

Ecography

**ECOG-01779**

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**Supplementary material**

## Appendix 1

Table A1. Species list for Hall Cave Mammal Community. Body mass and trophic designations are derived from an updated version of MOM v4.1 (Smith et al. 2003). As described in the main text, the trophic designation ‘frugivore/granivore’ includes animals primarily foraging on fruit, seeds or nuts; ‘carnivore’ are those eating any type of animal, including fish; and ‘insectivore’ are mammals primarily foraging on insect prey.

| Order        | Family         | Genus               | Species             | Average Body Mass (g) | Status  | Trophic Level       | Segregated Pairs | Aggregated Pairs | Total Pairs | Sites                                      |
|--------------|----------------|---------------------|---------------------|-----------------------|---------|---------------------|------------------|------------------|-------------|--|
| Artiodactyla | Antilocapridae | <i>Antilocapra</i>  | <i>americana</i>    | 46,083                | extant  | browser             | 0                | 0                | 0           | HC; 41; KS; MC                             |
| Artiodactyla | Antilocapridae | <i>Stockoceros</i>  | <i>sp.</i>          | 720,000               | extinct | browser             | 1                | 8                | 9           | CQ; SC                                     |
| Artiodactyla | Antilocapridae | <i>Tetrameryx</i>   | <i>shuleri</i>      | 8                     | extinct | browser             | 16               | 2                | 18          | LC3  |
| Artiodactyla | Bovidae        | <i>Bison</i>        | <i>antiquus</i>     | 1,130                 | extinct | grazer              | 6                | 10               | 16          | HC; KS                                     |
| Artiodactyla | Bovidae        | <i>Bison</i>        | <i>bison</i>        | 195,718               | extant  | grazer              | 0                | 0                | 0           | HC; 41; EC; FF; KS; MC; CW; FC; Fr; SC; ZC |
| Artiodactyla | Camelidae      | <i>Camelops</i>     | <i>hesternus</i>    | 579,255               | extinct | grazer              | 6                | 4                | 10          | BT; Fr; KS; LC2; ZC                        |
| Artiodactyla | Camelidae      | <i>Hemiauchenia</i> | <i>macrocephala</i> | 14                    | extinct | grazer              | 4                | 2                | 6           | HC; ZC                                     |
| Artiodactyla | Cervidae       | <i>Navahoceros</i>  | <i>fricki</i>       | 1,100,000             | extinct | browser             | 1                | 0                | 1           | MS; SC                                     |
| Artiodactyla | Cervidae       | <i>Odocoileus</i>   | <i>sp</i>           | 65,000                | extant  | browser             | 0                | 0                | 0           | HC; KS; MiC; CW; MS; SC; ZC                |
| Artiodactyla | Tayassuidae    | <i>Pecari</i>       | <i>tajacu</i>       | 17,000                | extant  | frugivore/granivore | 8                | 1                | 9           | HC   |
| Artiodactyla | Tayassuidae    | <i>Platygonus</i>   | <i>compressus</i>   | 13,406                | extant  | grazer              | 4                | 0                | 4           | HC; ZC                                     |
| Carnivora    | Canidae        | <i>Canis</i>        | <i>dirus</i>        | 19,892                | extinct | carnivore           | 3                | 3                | 6           | HC; FR; KS; LC3; ZC                        |

|           |            |                    |                              |           |         |             |    |   |    |  |
|-----------|------------|--------------------|------------------------------|-----------|---------|-------------|----|---|----|--|
| Carnivora | Canidae    | <i>Canis</i>       | <i>familiaris</i>            | 32        | extant  | carnivore   | 4  | 0 | 4  | HC; SC   |
| Carnivora | Canidae    | <i>Canis</i>       | <i>latrans</i>               | 3,500     | extant  | carnivore   | 0  | 0 | 0  | HC; CW;<br>CS; EC;<br>Fr; KS;<br>LC3;<br>MC; SC;<br>ZC |
| Carnivora | Canidae    | <i>Canis</i>       | <i>lupus</i>                 | 5         | extant  | carnivore   | 3  | 0 | 3  | HC; 41;<br>KS; SC                                      |
| Carnivora | Canidae    | <i>Urocyon</i>     | <i>cinereoargent<br/>eus</i> | 1,364     | extant  | carnivore   | 3  | 0 | 3  | HC   |
| Carnivora | Canidae    | <i>Vulpes</i>      | <i>vulpes</i>                | 45,000    | extant  | carnivore   | 1  | 0 | 1  | HC; SC;<br>ZC  |
| Carnivora | Felidae    | <i>Felis</i>       | <i>amnicola</i>              | 4,204     | extinct | carnivore   | 0  | 0 | 0  | SC   |
| Carnivora | Felidae    | <i>Herpailurus</i> | <i>yaguarondi</i>            | 2,195     | extant  | carnivore   | 0  | 0 | 0  | HC   |
| Carnivora | Felidae    | <i>Homotherium</i> | <i>serum</i>                 | 77        | extinct | carnivore   | 8  | 4 | 12 | Fr; LC2  |
| Carnivora | Felidae    | <i>Leopardus</i>   | <i>wiedii</i>                | 400,000   | extant  | carnivore   | 0  | 0 | 0  | HC   |
| Carnivora | Felidae    | <i>Lynx</i>        | <i>rufus</i>                 | 465,000   | extant  | carnivore   | 1  | 0 | 1  | HC; CW;<br>KS; SC;<br>ZC                               |
| Carnivora | Felidae    | <i>Panthera</i>    | <i>leo atrox</i>             | 555,000   | extinct | carnivore   | 4  | 2 | 6  | HC; KS   |
| Carnivora | Felidae    | <i>Panthera</i>    | <i>onca</i>                  | 259,000   | extant  | carnivore   | 5  | 0 | 5  | HC; KS;<br>LC1;<br>LC3; SC                             |
| Carnivora | Felidae    | <i>Puma</i>        | <i>concolor</i>              | 400,000   | extant  | carnivore   | 13 | 0 | 13 | HC; HiC;<br>KS; SC                                     |
| Carnivora | Felidae    | <i>Smilodon</i>    | <i>fatalis</i>               | 465,000   | extinct | carnivore   | 8  | 0 | 8  | FR   |
| Carnivora | Mustelidae | <i>Conepatus</i>   | <i>leuconotus</i>            | 5,000     | extant  | insectivore | 13 | 1 | 14 | HC   |
| Carnivora | Mustelidae | <i>Mephitis</i>    | <i>macroura</i>              | 248       | extant  | omnivore    | 1  | 4 | 5  | HC   |
| Carnivora | Mustelidae | <i>Mephitis</i>    | <i>mephitis</i>              | 1,100,000 | extant  | omnivore    | 1  | 2 | 3  | HC   |
| Carnivora | Mustelidae | <i>Mustela</i>     | <i>erminea</i>               | 110,000   | extant  | carnivore   | 1  | 2 | 3  | HC; SC   |
| Carnivora | Mustelidae | <i>Mustela</i>     | <i>frenata</i>               | 9,000     | extant  | carnivore   | 0  | 0 | 0  | HC; SC   |
| Carnivora | Mustelidae | <i>Spilogale</i>   | <i>sp</i>                    | 189,000   | extant  | omnivore    | 0  | 3 | 3  | HC   |

|                 |                |                      |                     |           |         |             |    |    |    |                               |
|-----------------|----------------|----------------------|---------------------|-----------|---------|-------------|----|----|----|-------------------------------|
| Carnivora       | Mustelidae     | <i>Taxidea</i>       | <i>taxus</i>        | 3,250     | extant  | carnivore   | 0  | 0  | 0  | SC                            |
| Carnivora       | Procyonidae    | <i>Bassariscus</i>   | <i>astutus</i>      | 2,422     | extant  | carnivore   | 0  | 0  | 0  | HC                            |
| Carnivora       | Procyonidae    | <i>Procyon</i>       | <i>lotor</i>        | 8,904     | extant  | omnivore    | 26 | 0  | 26 | HC                            |
| Carnivora       | Ursidae        | <i>Arctodus</i>      | <i>simus</i>        | 4,523,800 | extinct | carnivore   | 5  | 6  | 11 | CQ; Fr;<br>SC                 |
| Carnivora       | Ursidae        | <i>Tremarctos</i>    | <i>floridanus</i>   | 8,000,000 | extinct | browser     | 15 | 2  | 17 | LC3                           |
| Carnivora       | Ursidae        | <i>Ursus</i>         | <i>americanus</i>   | 600,000   | extant  | omnivore    | 3  | 0  | 3  | HC; CW;<br>Fr; MiC;<br>SC; ZC |
| Carnivora       | Ursidae        | <i>Ursus</i>         | <i>arctos</i>       | 801       | extant  | omnivore    | 0  | 0  | 0  | SC                            |
| Cingulata       | Dasypodidae    | <i>Dasypus</i>       | <i>bellus</i>       | 2,085     | extinct | omnivore    | 1  | 8  | 9  | HC; 41                        |
| Cingulata       | Dasypodidae    | <i>Dasypus</i>       | <i>novemcinctus</i> | 47        | extant  | insectivore | 4  | 0  | 4  | 41                            |
| Cingulata       | Glyptodontidae | <i>Glyptotherium</i> | <i>floridanum</i>   | 35        | extinct | grazer      | 15 | 2  | 17 | LC3                           |
| Didelphimorphia | Didelphidae    | <i>Didelphis</i>     | <i>virginiana</i>   | 36        | extant  | omnivore    | 9  | 2  | 11 | HC                            |
| Insectivora     | Talpidae       | <i>Scalopus</i>      | <i>aquaticus</i>    | 38        | extant  | insectivore | 2  | 1  | 3  | HC                            |
| Lagomorpha      | Leporidae      | <i>Lepus</i>         | <i>californicus</i> | 37        | extant  | browser     | 13 | 0  | 13 | HC                            |
| Lagomorpha      | Leporidae      | <i>Sylvilagus</i>    | <i>aquaticus</i>    | 26        | extant  | browser     | 14 | 0  | 14 | HC                            |
| Lagomorpha      | Leporidae      | <i>Sylvilagus</i>    | <i>audubonii</i>    | 169       | extant  | browser     | 0  | 0  | 0  | HC                            |
| Lagomorpha      | Leporidae      | <i>Sylvilagus</i>    | <i>floridanus</i>   | 147       | extant  | browser     | 0  | 0  | 0  | HC                            |
| Perissodactyla  | Equidae        | <i>Equus</i>         | <i>complicatus</i>  | 250,000   | extinct | grazer      | 1  | 8  | 9  | BT1                           |
| Perissodactyla  | Equidae        | <i>Equus</i>         | <i>francisci</i>    | 211       | extinct | grazer      | 1  | 2  | 3  | CQ; SC                        |
| Perissodactyla  | Equidae        | <i>Equus</i>         | <i>scotti</i>       | 4         | extinct | grazer      | 3  | 4  | 7  | CQ; SC                        |
| Perissodactyla  | Equidae        | <i>Equus</i>         | <i>fraternus</i>    | 54,861    | extinct | grazer      | 1  | 8  | 9  | BT1                           |
| Perissodactyla  | Equidae        | <i>Equus</i>         | <i>giganteus</i>    | 28        | extinct | grazer      | 1  | 8  | 9  | BT1                           |
| Perissodactyla  | Equidae        | <i>Equus</i>         | <i>sp. 1</i>        | 433,200   | extinct | grazer      | 6  | 0  | 6  | Various                       |
| Perissodactyla  | Tapiridae      | <i>Tapirus</i>       | <i>veroensis</i>    | 100,000   | extinct | browser     | 7  | 10 | 17 | MS; Fr                        |
| Pilosa          | Megalonychidae | <i>Megalonyx</i>     | <i>jeffersonii</i>  | 252       | extinct | browser     | 7  | 12 | 19 | Fr; LC3;<br>ZC                |
| Pilosa          | Mylodontidae   | <i>Paramylodon</i>   | <i>harlani</i>      | 1,587,000 | extinct | grazer      | 8  | 4  | 12 | A;KS                          |
| Proboscidea     | Elephantidae   | <i>Mammuthus</i>     | <i>columbi</i>      | 21,267    | extinct | grazer      | 7  | 1  | 8  | BT1; Fr;                      |

|             |              |                        |                       |         |         |                         |    |   |    | SC                |
|-------------|--------------|------------------------|-----------------------|---------|---------|-------------------------|----|---|----|-------------------|
| Proboscidea | Mammutidae   | <i>Mammut</i>          | <i>americanum</i>     | 9       | extinct | browser                 | 8  | 4 | 12 | A; BT1;<br>CW; Fr |
| Rodentia    | Geomyidae    | <i>Geomys</i>          | <i>sp</i>             | 8       | extant  | browser                 | 4  | 0 | 4  | HC                |
| Rodentia    | Geomyidae    | <i>Pappogeomys</i>     | <i>castanops</i>      | 36      | extant  | browser                 | 0  | 0 | 0  | HC                |
| Rodentia    | Geomyidae    | <i>Thomomys</i>        | <i>sp</i>             | 36      | extant  | browser                 | 28 | 0 | 28 | HC                |
| Rodentia    | Heteromyidae | <i>Chaetodipus</i>     | <i>hispidus</i>       | 136,000 | extant  | frugivore/<br>granivore | 0  | 0 | 0  | HC                |
| Rodentia    | Heteromyidae | <i>Dipodomys</i>       | <i>elator</i>         | 5,525   | extant  | frugivore/<br>granivore | 4  | 0 | 4  | HC                |
| Rodentia    | Heteromyidae | <i>Perognathus</i>     | <i>flavescens</i>     | 51,600  | extant  | frugivore/<br>granivore | 4  | 0 | 4  | HC                |
| Rodentia    | Heteromyidae | <i>Perognathus</i>     | <i>flavus</i>         | 16      | extant  | frugivore/<br>granivore | 4  | 0 | 4  | HC                |
| Rodentia    | Muridae      | <i>Baiomys</i>         | <i>taylori</i>        | 91      | extant  | frugivore/<br>granivore | 11 | 0 | 11 | HC                |
| Rodentia    | Muridae      | <i>Microtus</i>        | <i>longicaudus</i>    | 500     | extant  | browser                 | 1  | 8 | 9  | HC                |
| Rodentia    | Muridae      | <i>Microtus</i>        | <i>mexicanus</i>      | 92      | extant  | grazer                  | 1  | 8 | 9  | HC                |
| Rodentia    | Muridae      | <i>Microtus</i>        | <i>montanus</i>       | 400,000 | extant  | grazer                  | 1  | 8 | 9  | HC                |
| Rodentia    | Muridae      | <i>Microtus</i>        | <i>ochrogaster</i>    | 5       | extant  | grazer                  | 0  | 0 | 0  | HC                |
| Rodentia    | Muridae      | <i>Microtus</i>        | <i>pennsylvanicus</i> | 4       | extant  | grazer                  | 1  | 8 | 9  | HC                |
| Rodentia    | Muridae      | <i>Microtus</i>        | <i>pinetorum</i>      | 4       | extant  | browser                 | 0  | 0 | 0  | HC                |
| Rodentia    | Muridae      | <i>Neotoma</i>         | <i>sp</i>             | 326     | extant  | browser                 | 0  | 0 | 0  | HC                |
| Rodentia    | Muridae      | <i>Onychomys</i>       | <i>leucogaster</i>    | 288     | extant  | insectivore             | 1  | 0 | 1  | HC                |
| Rodentia    | Muridae      | <i>Peromyscus</i>      | <i>sp. 1</i>          | 53,000  | extant  | omnivore                | 0  | 0 | 0  | HC                |
| Rodentia    | Muridae      | <i>Peromyscus</i>      | <i>sp. 2</i>          | 2,136   | extant  | omnivore                | 0  | 0 | 0  | HC                |
| Rodentia    | Muridae      | <i>Reithrodontomys</i> | <i>sp</i>             | 890     | extant  | frugivore/<br>granivore | 4  | 0 | 4  | HC                |

|          |           |                     |                     |         |        |                         |    |   |    |    |
|----------|-----------|---------------------|---------------------|---------|--------|-------------------------|----|---|----|----|
| Rodentia | Muridae   | <i>Sigmodon</i>     | <i>hispidus</i>     | 1,173   | extant | grazer                  | 5  | 0 | 5  | HC |
| Rodentia | Muridae   | <i>Synaptomys</i>   | <i>cooperi</i>      | 32      | extant | grazer                  | 5  | 1 | 6  | HC |
| Rodentia | Sciuridae | <i>Cynomys</i>      | <i>ludovicianus</i> | 275,000 | extant | grazer                  | 5  | 0 | 5  | HC |
| Rodentia | Sciuridae | <i>Sciurus</i>      | <i>sp</i>           | 7,108   | extant | frugivore/<br>granivore | 14 | 0 | 14 | HC |
| Rodentia | Sciuridae | <i>Spermophilus</i> | <i>sp.</i>          | 60,000  | extant | frugivore/<br>granivore | 1  | 0 | 1  | HC |
| Rodentia | Soricidae | <i>Blarina</i>      | <i>carolinensis</i> | 135     | extant | insectivore             | 3  | 0 | 3  | HC |
| Rodentia | Soricidae | <i>Cryptotis</i>    | <i>parva</i>        | 150,000 | extant | insectivore             | 5  | 0 | 5  | HC |
| Rodentia | Soricidae | <i>Notiosorex</i>   | <i>crawfordi</i>    | 3,834   | extant | insectivore             | 4  | 0 | 4  | HC |
| Rodentia | Soricidae | <i>Sorex</i>        | <i>cinereus</i>     | 99,949  | extant | insectivore             | 2  | 3 | 5  | HC |
| Rodentia | Soricidae | <i>Sorex</i>        | <i>haydeni</i>      | 139,441 | extant | insectivore             | 4  | 2 | 6  | HC |
| Rodentia | Soricidae | <i>Sorex</i>        | <i>longirostris</i> | 6,000   | extant | insectivore             | 4  | 2 | 6  | HC |
| Rodentia | Zapodidae | <i>Zapus</i>        | <i>hudsonius</i>    | 17      | extant | frugivore/<br>granivore | 0  | 0 | 0  | HC |

\* For all included Texas sites the full name and distance from Hall's Cave site are as follows: HC (Hall's Cave) = 0 km; 41(41TG91) = 165 km; A (The Avenue) = 172 km; BT (Barton Road Shelter) = 171 km; BT1 (Berclair Terrace Site 1) = 268 km; CQ (Cueva Quebrada) = 185 km; CW (Cave Without A Name) = 93 km; CS (Coontail Spin) = 178 km; EC (Eagle Cave) = 197 km; FC (Felton Cave) = 104 km; FF (Finis Frost) = 140 km; Fr (Friesenhahn Cave) = 126 km; HiC (Hinds Cave) = 185 km; KS (Kincaid Shelter) = 85 km; LC2 [Inner Space Cavern (Laubach No. 2)] = 192 km; LC3 [Inner Space Cavern (Laubach No. 3)] = 192 km; MC (Murreh Cave) = 178 km; MiC (Miller Cave) = 100 km; MS (Montell Shelter) = 83 km; SC (Schulze Cave) = 34 km; ZC (Zesch Cave) = 74 km.