**Supplementary Table 2: Adult heartworm burdens in Carnivora hosts**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Host** | **Location** | **Animals** | **Adult worms /animal** | **Reference** |
| **Wolves** | | | | |
| Gray wolves | Italy | 3 | 5 | (Moroni et al., 2020) |
| Wolf  (*Canis lupus*) | Serbia | 1 | 37 | (Penezić et al., 2014) |
| Wolf  (*Canis lupus*) | Spain | 1 | 1 | (Segovia et al., 2001) |
| Grey wolf  (*Canis lupus lupus*) | Serbia | 1 | 42 | (Gavrilović et al., 2015) |
| Red wolves  (*Canis rufus gregoryi*) | USA | 8 | 77.8 | (Custer & Pence, 1981) |
| **Microfilaremia reported?** | Yes | | | (Gomes-de-Sá et al., 2022) |
| **Coyotes** | | | | |
| Coyotes  (*Canis latrans*) | USA | 77 | 21.29 | (Aher et al., 2016) |
| Coyotes  (*Canis latrans*) | USA | 36 | 12 | (King & Bohning, 1984) |
| Coyotes  (*Canis latrans*) | USA | 2 | 3 | (Wixsom et al., 1991) |
| Coyotes  (*Canis latrans*) | USA | 17 | 13.2 | (Wixsom et al., 1991) |
| Coyote  (Canis latrans) | USA | 1 | 11 | (Kazacos & Edberg, 1979) |
| Coyotes  (*Canis latrans*) | USA | 21 | 19.4 | (Sacks, 1998) |
| Coyotes  (*Canis latrans*) | USA | 147 | 8.7 | (Nelson et al., 2003) |
| Coyotes  (*Canis latrans*) | USA | 8 | 13.6 | (Agostine & Jones, 1982) |
| Coyotes  (*Canis latrans*) | USA | 1 | 5 | (Agostine & Jones, 1982) |
| Coyotes  (*Canis latrans*) | USA | 1 | 3 | (Agostine & Jones, 1982) |
| Coyotes  (*Canis latrans*) | USA | 20 | 9 | (Weinmann & Garcia, 1980) |
| Coyotes  (*Canis latrans*) | USA | 19 | 16.2 | (Weinmann & Garcia, 1980) |
| Coyotes  (*Canis latrans*) | USA | 17 | 13.6 | (Custer & Pence, 1981) |
| **Microfilaremia reported?** | Yes | | | (Weinmann & Garcia, 1980) |
| **Jackals** | | | | |
| Eurasian/golden jackals  (*Canis aureus*) | Iran | 4 | 5.25 | (Heidari et al., 2015) |
| Golden jackals  (*Canis aureus*) | Iran | 8 | 6.62 | (Sharifdini et al., 2022) |
| Golden jackals  (*Canis aureus*) | Bulgaria | 122 | 4.1 | (Panayotova-Pencheva et al., 2016) |
| Jackals  (*Canis aureus*) | Russia | 14 | 12 | (Kravchenko et al., 2016) |
| Golden jackals  (*Canis aureus*) | Romania | 12 | 2.92 | (Ionică et al., 2022) |
| Golden jackals  (*Canis aureus*) | Romania | 10 | 3 | (Ionică et al., 2016) |
| Golden jackals  (*Canis aureus*) | Hungary | 2 | 1 | (Tolnai et al., 2014) |
| **Microfilaremia reported?** | Yes | | | (Ionică et al., 2016) |
| **Foxes** | | | | |
| Red foxes  (*Vulpes vulpes*) | Spain | 46 | 4.39 | (Gortazar et al., 1994) |
| Red foxes  (*Vulpes vulpes*) | Spain | N/A | 4.4 | (Gortázar et al., 1998) |
| Gray fox  (*Urocyon cinereoargenteus*) | USA | 2 | 7 | (SIMMONS et al., 1980) |
| Gray fox  (*Urocyon cinereoargenteus*) | USA | 3 | 2 | (King & Bohning, 1984) |
| Red fox  (*Vulpes vulpes*) | USA | 1 | 5 | (King & Bohning, 1984) |
| Red foxes  (*Vulpes vulpes*) | USA | 5 | 3 | (Wixsom et al., 1991) |
| Red foxes  (*Vulpes fulva*) &  Gray foxes  (*Urocyon cinereoargenteus*) | USA | 6 | 5 | (Kazacos & Edberg, 1979) |
| Red foxes  (*Vulpes vulpes L.*) | Bulgaria | 29 | 4.79 | (Panayotova-Pencheva et al., 2016) |
| Foxes  (*Vulpes vulpes*) | Russia | 48 | 9.2 | (Kravchenko et al., 2016) |
| Red foxes  (*Vulpes vulpes*) | Romania | 4 | 1.5 | (Ionică et al., 2022) |
| Red Fox  (*Vulpes vulpes*) | Hungary | 20 | 1.5 | (Tolnai et al., 2014) |
| **Microfilaremia reported?** | Yes, but there is low risk that they are a competent reservoir. | | | (Marks & Bloomfield, 1998)  (McCall et al., 2008) |
| **Felidae** | | | | |
| Wild cat  (*Felis silvestris*) | Serbia | 1 | 2 | (Penezić et al., 2014) |
| Wild cats  (*Felis silvestris*) | Romania | 2 | 1 | (Ionică et al., 2022) |
| Cats | USA | 2 | 1.5 | (Nelson & Johnson, 2024) |
| Snow leopard (*Uncia uncia*) | Japan | 1 | 3 | (Murata et al., 2003) |
| **Microfilaremia reported?** | Infrequently, not considered competent reservoir. | | | (McCall et al., 2008) |
| **Procyonidae** | | | | |
| Raccoon dogs  (*Nyctereutes procyonoides*) | Russia | 28 | 12.6 | (Kravchenko et al., 2016) |
| Raccoon dog  (*Nyctereutes procyonoides*) | Romania | 1 | 1 | (Ionică et al., 2022) |
| Raccoon dogs  (*Nyctereutes procyonoides viverrinus*) | Japan | 8 | 1.75 | (Nakagaki et al., 2000) |
| **Microfilaremia reported?** | Infrequently, not considered competent reservoir. | | | (Ionică et al., 2022) |
| **Mustelidae** | | | | |
| European badger  (*Meles meles*) | Romania | 1 | 3 | (Ionică et al., 2022) |
| Ferret (*Mustela putorius furo*) | Hungary | 1 | 2 | (Molnár et al., 2010) |
| European badgers (*Meles meles*) | Greece | 2 | 3 | (Markakis et al., 2024) |
| **Microfilaremia reported?** | Infrequently, not considered competent reservoir. | | | (McCall et al., 2008) |
| **Pinnipedia** | | | | |
| Seal (*Phoca vitulina*) | Portugal (zoo) | 1 | 32 | (Alho et al., 2017) |
| Seal (*Arctocephalus pusillus pusillus*) | Portugal (zoo) | 3 | 17 | (Alho et al., 2017) |
| Harbor seal (*Phoca vitulina*) | South Korea (zoo) | 1 | 2 | (Kang et al., 2002) |
| **Microfilaremia reported?** | Infrequently, not considered competent reservoir. | | | (Alho et al., 2017) |
| **Ursidae** | | | | |
| Brown bear (*Ursus arctos*) | Greece | 1 | 4 | (Papadopoulos et al., 2017) |
| Black bear (*Ursus americanus*) | USA | 4 | 3 | (CRUM et al., 1978) |
| Black bear (*Ursus americanus*) | USA | 1 | 5 | (Johnson, 1975) |
| **Microfilaremia reported?** | Infrequently, not considered competent reservoir. | | | (McCall et al., 2008) |
| **Dogs** | | | | |
| Dogs | Iran | 10 | 23.5 | (Sharifdini et al., 2022) |
| Dogs | Bulgaria | 9 | 14.43 | (Panayotova-Pencheva et al., 2016) |
| Dog | USA | 1 | 150 | (Oliveira et al., 2021) |
| Dogs | Italy | 2 | 15.5 | (Santoro et al., 2019) |
| Dogs | Taiwan | 477 | 7.2 | (Wu & Fan, 2003) |
| Dogs | Mexico | 52 | 4.5 | (Bolio-Gonzalez et al., 2007) |
| Dogs | USA | 170 | 14 | (Kaiser & Williams, 2004) |
| Dogs | Australia | 15 | 5.8 | (Bidgood & Collins, 1996) |
| Dogs | Hungary | 2 | 9 | (Tolnai et al., 2014) |
| Dogs | N/A | 6 | 23.83 | (Rafailov et al., 2022) |
| Dogs | USA | 50 | 7.62 | (Henry et al., 2018) |
| Dogs | USA | 50 | 24.62 | (Henry et al., 2018) |
| Dogs | USA | 50 | 53.86 | (Henry et al., 2018) |
| Dogs | USA | 50 | 104.92 | (Henry et al., 2018) |
| Dogs | Panama | 3 | 44 | (Chacón & Candanedo, 2021) |
| **Microfilaremia reported?** | Yes | | | (Panetta et al., 2021) |

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