Jellyfish facts for kids



Jellyfish are animals of the phylum <u>Cnidaria</u>. They are a <u>monophyletic clade</u>, the **Medusozoa**. Most of them live in the oceans, in salt water, where they eat small sea animals like plankton and little fish, and <u>float</u> in the sea. Only a few jellyfish live in fresh water.

They have soft bodies and long, stinging, venomous tentacles that they use to catch their prey, usually small plankton animals or small crustaceans or tiny fish. Some jellyfish hunt other jellyfish. Venom is injected by stinging cells

called *nematocysts*. A jellyfish is 97% water.

Most jellyfish have a <u>bell</u>-shaped <u>body</u> and long <u>tentacles</u> at the underside of the body. Tentacles are long "arms" with special stinging <u>cells</u> called <u>nematocysts</u>. They move by contracting their bodies, but they do not have much control over where they go: most of the time, they drift with the water current. The largest type of jellyfish is the Lion's mane jellyfish, which has tentacles that can be as long as 60 meters, but most jellyfish are much smaller.

The Medusozoa are four <u>classes</u> of the Cnidaria:

White-spotted jellyfish

Scyphozoa: the true jellyfishCubozoa: the box jellyfish

Staurozoa: the stalked jellyfish

Hydrozoa: the hydroids

There are many types of jellyfish. The smallest jellyfish are just a few inches across. The largest jellyfish is the Lion's mane (*Cyanea capillata*), whose body can be over 3 feet (1 m) across, with much longer tentacles. Some jellyfish glow in the dark (this is called <u>phosphorescence</u>). Some of the most dangerous jelly fish include the <u>box jelly</u> (Genuses *Chironex*, *Chiropsalmus* and *Carybdea*) and the tiny, two-cm-across <u>Irukandji jelly</u> (*Carukia barnesi*); the venomous sting of these jellyfish can kill a person.

Many animals eat jellyfish, including sea turtles and some fish (including the sun fish). Humans eat jellyfish too; especially in Asia jellyfish are considered a delicacy. Jellyfish spoil very quickly after they are caught. Sometimes they are dried to preserve them. There is a different process in which they are cleaned, which can take up to 40 days. They are often eaten in a kind of salad, with soy sauce or vinegar.



Life cycle

Polyps

Most jellyfish undergo two distinct life history stages (body forms) during their <u>life cycle</u>. The first is the <u>polypoid</u> stage, when the animal takes the form of a small stalk with feeding tentacles. Very often, this polyp is attached to the sea floor, or to another hard surface; it rarely moves around. A polyp that lives that way is called <u>sessile</u>. In some cases, the polyp is free-floating. Polyps generally have a mouth surrounded by upward-facing tentacles. Polyps may be on their own or in groups, and some bud <u>asexually</u>, making more polyps. Most are very small, measured in <u>millimeters</u>.

In the second stage, the tiny polyps asexually produce jellyfish, each of which is known as a <u>medusa</u>. Tiny jellyfish swim away from the polyp and then grow and feed in the <u>plankton</u>. Jellyfish reproduce both sexually and asexually. Well-fed adult jellyfish <u>spawn</u> daily. In most species, spawning is controlled by light, so the entire population spawns at about the same time of day, often at either dusk or dawn. Jellyfish are usually either male or female (with occasional hermaphrodites). In most cases, adults release sperm and eggs into the surrounding



water, where the (unprotected) eggs are fertilized and mature into new organisms.

Box jellyfish at Bakoven Rock

Medusae have a <u>radially symmetric</u>, umbrella-shaped body called a bell, which is usually supplied with marginal tentacles that capture prey. A few species of jellyfish do not have the polyp portion of the life cycle, but go from jellyfish to the next generation of jellyfish through direct

development of fertilized eggs. Jellyfish at the medusa stage usually lives only up to six months, after which it dies.

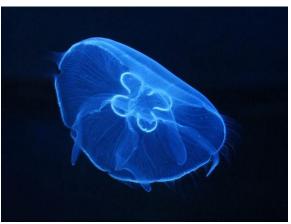
Jellyfish eat <u>plankton</u> and small fish, which they catch using their <u>venomous</u> tentacles. Jellyfish may live in <u>symbiosis</u> with <u>algae</u>. The jellyfish transports them into sunlight and get <u>nutrients</u> from the algae's <u>photosynthesis</u>. Both forms of jelly fish have small tentacles with nematocysts (stinging cells) that sting and can hurt people on contact.

A group of jellyfish is called a *smack*; an occurrence of many jellyfish simultaneously is sometimes called a *bloom*.

Images for kids



A flower hat jelly (*Olindias formosa*) photographed at the Osaka Aquarium Kaiyukan



A moon jelly shown in false color at the $\underline{\underline{Pairi}}$ $\underline{\underline{Daiza}}$



The <u>lion's mane jellyfish</u> (*Cyanea capillata*) is one of the larger species of jellyfish.

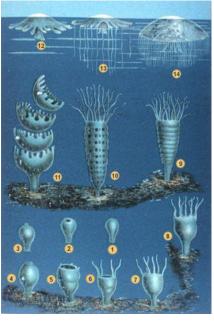


Illustration of two life stages of seven jelly species



Aurelia sp. occurs in large quantities in most of the world's coastal waters. Members of this genus are nearly identical to each other



A group of Pacific sea nettle jellyfish, *Chrysaora fuscescens*, in an aquarium exhibit



The deadly Malo kingi, an example of a highly venomous box jellyfish responsible for many deaths



Like many species of jellyfish, the sting of some species of *Mastigias* have little or no discernible effect on humans.