use the fore-paws, either alternately or simultaneously, pressing the palmar surface on the ground and lifting and dragging the body forwards in a succession of short jumps. In this way they can move so fast that a man has to step out beyond a walk to keep up with them; but such rapid action costs considerable effort, and they soon become exhausted. These various modes of progression appear to be common to all species so far as has been observed.

Most kinds of seals are gregarious and congregate, especially at the breeding season, in immense herds. Such is the habit of the Greenland seal, which resorts in the spring to the ice-floes of the North Sea, around Jan Mayen Island. Others, like the common seal of the British Islands, though having a wide geographical range, are never met with in such large numbers or far away from land. This species is stationary all the year round, but some have a regular season of migration, moving south in winter and north in summer. They are usually harmless, timid, inoffensive animals, though, being polygamous, the old males often fight desperately with each other, their skins being frequently found covered with wounds and scars. They are greatly attached to their young, and remarkably docile and easily trained when in captivity; indeed there is perhaps no wild animal which attaches itself so readily to the person by whom it is cared for and fed. They have much curiosity, and are strongly attracted by musical sounds. Their sense of smell is acute, and their voice varies from a harsh bark or grunt to a plaintive bleat. Seals feed chiefly on fish, of which they consume enormous quantities; some, however, subsist largely on crustaceans, especially species of *Gam­marus,* which swarm in the northern seas, also on molluscs, sea- urchins and even occasionally sea-birds, which they seize when swimming or floating on the water.

Although the true seals do not possess the beautiful under-fur (“ seal-skin ” of the furriers) which makes the skin of the sea-bears or fur-seals so precious, their hides are still valuable as articles of commerce, and together with the oil yielded by their fat, subject them to a devastating persecution.

Two species of seal are met with regularly on the British coasts, the common seal and the grey seal. The former is a constant resident in all suitable localities round the Scottish, Irish and English coasts, from which it has not been driven away by man. Although the most secluded and out-of-the-way spots are selected as their habitual dwelling-places, there are few localities where these seals may not occasionally be seen. They frequent bays, inlets and estuaries, and

are seen on sandbanks or mud-flats left dry at low tide. Unlike some of their congeners, they are not found on the ice-floes of the open sea, nor, though gregarious, are very large numbers ever seen in one spot. The young are born at the end of May or beginning of June. They feed chiefly on fish, and the destruction they occasion among salmon is well known to Scottish fishermen. The common seal is found not only on the European and American coasts border- ing the Atlantic, but also in the North Pacific. It is from 4 to 5 ft. in length, and variable in colour, though usually yellowish grey, with irregular spots of dark brown or black above and yellowish white beneath. According to Dr J. A. Allen, there is a marked differ­ence between the dentition of the male and female of the common seal. In the latter sex the teeth are much smaller than those of the male, and are inserted more obliquely in the jaw; they also differ by the reduction in the size and number of the accessory cusps, which are almost invariably absent on the inner side.

The grey seal *Halichoerus grypus)* is of considerably larger size, the males attaining when fully adult a length of 8 ft. from the nose to the end of the hind feet. The form of the skull and the simple characters of the molar teeth distinguish it generically from the common seal. It is of a yellowish grey colour, lighter beneath, and with dark grey spots or blotches, but, like most other seals, is liable to great variations of colour according to age. The grey seal appears to be restricted to the North Atlantic, having been rarely seen on the American coasts, but not farther south than Nova Scotia; it is chiefly met with on the coasts of Ireland, England, Scotland, Norway

and Sweden, including the Baltic and Gulf of Bothnia, and Iceland, though it does not appear to range farther north. It is not migratory, and its favourite breeding-places are rocky islands, the young being born in the end of September or beginning of October.

As the grey seal is sometimes confused with the bearded seal *(Phoca barbata),* the following account, by T. Southwell, of the distinctions between the two may be quoted :—

“ As to the external features by which the grey seal may at any age be distinguished from the bearded seal, which it most resembles, in the first place the abnormal season of reproduction in this species is unique; it is the only seal which has its young in the late autumn. The large size is not a very trustworthy distinction, as it varies considerably in individuals; but a marked feature is the great length of the claws in the fore-flipper, the first two digits of which are nearly of equal length and extend beyond the others; those on the hind-flippers are small and weak, the margin of the skin extending beyond them, and the outer toes on each foot the longest. The long, scimitar-shaped, flattened and crenulated lip-bristles do not differ greatly from those of other species, except from those of the bearded seal, the only species in which this curious impressed pattern is absent. The muzzle is broad and fleshy, and the upper lip and nose extend considerably beyond the lower jaw. Dr Edmondston calls special attention to this peculiarity, and states that in seizing its prey he has often seen it \* make a slight turn in the manner of a shark.' A captive young grey seal in taking fluid food always turned its head on one side and sucked it in through the side of the mouth. Another feature, which, so far as I know, is peculiar to this species, is the dog-like way in which, when on the alert, it carries its fore- flippers to the front.

“ Dr Edmondston also mentions a curious disposal of the hair on the neck of the adult animals, which he attributes to there being four or five rings of hair a little longer than on the rest of the body, which, he says, give it the appearance when rearing its head some­what put of the water, as if several small ropes encircled its neck. This is a sedentary species, seldom straying far from its chosen locality and rarely met with far from land.

“In the British seas the grey seal resorts to tide-washed rocks and lonely beaches, from Shetland and the Orkney Isles in the north to a few scattered localities along the east and south coasts, as far as Cornwall and even the Channel Islands; northward on the west coast to Wales, the outlying rocks in the Irish Sea and the Hebrides —a sufficiently comprehensive range, and in a few favoured spots it is still fairly numerous. It is seldom found far from land, and seems to be much attached to particular spots, to which it regularly returns as the state of the tide permits. In the breeding-season, which is the late autumn or early winter, its favourite resort is the inner recess of an ocean-cavern, often only to be approached under water; here, in October or November, it deposits its single young one on the small beach at the far end of the cave, beyond the reach of the tide, attending it assiduously for several weeks, until it has shed its infant-coat, which is at first beautifully long, soft and white, offering a great contrast to the young of the common seal. The young are suckled for six weeks before they take to the water, and during that time they are practically land animals. From this time till maturity several successive changes of pelage in each sex take place.”

Other species of seals inhabiting the nothern seas, of which stragglers have occasionally visited the British coasts, are the small ringed seal or “ floe-rat ” of the sealers *(Phoca hispida),* the Green­land or harp-seal *(Phoca groenlandica),* the hooded or bladder-nosed seal (*Cystophora* *cristαtα)* and the bearded seal *(Phoca barbata).*

See also Seal-Fisheries. (W.H.F.; R.L.\*)

SEA LAWS, a title which came into use among writers on maritime law in the 16th century, and was applied by them to certain medieval collections of usages of the sea recognized as having the force of customary law, either by the judgments of a maritime court or by the resolutions of a congress of merchants and shipmasters. To the former class belong the sea laws of Oléron, embodying the usages of the mariners of the Atlantic; under the latter come the sea laws of Visby (Wisby), reflecting the customs of the mariners of the North Sea and of the Baltic.

The earliest collection of such usages received in England is described in the *Black Book of the Admiralty* as the “ Laws of Oléron,” whilst the earliest known text is contained in the *Liber memorandorum* of the corporation of the City of London, preserved in the archives of their Guildhall. These laws are in an early handwriting of the 14th century, and the title pre- fixed to them is *La Charte d'Oleroun des juggementz de la mier.* How and in what manner these “ Judgments of the Sea ” came to be collected is not altogether certain. Cleirac, a learned advocate in the parlement of Bordeaux, in the introduction to his work on *Les Us et coustumes de la mer* (Bordeaux, 1647), states that Eleanor of Aquitaine (*q.v.*), having observed during her visit to the Holy Land that the collection of customs of the