

Pleuston

From Wikipedia, the free encyclopedia

Pleuston are the organisms that live in the thin surface layer existing at the air-water interface of a body of water as their **habitat**.^[1] Examples include some **cyanobacteria**, some **gastropods**, the ferns *Azolla* and *Salvinia* and the seed plants *Lemna*, *Wolffia*, *Pistia*, *Eichhornia crassipes* and *Hydrocharis*. Some fungi and fungi-like protists may be also found.



The **water strider**, a common pleuston

Source: <https://en.wikipedia.org/wiki/Pleuston>

Gerridae

From Wikipedia, the free encyclopedia

(Redirected from **Water strider**)

"Water skipper" redirects here. For the butterfly with this common name, see Parnara monasi.

The **Gerridae** are a family of insects in the order **Hemiptera**, commonly known as **water striders**, **water bugs**, **pond skaters**, **water skippers**, or **jesus bugs**. Consistent with the classification of the Gerridae as true bugs (*i.e.*, suborder **Heteroptera**), gerrids have mouthparts evolved for piercing and sucking, and distinguish themselves by having the unique ability to walk on water. Gerridae, or water striders, are anatomically built to transfer their weight to be able to run on top of the water's surface. As a result, one could likely find water striders present in any pond, river, or lake. Scientists have identified over 1,700 species of gerrids, 10% of them being **marine**.^[2]

While 90% of the Gerridae are freshwater bugs, the oceanic *Halobates* makes the family quite exceptional among insects. The genus *Halobates* was first heavily studied between 1822 and 1883 when Buchanan-White collected several different species during the **Challenger Expedition**.^[3] Around this time, Eschscholtz discovered three species of the Gerridae, bringing attention to the species, though little of their biology was known.^[3] Since then, the Gerridae have been continuously studied due to their ability to walk on water and unique social characteristics. Small gerrids have frequently been confused with the other **semiaquatic** bugs, the **Veliidae**. The most consistent characteristic used to separate these two families are internal genitalia differences. Since internal genitalia require specific training and tools to identify, it is almost impossible to tell a member of the Gerridae apart from a member of the Veliidae by external visual cues. One must study their habitat and behaviors to properly differentiate the two without looking at their specific **anatomy**.

Gerridae



Adult water strider
Aquarius remigis

Scientific classification

Kingdom:	Animalia
Phylum:	Arthropoda
Class:	Insecta
Order:	Hemiptera
Suborder:	Heteroptera
Infraorder:	Gerromorpha
Superfamily:	Gerroidea
Family:	Gerridae
	Leach, 1815

Source: <https://en.wikipedia.org/wiki/Gerridae>

Veliidae

From Wikipedia, the free encyclopedia

Veliidae is a family of predatory insects in the suborder **Heteroptera**. They are commonly known as **riffle bugs**, **smaller water striders** or **broad-shouldered water striders** because the segment immediately behind the head is wider than the rest of the abdomen, unlike in the typical water striders (**Gerridae**), close relatives which are also in superfamily **Gerroidea**. Unlike some Gerridae, riffle bugs are small, typically about 4.5 mm in length.

Riffle bugs



Velia caprai

Scientific classification

Kingdom:	Animalia
Phylum:	Arthropoda
Class:	Insecta
Order:	Hemiptera
Suborder:	Heteroptera
Infraorder:	Gerromorpha
Superfamily:	Gerroidea
Family:	Veliidae
	Amyot & Serville, 1843

Source: <https://en.wikipedia.org/wiki/Veliidae>

Whirligig beetle


From Wikipedia, the free encyclopedia
(Redirected from **Gyrinidae**)

The **whirligig beetles** are a family (**Gyrinidae**) of **water beetles** that usually swim on the surface of the water if undisturbed, though they swim underwater when threatened. They get their common name from their habit of swimming rapidly in circles when alarmed, and are also notable for their divided eyes which are believed to enable them to see both above and below water.^[1] The family includes some 700 extant species worldwide, in 15 genera, plus a few fossil species. Most species are very similar in general appearance, though they vary in size from perhaps 3 mm to 18 mm in length.^[2] They tend to be flattened and rounded in cross section, in plain view as seen from above, and in longitudinal section. In fact their shape is a good first approximation to an **ellipsoid**, with legs and other appendages fitting closely into a streamlined surface.

Taxonomy [\[edit \]](#)

The Gyrinidae generally have been regarded as a family in the **Adephaga**, but there is a great deal of work underway to clarify the relationships both within the Adephaga and within the **Coleoptera** in general.^[3] Within the Adephaga there is confusion as well, with various rival proposals in contention; for example some workers regard the Gyrinidae as being closely related to such families as the **Dytiscidae** and various other predacious water beetle families, whereas other analyses suggest rather that the Gyrinidae are a sister group to the rest of the Adephaga.^[4] Some of the Adephagan families seem to be polyphyletic themselves, so a definitive cladistic structure will have to await more advanced nucleic acid analyses.^[5]

Whirligig beetle



Gyrinus natator, 1909 illustration

Scientific classification

Kingdom:	Animalia
Phylum:	Arthropoda
Class:	Insecta
Order:	Coleoptera
Suborder:	Adephaga
Family:	Gyrinidae
	Latreille, 1802

Source: https://en.wikipedia.org/wiki/Whirligig_beetle