Algodones Dunes
x	N=NR
y	N=NR; Dale Dry Lake, Palm Springs and Algodones Dunes
z	mean % of total dry matter stomach contents; N=7; autumn; Thousand Palms; average body weight = 46.9 g
aa	mean % of total dry matter stomach contents; N=6; spring; Thousand Palms; average body weight = 48.0 g
ab	mean % of total dry matter stomach contents; N=12; autumn; Thousand Palms; average body weight = 3.8 g
ac	mean % of total dry matter stomach contents; N=5; spring; Thousand Palms; average body weight = 8.5 g
ad	figure of % of food item in diet, based on dry weight of stomach contents; N=11-14/season or location; spring and summer; Palm Desert and Thousand Palms
ae	% volume of total stomach contents; N=8; fall; Coachella Valley
af	% volume of total stomach contents; N=12; summer; Coachella Valley
ag	% volume of total stomach contents; N=17; spring; Coachella Valley
ah	incubation period at 36C; N=60; see citation for figure of incubation time at various temperatures (28-40C)
ai	incubation period at 28C; N=12; see citation for figure of incubation time at various temperatures (28-40C)
aj	time from egg to hatching; N=NR; Dale Dry Lake, Palm Springs and Algodones Dunes
ak	estimated feeding rate to support energy expenditure measured in field; N=7-11/time period; Apr.- Sept.; Thousand Palms; average body mass range; 50.3-57.0 g
al	estimated feeding rate to support energy expenditure measured in field; N=7-9/time period; Apr. - Sept.; Thousand Palms; average body weight range; 3.5-8.2 g
am	rate estimated from intake of preformed water and water content of food for animals maintaining weight on natural vegetation; N=NR; spring and summer; Palm Desert and Thousand Palms; also reported as 25 g dry wt food/kg/d
an	N=5 - 52/sampling time; Thousand Palms; snout-vent length growth rate range = 0.044-0.283 mm/d
ao	growth rate based on changes in snout-vent length (48-73 mm); N=22; Phoenix South Mountain, Maricopa County
ap	minimum area versus probability estimates for 3 sites; estimate of area encompassing 95% of total space utilization; N=NR; Mar. - June; Coachella Valley; home range estimate via convex polygon method = 65 - 310 m2
aq	home range estimated using the convex polygon method; N=5; June-July; Thousand Palms; snout-vent length range, 105-120mm
ar	minimum area versus probability estimate for 3 sites; estimate of area encompassing 95% of total space utilization; N=NR; Mar. - June; Coachella Valley; home range estimate via convex polygon method =153 - 592 m2
as	home range estimated using the convex polygon method; N=20; June-July; Thousand Palms; snout-vent length range, 115-125mm
at	longest lived individual in study; N=NR; Thousand Palms
au	figure of standard and maximal activity metabolic rates at 25-45C; N=30
av	range of standard metabolic rates (oxygen consumption) measured at 40C, predicted for 50 g animal, at 5 collection dates; N=11-21/date; Jan., Mar., May, June, Sept.; animals collected in Riverside County
aw	range of maximal rates of oxygen consumption measured at 40C, predicted for 50 g animal, at 5 collection dates; N=11-21/date; Jan., Mar., May, June, Sept.; animals collected in Riverside County
ax	range of average field metabolic rates (measured using doubly-labeled water) over 3 time periods; N=7-11/time period; Apr.- Sept.; Thousand Palms; average body mass range; 50.3-57.0 g
ay	average resting metabolic rate (oxygen consumption) measured at 30-40C; N=5; Thousand Palms; average body weight = 58g
az	range of average field metabolic rates (measured using doubly-labeled water) over 3 time periods; N=7-9/time period; Apr. - Sept.; Thousand Palms; average body weight range; 3.5-8.2 g
ba	average resting metabolic rate (oxygen consumption) measured at 30-40C; N=5; Thousand Palms; average body weight = 4.5 g
bb	average field metabolic rate (measured using doubly-labeled water); N=8; Aug. - Sept.; Thousand Palms; average body weight = 22.4 +/- 1.6g
bc	figure of resting oxygen consumption in hibernating and non-hibernating lizards at several body temperatures; N=60; Palm Springs; see citation for figure relating breathing rate to body temperature
bd	N=NR
be	range over 3 yrs at 3 sites; N=96 marked lizards; Mar. - June; Coachella Valley; see citation for plant species diversity at habitat
bf	N=NR; spring; Thousand Palms; exludes hatchlings; see citation for population age structure
bg	N=45 lizards/10 quadrants (100m2); Apr.-June; Thousand Palms; snout-vent length range 62-132 mm
bh	N=11-20; spring - summer; Phoenix South Mountain, Maricopa County
bi	average annual survivorship estimated for 2 yrs; N=27-65 marked/yr; Age=7-9 mo; Apr.-May; Thousand Palms
bj	average annual survivorship estimated over 3 yrs; N=11-30 marked/yr; Age=19-22 mo; Apr.-May; Thousand Palms
bk	average annual survivorship estimated for 4 yrs; N=5-38 marked/yr; Age=> 31 mo; Apr.-May; Thousand Palms
bl	annual survivorship; N=37 marked; Age=0-2 mo; Sept.; Thousand Palms
bm	N=NR; Thousand Palms
bn	N=NR; Thousand Palms
bo	N=NR; Dale Dry Lake, Palm Springs and Algodones Dunes
bp	N=NR

bq	time of breeding; N=NR
br	time of laying; N=NR
bs	time of potential breeding based on testis volume; N=365; Dale Dry Lake, Palm Springs and Algodones Dunes
bt	N=NR; Phoenix South Mountain, Maricopa County
bu	N=NR; Thousand Palms
bv	N=95; Palm Springs

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