A great flow of tropical water pushes southwards along the edge of Western Australia’s continental shelf, sending giant swirling eddies into coastal waters and out to sea. This is the Leeuwin Current — the longest boundary current in the world, and an enormous influence on the life cycle and distribution of many WA marine species.

**Who goes with the flow?**

**Turtles**

The Leeuwin Current can have a significant impact on the breeding sites of turtles from their northern nesting areas. Fertilised eggs are laid on beaches near coastal waters. Photo: Department of Environment and Conservation

**Whale shark**

The mass spawning of corals at Ningaloo Reef exposes the massive whale shark to a mini-planktonic buffet. Photo: Gary Bell

**Pygmy blue whales**

Various current systems (including the Leeuwin Current) influence the location and population of pygmy blue whales. They are usually seen in years when the Leeuwin Current is stronger. Photo: Barb Malc

**Western rock lobster**

Western rock lobster larvae drift in the open ocean for nearly a year before settling on reefs in tropical and coastal areas. A strong Leeuwin Current annually results in higher numbers of young lobsters reaching coastal nurseries. Photo: Barb Malc

**Humpback whales**

Humpback whales migrate with the Leeuwin Current, from their southern feeding grounds in Antarctica. Mothers and calves stop to rest at certain areas of the coast during the long trek. Photo: Clay Bryce

**Southern bluefin tuna**

Between September and March, southern bluefin tuna migrate from their winter breeding grounds in Indian Ocean waters, between Java and northern Western Australia. As they grow, the young tuna ride the Leeuwin Current and coastal areas. A strong Leeuwin Current normally results in higher numbers of young tuna reaching coastal nurseries. Photo: OCEANA, Keith Ellenbogen

**Australian herring**

Australian herring dive offshore from southern Australia during the southern winter and move along the southern coast in the spring and autumn. Photo: Ben Barkworth

**Mud crabs**

Mud crabs feed on the bottom of the sea and are distributed from Busselton to Esperance. Depending on the strength of the Leeuwin Current, mud crabs may be carried as far as the southern coast of South Australia. Photo: Tim Leary

**Coral**

Coral breeding sites are located near the northern coast of Java, and the Leeuwin Current transports the eggs and larvae south and east into coastal nurseries. Some corals settle on the reef and continue to reproduce. Photo: Tim Leary

**Sawfish**

The Leeuwin Current can have a significant influence on the distribution of sawfish, including the massive whale shark — the largest living fish in the world. Photo: OCEANA, Keith Ellenbogen

**New data**

Certainty within the southern waters of the Leeuwin Current are the high linear and transverse transport of nutrients, temperate species and organic matter. The Leeuwin Current also acts as a funnel, transporting nutrients from the northern waters of tropical Australia into the warm waters of the south-west coast of WA. The Leeuwin Current may interact with other current systems, including the Leeuwin Current Loop, to affect the biological productivity of the region.

**Tentacles**

Phytoplankton, which are single-celled plants, are a major food source for many marine animals such as whales and fish. The Leeuwin Current transports warmer waters south, which results in higher phytoplankton and zooplankton populations. These populations provide a food source for many fish and marine mammals.

**The current and marine life**

The Leeuwin Current transports warmer waters south, which results in higher phytoplankton and zooplankton populations. These populations provide a food source for many fish and marine mammals.

**Pygmy blue whales**

An abnormally strong Leeuwin Current in 1999 and 2000 swept mud crab larvae far away from where they were spawned. Photo: Tim Leary

**Tentacles**

Phytoplankton, which are single-celled plants, are a major food source for many marine animals such as whales and fish. The Leeuwin Current transports warmer waters south, which results in higher phytoplankton and zooplankton populations. These populations provide a food source for many fish and marine mammals.

**Southern bluefin tuna**

Between September and March, southern bluefin tuna migrate from their winter breeding grounds in Indian Ocean waters, between Java and northern Western Australia. As they grow, the young tuna ride the Leeuwin Current and coastal areas. A strong Leeuwin Current normally results in higher numbers of young tuna reaching coastal nurseries. Photo: OCEANA, Keith Ellenbogen

**Tentacles**

Phytoplankton, which are single-celled plants, are a major food source for many marine animals such as whales and fish. The Leeuwin Current transports warmer waters south, which results in higher phytoplankton and zooplankton populations. These populations provide a food source for many fish and marine mammals.

**Southern bluefin tuna**

Between September and March, southern bluefin tuna migrate from their winter breeding grounds in Indian Ocean waters, between Java and northern Western Australia. As they grow, the young tuna ride the Leeuwin Current and coastal areas. A strong Leeuwin Current normally results in higher numbers of young tuna reaching coastal nurseries. Photo: OCEANA, Keith Ellenbogen

**Tentacles**

Phytoplankton, which are single-celled plants, are a major food source for many marine animals such as whales and fish. The Leeuwin Current transports warmer waters south, which results in higher phytoplankton and zooplankton populations. These populations provide a food source for many fish and marine mammals.

**Southern bluefin tuna**

Between September and March, southern bluefin tuna migrate from their winter breeding grounds in Indian Ocean waters, between Java and northern Western Australia. As they grow, the young tuna ride the Leeuwin Current and coastal areas. A strong Leeuwin Current normally results in higher numbers of young tuna reaching coastal nurseries. Photo: OCEANA, Keith Ellenbogen

**Tentacles**

Phytoplankton, which are single-celled plants, are a major food source for many marine animals such as whales and fish. The Leeuwin Current transports warmer waters south, which results in higher phytoplankton and zooplankton populations. These populations provide a food source for many fish and marine mammals.

**Southern bluefin tuna**

Between September and March, southern bluefin tuna migrate from their winter breeding grounds in Indian Ocean waters, between Java and northern Western Australia. As they grow, the young tuna ride the Leeuwin Current and coastal areas. A strong Leeuwin Current normally results in higher numbers of young tuna reaching coastal nurseries. Photo: OCEANA, Keith Ellenbogen

**Tentacles**

Phytoplankton, which are single-celled plants, are a major food source for many marine animals such as whales and fish. The Leeuwin Current transports warmer waters south, which results in higher phytoplankton and zooplankton populations. These populations provide a food source for many fish and marine mammals.