



Dear Dolphin Friend,

The Year of the Dolphin 2007 has given us the opportunity to present one species of dolphin in more detail each month. September's dolphin is Risso's dolphin (*Grampus griseus*), a species distinctive for its large, stocky body structure and numerous scars, which was but little known until now.

## Risso's Dolphin

Risso's dolphin, also known as the Grampus, has a grey back, grey flanks and a white belly. The extremities are often darker than the rest of the body. Especially older Risso's dolphins are easily recognizable from their scars, which they get from other Risso's dolphins' teeth during intensive social interactions (the scars can also partly derive from fights with their preferred prey, the cuttlefish). In addition, the colour gets lighter with increasing age. They have teeth only at the peak of the lower jaw, used in play or fights. The upper jaw is generally toothless. Risso's dolphins are robust and, growing up to four metres in length, the fifth biggest among the dolphinids. Unfortunately, there is no definite information about the size of the remaining population. Risso's dolphins occur in groups of between three and one hundred animals, but bigger groups of up to 4000 animals have been sighted. They are often seen in the company of other whales and dolphins.



### Where do Risso's dolphins live?

Risso's dolphins occur in all tropical and warm seas to the point of the sixtieth latitude in the northern and southern hemisphere, preferring a water temperature between 10 and 35 degrees Celsius. They are a pelagic species, which means that they prefer deep water and occur close to the coast only where the continental shelf slope approaches close to land or where the sea is deeper than one hundred metres inshore, e.g. at the Azores. In these waters, squid are likely to be widespread and numerous. In summertime, they are also seen in cooler waters, for instance close to Wales at the island Bardsey, where WDCS does research into these animals every

year. There are indications of a seasonal migration.

### Threats

Bycatch is among the worst threats to these animals, meaning that they are caught up in fishing nets and then drown. In some regions, they are intentionally killed for food or killed by fishermen who consider them to be competition. As a deep-diving species, they are also threatened by noise pollution, caused mainly by ship traffic and military sonar. This species is also heavily burdened by toxins such as mercury and chlorides, particularly in the Mediterranean Sea, but also in other regions.

### Protection within the framework of international conventions

The North- and Baltic Sea populations are listed in Appendix II of the Bonn Convention for on the Conservation of Migratory Species of Wild Animals (CMS). In the Mediterranean Sea, the animals are protected by the regional ACCOBAMS and in the North- and Baltic Sea by the ASCOBANS Agreements. The World Conservation Union (IUCN) lists the animals in the category “data deficient“, which means that there is not enough information available to say to what degree the Risso’s dolphin is threatened.

### Risso’s dolphins in the waters of the North Atlantic

“Risso’s dolphins are a fascinating species. In North Atlantic waters they are typically elusive although their occurrence may be underestimated as they are a large grey dolphin and may be mistaken for the similarly sized and shaped bottlenose dolphin. They are, however, a very different species with different habits. Risso’s seem to prefer deeper waters, and this may relate to the fact that they prefer to eat squid that live at depth. In British waters we tend to encounter them off the west coast near islands with good access to deep zones. Little is known about them, making conservation plans difficult to develop. Nor do we have a good idea of population sizes. However, if areas can be identified that are important for them this may be a good starting point for conservation plans. In the ongoing field research conducted by WDCS in northern Cardigan in Wales, we often encounter this species and this area seems to be important for them, including for rearing their young. Close up they are quite unlike the bottlenose dolphins, beyond lacking a beak, they swim in a different way, are typically heavily scarred and have a distinctly tall dorsal fin. They are highly social and there often seems to be much communication going on between animals in a group with much dramatic splashing at the surface.”

## Mark Simmonds, International Director of Science for WDCS

### Risso's dolphins in the Mediterranean Sea

"I was "enchanted" by Risso's dolphins (*Grampus griseus*) from the first time I saw them back in 1988 in the deep waters of the western Ligurian Sea. Although this species is widely distributed in temperate and tropical waters worldwide, very little is known about Risso's dolphins and this convinced myself to start to study them. Data on distribution, abundance, social structure, genetics and bioacoustics were collected in the past 20 years and by means the photo-identification technique it's now possible to follow the story of many individuals and in some cases from their birth. A core group of individuals is in fact present during the summer, showing a degree of site fidelity.

Risso's dolphins prefer continental slope waters with steep relief and submarine canyons and the Ligurian-Corso-Provençal basin is one of the few areas in the Mediterranean Sea where the continental shelf is close to the coast, giving especially good opportunities to observe and study this species.

Scientific results indicate that Risso's dolphins in the Mediterranean Sea are genetically differentiated from those in the eastern Atlantic. This implies that gene flow between the two areas is limited or negligible and that the Mediterranean animals constitute a distinct population.

To date, no specific conservation measures have been taken for Mediterranean Risso's dolphins population, considered Data Deficient (DD) in the IUCN Red List of Threatened Species, because of inadequate information to assess their extinction risk. The existence of a Marine Sanctuary for cetaceans in the Corso-Ligurian Basin, declared by the Governments of Italy, France and Monaco, has proved to be of great value for the study of Risso's dolphins, but the research on this species should be expanded, and additional areas in the region should be identified where protective measures would benefit the species."

Sabina Airoidi, Director of the Tethys Cetacean Sanctuary Research Project

WDCS does research on the Risso' dolphins within the framework of a scientific conservation programme and supports the work of Tethys in the Mediterranean Sea.