

FAUNA AQUATICA AUSTRIACA

ARACHNIDA: ARANEAE (Spiders)

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Spiders are clearly elements of the terrestrial fauna, but all Central European spiders have a more or less strong affinity to moist environments. Braun (1969) provided strong arguments for rejecting the use of the terms "xerobiont, xerophilous" in Central European spiders.

Only a single species, the "water spider" *Argyroneta aquatica*, lives underwater (Crome 1951). In Austria it inhabits shallow, lentic waters along the Alpine foothills and lowland areas; in the Alps themselves it is restricted to large valleys. The highest locality was reported at 980 m by Walder (1995) in the Außerfern. Numerous other spider species are so closely associated with aquatic habitats, however, that the Fauna Aquatica Austriaca would fail to take the full taxonomic diversity of aquatic systems into consideration by excluding them.

Several species inhabit the shorelines themselves and flee onto the open water surface; many are able to capture prey under water. The prey spectrum of "hunting spiders" (genus *Dolomedes*) even includes small vertebrates: tadpoles and fish up to the size of sticklebacks.

The number of spider species in Austria probably exceeds 900, although our knowledge about their regional distributions remains incomplete and the faunistic literature has only partially been critically examined and compiled (Styria 564 spp., 1761-1994, Kropf & Horak 1996; North Tyrol 683 spp., 1867-1999, Thaler 1998, 1999).

Some species lists from riparian and riverine forest environments are extensive, e.g. 87 and 99 species have been recorded from the Unterinntal (Steinberger & Thaler 1990, Steinberger 1998), ca. 130 in the alluvial zone of the Zillertal valley (Steiner 1955), 164 from the Rheintal (Steinberger & Meyer 1995), and the highest number (205) along the Lech in Tyrol (Steinberger 1996). Nonetheless, only few species are tightly and exclusively linked to riparian habitats.

Beyond those species bound to vegetation-free shores and banks, the following list also includes those species that prefer riparian vegetation or moist habitats. Of course, the underlying criteria are not rigid. The comprehensive overview on the "Habitats of Central European Spiders" ("Lebensräume mitteleuropäischer Spinnen"; Hänggi et al. 1995) provides information on the habitat specificity of many species and on the current status of our knowledge.

In the comprehensive evaluation of aquatic habitats spiders are considered to be indicators of an intact aquatic environment, particularly in the realm of the land-water ecotones.

References

- Braun, R. (1969): Zur Autökologie und Phänologie der Spinnen (Araneida) des Naturschutzgebiets "Mainzer Sand". Gleichzeitig ein Beitrag zur Kenntnis der Thermophilie bei Spinnen. Mainzer Naturw. Arch. 8: 193-288.
- Crome, W. (1951): Die Wasserspinne. Neue Brehm-Bücherei 44. Geest & Portig, Leipzig.
- Hänggi, A., E. Stöckli & W. Nentwig (1995): Lebensräume mitteleuropäischer Spinnen. Charakterisierung der Lebensräume der häufigsten Spinnenarten Mitteleuropas und der mit diesen vergesellschafteten Arten. Miscellanea Faunistica Helvetiae 4: 1-459.
- Kropf, C. & P. Horak (1996): Die Spinnen der Steiermark (Arachnida, Araneae). Mitt. naturw. Ver. Steiermark, Sonderheft: 1-112.
- Platnick, N. I. (2001): The world spider catalog, version 2.0. American Museum of Natural History, online at <http://research.amnh.org/entomology/spiders/catalog81-87/index.html>.
- Steinberger, K. H. (1996): Die Spinnenfauna der Uferlebensräume des Lech (Nordtirol, Österreich) (Arachnida: Araneae). Ber. nat.-med. Verein Innsbruck 83: 187-210.
- Steinberger, K. H. (1998): Zur Spinnenfauna der Innauen des Unterinntals (Nordtirol, Österreich) II (Arachnida: Araneae, Opiliones). Ber. nat.-med. Verein Innsbruck 85: 187-212.
- Steinberger, K. H. & E. Meyer (1995): Die Spinnenfauna des Naturschutzgebietes Rheindelta (Vorarlberg, Österreich) (Arachnida: Araneae). Ber. nat.-med. Verein Innsbruck 82: 195-215.
- Steinberger, K. H. & K. Thaler (1990): Zur Spinnenfauna der Innauen bei Kufstein - Langkampfen, Nordtirol (Arachnida: Aranei, Opiliones). Ber. nat.-med. Verein Innsbruck 77: 77-89.
- Steiner, W. (1955): Die Fauna des Entwässerungsgebiets Straß-Schlitters, Zillertal, Tirol. Mitt. B.-Versuchsinstitut für Kulturtechnik und Technische Bodenkunde 13: 1-272.
- Thaler, K. (1998): Die Spinnen von Nordtirol (Arachnida, Araneae): Faunistische Synopsis. Veröff. Mus. Ferdinandeum (Innsbruck) 78: 37-58.
- Thaler, K. (1999): Fragmenta Faunistica Tirolensia - XII (Arachnida .. Mycetophiloidea). Ber. nat.-med. Verein Innsbruck 86: 201-211.
- Walder, C. (1995): Zur Verbreitung der Wasserspinne *Argyroneta aquatica* (Clerck) in Österreich (Arachnida, Araneida, Argyronetidae). Ber. nat.-med. Verein Innsbruck 82: 191-194.

Species inventory

Family Theridiidae

Genus Enoplognatha PAVESI, 1880

Enoplognatha tecta KEYSERLING, 1884

Genus Robertus O.P.-CAMBRIDGE, 1879

Robertus unguatus VOGELSANGER, 1944

Family Theridiosomatidae

Genus Theridiosoma O.P.-CAMBRIDGE, 1879

Theridiosoma gemmosum (L. KOCH, 1878)

Family Linyphiidae

Subfamily Erigoninae (Micryphantidae, sensu WIEHLE)
(inkl. Donacochareae)

Genus Caviphantes OL, 1960

Caviphantes saxetorum (HULL, 1916)

Genus Donacochara SIMON, 1884

Donacochara speciosa (THORELL, 1875)

Genus Collinsia O.P.-CAMBRIDGE, 1913

Collinsia distincta (SIMON, 1884)

Genus Diplocephalus BERTKAU, 1883

Diplocephalus alpinus (O.P.-CAMBRIDGE, 1872)

(= *Diplocephalus connectens* Kulczynski, 1894)

Genus Hilaira SIMON, 1884

Hilaira excisa (O.P.-CAMBRIDGE, 1870)

Genus Janetschekia SCHENKEL, 1939

Janetschekia monodon (O.P.-CAMBRIDGE, 1872)

Genus Oedothorax BERTKAU, 1883

Oedothorax agrestis (BLACKWALL, 1853)

Oedothorax gibbifer (KULCZYNSKI, 1882)

Oedothorax retusus (WESTRING, 1851)

Genus Trichopterna KULCZYNSKI, 1894*Trichopterna thorelli* (WESTRING, 1861)**Subfamily Linyphiinae (ohne Donacochareae)****Genus Bathyphantes MENGE, 1866***Bathyphantes approximatus* (O.P.-CAMBRIDGE, 1871)*Bathyphantes setiger* F.P.P.-CAMBRIDGE, 1894**Genus Porrhomma SIMON, 1884***Porrhomma convexum* (WESTRING, 1851)*Porrhomma oblitum* (O.P.-CAMBRIDGE, 1871)*Porrhomma pygmaeum* (BLACKWALL, 1834)**Family Tetragnathidae****Genus Tetragnatha LATREILLE, 1804***Tetragnatha extensa* (LINNAEUS, 1758)*Tetragnatha reimoseri* (ROSCA, 1939) (= *Eucta kaestneri* (CROME, 1954))*Tetragnatha shoshone* LEVI, 1981*Tetragnatha striata* L. KOCH, 1862**Family Araneidae****Genus Hypsosinga AUSSERER, 1871***Hypsosinga heri* (HAHN, 1831)**Genus Larinia SIMON, 1874***Larinia bonneti* SPASSKY, 1938*Larinia elegans* SPASSKY, 1939 (= *Singa phragmiteti* NEMENZ, 1956)**Genus Larinioides CAPORACCO, 1934***Larinioides cornutus* (CLERCK, 1757)*Larinioides suspicax* (O.P.- CAMBRIDGE, 1876) (= *L. folium* (SCHRANK, 1803) auct.)**Genus Singa C.L. KOCH, 1836***Singa nitidula* C.L. KOCH, 1844**Family Lycosidae****Genus Arctosa C.L. KOCH, 1847***Arctosa alpigena lamperti* DAHL, 1908*Arctosa cinerea* (FABRICIUS, 1777)*Arctosa stigmosa* (THORELL, 1875)

Genus Hygrolycosa DAHL, 1908*Hygrolycosa rubrofasciata* (OHLERT, 1865)**Genus Pardosa** C.L. KOCH, 1847*Pardosa amentata* (CLERCK, 1757)*Pardosa morosa* (L. KOCH, 1870)*Pardosa pseudostrigillata* TONGIORGI, 1966*Pardosa saturator* SIMON, 1937*Pardosa torrentum* SIMON, 1876*Pardosa wagleri* (HAHN, 1822)**Genus Pirata** SUNDEVALL, 1833*Pirata knorri* (SCOPOLI, 1763)*Pirata piraticus* (CLERCK, 1757)*Pirata piscatorius* (CLERCK, 1757)*Pirata tenuitarsis* SIMON, 1876**Family Pisauridae****Genus Dolomedes** LATREILLE, 1804*Dolomedes fimbriatus* (Clerck, 1757)*Dolomedes plantarius* (Clerck, 1757)**Family Cybaeidae (= Argyronetidae)****Genus Argyroneta** LATREILLE, 1804*Argyroneta aquatica* (CLERCK, 1757)**Family Hahniidae****Genus Antistea** SIMON, 1897*Antistea elegans* (BLACKWALL, 1841)**Family Clubionidae****Genus Clubiona** LATREILLE, 1804*Clubiona phragmitis* C.L. KOCH, 1843*Clubiona similis* L. KOCH, 1867

Family Gnaphosidae**Genus Gnaphosa** LATREILLE, 1804*Gnaphosa rhenana* MÜLLER & SCHENKEL, 1895**Family Thomisidae****Genus Xysticus** C.L. KOCH, 1835*Xysticus lineatus* (WESTRING, 1851)*Xysticus viduus* KULCZYNSKI, 1898**Family Salticidae****Genus Heliophanus** C.L. KOCH, 1833*Heliophanus patagiatus* THORELL, 1875**Genus Marpissa** C.L. KOCH, 1846*Marpissa radiata* (GRUBE, 1859)**Genus Sitticus** SIMON, 1901*Sitticus caricis* (WESTRING, 1861)