# Supplementary Tables: Data on trophic levels and body lengths of trophic species in 9 pelagic and 9 terrestrial food webs

**Table S1.** Summary of the 9 pelagic and 9 matching terrestrial food webs taken from Briand and Cohen (1987). We excluded some ‘species’, particularly detritus and carcasses (consistent with Briand and Cohen according to their numbers of trophic species), larvae and parts of animals or plants (e.g. ‘Salpae’). Where a trophic species was cited as a broad category, e.g. ‘Large insects’, we designated a size range of these organisms, and counted it as a single trophic species.

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| Reference | Briand & Cohen web number | Briand & Cohen ref number | Number trophic species | Name | Briand & Cohen maximum chain length | Our maximum chain length |
| Pelagic |  |  |  |  |  |  |
| Smirnov (1961) | 58 | 56 | 17 | Sphagnum bog, Russia | 7 | 7 |
| Mackintosh (1964) | 30 | 36 | 14 | Antarctic Seas | 7 | 7 |
| Patten and Finn (1979) | 21 | 30 | 9 | Ross Sea | 7 | 6 |
| Vinogradov and Shushkina (1978) | 42 | 44 | 15 | Upwelling areas, Pacific Ocean | 8 | 4 |
| Hogetsu (1979) | 86 | 82 | 16 | Suruga Bay, epipelagic zone, Japan | 6 | 6 |
| Harris and Bowman (1980) | 47 | 49 | 27 | Swamps, south Florida  Terrestrial & pelagic components | 5 | 6 |
| Parin (1970) | 41 | 43 | 18 | Tropical seas, epipelagic zone | 8 | 7 |
| Petipa (1979) | 103 | 98 | 23 | Tropical plankton community, Pacific. | 10 | 4 |
| Sorokin (1972) | 71 | 68 | 16 | Lake Rybinsk, Russia | 7 | 6 |

**Table S1 (continued)**

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| Reference | Briand & Cohen web number | Briand & Cohen ref number | Number trophic species | Name | Briand & Cohen maximum chain length | Our maximum chain length |
| Terrestrial |  |  |  |  |  |  |
| Holm and Scholtz (1980) | 98 | 94 | 17 | Sand dunes, Namib desert, Namibia | 5 | 5 |
| Bird (1930) | 24 | 32 | 12 | Willow forest, Manitoba | 4 | 4 |
| Harrison (1962) | 40 | 42 | 11 | Rainforest, Malaysia | 3 | 3 |
| Bird (1930) | 23 | 32 | 15 | Prairie, Manitoba | 4 | 4 |
| Varley (1970) | 27 | 33 | 22 | Wythan Wood, England | 4 | 4 |
| Twomey (1945) | 59 | 57 | 29 | Trelease Woods, Illinois | 4 | 4 |
| Sharma (1980) | 100 | 96 | 22 | Rajasthan Desert, India | 6 | 5 |
| Bird (1930) | 25 | 32 | 24 | Aspen Communities, Manitoba | 4 | 4 |
| Waide and Reagan (1996) | N/A | N/A | 20 | Tropical Rainforest, El Verde | N/A | 5 |

**Table S2.** Average adult body lengths of trophic species in pelagic food webs.

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| Table S2.1 Sphagnum bog, Russia | | |
| Briand and Cohen (1987) Web No. 58 | | |
| Briand and Cohen (1987) Ref No. 56 | | |
| B&C mean chain length 4.28 | | |
| B&C maximum chain length 7 | | |
| Trophic level | Average length (cm) | Species |
| 1 |  | Sphagnum |
| 1 | 0.00075 | Algae |
| 1 | 0.6 | Utricularia |
| 2 | 0.4 | Psectrocladius |
| 2 | 0.45 | Chironomous |
| 2 | 0.1625 | Corynoneura larvae |
| 2 | 0.525 | Cladocera |
| 3 | 0.5 | Ablabesmyia larvae |
| 3 | 2 | Chaoborus larvae |
| 3 | 2 | Odonta larvae |
| 3 | 2.6 | Hemiptera |
| 3 | 3.85 | Coleoptera |
| 3 | 6 | Nematocera imagines |
| 4 | 1.3 | Ants |
| 5 | 5.1 | Spiders |
| 6 | 15.65 | Frogs |
| 6 | 51.5 | Lizards |
| 6 | 30 | Birds |
| 7 | 35 | Birds of prey |

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| Table S2.2 Antarctic seas | | |
| Briand and Cohen (1987) Web No. 30 | | |
| Briand and Cohen (1987) Ref No. 36 | | |
| B&C mean chain length 5.02 | | |
| B&C maximum chain length 7 | | |
| Trophic level | Average length (cm) | Species |
| 1 | 0.0502 | Phytoplankton |
| 2 | 5 | Euphausia superba (krill) |
| 2 | 0.55 | Other herbivorous plankton |
| 3 | 1.1 | Carnivorous plankton |
| 5 | 64 | Birds |
| 4 | 123 | Fish |
| 4 | 126.75 | Squid |
| 3 | 250 | Crabeater seal |
| 5 | 360 | Leopard seal |
| 5 | 365 | Elephant seal |
| 3 | 1800 | Baleen whales |
| 6 | 545 | Smaller toothed whales |
| 5 | 1650 | Sperm whale |
| 7 | 175 | Homo sapiens |

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| Table S2.3 Ross Sea | | |
| Briand and Cohen (1987) Web No. 21 | | |
| Briand and Cohen (1987) Ref No. 30 | | |
| B&C mean chain length 4.61 | | |
| B&C maximum chain length 7 | | |
| Trophic level | Average length (cm) | Species |
| 1 | 0.0502 | Aufwachs |
| 2 | 7.5 | Polychaetes |
| 2 | 0.35 | Copepods |
| 2 | 1 | Amphipods |
| 1 | 0.0502 | Diatoms |
| 2 | 0.35 | Copepods |
| 2 | 3 | Chaetognaths |
| 2 | 4.5 | Euphausids |
| 3 | 45 | Pleurogamma antarcticum |
| 4 | 127.25 | Squid |
| 4 | 110 | Emperor penguin |
| 4 | 71 | Adelie penguin |
| 3 | 250 | Crabeater seal |
| 5 | 200 | Weddell seal |
| 5 | 200 | Ross seal |
| 6 | 360 | Leopard seal |
| 3 | 2150 | Baleen whales |
| 6 | 675 | Toothed whales |

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| Table S2.4 Upwelling areas, Pacific Ocean | | |
| Briand and Cohen (1987) Web No. 42 | | |
| Briand and Cohen (1987) Ref No. 44 | | |
| B&C mean chain length 4.95 | | |
| B&C maximum chain length 8 | | |
| Trophic level | Average length (cm) | Species |
| 1 | 0.00055 | Nanoplankton |
| 1 | 0.0014 | Small phytoplankton |
| 1 | 0.00605 | Medium phytoplankton |
| 1 | 0.01 | Large phytoplankton |
| 2 | 0.0055 | Ciliates |
| 3 | 0.1 | Medium size calanoids |
| 3 | 1 | Juvenile euphausids |
| 3 | 0.18 | Meroplankton |
| 3 | 0.13 | Appendicularians |
| 3 | 0.13 | Doliolids |
| 3 | 0.1 | Small calanoids |
| 4 | 0.085 | Cyclopoids |
| 4 | 0.25 | Calanoids |
| 4 | 0.3 | Small tomopterids |
| 4 | 0.5 | Small colelenterates |
| 4 | 2 | Chaetognaths |
| 4 | 0.3 | Polychaetes |
| 4 | 20 | Anchovy |

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| Table S2.5 Suruga Bay, epipelagic zone, Japan | | |
| Briand and Cohen (1987) Web No. 86 | | |
| Briand and Cohen (1987) Ref No. 82 | | |
| B&C mean chain length 4.09 | | |
| B&C maximum chain length 6 | | |
| Trophic level | Average length (cm) | Species |
| 1 | 0.0103 | Microflagellates |
| 1 | 0.015 | Coscinodiscus |
| 1 | 0.002 | Chaetoceros |
| 1 | 0.0007 | Skeletonema |
| 1 | 0.00195 | Costatum |
| 2 | 3 | Euphausia similis |
| 2 | 3 | Euphausia pacifica |
| 2 | 0.275 | Calanus pacifica |
| 2 | 0.0975 | Palacalanus parrus |
| 3 | 4.8 | Sergia lucens |
| 3 | 2.5 | Engraulis japonica (post-larvae) |
| 3 | 5 | Sagitta nagae |
| 3 | 2.5 | Parathemisto gracilis |
| 4 | 15 | Diaphus coeruleus |
| 4 | 15 | Diaphus elucens |
| 4 | 15 | Other myctophids (lanternfishes) |
| 4 | 9.15 | Trachiurus japonica (adult) |
| 4 | 7 | Engraulis japonica (adult) |
| 4 | 9.2 | Scomber japonicus (adult) |
| 5 | 26.75 | Todarodes pacificus |
| 5 | 143.5 | Stenella species |
| 6 | 175 | Homo sapiens |

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| Table S2.6 Swamps, south Florida. Terrestrial & pelagic components | | | | |
| Briand and Cohen (1987) Web No. 47 | | | | |
| Briand and Cohen (1987) Ref No. 49 | | | | |
| B&C mean chain length 4.22 | | | | |
| B&C maximum chain length 5 | | | | |
| Trophic level | Average length (cm) | |  | Species |
| Pelagic subweb | Vascular plant subweb |
| 1 | 0.011 |  |  | Phytoplankton |
| 1 |  | 105 |  | Vascular plants |
| 2 | 0.5 |  |  | Copepods |
| 2 | 0.16 |  |  | Cladocerans |
| 2 | 1.1 |  |  | Amphipods |
| 2 |  | 91.25 |  | Waterfowl |
| 2 |  | 39.5 |  | Marsh rabbits |
| 2 |  | 143.25 |  | Deer |
| 2 |  | 20 |  | Water rat |
| 3 | 3.5 |  |  | Plecopterans |
| 3 | 5.1 |  |  | Odonates |
| 3 | 2.6 |  |  | Hempiterans |
| 3 | 10 |  |  | Crayfish |
| 3 | 11.25 |  |  | Cyprinodontids |
| 3 | 3.8 |  |  | Mosquitofish |
| 4 | 3.85 |  |  | Coleopterans |
| 4 | 1.4 |  |  | Dipterans |
| 4 | 2.6 |  |  | Hemipterans |
| 4 | 27.3 |  |  | Centrarchids |
| 4 | 140 |  |  | Snakes |
| 4 | 16 |  |  | Turtles |
| 5 | 90 |  |  | Bowfin |
| 5 | 210 |  |  | Gar |
| 5 | 100 |  |  | Pickerel |
| 5 | 33.3 |  |  | Herons |
| 5 | 25.5 |  |  | Ibises |
| 5 | 35.25 |  |  | Egrets |
| 5 | 48.25 |  |  | Raccoons |
| 5 | 44 |  |  | Opossums |
| 6 | 285 |  |  | Alligators |
| 6 | 62 |  |  | Raptors |
| 3 |  | 70 |  | Bobcats |

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| Table S2.7 Tropical seas, epipelagic zone | | |
| Briand and Cohen (1987) Web No. 41 | | |
| Briand and Cohen (1987) Ref No. 43 | | |
| B&C mean chain length 5.92 | | |
| B&C maximum chain length 8 | | |
| Trophic level | Average length (cm) | Species |
| 1 | 0.0502 | Phytoplankton |
| 2 | 1.6 | Euphausiids |
| 2 | 0.5 | Copepods |
| 2 | 0.2 | Shrimp |
| 3 | 20 | Flying fish |
| 3 | 1.55 | Hyperiids |
| 3 | 8.5 | Lanternfishes |
| 3 | 130 | Molas |
| 4 | 25 | Chiasmodon (black swallower) |
| 4 | 30 | Snake mackerel |
| 4 | 140 | Squid |
| 4 | 170 | Coryphaena |
| 5 | 115 | Tuna |
| 5 | 100 | Billfish (lancetfishes) |
| 6 | 270 | Marlin |
| 6 | 250 | Medium-sized sharks |
| 7 | 550 | Large sharks |

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| Table S2.8 Tropical plankton community, Pacific | | |
| Briand and Cohen (1987) Web No. 103 | | |
| Briand and Cohen (1987) Ref No. 98 | | |
| B&C mean chain length 5.59 | | |
| B&C maximum chain length 10 | | |
| Trophic level | Average length (cm) | Species |
| 1 | 0.001 | Small phytoplankton |
| 1 | 0.004 | Medium phytoplankton |
| 1 | 0.0309 | Large phytoplankton |
| 2 | 0.3 | Appendicularia (large) |
| 2 | 0.015 | Nauplii of Copepoda |
| 2 | 0.0075 | Appendicularia (small) |
| 2 | 0.0057 | Infusoria |
| 2 | 0.02 | Radiolaria |
| 2 | 0.035 | Copepodita of Copepoda |
| 2 | 0.15 | Calanus (small) |
| 3 | 0.3 | Acartia (large) |
| 3 | 0.1 | Oithona - oncaea (small) |
| 3 | 0.4 | Oithona - oncaea (large) |
| 3 | 0.325 | Centropages |
| 3 | 0.128 | Arcatia (small) |
| 3 | 0.3 | Calanus (large) |
| 3 | 0.345 | Amphipoda |
| 3 | 0.34 | Euchaeta |
| 3 | 1.15 | Euphasia |
| 4 | 0.35 | Pteropoda |
| 4 | 1.05 | Chaetognatha |
| 4 | 0.33 | Ctenophora medusae |

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| Table S2.9 Lake Rybinsk, Russia | | |
| Briand and Cohen (1987) Web No. 71 | | |
| Briand and Cohen (1987) Ref No. 68 | | |
| B&C mean chain length 5.15 | | |
| B&C maximum chain length 7 | | |
| Trophic level | Average length (cm) | Species |
| 1 | 0.001 | Diatom: Melosira italica |
| 1 | 0.001 | Diatom: Asterionella formosa |
| 1 | 0.0005 | Blue-green algae: Aphanizomenon flos-aquae |
| 1 | 0.0005 | Blue-green algae: Anabaena spp. |
| 1 | 0.0004 | Blue-green algae: Microcystis aeruginosa |
| 2 | 0.055 | Protozoa |
| 2 | 0.1 | Rotatoria |
| 3 | 0.2 | Daphnia longispina |
| 3 | 0.08 | Daphnia cucculata |
| 3 | 0.1 | Bosmina coregoni |
| 3 | 0.525 | Leptodora kindtii (planktonic cladoceran) |
| 3 | 0.525 | Polyphemus pediculus (planktonic cladoceran) |
| 3 | 0.15 | Eudiaptomus gracilis |
| 3 | 0.15 | Eudiaptomus graciloides |
| 3 | 0.15 | Heterocope appendiculata |
| 3 | 0.275 | Mesocyclops leuckarti |
| 3 | 0.275 | Mesocyclops orthonoides |
| 3 | 0.275 | Cyclops vicinus |
| 3 | 0.275 | Cyclops kolensis |
| 2 | 3.45 | Isochaetides newaensis |
| 2 | 4.5 | L. hoffmeisteri |
| 2 | 0.45 | Chironomus plumosus |
| 2 | 0.65 | Glyptotendipes spp. |
| 2 | 0.4 | Procladius spp. |
| 2 | 5.5 | Dreissena polymorpha (clam) |
| 4 | 17.5 | Abramis balerus (European bream) |
| 4 | 20 | Osmerus eperlanus (European smelt) |
| 4 | 20 | Alburnus alburnus (bleak) |
| 4 | 42.5 | Abramis brama (bream) |
| 4 | 30 | Rutilus rutilus (roach) |
| 4 | 40 | Blica bjorkna (silver bream) |
| 5 | 47.5 | Lucioperca lucioperca (pike perch) |
| 5 | 57.5 | Esox lucius (Northern pike) |
| 5 | 29.5 | Pirca fluviatilis (European perch) |
| 6 | 90 | Lota lota (burbot) |
| 6 | 175 | Homo sapiens |

**Table S3.** Average adult body lengths of trophic species in terrestrial food webs.

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| Table S3.1 Sand dunes, Namib desert, Namibia | | |
| Briand and Cohen (1987) Web No. 98 | | |
| Briand and Cohen (1987) Ref No. 94 | | |
| B&C mean chain length 3.54 | | |
| B&C maximum chain length 5 | | |
| Trophic level | Average length (cm) | Species |
| 1 | 40 | Annuals: Monsonia, Stpagrostis, Eragostris |
| 1 | 100 | Perennial: Stipagostris salbulicola |
| 1 | 100 | Perennial: Acanthosicyos horrida |
| 1 | 100 | Perennial: Trianthema hereroensis |
| 2 | 1.5 | Tenebrionidae |
| 2 | 6.75 | Orthoptera |
| 2 | 1 | Curculionidae |
| 2 | 60 | Hare - Lepus capensis |
| 2 | 120 | Oryx gazella |
| 2 | 1 | Aclerda |
| 2 | 1 | Thysanura, Isoptera, other Tenebrionidae |
| 3 | 2.5 | Scarabs |
| 3 | 13.5 | Gerbillius paeba, G. vallinus |
| 3 | 5 | Spiders, solpugids, scorpions |
| 3 | 8.2 | Mole - Eremitalpa granti namibensis |
| 3 | 50 | Aporosaura anchietae - Lacertidae |
| 3 | 10 | Typhlosaurus, lizards |
| 4 | 160 | Snakes - Bitis |
| 4 | 56 | Jackal - Canis mesomelas |
| 4 | 105.5 | Hyaena brunnea |
| 5 | 34.5 | Birds - Tyto alba |
| 5 | 41 | Falco |
| 5 | 48.5 | Corvus |
| 5 | 34 | Bubo africanus |
| 5 | 40 | Bubo asio |

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| Table S3.2 Willow forest, Manitoba | | |
| Briand and Cohen (1987) Web No. 24 | | |
| Briand and Cohen (1987) Ref No. 32 | | |
| B&C mean chain length 2.7 | | |
| B&C maximum chain length 4 | | |
| Trophic level | Average length (cm) | Species |
| 1 | 100 | Salix discolour |
| 2 | 1.2 | Garlerucella decora (beetle, Chrysomelidae) |
| 4 | 18.75 | Redwinged blackbird Agelaius |
| 4 | 20 | Bronze grackle |
| 4 | 14 | Song sparrow |
| 4 | 13 | Maryland yellow throat (Geothlypis tricas), yellow marbler, song sparrow |
| 1 | 100 | Salix petiolaris |
| 1 | 295 | Salix longifolia |
| 3 | 2 | Spiders |
| 2 | 0.2 | Insects, Pontania petiolaridis, collembola |
| 2 | 0.2 | Insects, Disyonicha quinquevitata, collembola |
| 3 | 8 | Rana pipiens |
| 2 | 1.25 | Snails (Vertigo, Succinea, Lymnea) |
| 4 | 77.33333333 | Garter snake (Eutaenia parietalis) |

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| Table S3.3 Rainforest, Malaysia | | |
| Briand and Cohen (1987) Web No. 40 | | |
| Briand and Cohen (1987) Ref No. 42 | | |
| B&C mean chain length 1.88 | | |
| B&C maximum chain length 3 | | |
| Trophic level | Average length (cm) | Species |
| 1 | 3 | Canopy - leaves |
| 2 | 54.55 | Primates: Hylobates |
| 2 | 61 | Primates: Presbytis |
| 2 | 34 | Primates: Nycticebus |
| 2 | 35.55 | Rodents: Ratufa (giant squirrel) |
| 2 | 24.2 | Rodents: Flying squirrels |
| 2 | 12.75 | Rodents: Hapalomys (rat) |
| 2 | 40 | Flying lemur |
| 2 | 12 | Ptilocercus (pen-tail tree shrew) |
| 2 | 8 | Fruit bat |
| 2 | 16.2 | Birds |
| 2 | 20 | Upper air animals: birds and bats, insectivorous, carnivorous birds |
| 3 | 5.8 | Insectivorous bats |
| 3 | 1.15 | Insects |
| 2 | 595 | Elephas |
| 3 | 265 | Didermorcerus (rhino) |
| 3 | 215 | Tapirus (tapir) |
| 3 | 150 | Feral pig (Sus) |
| 3 | 100 | Cervidae (deer) |
| 3 | 50.5 | Tragulus (mouse deer) |
| 3 | 100 | Bos (gaur) |
| 3 | 120.7 | Panthera (tiger and leopard) |
| 3 | 125 | Helarctos (bear) |
| 3 | 88 | Cuon (wild dog) |
| 3 | 54.5 | Hystricidae (porcupine) |
| 3 | 41 | Birds |
| 3 | 3 | Trunk, fruit, flowers |
| 1 | 54 | Macaca (monkeys) |
| 3 | 47.5 | Martes (marten) |
| 3 | 40 | Prionodon (linsang) |

**Table S3.3 (continued)**

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| Trophic level | Average length (cm) | Species |
| 3 | 57 | Paradoxurinae (civets) |
| 3 | 80.5 | Neofelis (clouded leopard) |
| 3 | 20.5 | Callosciurus (tree squirrels) |
| 3 | 19 | Rattus (tree rats) |
| 3 | 18.5 | Tuapaia (tree-shrews) |
| 3 | 5.5 | Bats |
| 3 | 20 | Birds |
| 3 | 3 | Ground - roots, fallen fruit, leaves and trunks (detritus?) |
| 1 | 70.5 | Viverrianae |
| 2 | 55 | Felis (small cats) |
| 2 | 19 | Mustela (stoat) |
| 2 | 20 | Lariscus and Rhinoscirius (ground squirrels) |
| 2 | 19 | Rattus (ground rats) |
| 2 | 35.5 | Rhizomys (bamboo rats) |
| 2 | 35 | Erinaceidae: moonrat |
| 2 | 14 | Erinaceidae: short-tailed shrew |
| 2 | 7.45 | Soricidae (shrews) |
| 2 | 59 | Manis (scaly anteater) |
| 3 | 12 | Birds |
| 2 | 3.25 | Fungi |

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| Table S3.4 Prairie, Manitoba | | |
| Briand and Cohen (1987) Web No. 23 | | |
| Briand and Cohen (1987) Ref No. 32 | | |
| B&C mean chain length 2.4 | | |
| B&C maximum chain length 4 | | |
| Trophic level | Average length (cm) | Species |
| 2 | 28 | Richardson spermophile (ground squirrel) |
| 4 | 54.5 | Marsh hawk (Circus hudsonius) |
| 4 | 90 | Coyote (Canis latrans) |
| 4 | 52.5 | Red-tailed hawk (Buteo borealis) |
| 4 | 19 | Weasel (Mustela) |
| 4 | 57 | Badger (Taxiadea taxus) |
| 2 | 13 | Vole (Microtus) |
| 3 | 28 | 13-striped spermophile (ground squirrel) |
| 2 | 23.5 | Pocket gopher (Thomomys) |
| 4 | 35 | Great horned owl |
| 1 | 80 | Agropyron |
| 1 | 66 | Stipa comata, Helianthus scaberrimus |
| 2 | 1.75 | Insects in herb and surface stratum, Diptera, Hermiptera, grasshoppers |
| 3 | 2.5 | Spiders |
| 2 | 2 | Insects in soil stratum, wire worms (Ludius larvae), cutworms, white grubs (Apodius larvae-beetle) |
| 3 | 22.5 | Meadow lark (Strunella neglecta) |
| 3 | 15 | Chipping sparrow (Spizella passerina), clay-coloured sparrow (S. pallida), vesper sparrow (Poecetes confinis) = all sparrows |
| 3 | 18 | Horned lark (Otocoris) |
| 3 | 28 | Upland plover (Bartramia longicauda) |
| 3 | 47.5 | Crow (Corvus brachyrhynchos) |
| 3 | 8 | Frog: Rana |
| 4 | 77.33333333 | Garter snake (Eutaenia parietalis) |

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| Table S3.5 Wythan Wood, England | | |
| Briand and Cohen (1987) Web No. 27 | | |
| Briand and Cohen (1987) Ref No. 33 | | |
| B&C mean chain length 2.89 | | |
| B&C maximum chain length 4 | | |
| Trophic level | Average length (cm) | Species |
| 1 | 20 | Herbs |
| 1 | 200 | Trees and bushes |
| 1 | 350 | Oak trees |
| 2 | 6 | Tortrix, other leaf feeders, earth worms, fungi |
| 2 | 4 | Winter moth Operopthera brumata |
| 2 | 4 | Campaea margaritata, Hemithea aestivaria (moths) |
| 2 | 0.45 | Philontus decorus |
| 2 | 1.5 | Abax parallelopipedus (beetles) |
| 2 | 1.8 | Feronia modida, F. melanaria (carabids) |
| 2 | 0.6 | Ladybird beetle: Adalia decempuctata |
| 3 | 9.1 | Voles, mice |
| 3 | 1 | Spider: Linyphia triangularis |
| 3 | 14 | Titmice (the great tit and blue tit) |
| 3 | 0.45 | Cyzenis albicans (Diptera) |
| 3 | 0.75 | Soil insects, mites |
| 4 | 40.5 | Owl (Strix aluco) |
| 4 | 18.75 | Weasels |
| 4 | 7 | Shrews: Sorex |
| 4 | 9.1 | Rats: Clethrionomys glareolus |
| 4 | 9.25 | Rats: Apodemus sylvaticus |
| 4 | 15 | Moles |

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| Table S3.6 Trelease Woods, Illionois | | |
| Briand and Cohen (1987) Web No. 59 | | |
| Briand and Cohen (1987) Ref No. 57 | | |
| B&C mean chain length 2.379 | | |
| B&C maximum chain length 4 | | |
| Trophic level | Average length (cm) | Species |
| 1 | 2.75 | Weed seeds, corn grains, grass seeds, acorns, wild fruits, roots, bark |
| 2 | 12.5 | Deer mice |
| 2 | 19.5 | Cardinal |
| 3 | 20 | Red-headed woodpecker |
| 3 | 20 | Downy woodpecker |
| 2 | 12.8 | Mole |
| 2 | 55 | Rabbit |
| 2 | 1 | Wood borers, weevils |
| 2 | 15 | Brown creeper |
| 3 | 13 | White-breasted nuthatch |
| 3 | 14 | Tufted titmouse |
| 2 | 20.35 | Starling |
| 2 | 24.5 | Robin |
| 2 | 58.25 | Blue jay |
| 2 | 25.75 | Fox squirrel |
| 2 | 13.3 | Junco (junco), tree sparrel (Spizella) |
| 1 | 1.5 | Coleoptera |
| 1 | 0.525 | Diptera larvae |
| 2 | 3.25 | Lepidoptera larvae |
| 2 | 4 | Lepidoptera |
| 1 | 1.75 | Arachnidae |
| 1 | 0.8 | Scale insects |
| 1 | 1 | Miscellaneous insects |
| 1 | 3 | Snails |
| 4 | 40 | Barred owl (Strix) |
| 4 | 7.5 | Shrew |

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| Table S3.7 Rajasthan Desert, India | | |
| Briand and Cohen (1987) Web No. 100 | | |
| Briand and Cohen (1987) Ref No. 96 | | |
| B&C mean chain length 3.34 | | |
| B&C maximum chain length 6 | | |
| Trophic level | Average length (cm) | Species |
| 1 | 2 | Cyperus, Cenchrus, Eleucine (grasses) |
| 1 | 40 | Crotalaria, Zizyphus (herbs-shrubs) |
| 1 | 100 | Prosopis cineraria (trees) |
| 2 | 1.75 | Insects: hoppers, termites, ants, moths, beetles |
| 2 | 19 | Rodents (Rattus, Mus) |
| 2 | 12.25 | Gerbils: Meriones |
| 2 | 14 | Gerbils: Tatera |
| 2 | 60 | Hare |
| 2 | 24.75 | Birds: doves (Streptopalia senegalensis) |
| 2 | 18 | Birds: larks |
| 2 | 29 | Birds: sandgrouse (Pterocles exustus) |
| 2 | 110 | Antelopes: gazelle (Gazella) |
| 2 | 120 | Antelopes: black buck (Antilope) |
| 2 | 205 | Antelopes: nilgai |
| 3 | 3 | Wasps, carpenter ants, tiger beetles, spiders |
| 3 | 10 | Lizards: Acanthodactylus-gekko, Hemidactylus |
| 3 | 80 | Lizards: Varanus spp. |
| 4 | 66 | Snakes: viper Echis carinatus |
| 4 | 75 | Snakes: sand boa Eryx conicus |
| 4 | 165 | Snakes: Phytas, Naja |
| 3 | 21 | Birds: bulbuls (Picnonotus cafer) |
| 3 | 21 | Birds: babblers (Turdoides stiatus) |
| 3 | 22 | Birds: shirke (Lanius excubator) |
| 3 | 15 | Birds: Indian robin (Sexicoloides fulicata) |
| 3 | 25 | Birds: bee-eater |
| 3 | 7 | Bats: Rhinopoma |
| 3 | 6.9 | Bats: Pipistrellus |
| 3 | 16 | Hedgehog |
| 3 | 32 | Shikra (bird) |
| 5 | 61 | Cat (Felis lybica) |
| 5 | 65 | Dog (Canis familaris) |
| 5 | 115 | Wolf (Canis lupus) |

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| Table S3.8 Aspen Communities, Manitoba | | |
| Briand and Cohen (1987) Web No. 25 | | |
| Briand and Cohen (1987) Ref No. 32 | | |
| B&C mean chain length 2.16 | | |
| B&C maximum chain length 4 | | |
| Trophic level | Average length (cm) | Species |
| 3 | 23.5 | Birds: baltimore oriole (Icterus galbula) |
| 3 | 17 | Birds: black capped chickadee |
| 3 | 14 | Birds: least flycatcher (Empidonax minimus) |
| 3 | 15 | Birds: warbling vireo, rosebreated grosbeak (Hedymeles ludovicianus) |
| 2 | 14.7 | Fungus: canker (Hypoxylon pruinatum), white heart rot (Fomes ignarius) |
| 3 | 20 | Hairy and downy woodpeckers (Dryobates) |
| 2 | 2 | Spiders (mature forest) |
| 2 | 0.75 | Insects (mature forest - Diptera is the most abundant) |
| 2 | 1.35 | Dicerca, Saperda calcerata, S. bipuntata (Cerambycid beetle) |
| 2 | 19.75 | Red squirrel (Sciurus) |
| 1 | 880 | Plants: Populus |
| 3 | 50 | Goshawk (Astur) |
| 2 | 9.1 | Redbacked vole (Evotomys) |
| 4 | 42.5 | Coopers and sharpshinned hawks (Accipiter) |
| 3 | 35 | Great horned owl (Bubo occidentalis) |
| 2 | 44.5 | Bird ruffled grouse (Pediocetes) |
| 2 | 15 | Flicker (Coloptes auratys) |
| 2 | 47.5 | Crow |
| 3 | 12.5 | House wren (Tryglodytes aedon) |
| 2 | 55 | Snowshoe rabbit (Lepus) |
| 3 | 13 | Birds: yellow marbler (Dendroica aestiva) |
| 3 | 12.95 | Birds: gold finch (Astragalinus tritis) |
| 3 | 24.5 | Birds: robin (Planesticus migratorius) |
| 1 | 250 | Populus, Symphoricarpos (snow berry), Corylus, Prumus |
| 2 | 9.1 | Red backed vole |
| 2 | 28 | Franklin ground squirrel (Citellus franklini) |
| 2 | 2.25 | Insects (forest edge): Ropolopus (cerambycids) |
| 2 | 2 | Spiders (forest edge) |
| 2 | 2.25 | Snails |
| 3 | 8 | Frog Rana pipiens |

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| Table S3.9 Tropical Rainforest, El Verde | | |
| Web not part of the Briand and Cohen (1987) collection | | |
|  | | |
| Trophic level | Average length (cm) | Species |
| 1 | 2000 | Leaves (canopy) |
| 1 | 0.0035 | Algae |
| 1 | 3 | Nectar, fruit |
| 2 | 4.25 | Fungi: micorrhizal fungi, Mycena, Psychotria, Favolus |
| 2 | 7.1 | Monophyllus |
| 2 | 9.65 | Brachyphylla |
| 2 | 9 | Artibeus |
| 2 | 7 | Erophylla |
| 2 | 5.9 | Stenoderma |
| 2 | 4 | Snails |
| 3 | 0.75 | Chelicerata: mites, Acari (order Cryptostigmata and Prostigmata), ants |
| 3 | 6 | Chelicerata: Aranea (Pholcidae and Ochyroceratidae) |
| 3 | 0.25 | Miriapoda: Scolopendra |
| 3 | 0.2 | Insecta: Collembola |
| 3 | 1 | Insecta: Homoptera |
| 3 | 1.75 | Insecta: Coleoptera |
| 3 | 0.8 | Insecta: Hemiptera |
| 2 | 2 | Termites |
| 2 | 8 | Earthworms (Oligochaeta) |
| 2 | 25 | Columba |
| 2 | 30 | Zenaida |
| 2 | 30 | Amazona |
| 2 | 25 | Geotrygon |
| 3 | 2.7 | Gekkos |
| 3 | 8.2 | Anguidae |
| 3 | 19 | Rats (Rattus) |
| 2 | 5 | Walking sticks |
| 2 | 4 | Pierid butterfly |
| 2 | 2 | Fulgoroid hoppers |
| 2 | 3.5 | Crickets |
| 2 | 2.5 | Cockroaches |
| 3 | 18.75 | Seiurus |

**Table S3.9 (continued)**

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| Trophic level | Average length (cm) | Species |
| 3 | 14 | Other birds |
| 3 | 12.5 | A. cuvieri |
| 3 | 5.8 | A. gundlachi |
| 3 | 4.1 | A. stratulus |
| 3 | 5.5 | A. evermanni |
| 4 | 5 | Scorpiones: Tityus |
| 4 | 3.5 | Araneae |
| 3 | 3.95 | Eleutherodactylus |
| 3 | 5.3 | Leptodactylus albilabris |
| 3 | 5.85 | Pteronotus |
| 3 | 5.25 | Eptesicus |
| 3 | 7 | Lasirius |
| 4 | 22.5 | Typhlops plaatycephalus |
| 4 | 17.7 | T. rostellatus and Amphisbaena |
| 4 | 110 | Boidae |
| 4 | 55.4 | Alsophis |
| 4 | 26.5 | Arrhyton |
| 4 | 42.5 | Mongooses |
| 5 | 52.5 | Buteo |
| 5 | 47.5 | Otus |