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GENERAL INFORMATION
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1. Title of Dataset
Alaska small mammals: individual capture and measurement data

2. Author Information

Principal Investigator Contact Information
Name: Carolyn A. Eckrich
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3. Date of data collection
May through August 2010
May through August 2011
May through August 2012

4. Geographic location of data collection (where was data collected?):

The study was conducted on six sites across northern Prince of Wales Island (POW), Alaska (55.9° N, 132.9° W). See Table 1 for specific location data for each trapping grid.

5. Information about funding sources that supported the collection of the data:

Funding was provided by the United States Forest Service Tongass National Forest, the National Fish and Wildlife Foundation, the UW Biodiversity Institute and Department of Zoology and Physiology.

SHARING/ACCESS INFORMATION
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1. Licenses/restrictions placed on the data:

None

2. Links to publications that cite or use the data:

Eckrich, C. A., E. A. Flaherty, and M. Ben-David. 2017. Functional and numerical responses of shrews to competition vary with mouse density. PLoS One.

3. Links to other publicly accessible locations of the data:

None

4. Links/relationships to ancillary data sets:

None

5. Was data derived from another source? No
If yes, list source(s):

6. Recommended citation for the data:

Eckrich, C. A., E. A. Flaherty, and M. Ben-David. 2017. Alaska small mammals: individual capture and measurement data. DOI.10.15786/M24T00

DATA & FILE OVERVIEW
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1. File List
A. Filename: Individual captures
Short description: This file contains information on capture of Keen's mice (*Peromyscus keeni*) and Dusky shrews (*Sorex monticolus*), including date of capture, history (new or recapture), and fate (healthy, injured, or dead).

B. Filename: Animal measurements
Short description: This file contains information on the sex of the captured animals listed in the previous file and their body mass in grams.

2. Relationship between files:
The two files contain information on the same individuals. The files can be linked through the animal ID.

3. Additional related data collected that was not included in the current data package:

Additional data include habitat and stable isotope data. Those files will be added to this depository after publication of two additional manuscripts.

4. Are there multiple versions of the dataset? No

METHODOLOGICAL INFORMATION
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1. Description of methods used for collection/generation of data:

We live-trapped small mammals from May to August 2010-2012 using 40 to 52 Sherman live-traps (H.B. Sherman Traps, Inc, Tallahassee, FL, USA) per grid set at 25-m intervals and configured to fit within each forest stand. We baited traps with a mix of oats, molasses and peanut butter. Polyester bedding was provided to aid in thermoregulation. Each year, trapping occurred for five consecutive nights three times in late spring, early summer and late summer/fall following a robust-design capture-recapture protocol (Amstrup et al. 2010). We checked traps once in the morning. Each trapped individual was weighed, sexed, aged, and assessed for reproductive status. Mice were marked with a passive integrated transponder (PIT) tag (Biomark, Boise, ID, USA) for permanent identification after a brief exposure to Isoflurane (Piramal Healthcare Limited, Andhra Pradesh, India). After immobilization, we collected blood via tail clipping (Abatan et al. 2008) from all mice at first capture. Live-captured shrews were released without processing. Carcasses of all incidental mortalities were deposited in the Vertebrate Museum at the University of Wyoming (UW) Berry Center for Biodiversity Conservation. All procedures were approved by the Institutional Animal Care and Use Committee at UW and adhere to the guidelines of the American Society of Mammalogists (Sikes et al. 2016). Trapping permit was obtained from the Alaska Department of Fish and Game and study methods were approved by the US Forest Service, Tongass National Forest, Thorne Bay District.

Abatan OI, Welch KB, Nemzek JA. 2008. Evaluation of saphenous venipuncture and modified tail-clip blood collection in mice. J Am Assoc Lab Anim Sci. 47: 8–15.

Amstrup SC, McDonald TL, Manly BF. 2010. Handbook of capture-recapture analysis [Internet]. Princeton, N.J: Princeton University Press.

Sikes RS, Bryan JA, Byman D, Danielson BJ, Eggleston J, Gannon MR, et al. 2016. Guidelines of the American Society of Mammalogists for the use of wild mammals in research and education. J Mammal. 97: 663–688.

2. Methods for processing the data: These are raw data.

3. Instrument- or software-specific information needed to interpret the data: None.

4. Standards and calibration information, if appropriate: NA

5. Environmental/experimental conditions:

Our sites included seven TWYGS treatments, six un-thinned young-growth stands, three old-growth stands and three clearcuts (for a total of 19 stands). In 2011 and 2012 we added one old-growth and one clearcut grids (21 grids total; Table 1). This sampling design encompassed a wide range of habitat conditions and successional stages across POW. Pre-commercially thinned stands had a robust understory with remaining trees spaced according to thinning treatment (e.g. 14 × 14 or 18 × 18 ft). Young-growth stands had little spatial variation and were composed of densely regenerated, even-aged, small-diameter trees with sparse understory. Old-growth stands ranged from low-elevation, high-productivity to high-elevation, mesic sites. A variety of tree size classes and ages contributed to a more heterogeneous canopy in this stand type. Clearcuts ranged in age from 1-15 years post-harvest, contained few remaining overstory trees, and were characterized by a dense layer of residual timber slash mixed with regenerating shrubs and tree seedlings.

Annual precipitation on POW ranges from 254-508 cm and average temperatures range from 10-17°C in summer to 0-6°C in winter. Elevation at our study sites varied from 0 to 305 m. Areas lower than ~600 m are characterized by temperate, coniferous rainforest [43], dominated by Sitka spruce (*Picea sitchensis*) and western hemlock (*Tsuga heterophylla*). The understory consists primarily of *Vaccinium* spp., false azalea (*Menziesia ferruginea*), and salmonberry (*Rubus spectabilis*). The herbaceous layer includes skunk cabbage (*Lysichiton americanum*) and bunchberry (*Cornus canadensis*), among various other forbs, mosses, and ferns. Muskegs, or peatland bogs, compose the majority of natural non-forested areas on POW.

Similar to other high latitude islands, POW is characterized by a depauperate fauna with mink (*Neovison vison*) and ermine (*Mustela erminea celenda*) the only native mesocarnivores and few small mammals including Keen's mice, long-tailed voles (*Microtus longicaudas*), dusky shrews, and northern flying squirrels (*Glaucomys sabrinus griseifrons*). Long-tailed vole densities, which were high in the 1970s, are currently so low that in multiple years of attempts by several different research teams, only a handful have been captured. American marten (*Martes americana*) were introduced to POW in the 1930s to provide trapping opportunities for rural residents. The avian fauna of the island is also limited, with dark-eyed junco (*Junco heymalis*) the only ground-nesting songbird. Northern goshawk (*Accipiter gentilis*), a raptor that rarely preys on small mammals, is the main avian predator.

6. Describe any quality-assurance procedures performed on the data:

Data were checked to ensure no duplicate entries and correctness of species and sex designations.

7. People involved with sample collection, processing, analysis and/or submission:

Carolyn A. Eckrich, Elizabeth A. Flaherty, Merav Ben-David

DATA-SPECIFIC INFORMATION FOR:

Individual captures

1. Number of variables: 8

2. Number of cases/rows: 11,624

3. Missing data codes:

Code/symbol: Blank cell Definition: unknown or missing data

4. Variable List and descriptions

Variable	Description	Method	Reference
IndID	Individual ID	Sequential numerical code. To link with measurements file	
MamSpecies	Mammalian species 4 letter abbreviation	Keen's Mouse (*Peromyscus keeni*) = PEKE; Dusky shrew (*Sorex monticolus*) = SOMO	
Trap_Night	Date of trapping	month/day/year	Eckrich et al. 2017
Grid_ID	Name of grid for 21 trapping grids on northern Prince of Wales Island, southeast Alaska. Composed of location ID and habitat type.	CC = Coffman Cove, SC = Staney Creek, HC = Hatchery Creek, LP = Luck Point; CC codes for clear cut, 14 is thinned stand to 14 x 14 spacing, 18 is thinned stand to 18 x 18 spacing, 1:2 and 1:4 is ratios of barches trimmed on remaining trees after thinning, OG , is old-growth, and C is control (never thinned).	Eckrich et al. 2017
TrapID	Number of trap in which the animal was caught.	Composed of letter (row) and number (column) in the grid	Eckrich et al. 2017
History	Whether a new capture (N) or a recapture (RC)		
Fate	Whether released healthy (H), injured (I), or died (D)		
Year	Year of study: 2010, 2011, 2012		

Animal measurements

1. Number of variables: 7

2. Number of cases/rows: 3,120

3. Missing data codes:

Code/symbol: Blank cell Definition: unknown or missing data

4. Variable List and descriptions

Variable	Description	Method	Reference
IndID	Individual ID	Sequential numerical code. To link with capture data file	
ANWT	Animal mass in grams (g) to the nearest 0.1.	Measured using pesola scale. The tare weight of the plastic bag in which the animal is restrained is subtracted from the gross weight.	Eckrich et al. 2017
Age	Estimate of animal age class. Score of 2 represents an adult, 1 juvenile, blank represents unknown.	Visual estimate based on size and color of fur. Juvenile Keen's mice are more gray relative to adults.	McDonald and Cook 2007
Year	Year of trapping: 2010, 2011, or 2012.		Eckrich et al. 2017
TrapEvent	Trapping session with each year.	Each year, trapping occurred for five consecutive nights three times in late spring, early summer and late summer/fall following a robust-design capture-recapture protocol	Eckrich et al. 2017
Sex	Male (M), Female (F), or unknown blank		Eckrich et al. 2017

Table 1: List of treatment sites, spatial extent and location on Prince of Wales Island, Alaska, chosen for monitoring of small mammal responses to thinning. In *Italics* are 2 sites that were added to the project in 2011.

Field group #	TWYGS Experiment #	Installation name	Installation Code	Treatment	Stand ID	Area	Latitude	Longitude
1a	2	POW Coffman Creek	CC 14	14X14	572030512	37.5	55.97832527	132.8592219
	2	POW Coffman Creek	CC C	CONTROL	572030512	21.2	55.98175711	132.860377
1b	2	POW Hatchery Creek 4	HC4 18	18X18	574030504	19.3	55.88481185	132.8999153
	2	POW Hatchery Creek 4	HC4 C	CONTROL	574030504	16.9	55.88287221	132.8983071
		POW Hatchery Creek 4	HC4 OG	Old growth			55.886	132.895
2a	3	POW Staney Creek 1	SC C	CONTROL	588020502	15.2	55.79833385	133.1331515
	3	POW Staney Creek 1	SC T	16X16-1:4	588020502	17.1	55.79830957	133.1376256
		POW near Log Jam Creek	*LJC CC*	*Clearcut*			*55.90513*	*133.00022*
2b		POW near Staney Creek – End of Coffman Cove Road	SC CC	Clearcut			55.867955	133.06175
		POW Staney Creek	SC OG	Old Growth			55.798976	133.10811
3a	3	POW Luck Point North	LP 1:2	16X16-1:2	572020505	18.8	55.98271657	132.7840612
	3	POW Luck Point North	LP 1:4	16X16-1:4	572020505	17.1	55.98173085	132.7789239
	3	POW Luck Point North	LP C	CONTROL	572020505	11	55.98421758	132.7810598
3b		POW Luck Point North 1	LP CC1	Clearcut			55.985533	132.787394
		POW Luck Point North 2	LP CC2	Clearcut			55.981536	132.800528
		POW Luck Point North 2	*LP OG*	*Old growth*			*55.977471*	*132.795054*
4a	2	POW Hatchery Creek 1 (Sweet Cove)	HC1 14	14X14	574020508	19.6	55.92443161	132.9528029
	2	POW Hatchery Creek 1 (Sweet Cove)	HC1 C	CONTROL	574020503	17.7	55.92546532	132.9568152
4b	2	POW Hatchery Creek 2	HC2 18	18X18	574010507	30.2	55.89165622	132.9402273
	2	POW Hatchery Creek 2	HC2 C	CONTROL	574010507	25.9	55.89443758	132.9411449
		POW Hatchery Creek 1	HC1 OG	Old Growth			55.92415	132.9401