

- Marine biology

Do fish see in colour?

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It depends. Fish active during the day, especially in bright environments near the surface of tropical waters, tend to see a wide range of colours. Barrier Reef anemonefish, for example, see ultraviolet light in addition to the visible spectrum that we detect. This ability may help them find other individuals by highlighting the contrast between their bodies' white vertical stripes and orange background, as well as make it easier to spot their zooplankton prey and the sea anemones they live in symbiosis with. Immune to the anemones' stinging cells, the fish gain a safe place to live. In turn, they provide benefits such as excreting nutrients and protecting the anemones from predators. Fish that live at depth or are nocturnal, on the other hand, see well in low light but distinguish colours poorly. Some species of fish may be able to detect the polarisation of light, too.

