

*Report on the Fauna of Ireland: Div. Vertebrata. Drawn up, at the request of the British Association, by WILLIAM THOMPSON, Esq., (Vice-Pres. Nat. Hist. Society of Belfast,) one of the Committee appointed for that purpose.*

## PART I.

IT has been remarked to me, and by a distinguished naturalist, that the zoology of Ireland can hardly be worth attention, from the similarity it must bear to that of Great Britain, already so well known. But, properly considered, the zoology of an island which, in the eastern hemisphere, constitutes the most western land within the fifty-first and fifty-fifth degrees of north latitude, cannot but be highly interesting, especially in connexion with that most attractive subject, the geographical distribution of animals. In Ireland, we find within the degrees of latitude just mentioned the extreme western limits to which all our species range that are peculiar to the eastern hemisphere. In Zoology, however,—that is, in Vertebratal zoology, for of it only the present communication treats,—we do not (as some writers, without reflecting on the very different circumstances which influence the distribution of animal and vegetable life, have anticipated,) find the same interesting results as in Botany. The West and South of the island do not present us with any of the *Vertebrata* of Portugal, the western Pyrenees, or the South of Europe, which are not found elsewhere in the British Islands. The *Erica mediterranea*, *Menziesia polifolia*, *Arbutus Unedo*, &c., have no animal representatives\*.

Throughout this Report it has been considered desirable to contrast the zoology of Ireland with that of Great Britain,—to present, in fact, a comparative list of the Vertebrata of the two islands. It must, however, be borne in mind, that all species found from the Channel Islands in the south, to the Shetland Islands in the north, are included in the British Fauna, and that within the degrees of latitude over which it extends, Ireland occupies but one third. Ireland is comprised within four degrees, whilst the Shetland Islands range nearly six degrees further to the north, and more than two degrees to the south the Channel Islands are situated. The Fauna of Great Britain also extends over ten degrees of longitude, whilst that of Ireland is limited to half the number.

The *physical geography* of Ireland must, like that of every

\* What may be the distribution of *Lepus hibernicus* and *Mus hibernicus* is yet indeed a problem.

other country, have a primary influence on the number of *individuals* of the species which are found there either permanently or as periodical visitants. At the same time, its natural features do not differ so much from those of Great Britain as altogether to preclude the presence of more than one, or perhaps two, vertebrate animals, which have a place in the British and not in the Irish Fauna. These are the Ptarmigan (*Tetrao Lagopus*) and Alpine Hare. For the abode of the former, it does not afford a continuity of mountains of sufficient altitude and of such a nature as this bird chiefly inhabits. The haunts of the Alpine Hare (*Lepus variabilis*) are pretty similar to those of the Ptarmigan, but often at a much lower elevation.

The influence of *climate* is now to be considered ; and under this head the species just mentioned might perhaps with propriety have been included. The difference between the temperature of Ireland and Great Britain cannot with any degree of certainty be said to attract to, or repel from, our island, any *species* of the British Vertebrata. Our *mild winters* in particular have otherwise great influence. The Stoat (*Mustela erminea*), for instance, very rarely in winter changes the colour of its summer fur to the warmer and more attractive garb of the Ermine, in which it is so much better known. Even in the north of the island, some species considered as birds of passage in England, except in the *extreme* south, are induced to become residents, as is the case with the Grey Wagtail (*Motacilla Boarula*), and to a very great extent with the Quail (*Perdix Coturnix*). Of the *Grallatores*, some few species remain throughout the winter in the North of Ireland, although only to the South of England are they known at this season. But, above all, the mildness of our winters is such, that some of the soft-billed birds, which are generally able to procure an abundance of food, are more disposed than in the neighbouring island to song, and accordingly at this period of the year delight us with much more of their music.

The *humidity* of our climate would seem to attract to favourite localities more Woodcocks (*Scolopax Rusticola*) than are found in any part of Great Britain, and, together with the great extent of bog throughout the island, brings hither to winter many more of the Jack Snipe (*Scolopax Gallinula*), and of the common Snipe (*Scolopax Gallinago*). The two last, above all other birds, exceed in number those found in England and Scotland. The indigenous Starlings and Snipes are as nothing compared with the numbers that pour into the island during autumn from their breeding-haunts in higher latitudes.

Our moist and rich meadows draw hither in spring more Land-Rails (*Crex pratensis*) than are generally to be found in the meadows of England and Scotland; but in the case of this bird, the far-western position of Ireland should perhaps be considered, as in Portugal the species is about equally abundant.

*Mammalia*.—It is so extremely difficult to procure the greater number of the animals of this class, that some, especially of the smaller species, are doubtless yet to be discovered; as known at present, they appear to fall short of those of Great Britain in an extraordinary degree. In the *Cheiroptera*, or Bats, we seem to be remarkably deficient, but time must add more species to our list. In the genus *Mus* there is a species—the *M. hibernicus*—as yet unknown elsewhere. The Squirrel (*Sciurus vulgaris*) and Dormouse (*Myoxus avellanarius*) are desiderata: of the genus *Arvicola* I have not seen an Irish example. In *Lepus*, the place of *L. timidus* and *L. variabilis* is supplied by *L. hibernicus*, as yet known only to Ireland. In *Mustela*, the Polecat (*M. Putorius*) is unknown to me; and if *M. vulgaris* be indigenous, it is much more rare than *M. erminea*, which prevails from north to south. Of *Felis Catus*, as an Irish animal, positive information is yet wanted. The *Talpa europæa* we certainly have not, though in Great Britain mole-hills may be observed close to the sea-side at some of the nearest points of land to Ireland, as at Holyhead in Wales, and Portpatrick in Scotland. The *Sorex*es at present known are but two in number.

Ireland possesses as many *Birds* as from her geographical position might be anticipated. The species which appear in the catalogue of Great Britain and not in that of Ireland, are chiefly occasional visitants, many of which have no doubt extended their flight hither, although they have not come under the cognizance of the naturalist. This refers chiefly to stragglers or single birds; the species which come in flights to Great Britain generally extend their migration to Ireland also.

In the class *Reptilia* nothing particular need be remarked, except the well-known fact of the absence of Ophidian Reptiles from the island.

In *Amphibia* we have not the Toad (*Bufo vulgaris*); the Frog (*Rana temporaria*) is stated to have been introduced; the Natterjack (*Bufo Calamita*) is believed to be truly indigenous to Kerry.

The coast of Ireland offers nothing very remarkable in *Fishes*. The families having a place in the British catalogue and in which the Irish is particularly deficient, are *Percidæ*,

*Sparidæ*, and *Tænioideæ*. In fresh-water fishes there is, compared with England, a remarkable poverty in the species of *Cyprinidæ*; yet, leaving out of the question geological influences, there are in certain portions of Ireland lakes and rivers apparently well suited to this family. Scotland too is very deficient in the *Cyprinidæ*.

In the following catalogue of the vertebrate animals of Ireland about 420 species are included; namely, of *Mammalia*, 30?; *Aves*, 230?; *Reptilia*, 2; *Amphibia*, 4; *Pisces*, 150?; omitting in each class all extinct and naturalized species. To take a general review of the Irish *Vertebrata*, as known at present—and every year several species are added to the catalogue—and of the causes of the absence of species found in Great Britain, it is believed that the physical geography and climate of the island will account for that of only one or two. The want of old timber over the country might be considered an obstacle to the presence of certain *Mammalia* and *Birds*, as the *Cheiroptera*, or *Bats*, a large proportion of the British species of which inhabit old trees; the *Squirrel*, &c. In *Birds*, the *Picidæ*, or *Woodpeckers*, their congeners, and some others. The absence of all species which would not be affected by any of the above circumstances, and which we really have not, seems to me to be attributable to geographical distribution alone; thus, as the shores of continental Europe on the same parallels of latitude as Great Britain are the western boundary to many vertebrate animals unknown to that island, so again are the shores of the latter the extreme western boundary to many species unknown to Ireland\*.

*Note 1.*—The North-east of Ireland and South-west of Scotland, although divided by so narrow a channel, are zoologically very different. The species unknown to me as Irish, but of which I have seen examples from the opposite coast, are, the *Polecat* (*Mustela Putorius*), *Mole* (*Talpa europæa*), *Ciliated Shrew* (*Sorex ciliatus*), the three species of *Campagnol* (*Arvicola amphibia*, *A. agrestis*, and *A. riparia*), and the common *Hare* (*Lepus timidus*)—the *Black Grouse* (*Tetrao Tetrix*)—the *Blind-worm* (*Anguis fragilis*), *Adder* or *Viper* (*Pelivus Berus*), and *Toad* (*Bufo vulgaris*).

In the *genera* to which the animals just mentioned belong, Ireland is known to possess but one species which is not found in Scotland, the *Lepus hibernicus*, and of the terrestrial *Mammalia* generally, but one other, *Mus hibernicus*: of the com-

\* Several species of British *Birds* are either not found in the West of England, or become rare towards that quarter; as the *Nightingale*, *Nuthatch*, *Wryneck*, *Kentish Plover*, *Stork*, &c.

mon Shrew-mouse of Ireland (*Sorex rusticus*), indeed, I have not seen any specimens from Scotland, but there can be little doubt that the animal is found there.

*Note 2.*—The situation of the Isle of Man—midway between Great Britain and Ireland—suggests the inquiry whether certain species not found in the latter island prevail there. On this subject Mr. E. Forbes informs me that the Mole, Squirrel, Dormouse, and Roe-deer are not indigenous to the Isle of Man; neither is the Toad, nor any species of Ophidian Reptile. A skin of the Hare of the island sent me by Mr. Forbes is that of *L. timidus*, the species found in Great Britain, and represented by *L. hibernicus* in Ireland\*.

\* It may be desirable, with reference to the above remarks, to allude briefly to such species as, found in Great Britain and not in Ireland, prevail further to the west. In *Mammalia*, five of the British and non-Irish species are found in the western hemisphere. They all belong to the division *Mamm. Aquatica*, and are only occasional visitants<sup>1</sup> to the shores of Great Britain. The species are *Culocephalus* (*Phoca*) *grœnlandicus*, *Trichecus rosmarus*, *Delphinus Tursio*, *Delphinapterus* (*Beluga*) *leucas*, *Monodon Monoceros*.

In *Aves*, sixteen British and non-Irish species prevail in the western hemisphere. Of these, the Ptarmigan (*Lagopus mutus*) only can with certainty be termed indigenous to Great Britain, and for its absence from Ireland reasons have already been assigned. *Linaria canescens* seems not yet to be properly established as an indigenous British bird. Two species, *Procellaria glacialis* and *Lobipes hyperboreus*, are periodical visitants, the former to St. Kilda only, the latter to the northern Scottish islands. The remaining twelve are occasional and very rare visitants to Great Britain or the neighbouring seas. They are *Nauclerus* (*Elanus*) *furcatus*, *Surnia funerea*, *Plectrophanes Lapponica*, *Ectopistes* (*Columba*) *migratoria*, *Macroramphus griseus*, *Tringa rufescens*, *Tringa pectoralis*, *Oidemia perspicillata*, *Clangula histrionica*, *Merganser cucullatus*, *Larus atricilla*, and *Thalassidroma Wilsoni*.

In *Reptilia*, two species which have a place in the British and not in the Irish catalogue, belong to the western hemisphere: these are *Chelonia imbricata* and *Sphargis coriacea*.

In *Amphibia*, none of the species under consideration occur in the west.

In *Pisces*, several British and non-Irish species appear in the North American list, but they are all known only as rare and occasional visitants to the shores of Great Britain. They are *Trichiurus lepturus*, *Sebastes norvegicus*, *Naukrates Ductor*, *Exocetus exiliens*, *Engraulis encrasicolus*?, *Echeneis Remora*, *Muraena vulgaris*?, *Zygæna malleus*, *Scopelus Humboldtii*, and *Xiphias gladius*.

The *Mammalia*, *Reptilia*, and *Pisces* of the West are taken (with the exception of *Sphargis coriacea*) from Dr. Richardson's "Report on North American Zoology," (Report Brit. Assoc., vol. v.), and Dr. H. Storer's "Report on the Fishes &c. of Massachusetts;" *Aves*, from the Prince of Musignano's "Comparative Catalogue of the Birds of Europe and North America."

<sup>1</sup> Throughout this Report, the term *indigenous* is applied to species permanently resident; *periodical visitant*, to those which come annually; *occasional visitant*, to those met with at uncertain intervals.

## PART II.

## DIV. VERTEBRATA.

## CLASS MAMMALIA.—SECT. I. MAMM. TERRESTRIA.

## Order 1.—CHEIROPTERA.

Fam. *Vespertilionidæ*.

[Throughout the comparative catalogue, the mark 0 denotes absence, as the mark + does presence. Thus *Vesp. Noctula* is unknown in Ireland; *V. Pipistrellus* is a British as well as an Irish species.]

<i>Ireland.</i>	<i>Great Britain.</i>
0	<i>Vespertilio</i> <i>Noctula</i> , <i>Schreb.</i>
0	” <i>Leisleri</i> , <i>Kuhl.</i>
0	” <i>discolor</i> , <i>Natt.</i>
<i>Vespertilio Pipistrellus</i> , <i>Geoff.</i>	+
0	” <i>pygmæus</i> , <i>Leach.</i>
0	” <i>serotinus</i> , <i>Gmel.</i>
0	” <i>murinus</i> , <i>L.</i>
0	” <i>Bechsteinii</i> , <i>Leisl.</i>
0	” <i>Nattereri</i> , <i>Kuhl.</i>
0	” <i>emarginatus</i> , <i>Geoff.</i>
” <i>Daubentonii</i> , <i>Leisl.</i>	+
0	” <i>mystacinus</i> , <i>Leisl.</i>
0	” <i>ædilis</i> , <i>Jenyns.</i>
<i>Plecotus auritus</i> , <i>Geoff.</i>	+
0	<i>Plecotus brevimanus</i> , <i>Jenyns.</i>
0	<i>Barbastellus Daubentonii</i> , <i>Bell.</i>
0	<i>Rhinolophus Ferrum-equinum</i> , <i>Leach.</i>
0	” <i>hipposideros</i> , <i>Leach.</i>

Of the *Vespertilionidæ*, of which 18 species are now enumerated as British, all that can be announced as Irish are the *Vesp. Pipistrellus*, *V. Daubentonii* and *Plecotus auritus*: the first and last are common from north to south of the island: of the *V. Daubentonii*\*, one individual was obtained by the Ordnance collectors in the county of Londonderry. That other species remain to be discovered, there is little doubt.

Of the British Bats, 4 species have each been found, but in one locality; and of 4 other species but a single individual has been procured.

## Order 2.—BESTIÆ.

## (Feræ Insectivoræ.)

Fam. *Erinaceidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Erinaceus europæus</i> , <i>L.</i>	+
Common throughout the island.	

\* The species determined by Mr. Jenyns.

Fam. *Talpidae*.

Ireland.	Great Britain.
0	<i>Talpa europæa</i> , L.

Fam. *Soricidae*.

Ireland.	Great Britain.
<i>Sorex rusticus</i> , <i>Jenyns</i> .	+
„ <i>tetragonurus</i> , <i>Herm</i> .	+
0	<i>Sorex fodiens</i> , <i>Gmel</i> .
0	„ <i>ciliatus</i> , <i>Sower</i> .
0	„ <i>castaneus</i> , <i>Jenyns</i> .

*S. rusticus* is the common Shrew of Ireland from north to south; of *S. tetragonurus* I have seen but one native specimen, which was procured by the Ordnance Survey near the Giant's Causeway.

## Order 3.—FERÆ.

Fam. *Ursidae*\*.

Ireland.	Great Britain.
<i>Meles Taxus</i> , <i>Flem</i> .	+
In suitable localities throughout the island.	

Fam. *Felidae*.

Ireland.	Great Britain.
<i>Lutra vulgaris</i> , <i>Erxleb</i> . (?) †	+
<i>Mustela vulgaris</i> , L. (?)	+
„ <i>erminea</i> , L.	+
0	<i>Mustela Putorius</i> , L.
<i>Martes foina</i> , <i>Bell</i> .	+
„ <i>Abietum</i> , <i>Ray</i> .	+
0	<i>Felis Catus</i> , L.
<i>Vulpes vulgaris</i> , <i>Briss</i> .	+

The Irish Otter, named provisionally *Lutra Roensis* by Mr. Ogilby, is not now considered by that gentleman distinct from *L. vulgaris*; it is not uncommon. Of the *Mustelæ*, *M. Putorius* is unknown to me as Irish; and of *M. vulgaris*, which is noticed as common by Templeton and others, I have not seen a native specimen: *M. erminea* is common from north to south, and passes under the name of 'Weasel'. *Martes Abietum* is found throughout the island; of *M. foina*, but one native example (killed in the county of Antrim) is known to me. The

\* *Ursus Arctos*, L. I am not aware of any written evidence tending to show that the Bear was ever indigenous to Ireland; but a tradition exists of its having been so, and it is associated with the Wolf as a native animal in the stories handed down through several generations to the present time.

† The note of interrogation within brackets (?) marks species doubtfully Irish.

difference of colour attributed to these animals appears to me of no value as a specific character, as in course of shedding their fur they become particoloured, the breast as well as the body presenting at the same time the colours of the Beech and the Pine Marten\*. Certain data for including *Felis Catus* in the Irish catalogue are wanting: it is said to frequent the wild district of Erris (co. Mayo). *Vulpes vulgaris* is common †.

## Order 4.—GLIRES.

Fam. *Castoridae*.

Ireland.	Great Britain.
0	<i>Arvicola amphibius</i> , <i>Desm.</i>
0	„ <i>arvalis</i> , <i>Gm.</i> ( <i>agrestis</i> , <i>Brit. authors</i> ).
0	„ <i>rubidus</i> , <i>Baill.</i> ( <i>riparia</i> , <i>Yarrell</i> ).

Of the genus *Arvicola*, there is not any species known to me as indigenous to Ireland.

Fam. *Muridae*.

Ireland.	Great Britain.
0	<i>Sciurus vulgaris</i> , <i>L.</i>
0	<i>Myoxus avellanarius</i> , <i>Desm.</i>
0	<i>Mus minutus</i> , <i>Pall.</i> ( <i>messorius</i> , <i>Shaw.</i> )
<i>Mus sylvaticus</i> , <i>L.</i>	+
„ <i>Musculus</i> , <i>L.</i>	+
„ <i>Rattus</i> , <i>L.</i> (?)	+
„ <i>hibernicus</i> , <i>Thomps.</i>	0
„ <i>decumanus</i> , <i>Pall.</i>	+

*Sciurus vulgaris* is not now a truly native animal ‡; it was introduced a few years since to the county of Wicklow, where it is said to be fast increasing in numbers. Ruty, in his Natural History of the County of Dublin, (1772,) vol. i. p. 291, remarks that it is “said to have been found in the wood in

\* When the above was in the press, Mr. Eyton published in the Annals of Nat. Hist. (Dec. 1840, p. 290) some valuable remarks on the British Martens, tending to prove that they are in reality but one species. He states that the young animal has the yellow breast attributed to the Pine Marten, and the adult, the white breast of the common “species.” I had also long since remarked that the yellow colour of the breast gave place to white. This view would satisfactorily explain why the yellow-breasted one—*M. Abietum*—should appear to be the more common with us, as by far the greater proportion of animals that fall victims to man are those which have not arrived at full maturity.

† *Canis Lupus*, *L.* Smith, in his History of Kerry (p. 173), states that Wolves were not entirely extirpated in Ireland until 1710. That noble race of domestic animals, the Irish Wolf Dog, so successfully used in their pursuit, has, since no longer required, been neglected, and must now, I fear, be called extinct.

‡ There is a tradition that the Squirrel was common in Ireland before the destruction of the native woods.



Lutterel's Town." In the same work it is observed in vol. i. p. 277, that "a vulgar error has prevailed, mentioned at Jonston's *Historia Animalium*, that the Dormouse was not found in Ireland," &c. ; a sort of description of the animal follows, but by no means proving it to be a *Myoxus*. *Mus minutus* cannot be announced as Irish ; but a native animal was once described to me which would agree with it ; *M. sylvaticus* and *M. Musculus* are both too common over the island. The animal provisionally called *Mus hibernicus*\* is now so rare that I have been able to obtain for examination but one specimen, which is insufficient to establish it properly as a distinct species ; *M. Rattus*, though very rare, is stated to occur occasionally in various parts of the island.

In his Natural History of Dublin, Rutty states that the *Mus decumanus* "first began to infest these parts about the year 1722." (vol. i. 281.) It has long since overspread the island.

Fam. *Leporidae*.

Ireland.	Great Britain.
0	Lepus timidus, L.
0	,, variabilis, Pall.
Lepus hibernicus, Bell.	0
Cuniculus, L.	+

The only species of Hare known as Irish is the *L. hibernicus*, which is common throughout the island, as is likewise *L. Cuniculus*†.

Order 5.—PECORA‡.

Fam. *Cervidae* §.

Ireland.	Great Britain.
Cervus Elaphus, L.	+
0	Cervus Capreolus, L.

\* Proceedings Zool. Soc. London, 1837, p. 52.

† This animal passes under the names of *burrow* and *bush* Rabbit in the North of Ireland. These are distinguished from each other accordingly as they burrow in the ground in the ordinary manner, or live in "forms" like the Hare among bushes or underwood. This departure from their natural habit is, I conceive, only resorted to where the soil is unsuited to burrowing. In the Annals of Nat. Hist. vol. v. p. 362, a notice will be found on the subject of Hares burrowing in an exposed situation on the western coast of Ireland, to which they were introduced, and where they could not otherwise find shelter.

‡ *Bos Taurus*, L. The remains of a race of Oxen, believed to be peculiar to Ireland, are found in our bogs. The distinguishing characters are, "the convexity of the upper part of the forehead, its great proportional length, and the shortness and downward direction of the horns." See an abstract of a paper by Mr. R. Ball, "On the Remains of Oxen found in the Bogs of Ireland," in the Proceedings of the Royal Irish Academy, January 28, 1839.

§ *Cervus Dama*, L. Smith, in his History of Kerry, notices herds of Fallow Deer as frequenting the "mountains" in that county. But as these are the haunts not of this animal, but of the Stag or Red Deer (*C. Elaphus*), the latter

The *C. Elaphus*, once abundant over Ireland, is now confined to the wilder parts of Connaught, as Erris and Conne-mara; and to one or two localities in the South, more especially the vicinity of the lakes of Killarney.

SECT. II. MAMMALIA AQUATICA.

Order 6.—PINNIPEDA.

Fam. *Phocidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Phoca vitulina</i> , L.	+
0	<i>Phoca grœnlandica</i> , Mull.
0	,, <i>barbata</i> , Mull.
<i>Halichærus Gryphus</i> , Bell.	+
0	<i>Trichecus Rosmarus</i> , L.

was probably the species alluded to, especially as in the index to the volume appears "Deer, red or fallow". For a long period the Fallow Deer certainly has not been found in any part of Ireland where it could be called truly wild. A horn of this species which I possess, (through the kindness of Edward Benn, Esq., of Glenravel, county Antrim,) is stated to have been dug up from a considerable depth in a bog in his neighbourhood, but minute particulars respecting it could not be obtained. It may not be out of place to observe here, that the *C. Dama* is now well known to inhabit Greece in a wild state. Lord Derby has for some years possessed a pair of these animals of the common spotted variety, which were brought from the neighbourhood of Axium by Lord Nugent, and which, as I am informed by my friend Mr. Ogilby, who examined them attentively, during a recent visit to their noble owner, differ in no respect from the common Fallow Deer of our parks. Moreover, as remarked by the same gentleman, the universal application of the word *Dama* to this animal in the Italian, French, Spanish, and other modern languages derived from the ancient Latin, (added to the fact of the animal being still found in the forests of Italy, where there are no parks or inclosures,) points it out as the beast of chase so frequently mentioned under the same name by the Roman poets. Mr. Ogilby likewise remarks that it is in all probability the *Platycerus* of Pliny, or rather of the Greeks, from whom he copied. It is said in a note to the second edition of the *Règne Animal* to have been found in the woods of Northern Africa.

*Cervus Alces*, L. A horn of the true Elk (*C. Alces*), as noticed by me in the "Proceedings of the Zoological Society of London," for 1837, p. 53, was some years since presented to the Natural History Society of Belfast. To the donor it was given by a relative residing at Stewartstown, county Tyrone, who attached much value to it as a singular relic dug out of a peat-bog on his own property in that neighbourhood. That it was so obtained I am assured there cannot be a doubt. The horn is that of a very old animal, and quite perfect. On removing the paint with which it was besmeared, the horn certainly presented a fresh appearance; but might not this be attributed to the well-known preservative property of the soil in which it is said to have been found? There is not, that I am aware of, any record of this animal having ever existed in a wild state in the British Isles; but as it inhabited a wide range of latitude on the continent of Europe, it is within the bounds of probability to believe that it may have been a native species.

*Sus Scrofa*, L. The Wild Boar was at one period common in Ireland, but has long since become extinct. Giraldus remarks that it was of a small race, but tusks of this animal dug up in our bogs are often of goodly dimensions.

*P. vitulina* and *Hal. Gryphus* only, in this family, have with certainty been recognised as Irish species; they both inhabit the coasts from north to south.

Precise information is much wanted with reference to *P. barbata* as a British species; and as such, *P. grænelandica* (or the animal so considered to be) is a recent addition to the catalogue. *Trich. Rosmarus* very rarely occurs in the Hebrides and in the Orkney and Shetland Islands.

## Order 7. CETÆ.

Fam. *Delphinidæ*.

Ireland.	Great Britain.
Delphinus Delphis, L. 0	+
Phocæna communis, Less.	+
„ Orca, F. Cuv.	+
„ melas, Bell. 0	+
Hyperoodon Butzkopf, Lacep. 0	+
0	Diodon Sowerbæi, Jard.
	Monodon Monoceros, L.

*D. Delphis*, *P. communis* and *P. Orca* are considered to prevail on various parts of the coast of Ireland, the second to be the most common, the last the rarest; of all, I have seen native specimens, but cannot from personal knowledge speak of the comparative abundance or scarcity of the species. *P. melas* has been observed on the western and southern coasts; *Hyp. Butzkopf* along the eastern coast. The four *Delphinidæ* which cannot be enumerated in the Irish catalogue are very rare as British species; of *Diodon Sowerbæi* a single specimen only is on record.

Fam. *Balænidæ*.

Ireland.	Great Britain.
Physeter macrocephalus, L.	+
„ Tursio, L.	+
Balæna Mysticetus, L.	+
Balænoptera Boops, Flem.	+

According to Dr. Molyneux\*, the “Spermaceti Whale” has been captured on the north and north-west coasts. Smith notices one, taken near Youghal; and Ruttty, in his Natural History of Dublin, mentions an individual as cast ashore in 1766. Templeton states that *Phys. Tursio* is of occasional occurrence in the West. *Bal. Mysticetus* has been rarely captured on various parts of the coast. Of a *Balænoptera* (*Balæna rostrata*) which was taken on the western coast some years ago a very full account has been published by Dr. Jacob in the Dublin Philosophical Journal.

\* Phil. Trans., vol. xix. 1795-6, p. 508.

## PART III.

## Class AVES.

## Order 1.—RAPTORES.

Fam. *Vulturidæ*.

## Ireland.

0

## Great Britain.

Neophron Percnopterus, Sav.

This bird has a place in the British Fauna from its occurrence in England on one or two occasions. Africa is its head quarters.

Fam. *Falconidæ*.

## Ireland.

Aquila Chrysaëtos, Vig.

Haliæetus albicilla, Selby.

Pandion Haliæetus, Sav.

Astur palumbarius, Bechst. (?)

Accipiter fringillarius, Ray.

Falco grœnlandicus, L. Hancock.

„ Islandicus, Lath. Hancock. (?)

„ peregrinus, L.

„ Subbuteo, L.

„ rufipes, Bechst.

„ Tinnunculus, L.

„ Æsalon, Gmel.

Buteo vulgaris, Bechst.

„ Lagopus, Vig.

Pernis apivorus, Cuv.

Circus rufus, Briss.

„ cyaneus, Flem.

0

Milvus Ictinus, Sav.

0

## Great Britain.

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Circus cineraceus, Shaw.

+

Elanus furcatus, Sav.

The two first-named species, the Golden and Sea Eagles are in Ireland, as in Scotland, more numerous than in England. *Pandion Haliæetus* is chiefly confined to the more southern half of the island. *Astur palumbarius* has a place not only in the older county histories, but in Mr. Templeton's catalogue; I have not myself seen any specimen which could be verified as native. *Accipiter fringillarius*, *Falco peregrinus*, *F. Tinnunculus*, *F. Æsalon*, *Buteo vulgaris*, *Circus rufus*, and *C. cyaneus*, inhabit suitable localities throughout Ireland: in the wild and mountainous parts of the country which are destitute of wood, *B. vulgaris* makes the precipitous rocks its habitation. *Falco grœn-*

*landicus* as distinguished by Mr. Hancock from *F. Islandicus*\*, has in one instance been obtained in Donegal†: under the latter name Mr. Templeton records a specimen, killed in the county of Antrim, but as both these terms were then used synonymously, it must remain doubtful whether it was this or the former species. By this naturalist the *F. Subbuteo* was on two occasions observed in Ireland. *Falco rufipes* has once been obtained, in the neighbourhood of Dublin. *Buteo Lagopus* is a very rare winter, as *Pernis apivorus* is a summer, visitant. Smith, in his History of Cork, (completed in 1749,) remarks of the *Milvus Ictinus*, "These birds are so common that they need no particular description; . . . . with us it remains all the year‡." At present the species is unknown in that county. The terms Kite and Goshawk being applied indiscriminately in Ireland to the Buzzards, and the latter sometimes to the Peregrine Falcon, renders it somewhat dubious whether the proper names have always been legitimately employed in the county histories, &c. The *Milvus Ictinus* has, on what was considered sufficient authority, been noticed as an extremely rare visitant to the North§.

Of our desiderata, the *Circus cineraceus* is a species, which from its general resemblance to *C. cyaneus*, might readily be overlooked; it will probably yet be added to the Irish catalogue. *Elanus furcatus*, an American species, has only twice been taken in Great Britain.

Fam. *Strigidae*.

Ireland.	Great Britain.
<i>Bubo maximus</i> , <i>Sibbald.</i>	+
<i>Otus vulgaris</i> , <i>Flem.</i>	+
„ <i>Brachyotos</i> , <i>Cuv.</i>	+
<i>Scops Aldrovandi</i> , <i>Will. &amp; Ray.</i>	+
<i>Surnia nyctea</i> , <i>Dum.</i>	+
0	<i>Surnia funerea</i> , <i>Dum.</i>
<i>Strix flammea</i> , <i>L.</i>	+
<i>Ulula stridula</i> , <i>Selby.</i>	+
0	<i>Noctua Tengmalmi</i> , <i>Selby.</i>
0	„ <i>passerina</i> , <i>Selby.</i>

Of the occurrence of either *Bubo maximus* or *Scops Aldrovandi* in Ireland, there is but a single record. *Otus vulgaris*

\* Annals of Natural History, vol. ii. p. 249.

† The description of this individual, supplied me, previous to the appearance of Mr. Hancock's paper, by John Vandeleur Stewart, Esq., of Rockhill, Letterkenny, in whose collection it is, is so ample, as to prove its species beyond any doubt.

‡ Vol. ii. p. 326, 2nd edit.

§ Ann. Nat. Hist., vol. i. p. 156.

and *Strix flammea* are common and resident. *Otus Brachyotos* is a regular winter resident; at the same season *Surnia nyctea* has occasionally been met with. *Ulula stridula* is included in the older county histories; on what was considered sufficient authority it was noticed as an Irish species in Annals of Natural History, vol. i. p. 156.

*Surnia funerea* has its place in the British catalogue from a single individual having been taken off the coast of Cornwall. *Noctua Tengmalmi* and *N. passerina* have been very rarely met with in England.

Order 2.—INSESSORES.

Div. 1.—DENTIROSTRES.

Fam. *Laniadæ*.

Ireland.	Great Britain.
Lanius Excubitor, L.	+
0	Lanius Collurio, L.
0	,, rufus, L.

The *L. Excubitor* only in this family can be announced as Irish: its occurrence in a number of instances is on record.

*L. Collurio* is a regular summer visitant to England; *L. rufus* but a very rare and occasional one.

Fam. *Muscicapidæ*.

Ireland.	Great Britain.
Muscicapa grisola, L.	+
0	Muscicapa luctuosa, Temm.

*M. grisola* is a regular summer visitant to Ireland.

*M. luctuosa* is in England considered only as an occasional visitant (Selby).

Fam. *Merulidæ*.

Ireland.	Great Britain.
Cinclus aquaticus, Bechst.	+
Merula viscivora, Selby.	+
,, pilaris, Selby.	+
,, musica, Selby.	+
,, iliaca, Selby.	+
,, vulgaris, Ray.	+
,, torquata, Selby.	+
0	Merula Whitei, Jard.
Oriolus Galbula, L.	+

*Cinclus aquaticus*, *Mer. musica* and *M. vulgaris* are common and resident; so likewise is *M. viscivora*, but not to the same extent, although its increase in Ireland of late years has

fully kept pace with that in Great Britain : so mild have been our few last winters, that the song of *M. musica* was almost daily heard. *Mer. pilaris* and *M. iliaca* regularly take up their abode with us in winter, as does *M. torquata* in summer. *Oriolus Galbula* has in a few instances been met with in various parts of Ireland, and as far north as Donaghadee, co. Down.

*Mer. Whitei* has on two occasions occurred in England.

Fam. *Sylviadæ*.

Ireland.	Great Britain.
Accentor modularis, <i>Cuv.</i>	+
0	Accentor alpinus, <i>Bechst.</i>
Erythaca Rubecula, <i>Swains.</i>	+
Phœnicura Ruticilla, <i>Swains.</i>	+
„ Tithys, <i>Jard. &amp; Selby.</i>	+
0	Phœnicura Suecica, <i>Selby.</i>
Saxicola Cœnanthe, <i>Bechst.</i>	+
„ Rubetra, <i>Bechst.</i>	+
„ Rubicola, <i>Bechst.</i>	+
Salicaria Locustella, <i>Selby.</i>	+
„ Phragmitis, <i>Selby.</i>	+
„ arundinacea, <i>Selby.</i>	+
0	Philomela Luscinia, <i>Swains.</i>
Curruca Atricapilla, <i>Bechst.</i>	+
„ hortensis, <i>Bechst.</i>	+
„ cinerea, <i>Bechst.</i>	+
0	Curruca Garrula, <i>Briss.</i>
Sylvia Hippolais, <i>Lath.</i>	Melizophilus provincialis, <i>Leach.</i>
„ Sibilatrix, <i>Bechst. (?)</i>	+
„ Trochilus, <i>Lath.</i>	+
Regulus Aurocapillus, <i>Selby.</i>	+
0	Regulus ignicapillus, <i>Jenyns.</i>
Parus major, <i>L.</i>	+
„ cœruleus, <i>L.</i>	+
„ palustris, <i>L.</i>	+
„ ater, <i>L.</i>	+
„ caudatus, <i>L.</i>	+
0	Parus cristatus, <i>L.</i>
Calamophilus biarmicus, <i>Leach.</i>	+
Motacilla Yarrellii, <i>Gould. (M. alba,</i> preceding British authors).	+
Motacilla Boarula, <i>L.</i>	+
„ flava, <i>Ray.</i>	+
0	Motacilla neglecta, <i>Gould.</i>
Anthus obscurus, <i>Temm.* (Rock Pipit,</i> Brit. authors).	+
Anthus pratensis, <i>Bechst.</i>	+
„ arboreus, <i>Bechst. (?)</i>	+
0	Anthus Richardi, <i>Vieill.</i>

\* Not *A. aquaticus*, *Bechst.* See *Temm. Man.*, part iv. p. 929.

*Accentor modularis*, *Erythaca Rubecula*, *Saxicola Rubicola*, *Regulus Aurocapillus*, *Parus major*, *P. cæruleus*, *P. ater*, *Motacilla Yarrellii*, *M. Boarula*, *Anthus obscurus*, *A. pratensis* are common and resident: in the wilder districts, especially towards the west, *M. Boarula* is rare. *Parus caudatus* and *P. palustris* are likewise resident, but much less common than the preceding species; the former is increasing with the spread of plantations; the latter is very little known as an Irish bird. *Phœnicura Ruticilla* is but of occasional and rare occurrence; *Ph. Tithys* can only be announced with certainty as having once been met with. *Saxicola Cenanthe*, *S. Rubetra*, *Salicaria Phragmitis*, *Curruca cinerea*, *Sylvia Trochilus* are the most common and widely dispersed of the regular summer visitants; *Salicaria Locustella* should perhaps be included with them, but its retired habits render it less known. *Salicaria arundinacea* is recorded by Templeton as once seen by him near Belfast, and in a single instance *Calamophilus biarmicus* has been obtained on the banks of the Shannon. *Curruca Atricapilla* is probably a regular summer visitant to select localities, and has in several instances been known to winter in Ireland. *C. hortensis* is with certainty known only as an occasional summer visitant. *Sylvia Hippolais* and *Motacilla flava* appear every summer in comparatively few localities over the island. *Sylvia Sibilatrix* and *Anthus arboreus* are believed to visit Ireland in summer, but it yet remains to be determined.

Of our desiderata, *Accentor alpinus*, *Phœnicura suecica*, *Regulus Ignicapillus*, and *Anthus Richardi* are only known as rare and occasional visitants to England. *Motacilla neglecta* cannot without further information be regarded otherwise than a species of occasional occurrence in Great Britain. There is little hope of *Parus cristatus* being found in Ireland: it is, as a British bird, known only in Scotland, where it especially frequents the pine forests. *Melizophilus provincialis* has been met with only in the more southern half of England. Of *Philomela Luscinia* and *Curruca Garrula*, the former is unknown in the West of that country, and the latter would seem to become rare towards the same quarter. With increased attention, more species in this family will doubtless be added to the Irish catalogue.

Fam. *Ampelidæ*.

Ireland.  
*Bombycilla garrula*, Bonap.

Great Britain.  
 +

An occasional winter visitant to Ireland.



## Order INSESSORES.

## Div. 2.—CONIROSTRES.

Fam. *Fringillidæ*.

Ireland.	Great Britain.
0	<i>Alauda alpestris</i> , L.
<i>Alauda arvensis</i> , L.	+
„ <i>arborea</i> , L.	+
0	<i>Plectrophanes Lapponica</i> , Selby.
<i>Plectrophanes nivalis</i> , Meyer.	+
<i>Emberiza Miliaria</i> , L.	+
„ <i>Schœniculus</i> , L.	+
„ <i>Citrinella</i> , L.	+
0	<i>Emberiza Cirrus</i> , L.
0	„ <i>hortulana</i> , L.
<i>Fringilla Cœlebs</i> , L.	+
„ <i>Montifringilla</i> , L.	+
<i>Passer domesticus</i> , Ray.	+
0	<i>Passer montanus</i> , Ray.
<i>Coccothraustes vulgaris</i> , Flem. (Fring.)	+
0	
<i>Coccothraustes Chloris</i> , Flem.	+
<i>Carduelis elegans</i> , Steph.	+
„ <i>Spinus</i> , Steph.	+
<i>Linaria minor</i> , Ray.	+
„ <i>cannabina</i> , Sw.	+
„ <i>montana</i> , Ray.	+
0	<i>Linaria canescens</i> , Gould.
<i>Pyrrhula vulgaris</i> , Temm.	+
„ <i>Enucleator</i> , Tem. (?)	+
<i>Loxia curvirostra</i> , L.	+
0	<i>Loxia Pytiopsittacus</i> , Bechst.
„ <i>leucoptera</i> , Gmel.	+

*Alauda arvensis*, *Emb. miliaria*, *E. Schœniculus* and *E. Citrinella*, *Fring. Cœlebs*, *Pass. domesticus*, *Cocc. Chloris*, *Linaria minor* and *L. cannabina* are common and resident. *Alauda arborea*, *Card. elegans*, *Lin. montana* and *Pyrr. vulgaris* are likewise resident, but more local than the others. *Plect. nivalis* is a regular winter visitant to the North of Ireland, but little known in the South; *Fring. Montifringilla* is a frequent, perhaps a regular visitant at the same period. *Cocc. vulgaris*, *Card. Spinus*, and *Loxia curvirostra* occasionally visit us in winter, the first-mentioned being the most rare, and occurring in the fewest numbers; the last-named has in some instances bred in Ireland. *Pyrr. Enucleator* would seem from a note of Mr. Templeton's to have been once met with near Belfast. *Loxia leucoptera* has been obtained on one occasion.

*Alauda alpestris*, *Plect. Lapponica*, *Emb. hortulana* and *Loxia Pytiopsittacus*\* are very rare and occasional visitants to Great Britain. *Emberiza Cirlus* and *Passer montanus* are local species in England, the former visiting only a portion of the South. *Linaria canescens* I have not yet sought to distinguish from its allies.

Fam. *Sturnidæ*.

Ireland.	Great Britain.
<i>Sturnus vulgaris</i> , L.	+
<i>Pastor roseus</i> , Temm.	+

The former species is somewhat local and partially resident; it abounds in particular localities during winter. The latter is a rare summer visitant, but has been met with in all quarters of the island.

Fam. *Corvidæ*.

Ireland.	Great Britain.
<i>Fregilus Graculus</i> , Selb.	+
<i>Corvus Corax</i> , L.	+
„ <i>Corone</i> , L.	+
„ <i>Cornix</i> , L.	+
„ <i>Frugilegus</i> , L.	+
„ <i>Monedula</i> , L.	+
<i>Pica melanoleuca</i> , Vieill.	+
<i>Garrulus glandarius</i> , Flem.	+
0	+
	<i>Nucifraga Caryocatactes</i> , Bris.

*Freg. Graculus* is pretty generally diffused over the marine cliffs of Ireland, and rarely inhabits inland localities. All the species of *Corvus* are resident and common; *C. Corone* least so. Of *Pica melanoleuca* it is stated by Smith, in his History of Cork, (1749,) that it “was not known in Ireland seventy years ago, but is now very common†. Ruddy, in his Natural History of Dublin, observes respecting this bird, “It is a foreigner, naturalised here since the latter end of King James the Second’s reign, and is said to have been driven hither by a strong wind.”‡ *Garr. glandarius* inhabits only some parts of the island, especially towards the centre and south.

*Nucif. Caryocatactes* is but a rare visitant to Great Britain. I have heard that it once occurred at Silvermines, co. Tipperary.

\* It is more than probable that some of the later British specimens noticed as this bird were merely *L. curvirostra*, with the point of the lower mandible not extending beyond the profile of the upper.

† Vol. ii. p. 330.

‡ Vol. i. p. 308.

## Order INSESSORES.

## Div. 3.—SCANSORES.

Fam. *Picidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
0	<i>Picus viridis, L.</i>
<i>Picus major, L.</i>	+
0	„ <i>minor, L.</i>
0	„ <i>martius, L.</i>
0	<i>Yunx Torquilla, L.</i>

Owing to the general scarcity of wood, especially old, this family of birds is rare. *P. major* only can with certainty be introduced to our catalogue, and it is but a very rare visitant. "*Picus varius minor*, Lesser Spotted Woodpecker," is given as one of the birds of the co. Dublin by Ruddy\*. In Dr. Patrick Brown's catalogue of the Birds of Ireland it likewise has a place, but was probably copied from Ruddy. In Smith's Waterford† appears "*Picus Martis*, the Woodpecker, a bird rare in this county:" the *P. martius* can hardly have been here meant.

*Picus viridis* would appear to be generally distributed in suitable localities in Great Britain, and *P. minor* to be so in England; *P. martius* is a very rare visitant. *Yunx Torquilla*, one of the summer birds of passage to England, decreases in numbers towards the west of that country.

Fam. *Certhiadæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Certhia familiaris, L.</i>	+
<i>Troglodytes europæus, Cuv.</i>	+
<i>Upupa Epops, L.</i>	+
0	<i>Sitta europæa, L.</i>

*Cert. familiaris* constantly inhabits the best-wooded districts throughout Ireland; *Trog. europæus* is common and resident. *Upupa Epops* is a rare visitant but has been taken in all quarters of the island.

*Sitta europæa* is somewhat local in England, and towards the West is said to become more rare.

Fam. *Cuculidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Cuculus canorus, L.</i>	+
<i>Coccyzus americanus, Bonap.</i>	+

The former is a regular vernal migrant to Ireland, and is generally diffused; the latter has on two or three occasions been obtained in the counties of Cork and Dublin.

\* Vol. i. p. 302.

† P. 338.

## Order INSESSORES.

## Div. 4.—FISSIROSTRES.

Fam. *Meropidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Coracias garrula, L.</i>	+
<i>Merops Apiaster, L.</i>	+

Both species are extremely rare and known only to have occurred on two or three occasions in Ireland.

Fam. *Halcyonidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Alcedo Ispida, L.</i>	+

Is diffused over suitable localities and resident.

Fam. *Hirundinidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Hirundo rustica, L.</i>	+
„ <i>urbica, L.</i>	+
„ <i>riparia, L.</i>	+
<i>Cypselus Apus, Flem.</i>	+
„ <i>alpinus, Temm.</i>	+

The three species of *Hirundo* and *Cyp. Apus* are regular vernal migrants to Ireland. *Cyp. alpinus* has been obtained once off Cape Clear, and again in the county of Dublin.

Fam. *Caprimulgidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Caprimulgus europæus, L.</i>	+

A regular summer visitant to certain portions of the island both north and south, but very local.

## Order 3.—RASORES.

Fam. *Columbidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Columba Palumbus, L.</i>	+
0	<i>Columba CEnas, L.</i>
„ <i>Livia, Bris.</i>	+
„ <i>Turtur, L.</i>	+
0	„ <i>migratoria, L.</i>

*C. Palumbus* and *C. Livia* are common and resident in their very different places of abode. *C. Turtur* is an occasional summer visitant.

*C. CEnas* is very partially distributed in England, being chiefly confined to the midland and eastern counties. Of *C. migratoria* a single specimen, supposed to have been in a wild state, has been obtained in Great Britain\*.

\* *Phasianus Colchicus*, and its var.  $\beta$  the Ring-necked, are common in many parts of Ireland to which they have been introduced.

Fam. *Tetraonidæ*.

Ireland.	Great Britain.
0	Tetrao Tetrix, L.
Lagopus scoticus, Selby.	+
0	Lagopus mutus, Leach.
Perdix cinerea, Lath.	+
„ Coturnix, Lath.	+

In the genera *Tetrao* and *Lagopus*, which in the eye of the sportsman if not of the naturalist are of all others the most attractive, we now possess but one species, the *Lagopus scoticus*. This is common to heathy tracts, from the low-lying bog to the mountain top throughout Ireland, and is in many places as abundant as in the highlands of Scotland. Of the *Tetrao Urogallus*, Smith, in his History of Cork\*, observes, that it is now found rarely in Ireland since our woods have been destroyed. In his Natural History of Dublin, Ruttly remarks, that "one of these [*T. Urogallus*] was seen in the county of Leitrim about the year 1710, but they have entirely disappeared of late, by reason of the destruction of our woods†." In the work above cited, Smith describes the *T. Tetrix* as "frequent." Mr. Templeton states that he had been informed by excellent authority, that "black game is mentioned in some of the old leases of the county of Down"‡; and elsewhere this bird is noticed as a native. That the species alluded to by Smith was the *T. Tetrix* would seem hardly to admit of doubt, as in addition to it he enumerates the Red Grouse. If it were really indigenous, its extinction must, I conceive, be attributed to the destruction of our native woods. The *Lagopus mutus* is not now, nor do I conceive ever was, indigenous to this island. There seems not to be in any part of Ireland a continuity of mountains of sufficient altitude to be suited to the Ptarmigan's abode. *Perdix cinerea* is common and resident. *P. Coturnix* frequents the most highly-cultivated districts in summer, and within the last few years has in certain localities remained throughout the winter.

Fam. *Struthionidæ*.

Ireland.	Great Britain.
0	Otis Tarda, L.
Otis Tetrax, L.	+

The latter species, which is a very rare visitant to Great Britain, has once been obtained in Ireland, in the county of Wicklow a few years ago. *O. Tarda* is enumerated by Smith

\* 1749.

† Vol. i. p. 302.

‡ Magazine of Natural History, vol. i. new series.

as one of the birds of the county of Cork; it is long since extinct.

## Order 4.—GRALLATORES.

Fam. *Charadriadæ*.

Ireland.	Great Britain.
0	<i>Cursorius Isabellinus</i> , Meyer.
<i>Ædicnemus crepitans</i> , Temm.	+
<i>Charadrius pluvialis</i> , L.	+
„ <i>Morinellus</i> , L.	+
„ <i>Hiaticula</i> , L.	+
0	<i>Charadrius minor</i> , Meyer.
0	„ <i>Cantiacus</i> , Lath.
<i>Squatarola cinerea</i> , Cuv.	+
<i>Vanellus cristatus</i> , Meyer.	+
<i>Streptilas Interpres</i> , Leach.	+
<i>Arenaria Calidris</i> , Meyer.	+
<i>Hæmatopus Ostralegus</i> , L.	+

In this family, *Van. cristatus* and *Hæm. Ostralegus* are common and resident. *Char. pluvialis* and *C. Hiaticula* are common and partially resident; the numbers of both species (certainly of the former) being much increased by an autumnal migration from higher latitudes. *Squat. cinerea*, *Strep. Interpres*, and *Aren. Calidris*, are regular periodical visitants. *Ædic. crepitans* and *Char. Morinellus* very rarely visit Ireland.

Of the *Cursorius Isabellinus*, four individuals have been obtained in England and Wales. *Char. minor* has a place in the British catalogue from a single specimen killed in Sussex. To the east and south-east of England only, I believe, is *Char. Cantianus* known.

Fam. *Gruidæ*.

Ireland.	Great Britain.
0	<i>Grus cinerea</i> , Bechst.

In his History of Cork, Smith states that “this bird was seen in this country during the remarkable frost of 1739.”

Fam. *Ardeidæ*.

Ireland.	Great Britain.
<i>Ardea cinerea</i> , Lath.	+
„ <i>purpurea</i> , L.	+
0	<i>Ardea alba</i> , L.
„ <i>Garzetta</i> , L.	+
0	„ <i>russata</i> , Wagler.
0	„ <i>Ralloides</i> , Scop.
<i>Botaurus stellaris</i> , Steph.	+
0	<i>Botaurus Mokoho</i> , Vieill.
„ <i>minutus</i> , Selby.	+
<i>Nycticorax europæus</i> , Steph.	+

Ireland.	Great Britain.
0	<i>Ciconia alba</i> , Ray.
0	„ <i>nigra</i> , Ray.
<i>Platalea Leucorodia</i> , L.	+
<i>Ibis Falcinellus</i> , Temm.	+

In this family, the *Ardea cinerea* only is common and resident; *Botaurus stellaris* is, in consequence of the improvement of the bogs, becoming gradually scarcer, and, as a resident species, is confined to few localities. *Bot. minutus*, *Nyct. europæus*, *Plat. Leucorodia*, *Ibis Falcinellus*, are rare visitants. *Ardea purpurea* and *A. Garzetta* have each been once obtained; of the latter species, one or two other examples in addition to that alluded to\*, are said to have occurred on the southern coast.

The six British species of the *Ardeidæ* which are desiderata in Ireland, are, with the exception of *Ciconia alba*, very rare visitants; three of them, indeed, are with certainty placed in the catalogue from their occurrence each in a single instance.

Fam. *Scolopacidæ*.

Ireland.	Great Britain.
<i>Numenius arquata</i> , Lath.	+
„ <i>Phæopus</i> , Lath.	+
<i>Totanus fuscus</i> , Leisl.	+
„ <i>Calidris</i> , Bechst.	+
„ <i>Ochropus</i> , Temm.	+
„ <i>Glareola</i> , Temm. (?)	+
„ <i>Hypoleucos</i> , Temm.	+
„ <i>Glottis</i> , Bechst.	+
<i>Recurvirostra Avocetta</i> , L.	+
<i>Himantopus melanopterus</i> , Temm.	+
<i>Limosa melanura</i> , Leisl.	+
„ <i>rufa</i> , Briss.	+
<i>Scolopax Rusticola</i> , L.	+
„ <i>Sabini</i> , Vigors.	+
„ <i>major</i> , Gmel. (?)	+
„ <i>Gallinago</i> , L.	+
„ <i>Gallinula</i> , L.	+
0	<i>Macroramphus griseus</i> , Leach.
<i>Machetes pugnax</i> , Cuv.	+
<i>Tringa subarquata</i> , Temm.	+
„ <i>variabilis</i> , Meyer.	+
0	<i>Tringa pectoralis</i> , Bonap.
„ <i>maritima</i> , Brunn.	+
0	„ <i>Temminckii</i> , Leisl.
„ <i>minuta</i> , Leisl.	+
„ <i>Canutus</i> , L.	+
0	„ <i>rufescens</i> , Vieill.
0	<i>Lobipes hyperboreus</i> , Steph.
<i>Phalaropus lobatus</i> , Flem.	+

\* See Templeton in Magazine of Natural History, vol. i. new series.

The word "resident," in the sense in which it has hitherto been used, will not apply to any of the *Scolopacidæ*. The species of which a portion breed in Ireland, and are common at all seasons, are *Num. arquata*, *Tot. Calidris*, *Scol. Gallinago*, and *Trin. variabilis*. *Tot. Hypoleucos* is a regular summer visitant; at the same season *T. Ochropus* has occasionally been met with, and very rarely *T. Glarcola*\*? The regular autumnal migrants are *Num. Phæopus*, *Tot. Glottis*, *Lim. rufa*, *Machetes pugnax*, *Trin. subarquata* †, *T. minuta* †, *T. Canutus*; and to these probably *Lim. melanura* might with propriety be added. In the North of Ireland these species are met with for a longer or shorter period during autumn, and generally move southward on the approach of winter: to this there are, however, occasional exceptions, in some remaining behind; to *T. Canutus* and *T. Glottis* this more especially applies. *Num. Phæopus* is, in consequence of being in large flocks, much better known upon our coasts in spring when migrating northwards, than in the autumn, when it appears only in small numbers. *Scol. Rusticola* and *S. Gallinula* come from more northern latitudes to abide the winter; the former has of late years bred in various parts of Ireland ‡. *Scol. Sabini*, *Trin. maritima*, and *Phal. lobatus*, have on several occasions been obtained; *T. maritima* is probably a regular winter visitant. *Recur. Avocetta* and *Him. melanopterus* have twice been noticed. *Tot. fuscus* is on record, from a single example having occurred: this species may have escaped notice from its general similarity to the common *Tot. Calidris*. *Scol. major* should not perhaps be included even with a mark of doubt, as I have not seen any example of it, killed in Ireland, but sportsmen have described birds to me that can hardly be any other, and have correctly remarked on the peculiarity of habits in which they differed from the *Scol. Gallinago*.

Of our desiderata in the *Scolopacidæ*, *Tr. pectoralis* has once, and *Tr. rufescens* twice, been obtained in England; *Macr. griseus* is a "very rare," and *Tr. Temminckii* an "occasional visitant" to that country. *Lobipes hyperboreus* is in Great Britain chiefly confined to the more northern isles and coasts of Scotland.

Fam. *Rallidæ*.

Ireland.	Great Britain.
0	<i>Glarcola Pratincola</i> , Leach.
<i>Rallus aquaticus</i> , L.	+

\* See Annals of Natural History, vol. v. p. 8.

† Ibid., vol. iv. p. 285.

‡ Annals of Natural History, vol. ii.



Ireland.	Great Britain.
<i>Crex pratensis</i> , <i>Bechst.</i>	+
„ <i>Porzana</i> , <i>Selby.</i>	+
0	<i>Crex Baillonii</i> , <i>Selby.</i>
0	„ <i>pusilla</i> , <i>Selby.</i>
<i>Gallinula Chloropus</i> , <i>L.c.th.</i>	+
<i>Fulica atra</i> , <i>L.</i>	+

*R. aquaticus* and the two last are resident and common, as the species ordinarily are in other countries. *Crex pratensis* is a regular summer visitant, and abundant; *C. Porzana* a species of occasional occurrence at the same season.

Of *Glareola Pratincola*, four individuals are on record as British. *Crex Baillonii* and *C. pusilla* are very rare visitants to England.

## Order 5.—NATATORES.

## Fam. Anatidæ.

Sub-Fam. *Anserinæ*.

Ireland.	Great Britain.
<i>Anser palustris</i> , <i>Flem.</i>	+
„ <i>ferus</i> , <i>Flem.</i>	+
„ <i>Erythropus</i> , <i>Flem.</i>	+
„ <i>Bernicla</i> , <i>Flem.</i>	+
„ <i>Brenta</i> , <i>Flem.</i>	+
0	<i>Anser ruficollis</i> , <i>Pall.</i>
0	<i>Plectropterus Gambensis</i> , <i>Steph.</i>
<i>Cygnus ferus</i> , <i>Ray.</i>	+
„ <i>Bewickii</i> , <i>Yarr.</i>	+

*A. ferus* (*A. Segetum*, *Steph.*), *A. Erythropus* (*A. albifrons*, *Steph.*), *A. Bernicla* and *A. Brenta* are regular winter visitants to Ireland, the two last, but more especially *A. Brenta*, being in great numbers in their very different places of abode. *A. palustris* (*A. ferus*, *Steph.*) is much more rare than the two first mentioned: at one period it bred in this country, but has long since ceased to do so.

Wild Swans are seen every winter in some parts of Ireland, but it cannot be positively stated of either *C. ferus* or *C. Bewickii*, that it is a regular winter visitant; that one or both may be so considered is a fair inference, from the same lakes being annually visited by "wild Swans." Of both species I have seen examples, which were obtained in the north, east, and west of the island; *C. Bewickii* is of much more frequent occurrence than *C. ferus*. The Egyptian Goose (*Anser ægyptiacus*) and Canada Goose (*Anser Canadensis*) have at different times been shot on the Irish coast: the former species had doubtless escaped from ponds; the latter, too, had in all probability done so.

*A. ruficollis* is a very rare visitant to England. *A. Gambensis* has been but once obtained, and whether the individual so recorded was a wild bird is very questionable, as the species does not appear to have been met with on the European continent.

Fam. *Anatidæ*.Sub-Fam. *Anatinae*.

Ireland.	Great Britain.
Tadorna Vulpanser, <i>Flem.</i>	+
0	Tadorna rutila, <i>Steph.</i>
Spathulea clypeata, <i>Flem.</i>	+
Chauliodus Strepera, <i>Sw.</i>	+
Anas Boschas, <i>L.</i>	+
Querquedula acuta, <i>Selby.</i>	+
" Crecca, <i>Steph.</i>	+
" Circia, <i>Steph.</i>	+
0	Querquedula glocitans, <i>Figors.</i>
Mareca Penelope, <i>Selby.</i>	+

Three species, *T. Vulpanser*, *A. Boschas*, and *Q. Crecca*, may be called resident from their breeding in Ireland and being met with at all seasons; but of the numbers of the two last which are here in winter, but a small proportion is bred in the country. *Spat. clypeata* is most probably indigenous, as in England. It has occurred in Ireland in May, and I once obtained an adult female, shot in July. *Querq. acuta* and *Mar. Penelope* are regular winter visitants. *Chaul. Strepera* and *Querq. Circia* (*A. Querquedula*) are of rare occurrence at the same season; of the latter I have not myself seen a duly-authenticated Irish example; it is noticed in Tighe's Kilkenny, and in a catalogue of the Birds of Dublin supplied me by Mr. R. Ball.

*Tad. rutila* and *Querq. glocitans* are extremely rare visitants to England.

Fam. *Anatidæ*.Sub-Fam. *Fuliginæ*.

Ireland.	Great Britain.
Somateria molliissima, <i>Leach.</i>	+
" spectabilis, <i>Leach.</i>	+
Oidemia fusca, <i>Flem.</i>	+
" nigra, <i>Flem.</i>	+
0	Fuligula rufina, <i>Steph.</i>
Fuligula ferina, <i>Steph.</i>	+
0	" Nyroca, <i>Steph.</i>
0	" dispar, <i>Steph.</i>
" Marila, <i>Steph.</i>	+
" cristata, <i>Steph.</i>	+
Clangula vulgaris, <i>Leach.</i>	+
0	Clangula histrionica, <i>Steph.</i>
Harelda glacialis, <i>Steph.</i>	+

The three species of *Fuligula* noticed as Irish, and *Clang. vulgaris*, are regular winter visitants: *Oid. nigra* and *Har. glacialis* would likewise seem to be so, but in very small numbers; for four winters successively I have obtained a single specimen of the last in Belfast Bay. *Oid. fusca*, *Som. mollissima*, and *S. spectabilis*, can only be noticed as very rare visitants; once only has the last been obtained\*.

*Ful. rufina* has in a very few instances occurred in England. *F. Nyroca* is but a rare and occasional visitant; and *F. dispar* has once been procured. *Clang. histrionica* is likewise very rare.

## Fam. Anatidæ.

## Sub-Fam. Merganinæ.

Ireland.	Great Britain.
Mergus Merganser, L.	+
„ Serrator, L.	+
0	Mergus cucullatus, L.
„ albellus, L.	+

*M. Serrator* is indigenous, nestling on islets both of marine and fresh-water loughs. *M. Merganser* is a regular, and *M. albellus* an occasional winter visitant.

*M. cucullatus* has a place in the British catalogue from the occurrence of a single specimen.

## Fam. Colymbidæ.

Ireland.	Great Britain.
Podiceps cristatus, Lath.	+
„ rubricollis, Lath.	+
„ cornutus, Lath.	+
„ auritus, Lath.	+
„ minor, Lath.	+
Colymbus glacialis, L.	+
„ arcticus, L.	+
„ septentrionalis, L.	+

*Pod. minor* is common and resident; *P. cristatus* is more rare, but resident on the larger lakes; *P. rubricollis* is known only as a rare visitant; *P. cornutus* is not of uncommon occurrence in winter, at which season *P. auritus* more rarely occurs. These two last species are most probably indigenous, as in England, but they have not come under my cognizance in summer. *Col. glacialis* and *C. septentrionalis* are regular winter visitants; *C. arcticus* is much more rare, but occasionally met with at the same season.

\* The specimen is in the collection of Mr. R. Ball.

Fam. *Alcidae*.

Ireland.	Great Britain.
<i>Uria Troile, Lath.</i>	+
„ <i>Brunnichii, Sabine.</i>	+
„ <i>Grylle, Lath.</i>	+
<i>Mergulus melanoleucos, Ray.</i>	+
<i>Fratercula arctica, Steph.</i>	+
<i>Alca Torda, L.</i>	+
„ <i>impennis, L.</i>	+

*Uria Grylle* is a resident species. *U. Troile*, *Frat. arctica*, and *Alca Torda*, are regular summer visitants, having breeding-haunts around the coast: either or both of the two former I am disposed to believe may occasionally be found in small numbers in the bays of Ireland during winter. *Uria Brunnichii* is noticed by Major Sabine as seen by him in the month of July on the coast of Kerry\*, where it may be presumed to breed. By this able ornithologist, the *Merg. melanoleucos* (*M. Alle*) was observed at the same time with *U. Brunnichii*; here it also may have its nestling-places; in two instances I know of this bird having been shot on the coasts of Wexford and Kerry. Of *Alca impennis*, a single specimen is on record as Irish.

Fam. *Pelecanidae*.

Ireland.	Great Britain.
<i>Phalacrocorax Carbo, Steph.</i>	+
„ <i>cristatus, Steph.</i>	+
<i>Sula Bassana, Bris.</i>	+

The first two are common and resident. *Sula Bassana* is common on the coast of Ireland in summer and autumn; the individuals which frequent the northern parts have their breeding-haunts in Scotland. On the Irish coast this species breeds only on one of the Skelig islands off Kerry.

Fam. *Laridae*.

Ireland.	Great Britain.
0	<i>Sterna Caspia, Pall.</i>
<i>Sterna Boysii, Lath.</i>	+
„ <i>Dougallii, Mont.</i>	+
„ <i>Hirundo, L.</i>	+
„ <i>arctica, Temm.</i>	+
„ <i>minuta, L.</i>	+
„ <i>nigra, L.</i>	+
0	<i>Sterna Anglica, Mont.</i>
„ <i>stolida, L.</i>	0
<i>Larus Sabini, Sab.</i>	+
„ <i>minutus, Pall.</i>	+
„ <i>capistratus, Temm.</i>	+

\* Ainsworth's "Caves of Ballybunian," p. 78.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Larus ridibundus</i> , <i>L.</i>	+
0	<i>Larus atracilla</i> , <i>L.</i>
„ <i>Rissa</i> , <i>L.</i>	+
„ <i>Canus</i> , <i>L.</i>	+
„ <i>eburneus</i> , <i>Gmel.</i> (?)	+
„ <i>argentatus</i> , <i>Brunn.</i>	+
„ <i>fuscus</i> , <i>L.</i>	+
„ <i>marinus</i> , <i>L.</i>	+
„ <i>Islandicus</i> , <i>Edmon.</i>	+
„ <i>glaucus</i> , <i>Brunn.</i>	+
<i>Cataractes vulgaris</i> , <i>Flem.</i>	+
„ <i>Pomarinus</i> , <i>Steph.</i>	+
„ <i>Richardsonii</i> ( <i>Lest. Richardsonii</i> , <i>Sw.</i> )	+
„ <i>parasiticus</i> ( <i>not Flem.</i> , <i>Lest.</i> )	+
„ <i>parasiticus</i> , <i>Temm.</i>	+
0	<i>Procellaria glacialis</i> , <i>L.</i>
<i>Puffinus cinereus</i> , <i>Steph.</i>	+
„ <i>Anglorum</i> , <i>Ray.</i>	+
0	<i>Puffinus fuliginosus</i> , <i>Strickland.</i>
<i>Thalassidroma pelagica</i> , <i>Selby.</i>	+
„ <i>Bullockii</i> , <i>Selby.</i>	+

*St. Dougallii*, *S. Hirundo*, *S. arctica*, and *S. minuta*, are regular summer visitants to Ireland, the *S. Hirundo* and *S. arctica* being much the most common and widely-distributed species. These two, with *S. Dougallii*, breed in a small low rocky islet near the entrance to Belfast Bay\*. *St. nigra* is an occasional visitant; and many years ago was known by Mr. R. Ball to breed at a small lake in the county of Cork. *St. Boysii* is annually shot upon the coast, and may perhaps have breeding-haunts in some of the islets that are rarely visited by the naturalist. *St. stolidus* has a place in the catalogue from two specimens having been taken at sea between Tusker Lighthouse (co. Wexford) and Dublin Bay. *Larus capistratus* (of British authors), *L. ridibundus*, *L. Canus*, *L. argentatus*, *L. fuscus*, and *L. marinus*, are resident species. *L. Rissa* is a regular summer visitant. *L. glaucus* is of occasional occurrence on every quarter of the coast. *L. Sabini* has in four instances been obtained in the bays of Belfast and Dublin; *L. Islandicus* has twice been noticed †, and *L. minutus* once: of the latter species, an adult bird in summer plumage was shot upon the river Shannon. In the Appendix to Ross's Second Voyage it is remarked, under the head of *Larus eburneus*,

\* *S. Dougallii* likewise breeds on islets off the Dublin coast.

† In March 1832 I saw a specimen of *L. Islandicus* in the shop of Mr. Glennon, bird-preserver, Dublin: it had been sent him early in the winter of 1831-32, from the West of Ireland. The other example was obtained by the Ordnance Survey in Strangford Lough.

that "this beautiful gull has lately visited the western shores of Ireland," (p. 35). Capt. James Ross, the author of this Appendix, has informed me that early in the year 1834 he derived that information from Joseph Sabine, Esq., and that he knows nothing of it further than what is published. For some years, however, I have had a note communicated by the late Thomas F. Neligan, Esq., of Tralee, who was well versed in British Birds, that "in January 1835 he saw a gull in a field near that town, and four miles from the sea, which he was satisfied was the *L. eburneus*; he watched it for about twenty minutes, and was at first attracted by the ivory tint of its plumage and its black legs." All the species of *Cataractes* do in autumn and winter, at least occasionally, visit the Irish coast. *Puffinus cinereus* has been obtained near Dungarvan, county Waterford, and is believed to breed there. *P. Anglorum* is known to me only as an occasional visitant; it would seem to be more rare now in Ireland than formerly, as is the case in other of the British islands: in Harris's Down and Smith's Cork it is mentioned. *Thal. pelagica* is at all times to be met with on the coasts of Ireland washed by the Atlantic, and breeds on several of the islets ranging from north to south of the western coast. *Thal. Bullockii* (*Proc. Leachii*, Temm.) has been obtained on various occasions in all quarters of Ireland; it breeds on some of the western islets.

*Sterna Caspia* and *St. Anglica* have in a very few instances been obtained in England. *Larus atracilla*, as a British bird, was known only to Montagu, who on two occasions met with it on the coast of Sussex. *Proc. glacialis* is, except in the North of Scotland, an occasional visitant to the shores of Great Britain; *P. fuliginosa* has but once been procured in England.

In the preceding catalogue of Irish Birds, all the species noticed by Mr. Selby as *indigenous* to Great Britain will be found—either as such, or as visitants—except the following: *Melizophilus provincialis*, *Parus cristatus*, *Emberiza Cirlus*, *Passer montanus*, *Picus viridis*\*, *Sitta europæa*, *Columba Cenas*, *Lagopus mutus*. With these may be mentioned three more which are said to have been found in Ireland, but are not now indigenous—*Picus minor*, *Tetrao Tetrix*, *Otis tarda*.

\* I have been assured that this bird is found in some localities in Ireland, but have not seen specimens.

## PART IV.

## CLASS REPTILIA.

## Order 1.—TESTUDINATA.

<i>Ireland.</i>	<i>Great Britain.</i>
Chelonia Caouana, Schw. 0 0	+ Chelonia imbricata, Schw. Sphargis coriacea, Gray.

A single specimen of *C. Caouana* has been taken alive on the coast of Donegal\*. In the British catalogue this species has a place from the occurrence of an individual on the Devonshire coast.

*C. imbricata* and *S. coriacea* have each been obtained on three occasions on the coasts of Great Britain.

## Order 2.—SAURIA.

<i>Ireland.</i>	<i>Great Britain.</i>
0 Zootoca vivipara, Wagl. Bell.	+ Lacerta agilis, L. Bell.

*Z. vivipara* prevails over the island. *Lacerta viridis*, stated by Ray to have been found in Ireland, is at present quite unknown. Mr. Bell in his "British Reptiles" suggests that "a green variety of *L. agilis*, L., was probably alluded to: this is more likely than that the true *L. viridis* was meant; but the *L. agilis*, L., has not been distinguished as an Irish species." It has but lately been added to the British Fauna, and from specimens obtained in the South of England.

## Order 3.—OPHIDIA.

<i>Ireland.</i>	<i>Great Britain.</i>
0 0 0	Anguis fragilis, L. Natrix torquata, Ray. Pelius Berus, Merr.

Ireland has ever been free from the presence of Ophidian Reptiles. As there is no physical obstacle to their being indigenous to the island, it can only be said, that as all animals have geographical limits assigned to them, so these have Great Britain as their western boundary within her parallel of latitude.

\* See Annals of Natural History, vol. v. p. 8.

## AMPHIBIA.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Rana temporaria</i> , L.	+
0	<i>Bufo vulgaris</i> , Laur.
<i>Bufo calamita</i> , Laur.	+
<i>Triton cristatus</i> , Laur. (?)	+
0	<i>Triton Bibronii</i> , Bell.
<i>Lissotriton punctatus</i> , Bell.	+
,, <i>palmipes</i> , Bell. (?)	+

*Rana temporaria* is common throughout Ireland. In Ruttý's "Natural History of Dublin," the Frog is said to have been "brought into this kingdom in 1699 by Dr. Guithers:" from those introduced by this gentleman to the University Park, Dublin, it is considered that all the frogs in Ireland and her islands\* owe their origin! *Bufo calamita* is found in several parts of the county of Kerry, where it is believed to be indigenous. *Triton cristatus* is noticed by Templeton; to myself it is unknown. *Liss. punctatus* occurs from north to south, but is not universally distributed. *Liss. palmipes* has been so accurately described to me as to warrant its introduction, with a mark of doubt: I have not yet seen examples of it.

*Bufo vulgaris*, though so common in Great Britain, is not found in Ireland. *Triton Bibronii* is a recently-distinguished British species.

## PART V.

## CLASS PISCES.

## (1. OSSEI.)

## PECTINIBRANCHII.

## Order 1.—ACANTHOPTERYGII.

Fam. *Percidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Perca fluviatilis</i> , L.	+
<i>Labrax Lupus</i> , Cuv.	+
0	<i>Serranus Cabrilla</i> , Cuv.
0	,, <i>Gigas</i> , Cuv.
0	<i>Polyprion cernium</i> , Cuv.
0	<i>Acerina vulgaris</i> , Cuv.
0	<i>Trachinus Draco</i> , L.
<i>Trachinus Vipera</i> , Cuv.	+
<i>Mullus Surmuletus</i> , L.	+
0	,, <i>barbatus</i> , L.

\* In Achil I have remarked them to be common.



In the family *Percidæ*, Ireland would seem to be so deficient that four species only can be announced; of these, *Mullus Surmuletus* is given on the authority of Dr. Patrick Browne's Catalogue, published in 1774. The *Perca fluviatilis* is stated to have been introduced; but this I am disposed to doubt, as the species is so very widely distributed over the island. *Labrax Lupus* is a well-known fish on the coast, its numbers decreasing northwards. *Trachinus Viperæ* is found from north to south.

Of the species unknown to the Irish Fauna, *Serranus Cabrilla* and *S. Gigas* have in Great Britain been noticed only on the coast of Cornwall, and of the latter but a single individual has been procured; *Polyprion cernium* has been observed only on the south-west coast of England; *Mullus barbatus* is extremely rare; *Trachinus Draco* a species only of occasional occurrence, and chiefly on the southern coast\*. *Acerina vulgaris* is said to be common to the rivers and canals in England.

Fam. *Loricati*.

Ireland.	Great Britain.
Trigla Pini, <i>Bl.</i>	+
„ lineata, <i>Gmel.</i>	+
„ Hirundo, <i>Bl.</i>	+
„ Lyra, <i>L.</i>	+
„ Gurnardus, <i>L.</i>	+
„ Cuculus, <i>Bl.</i> } one species†.	+
„ Pæcilopectera, <i>Cuv.</i>	+
0	Trigla lucerna, <i>Brunn.</i>
0	Peristedion Malarmat, <i>Cuv.</i>
0	Cottus Gobio, <i>L.</i>
„ Scorpius, <i>L.</i>	+
„ Bubalis, <i>Euph.</i>	+
0	Cottus quadricornis, <i>L.</i>
Aspidophorus cataphractus, <i>Cuv.</i>	+
0	Scorpoena norvegica, <i>Cuv.</i>
Gasterosteus aculeatus, <i>L.</i>	+
„ Pungitius, <i>L.</i>	+
„ Spinachia, <i>L.</i>	+

Of the seventeen (reckoning *Trigla Gurnardus* and *T. Cuculus* as one) British species of *Loricata* here enumerated, Ireland is known to possess all but five; of these, three species, *Trigla lucerna*, *Peristedion Malarmat*, and *Cottus quadricornis*, are late additions, and have as yet been procured only

\* The term "southern coast" applied to England, throughout this Report, refers generally to the portion of that country which lies altogether to the South of Ireland.

† See Annals of Natural History, vol. ii. p. 413.

on the more southern coast. *Sciæna norvegica* has I believe been taken only from Berwick northwards. *Cottus Gobio* is said to be common in England.

Of *Trigla Pæcilopectera* but a single individual, obtained at Youghal, has yet been recognised in the British seas\*. Of the *Triglæ*, *T. Gurnardus* is most common in Ireland, and taken in abundance in the more genial season of the year; next come *T. Hirundo*, *T. Pini*, and *T. lineata*, which are procured at different seasons and throughout the winter. *T. Lyra* I have not seen in the north, but have observed it in Galway market. Mr. R. Ball states that at Youghal it is not uncommon. Of the *Cotti*, *C. Scorpius* and *C. Bubalis* are common around the coast; the latter the more so. *Aspidophorus*, *Gasterosteus aculeatus*, with its varieties †, and *G. Spinachia*, are common from north to south; *G. Pungitius* is obtained in the north, and in one locality at least, southwards.

Fam. *Sciænida*.

Ireland.	Great Britain.
<i>Sciæna Aquila</i> , Cuv.	+
0	<i>Umbrina vulgaris</i> , Cuv.

A single individual only of *S. Aquila* is known to have been taken on the Irish coast; about the 1st of August, 1840, it was captured within the entrance of Cork harbour.

The *Umbrina vulgaris* has but in one instance been recognised as a British fish.

Fam. *Sparida*.

Ireland.	Great Britain.
0	<i>Chrysophrys aurata</i> , Cuv.
0	<i>Pagrus vulgaris</i> , Cuv.
0	<i>Pagellus erythrinus</i> , Cuv.
0	„ <i>Acarne</i> , Cuv.
<i>Pagellus Centrodontus</i> , Cuv.	+
0	<i>Dentex vulgaris</i> , Cuv.
0	<i>Cantharus griseus</i> , Cuv.

Of the seven British species of the *Sparida*, I have seen only the *Pag. Centrodontus* † in Ireland, where it is common around the coast. A second species appears in several Irish catalogues, and *Chrysophrys* or *Pagrus* may perhaps be

\* Proceedings of the Zoological Society, 1837, p. 61.

† *Gast. trachurus*, *semiarmatus*, *lieurus*, *brachycentrus*, *semiloricatus*, and *spinulosus* seem to me varieties of one species. See Annals of Natural History for April 1841.

‡ It is I presume this species which is alluded to by Templeton, under the name of *Sparus aurata*.

meant. Ruddy mentions *Cantharus Rondeletii*, quoting Willoughby, fig. 5, 1, as a fish taken in Dublin Bay: the species thus referred to is the *Cantharus vulgaris*\*, a Mediterranean fish, and yet unrecognised as British. The reference is probably erroneous.

*Dentex vulgaris* and *Pag. Acarne* have their place in the British catalogue from the capture of a single individual of each species; the other four have, with the exception perhaps of either *Chrysophrys* or *Pagrus*, been taken only on the southern coast of England. A single specimen of *Pag. erythrinus* was procured by Dr. Parnell in the Frith of Forth.

Fam. *Squamipinnati*.

Ireland.	Great Britain.
0	Brama Raii, Cuv.

This is a rare British species. It is enumerated in a list of fishes published in M'Skimmin's History of Carrickfergus, but the propriety of the application of the name to this species is doubtful.

Fam. *Scombridæ*.

Ireland.	Great Britain.
Scomber Scomber, L.	+
„ maculatus, Couch (?)	+
Thynnus vulgaris, Cuv.	+
„ Pelamys, Cuv.	+
0	Xiphias Gladius, L.
0	Neurates Ductor, Cuv.
Caranx Trachurus, Lacép.	+
Zeus Faber, L.	+
0	Capros Aper, Lacép.
Lampris Luna, Flem.	+
0	Coryphæna Morio, Cuv.

The four species of *Scombridæ* desiderated in the Irish list are all rare British species, and, excepting *Xiphias*, chiefly found on the southern coast.

*Scomber Scomber* is common around Ireland; *Scomber maculatus* is scomber by a very intelligent correspondent to visit the coast of Connemara in the months of July and August. *Caranx Trachurus* and *Zeus Faber* have been obtained from north to south, but are most common on the western coast. *Thynnus vulgaris*, *T. Pelamys*, and *Lampris Luna*, are extremely rare visitants to the Irish as to the English and Scottish coasts.

\* Cuv. and Val., tom. vi. p. 318.

Fam. *Tænioidei*.

<i>Ireland.</i>	<i>Great Britain.</i>
0	Lepidopus argyreus, <i>Cuv.</i>
0	Trichiurus Lepturus, <i>L.?</i>
0	Trachypterus vogmarus, <i>Cuv.</i>
0	Gymnetrus Hawkenii, <i>Bl.?</i>
0	Cepola rubescens, <i>L.</i>

Of the *Tænioidei*, none can be announced as Irish; all are species of only occasional occurrence on the coasts of Great Britain, excepting the *Cepola rubescens*, which will doubtless yet be added to the Irish catalogue. On the coast of Ayrshire, in Scotland, so near to Ireland, it has several times been taken.

Fam. *Mugilidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
Mugil Chelo, <i>Cuv.</i>	+
„ Capito, <i>Cuv.</i>	M. curtus, <i>Yarr.</i>
Atherina Presbyter, <i>Cuv.</i>	+

Of the *Mugilidæ* we probably want only *Mugil curtus*, of which but one British specimen has been obtained. *Mug. Capito* has been noticed as Irish, but all the specimens which have come under my own examination were *M. Chelo*, which is our common Mullet of the north\*. *Atherina Presbyter* is taken from north to south.

Fam. *Gobiadæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
0	Blennius ocellaris, <i>Bl.</i>
Blennius Gattorugine, <i>Mont.</i>	+
„ Yarrellii, <i>Val.</i>	+
0	„ Galerita, <i>Mont.</i>
„ Pholis, <i>L.</i>	+
Murænoïdes guttata, <i>Lacép.</i> (Blen. } Gunnellus). }	+
Zoarces viviparus, <i>Cuv.</i>	+
Anarrhicas Lupus, <i>L.</i>	+
Gobius niger, <i>Cuv.</i> and <i>Val.</i>	0
„ Britannicus, <i>Thomp.</i> (G. ni- } ger, recent British authors). }	+
„ Ruthensparii, <i>Euph.</i> (G. bi- } punctatus, <i>Yarr.</i> ) }	+
„ minutus, <i>Pall.</i>	+
„ gracilis, <i>Jenyns.</i>	+
„ unipunctatus, <i>Parnell.</i>	+
0	Gobius albus, <i>Parnell.</i>

\* Capt. Portlock informs me that he submitted drawings of a *Mugil* taken on the coast of Down or Antrim to Mr. Yarrell, who considered them to represent *M. Capito*.

Ireland.	Great Britain.
Callionymus Lyra, L.	+
„ Dracunculus, L.	+

Of our desiderata here, the *Blennius ocellaris* and *B. Gasterita* are rare and apparently local on the coast of Great Britain; the *Gobius albus* has been taken only in the Solway Firth, and but on one occasion.

In Ireland, the *Blennius Pholis* and *Murænoidea guttata* are very common around the coast; the *B. Gattorugine* is of occasional occurrence in the north; the *B. Yarrellii* (*B. palmicornis* of Yarrell's and Jenyns's works) has been obtained on the Antrim coast by the Ordnance Survey. By Templeton the *Zoarces* was noticed in one instance; but little is known with certainty of *Anarrhicas* as an Irish fish. Of the genus *Gobius*, the *G. minutus* and *G. Ruthensparii* (*G. bipunctatus*, Yarr.) are the most widely diffused in their very different places of abode on our coasts, the former, as elsewhere, the more abundant; *G. niger* and *G. Britannicus*\* I have only from the more southern portion of the island; *G. gracilis* and *G. unipunctatus* are of occasional occurrence with *G. minutus*. *Callionymus Lyra* and *C. Dracunculus* are not unfrequently taken from north to south, the latter the more commonly.

Fam. Lophiidae.

Ireland.	Great Britain.
Lophius Piscatorius, L. (common).	+

Fam. Labridae.

Ireland.	Great Britain.
Labrus variabilis, Thomp.† (L. maculatus, Bloch.)	+
„ lineatus, Don. (not specifically distinct from the last.)	+
0	Labrus Comber, Gmel.
„ variegatus, Gmel.	+
0	„ Vetula, Bl.?
„ trimaculatus, Penn.‡	+
0	Julis vulgaris, Flem.
Crenilabrus Tinca, Flem.	+
„ Cornubicus, (Labrus Cornubicus, Penn.)	+
„ gibbus, Flem.	+

\* Zoological Proceedings, 1837, p. 61.

† Zoological Proceedings, 1837, p. 59.

‡ M. Agassiz informs me that *L. carneus*, Risso, of which he possesses a specimen so named by that author, is a distinct species from the *L. carneus*, Bloch; this latter being identical with *L. trimaculatus* as figured by Donovan.

§ Magazine of Zoology and Botany, vol. ii. p. 412.

Ireland.	Great Britain.
0	Crenilabrus luscus, Couch.
Crenilabrus rupestris, Selby.	+
„ pusillus, Yarr.	+
„ exoletus, Yarr.	+

Of the British *Labridæ* wanting to the Irish list, the *L. Comber* is a very obscure and little-understood species. *Labrus Vetula*, *Julis vulgaris*, and *Crenilabrus luscus*, have each but in a single instance been obtained on the British coast.

*Labrus variabilis* and *Cren. Tinca* are common in suitable localities around the Irish coast; *Lab. variegatus* is as extensively distributed, but in very small numbers; *Lab. trimaculatus* has been taken by the collectors of the Ordnance Survey at Portrush near the Giant's Causeway. Of *Cren. rupestris*, *C. exoletus*, and *C. pusillus*, a few individuals have been procured—the first-mentioned on the north-east and west coast, the second on the north-east, and the last on the south only.

#### Fam. Centriscidæ.

Ireland.	Great Britain.
0	Centriscus Scolopax, L. (extremely rare.)

#### Order 2.—MALACOPTERYGII.

#### Fam. Cyprinidæ\*.

Ireland.	Great Britain.
0	Barbus vulgaris, Flem.
Gobio fluviatilis, Will.	+
Tinca vulgaris, Cuv. (?)	+
Abramis Brama, Cuv.	+
0	Abramis Blicca, Cuv.
„ Buggenhagii, Thomp. (Cy- } prinus Buggenhagii, Bl.) }	+
0	Leuciscus Rutilus, Cuv.
0	„ Dobula, Cuv.
0	„ vulgaris, Cuv.
0	„ Lancastriensis, Yarr.
0	„ cephalus, Flem.
Leuciscus erythrophthalmus, Cuv.	+
0	„ cœruleus, Yarr.
0	„ Alburnus, Cuv.
0	„ Phoxinus, Cuv.
0	„ Idus, Cuv.
Cobitis barbatula, L.	+
0	Cobitis Tænia, L.

In the *Cyprinidæ* Ireland would seem to be remarkably deficient; and although there is no doubt that some species

\* The naturalized species are omitted.

will yet be added to our list, I have little hesitation in considering the waters of this country as deficient in the fishes of this family.

*Gobio fluviatilis*, *Abramis Brama*, and *Leuciscus erythrophthalmus* are common, and widely diffused over the island. *Cobitis barbatula* is somewhat generally distributed; *Abramis Buggenhagii* has as yet been observed only in the river Lagan. *Cyprinus Carpio* and *Tinca vulgaris* are in some waters in the country; but even the latter, which is considered indigenous to England, is stated to have been introduced to Ireland. *Leuciscus Phoxinus* was introduced some years ago near Dublin, and has, I understand, thriven well there\*.

Fam. *Esocidæ*.

Ireland.	Great Britain.
<i>Esox Lucius</i> , L.	+
<i>Belone vulgaris</i> , Cuv.	+
<i>Scomberesox Saurus</i> , Flem.	+
0	<i>Hemiramphus europæus</i> , Yarr.
<i>Exocoetus exiliens</i> , Bl. (? Irish species).	+

The two first mentioned are common; the *Scomberesox* is apparently rare; *Exocoeti* have been observed on the southern coast, but specimens are not available, that the species might be determined. The fish named provisionally *Hemiramphus europæus* has not yet been noticed on the Irish coast †.

Fam. *Salmonidæ*.

Ireland.	Great Britain.
<i>Salmo Salar</i> , L.	+
„ <i>Eriox</i> , L.	+
„ <i>Trutta</i> , L.	+
„ <i>Fario</i> , L.	+
„ <i>ferox</i> , Jard.	+
„ <i>Umbla</i> , L.	+
„ <i>Salvelinus</i> , Don. } onespecies,	+
„ } W. T.	+
<i>Osmerus Eperlanus</i> , Flem.	+
0	<i>Osmerus hebridicus</i> , Yarr.
0	<i>Thymallus vulgaris</i> , Cuv.
0	<i>Coregonus Lavaretus</i> , Flem.

\* In Ruttys Dublin (1772) it is remarked of the *Cyprinus Carpio*, that “it is said to have been first introduced into Ireland in the reign of King James the First.” In the same work it is said of *Tinca vulgaris*, that it, like the Carp, “is found for the most part in ponds, and rarely in the Liffey and Donnybrook rivers.” “*Cyprinus Cephalus* and *C. Barbus*” appear in Dr. P. Browne’s list of Irish Fishes, but excepting their names no information is given.

† *Silurus Glanis*, L., a fish described to me as taken some years ago in a river flowing into the Shannon near its source, exactly agrees with this species. For particular notice see Annals of Natural History, vol. vii.

Ireland.	Great Britain.
Coregonus Pollan, <i>Thomp.</i>	0
0	Coregonus Willughbei, <i>Jard.</i>
0	" Lacepedei, <i>Parnell.</i>
0	Scopelus Humboldtii, <i>Cuv.</i>

Of the genus *Salmo*, Ireland possesses all the British species. There are many valuable fisheries for *S. Salar* around the coast; of the migratory species, *S. Trutta* is next in value, and is taken co-extensively with it; the distribution of *S. Eriox* is yet to be determined; on every side of the northern portion of the island it occurs. *S. ferox* is common to the larger lakes, as is *S. Fario* to the rivers and lakes throughout the island. *Salmo Umbla* or *S. Salvelinus* (for I regard the fish so called but as one species) inhabits suitable lakes in all quarters. The *Osmerus Eperlanus* is recorded by Templeton as a fish of occasional occurrence. *Coregonus Pollan*, as yet known only as an Irish species, inhabits Lough Neagh, Erne, and Derg, and is abundant in the first-named locality.

Of the six species of British *Salmonidæ*, as yet unknown as Irish, three, *Osmerus hebridicus*, *Coregonus Willughbei*, and *Cor. Lacepedei*, are each known only to a single locality; *Scopelus Humboldtii* (if such be the species) has been recorded but in three instances on the coast of Great Britain; *Thymallus* is very local in England. This is noticed in Rutt's Dublin, but evidently in error, as it is made "a sea-fish." Dr. P. Browne enumerates it, perhaps without any better reason; he published in 1774, Rutt in 1772. *Coregonus Lavaretus* (if properly so named) is found only in Bala Lake in Wales, and some of the northern English lakes.

#### Fam. *Clupeidæ*.

Ireland.	Great Britain.
Clupea Harengus, <i>L.</i>	+
0	Clupea Leachii, <i>Yarr.</i>
" Sprattus, <i>L.</i>	+
0	" alba, <i>Yarr.</i>
" Pilchardus, <i>Bl.</i>	+
<i>Alosa Finta</i> , <i>Cuv.</i>	+
" communis, <i>Cuv.</i>	+
0	<i>Engraulis Encrasicolus</i> , <i>Flem.</i>

*Clupea Leachii* and *C. alba* have not yet been identified as Irish species; nor has the *Engraulis*, which is of rare occurrence on the English coast, been noticed on the Irish.

*Clupea Harengus*, *C. Sprattus*, and *C. Pilchardus* prevail around the coast, the last-named in the south particularly; here also the *Alosa Finta* is chiefly found. The "Rock Herring," which according to Dr. Parnell is the name applied in



Scotland to the *Alosa Finta*, is enumerated among the Fishes of Londonderry in Sampson's History of that county. It is however the *A. communis* which is noticed in the Ordnance Survey of Londonderry, and as being "not uncommon."

Div. 2.—SUBBRACHIALES.

Fam. *Gadidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
Gadus Morrhuæ, <i>L.</i>	+
„ Callarias, <i>L.</i>	+
„ Æglefinus, <i>L.</i>	+
„ luscus, <i>L.</i>	+
„ minutus, <i>L.</i>	+
Merlangus vulgaris, <i>Cuv.</i>	+
„ Pollachius, <i>Cuv.</i>	+
„ Carbonarius, <i>Cuv.</i>	+
0?	Merlangus virens, <i>Cuv.</i>
Merlucius vulgaris, <i>Cuv.</i>	+
Lota Molva, <i>Cuv.</i>	+
0	Lota vulgaris, <i>Cuv.</i>
Motella tricirrhata, <i>Nills.</i>	+
„ Mustela, <i>Nills.</i>	+
0	Motella Cimbrica, <i>Nills.</i>
Brosmus vulgaris, <i>Cuv.</i> (?)	+
Phycis furcatus, <i>Cuv.</i>	+
Raniceps trifurcatus, <i>Flem.</i>	+
0	{ Couchia argenteola, <i>Thomp.</i> (Motella glauca, Gadus argenteo- lus, <i>Mont.</i> )
Couchia minor, <i>Thomp.</i>	0

Of the four British species of the *Gadidæ* which we seem to want, one, *Motella Cimbrica* is a recent addition to the catalogue, and is yet known only to two localities, both in Scotland; *Lota vulgaris* is very partially distributed in England; *Couchia argenteola*\* has been observed only in Devonshire and Cornwall; *Merlangus virens* is unknown to me as a species distinct from *M. Carbonarius*. Of *Brosmus vulgaris* I have not seen an Irish specimen, but it is in the list of Fishes given in M'Skimmin's History of Carrickfergus.

*Gadus Morrhuæ* and *G. Æglefinus* are common around the Irish coast. *Gad. luscus*, *G. Callarias*, and *G. minutus* are of occasional occurrence from north to south. *Merlangus vulgaris*, *M. Pollachius* and *M. Carbonarius* are common and generally distributed. *Merlucius vulgaris* is taken around the coast, but is much more common in the south. *Lota Molva* and the two common *Motellæ* are generally distributed. *Phy-*

\* Annals of Natural History, vol. ii. p. 411.

*cis furcatus* has but rarely been obtained, and of *Raniceps trifurcatus* a single individual is on record. *Couchia minor* has been captured only in Strangford Lough\*.

Fam. *Pleuronectidæ*.

Ireland.	Great Britain.
<i>Platessa vulgaris</i> , Cuv.	+
" <i>Flesus</i> , Cuv.	+
" <i>Limanda</i> , Cuv.	+
" <i>microcephala</i> , Flem.	+
" <i>Pola</i> , Cuv.	+
0	+
0	<i>Platessa Limandoides</i> , Jen.
<i>Hippoglossus vulgaris</i> , Cuv.	+
<i>Pleuronectes maximus</i> , L.	+
" <i>Rhombus</i> , L.	+
" <i>punctatus</i> , Bl.	+
" <i>hirtus</i> , Mull.	+
" <i>Megastoma</i> , Don.	+
0	<i>Pleuronectes Arnoglossus</i> , Schn.
<i>Solea vulgaris</i> , Cuv.	+
0	<i>Solea Pegusa</i> , Yarr.
" <i>Lingula</i> , Rond.	+
" <i>variegata</i> , Flem.	+

All but four species of the British *Pleuronectidæ* have been noticed on the coast of Ireland; of these the *Platessa Limandoides* and *Plat. elongata* are late additions to the British catalogue; the former has been taken on the eastern coast of Scotland and South of England; the latter but in one instance, and a single specimen at Bridgewater. *Pleuronectes Arnoglossus*†, and *Solea Pegusa* are species of occasional occurrence, and, as British, are known only to the southern coast of England.

*Platessa vulgaris*, *P. Flesus* and *P. Limanda* are common around the Irish coast, the last not numerous; *P. microcephala* is widely distributed, but in numbers very limited. *P. Pola* appears to be a local fish, but tolerably numerous where it does occur; from the eastern coast only have I seen specimens. *Hippoglossus vulgaris* is occasionally met with from north to south. *Pleuronectes maximus* and *P. Rhombus* are common around the coast; *P. Megastoma* is not of unfrequent occurrence; *P. punctatus* and *P. hirtus* have each been once obtained in the north-east of the island. *Solea vulgaris* is common around the coast; *S. Lingula* I have seen a few specimens of from every side of the island; *S. variegata* has been taken in Belfast Bay.

\* Annals of Natural History, vol. ii. p. 408.

† This is enumerated in M'Skimmin's list, but probably erroneously.

Fam. *Discoboli*.

<i>Ireland.</i>	<i>Great Britain.</i>
Lepadogaster Cornubiensis, <i>Flem.</i>	+
„ bimaculatus, <i>Flem.</i>	+
„ cephalus, <i>Thomp.</i>	0
Cyclopterus Lumpus, <i>L.</i>	+
Liparis vulgaris, <i>Flem.</i> (?)	+
„ Montagui, <i>Flem.</i>	+

In this family Ireland would seem to possess one species more than Great Britain, *Lepadogaster cephalus*, which was described from a specimen taken on the western coast\*. *Lepadogaster Cornubiensis* is a local species known to inhabit the coasts of Antrim and Clare; *L. bimaculatus* is taken on the eastern and western coasts by dredging in deep water; *Cyclopterus Lumpus* is common from north to south. Of *Liparis vulgaris* I have not seen any Irish specimen; it is stated in the Ordnance Survey of Londonderry to have been procured at "Lough Foyle and Larne †;" of *L. Montagui*, I have seen a few specimens which were taken on every side of the island.

Fam. *Echeneidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
0	{ Echeneis Remora, <i>L.</i> (taken in a single instance.)

## Div. 3.—APODES.

Fam. *Anguillidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
Anguilla acutirostris, <i>Yarr.</i>	+
„ latirostris, <i>Yarr.</i>	+
„ mediorostris, <i>Yarr.</i> (?)	+
Conger vulgaris, <i>Cuv.</i>	+
0	Muræna Helena, <i>L.</i>
Leptocephalus Morrissii, <i>Penn.</i>	+
Ophidium imberbe, <i>L.</i> (?)	+
Echiodon Drummondii, <i>Thomp.</i>	0
Anmodytes Tobianus, <i>L.</i>	+
„ Lancea, <i>Cuv.</i>	+

The *Muræna Helena* only of the British *Anguillidæ* is certainly wanting to the Irish catalogue; there is but one recorded instance of its capture on the coast of Great Britain.

The *Echiodon*, of which a single individual was discovered on the Irish coast, has not yet been met with elsewhere. *An-*

\* Annals of Natural History, vol. iii. p. 34.

† One of these specimens, kindly offered to my inspection by Capt. Portlock, though not well marked as *L. Montagui*, I considered to be of this species.

*guilla acutirostris*, *A. latirostris* and *A. Conger* are common and in suitable localities, especially the first and last generally-distributed species. Of the *A. acutirostris* there are several valuable fisheries in Ireland. *A. mediorostris* is marked with doubt from a want of accordance in the one osteological character of the specimen examined with that attributed to the species; in every other character and in habit examples taken in the North of Ireland agree with it. *Leptocephalus Morrissii* has, in a few instances, been taken on the north-eastern, southern and western coasts. Templeton notices the *Ophidium imberbe* of Pennant as once obtained by him. *Ammodytes Lancea* is common on sandy coasts around the island; *A. Tobianus* has only as yet been recognised on the Down coast, where it is well known.

## LOPHOBRANCHII.

### Order 3.—OSTEODERMI.

#### Fam. Syngnathidæ.

Ireland.	Great Britain.
Syngnathus Acus, L.	+
" Typhle, L.	+
" æquoreus, L.	+
" anguineus, Jenyns ("S. } Ophidion, Bloch.") }	+
"           0	Syngnathus Ophidion, L.
" lumbriciformis, Jenyns.	+
Hippocampus brevirostris, Cuv.?	+

All of the British *Syngnathidæ* except *S. Ophidion*, Linn., are known as Irish. *Syng. Acus* and *S. lumbriciformis* are the most common around the coast. *S. Typhle*, *S. æquoreus*, and *S. anguineus* may be considered as rare, but have been taken both in the north and south. There is indubitable evidence of the occurrence of the genus *Hippocampus* more than once on the Irish coast, but the species cannot be announced: I have not myself seen any examples.

### Order 4.—GYMNODONTES.

#### Fam. Gymnodontidæ.

Ireland.	Great Britain.
Tetrodon stellatus, Don.	+
Orthogoriscus Mola, Schn.	+
"           0	Orthogoriscus oblongus, Schn.

Templeton has recorded the occurrence of *Tetrodon stellatus* in one instance on the coast of Waterford. *Orthogoriscus Mola* has occasionally been captured on every side of the island; *O. oblongus* has not been recognised as an Irish fish.

## Order 5.—SCIERODERMI.

<i>Ireland.</i>	<i>Great Britain.</i>
0	{ <i>Balistes Capriscus</i> , <i>Gmel.</i> (a single specimen.)

## II. CARTILAGINEI.

## Order 6.—ELEUTHEROPOMI.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Acipenser Sturio</i> , <i>L.</i> (?)	+
„ <i>Thompsoni</i> , <i>Ball</i> , <i>MS.</i>	0
0	<i>Acipenser latirostris</i> , <i>Parnell.</i>

Mr. R. Ball is of opinion that one or two Irish examples of *Acipenser*, which he has critically examined, are not only distinct from the two species which have been recognised as British, but are undescribed: he has named the species *A. Thompsoni*, and is about to publish a communication on the subject in the Proceedings or Transactions of the Royal Irish Academy. Sturgeons are occasionally, though very rarely, taken in all the larger rivers of Ireland, but I have not had the opportunity of examining them critically as to species.

## Order 7.—ACANTHORRHINI.

<i>Ireland.</i>	<i>Great Britain.</i>
0	{ <i>Chimæra monstrosa</i> , <i>L.</i> (taken only in the Shetland Islands).

## Order 8.—PLAGIOSTOMI.

Fam. *Squalidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Scyllium Canicula</i> , <i>Cuv.</i>	+
„ <i>stellaris</i> , <i>Cuv.</i>	+
<i>Pristiurus melanostomus</i> , <i>Bonap.</i> } ( <i>Scyllium melanostomum</i> , <i>Bon.</i> ) }	+
0	<i>Carcharias vulgaris</i> , <i>Cuv.</i>
<i>Carcharias Vulpes</i> , <i>Cuv.</i> (?)	+
„ <i>glaucus</i> , <i>Cuv.</i>	+
<i>Lamna Cornubica</i> , <i>Cuv.</i> } one „ <i>Monensis</i> , <i>Cuv.</i> } species?	+
<i>Galeus vulgaris</i> , <i>Cuv.</i>	+
<i>Mustelus lævis</i> , <i>Cuv.</i>	+
<i>Selachus maximus</i> , <i>Cuv.</i>	+
<i>Spinax acanthias</i> , <i>Cuv.</i>	+
0	<i>Scymnus borealis</i> , <i>Flem.</i>
0	<i>Echinorhinus spinosus</i> , <i>Blainv.</i>
0	<i>Zygæna malleus</i> , <i>Val.</i>
<i>Squatina Angelus</i> , <i>Dum.</i>	+

Of the four *Squalidæ* which cannot be announced as Irish, the

*Carcharias vulgaris* has not been properly established as a British species; the *Zygæna malleus* has but once been taken; *Scymnus borealis* twice, and in both instances north of the mainland of Scotland. *Echinorhinus spinosus* is a late addition to the British catalogue, and has been obtained in different localities on the English coast.

*Scyllium Canicula*, *Spinax acanthias*, *Mustela lævis* and *Galeus vulgaris* are the most common species; the first the most so, the others becoming less so in the order in which they are set down. They are found from north to south. *Carcharias glaucus*, *Lamna Cornubica* or *Monensis* (these I am disposed to believe are but one species), and *Squatina Angelus* are of occasional but rare occurrence from north to south. Templeton notices *Scyllium stellare* as taken occasionally; and *Carcharias Vulpes* as having been seen about the Copeland Isles, near the entrance of Belfast Bay. *Selachus maximus*, the "Sunfish" of Ireland, and so valuable for its oil, prevails on the western and southern coasts, but chiefly on the former. Of the *Pristiurus melanostomus*, two individuals have been obtained by the collectors of the Ordnance Survey at Portrush, near the Giant's Causeway\*.

Fam. *Raiidæ*.

Ireland.	Great Britain.
Torpedo Walshii, <i>Thomp. MS.</i>	+
Raia Batis, <i>L.</i>	+
„ Oxyrhynchus, <i>Mont.</i> (Smith's } Waterford.)	+
0	<i>Raia marginata</i> , <i>Flem.</i>
„ chagrinea, <i>Mont.</i>	+
„ maculata, <i>Mont.</i>	+
0	„ microcellata, <i>Mont.</i>
„ clavata, <i>Will.</i>	+
0	„ radiata, <i>Don.</i>
0	„ intermedia, <i>Parnell.</i>
„ radula, <i>Delur.</i> †	+
Trygon Pastinaca, <i>Cuv.</i>	+

\* Captain Portlock, in contributing a notice of this Shark, observed, that "in the work of Müller and Henle the genus *Pristiurus*, Bonap. is described as having a row of small prickles on the tail-fin, and *Scyllium Arledi* is figured and described by Risso as having but a single row. In Yarrell's description of *Scyll. melanostomum*, two rows are mentioned, and in our specimens they certainly exist. Ought not, therefore, the single row to be dropped as a generic character, and Risso's termination of his specific characters used, viz. 'pinna dorsi extremitate [supra] spinosa'? May not the one and two-roed individuals be of distinct species, and the black mouth be common to both?"

† Captain Portlock informs me that accurate drawings of a species of Ray, obtained during the Ordnance Survey of Antrim, and submitted to Mr. Yarrell and Mr. Couch, were considered by these naturalists to represent this species.

<i>Ireland.</i>	<i>Great Britain.</i>
0?	<i>Myliobatis Aquila, Cuv.</i>
<i>Cephaloptera Giorna, Risso.</i>	0

Of our desiderata in this family, *R. marginata* and *R. radiata* are rare species, and only of occasional occurrence, the former on the English, the latter on the Scottish coast. Of *R. microcellata* and *Myliobatis Aquila*, not more than two or three British examples are on record. *Raia intermedia* is one of Dr. Parnell's recent additions from the Frith of Forth.

*Raia clavata*, *R. Batis*, and *R. maculata* are taken from north to south of Ireland; the first is the most common on the north-east coast. *R. Oxyrhynchus* is included from being noticed in Smith's History of Waterford. *R. chagrineu* and *R. radula* are additions made to our catalogue by the Ordnance Survey, and have both been taken on the north-east coast. In contributing these species Captain Portlock remarks, that "the former seems to take the place of *R. Oxyrhynchus* on the northern coast," and that of *R. radula* he lately saw a specimen which was procured in Dublin Bay. The *Torpedo*, of which I have seen Irish specimens, is identical with that from the coast of France, figured by Walsh in the Philosophical Transactions; and which in the present confused state of the genus, it might be desirable, for the sake of distinction, to term *Torpedo Walshii*\*. *Cephaloptera Giorna* has a place in the general British catalogue from a single individual taken on the southern coast of Ireland. The Rays are less known in Ireland than most other fishes, in consequence of their being rarely brought to market, and when so to their being in an imperfect state.

## Order 9.—CYCLOSTOMI.

Fam. *Petromyzidæ*.

<i>Ireland.</i>	<i>Great Britain.</i>
<i>Petromyzon marinus, L.</i>	+
„ <i>fluviatilis, L.</i>	+
„ <i>Planeri, Bl.</i>	+
<i>Ammocoetes branchialis, Cuv.</i>	+
<i>Myxine glutinosa, L.</i>	+

In this family Ireland possesses all the British species. *P. marinus* ascends several of the rivers around the coast. *P. Planeri* occurs from north to south, and is more common than *P. fluviatilis*. *Ammocoetes branchialis* is likewise widely distributed. *Myxine* is said by L'empleton to have been found at Carrickfergus.

\* For a particular notice on this subject, see Annals of Nat. Hist. vol. v. p. 292.

Finally, the species of *Vertebrata* which appear at present to be peculiar to Ireland, are six in number; two Mammals, *Mus hibernicus* (not yet properly established as a species) and *Lepus hibernicus*; and four Fishes, *Coregonus Pollan*, *Couchia minor*†, *Lepadogaster cephalus*, and *Echiodon Drummondii*. Further investigation will, in all probability, show that some of these species are found elsewhere.

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## PART VI.

### Conclusion.

In addition to the foregoing comparative catalogue, it has been thought desirable that a catalogue proper, or one containing the Irish species only, should be appended to this Report. It here follows, and with it are local lists:—of these, a few more could have been given, but the six which are introduced comprise all that were considered necessary for the present purpose. The idea of giving these occurred so late, that there was not time to perfect them, but in so far as they extend they are believed to be critically correct. The columns headed “Elsewhere in North,” &c. are added for the reception only of such species as are *not* found in the restricted localities comprised in the one or two preceding columns. For the Belfast list I am myself accountable, together with the greater part of what is contained in the columns headed “Elsewhere,” &c. The list for “N. W. Donegal” is derived from Mr. John Vandeleur Stewart’s contribution to the 5th vol. of the Magazine of Natural History on the Mammalia and Birds of that district: additions made since its publication have been kindly communicated to me by Mr. Stewart, and are included; at his desire likewise some two or three species noticed in his published catalogue are here omitted. The lists for Dublin and Youghal were contributed by Mr. Robert Ball. “West of Connaught” is derived from different sources; “Tralee” from a list favoured me some years ago by an ardent and accurate naturalist, Mr. Thomas F. Neligan, since deceased. The distance of twenty miles round Belfast, Dublin, and Youghal is comprised in the respective catalogues. The ? throughout the columns implies doubt as to species, and not as to habitat; the \* denotes presence.

† Mr. Yarrell, perhaps judiciously, considers this too minute to be satisfactorily characterised as a species. The difference, however, in size between it and *Gadus argenteolus*, Mont., is so trivial, that if the one be acknowledged, the other has all but equal claims to be so.



MAMMALIA.	North.			East.		West.		South.		
	Belfast.	N.W. Donegal.	Elsewhere in North.	Dublin.	Elsewhere in East.	West of Connaught.	Elsewhere in West.	Youghal.	Tralee.	Elsewhere in South.
Vespertilio Pipistrellus .....	*	*	...	*	...	*	...	*	*	...
Plecotus auritus .....	*	*	...	*	...	...	...	*	*	...
Erinaceus europæus .....	*	*	...	*	...	*	...	*	*	...
Sorex rusticus.....	*	*	...	*	...	...	...	*	*	...
— Tetragonurus.....	...	...	*	...	...	...	...	*	*	...
Meles Taxus .....	*	*	...	*	...	*	...	*	*	...
Lutra vulgaris .....	*	*	...	*	...	*	...	*	*	...
Mustela vulgaris <sup>a</sup> .....	*	*	...	*	...	*	...	*	*	...
— erminea .....	*	*	...	*	...	*	...	*	*	*
Martes Foina .....	*	*	...	...	...	...	...	?	?	...
— Abietum.....	*	*	...	...	...	...	...	?	?	...
Vulpes vulgaris .....	...	*	*	*	...	*	...	*	*	...
Mus sylvaticus .....	*	*	...	*	...	*	...	*	*	*
— Musculus .....	*	*	...	*	...	*	...	*	*	...
— Rattus <sup>a</sup> .....	*	...	...	...	...	...	...	*	*	...
— hibernicus .....	*	...	...	...	...	...	...	*	*	...
— decumanus.....	*	*	...	*	...	*	...	*	*	...
Lepus hibernicus .....	*	*	...	*	...	*	...	*	*	...
— Cuniculus.....	*	*	...	*	...	*	...	*	*	...
Cervus Elaphus .....	...	...	...	...	...	...	...	...	...	*
Phoca vitulina .....	*	*	...	*	...	*	...	...	...	*
Halichærus Gryphus.....	*	...	...	*	...	*	...	*	*	...
Delphinus Delphis .....	*	...	...	...	...	...	...	*	*	...
Phocæna communis .....	*	*	...	*	...	?	...	*	*	...
— Orca .....	*	...	...	* <sup>b</sup>	...	?	...	*	*	...
— melas .....	*	...	...	...	...	...	...	*	*	...
Hyperoodon Butzkopf .....	*	...	...	* <sup>b</sup>	...	...	...	*	*	...
Physeter macrocephalus? .....	...	*	...	* <sup>b</sup>	...	...	...	*	*	...
— Tursio .....	...	...	...	...	...	* <sup>c</sup>	...	...	...	...
Balæna Mysticetus .....	...	*	*	...	...	*	...	...	...	...
Balænoptera Boops ("Balæna rostrata") .....	...	...	...	...	...	*	...	...	...	...
AVES.										
Aquila Chrysaëtos .....	*	*	...	...	*	*	...	...	...	*
Haliaëtus albicilla.....	*	*	...	*	...	*	...	*	...	*
Pandion Haliaëtus .....	...	...	...	*	...	*	...	...	...	*
Astur palumbarius? <sup>a</sup> .....	...	...	...	...	...	...	...	...	...	...
Accipiter fringillarius .....	*	*	...	*	...	*	...	*	*	...
Falco grœnlandicus .....	...	*	...	...	...	...	...	...	...	...
— Islandicus? .....	*	...	...	...	...	...	...	...	...	...
— peregrinus .....	*	*	...	*	...	*	...	*	...	*
— Subbuteo .....	...	...	*	*	...	...	...	...	...	...
— rufipes .....	...	...	...	*	...	...	...	...	...	...
— Tinnunculus .....	*	*	...	*	...	*	...	*	*	...
— Æsalon .....	*	*	...	*	...	...	*	*	*	...
Buteo vulgaris .....	*	*	...	*	...	*	...	*	*	...
— Lagopus .....	*	...	...	*	...	...	...	...	...	...
Pernis apivorus .....	*	...	...	*	...	...	...	?	...	...
Circus rufus .....	*	*	...	*	...	...	...	*	*	...
— cyaneus .....	*	*	...	*	...	*	...	*	*	...

<sup>a</sup> See preceding remarks on.

<sup>b</sup> Ruddy's Dublin.

<sup>c</sup> Templeton.

AVES.	North.			East.		West.		South.		
	Belfast.	N.W. Donegal.	Elsewhere in North.	Dublin.	Elsewhere in East.	West of Connaught.	Elsewhere in West.	Youghal.	Trillick.	Elsewhere in South.
Milvus Ictinus <sup>a</sup> .....	*									
Bubo maximus .....	...	*								
Otus vulgaris .....	*	*	...	*	...	*	...	*	*	
— Brachyotos .....	*	*	...	*	...	...	...	...	*	*
Scops Aldrovandi .....	*		...	...	*					*
Surnia nyctea .....	*	*	*							*
Strix flammea .....	*	*	...	*	...	...	...	*		*
Ulula stridula <sup>a</sup> .....	*		...							*
Lanius Excubitor .....	*	...	...	...	...	...	...	...		*
Muscicapa grisola .....	*	...	*	*	...	...	...	...	...	*
Cinclus aquaticus .....	*	*	...	*	*	*	*	*	*	*
Merula viscovora .....	v	*	...	*	*	*	*	*	*	*
— pilaris .....		*	...	*	*	*	*	*	*	*
— musica .....	*	*	...	*	*	*	*	*	*	*
— Iliaca .....	*	*	...	*	*	*	*	*	*	*
— vulgaris .....	*	*	...	*	*	*	*	*	*	*
— torquata .....	*	*	...	*	*	*	*	*	*	*
Oriolus Galbula .....	*		...	...	...	...	...	*		*
Accentor modularis .....	*	*	...	*	...	...	...	*		*
Erythaca Rubecula .....	*	*	...	*	...	*	...	*	*	*
Phœnicura Ruticilla .....	*	...	...	*	...	...	...	*		*
— Tithys .....	...	...	...	...	...	...	...	*		*
Saxicola Cenanthe .....	*	*	...	*	...	*	...	*	*	*
— Rubetra .....	*	*	...	*	...	*	...	*	*	*
— Rubicola .....	*	*	...	*	...	*	...	*	*	*
Salicaria Locustella <sup>a</sup> .....	*	...	...	*	...	...	...	*	*	*
— Phragmitis .....	*	*	...	*	...	*	...	*	?	*
— arundinacea .....	*	...	...	*	?	...	...	*	?	*
Curruca atricapilla .....	*	...	...	*	...	...	...	*	...	*
— hortensis .....	*	...	...	...	...	...	...	*	...	*
— cinerea .....	*	*	...	*	...	...	...	*	*	*
Sylvia Hippolais .....	*	...	*	*	...	...	...	*	...	*
— Sibilatrix? <sup>a</sup> .....	*	...	...	*	...	...	...	*	...	*
— Trochilus .....	*	*	...	*	...	...	...	*	*	*
Regulus aurocapillus .....	*	*	...	*	...	*	...	*	*	*
Parus major .....	*	*	...	*	...	*	...	*	*	*
— cœruleus .....	*	*	...	*	...	*	...	*	*	*
— palustris .....	*	*	...	*	...	*	...	*	*	*
— ater .....	*	*	...	*	...	*	...	*	*	*
— caudatus .....	*	*	...	*	...	*	...	*	*	*
Calamophiles biarmicus .....	...	...	...	...	...	*	...	*		*
Motacilla Yarrellii .....	*	*	...	*	...	*	...	*	*	*
— Boarula .....	*	*	...	*	...	*	...	*	*	*
— flava .....	*	...	*	*	...	*	...	*	*	*
Anthus obscurus .....	*	*	...	*	...	*	...	*	*	*
— pratensis .....	*	*	...	*	...	*	...	*	*	*
— arboreus? <sup>a</sup> .....	*	...	...	*	...	*	...	*	*	*
Bombycilla garrula .....	*	...	*	*	...	*	...	*		*
Alauda arvensis .....	*	*	...	*	...	*	...	*	*	*
— arborea .....	*	...	*	*	...	*	...	*	*	*
Plectrophanes nivalis .....	*	*	...	*	...	*	...	...	...	*
Emberiza miliaria .....	*	*	...	*	...	*	...	*	*	*

<sup>a</sup> See preceding remarks on.

AVES.	North.			East.		West.		South.		
	Belfast.	N. W. Donegal.	Elsewhere in North.	Dublin.	Elsewhere in East.	West of Connaught.	Elsewhere in West.	Youghal.	Trillick.	Elsewhere in South.
<i>Emberiza Schœniculus</i> .....	*	*	...	*	...	...	...	*	*	
— <i>Citrinella</i> .....	*	*	...	*	...	*	...	*	*	
<i>Fringilla Cœlebs</i> .....	*	*	...	*	...	*	...	*	*	
— <i>Montifringilla</i> .....	*	...	*	*	...	*	...	*	*	
<i>Passer domesticus</i> .....	*	*	...	*	...	*	...	*	*	
<i>Coccothraustes vulgaris</i> .....	*	*	...	*	...	*	...	*	*	
— <i>Chloris</i> .....	*	*	...	*	...	*	...	*	*	
<i>Carduelis elegans</i> .....	*	*	...	*	...	*	...	*	*	
— <i>Spinus</i> .....	*	...	*	*	...	*	...	*	*	
<i>Linaria minor</i> .....	*	*	...	*	...	...	...	*		
— <i>cannabina</i> .....	*	*	...	*	...	*	...	*	*	
— <i>montana</i> .....	*	...	*	*	...	...	...	...		*
<i>Pyrrhula vulgaris</i> .....	*	*	...	*	...	*	...	*	*	
— <i>Enucleator</i> <sup>a</sup> .....	*	...	...	*	...	...	...	*	*	
<i>Toxia curvirostra</i> .....	*	...	*	*	...	...	...	*	...	*
— <i>leucoptera</i> .....	*	...	...	...	...	...	...	...	...	...
<i>Sturnus vulgaris</i> .....	*	*	...	*	...	*	...	*	*	...
<i>Pastor roseus</i> .....	*	...	...	*	...	*	...	...	...	*
<i>Fregilus Graculus</i> .....	*	*	...	*	...	*	...	*	*	...
<i>Corvus Corax</i> .....	*	*	...	*	...	*	...	*	*	...
— <i>Corone</i> .....	*	...	*	...	...	*	...	...	...	*
— <i>Cornix</i> .....	*	*	...	*	...	*	...	*	*	...
— <i>frugilegus</i> .....	*	*	...	*	...	*	...	*	*	...
— <i>Monedula</i> .....	*	*	...	*	...	*	...	*	*	...
<i>Pica melanoleuca</i> .....	*	*	...	*	...	*	...	*	*	...
<i>Garrulus glandarius</i> .....	*	...	...	*	...	...	...	*	...	*
<i>Picus major</i> .....	*	...	*	*	...	...	...	...	...	...
<i>Certhia familiaris</i> .....	*	*	...	*	...	...	*	*	*	...
<i>Troglodytes europæus</i> .....	*	*	...	*	...	*	...	*	*	...
<i>Upupa Epops</i> .....	*	...	...	*	...	*	...	*	...	*
<i>Cuculus canorus</i> .....	*	*	...	*	...	*	...	*	*	...
<i>Coccyzus americanus</i> .....	...	...	...	*	...	...	...	...	...	...
<i>Coracias garrula</i> .....	...	...	...	*	...	...	*	...	...	* <sup>2</sup>
<i>Merops Apiaster</i> .....	...	...	...	*	...	...	...	...	...	...
<i>Alcedo Ispida</i> .....	*	*	...	*	...	*	...	*	*	...
<i>Hirundo rustica</i> .....	*	*	...	*	...	*	...	*	*	...
— <i>urbica</i> .....	*	*	...	*	...	*	...	*	*	...
— <i>riparia</i> .....	*	*	...	*	...	*	...	*	*	...
<i>Cypselus Apus</i> .....	*	*	...	*	...	*	...	*	*	...
— <i>alpinus</i> .....	...	...	...	*	...	...	...	...	...	*
<i>Caprimulgus europæus</i> .....	*	...	*	*	...	...	...	*	...	*
<i>Columba Palumbus</i> .....	*	*	...	*	...	...	...	*	*	...
— <i>Livia</i> .....	*	*	...	*	...	*	...	*	*	...
— <i>Turtur</i> .....	*	*	...	*	...	*	...	*	*	...
<i>Lagopus scoticus</i> .....	...	...	...	*	...	*	...	...	...	*
<i>Perdix cinerea</i> .....	*	*	...	*	...	*	...	*	*	...
— <i>Coturnix</i> .....	*	*	...	*	...	*	...	*	*	...
<i>Otus Tetrax</i> .....	...	...	...	*	...	...	...	...	...	...
<i>Edicnemus crepitans</i> .....	...	...	...	*	...	...	...	*	...	...
<i>Charadrius pluvialis</i> .....	*	*	...	*	...	*	...	*	*	...
— <i>Morinellus</i> .....	*	...	...	...	...	...	...	...	...	*
— <i>Hiaticula</i> .....	*	*	...	*	...	*	...	*	*	...

<sup>a</sup> See preceding remarks on.

AVES.	North.			East.		West.		South.		
	Belfast.	N.W. Donegal.	Elsewhere in North.	Dublin.	Elsewhere in East.	West of Connaught.	Elsewhere in West.	Youghal.	Tralee.	Elsewhere in South.
<i>Squatarola cinerea</i> .....	*	..	*	*	..	*	..	*	*	
<i>Vanellus cristatus</i> .....	*	*	..	*	..	*	..	*	*	
<i>Streptopelia Interpres</i> .....	*	*	..	*	..	*	..	*	*	
<i>Arenaria Calidris</i> .....	*	*	..	*	..	*	..	*	*	
<i>Hæmatopus ostralegus</i> .....	*	*	..	*	..	*	..	*	*	
<i>Ardea cinerea</i> .....	*	*	..	*	..	*	..	*	*	
— <i>purpurea</i> .....	..	..	*	..	..	..	..	..	..	
— <i>Garzetta</i> .....	..	..	..	..	..	..	..	..	..	*
<i>Botaurus stellaris</i> .....	*	..	..	*	..	..	..	*	*	
— <i>minutus</i> .....	..	..	*	..	..	..	..	..	..	
<i>Nycticorax europæus</i> .....	* <sup>2</sup>	..	..	..	..	..	..	..	..	
<i>Platalea Leucorodia</i> .....	*	..	..	..	..	..	..	*	..	*
<i>Ibis Falcinellus</i> .....	*	..	..	* <sup>2</sup>	*	..	..	*	..	
<i>Numenius arquata</i> .....	*	*	..	*	..	*	..	*	*	
— <i>Phæopus</i> .....	*	*	..	*	..	*	..	*	*	
<i>Totanus fuscus</i> .....	*	..	..	*	..	*	..	*	*	
— <i>Calidris</i> .....	*	*	..	*	..	*	..	*	*	
— <i>Ochropus</i> .....	*	..	..	*	..	*	..	*	*	
— <i>Glareola</i> ? <sup>a</sup> .....	*	..	..	..	..	*	..	*	*	
— <i>Hypoleucos</i> .....	*	*	..	*	..	*	..	*	*	
— <i>Glottis</i> .....	*	..	*	*	..	*	..	..	..	*
<i>Recurvirostra Avocetta</i> .....	..	..	..	*	..	..	..	*	*	
<i>Himantopus melanocephalus</i> ...	*	..	..	*	..	..	..	*	*	
<i>Limosa melanura</i> .....	*	..	..	*	..	..	*	*	..	*
— <i>rufa</i> .....	*	*	..	*	..	*	..	*	*	
<i>Scolopax Rusticola</i> .....	*	..	..	*	..	*	..	*	*	
— <i>Sabini</i> .....	..	..	*	..	*	..	..	..	..	
— <i>major</i> ? <sup>a</sup> .....	*	..	..	..	..	..	..	..	..	
— <i>Gallinago</i> .....	*	*	..	*	..	*	..	*	*	
— <i>Gallinula</i> .....	*	*	..	*	..	*	..	*	*	
<i>Machetes pugnax</i> .....	*	..	*	..	..	..	*	..	..	
<i>Tringa subarquata</i> .....	*	..	..	*	..	..	..	*	*	
— <i>variabilis</i> .....	*	*	..	*	..	*	..	*	*	
— <i>maritima</i> .....	..	*	*	..	..	..	..	..	..	
— <i>minuta</i> .....	*	..	..	*	..	..	..	..	..	
— <i>Canutus</i> .....	*	*	..	*	..	..	..	..	*	
<i>Phalaropus lobatus</i> .....	*	*	..	*	..	..	..	..	..	
<i>Rallus aquaticus</i> .....	*	*	..	*	..	*	..	*	*	
<i>Crex pratensis</i> .....	*	..	..	*	..	*	..	*	*	
— <i>Porzana</i> .....	*	..	..	*	..	..	..	..	..	
<i>Gallinula Chloropus</i> .....	*	*	..	*	..	*	..	*	*	
<i>Fulica atra</i> .....	*	*	..	*	..	*	..	*	*	
<i>Anser palustris</i> (A. ferus )	..	..	..	*	..	..	..	..	..	
— <i>Steph.</i> .....	..	..	..	..	..	..	..	..	..	
— <i>ferus</i> (A. Segetum )	*	..	..	..	..	..	..	*	..	
— <i>Steph.</i> .....	*	..	..	*	..	..	..	..	..	
— <i>Erythropus</i> (A. albifrons, Steph.) .....	*	..	..	*	..	..	..	..	..	*
— <i>Bernicla</i> .....	*	*	..	*	..	..	..	..	..	*
— <i>Brenta</i> .....	*	*	..	*	..	*	..	*	*	
<i>Cygnus ferus</i> .....	*	*	..	*	..	*	..	*	*	
— <i>Bewickii</i> .....	*	..	* <sup>1</sup>	*	..	*	..	..	..	

<sup>a</sup> See preceding remarks on.

AVES.	North.			East.		West.		South.		
	Belfast.	N. W. Donegal.	Elsewhere in North.	Dublin.	Elsewhere in East.	West of Connaught.	Elsewhere in West.	Youghal.	Trillick.	Elsewhere in South.
Tadorna Vulpanser .....	*	*	...	*	...	*	...	*	*	
Spatulea clypeata .....	*	...	...	*	...	...	...	...	*	
Chauliodus Strepera .....	*	...	...	*	...	...	...	...	...	*
Anas Boschas .....	*	*	...	*	...	*	...	*	*	
Querquedula acuta.....	*	...	...	*	...	...	...	...	*	
— Crecca .....	*	*	...	*	...	*	...	*	*	
— Circia (Anas quer- quedula, L.) .....	...	...	...	...	*	...	...	*	*	
Mareca Penelope .....	*	*	...	*	...	*	...	*	*	
Somateria mollissima.....	...	...	...	*	...	...	...	...	...	
— spectabilis .....	...	...	...	*	...	...	...	...	...	
Oidemia fusca .....	...	...	...	*	...	...	...	...	...	
— nigra .....	...	...	*	*	...	*	...	*	*	
Fuligula ferina .....	*	*	...	*	...	*	...	*	*	*
— Marila .....	*	*	...	*	...	*	...	*	*	*
— cristata .....	*	*	...	*	...	...	...	*	*	*
Clangula vulgaris .....	*	*	...	*	...	...	...	...	...	
Harelda glacialis .....	*	*	...	*	...	...	...	...	...	
Mergus Merganser .....	*	...	*	*	...	...	...	...	...	*
— Serrator .....	*	*	...	*	...	*	...	...	...	*
— albellus .....	*	...	...	*	...	*	...	...	...	*
Podiceps cristatus .....	*	...	...	*	...	*	...	...	...	*
— rubricollis .....	*	...	...	*	...	...	...	...	...	*
— cornutus.....	*	?	...	*	...	...	...	...	...	*
— auritus .....	?	*	...	?	...	...	...	...	...	*
— minor.....	*	*	...	*	...	*	...	*	*	
Colymbus glacialis.....	*	*	...	*	...	*	...	*	*	
— arcticus .....	*	*	...	*	...	*	...	*	*	
— septentrionalis .....	*	*	...	*	...	*	...	*	*	
Uria Troile .....	*	*	...	*	...	*	...	*	*	
— Brunnichii.....	*	*	...	*	...	*	...	*	*	
— Grylle .....	*	*	...	*	...	*	...	*	*	*
Mergulus melanoleucos ...	...	...	...	*	...	...	...	...	...	*
Fratercula arctica .....	*	*	...	*	...	*	...	*	*	
Alca Torda.....	*	*	...	*	...	*	...	*	*	
— Impennis .....	...	...	...	...	...	...	...	...	...	*
Phalacrocorax Carbo.....	*	*	...	*	...	*	...	*	*	
— cristatus .....	*	*	...	*	...	*	...	*	*	
Sula Bassana .....	*	*	...	*	...	*	...	*	*	
Sterna Boysii .....	*	...	...	*	...	...	...	...	...	
— Dougallii .....	*	...	...	*	...	...	...	...	...	*
— Hirundo .....	*	*	...	*	...	*	...	*	...	*
— arctica .....	*	...	*	*	...	*	...	...	...	
— minuta .....	*	*	...	*	...	*	...	...	...	
— nigra .....	*	...	...	*	...	...	...	*	...	
— stolidia .....	...	...	...	...	*	...	...	...	...	
Larus Sabini .....	*	...	...	*	...	...	...	...	...	
— minutus .....	...	...	...	...	...	...	*	...	...	
— capistratus .....	*	...	...	*	...	*	...	...	...	*
— ridibundus.....	*	*	...	*	...	*	...	*	*	
— Rissa .....	*	*	...	*	...	*	...	*	*	
— Canus .....	*	*	...	*	...	*	...	*	*	
— eburneus? <sup>a</sup> .....	...	...	...	...	...	...	...	...	...	*

<sup>a</sup> See preceding remarks on.

AVES.	North.			East.		West.		South.		
	Belfast.	N. W. Donegal.	Elsewhere in North.	Dublin.	Elsewhere in East.	West of Connaught.	Elsewhere in West.	Youghal.	Tralee.	Elsewhere in South.
Larus argentatus .....	*	*	...	*	...	*	...	*	•	
— fuscus.....	*	*	...	*	...	*	...	*	•	
— marinus .....	*	*	...	*	...	*	...	*		
— Islandicus .....	*	..	...	..	...	*	*	*		
— glaucus .....	*	*	...	*	...	..	*	•		
Cataractes vulgaris.....	..	..	..	*	..	..	..	•	•	
— Pomarinus.....	*	..	*	*	..	..	..	•		
— Richardsonii .....	..	..	..	*	..	..	..	•		
— parasiticus .....	*	..	..	*	..	..	..	•	•	
Puffinus cinereus .....	..	..	..	..	..	..	..	..	..	•
— Anglorum .....	*	..	..	..	..	..	..	..	..	•
Thalassidroma pelagica ...	*	*	..	*	..	*	..	•	•	
— Bullockii ... ..	*	..	..	*	..	..	..	•		•

REPTILIA.	Belfast.	Elsewhere in North.	Dublin.	Elsewhere in East.	West of Connaught.	Elsewhere in West.	Youghal.	Elsewhere in South.
Chelonia Caouana .....	..	*						
Zootoca vivipara .....	*	*	*	..	*	..	*	
Lacerta agilis, Berk. .... }								
AMPHIBIA.								
Rana temporaria .....	*	*	*	..	*	..	*	
Bufo Calamita .....	..	..	..	..	..	..	..	*
Triton palustris? <sup>a</sup> .....	*	*	*	..	..	..	..	
Lissotriton punctatus.....	*	..	*	..	..	*	..	
— palmipes? .....	..	..	..	..	..	*	..	
PISCES.								
Perca fluviatilis .. ..	*	..	*	..	..	*	*	
Labrax Lupus .....	*	..	*	..	..	*	*	
Trachinus Viperæ .....	..	*	*	..	..	..	*	
Mullus Surmuletus <sup>b</sup> .....	..	..	..	..	..	..	*	
Trigla Pini.....	*	..	*	..	*	..	*	
— lineata .....	*	..	*	..	*	..	*	
— Hirundo .....	*	..	*	..	*	..	*	
— Lyra .....	..	..	..	..	*	..	*	
— Gurnardus... } One	..	..	..	..	*	..	*	
— Cuculus..... } species.	*	..	*	..	*	..	*	
— Pæcilloptera .....	..	..	..	..	..	..	*	
Cottus Scorpius .....	*	..	*	..	*	..	*	
— Bubalis .....	*	..	*	..	*	..	*	
Aspidophorus cataphractus .	*	..	*	..	*	..	*	
Gasterosteus aculeatus .....	*	..	*	..	*	*	*	
— pungitius .....	*	..	..	*	..	..	*	
— Spinachia .....	*	..	*	..	*	..	*	
Sciæna Aquila .....	..	..	..	..	..	..	..	*

<sup>a</sup> See preceding remarks on.<sup>b</sup> Given on authority of Dr. Brown's catalogue, in which no locality is named.

PISCES.	North.		East.		West.		South.	
	Belfast.	Elsewhere in North.	Dublin.	Elsewhere in East.	West of Connaught.	Elsewhere in West.	Youghal.	Elsewhere in South.
Pagellus Centrodontus .....	*	...	*	...	*	...	*	
Scomber Scomber .....	*	...	*	...	*	...	*	
— maculatus .....	...	...	...	...	*	...		
Thynnus vulgaris .....	...	...	*	...		...		
— Pelamys .....	...	...	...	...	...	...	...	*
Caranx Trachurus .....	*	...	*	...	*	...	*	
Zeus Faber .....	*	...	*	...	*	...	*	
Lampris Luna .....		*	...	...	...	...	...	*
Mugil Chelo .....	*	...	*	...	*	...	*	
— Capito .....	*	...	...	...	...	...	...	
Atherina Presbyter .....	*	...	*	...	...	...	*	
Blennius Gattorugine .....	*	...	...	...	...	...	...	
— Yarrellii, Val. (B.)	}	...	...	...	...	...	...	...
— palmicornis, Yarr. and								
Jenyns' Works) .....								
— Pholis .....	*	...	*	...	*	...	*	
Muraenoides guttata .....	*	...	*	...	*	...	*	
Zoarces viviparus .....	*	...	...	...	*	...	*	
Anarrhicas Lupus .....	*	...	*	...	*	...	*	
Gobius niger, Cuv. ....	...	...	...	...	*	...	*	
— Britannicus, Thorp.	}	...	...	...	...	...	...	...
(G. niger, recent Brit. authors) .....								
Gobius Ruthensparii (G.)	}	...	...	...	*	...	*	...
bipunctatus, Yarr.) .....								
— minutus .....								
— gracilis .....								
— unipunctatus .....	*	...	...	...	*	...	*	
Callionymus Lyra .....	*	...	*	...	*	...	*	
— Dracunculus .....	*	...	*	...	*	...	*	
Lophius Piscatorius .....	*	...	*	...	*	...	*	
Labrus variabilis (L.)	}	one.	*	...	*	...	*	...
— maculatus, Bl.) .....								
— lineatus .....								
— variegatus .....	*	...	*	...	*	...	*	
— trimaculatus .....	...	*	...	...	...	...	...	
Crenilabrus Tinca .....	}	one.	*	...	*	...	*	...
— Cornubicus .....								
— gibbus .....								
— rupestris .....								
— pusillus .....								
— exoletus .....								
Gobio fluviatilis .....	*	...	*	...	*	...	*	
Tinca vulgaris <sup>a</sup> .....	*	...	...	...	...	...	...	
Abramis Brama .....	*	...	...	...	...	*	...	
— Buggenhagii .....	*	...	...	...	...	...	...	
Leuciscus Erythrophthalmus	*	...	*	...	*	...	*	
Cobitis barbatula .....	...	*	*	...	...	*	...	*
Esox Lucius .....	*	...	*	...	...	*	...	*
Belone vulgaris .....	*	...	*	...	*	...	*	
Scomberesox Saurus .....	*	...	*	...	...	...	...	
Exocoetus exiliens? <sup>b</sup> .....	...	...	...	...	...	...	*	
Silurus glanis? <sup>b</sup> .....	...	...	...	...	...	*	...	

<sup>a</sup> Possibly introduced — see preceding remarks on.

<sup>b</sup> See preceding remarks on.

PISCES.	North.		East.		West.		South.	
	Belfast.	Elsewhere In North.	Dublin.	Elsewhere In East.	West of Connaught.	Elsewhere In West.	Youghal.	Elsewhere In South.
<i>Salmo Salar</i> <sup>a</sup> .....	*	...	*	...	*	...	*	
— <i>Eriox</i> .....	*	...	*	...	*	...	*	
— <i>Trutta</i> .....	*	...	*	...	*	...	*	
— <i>Fario</i> .....	*	...	*	...	...	*	*	
— <i>ferox</i> .....	*	...	...	...	...	*	*	
— <i>Umbla, L.</i> .....	...	...	...	...	...	*	...	*
— <i>Salvelinus, Don.</i> } one.	*	*	*	...	...	*	...	*
<i>Osmerus Eperlanus</i> .....	*	...	...	...	...	...	...	
<i>Coregonus Pollan</i> .....	*	...	...	...	...	*	...	
<i>Clupea Harengus</i> .....	*	...	*	...	*	...	*	
— <i>Sprattus</i> .....	*	...	*	...	*	...	*	
— <i>Pilchardus</i> .....	*	...	*	...	*	...	*	
<i>Alosa Finta</i> .....	...	*	...	...	*	...	*	
— <i>communis</i> .....	...	*	...	...	...	...	...	
<i>Gadus Morrhu</i> .....	...	...	*	...	*	...	*	
— <i>Callarias</i> .....	*	...	...	...	...	...	*	
— <i>Æglefinus</i> .....	*	...	*	...	*	...	*	
— <i>luscus</i> .....	*	...	*	...	...	...	*	
— <i>minutus</i> .....	*	...	*	...	*	...	*	
<i>Merlangus vulgaris</i> .....	*	...	*	...	*	...	*	
— <i>Pollachius</i> .....	*	...	*	...	*	...	*	
— <i>Carbonarius</i> .....	*	...	*	...	*	...	*	
<i>Merlucius vulgaris</i> .....	*	...	*	...	*	...	*	
<i>Lota Molva</i> .....	*	...	*	...	*	...	*	
<i>Motella tricirrhata</i> .....	*	...	...	...	*	...	*	
— <i>Mustela</i> .....	*	...	*	...	*	...	*	
<i>Brosmus vulgaris</i> ? .....	*	...	...	...	...	...	...	
<i>Phycis furcatus</i> .....	*	...	...	...	...	...	...	
<i>Raniceps trifurcatus</i> .....	*	...	...	...	...	...	...	
<i>Couchia minor</i> .....	...	*	...	...	...	...	...	
<i>Platessa vulgaris</i> .....	*	...	*	...	*	...	*	
— <i>Flesus</i> .....	*	...	*	...	*	...	*	
— <i>Limanda</i> .....	*	...	*	...	*	...	*	
— <i>microcephala</i> .....	*	...	*	...	*	...	*	
— <i>Pola</i> .....	*	...	*	...	*	...	*	
<i>Hippoglossus vulgaris</i> .....	*	...	*	...	*	...	*	
<i>Pleuronectes maximus</i> .....	*	...	*	...	*	...	*	
— <i>Rhombus</i> .....	*	...	*	...	*	...	*	
— <i>punctatus</i> .....	*	...	...	...	...	...	...	
— <i>hirtus</i> .....	...	*	...	...	...	...	...	
— <i>Megastoma</i> .....	...	...	*	...	...	...	...	
<i>Solea vulgaris</i> .....	*	...	*	...	*	...	*	
— <i>Lingula</i> .....	*	...	*	...	*	...	*	
— <i>variegata</i> .....	*	...	...	...	...	...	...	
<i>Lepadogaster Cornubiensis</i> .....	...	*	...	...	*	...	...	*
— <i>bimaculatus</i> .....	*	...	*	...	*	...	...	
— <i>cephalus</i> .....	*	...	...	...	*	...	...	
<i>Cyclopterus Lumpus</i> .....	*	...	*	...	*	...	*	
<i>Liparis vulgaris</i> ? <sup>b</sup> .....	*	...	...	...	...	...	...	
— <i>Montagui</i> .....	*	...	...	...	*	...	*	
<i>Anguilla acutirostris</i> .....	*	...	*	...	*	...	*	
— <i>latirostris</i> .....	*	...	...	...	...	*	...	

<sup>a</sup> *S. Salmulus*, Young.<sup>b</sup> See preceding remarks on.



PISCES.	North.		East.		West.		South.	
	Belfast.	Elsewhere in North.	Dublin.	Elsewhere in East.	West of Connaught.	Elsewhere in West.	Youghal.	Elsewhere in South.
<i>Anguilla mediorostris</i> ? <sup>a</sup> .....	*							
<i>Conger vulgaris</i> .....	*	...	*	...	*	...	*	
<i>Leptocephalus Morrissii</i> .....	*	...	...	...	*	...	*	
<i>Ophidium imberbe</i> .....	*							
<i>Echiodon Drummondii</i> .....	*							
<i>Ammodytes Tobianus</i> .....	...	*						
— <i>Lancea</i> .....	*	...	*	...	*	...	*	
<i>Syngnathus Acus</i> .....	*	...	*	...	*	...	*	
— <i>Typhle</i> .....	*	...	*	...	*	...	*	
— <i>æquoreus</i> .....	*	...	...	...	*	...	*	
— <i>anguineus</i> .....	*	...	...	...	*	...	*	
— <i>lumbriciformis</i> .....	*	...	*	...	*	...	*	
<i>Hippocampus brevirostris</i> ? .....	*	...	*	...	...	...	*	
<i>Tetrodon stellatus</i> .....	...	...	...	...	...	...	...	*
<i>Orthogoriscus Mola</i> .....	*	...	*	...	*	...	*	
<i>Acipenser Sturio</i> ? .....	*	...	*	...	...	...	*	
<i>Scyllium Canicula</i> .....	*	...	*	...	*	...	*	
— <i>stellaris</i> .....	*							
<i>Pristiurus melanostomus</i> .....	...	*						
<i>Carcharias Vulpes</i> ? .....	*							
— <i>glaucus</i> .....	...	...	*	...	*	...	*	
<i>Lamna Cornubica</i> .....	...	...	*	...	*	...	*	
— <i>Monensis</i> ... } One?	*	...	*	...	*	...	*	
<i>Galeus vulgaris</i> .....	*	...	*	...	*	...	*	
<i>Mustela lævis</i> .....	*	...	*	...	...	...	*	
<i>Selachus maximus</i> .....	...	*	...	...	*	...	*?	
<i>Spinax Acanthias</i> .....	*	...	*	...	*	...	*	
<i>Squatina Angelus</i> .....	*	...	*	...	*	...	...	*
<i>Torpedo Walshii</i> .....	...	...	*	...	...	...	...	*
<i>Raia Batis</i> .....	*	...	*	...	*?	...	*?	*
— <i>Oxyrhynchus</i> .....	*	...	*	...	...	...	...	*
— <i>chagrinea</i> .....	...	*	...	...	...	...	...	*
— <i>maculata</i> .....	*	...	*	...	...	...	*	
— <i>clavata</i> .....	*	...	*	...	*	...	*	
— <i>radula</i> .....	*	...	*	...	*	...	*	
<i>Trygon Pastinaca</i> .....	*?	...	...	...	...	...	...	*
<i>Cephaloptera Giorna</i> .....	...	...	...	...	...	...	...	*
<i>Petromyzon marinus</i> .....	*	...	...	...	...	*	...	
— <i>fluviatilis</i> .....	*	...	*	...	...	...	*	
— <i>Planeri</i> .....	...	*	*	...	...	*	*	
<i>Ammocoetes branchialis</i> .....	*	...	*	...	...	...	*	
<i>Myxine glutinosa</i> .....	*	...	*	...	...	...	*	

<sup>a</sup> See preceding remarks on.

