

## LETTERS TO THE EDITOR

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## Holly Berries and Rare Birds

WITH reference to the statement which has been made by Mr. McNab of the Botanic Gardens in Edinburgh, corroborated by Mr. Darwin and others in England, that holly berries are, this season, extremely scarce, it may be interesting to note that so far as this district is concerned, the holly is, on the contrary, unusually rich in fruit. For many years I have never seen so abundant a crop, and I suspect this will be found to be the case all over the West Highlands.

We have had a most unusual winter, from its extreme mildness, skies almost continually densely overcast, and the persistence of east wind. The rainfall for 1876 was not much in excess of our average—fifty-three inches. We have had little snow, and only one severe gale of wind. But the barometer has been frequently very low, in sympathy with the destructive gales both to the north and to the south of us.

I don't know whether it is due to any of those circumstances of climate that we have had two very rare birds—the great grey shrike, and the greater spotted woodpecker.

The shrike was seen here about twenty years ago, on one occasion; and a specimen of the woodpecker was killed about fifty years ago. About the time when the shrike was seen here on the last occasion, several specimens were shot in different parts of the low country; but this winter I have seen no case mentioned of the bird being observed.

ARGYLL

Inveraray, January 20

## On the Southern Tendency of Peninsulas

THE attention of those interested in physical geography has long been attracted to the remarkable fact that almost all the great peninsulas of the earth trend southwards, and that the majority, at any rate, have an island, or group of islands, at their southern extremity. Thus Mrs. Somerville, calling attention to this, says:—"The tendency of the land to assume a peninsular form is very remarkable, and it is still more so that almost all the peninsulas trend to the south, circumstances that depend on some unknown cause which seems to have acted very extensively. The continents of South America, Africa, and Greenland, are peninsulas on a gigantic scale, all directed to the south; the peninsula of India, the Indo-Chinese peninsula; those of Korea, Kamtchatka, Florida, California, and Alaska, in North America; as well as the European peninsulas of Norway and Sweden, Spain and Portugal, Italy and Greece, observe the same direction. . . .

"Many of the peninsulas have an island, or group of islands at their extremity, as South America, which is terminated by the group of Tierra del Fuego; India has Ceylon; Malacca has Sumatra and Banca; the southern extremity of Australia ends in Tasmania, or Van Diemen's Land; a chain of islands runs from the end of the peninsula of Alaska; Greenland has a group of islands at its extremity; and Sicily lies close to the southern termination of Italy."

Now may we not correlate this with the remarkable preponderance of ocean in the southern hemisphere, which M. Adhémar has suggested to be due to the alteration of the centre of gravity of the earth, caused by the great southern cupola of ice? However that may be, the preponderance of water in the south is very remarkable. Taking each parallel as unity, the proportion of sea is as follows:—

60° North ... ..	0.353	10° South ... ..	0.786
50° " ... ..	0.407	20° " ... ..	0.777
40° " ... ..	0.527	30° " ... ..	0.791
30° " ... ..	0.536	40° " ... ..	0.951
20° " ... ..	0.677	50° " ... ..	0.972
10° " ... ..	0.710	60° " ... ..	1.000
0° " ... ..	0.771		

Without at the present moment entering upon any discussion as to the cause which has produced this remarkable result, the fact at any rate seems to throw some light on the southern direction of promontories, for which, as far as I am aware, no cause has yet been suggested. For let us suppose three tracts of land, each trending north and south, each with a central backbone, but one with a general slope southwards, one with a northward

slope, and the third without any. The first will, of course, form a peninsula pointing southwards, because as we proceed southwards, less and less of the surface will project above the water, until nothing but the central ridge remains. The second tract, however, would also assume the same form, because, though by the hypothesis the land does not sink, still the gradual preponderance of water would produce the same effect.

If, moreover, the central mountain ridge, as is so generally the case, presents a series of detached summits, the last of such elevations which rises above the water level will necessarily form an island, situated, with reference to the land, like those mentioned by Mrs. Somerville.

Lastly, in the third case, the gradual diminution of water would tend to neutralise the effect of the slope, and if the two were equal, the land would form, not a pointed peninsula, but an oblong tract.

If there is anything in the above suggestions it will throw some light on the southern trend of peninsulas by bringing them under the general law to which is due the remarkable preponderance of ocean in the southern hemisphere.

JOHN LUBBOCK

Down, Kent

## Basking Shark

IN looking over some old numbers of NATURE, which I had not been able to read, owing to my absence from Florence, I came across Dr. E. Perceval Wright's interesting article on the basking shark, *Selache maxima* (NATURE, vol. xiv. p. 313), which I read with much pleasure, and on which I would beg to offer a few observations, which I hope will not be considered as coming too late.

First and foremost, Dr. Wright in justly lamenting the absence of information on a most strange and singular form of Elasmobranch fish, far from being rare on the British coasts, entirely omits to mention the exhaustive and most important memoir on the genus *Selache*, published by Prof. P. Pavesi, of Pavia, in the *Annali del Museo Civico di Storia Naturale di Genova*, edited with so much ability, and mostly at his own private expense, by my friend, the Marquis G. Doria. In Italy we usually take much pains to be au jour of foreign scientific literature, and we are striving to do our best to form a good scientific literature of our own, therefore we may be excused if we feel anxious that it should be more generally known and appreciated abroad. Doria's *Annali* include most important zoological papers, and form already eight big volumes, which have cost the editor no small amount of pains and money; and it is most desirable that they should not escape the notice of working zoologists out of Italy. Indeed I may refer to some of the leading English zoologists, and more especially to my friend Dr. P. L. Sclater, to corroborate my assertion.

Prof. Pavesi's paper, "Contribuzione alla Storia Naturale del genere *Selache*," is continued in the sixth volume of Doria's *Annali*, published in 1874; and had Prof. Wright read it, he would have discovered that a very conflicting opinions on *Selache*, *Polyprosopus*, and *Pseudotriakis* had been most carefully examined, discussed, and sifted, that all the anatomical and zoological labours of well known and little known savants on the subject had been carefully analysed and critically studied by Prof. Pavesi, who in illustrating in a very lucid and minute manner the zoological affinities and anatomical peculiarities of a fine specimen of *Selache* captured at Lerici, near Spezia, on April 25, 1871, has succeeded in solving the Gordian knot which confused the true relations of the three genera above cited, and refers those strange Selacoids to two forms: *Selache maxima* (Gunn) and *S. rostrata* (Macri). To the latter species, characterised by a most singular snout, is to be referred the Lerici specimens, now in the Museum of the University of Genoa; one captured near Reggio (Calabria) in May, 1795, and described by Macri as *Squalus rostratus*; and lastly, the basking sharks, captured on the Western British coasts, and described in an incomplete manner as *Polyprosopus* by Couch, and as *Squalus* or *Cetorhinus rostratus* by Cornish.

Prof. Pavesi has largely illustrated the anatomy of *S. rostrata* in his memoir, especially the skeleton of the Lerici specimen which is preserved entire in the Genoa Museum; he also describes and figures the strange baleen-like fringes which adorn the branchial arches.

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Florence

[We have also received a communication from Rev. M. Harvey, of St. John's, Newfoundland, mentioning that a spe-