

## 03. Sea birds

The Raphaëla Le Gouvello education packet - Windsurfing solo across the Indian Ocean

<http://www.respectocean.com>



### Wildlife / Biodiversity



#### Did you know?

In East Asia, coastal people have long used trained cormorants to fish.

They tie a line to the cormorant to reel it back in when they want. A tight collar fitted around its neck keeps it from swallowing the fish it catches.



Gannet



Cormorant



Gull

Sea birds live mainly on the high seas. They represent only 3% of the 9,000 known bird species throughout the world, and are classified into 15 families according to their various characteristics.

These birds spend most of their time flying above the open seas, returning to land to nest and mate.

#### Genetic mysteries

Ornithologists regularly update their classification of birds as genetic discoveries are made. Some birds placed in the same family based on apparent similarities have actually turned out to be so genetically different that they constitute distinct species with their own characteristics. It is estimated that 250 species of birds live partially or exclusively at sea.

#### Identifying characteristics

Sea birds are generally lighter than their land "cousins" so they can more easily float on the water. They have fine, light bones, an insulating layer of fat, and feathers that "hold" air. As they dive into the water, they shoot the air out of their feathers to propel themselves deeper into the sea. Their beaks are long and sharp, and some species (like the **cormorant** and the **gull**) have a hook at the end for a firm grip on their slippery, wiggly prey. Often long and flexible, their neck is shaped for swallowing fish, the basis of their diet.

Ocean birds have webbed feet that help them swim. Some, like the **gannet**, have extra large feet that serve as an underwater propeller for high-speed chases after fish. During the mating season, sea birds cover their eggs with their webbed feet to aid incubation.

With their oar-shaped wings, they move easily through the water. Given their typical saltwater environment, sea birds have their very own desalination gland that eliminates excess salt.

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Common murre



Albatross



Petrel

### Activity

Along her way, Raphaëla will most likely encounter red-footed boobies, little terns, Australian pelicans... Try to find out if these birds have "cousins" in your part of the world.

## What do sea birds eat?

Everything they eat is from the sea: small fish, zooplankton (mainly little crustaceans, which in turn get their nourishment from absorbing phytoplankton).

Sea birds have a varied diet. They capture prey of different sizes, from squid (for the largest birds) to mollusks—little morsels they get to by breaking the shell with their powerful beak. When raising their young, some sea birds become more selective. **Common murre**s and **puffins**, for instance, will eat only fish.

## Mating on land

Sea birds return to land to nest. During this period, they gather in colonies by the hundreds. Several different species may share the same cliff: gannets, which need lift to take wing, nest up high; gulls prefer narrow ledges. They all build their nests on the sides of cliffs or on small rocky islets to stay safely away from potential predators (other birds, rats) that would love to steal their eggs or attack their chicks. Since sea birds all lay their eggs at about same time, for the predators these nesting grounds are hard to resist. But no sooner does one approach than a bird will sound the alert, mobilizing dozens of neighbors to chase the intruder away.

## The families of sea birds

Les oiseaux marins sont classés en cinq familles distinctes :

Sea birds are classified into five distinct families:

Diomedidae (such as **albatrosses**). These very large pelagic birds usually live on the seas of the southern hemisphere.

Procellariidae, (such as **petrels** and **puffins**). Except when nesting, they live exclusively on the high seas. Sometimes they gather by the hundreds at the bow of a ship or along the line of a trawl.

Hydrobatidae (such as the **petrel**). Outside of the nesting season, these little ocean birds come to shore only during raging storms, when they take shelter in coastal coves. To sailors off the coast of Brittany they are a bad omen—if they fly too near their boat, it means a storm is on its way.

Sulidae, (such as the **gannet**). These birds are both coastal and pelagic (ocean-going). To feed, they scout for a school of fish then, from up high, dive bomb beak first, wings tucked back, straight into the water. Once one takes the plunge, dozens more quickly follow, knowing there must be good fishing below!

Laridae (such as **rissa tridactyla**, also known as the **black-legged kittiwake**). This web-footed bird is the only pelagic bird that mates on the coasts of France, where it chooses a spot on high cliffs.

Alcidae (like the **auk**, better known as the **penguin**). This family also includes common murre and the great auk, a species now extinct.