

Received April 3, 1767.

XXIII. *A Letter to Dr. William Watſon, F. R. S. from the Hon. Daines Barrington, F. R. S. on ſome particular Fiſh found in Wales.*

Dear Sir,

Read April 9, 1767. **K**NOWING your attention to every thing which relates to any branch of natural hiſtory, I ſhall not make apologies for ſending you an account of the following particulars with regard to perch in a pool of Merionethſhire; and trout, which are found in a river of Cardiganshire.

The pool is ſituated in the pariſh of Trawſwynnyd, and is called Llyn Raithlyn; as it does not lie near any road, a common traveller cannot hear any thing about it, but by very extraordinary accident.

Having been informed by Mr. Garnons of Riwgoch, who lives near this pool, that perch were frequently caught there, which were crooked near the tail, I have, through him, procured fiſh of this ſort at three different times; as I intended to preſerve them in ſpirits, I have always deſired that they ſhould be of a ſmall ſize.

Theſe fiſh were all of them moſt apparently crooked in that part; which appears ſtill ſtronger (as I am informed) in thoſe of a larger ſize, and ſome of them have been taken of nearly two pounds.

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I have

I have never examined the back bone of these perch, but I have now by me that of one of the trout (which I mean likewise to give you an account of): this bone, any one may immediately see, differs most apparently from that of a common trout, or any other fish, by its being crooked near the tail. I have therefore no doubt but that the back bone of these perch will turn out to be equally crooked.

These fish are not only crooked near the tail, and for about one third of the whole length of their body; there is likewise a very remarkable protuberance on each side, which I have opened with a knife, but did not observe it to differ materially from other parts of the flesh. I have likewise eat these perch, and should not, by the taste, have distinguished them from the common ones of the same kind.

I happened likewise (after these inquiries with regard to the perch of Llyn Raithlyn) to hear of trout, which were crooked in the same part, said to be peculiar to the river Eynion in Cardiganshire, which is a small brook, that empties itself into the Dovey, near Eggdwys Vach, and is on the road from Machentleth in Montgomeryshire, to Talypont in Cardiganshire*.

* In Dalekarlia, a province of Sweden, near Fahlun, are two small lakes, famous for the singular shape of the perch, where-with they abound. These perch grow to the common size, and are of a good taste, but they have all a hump on their back. This peculiarity is taken notice of in Linnæi Fauna Suecica, † p. 118. The country people in the neighbourhood imagine that it may be occasioned by the quality of the water in those lakes, which

† In stagnis Fahlunæ hujus piscis (Perca) varietas est, quæ spinâ recurvâ, & corpore omninò gibbo, frequens reperitur.

I have procured at two several times specimens of these trout likewise, and have one now by me in spirits. They are crooked in the same manner near the tail; but, as the make of a trout is more taper than that of a perch, the curve does not appear so strongly: no one, however, who looks at them with any degree of attention, can have the least doubt of their differing most materially, from other fish of the same kind.

These trout are caught, only in a small basin of perhaps eight or nine feet deep, which the river Eynion forms after a fall from the rocks. I have been informed, that, in a calm day, you may often see them in this basin; it hath so happened that a good deal of wind hath ruffled the surface, when I have examined it.

I have only to add to these particulars, that, by very accurate accounts from those, who have caught both the perch and trout, it is not above half of these fish which are thus crooked; and that the others do not in any respect differ from the common ones of these two sorts.

As I have often observed that the existence of such fish was doubted by the Welsh themselves, till I had procured these specimens, it hath occasioned my

might probably be impregnated with some mineral salt, especially as they are situated near the largest copper mine in Europe.

Dan. Solander.

There is no copper mine near Llyn Raithlyn, or the river Eynion.

Daines Barrington.

inquiring

inquiring with regard to monocular fish, which are said by Giraldus Cambrensis, to be found in the lakes of Snowden, and from whom I shall transcribe the whole passage :

“ In summis autem montium istorum verticibus,
 “ duo lacus reperiuntur, sua non indigni admirati-
 “ one : alter enim insulam habet erraticam, ad oppo-
 “ sitas plerumque partes errabundam ; alter vero miro
 “ & inaudito miraculo pollet, quia cum trium gene-
 “ rum piscibus abundet, anguillis, truttis, & perchiis,
 “ omnes in eo pisces monoculi reperiuntur, oculum
 “ dextrum habentes, & sinistro carentes : si rei tam
 “ novæ, tamque stupendæ rationem scrupulosus lector
 “ efflagitet, assignare non præsumo.” Giraldus
 Cambrensis, lib. ii. cap. 10.

This writer was Archdeacon of Brecknock, and attended Baldwin Archbishop of Canterbury, in a progress which he made in the year 1188 through South and North Wales, to recommend a collection for a crusade which was then in agitation.

We have no account of any part of England nearly so ancient, Leland's *Itinerary* having been undertaken only in the reign of Henry the VIIIth : it is not however merely the antiquity of the work, which should recommend Giraldus's observations to the perusal of every English reader ; they are at the same time very entertaining, nor is the latinity contemptible.

Giraldus hath in common with other ancient travellers been considered as taking the liberties, with which they have been so frequently charged. For my

own part the last undoubted discovery of the Patagonian giants, mentioned, but not credited in any previous account, will teach me not to disbelieve entirely what is not a contradiction, on the very state of it. I therefore do not absolutely disbelieve Mr. Grose's late description of pigmies which are found in a forest of the Carnatic, though I admit such facts require the strongest testimony before one should give a complete assent. In short, I am neither for implicit belief or disbelief of such extraordinary facts; and it is remarkable that Aristotle, in his account of a nation of pigmies, says, "this is not a fable, but a truth."

Εστι δὲ ὁ τοπος οὗτος, ἔπει οὐ οἱ Πυγμαῖοι κατοικοῦσιν' οὐ γὰρ ἐστὶ τοῦτο μῦθος, ἀλλὰ ἐστὶ κατὰ τὴν ἀληθειαν, γένος μικρον μὲν (ὡσπερ λεγέται), καὶ αὐτοὶ, καὶ οἱ ἵπποι. Arist. de Nat. anim. i. viii. cap. 12.

But to return to the extract from Giraldus which hath been looked upon as one of the most glaring falsities, in this traveller.

It will appear to any one who reads the whole of his *Itinerary*, and is at all acquainted with the geography of the country, that Giraldus (who was a native of Pembroke-shire) never was himself in these mountains of Snowden; he had therefore only picked up this account, from some of the inhabitants of the towns, through which the Archbishop passed, who themselves probably received it from mountaineers.

There are few inhabitants of the principality, who have ever been in this tract of mountains; and I, who have been in most parts of them, have always been informed, at my setting out, that the roads were nearly unpassable.

Upon

Upon these occasions, I have frequently inquired whether there was any such notion or tradition amongst the mountaineers, with regard to monocular fish, and have found, that it is supposed there are such in a pool called Llyn y Cwn, which indeed I have never seen; but, by the best accounts I can procure, it is high up the Glyder mountain, which forms the opposite side of the vale of Lanberris to Wyddva, or the highest part of Snowden.

I have, by means of an interpreter, examined some of these mountaineers very particularly with regard to this point. One of them told me that, though he had often heard of these monocular fish, yet he had seen two or three taken by an angler in Llyn y Cwn, which did not seem to differ from common trout; and indeed the fish of that lake are seldom caught, as they are of very difficult access, and have no extraordinary character either for goodness or size.

Mr. Hughes (of Penrhyn in Carnarvonshire) having known that I had a curiosity with regard to these extraordinary fish, sent me over last summer a mountaineer, whose account of them I took down by means of an interpreter, and send you herewith.

“ Thomas William, of the parish of Lanleched, “ taylor, aged 51, remembers one Daniel Pritchard of “ Comb Cloran, yeoman, who was near 100 years “ of age, and died in 1764. This Daniel Pritchard “ told him (about nineteen years since), that he “ caught a trout at Llyn y Cwn with one eye only in “ the forehead, and that the head was thicker than “ the heads of trout commonly are. He added also, “ that William Robert, a fuller, had heard the same “ story from Pritchard: Thomas William himself,
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“ however informed me, that he had been fishing in
 “ this pool, but never caught a trout of this extraordi-
 “ nary kind. He had likewise fished in Llyn March-
 “ leyn, and Llyn Bochlwyd, and though he caught
 “ some fish with crooked backs, never took any that
 “ had but one eye. He concluded his account by
 “ saying, that there is a brother-in-law of Pritchard
 “ now alive, who will confirm Pritchard’s testimony ;
 “ and that it is generally believed in Lanleched
 “ parish, there are fish which have but one eye, in
 “ some of the pools of the neighbouring mountains.”

If by this I have not established the existence of
 such monocular fish in the Carnarvonshire lakes, I
 hope you will at least think that Giraldus’s account is
 not to be so immediately rejected as impossible, espe-
 cially when I send you an extract from the History
 of the French Academy of Sciences, which contains
 the following proof of nearly as extraordinary fish in a
 lake of France.

“ Monsieur le Marquis de Montalembert a fait à
 “ l’Académie l’observation suivante. Dans la fontaine
 “ du Gabard en Angoumois, on pêche souvent des
 “ brochets aveugles, & jamais aucun qui ne soit
 “ borgne. Ceux qui ne sont que borgnes, le sont tous
 “ de l’œil droit, & dans ceux qui sont aveugles on voit
 “ aisément que l’œil droit a été attaqué le premier,
 “ & est beaucoup plus endommagé que l’autre.
 “ Cette fontaine est une espèce de gouffre, dont on ne
 “ peut trouver le fond ; plusieurs petites isles de
 “ roseaux, qui flottent à sa surface, empêchent qu’on
 “ ne puisse se servir de filets, pour y pêcher, ce qui
 “ rend cette pêche très longue, & très difficile.
 “ M. de Montalembert fut assez heureux pour at-
 “ traper,

“ traper un jeune brochet, qui effectivement se trouva
 “ borgne du côté droit. Ce qu’il y a de singulier
 “ c’est que cette fontaine se décharge par un assez
 “ gros ruisseau dans la Liffonne, & que malgré cette
 “ communication, qui est très facile, les gens du païs
 “ assurent qu’on ne prend jamais dans cette riviere de
 “ brochets borgnes, ou aveugles, & qu’on n’en prend
 “ aucuns dans la fontaine qui ne le soient.”

I refer you for this extract to page 27 and 28, of the History of the Academy of Sciences for the year 1748, being the quarto edition, which you was so good as to lend me on this occasion*.

The latter part of this extract, which asserts that these blind pike are only to be found in the pool of Gabard, and not in the small river by which it communicates with the Liffonne, suggests to me that it is generally supposed (and even by Lhwyd in his additions to Camden’s Britannia) salmon are never caught in the lake of Bala in Merionethshire, though they are frequently taken in the river Dee, just below where it issues from that lake; whilst the contrary is observed with regard to the fish called a Gwyniad, which is at the same time conceived to be peculiar to this lake.

I happened myself once to see a salmon of about fifteen pound, caught in the lake, at least 200 yards

* I am likewise referred by an ingenious friend to a passage in Fr. Ern. Bruckmanni Epistolâ Itinerariâ xxxvi. Wolfenb. 1734, p. 10, which mentions a river in Germany, having all the trout blind: “ Truttæ omnes (teste P. Stephan. Amiodt, de Germaniâ in naturæ operibus admirandâ, p. 66.) in flumine *Fischau* prope *Mandorf* visu destitutæ dicuntur. Vide plura apud Kirkelbeck, p. 809, E. Brown in Itin. p. 196. and Math. Puel in Iten. “ Thalassico, p. 33.”

above the bridge through which the river Dee issues ; and though I never saw the Gwyniad taken in the Dee, yet I was most authentically informed by a gentleman who was present, that several of them were caught within these three years as low down as Landrillo, which is near six measured miles from the lake of Bala.

With regard to the Gwyniad's being peculiar to this lake, which is so generally believed, I can myself most flatly contradict this notion, as the first parcel of fish, which I happened to see in the market at Perith, in Cumberland, were of this sort, and were brought from the Ulles Water, which is a large lake not above four or five miles distant from that town.

I have been likewise informed, by some people, who lived on the banks of Loch Lomond in Scotland, that fish answering to my description of a Gwyniad were often caught in that lake. I did not happen however, myself, to see any of this sort.

There is indeed one very striking mark in this fish, which cannot but be attended to by those even who are not naturalists: they have ventral fins of a very deep blue ; and the belly, at most seasons, is marked with small blue specks, which I do not recollect to have observed in any other fish of this island.

I have thus endeavoured to contribute my poor mite with regard to the natural history of Wales, which I have been enabled to state with some precision, from having had occasion to go twice a year into the principality, and to stay six or seven days in a particular place.

When I have mentioned to some friends, who are versed in botany, and the study of natural history, the necessity

necessity of a more accurate and complete history of this kind ; I have been frequently answered, that they despaired of making any material additions to the discoveries of Ray and other naturalists, who have been in many parts of this country.

It is very true that Ray and some of his contemporaries were in many of the Welsh counties; it appears, however, by his Journal lately published, that he stayed but a very short time at any place, and only went to the top of some of the high mountains.

Now, Sir, I need not say, to a person of your consummate knowledge in botany, that to discover all the plants of a country, one should at least, once a fortnight, search every part, from the time vegetation commences, to that period of the autumn when it ceases. He who searches for pilewort in july, without knowing that it is a plant, which appears early in the spring, and that both leaves and flowers immediately afterwards decay, will search in vain: the botanist must look for it in april, or not at all.

Dillenius is the latest botanist of reputation, who hath visited these mountains; as I remember to have seen him a year or two before his death, I can venture to say that those who may afterwards make the same search, need not absolutely despair of new and material discoveries, notwithstanding his known diligence and accuracy.

He was of a very improper make for clambering up a rock, or mountain; and indeed it is a misfortune to the naturalist, that when from experience his knowledge becomes considerable, his strength and activity begin to fail.

When

When a stranger, from botanical or other curiosity goes to the top of a Welsh mountain, he is obliged to trust implicitly to his guide, who contrives to carry him where he can ride on horseback. The stranger therefore proceeds in the very track, where a sheep or cow can graze, which consequently crop the flowering stem and leaves of the plants.

It is in the fissures of rocks, and the central parts of bogs, that the search for uncommon plants must be made; he who looks elsewhere for them, may travel a great deal of ground, but will never make any material discoveries.

I will not detain you longer with observations of this kind, as they must have been to you long obvious and familiar. I have, however, been insensibly betrayed into this length, by thinking, that every attempt to render the natural History of Great Britain more complete, and accurate, may not be entirely without its use.

I am,

Dear Sir,

Your most faithful

Humble servant,

Daines Barrington.