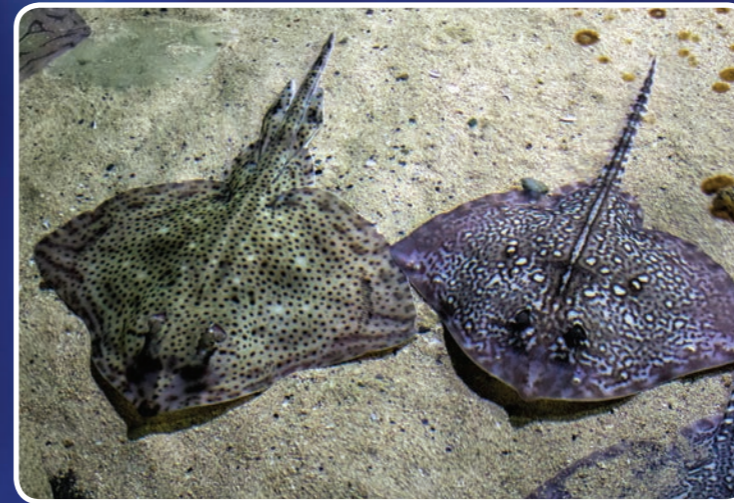




Foras na Mara
Marine Institute

RAY^{-ing} THE SKATES



Rays and skates, close relations of sharks, have been swimming in our seas for over 400 million years. This is before the first dinosaurs even appeared!

They are flat-bodied, and most live close to the sea bed. Twenty-nine species have been recorded in Ireland's waters. Hotspots for these animals include Tralee Bay and Galway Bay. In Ireland ten ray and skate species have been listed as vulnerable, endangered or critically endangered by the International Union for the Conservation of Nature (IUCN).



Marine Institute scientists are working on a census programme with local fishermen in Tralee Bay to learn more about the rare species that live there, including the endangered Undulate Ray, Common Stingray and White Skate, as well as the critically endangered Angel Shark, which faces a high risk of extinction in the wild.

Rays and skates are threatened by climate change and overfishing. The largest skate



in Ireland, and the world, is the Common Skate which grows to almost 3m long. This species, which can live for 50 years, is critically endangered. In fact, there are more snow leopards than there are common skate! Distinguishing a ray from a skate can be challenging. Skates have much thicker tails while rays have whip-like tails. Stingrays also have a venomous barb on their tails for defence.

Skates lay eggs, and when the empty cases wash up on beaches they are called mermaid's purses. Their size and shape can indicate the species it belongs to. The Marine Institute supports Purse Search Ireland, a citizen science project which records mermaid's purses found around the country (raysawareness.ie).

Scientists at the Marine Institute's Newport Catchment Facility are involved in an international project that will tag and examine the movement of basking shark, rays and skates between Ireland and Scotland.

Irish anglers can take part in tagging programmes to learn more about these animals so they can be better protected. Under the EU Common Fisheries Policy rare species must be released if caught. Marine Institute researchers also assess the stocks of ray and skate species in Irish waters on a regular basis.

Did you know?

Like sharks, skates and rays can detect electrical signals given off by other animals. The Atlantic Torpedo Ray takes this to the next level by producing 170 – 220V of electricity to stun its prey. Shocking!

