# Cal/Ecotox
# Exposure Factors for California Vole (Microtus californicus)*



| Endpoint Type | Endpoint Value | Error | Range | Units | Sex | Life Stage | Location | Note | Reference |
|---|---|---|---|---|---|---|---|---|---|
| Age at Fledging, Metamorphosis, Weaning | 21 | | | d | B | Juvenile | Lab | a | 1 |
| Age at Fledging, Metamorphosis, Weaning | 2 | | | wks | NR | Juvenile | Marin; CA | b | 2 |
| Age at Sexual Maturity | 30 | | | d | B | Adult | Lab | c | 3 |
| Age at Sexual Maturity | 17 | | | d | F | Adult | Contra Costa; CA | d | 4 |
| Age at Sexual Maturity | 25 | | | d | M | Adult | Contra Costa; CA | e | 4 |
| Body Fat (total or %) | 0.45 | | | g/g lean dry mass | B | Adult | Lab | f | 1 |
| Body Fat (total or %) | see citation | | | g | B | Both Adult and Juv. | Contra Costa; CA | g | 4 |
| Body Fat (total or %) | see citation | | | g/g dry lean wt | B | Both Adult and Juv. | Contra Costa; CA | h | 5 |
| Body Weight - Mean | | | 45.5-62.5 | g | F | Adult | Contra Costa; CA | i | 4 |
| Body Weight - Mean | > 40 | | | g | F | Adult | Contra Costa; CA | j | 6 |
| Body Weight - Mean | | | 38.2-49.4 | g | F | Adult | Contra Costa; CA | k | 7 |
| Body Weight - Mean | | | 29.0 - 42.7 | g | F | Adult | Contra Costa; CA | l | 7 |
| Body Weight - Mean | 20.4 | | | g | F | Adult | Contra Costa; CA | m | 8 |
| Body Weight - Mean | 24.4 | | | g | F | Adult | Sonoma; CA | n | 8 |
| Body Weight - Mean | >35 | | | g | F | Adult | Contra Costa; CA | o | 5 |
| Body Weight - Mean | | | 35.3 - 75.8 | g | F | Adult | Lab | p | 9 |
| Body Weight - Mean | | | 55-80.9 | g | M | Adult | Contra Costa; CA | q | 4 |
| Body Weight - Mean | | | 40-50 | g | M | Adult | Contra Costa; CA | r | 4 |
| Body Weight - Mean | > 45 | | | g | M | Adult | Contra Costa; CA | s | 6 |
| Body Weight - Mean | | | 30.2 - 53.8 | g | M | Adult | Contra Costa; CA | t | 7 |
| Body Weight - Mean | | | 41.0 - 61.1 | g | M | Adult | Contra Costa; CA | u | 7 |
| Body Weight - Mean | 30.4 | | | g | M | Adult | Contra Costa; CA | v | 8 |
| Body Weight - Mean | 25.8 | | | g | M | Adult | Sonoma; CA | w | 8 |
| Body Weight - Mean | >40 | | | g | M | Adult | Contra Costa; CA | x | 5 |
| Body Weight - Mean | | | 32.4 - 78.7 | g | M | Adult | Lab | y | 9 |
| Body Weight - Mean | see citation | | | g | M | Adult | Sonoma; CA | z | 10 |
| Body Weight - Mean | | | 26 - 35 | g | F | Both Adult and Juv. | Contra Costa; CA | aa | 5 |
| Body Weight - Mean | | | 26 - 40 | g | M | Both Adult and Juv. | Contra Costa; CA | ab | 5 |
| Body Weight - Mean | | | 26 - 63 | g | M | Both Adult and Juv. | CA | ac | 11 |
| Body Weight - Mean | <25 | | | g | B | Juvenile | Contra Costa; CA | ad | 5 |
| Body Weight - Mean | | | 10.0 - 66.5 | g | F | NR | Marin; CA | ae | 2 |
| Body Weight - Mean | | | 9.6 - 71.9 | g | M | NR | Marin; CA | af | 2 |
| Clutch or Litter Size | | | 6.1 - 7.3 | young/litter | F | Adult | Alameda; CA | ag | 12 |
| Clutch or Litter Size | see citation | | | | F | Adult | Contra Costa; Sonoma | ah | 13 |
| Clutch or Litter Size | 3.5 | 0.6 SE | | young/litter | F | Adult | Lab | ai | 1 |
| Clutch or Litter Size | 3.3 | 0.4 SE | | young/litter | F | Adult | Lab | aj | 1 |
| Clutch or Litter Size | 3.3 | 0.7 SE | | young/litter | F | Adult | Lab | ak | 1 |
| Clutch or Litter Size | 3.7 | 0.3 SE | | young/litter | F | Adult | Lab | al | 1 |
| Clutch or Litter Size | 3.7 | 0.2 SE | | young/litter | F | Adult | Lab | am | 1 |
| Clutch or Litter Size | 5.23 | 0.33 SE | 1-10 | pups/litter | F | Adult | Lab | an | 8 |
| Clutch or Litter Size | 4.17 | 0.2 SE | 1-10 | pups/litter | F | Adult | Lab | ao | 8 |
| Clutch or Litter Size | 3.45 | 0.32 SE | 1-7 | pups/litter | F | Adult | Lab; CA | ap | 8 |
| Clutch or Litter Size | 4.25 | 0.28 SE | 1-10 | pups/litter | F | Adult | Lab | aq | 8 |

| Endpoint Type | Endpoint Value | Error | Range | Units | Sex | Life Stage | Location | Note | Reference |
|---|---|---|---|---|---|---|---|---|---|
| Clutch or Litter Size | 3.0 | 0.8 (95%CI) | | pups/litter | F | Adult | Contra Costa; CA | ar | 5 |
| Clutch or Litter Size | 3.3 | 1.1 (95%CI) | | pups/litter | F | Adult | Contra Costa; CA | as | 5 |
| Clutch or Litter Size | 3.6 | 0.7 (95%CI) | | pups/litter | F | Adult | Contra Costa; CA | at | 5 |
| Clutch or Litter Size | 6.0 | 1.3 (95%CI) | | pups/litter | F | Adult | Contra Costa; CA | au | 5 |
| Clutch or Litter Size | 3.4 | 0.9 (95%CI) | | pups/litter | F | Adult | Contra Costa; CA | av | 5 |
| Clutch or Litter Size | 5.2 | 0.8 (95%CI) | | pups/litter | F | Adult | Contra Costa; CA | aw | 5 |
| Clutch or Litter Size | | | 2-9 | pups/litter | F | Adult | Lab | ax | 9 |
| Clutch or Litter Size | 4.2 | | 2 - 5 | pups/litter | F | Adult | Merced; CA | ay | 14 |
| Clutch or Litter Size | 4.20 | 1.41 SD | 1 - 9 | embryos/female | F | Adult | Marin; CA | az | 2 |
| Clutches or Litters per year | 0.3 | 0.2 SE | | litters/12 wks | F | Adult | Lab | ba | 1 |
| Clutches or Litters per year | 0.2 | 0.1 SE | | litters/12 wks | F | Adult | Lab | bb | 1 |
| Clutches or Litters per year | 1.0 | 0.2 SE | | litters/12 wks | F | Adult | Lab | bc | 1 |
| Clutches or Litters per year | 1.9 | 0.2 SE | | litters/12 wks | F | Adult | Lab | bd | 1 |
| Clutches or Litters per year | 0.5 | 0.2 SE | | litters/12 wks | F | Adult | Lab | be | 1 |
| Dietary Composition | grass heads (1.3%); grass leaves (78.9%); grass stems (9.2%); grass roots (0.3%); Forb leaves (9.3%); Forb stems (0.4%); Forb roots (0.1%); Vole hair (0.4%) | | | % | NR | NR | Contra Costa; CA | bf | 5 |
| Dietary Composition | grass heads (72.6%); grass leaves (4.2%); grass stems (2.0%); grass roots (0.4%); Forb leaves (15.4%); Forb stems (2.6%); Forb roots (2.0%); vole hair (0.8%) | | | % | NR | NR | Contra Costa; CA | bg | 5 |
| Duration of Incubation or Gestation | 3 | | | wks | B; F | Adult | Lab | bh | 1 |
| Duration of Incubation or Gestation | | | 20 - 22 | d | B | Embryo | Lab | bi | 3 |
| Food Ingestion Rate | 157 | 5 SE | | mg/g/d | NR | | Lab | bj | 15 |
| Food Ingestion Rate | 693 | 22 SE | | cal/g/d | NR | | Lab | bk | 15 |
| Food Ingestion Rate | 254 | 8 SE | | mg/g/d | NR | | Lab | bl | 15 |
| Food Ingestion Rate | 897 | 28 SE | | cal/g/d | NR | | Lab | bm | 15 |
| Food Ingestion Rate | 1115 | 35 SE | | cal/g/d | NR | | Lab | bn | 15 |
| Food Ingestion Rate | 206 | 6 SE | | mg/g/d | NR | | Lab | bo | 15 |
| Growth Rate | | | 0-1 | %/d | B | Adult | Contra Costa; CA | bp | 5 |
| Growth Rate | | | 0-0.4 | %/d | M | Adult | Contra Costa; CA | bq | 5 |
| Growth Rate | see citation | | | g/d | B | Both Adult and Juv. | Lab | br | 3 |
| Growth Rate | | | 0.4-3 | %/d | B | Juvenile | Contra Costa; CA | bs | 5 |
| Growth Rate | 2.9 | 0.3 SE | | g/wk | M | Juvenile | Lab | bt | 8 |
| Growth Rate | 3.5 | 0.2 SE | | g/wk | M | Juvenile | Lab | bu | 8 |
| Home Range | 68 | | | m2 | F | Adult | Contra Costa; CA | bv | 6 |
| Home Range | | | 85 - 116 | m2 | F | Adult | Contra Costa; CA | bw | 16 |
| Home Range | 103 | | | m2 | M | Adult | Contra Costa; CA | bx | 6 |

| Endpoint Type | Endpoint Value | Error | Range | Units | Sex | Life Stage | Location | Note | Reference |
|---|---|---|---|---|---|---|---|---|---|
| Home Range | 87.5 | 1.5 SE | | m2 | M | Adult | Contra Costa; CA | by | 16 |
| Home Range | | | 128 - 231 | m2 | M | Adult | Contra Costa; CA | bz | 16 |
| Home Range | | | 36.9 - 97.5 | m | B | NR | Contra Costa; CA | ca | 17 |
| Inhalation Rate | 297 (10C); 238 (20C); 137 (30C) | | | ml/min | NR | NR | Lab | cb | 18 |
| Longevity | 1 | | | yr | B | Adult | Marin; CA | cc | 2 |
| Metabolic Rate | 450 | 16 SE | | cal/g/d | NR | | Lab | cd | 15 |
| Metabolic Rate | 504 | 28 SE | | cal/g/d | NR | | Lab | ce | 15 |
| Metabolic Rate | 485 | 16 SE | | cal/g/d | NR | | Lab | cf | 15 |
| Metabolic Rate | 0.0251 (10C); 0.0179 (20C); 0.0114 (30C) | | | ml O2/g/min | NR | NR | Lab | cg | 18 |
| Metabolic Rate | OC = 1.94W^-0.209 | | | ml O2/g/hr | NR | NR | Lab | ch | 19 |
| Metabolic Rate | 0.53 | 0.04 | | ml O2/g/ hr | NR | NR | Lab | ci | 19 |
| Population Density | | | 45 - 374 | #/ha | B | Adult | Contra Costa; CA | cj | 16 |
| Population Density | | | 685-1077 | #/ha | B | Both Adult and Juv. | Contra Costa; CA | ck | 6 |
| Population Density | | | 150-160 | #/acre | B | Both Adult and Juv. | Contra Costa; CA | cl | 5 |
| Population Density | 550 | | | #/ha | B | Both Adult and Juv. | Contra Costa; CA | cm | 20 |
| Population Density | see citation | | | #/acre | B | Both Adult and Juv. | Contra Costa; CA | cn | 21 |
| Population Density | | | 0.7 - 195.0 | #/acre | F | Both Adult and Juv. | CA | co | 11 |
| Population Density | | | 0.8 - 140.1 | #/ha | M | Both Adult and Juv. | CA | cp | 11 |
| Population Density | | | 5 - 618 | | B | NR | Contra Costa; CA | cq | 22 |
| Population Density | see citation | | | #/acre | B | NR | Sonoma; CA | cr | 10 |
| Population Density | see citation | | | #/acre | B | NR | CA | cs | 23 |
| Population Density | | | 4.8 - 5.7 | #/ha | NR | NR | Contra Costa; CA | ct | 17 |
| Population Density | see citation | | | #/acre | NR | NR | Alameda; CA | cu | 24 |
| Survival/ Mortality | .739 | | | | F | Adult | CA | cv | 25 |
| Survival/ Mortality | .766 | | | | F | Adult | CA | cw | 25 |
| Survival/ Mortality | | | 0.81 - 0.85 | | F | Adult | CA | cx | 11 |
| Survival/ Mortality | .574 | | | | M | Adult | CA | cy | 25 |
| Survival/ Mortality | .635 | | | | M | Adult | CA | cz | 25 |
| Survival/ Mortality | | | 0.67 - 0.73 | | M | Adult | CA | da | 11 |
| Survival/ Mortality | see citation | | | %/28d | B | Both Adult and Juv. | Contra Costa; CA | db | 5 |
| Survival/ Mortality | see citation | | | | B | Both Adult and Juv. | Sonoma; CA | dc | 10 |
| Survival/ Mortality | | | 0.71 - 0.78 | | F | Juvenile | CA | dd | 11 |
| Survival/ Mortality | | | 0.67 - 0.72 | | F | Juvenile | CA | de | 11 |
| Survival/ Mortality | | | 0.64 - 0.69 | | M | Juvenile | CA | df | 11 |
| Survival/ Mortality | | | 0.44 - 0.60 | | M | Juvenile | CA | dg | 11 |
| Time of Mating/ Laying | Sept/Oct. - May/June | | | | B | Adult | Contra Costa; CA | dh | 5 |
| Time of Mating/ Laying | Jan. - June | | | | B | Adult | Marin; CA | di | 2 |
| Time of Mating/ Laying | Oct. - Aug. | | | | B | Adult | CA | dj | 11 |

***Notes***

a N=24; fed lab chow diet
b N=NR; San Francisco Bay, San Rafael
c time when females became perforate and males became scrotal; N=NR
d N=NR; Brooks Island, San Francisco Bay
e N=NR; Brooks Island, San Francisco Bay

| | |
|---|---|
| f | N=NR; values reported higher than field data |
| g | figure relating fat content to body weight; N=44; Brooks Island, San Francisco Bay |
| h | figure of seasonal changes in body fat content; NR; Richmond Field Station and Russel Reservation |
| i | "extra large" body weight corrected for embryos (12.8 % of population); N=123; Age=>25 d; Brooks Island, San Francisco Bay |
| j | N=NR; Condition=breeding; May; Richmond Field Station |
| k | range of mean values for 4 grids over 3 yrs; N=1 - 42; Condition=breeding; Russell Reservation, Berkeley |
| l | range of mean values for 4 grids over 3 yrs; N=1 - 24; Condition=non-breeding; Russell Reservation, Berkeley |
| m | median weight at sexual maturity; N=69; Feb. - May; Orinda, Layfayette, Russell Reservation |
| n | median weight at sexual maturity; 30; Feb. - May; Sea Ranch |
| o | NR; Richmond Field Station and Russel Reservation; see citation for figure of seasonal changes in body weight |
| p | range of means measured in voles in enclosures in different seasons; N=5-45/sample; yr-round |
| q | "extra large" body weight (12.6 % of population); N=121; Age=>25 d; Brooks Island, San Francisco Bay |
| r | "typical" body weight; N=NR; Age=>25 d; Brooks Island, San Francisco Bay |
| s | N=NR; Condition=breeding; May; Richmond Field Station |
| t | range of mean values for 4 grids over 3 yrs; N=1 - 23; Condition=non-breeding; Russell Reservation, Berkeley |
| u | range of mean values for 4 grids over 3 yrs; N=1 - 20; Condition=breeding; Russell Reservation, Berkeley |
| v | median weight at sexual maturity; N=56; Feb. - May; Orinda, Layfayette, Russell Reservation |
| w | median weight at sexual maturity; N=33; Feb. - May; Sea Ranch |
| x | NR; Richmond Field Station and Russel Reservation; see citation for figure of seasonal changes in body weight |
| y | range of means measured in voles in enclosures in different seasons; N=5-35/sample; yr-round |
| z | figure of seasonal changes in weight; N=NR; Sea Ranch |
| aa | NR; Richmond Field Station and Russel Reservation; subadult; see citation for figure of seasonal changes in body weight |
| ab | NR; Richmond Field Station and Russel Reservation; subadult; see citation for figure of seasonal changes in body weight |
| ac | range of monthly means at 3 locations; N=9-169/mo and site; yr-round; Tilden Regional Park and Richmond Field Station; see citation for detailed table of seasonal distribution in body weights at 3 locations |
| ad | NR; Richmond Field Station and Russel Reservation; see citation for figure of seasonal changes in body weight |
| ae | N=NR; Condition=non-pregnant; San Francisco Bay, San Rafael; see citation for figure of seasonal changes in weight |
| af | N=NR; San Francisco Bay, San Rafael; see citation for figure of seasonal changes in weight |
| ag | range of means for 2 yrs; N=11/yr; Feb - July; Camp Ohlone [lat., 37^o29'N; long., 121^o45'W] |
| ah | figure of mean monthly litter sizes; N=4-33/mo; Orinda, Layfayette, Russell Reservation and Sea Ranch |
| ai | N=12; Age=subadult (4 wks); fed grass (Bromus) for 12 wks |
| aj | N=12; fed a seed (Lolium) diet for 12 wks |
| ak | N=12; Age=subadult (4 wks); fed a seed (Lolium) diet for 12 wks |
| al | N=12; fed lab chow diet |
| am | N=24; Age=subadult (4 weeks); fed lab chow diet for 12 wks |
| an | inhabiting annual grassland enclosure; N=42; captured in Contra Costa County, CA |
| ao | ; N=220; captured in Sonoma County, CA |
| ap | inhabiting perennial grassland enclosure; N=20; captured in Sonoma County, CA |
| aq | N=65; captured in Contra Costa County, CA |
| ar | mean; early growing season; N=11; Nov-Jan; Russell Reservation |
| as | mean; dry season; N=6; May-October; Russell Reservation |
| at | mean; dry season; N=5; May-Oct.; Richmond Field Station |
| au | mean; height of growing season; N=4; March-April; Russell Reservation |
| av | mean; early growing season; N=9; Nov-Jan; Richmond Field Station |
| aw | mean; height of growing season; N=13; Mar-April; Richmond Field Station |
| ax | N=35 females; population inhabiting enclosure |
| ay | N=12; Volta |
| az | mean embryo number per female; N=154; San Francisco Bay, San Rafael |
| ba | litters per female per 12 wks; N=12; Age=subadult (4 wks); fed grass (Bromus) diet for 12 weeks |
| bb | litters per female per 12 wks; N=12; Age=subadult (4 wks); fed a seed (Lolium) diet for 12 wks |

| | |
|---|---|
| bc | litters per female per 12 wks; N=12; fed a seed (Lolium) diet for 12 wks |
| bd | litters per female per 12 wks; N=12; Age=adult; fed lab chow diet for 12 wks |
| be | litters per female per 12 wks; N=24; Age=subadult (4 weeks); fed lab chow diet for 12 wks |
| bf | composition of stomach contents; 750 items/15 voles; Nov.-Mar.; Richmond Field Station; see citation for specific plant species percent composition and seasonal/site comparisons |
| bg | composition of stomach contents; 500 items/10 voles; June-Sept.; Richmond Field Station; see citation for specific plant species percent composition and seasonal/site comparisons |
| bh | N=24; Age=subadult; fed lab chow diet |
| bi | N=NR |
| bj | fed ryegrass seeds for 21 d; N=8; Age=28 d or older; body weight = 25-35 g |
| bk | ingested energy; fed ryegrass seeds for 21 d; N=8; Age=28 d or older; body weight = 25 - 35 g |
| bl | fed bromegrass for 21 d; N=7; Age=28 d or older; body weight = 25-35 g |
| bm | ingested energy; fed rabbit pellets for 21 d; N=5; Age=28 d or older; body weight = 25 - 35 g |
| bn | ingested energy; fed bromegrass for 21 d; N=7; Age=28 d or older; body weight = 25 - 35 g |
| bo | fed rabbit pellets for 21 d; N=5; Age=28 d or older; body weight = 25 - 35 g |
| bp | change in body weight; instantaneous rate based on Brody 1945; N=NR; Age=subadult; Richmond field station; Russell Reservation |
| bq | change in body weight; instantaneous rated based on Brody 1945; N=NR; Richmond field station; Russell Reservation |
| br | figure of body weight at ages 20 - 180 d; N=NR |
| bs | change in body weight; instantaneous rate based on Brody 1945; N=NR; Richmond field station; Russell Reservation |
| bt | change in body weight; N=18; captured in Sonoma County, CA; inhabiting perennial grassland enclosure |
| bu | change in body weight; N=42; captured in Contra Costa County, CA; inhabiting annual grassland enclosure |
| bv | estimated by minimum area polygon; N=NR; Condition=breeding; May; Richmond Field Station |
| bw | range in home range (minimum area probability, 0.95) over 2 yrs; N=7/yr; Mar-May; Richmond Field Station |
| bx | estimated by minimum area polygon; N=NR; Condition=breeding; May; Richmond Field Station |
| by | estimated by minimum area probability (0.95) method; N=2; Age=subadult; Mar-May; Richmond Field Station |
| bz | range in home range (minimum area probability, 0.95) over 2 yrs; N=4-7/yr; Mar-May; Richmond Field Station |
| ca | range of average maximum distance between captures for groups recaptured 2-9 times; N=NR; San Pablo salt marsh |
| cb | inhalation rates at ambient temperatures (10-30C); N=6/group; mean body weight = 531 g |
| cc | maximum length of life in wild; N=NR; San Francisco Bay, San Rafael |
| cd | metabolizable energy; equivalent to average daily metabolic rate; N=5; Age=28 d or older; fed rabbit pellets for 21 d; body weight 25-35 g |
| ce | metabolizable energy; equivalent to average daily metabolic rate; N=7; Age=28 d or older; fed bromegrass for 21 d; body weight = 25-35 g |
| cf | metabolizable energy; equivalent to average daily metabolic rate; N=8; Age=28 d or older; fed ryegrass for 21 d; body weight = 25-35g |
| cg | mean minium metabolic rate estimated as oxygen consumption at ambient temperatures (10-30C); N=6/group; mean body weight = 531 g |
| ch | equation relating basal oxygen consumption (OC; ml O2/g/hr) to body weight (W, g; 260-800g); N=NR; see citation for figure of relationship |
| ci | mean basal oxygen consumption at 28 degree C; N=10; mean body weight 599.6 g; see citation for figure of relationship between oxygen consumption and ambient temperature |
| cj | range in mean density for 2 yr; Mar-May; Richmond Field Station |
| ck | N=NR; Condition=breeding; May; Richmond Field Station |
| cl | peak density; N=NR; spring; Richmond Field Station and Russel Reservation; see citation for figure of seasonal changes in density |
| cm | peak density; N=NR; Russell Reservation; see citation for figure of population size changes over 3+ yrs |
| cn | figure of seasonal changes in density; N=NR; Tilden Park |
| co | range of minimum # alive in 8 areas at 103 weekly intervals; N=NR; yr-round; Tilden Regional Park and Richmond Field Station; see citation for seasonal changes in density |
| cp | range of minimum # alive in 8 areas at 103 weekly intervals; N=NR; yr-round; Tilden Regional Park and Richmond Field Station; see citation for seasonal changes in density |
| cq | range of low and high density yrs; N=NR; Richmond Field Station; see citation for figure of seasonal changes in density |
| cr | figure of seasonal changes in density; N=NR; Sea Ranch |
| cs | figure of seasonal changes in density; N=NR; yr-round; Tilden Regional Park, Berkeley (elev. 600-1200 ft) |
| ct | N=NR; San Pablo salt marsh |
| cu | figure of seasonal changes in density; N=NR; Grass Valley Regional Park |
| cv | minimum survival rate per 2 wks; N=7 breeding seasons (6 populations pooled); Condition=breeding season; Berkeley; body weight = 36 - 51 g |
| cw | minimum survival rate per 2 wks; N=7 breeding seasons (6 populations pooled); Condition=breeding season; Berkeley; body weight = >52 g |
| cx | range of mean minimum survival rates per 14 d; N=2 periods of weekly sampling; Nov. - Aug.; Tilden Regional Park; see citation for seasonal changes |
| cy | minimum survival rate per 2 wks; N=8 breeding seasons (6 populations pooled); Condition=breeding season; Berkeley; body weight = 40-55 g |

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|---|---|
| cz | minimum survival rate per 2 wks; N=8 breeding seasons (6 populations pooled); Condition=breeding season; Berkeley; body weight = >56 g |
| da | range of mean minimum survival rates per 14 d; N=2 periods of weekly sampling; Nov. - Aug.; Tilden Regional Park; see citation for seasonal changes |
| db | figure of seasonal changes in minimum survival rate; NR; Richmond Field Station and Russel Reservation |
| dc | figure of proportion surviving/wk; N=NR; Sea Ranch |
| dd | range of mean minimum survival rates per 14 d measured; N=2 periods of weekly sampling; Age="subadult" (26-39g); Nov. - Aug.; Tilden Regional Park; see citation for seasonal changes |
| de | range of mean minimum survival rates per 14 d measured; N=2 periods of weekly sampling; Nov. - Aug.; Tilden Regional Park; see citation for seasonal changes |
| df | range of mean minimum survival rates per 14 d; N= 2 periods of weekly sampling; Nov. - Aug.; Tilden Regional Park; see citation for seasonal changes |
| dg | range of mean minimum survival rates per 14 d; N=2 periods of weekly sampling; Age="subadults" (26-39 g); Nov. - Aug.; Tilden Regional Park; see citation for seasonal changes |
| dh | breeding; > 50% in reproductive condition; NR; Richmond Field Station and Russel Reservation |
| di | major breeding season; N=NR; San Francisco Bay, San Rafael |
| dj | based on % scrotal males and performate females; overall range varied by location and year; N=NR; Tilden Regional Park and Richmond Field Station |

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