

Supporting Information

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Table S1. Summary statistics of multiple paternity in viviparous mammals

| Species | # Litters examined | Mean litter size (range) | % Litters with multiple paternity | Mean # mates (range) | Reference |
|--|--------------------|--------------------------|-----------------------------------|----------------------|-----------|
| Arctic fox, <i>Alopex lagopus</i> | 8 | 5.4 | 12.5 | 1.1 (1-2) | 1 |
| Ethiopian wolf, <i>Canis simensis</i> | 12 | 4.7 | 33.3 | 1.3 (1-2) | 2 |
| African wild dog, <i>Lycaon pictus</i> | 6 | 4.2 | 16.7 | 1.2 (1-2) | 3 |
| Gray fox, <i>Urocyon cinereoargenteus</i> | 7 | 3.3 (2-5) | 14.3 | 1.1 (1-2) | 4 |
| Red fox, <i>Vulpes vulpes</i> | 12 | 3.8 (2-8) | 50.0 | 1.8 (1-4) | 5 |
| Cheetah, <i>Acinonyx jubatus</i> | 23 | 3.0 (2-5) | 43.5 | 1.5 (1-3) | 6 |
| Domestic cat, <i>Felis catus</i> | 92 | 3.8 | 55.4 | 1.8 (1-5) | 7, 8 |
| Spotted hyena, <i>Crocuta crocuta</i> | 102 | 2.0 | 33.3 | 1.3 (1-2) | 9,10 |
| Striped hyena, <i>Hyaena hyaena</i> | 4 | 2.5 (2-3) | 50.0 | 1.5 (1-2) | 11 |
| Wolverine, <i>Gulo gulo</i> | 43 | 2.1 (2-3) | 0 | 1.0 | 12 |
| European badger, <i>Meles meles</i> | 174 | 2.0 (2-4) | 39.6 | 1.4 (1-4) | 13, 14 |
| Stoat, <i>Mustela erminea</i> | 5 | 8.4 (3-11) | 20.0 | 1.2 (1-2) | 15 |
| American mink, <i>Mustela vison</i> | 5 | 3.6 (2-6) | 60.0 | 1.6 (1-2) | 16 |
| Raccoon, <i>Procyon lotor</i> | 8 | 4.0 (3-6) | 87.5 | 1.9 (1-2) | 17 |
| American black bear, <i>Ursus americanus</i> | 5 | 2.4 | 20.0 | 1.2 (1-2) | 18 |
| Brown bear, <i>Ursus arctos</i> | 69 | 2.0 | 14.5 | 1.1 (1-2) | 19 |
| North American Beaver, <i>Castor canadensis</i> | 9 | 3.7 | 55.6 | 1.6 (1-2) | 20 |
| Wild cavy, <i>Cavia aperea</i> | 15 | 3.9 | 26.7 | 1.3 (1-2) | 21 |
| Prairie vole, <i>Microtus ochrogaster</i> | 9 | 4.8 (3-6) | 55.6 | 1.6 (1-2) | 22 |
| Root vole, <i>Microtus oeconomus</i> | 21 | 5.3 | 38.1 | 1.6 (1-3) | 23 |
| Gray-sided vole, <i>Myodes rufocanus</i> | 215 | 4.3 | 23.2 | 1.2 (1-3) | 24 |
| Big-eared woodrat, <i>Neotoma macrotis</i> | 25 | 2.2 (2-3) | 20.0 | 1.2 (1-2) | 25 |
| Canyon mouse, <i>Peromyscus crinitus</i> | 10 | 3.8 (3-5) | 20.0 | 1.2 (1-2) | 26 |
| Striped field mouse, <i>Apodemus agrarius</i> | 44 | 6.5 (5-10) | 63.6 | 1.8 (1-3) | 27,28 |
| Yellow-necked mouse, <i>Apodemus flavicollis</i> | 35 | 5.0 | 51.4 | 1.5 (1-2) | 27,29 |
| Wood mouse, <i>Apodemus sylvaticus</i> | 28 | 4.7 (4-6) | 64.3 | 1.7 (1-3) | 27,28 |
| Ural field mouse, <i>Apodemus uralensis</i> | 46 | 5.0 | 43.5 | 1.4 (1-2) | 27 |
| Natal multimammate mouse <i>Mastomys natalensis</i> | 36 | 9.9 (3-16) | 67.0 | 1.9 (1-4) | 30 |
| House mouse, <i>Mus domesticus</i> | 143 | 5.6 | 20.3 | 1.2 (1-2) | 31 |
| Red squirrel, <i>Tamiasciurus hudsonicus</i> | 44 | 3.0 | 72.7 | 2.0 (1-4) | 32, 33 |
| Alpine marmot, <i>Marmota marmota</i> | 68 | 3.5 | 26.5 | 1.3 (1-2) | 34 |
| Columbia ground squirrel, <i>Urocitellus columbianus</i> | 147 | 3.0 | 57.8 | 1.8 (1-4) | 35 |
| Pronghorn antelope, <i>Antilocapra americana</i> | 25 | 2.0 | 44.0 | 1.4 (1-2) | 36 |
| Soay sheep, <i>Ovis aries</i> | 80 | 2.0 | 73.8 | 1.7 (1-2) | 37 |
| Roe deer, <i>Capreolus capreolus</i> | 33 | 2.1 (2-3) | 15.5 | 1.2 (1-2) | 38 |
| White-tailed deer, <i>Odocoileus virginianus</i> | 27 | 2.1 (2-3) | 25.9 | 1.3 (1-2) | 39 |
| Wild boar, <i>Sus scrofa</i> | 30 | 4.5 (2-7) | 10.0 | 1.1 (1-2) | 40, 41 |
| Greater white-toothed shrew, <i>Crocidura russula</i> | 42 | 2.3 | 0 | 1.0 | 42 |
| Asian lesser white-toothed shrew, <i>Crocidura shantungensis</i> | 18 | 3.0 (2-4) | 27.7 | 1.3 (1-2) | 43 |
| Big brown bat, <i>Eptesicus fuscus</i> | 26 | 2.0 | 46.2 | 1.5 (1-2) | 44 |
| European hedgehog, <i>Erinaceus europaeus</i> | 5 | 5.0 (4-7) | 40.0 | 1.4 (1-2) | 45 |
| Snow hare, <i>Lepus americanus</i> | 16 | 4.0 | 25.0 | 1.3 (1-2) | 46 |
| Gray mouse lemur, <i>Microcebus murinus</i> | 26 | 2.0 | 65.4 | 1.7 (1-3) | 47 |
| Large treeshrew, <i>Tupaia tana</i> | 9 | 2.0 | 33.3 | 1.3 (1-2) | 48 |
| Stuart's antechinus, <i>Antechinus stuartii</i> | 39 | 4.4 (2-8) | 92.3 | 2.8 (1-4) | 49 |
| Agile antechinus, <i>Antechinus agilis</i> | 47 | 7.7 (3-10) | 97.8 | 2.8 (1-4) | 50 |
| Virginia opossum, <i>Didelphis virginiana</i> | 64 | 8.7 | 40.6 | 1.4 (1-3) | 51 |
| Spotted-tailed quoll, <i>Dasyurus maculatus</i> | 6 | 5.0 (2-6) | 66.7 | 1.8 (1-3) | 52 |
| Honey possum, <i>Tarsipes rostratus</i> | 5 | 2.4 (2-4) | 100 | 2.0 | 53 |

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Table S2. Summary statistics of multiple paternity in live-bearing amphibians and reptiles

| Species | # Clutches examined | Mean clutch size (range) | % Clutches with multiple paternity | Mean # of mates (range) | Reference |
|--|---------------------|--------------------------|------------------------------------|-------------------------|-----------|
| White's skink, <i>Egernia whitii</i> | 43 | 2.5 (1-4) | 11.6 | 1.1 (1-2) | 1 |
| Spiny-tailed skink, <i>Egernia stokesii</i> | 16 | 4.2 (1-7) | 25.0 | 1.3 (1-2) | 2 |
| Cunningham's skink, <i>Egernia cunninghami</i> | 38 | 3.4 (2-7) | 2.6 | 1.0 (1-2) | 3 |
| Southern water skink, <i>Eulamprus heatwolei</i> | 17 | 3.2 (2-5) | 64.7 | 1.7 (1-3) | 4 |
| Southern snow skink, <i>Niveoscincus microlepidotus</i> | 8 | 2.3 (2-4) | 75.0 | N/A | 5 |
| Spotted snow skink <i>Niveoscincus ocellatus</i> | 16 | 1.8 | 93.8 | N/A | 6 |
| Mt log skink, <i>Pseudomoia eurecateui</i> | 11 | 2.6 (2-3) | 27.3 | 1.3 (1-2) | 7 |
| Sleepy lizard, <i>Tiliqua rugosa</i> | 17 | 2.0 (1-3) | 23.5 | 1.2 (1-2) | 8 |
| Common lizard, <i>Lacerta vivipara</i> | 58 | 5.6 | 63.8 | 1.7 (1-3) | 9 |
| Northern water snake, <i>Nerodia sipedon</i> | 45 | 18.0 (5-28) | 58.0 | 1.8 (1-5) | 10 |
| Garter snake, <i>Thamnophis sirtalis</i> | 28 | 9.6 (3-21) | 57.8 | 1.7 (1-3) | 11-13 |
| Western garter snake, <i>Thamnophis elegans</i> | 6 | 13.8 (8-24) | 50.0 | 1.7 (1-3) | 14 |
| Common European adder, <i>Vipera berus</i> | 13 | 7.7 (2-13) | 69.2 | 2.2 (1-4) | 15 |
| Rainbow mud snake, <i>Enhydryis enhydryis</i> | 2 | 32.5 (29-36) | 100 | 4.0 (3-5) | 16 |
| Mekong mud snake, <i>Enhydryis subtaeniata</i> | 4 | 18.5 (14-25) | 100 | 4.3 (3-5) | 16 |
| Broods of 7 watersnake species (Homalopsidae) | 7 | 15.1 (6-30) | 85.7 | 2.0 (1-3) | 17 |
| Broods of 5 <i>Hydrophis</i> and 1 <i>Lapenmis</i> species | 12 | 6.4 (4-18) | 0 | 1.0 | 18 |
| Fire salamander, <i>Salamandra salamandra</i> | 21 | 22.8 (9-41) | 52.4 | 1.7 (1-3) | 19 |

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