



*Believed extinct by the 1600s, Bermuda Petrel (above) was rediscovered in the 1900s and its nesting grounds were located in 1951. This attractive gadfly petrel has since been the subject of an intensive conservation campaign, and today it is likely that 500 or so birds range over the North Atlantic. Still, the chances of seeing one off the East Coast remain slim.*

**Abbreviations.** To save space we often use four-letter codes for species names; the codes are listed as an index on pp. 63–64. Likewise, standard state abbreviations are used: DE for Delaware, FL Florida, MA Massachusetts, MD Maryland, ME Maine, NC North Carolina, NH New Hampshire, NJ New Jersey, VA Virginia. For months we use 3 letters: Feb for February, Jun for June, etc. North, central, south, etc., are usually abbreviated as n., cen., s., etc. We use the Latin abbreviation ‘cf.’ for ‘compare with.’

We define the Northeast as the Gulf of Maine south to Cape Cod, Massachusetts; the Mid-Atlantic Coast as Long Island, New York, south to Cape Hatteras, North Carolina; and the Southeast as Cape Hatteras south to Florida.

## Introduction

What do the following have in common? Humpback Whales lunge-feeding and breaching, snappy-looking Black-capped Petrels wheeling over cobalt blue waters, multicolored flyingfish gliding over glassy seas flecked with golden Sargassum weed. Well, for the most part, you can’t see them from shore. You’ll need to experience these offshore wonders on a boat trip, often called a ‘pelagic trip’ by birdwatchers.

This identification guide uses plates of composite photos to help you identify offshore marine wildlife—‘things you see at sea,’ be they whales, birds, dolphins, turtles, sharks, or flyingfish. Short accounts distill the essence of identification—wildlife views at sea can be brief, and the less time you spend reading a book the better. Once you have a name, numerous other resources are available to help you learn more about the creatures that inhabit the oceans. But that all-important handle, a species name, is the first step in the cascade of knowledge.

We focus on species seen on day trips off the East Coast (Maine to central Florida; see map inside back cover), not those found far offshore in waters few people get to visit. Some species we include can be seen from shore but are also found offshore, and are usually considered as marine creatures. We don’t include coastal birds such as most gulls, terns, cormorants, sea ducks, loons, grebes, or even some ‘marine’ mammals (they’re called *Harbor Seals* for a reason; below); even though you may see these from boats they can all be watched more easily from shore. We also do not include real rarities, species you might never see even on 100 trips, such as a Bermuda Petrel (opposite).

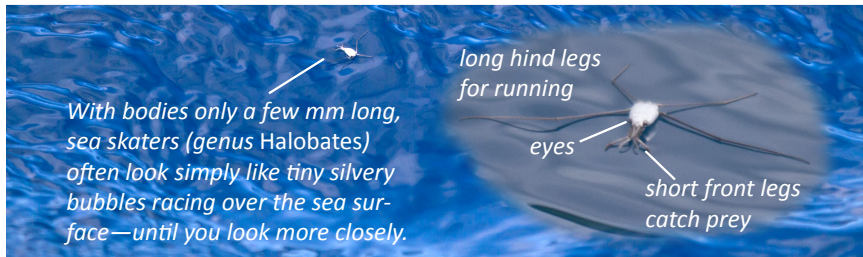


*Gray Seals (the 2 larger, longer-nosed animals near front) and Harbor Seals are inshore and coastal animals, seen on rocky headlands and islands, not truly offshore creatures.*



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The harder you look at the ocean the more you see. We cut off our coverage at about apple-size organisms, which is what most people are likely to notice. However, if you look carefully, on calm days you might see many more things, including the amazing sea skaters, ocean-going wingless insects related to the water striders you can see on freshwater ponds. Most species, like those shown below, occur in the Pacific Ocean, but one species, *Halobates micans*, can be seen off the Southeast. All species look very similar except under a microscope.



One thing you'll soon notice is that wildlife is not evenly distributed at sea. On your way offshore you pass through the inshore zone, often alive with coastal 'seabirds' such as gulls, terns, pelicans, and cormorants, most of which tend to disappear when you get a few miles offshore. Then you are in the world of whales, petrels, and flyingfish—the pelagic zone.

*Sargassum* (below, and p. 60) often bunches up at fronts within the Gulf Stream. Such weedlines are good places to find terns, phalaropes, and flyingfish.



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Although the ocean often looks much the same from a boat, it comprises different habitats, much as land does—but on land we can more easily see the difference between a field and a forest. Moreover, the habitats at sea are mobile, shifting with the currents and the wind. This means that it can be difficult to predict where whales or birds will be from day to day, as they track their food resources across a seemingly featureless ocean.

Luckily, food tends to be concentrated in certain areas because of predictable marine processes. The food web starts with plankton, tiny organisms that fuel themselves with sunlight and nutrients, like plants on land. Sunlight is easy to find anywhere near the surface, but most of the nutrients in the ocean have sunk to the deep over countless ages. A process known as upwelling can bring nutrients up into reach of the sunlight, and thus set in motion the cycle of life. For example, areas where two water masses meet, known as 'fronts,' can mix the water to generate upwelling and thus productivity.

Upwelling also occurs in places where currents run into topographic features of the seabed, such as canyon walls or mountains (often known

*Few ocean fronts in the world are as stark as this mid-winter break between the cold green Labrador Current (at back, around 40°F) and the warm blue Gulf Stream (in front, around 60°F and warming rapidly away from the front). Food items, and thus birds (such as these Dovekies), often concentrate along such fronts. On another day, this exact same 'place' on the Earth's surface might look like the picture opposite, a vivid testament to the shifting nature of marine habitats.*



as ‘banks’ when they are high enough to approach the surface). The underwater ridges and mountains north of Cape Cod, Massachusetts, known as Stellwagen Bank and Jeffreys Ledge, along with Georges Bank farther offshore, promote upwelling and help make the Gulf of Maine region such a hotspot for marine life.

Another important upwelling region, where underwater currents run into topography, is where the continental shelf drops off to the deep. The shelf is the relatively shallow seabed that extends from a continental landmass. The point at which it ends and the seabed drops off steeply is known as the ‘shelf break.’ Unlike along the West Coast, the continental shelf in the East is wide. It is not easy to reach the shelf break in a day trip other than off Cape Hatteras, North Carolina, helping explain why this is such a popular destination for birders.

*Feeding swarms of Northern Gannets (below) are typical of cooler ‘green waters’ off the Northeast and, in winter, the Mid-Atlantic states.*



While the productive ‘green waters’ off the Northeast support many whales and seabirds, the warm ‘blue waters’ of the Gulf Stream are relatively poor in life—the equivalent of deserts on land. But, as with land deserts, the blue waters have species adapted to that habitat, creatures not found in the cooler waters—such as tropicbirds and flyingfish.

Although offshore wildlife includes spectacular animals such as whales and gadfly petrels, as well as some birds in great abundance, the total number of species is manageable. In the region this guide covers, we consider only about 15 mammals and 35 bird species as regularly occurring offshore marine creatures likely to be seen on day trips. To balance this modest number, however, many of the species look quite similar, and viewing wildlife from a moving platform can be a challenge.

Medications can help with seasickness (if taken ahead of time), but many people do just fine on boats if they stay outside with the breeze in their face and a view of the horizon (don’t sit in the cabin and read!). The ocean has only a finite range of motions, and observing swell direction and moving your body accordingly is a good idea—learn to move with the ocean, not fight against it.

Even when it’s sunny and hot onshore it can be cool offshore on a boat, and it’s better to bring extra clothes and not need them than to spend the day cold and uncomfortable. On summer trips remember to take lots of liquids and stay hydrated, as it can be really hot and sunny, at least from the Mid-Atlantic Coast southward. And don’t forget your sunscreen, sunglasses, and a hat.

*In warmer ‘blue waters’ off the Southeast, False Killer Whales (below) occasionally come in and bow-ride, putting on quite a show.*





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*Bow-riding Atlantic Spotted Dolphins*

Obviously, bow-riding dolphins are best seen while the boat is moving, but otherwise the best and easiest viewing is often when the boat is stopped, either because whales have been spotted or because birds are coming in to feed on 'chum' (food thrown out behind the boat). Most wildlife can be appreciated simply with the naked eye, but binoculars are helpful when looking for smaller birds such as storm-petrels and phalaropes.

Now all that remains is to get out there and experience the magic of the open ocean. Enjoy!

*The long white pectoral flippers of this curious Hump-back Whale are here shown off well to its appreciative audience.*

