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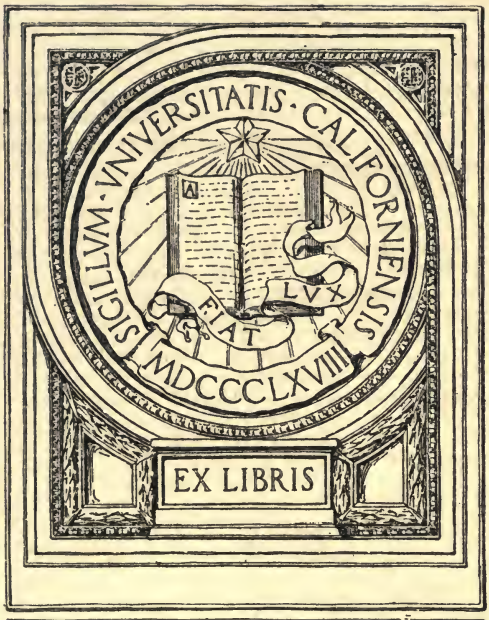
THE ENGLISH LAKE DISTRICT FISHERIES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THE ENGLISH LAKE DISTRICT FISHERIES

BY

JOHN WATSON, F.L.S.

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JOHN WATSON, F.L.S.

AUTHOR OF "SYLVAN FOLK," "NATURE AND WOODCRAFT," 'POACHERS AND POACHING," ETC., ETC.

ILLUSTRATED

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PREFACE

My apology for offering this work to the public is that the Editors of the Angler's Library have kindly asked me to write it; and because all my life I have been specially interested in the Fisheries of the Lake District. This magnificent system of lakes, tarns, and rivers, now constitute fisheries mainly in a potential sense only; for there is not the slightest comparison between the sport or food-supply they yield to-day with what they might—and will—yield in the not distant future. A few years ago fish-culture and the management of fisheries were in their infancy; but of late the knowledge of the subject has made enormous strides. Once the results of systematic re-stocking are seen, the cultivation of water will be looked upon far differently to what it is to-day. There is probably no like area in the whole of Great Britain which has so many natural advantages in this respect as the English Lake District, but as yet these advantages have been but little realised.

If the present volume but arouses an intelligent consideration of the question by those most nearly

concerned it will have served a useful end. I am quite aware of the difficulties in the way—no one more so—but none of these difficulties are insurmountable; and I am confident that the future will show a revolution in regard to the whole subject.

The area treated of in the present volume is, comparatively, a large one, and but little has been written of it in this connection of a sustained nature. *Salmonia* and *The Angler in the Lake District* are both charming works, but delightfully vague as to the actualities of the subject. The *Salmonidæ of Westmorland*, by the late G. F. Braithwaite, contains a good deal that is pleasant and suggestive; but the reminiscences of the author form the more valuable portion of his little book. There have been, of course, a great many contributions to the subject in the columns of the *Field* and other newspapers; but altogether the literature of the subject is scant. Reference may be made to a paper on the "British Charrs" in the *Transactions* of the Zoological Society, by Dr. Günther, in which occurs an extended reference to the Windermere Char.

If, therefore, there is but little material to build upon, this volume may be looked upon less critically than otherwise it might be. At worst it may form the foundation for the work of some future angler historian. I hope, however, that what is set down may be found at least suggestive, and of a fairly practical nature. To ensure partly the latter

element I have revisited and fished almost every lake and river of the district, not omitting the almost innumerable mountain tarns.

To the following gentlemen I must own my indebtedness for information upon matters of which they have special knowledge :—Dr. Fawcitt, of Broughton ; Mr. S. Taylor, of Haverthwaite ; Mr. W. Harrison of Skelwith ; Mr. Arthur Severn, of Coniston ; Mr. F. M. T. Jones-Balme, of Langdale ; Captain Ormrod, of Wyresdale Park ; Captain Bagot, M.P., of Levens ; and for special contributions, to Mr. J. B. Slater, of Carlisle ; and Mr. G. E. Lowthian, of Keswick.

JOHN WATSON

THORNY HILLS KENDAL,
1899.

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THE

ENGLISH LAKE DISTRICT FISHERIES

CHAPTER I

INTRODUCTORY

THE English Lake District roughly comprises that portion of north-western England embraced by Westmorland, Cumberland and the Furness district of Lancashire. It is bordered on the west by the Irish Sea; Morecambe Bay and the Solway are its confines on the north and south; and the valleys of the Eden and the Lune interpose a trench between its mountain border on the east and the Pennine Range.

The above is a comprehensive definition of the district. But it has been pointed out,[1] and with truth, that from a point midway between Stake Pass and Dunmail Raise (lying on the western slope of High Raise) a circle of 15 miles' radius just touches the outlet of Bassenthwaite on the north-north-west, of Windermere on the south-south-east, and includes every lake and

[1] *On the Bathymetrical Survey of the English Lakes*, by Hugh Robert Mill.

tarn of the district (except the little Over Water on the northern slopes of the Skiddaw elevation), and almost all the land of greater altitude than 1,000 feet.

A pithier definition of the district has been given as the area bounded by the Lancashire and Carlisle Railway from Carnforth to Penrith; by the high road from Penrith to Workington; by the Derwent from Workington to the sea; and by the sea-shore from the mouth of the Derwent to Carnforth.

The authorities who administer the Fishery matters within this area are the :—

Kent Fishery Board. Clerk: Mr. S. Hart Jackson, Solicitor, Ulverston.

Eden Fishery Board. Clerk: Mr. J. B. Slater Carlisle.

Derwent Fishery Board. Clerk: Mr. T. C. Burn, Solicitor, Cockermouth.

Lune Fishery Board. Clerk: Mr. J. T. Sanderson, Solicitor, Lancaster.

West Cumberland Fishery Board. Clerk: Mr. J. Webster, Solicitor, Whitehaven.

During 1897 the number of Water Bailiffs employed by the five Northern Fishery Boards were as follows:—In the Eden district, ten permanent and one temporary, amount paid in wages, £696; in the Derwent district, six permanent (wages £348); West Cumberland three permanent, one temporary (wages £211); Kent, four permanent, two temporary (wages £279); Lune, six permanent, one temporary (wages £298).

In relation to the Lake District proper, the Kent Board is the most important, as its administration covers the heart of the district, and several of the more important lakes including Windermere, Coniston, Grasmere, Rydalwater, Elterwater, and Esthwaite. Comprehensively spoken of as the Lake District Fishery Board, its technical designation is the "Kent, Bela, Winster, Leven and Duddon Fishery Board." These are the rivers within its borders ; but perhaps the more important part of its administration applies to the lakes enumerated. The Conservancy Board came into existence in 1866. It has twenty-five members, ten of whom represent Westmorland, twelve Lancashire, and three Cumberland. The Election of the Conservators is by nomination, with subsequent confirmation by the three County Councils (Westmorland, Cumberland, Lancashire) whose areas are involved.

This governing body issues licences, has the control of licence duties, and is primarily responsible for the watching and preservation of the whole district. To a very small extent it makes annual money grants to local Associations towards the administration of particular areas. This is a matter which might be considerably extended, and from which the outlying portions of the Fishery district would gain enormously. By subsidies to local angling Associations the influence for good in preservation would be doubled, the scheme of watching would be more complete, and poaching would be reduced to a minimum.

Two results of the present insufficient supervision are that salmon and trout are destroyed in

considerable numbers during the spawning season, and that the revenue of the Conservancy Board is about two-thirds of what it might otherwise be.

The chairman of the Lake District Board is John Fell, Esquire, J.P., D.L., a gentleman who has taken untiring interest in the work of the Board since its foundation.

It is proposed in the following pages to treat of the five rivers contained in the Lake District proper; to make reference to adjacent salmon and trout rivers—the Eden, Lune and Derwent,—and to deal with

Windermere,	Coniston,
Derwentwater,	Ullswater,

as well as the following smaller lakes—

Bassenthwaite,	Wastwater,
Thirlmere,	Crummock Water,
Esthwaite Water,	Buttermere,
Grasmere,	Loweswater,
Ennerdale,	Haweswater,

Rydal.[1]

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[1] The value of the fishing in the several lakes is as follows :—

	PER ANNUM.
Buttermere	£4 0s.
Cromack	7 0
Loweswater	0 15
Derwentwater	1 1
Bassenthwaite	1 0
Ullswater	13 0
Thirlmere	0 0 (or little)
Grasmere	1 0
Rydal	0 0 (or little)
Windermere	12 0
Coniston	7 0

Though the rents of these lakes are small, yet they are

A chapter will be devoted to those of the Mountain Tarns which contain fish; and this part of the scheme will be completed by the list of minor fish-containing waters not embraced by the above—arranged for easy reference.

In addition, the Natural History of Fish will be touched upon, and the very important subject of restocking will come under review.

In its place a list of killing flies will be given; but in this connection what is true of most fishery districts is true of the Lake District, viz., that a dozen (or fewer) flies will usually carry the angler through the season.

But little attention will be paid to fishing tackle, except where this is of a special kind or peculiar to the district. Many works on angling too much resemble manufacturers' catalogues, and the man who prides himself on the quantity and glory of his outfit, is not, as a rule, the man who catches fish. To the writer, it is almost a truism that the angler who gets the biggest baskets is he of little tackle —who ties his own flies, and can dress a killing imitation by the waterside.

A chapter will be devoted to the natural history of the waterside—to a consideration of the habits of those creatures which are either friends or enemies to fisheries—and it is hoped that this will not be thought to be outside the scope of the work.

The actual area of the lakes is 35,420 acres, and

very full of fish; but every person claims a right of angling in every one except Bassenthwaite, and there you may keep a boat, and kill whatever you can, for half a crown in the year. (Burn and Nicholson--1777.)

the principal fish found in the lakes and rivers are as follows:—

Game Fish

Migratory Salmonidæ.	*Non-migratory Salmonidæ.*
Salmon (*Salmo salar*).	Trout (*Salmo fario*).
Sea Trout (*Salmo trutta*).	Great Lake (or Grey or Ullswater Trout) (*Salmo ferox*).
Bull Trout (*Salmo eriox*).	Char (*Salmo Willughbii*).
Smelts (or Sparling) (*Osmerus eperlanus*).	Gwyniad (or Freshwater Herring) (*Coregonus clupeoides*).
	Vendace (*Coregonus albula*).

Coarse Fish

Pike,	Tench,
Perch,	Gudgeon,
Roach,	Eel (Sharp-nosed),
Rudd,	Eel (Broad-nosed),

besides the following:—

Loach,	Minnow,
River Bullhead,	Smooth-tailed Stickleback.

That these last are not altogether unimportant will be shown in connection with the food of some of the larger species.

As the dimensions, altitude, and particularly the depth of the various lakes has an important relation to the species and number of fish which they contain, it may be convenient to set out in tabular form certain facts which may prove useful in this connection.

Name.	Length.	Breadth (Mean).	Depth (Mean).	Area.	Altitude.
	MILES.	YARDS.	FEET.	MILES.	FEET.
Windermere . . .	10·50	950	78½	5·69	133·7
Ullswater	7·35	827	83	3·44	476·6
Coniston Water .	5·41	600	79	1·89	146·5
Thirlmere	4·00	440	59	0·88	533·2
Bassenthwaite Lake	3·83	950	18	2·06	225·5
Wastwater . . .	3·00	650	134	1·12	204·4
Derwentwater . .	2·87	1270	18	2·06	238·3
Crummock Water	2·50	700	87	0·97	320·8
Ennerdale Lake .	2·40	800	62	1·12	368·9
Haweswater . . .	2·33	405	39	0·54	694·4
Buttermere . . .	1·26	620	54	0·36	330·7
Esthwaite Water.	1·5	600	18	0·51	216·8
Grasmere [1] . . .	—	—	—	—	207·9
Loweswater . . .	—	—	—	—	428·9
Rydalmere . . .	—	—	—	—	180·5

An illustration of the fact just stated is that the char, which is essentially a deep-water fish, is found in the deeper lakes only, *e.g.*, Windermere (219 feet),[2] Coniston (184 feet), Haweswater (190 feet), and Wastwater (258 feet)—and that on the other hand trout are found in the shallower lakes, mainly on the rocky shores and shingly shallows.

The following is a list of rivers, lakes and tarns in the Kent, Bela, Winster, Leven and Duddon Fishery District:—

RIVERS

Kent,
(Tribs.: Mint and Sprint).
Winster,
Bela,
Leven,
Duddon.

[1] There are no *precise* data for Grasmere, Loweswater and Rydalmere, but approximate dimensions will be found in the individual descriptions of these lakes.

[2] These are maximum depths.

LAKES

Windermere,
Coniston,
Esthwaite,
Grasmere,
Rydal.

TARNS

Killington Reservoir,
Skeggleswater,
Whinfell Tarn,
Beacon Tarn,
Goats Water,
Highlow Tarn,
Codale Tarn,
Elter Water,
Blea Tarn,
Red Tarn (Bowfell),
Kentmere Reservoir,
Fothergill Tarn,
Seathwaite Tarn,
Lowwater,
Levers Water,
Easedale Tarn,
Loughrigg Tarn,
Little Langdale Tarn,
Stickle Tarn,
Tarns of Boscoe.

LICENCES

Salmon Licence for single rod and line for the District 10*s.*
" " " " for one week . 5*s.*
Trout " " " " " . 2*s.* 6*d.*

LAKES, TARNS, AND RIVERS IN THE DERWENT FISHERY DISTRICT

RIVERS

The Derwent and its tributaries :—

Borrowdale Beck,
Tribs. :
Langstrath Beck,
Watendlath Beck,
Brockley Beck.
Greta,
Tribs. :
Glenderamakin,
Troutbeck,
Mosedale Beck,
Bure,
Greta Tribs. (*contd.*) :
Naddle,
Glenderaterra,
Newlands Beck,
Powe Beck.
Cocker,
Tribs. :
Whitbeck,
Sail,
Marron,
Broughton Beck.

LAKES

Buttermere,
Loweswater,
Bassenthwaite.
Crummock,
Derwentwater,
Thirlmere.

TARNS

Scales Tarn, Blea Tarn,
Watendlath Tarn, Angle Tarn,
Dock Tarn, Tarn at Leaves,
Sprinkling Tarn, Styhead Tarn,
Bleaberry Tarn, Floutern Tarn,
Mockerkin Tarn.

LICENCES

Salmon Licence for single rod and line for the District for the season	£1 0s. 0d.
Ditto up to 15th September	10s. 0d.
Ditto for one month	10s. 0d.
Ditto for one week	5s. 0d.
Trout Licence for single rod and line in that part of the District formed by the river Derwent and its tributaries above Derwent Bridge, Cockermouth, for the season	5s. 0d.
Ditto for one month	2s. 6d.
Ditto above Ouse Bridge, for one day	1s. 0d.
Ditto below Derwent Bridge, Cockermouth, up to 30th June	5s. 0s.
Ditto for any month expiring not later than 30th June	2s. 6d.

RIVERS WITHIN THE EDEN FISHERY DISTRICT

The Eden,
Tribs.:
Lowther, Petterill,
Eamont, Caldew,
Irthing.

LICENCES

Salmon and Trout: For the season	£1 1s. 0d.
For the week	5s. 0d.
For the day	2s. 6d.
Trout only: For the season	2s. 6d.
For the week	1s. 0d.
Salmon and trout. Above Armathwaite. For the season	10s. 0d.
Ditto in rivers Waver, Wampool, and Irthing.	5s. 0d.

RIVERS WITHIN THE LUNE FISHERY DISTRICT

Rivers

Lune, Cocker,
Wyre, Conder,
Keer, Wenning,
Greta, and their tributaries.

Licences

Single rod and line for the whole District . . .	£1 0s. 0d.
Ditto for the Wyre and its tributaries	5s. 0d.
Ditto for the Keer, Cocker, Conder, Wenning, Greta, and their tributaries (all inclusive) .	5s. 0d.
For each and every rod and line for Trout and Char exclusively of Salmon	2s. 6d.

LORD LONSDALE'S PRIVATE WATERS

Rivers

The Lowther (portions of). The Eamont (portions of).

Lake

Haweswater.

Tarns

Small Water, Blea Water,
Angle Tarn, Brother's Water,
Hayes Water.

The above are not within the jurisdiction of any Fishery Board, but are subject to the provisions of the Solway Act. This Act prescribes (Sec. 15) a mesh of 1-inch. It does not prescribe any close-time for trout. The whole, or nearly the whole of these waters are not within a Fishery District. They are private property, and as a private regulation Lord Lonsdale has kept the close season prescribed for trout in the Salmon Acts.

CHAPTER II

Rivers of the District.—I

THE KENT

THE Kent is the principal river comprised in the Kent, Bela, Winster, Leven and Duddon Fishery District. It has its origin in Kentmere Tarn (now converted into a reservoir) at the foot of Kentmere High Street, and after flowing through the valley of the same name, and through the town of Kendal, it debouches into Morecambe Bay—a course of about twenty miles. It has two main tributaries, the Mint and Sprint. The former rises in Bannisdale, the latter in Longsleddale, and both enter the main stream not far distant from each other about a mile to the north of Kendal.

Salmon, sea or white trout (locally morts), herling (locally sprods), and brown trout are the anglers' fish found in the Kent.

Before proceeding to discuss these separately, something may be said as to the river generally. Twenty years ago the Kent was one of the best trout streams in the North, its capacity for carrying fish being almost unlimited. Nor did the exceeding quantity of fish seem to affect size, as the trout were as large, or larger, than those found in most rivers of like size and volume. In those days of plenty,

persons of every degree fished in the river, and it was no uncommon sight for an artisan during the dinner-hour to secure a dozen fish anywhere within a stone's throw of the town of Kendal. At this period poachers—systematic netters—were regularly at work, and upon the occasions when pollution proved deadly it was not uncommon to see a hundred dead trout in a single "dub."

But all this is changed. Like many another northern stream the Kent has come upon evil days. Over miles of its course the river is now nearly depopulated of fish. This state of things has been brought about by persistent pollution over a long period. This first destroyed the lower forms of life which constitute the food of fish over a greater part of the year ; then the trout fry and yearling fish ; and finally the mature trout. Of course this was not done in a single year, nor were the fish absolutely exterminated. Extermination is almost impossible when numerous unpolluted streams enter the main river, as the fish in proximity to the streams can always find refuge in the purer water. Game fish the most tenacious of life (and the brown trout comes within this category), cannot continue its existence in water which is constantly loaded with impurities, and in consequence the fame of the Kent as a trout stream is but a shadow of its former self. The question of river pollution is often a difficult one owing to conflicting interests, and of course it is essential to safeguard local industries. The pollution of the Kent, however, has been of a peculiarly selfish kind, as here the industries are few and the pollution in every case is of a preventable kind. A general remark may here be admissible. A pure, sparkling river is one of those inestimable

blessings which is never fully appreciated until it is lost.

To be just, however, pollution is not the only cause of the scarcity of fish in the Kent. Like most rivers it is affected by the increasing drainage of land over its watershed, and the more effective systems of drainage. Drainage is now so thorough and so general that within a few hours of heavy rain the surface water has run off the land and entered the river, with the effect that the latter rises and falls with astonishing rapidity. Before the system of drainage became so general, the rain water had to percolate slowly through the land, with the result that a day's heavy rain might not find its way into the river for a week. This surface water carries food in suspension, and the general conditions were eminently favourable to fish life. To illustrate the above point the writer has frequently seen the innocent looking Kent of twenty yards in width transformed in a short night to a mighty tumultuous flood, rushing swiftly along, carrying everything with it in its widely extended bed—flooding dwelling-houses and submerging the valley bottom. With sluggish rivers in flat countries this is not unusual, but the Kent is hemmed in by steep banks, and on more than one occasion has suddenly rushed several feet above them. In this connection it may be stated that, in proportion to its length, the Kent is the swiftest flowing river in the country. In its course of twenty miles, it falls nearly 2,000 feet.

A minor influence which has tended to the decrease of trout in the Kent, is the taking away of cover and harbour. Cover is as essential to fish as to game, and the removal of stones, boulders, and mis-

cellaneous obstructions has had an unfavourable effect.

To remedy this condition of affairs the Kent Angling Association has, for twelve years past, devoted itself to restocking the river. The experiment of the first year ended in disaster. Owing to a fine fibrous substance carried in suspension in the water which supplied its nursery boxes, 200,000 trout fry perished. Since that time, however, about 50,000 yearling trout have been turned into the the river, until now a hopeful condition of affairs again prevails. The fish have begun to appear in their old haunts, fair takes by anglers are again becoming the rule, and the pollution is year by year diminishing.

The remains of the largest trout ever taken in the Kent are preserved in a case by Messrs. Hutchinson and Son, of Kendal. Appended is this inscription: "Caught about three miles north of Kendal, in the River Kent [at Hagg Foot], April 10, 1861. Weight 5 lbs. 9 ozs." This fish was *not* taken with rod and line.

As a Salmon River.—Whilst considerable numbers of salmon and other species of migratory *Salmonidæ* enter the Kent yet it cannot be described as a salmon river, except with strict limitations. To this point I shall refer shortly. The Kent is a "late" river, the first fish not making their appearance until towards the latter end of August. From this time until the end of the season (November 14), (later, should the weather remain open), the fish continue to run in increasing quantities until, towards the end of the year, there is a fair show of salmon in the river. Fish from 12 to 20 lbs. are not uncommon, whilst individuals up to

25 lbs. and 30 lbs. can often be seen. Whilst the fish lying in the river are numerous, they are, as a rule, very shy on both top and bottom "feed," with the result that the average take for the season is from six to twenty fish only. The principal drawback to salmon fishing in the Kent is the late arrival of the fish, as when they are well on the "run" autumn is far advanced, and the river is covered with dead leaves and *débris*, rendering the fish excessively shy and sulky. Looking at the Kent as a salmon river, one of its disadvantages is the number of obstacles to the free passage of fish. The effect of these is that fewer fish enter the river than would otherwise be the case, and consequently the fish are deprived of miles of good spawning ground. The serious nature of these obstructions will be seen when it is remembered that the young salmon spawned in a certain river as a rule return to that river. Therefore for every adult fish that is prevented reaching the spawning ground hundreds of fish are sacrificed.

Of the largest fish taken in the Kent with rod-and-line I took careful memoranda, and the following is the note made at the time on the photograph of the fish and its captor. "A 30 lb. salmon, killed at the Waiste, on the Kent, November 2, by Mr. R. Garnett. A splendid fish, length 38 inches, girth 26 inches. Killed with a Silver Doctor; took three hours to land.—J. W." This is the largest fish actually taken with rod-and-line, although fish of 40 lbs. and upwards have not unfrequently been captured in the salmon nets at Levens and at the estuary of the river. If these weights are not big ones it must be borne in mind that the Kent is primarily

a trout-stream, and in width such only as a couple of long casts will cover.

Disease has intermittently occurred in the Kent, but only upon one occasion with such virulency as to do serious harm. The fact of its extremely rapid flow, and its being regularly scoured by floods, has probably much to do with immunity in this respect.

Morts (sea or white trout) enter the river about the third or fourth week in June, the run lasting until October. The best and heaviest fish invariably come first, their weight running from 1 lb. to 3 lbs., with exceptional fish up to 5 lbs., 6 lbs., and 7 lbs. These fish afford excellent sport on the lower reaches of the river, but once over the weirs and falls they become more widely dispersed and their capture is uncertain. During the day, particularly if the water is low, it is of little use fishing for them, although a few may sometimes be taken on Pennell tackle. When the river is in flood they will bite readily at worm. Two or three worms are put on a No. 10 hook (Sproat-bend) which is attached to a yard and a half of strong gut, and weighted with from two to six split shot according to the strength of the current.

On the water clearing, an artificial minnow may be used. This bait, usually a quill, was for some years an excellent means of filling the pannier, but of late, for some obscure reason, it has proved ineffective. Fish will eagerly follow the minnow, but refuse to mouth it. In this state of the water morts rise well at the fly, which in this district is usually fished on the casting line by tail-fly and two droppers, on hooks varying

from No. 4 to No. 10, Limerick or Kirby bend (Kendal size). The standard flies for the river are dressed as follows:—Tail fly; wings, from speckled feather in partridge tail; hackle; black, or black and white, with body of light blue worsted. Middle dropper; wings from tail feather of grouse; hackle; black with yellow body. Top dropper; brown feather from partridge tail; hackle; brown or red, with brown or brownish-red body.

Excellent sport may be had with morts with Pennell tackle when the water is slightly discoloured. It is locally fished with an 11-ft. to 13-ft. trout-rod, with a fine gut line about a foot short of the length of the rod, and weighted so as just to touch the river bed. The most deadly places are in holes of from 8 to 12 feet deep having a fair run of water through them. Some of the heaviest takes of sea-trout are creeled during the August and September moons with fly. An ideal night for this class of fishing should have the following conditions—soft and warm, sky overcast, with the moon rising about half-an-hour after twilight. A few fish will be obtained as the day is going, then will come a blank period between that time and until the light of the moon through the overcast sky begins to fall on the stream. At this time fish come on the feed again, and will continue doing so while the moon lasts, Should the sky not be overcast, or should rain be approaching—although it may not fall for a day or so—or if water-frost be on the river, the angler may take down his rod and go home.

The best places for this class of fishing are the top end, or stream, and the bottom end, or "draw" of some big hole. Such places should be visited

during the day, and any overhanging boughs, stakes, or similar obstructions should be carefully noted, as otherwise disappointment will result. In all probability during the day none, or but few fish will be seen on the ground mentioned as being the most favourable for night fishing, as the fish will then be in the deep water. It must, however, be borne in mind that sea-trout invariably feed at night, on thin or shallow water ; and the darker the night, the thinner the water they will frequent. The line should be cast down stream as in day fishing, and the flies worked very slowly ; in fact some anglers never stir their rod top. When the fish mouths the fly the angler will be aware of the fact by feeling a pronounced pull. He should then strike quietly but lightly, as it is impossible to see in the uncertain light whether the fish is large or not.

The three flies already mentioned are capital ones for this class of fishing, but they should be dressed fuller both in wings and body than those used for day fishing. Another good fly for night fishing can be dressed from the feather of a brown wood owl's wing or tail, with a body of brown, red, or yellow, and hackles to match. It should be borne in mind that the darker the night, larger and lighter-coloured flies will be required ; but, speaking generally, the following sizes will be found the most useful—Nos. 4, 5 and 6, with a line or two dressed on a No. 10 for the tail-fly, and No. 8 or 9 for droppers.

Another method of night-fishing on the Kent is locally termed bait-fishing. The procedure is as follows :—A No. 12 hook is tied to about a yard of stout gut, and baited with two or three well

scoured black-headed worms. The bait should then be cast slightly down stream, and if fished properly should be as nearly as possible in mid-water; a split shot, or even two, may be required to effect this. The angler should work his rod slowly up-stream so as to keep the bait in this position, allowing the current to bring it gradually into the side, when a yard or so of line should be let out and the process repeated. Should a feeding fish be about, it will speedily make known its presence by a sharp tug, when the rod top must be immediately released a couple of feet or so, thus allowing the fish a better chance of mouthing the bait; on feeling another tug, the angler must strike quickly and sharply, so as to drive the large hook home.

This style of fishing is arduous, owing to the cramped position the angler has to assume in order to enable him to float his bait steadily down stream, but some of the heaviest fish fall victims to it. A dark night, with overcast sky and no moon, is best for bait-fishing. The bait will often be found successful after twilight has gone, and during the interval between that time and the rising of the moon. As before stated the heaviest takes of mort are obtained during the August and September moons, panniers running from 12 lbs. to 15 lbs. for a night's fishing being not unfrequently made.

Next in point of order comes worm-fishing when the river is in flood, panniers from this class of fishing yielding from four to five to a dozen pounds, but an exceptional take of 28½lbs. to a single rod can be recorded.

The run of morts in the Kent is greatly influenced by the height of the water, also by the June, July,

and August tides. Should these be low, the majority of the fish are taken in the nets in the estuary and in Morecambe Bay—and a poor season is the result.

For sea-trout fishing one of the most useful rods with which I am acquainted is made by the Messrs. Farlow, of the Strand. This is a 12½ft. three-piece green-heart, and its speciality is a wonderful combination of lightness and strength. It will kill any sea-trout or grilse that the angler is likely to come across. Although I have never killed a salmon on this particular rod, I have not the slightest doubt that it would kill anything up to a dozen pounds with the greatest ease; and, judging by its power of casting, there are but few rivers on which it could not be used. The pleasurable sensation of fishing with this, after using a heavy local-made rod, has to be experienced to be fully appreciated. In my own case I commenced with a strong prejudice for the local-made article, but no one has fished through a long day with this work of art will ever go back to the heavier weapon. It is a rod specially suited to slightly built men, and it might well be named the *Multum in parvo.*

Sprods (herling or whiting) make their appearance in the Kent about the same time as the sea-trout, but the run lasts much longer, and freshly run fish are taken right up to the end of the season. The remarks as to mort fishing apply equally to the sprod. Good takes of this game fish are secured in October and until the middle of November, when sport is somewhat at a discount. The casting line used for sprod fishing should be of single horse-hair, the tail-fly being dressed as

follows :—Wings ; from the quill feather of a starling's (or jack snipe's) wing ; hackle, brown or red and body of yellow silk. Middle dropper hackle fly, dressed from outside snipe's (jack) wing, with mauve silk body. Top dropper ; hackle fly, dressed from feather from inside starling's wing (those with creamy tips for preference)—body of yellow silk.

The best time for this style of fishing is from 12 noon until about 3 p.m., when the duns are coming thickly on the stream. Should there have been a sharp touch of frost during the night, so much the better.

The angler should wait until he sees a fish on the rise, then cast his flies, dry, about a yard above the fish, when the chances are that it will be bagged. It need hardly be stated that both care and skill must be exercised when the sprod is hooked. The slightest check on the line, or mismanagement on the angler's part, and snap goes the hair casting-line. For gameness and pluck commend me to a freshly run sprod. By this method, and under favourable conditions, baskets running up to a score of sprods can be made in an afternoon, and no better sport need be desired.

THE MINT

This beautiful stream—the main tributary of the Kent—rises in Bannisdale Head, and flowing in a southerly direction, enters the main river about a mile north of Kendal. For four or five miles from its source it is known as Bannisdale beck, but after receiving the waters of Grayrigg and Docker becks, it becomes the Mint, flows

another four or five miles in a southeasterly direction, when it enters the Kent as already mentioned.

The Docker and Grayrigg becks afford excellent sport should the angler be lucky enough to find plenty of water in them; and given a spate, nice baskets can be made with worm or fly. Generally the fish run small, but no better or sweeter trout can be creeled. As the same flies apply equally to the Mint and these becks, a short list of the most useful is given here. Hackle or spider flies should invariably be used, unless the angler should feel inclined to try his luck during the warm nights of June and July, when winged flies will be found to be an advantage. It must be borne in mind, however, that to succeed in this kind of fishing low water is essential—in fact the lower the better.

Three flies to the cast are the rule, and no better can be used than the following—tail fly, orange partridge; middle dropper, light feather from the inside of a Jack snipe's or starling's wing, with yellow body; top dropper, dark woodcock or dark snipe, with golden orange body—the snipe may occasionally be dressed with a purple body with excellent results. These three flies cannot be beaten on the upper portions of the Mint; and as regards Docker and Grayrigg becks, if trout will not rise at them, it is almost useless to fish any other. They should be dressed on single hair, using No. 2 or 3 sneck-bend hooks, Kendal size. No. 3 are generally fished on the upper portions of the Mint and its tributaries, and trout will be found to take the larger fly equally with the smaller—and the extra size will prove to be an all-important factor when the basket is turned out for weighing

purposes in the evening. Other useful flies are dottrell, with yellow body; black gnat; the willow-fly for the end of May and throughout June; waterhen with purple body; and corncrake with yellow body.

For night fishing, the same sized hooks should be used and the wings of the flies dressed from the quill feathers taken from woodcock, starling, corncrake, or nightjar's wings. These winged flies are greatly improved by introducing a little hare's lug dubbing under the shoulder.

On the lower reaches of the Mint No. 1 hooks may be substituted, especially towards the middle and latter end of the season. It may here be mentioned that the lower reaches of the Mint—from the village of Meal Bank to its mouth, a distance of two miles—contain much bigger fish than the higher portions of the stream.

Excellent sport may be had on the Mint with Pennell tackle, the best time for this class of fishing being the day after a spate, when given the fish in a feeding way, baskets of from 50 to 100 can often be made. The finest gut must be used, and the worm always cast up stream. A No. 3 sneck-bend hook at the end, with a No. 2 tied about 1½ inches above, will be found the most serviceable tackle.

The upper portions of the Mint, and the tributaries will be found the best for Pennell fishing. There is, however, one great drawback, viz., the large quantities of par—locally pinks—which are found in it. The bed of the Mint is mainly composed of fine bright gravel, with the result that the greater portion of salmon and sea-trout which enter the Kent make up it for spawning purposes.

As two year olds their progeny become a nuisance to the angler, taking his fly or worm with equal avidity the moment it touches the water, thus giving the trout little or no chance of being creeled. Towards the end of April this state of things improves, as most of the par have then made their way to the sea. Speaking generally the fishing on the Mint is free.

There is good accommodation at most of the farm-houses, and any one who cares for burn fishing coupled with beautiful scenery, might do worse than spend a day or two on this beautiful stream.

THE SPRINT

This stream, the second largest tributary of the Kent, rises in Longsleddale, and after flowing in a southerly direction for 8 miles, enters the Kent 2 miles north of Kendal.

From some 4½ miles from its source its bed is composed of fine gravel, with narrow gorges. On this length will be found the best fish. The bed of the lower portion of the stream is largely made up of red sandstone which should be avoided, fish on this part being mostly poor.

The flies given for the Mint, both for day and night fishing, will be found equally serviceable for the Sprint, but it is not advisable to fish any size less than No. 3 sneck-bend Kendal size, unless the black-gnat should be on, when a smaller hook must be used. The best hook for dressing this fly on is a No. 2 sneck-bend, from which a small portion of the shank has been broken. One fly should never be omitted from the cast, viz., dark-snipe with purple body.

A good plan, if the angler should have a full day before him, is to fish rapidly up stream with Pennell tackle until the flies begin to hatch out; then turn round at once, and fish the fly carefully down.

About 5 miles from its mouth the angler will come to what he will naturally take to be the source of the stream. This appearance is, however, deceptive, as from this point for some two hundred yards or so the beck filters through some natural sand-beds, and from where this filtration commences up to its source, some of the best Pennell fishing on the whole stream is obtainable, and by keeping out of sight, and dropping the worm into any likely hole, trout may be taken where the beck is not a couple of yards wide.

A small runner called London beck, which flows in an easterly direction from the hamlet of Little London, and empties itself into the Sprint, will be found an excellent one for Pennell fishing.

It will be found that the fish in the Sprint are not so good either as regards size or quality as those taken in the Kent and Mint; and should a backward spring be experienced it is not advisable to commence fishing until May, as the trout, under these circumstances, are not in takeable condition before that time. Should the angler be fond of spate fishing, fish can be taken in large quantities, as there is no better beck in the district where trout bite so freely at worm as the Sprint.

The scenery in the Longsleddale valley is equal to any in the Lake District, the accommodation being of the farmhouse type, plain but good; and roughly speaking, the fishing may be said to be free from source to mouth.

CHAPTER III

Rivers of the District.—II

THE BELA

The Bela is formed by the junction of two excellent trout streams, viz., Hutton and Stainton becks.

These becks afford good small brown trout fishing, and through the action of the Bela Angling Association fishing commences on these streams—the Bela included—a fortnight earlier than in the rest of the district under the control of the Kent Fishery Board, namely, the 16th of February.

Should the winter have been a fairly mild one, fish will readily rise at the fly, and will be found in fair condition at this time; but the angler is advised to have a few well scoured worms for Pennell fishing, should the day prove unfavourable for top feed coming on.

The average size of fish in these streams may be taken at about five to the lb., and at table they are admirable.

Permission to fish Hutton beck—so far as the upper reaches are concerned,—is obtained by making application to Mr. F. Punchard, Underley Estate Office, Kirkby Lonsdale, the agent to Lady

Henry Bentinck; and as to the lower reaches and Stainton beck from the farmers whose land adjoins the streams.

Turning to the Bela itself, this stream is one of the best in Westmorland for trout angling, both for quantity and quality of fish. As regards size a fair average basket will run about four to the lb., but there are plenty of fish up to 1lb.

As this stream runs entirely through the low-lying parts of the district, both top and bottom feed are plentiful, and when to this is added a constant supply of excellent water, practically no pollution, and excellent watching, it will be well understood that a badly conditioned fish is rare.

Unfortunately for the angling public this admirable trout-stream is mainly in the hands of a private angling association, and permission to fish is not obtainable without some little difficulty. If the intending angler is acquainted with a member, well and good; if not, his only chance is to make application to the Hon. Sec. of the Association, at Milnthorpe.

The extra trouble in obtaining permission to fish will be repaid when the pannier comes to be examined at the close of the day's fishing. The only method of angling allowed on the Club water is the fly, and night fishing is not permitted. The season for this stream and its tributaries closes on the 1st of September.

The town of Kendal is the best centre for Hutton and Stainton becks; and the village of Milnthorpe for the Bela, both town and village being easy of access by the L. and N. W. line.

THE LUNE

The Lune, which is on the confines of the Lake District proper, deserves mention if only for the beauty of the scenery of the valley—"one of the loveliest in England" Ruskin calls it—through which it flows. Its banks are everywhere well wooded, and an angler might spend a delightful holiday either on its higher, middle, or lower reaches. As the Lune, however, does not come directly within the scope of this work, its capabilities as a salmon and trout river can only be indicated generally.

Having its source in Ravenstonedale, the Lune runs for the greater part of its course of fifty miles in Westmorland. It has a good gravelly bottom, and, from the varied nature of its reaches, it is admirably adapted to the *Salmonidæ*—and it teems with trout. Until it reaches Lancaster it is free from pollution, and, owing to its great clearness the angler should, if he has the requisite skill, fish hair in preference to gut. Although a nice basket of trout may generally be had in the Lune, it is best to take the river in spate, or on a day following a spate, when a pannier may be filled.

Tebay (on the L. and N. W. Railway) marks the first point where trout fishing may be said to commence. Here the fish run four or five to the lb. They are well fed and fight well; and not unfrequently panniers of 8 lbs., 10 lbs., and 12 lbs. are obtained. The trout increase in size as the river reaches Kirkby Lonsdale, where it broadens out, and the trout are, of course, larger. Lower still, and towards Lancaster, some splendid trout

are to be found ; but here, except in the best months, they rise less readily to the fly.

Hackle flies are mainly used on the Lune, these being dressed like those used on the Kent and neighbouring rivers. Special mention should be made of the Willow-fly, which always proves killing here.

It should be noted that in the upper reaches, during the earlier fishing months, "smelts"[1] are a great nuisance, taking the trout flies at almost every cast.

So far as trout are concerned, until the present season they have been heavily netted ; but the Lune Conservancy Board has now secured a bye-law which abolishes netting for trout.

It is, however, as a salmon river that the Lune is famous. Of late years, however, several abuses have existed. It has been over netted ; it has been polluted ; and there have been difficulties in the way of effective administration. The tidal portions of the river are greatly over-fished, and a weir at Skerton, also heavily netted, is an effectual bar to the great majority of salmon ever reaching the main river at all—that is beyond the tidal influence. The result of this state of things is that salmon fishing has greatly declined, in some reaches of the river to the extent of ninety per cent. ; and among anglers there is a general feeling of dissatisfaction. The salmon angling along practically the whole of the river has been sacrificed to the commercial interests of a dozen professional fishermen ; and the upper riparian owners, who preserve the few breeding fish that do get up the river, are deprived of any-

[1] Local name for parr or salmon smolts.

thing in the nature of sport. The solution of this difficulty is to constitute the whole of the Lune up to Skerton Weir a playground for salmon—and this the Lune Conservancy Board is endeavouring to bring about. If they succeed, they will doubtless bring the Lune back to its once great productivity as a salmon river. An alternative plan, which would tend to secure the same result, would be to prohibit netting during a portion of every twenty-four hours, making netting between sunset and sunrise illegal.

Some years back it was found that the number of pike infesting the river was keeping a serious check upon the increase of trout. A crusade against them, however, has greatly improved matters in this respect, and during the past five years 120, 337, 417, 330, and 350 pike have been netted, giving a total of 1,554 fish—the largest weighing 33¾lb.

The Keer, Cocker, Wyre, Conder and Wenning are all within the Lune district, and contain a fair quantity of trout, and are free from obstructions for the ascent of salmon

THE WINSTER

This stream, which forms the boundary between Lancashire and Westmorland, rises in Lindeth Fell, about two miles from Bowness-on-Windermere, and after taking a westerly course of twelve miles, empties itself into Morecambe Bay, about three miles north of Grange-over-Sands.

The northern portion of the Winster will be more appreciated for the scenery it affords than for the quality of its trout. These as a rule run

small, and until the hamlet of Winster is reached the angler will find but little sport, unless he be fond of Pennell fishing for beck trout. Given that, he can have his fill.

After passing through Winster the stream gradually improves from the fly-fisher's point of view, and many excellent reaches and "dubs" will be found between that place and Bowland Bridge.

Taking the stream throughout, the best fishing will be found about two miles north to a mile south of the latter place, for choice, the southern portion, where some of the best "holds" will be found. About a mile below Bowland Bridge the stream becomes sluggish, and continues so, with rare intervals, until it reaches the estuary. This portion is of little use to the rod fisher.

The trout in the Winster are always good; and it is, from its low-lying position, one of the earliest streams in the Lake District. The tidal influence is felt for a considerable distance, and the trout within this portion are fair in size and good in quality.

Should a spate occur in the latter end of July, or in August, large quantities of sea-trout and herling—locally "morts" and "sprods"—make their way up the stream, and excellent fishing may be had, especially on the ground recommended for trout.

The Winster embraces some splendid spawning ground, and, on this account, a great deal of poaching goes on in the autumn on its higher reaches.

The ordinary hackle flies will be found effective along the whole of the stream.

The accommodation is of the usual country type —plain, but good.

THE CRAKE

The river Crake is the effluent of Coniston Water. Flowing through the Crake valley, it joins the Leven estuary at Greenodd. It is a fairly good trout-stream, with the qualification that the trout are shy risers. This is probably attributable to the great purity of its water, at least in the higher reaches. It is an early stream, and the trout are invariably in good condition when the season opens. The Crake is perhaps less like a mountain stream than any other in the district. It runs at a low level, flowing through fertile ground; and its wealth of bottom feed probably has something to do with the fact of its trout being shy feeders. The trout rise but little during the day, and this becomes more marked as the season advances. The spring months are the best for fishing, and the trout are then less shy than later. The best fishing is had at night with winged-flies. Apart from this, hackle or spider flies are used; and the following dressings prove the most useful:— Woodcock, corncrake, teal, mallard, snipe, brown- or wood-owl, partridge and grouse. The flies should be dressed on No. 2 or No. 3 hooks (Kendal size); and, for summer fishing at least, fine gut is indispensable. Spinning the natural minnow proves a killing bait.

The first spate in July or August brings up the sea-trout, the earliest salmon coming about the same time. Here, as elsewhere in the district, sea-trout fishing during the day is a comparative failure, although good takes are had at night with mort-flies. The favourite among these is that dressed from the brown- or wood-owl. A few

Photo by J. Redhead.

ON THE DUDDON.

[*To face p.* 33.

salmon are taken, but, owing to the hard netting at the estuary, fewer than formerly.

There are several eel-coops on the Crake, which, owing to the great quantity of eels in Coniston, are fairly productive. The heaviest takes are on stormy nights during the autumn months, when the fish are making their migration to the sea. The elvers may be observed returning up the river in early summer.

A curious fact is that sea-trout are often found in the eel-coops comparatively early in the season, proving that they do not always remain in the river they first enter, but make a rapid descent to the sea.

Of late years the fishing in the Crake has been deteriorated somewhat by the construction of a roadway across the Leven estuary by the Furness Railway Company. Not only does this impede the passage of salmon, but it allows the congregated fish to be scooped out of the pools wholesale at a low state of the tide, or when the river is low. Netting, however, has now been stopped, and sea-trout are ascending in greater numbers.

THE DUDDON

It must be confessed that the reputation of the Duddon has been gained more from the beauty of the valley down which it flows, and its association with Wordsworth's splendid series of sonnets, than for the fish it contains or the angling it affords. Theoretically, no doubt, the Duddon is a good salmon river in its lower reaches, and an admirable trout stream in its upper reaches. A practical acquaintance with the river, however, shows that

there are several characteristics which militate against its capacity for showing sport to the angler, either with salmon or trout.

These characteristics are mainly to be found (so far as the higher reaches are concerned) in the strength and rapidity of the current, in the bare rocky nature of the bed of the stream, and the consequent comparative poorness of the food supply. The watershed consists for the most part of hard, rocky ground—a condition always against well-fed fish—and the great purity, even brilliancy, of the stream tells against successful angling. Except in periods of drought, the water of most northern and Scottish rivers is more or less discoloured with peat—a condition always greatly in favour of getting fish; in the Duddon, even in times of spate, the river runs clear in a few hours at most.

The Duddon rises on Wrynose, not far from the Three Shire Stones, and after running twelve miles, to Broughton, it expands into a considerable estuary, through which it makes its way into the Irish Sea.

From Wrynose to Cockley beck the Duddon is merely a mountain stream; the first reach of the river proper being from the latter point to Seathwaite. This reach receives Grass Gars beck on the right, and the Tarn beck (the effluent from Seathwaite Tarn, 1,200 feet) on its left bank. Just below Grass Gars the river enters a deep gorge, emerging at the foot of Wallabarrow Crag, where are a series of remarkable "pot-holes." Here the bed of the stream consists of bright green slate, and the clearness of the emerald-green water is such that the venation of the slate can be plainly seen.

The tributaries referred to add considerably to the beauty and volume of the stream, which now traverses the vale of Ulpha. Here the river divides Ulpha and Seathwaite ; this stretch being made up of a succession of streams and pools, all of which contain fish. At Oak Bank (opposite to which is a good pool, "Long Dub"), Crosbythwaite beck enters the main stream ; whilst still lower, Holehouse beck enters the river opposite Sella—both on the right bank. Particularly good is the fishing on the Sella estate. Succeeding to this is the open stretch of water on Dunnerdale Fell. This stretch is more "fishy" than any portion of the river hitherto, with the exception of Sella, and contains some fine pools.

And here it may be well to say a word as to the fish and fishing of the river as far as this point. From its source to Cockley Beck (Cockley Beck is the name of a farm) the river contains numerous tiny trout. These are poor, badly fed, and not worth catching. In the second reach the trout increase in size, but are still small and poor in proportion to the volume of the stream. The numerous "pot-holes" contain a few big fish, but the first trout-fishing worthy the name commences at Sella. Leaving out the estuary, this point is about two-thirds down the river, and so far the facts would seem to justify the description of a Duddon angler that—"There is no trout-fishing in the Duddon." And substantially this is so—with a considerable reservation.

So far as salmon are concerned, there is not a single serious obstruction in the river to bar their progress, and they get right up to its source. "Smelts" (the grilse stage of *S. trutta*) are taken

as far up the Duddon as the mouth of Moasdale beck. This is another way of saying that the Duddon is a splendid nursery and breeding stream —a consolation, although a poor one, to the local anglers whose takes of salmon are comparatively few.

To return, however, to the Duddon side. The third and final reach is through the Duddon Hall estate to Duddon Hall, thence to its confluence with the Lickle, where the tidal portion may be said to commence. Than this, no stretch of river could be finer. Just before Duddon Hall— where the Logan beck enters—the river widens and deepens ; and from this point to Duddon Bridge it presents a splendid series of streams and pools which have every appearance of holding good fish ; and this stretch perhaps provides the best salmon-fishing in the river. Numbers of good fish have been taken here from time to time, and the name of almost every pool is suggestive in this connection —Rowfold pool, the Major's pool, and so on. Still lower is a series of pebbly reaches, on which there are fair trout; until half a mile below Duddon Bridge, the river Lickle effects a junction —not precisely with the Duddon itself, but with the higher portion of the estuary. Here the water is brackish, and during high spring tides the tidal water enters the Lickle mouth, flowing for quite a mile up that stream.

It is in the lower portion of the river where the only serious trout-fishing is to be had, and this is good only in a spate—or in summer when the water is low. The last, of course, is night-fishing with winged-flies, and in this way the best fish are taken. Some of the trout take up their resi-

dence in the brackish water, and not only assume a more brilliant dress than those outside the tidal influence, but are well-grown and pink-fleshed. Speaking generally, the trout average about a quarter of a pound, and a 1 lb. fish is exceptional. Worm-fishing in clear water is practised ; and the same bait when the river is in spate accounts for the best fish and the biggest baskets.

Not more than half-a-dozen trout flies are used on the Duddon. At the beginning of the season the March brown, woodcock (with hare's-lug body) and black palmer constitute the cast ; whilst later the flies are woodcock, red spinner, and light starling with dark body. These are continued until (say June) the black gnat displaces one of them ; and in August the cow-dung fly is a great favourite. Probably the most useful fly throughout the season is the March brown—as is the case on most northern streams. It should be added that these are hackle-flies, but most Duddon anglers prefer to have one winged-fly on their cast.

For sea-trout *the* fly used here is that dressed from the wood-owl's wing, chocolate body, and gold tinsel. A few locally dressed nondescript flies are fished, but the above is that on which Duddon anglers depend.

Sea-trout commence to run at the end of May, the best fish coming up in June. July and August, however, bring the sea-trout in quantity.

Salmon commence to run in June and continue until November. Comparatively few are caught. There is only one recorded instance of a salmon taking fly in Duddon after dusk. The Broughton postmaster a few years ago hooked a 19 lb. fish on a small sea-trout fly at 9 p.m. and it was gaffed at 11.

The largest salmon taken in the Duddon with rod and line weighed 21 lb., but much heavier fish have been taken in the estuary in the nets. The majority of the salmon-flies are dressed locally, although the Silver Doctor and Jock Scott are favourites.

During the present season a laudable attempt has been made to improve the Duddon as a salmon river. Hitherto it has been heavily fished; now however that portion of the river between the Lickle mouth and Foxfield viaduct has been constituted a play-ground for salmon. Prior to the present season this portion had been persistently netted by four boats, and, in addition to salmon, trout were taken in the nets, as well as large numbers of immature *Salmonidæ*. Fish so small have been netted in the Duddon that it took ten to the pound—and these were taken in a legal mesh. By the removal of the nets, this evil, for a time at least, is done away with.

In both the Lickle and Duddon there are remains of salmon-coops, but these, of course, are not now used. This was one of the "instruments" which the Salmon Fishery Acts made illegal.

The Duddon estuary extends nearly nine miles seawards, and comprises 13,000 acres of silty deposit. Its mean width is about $2\frac{1}{4}$ miles. Outside its banks there are some of the best feeding grounds for salmon to be found round our coasts.

THE LEVEN

The river Leven is the effluent of Windermere. Although it has a course of about six miles only, it is one of the finest streams in the district. Its first

reach, that from the southern extremity of Windermere to Newby Bridge, is half river, half lake, the river proper beginning at Newby Bridge—about a mile from Lake Side. Immediately below the bridge the river has every appearance of an ideal trout-stream, and it has in fact a capital stock of trout. In autumn a good many large trout make from the lake to the river for spawning purposes, and occasionally sea-trout are taken as high as Newby Bridge.

Owing to the steady volume of water running down the Leven, and its rocky bed, the trout in it run larger than in most rivers of the district. The whole of the bed, however, is not of this character —bare and rocky—much of it being productive of plenty of trout food, and the well-wooded nature of the banks is also productive in this respect. The overgrown nature of the river makes it somewhat difficult to fish to any one who has been accustomed to more open conditions, but the skilled angler soon becomes master of the up-and-down casting which is essential here. Although the higher reaches of the river may be said to be the best for trout, the fish are larger in the lower reaches. Here fish of 1 lb. in weight are not uncommon, and in the deeper dubs trout up to 3 lbs. have been taken.

Except in night-fishing, hackle flies are invariably used, these being those usually fished on the Lake District streams. The general season opens in March, but the Leven Angling Association (a private Association) has an option in the matter.

As elsewhere in the district, April and May are the best months for fishing, and this applies to

March, when the river is open. Night-fishing is best in June and July, and by this method not only the most, but the best fish are taken.

At one time the Leven had some fame as a salmon-river. It is, however, a fairly good trout-stream, but in this connection the seasons vary greatly. A run of salmon generally takes place in June and July, these fish being smaller than those that run later. Most, however, run from August to November, the bigger fish coming last, the largest of all in November. By October there are numbers of salmon in the river up to 20 lb., and a fish of 35 lb. has been taken with rod and line.

The salmon are capricious risers, and take the fly very badly. The numbers of fish caught vary considerably from year to year, and fewer salmon are now taken than formerly. The best months —if any months can be said to be best in this respect—are September and October. During the 1898 season, one of the worst on record, only seven salmon were taken with rod and line. The salmon flies most commonly used are Jock Scott and Silver Doctor, locally-dressed nondescript flies being also used.

At one time serious obstacles existed in the river to the passage of salmon, but some years ago these were removed, and the passes rendered easier by the Kent Board of Conservators. The ascent of the fish is now comparatively easy, and a large extent of spawning ground is opened out. Salmon —which were not found in Windermere prior to the removal of the obstacles referred to—now spawn in most, if not all, the streams running into Windermere, and thousands of smolts pass down

the lake annually. How far the introduction of salmon has been beneficial is a question.

A great quantity of sea-trout (locally morts) enter the Leven in July, August, and September, and afford good sport. Fishing for them during the day does not prove very successful, the best baskets being made at night—a soft, warm night for preference with plenty of clouds about. The majority of the sea-trout run from ½ lb. to 2 lb. in weight. For the best flies for sea-trout, see the chapter on "Flies."

The estuary of the Leven is rather hard fished by netters at Greenodd, as well as by private proprietors, and in some seasons a great many fish are taken. This is to be regretted, as large numbers of early run fish are taken, and the river suffers in consequence. In the past the netters have not always confined themselves to the estuary.

Although the Leven is controlled by a private Association, the fishing in the estuary is open to those taking tickets. These can be had from the stationmaster at Greenodd. Tickets are sold enabling anglers to fish in the tidal waters below Haverthwaite. The fishing here, however, can hardly be described as good.

CHAPTER IV

Adjacent Rivers.—I

THE EDEN

By J. B. Slater

The Cumberland Eden rises in Swaledale, Yorkshire, and in its course of seventy miles to the sea is swelled by a number of tributaries, the chief of which are the Lowther, Eamont, Irthing, Gelt, Petterill and Caldew. It empties into the Solway Firth below the village of Rockcliffe, four miles from Carlisle, but at low tide forms an independent stream till it meets the Dumfriesshire Esk at the north end of Rockcliffe Marsh. It is tidal at the time of spring tides as far up as the village of Grinsdale, three miles below Carlisle. The whole of the Eden, its estuary and tributaries, with two or three slight exceptions, are under the control of the Eden Fishery Board, whose headquarters are at Carlisle.

The Fishery District is one of the three large ones in England (the others being the Tyne and Severn), and one inspector with nine water bailiffs are constantly employed by the Board of Conservators, with occasional extra men during the salmon spawning season.

For beauty of scenery, from its source to its outlet, the Eden can hardly be surpassed, and it is

by nature an exceedingly good salmon and trout river, being in many places for long stretches self-protected from poachers by the rough and rocky bottom, and yet having plenty of gravelly streams for the production of flies. There is also another good feature from an angler's point of view. There is plenty of good taking water, that is, streams or runs where a fly comes over a fish in a tempting way. The Eden has another advantage. It always retains a fair volume of water even in the driest times, though, of course, not in the same degree as it did before drainage became so general. There are, however, some "flies in the ointment." The river is heavily netted by the proprietors ; the whole of the sewage from Carlisle, of over 40,000 inhabitants, is emptied in its crude state into the river a mile below Carlisle, thus stopping fish running except in times of flood ; and there is a great obstruction at the Armathwaite weir, ten miles above Carlisle, to the passage of salmon to the upper spawning grounds. This obstruction is likely to be much less in future, as the Fishery Board have constructed a salmon pass at the weir, which, it is believed, will enable fish to surmount it in greatly increased numbers, and open out many miles of good spawning ground. As to the sewage, the Carlisle Corporation have at last, after a deal of hammering at them by the Fishery Board, cried "Peccavimus," and promise to deal with the matter as soon as possible. With regard to the excessive netting, it is difficult to see how this can be checked, except by increased close-time, especially the weekly "slap." It is now forty-two hours, and should be raised to forty-eight, which is the longest time allowed by the present Fishery Acts.

The Eden is one of the few early rivers we have, and there are three migrations of salmon, in early spring, summer, and autumn. Unless stopped by ice the first run begins in December, and has been known as early as November; the second in June or July; and the last, the real spawning fish, in October. For spring salmon, March and April are generally the best angling months, though, in an open season, February yields a fair number, the season opening on February 16th; and those who live near a good stretch of water have often a good time in the early mornings and evenings of May. June, July, August and September are of little use, for Eden salmon are always extremely "dour" in warm weather, and many of the early fish have returned to the sea. The autumn fishing is in full swing in October and up to November 15th, when the season closes; and, as all the river nets are off by September 1st, there is often good sport, three, four or five fish to a rod in a day's fishing being not uncommon. But, of course, the fish are far behind the spring fish in quality, many of them being only fit for kippering.

With regard to flies, most of the standard patterns will kill, the favourites being the Silver Doctor, Blue Doctor, Silver Grey, Parson, Wilkinson, Black Ranger and Jock Scott. But the "fly of flies" on the Eden is the Carlisle Bulldog, designed by the late Robert Strong, of Carlisle, and now copied almost everywhere. No angler hereabout thinks his fly-book complete without this fly in three sizes, and the chances are that he tries it first, whatever the conditions, for it is good in either clear or dull weather. The consequence is that, when fish are in the humour, he will prob-

ably get a tight line and fish the same fly all day and every day, and the reputation of the Bulldog is greatly enhanced. Robert Strong asked the writer to try the first one he tied, the result being two spring salmon, and the success of the pattern was assured. An old Carlisle angler, when asked by a stranger which was the best fly for salmon on the Eden, said, "The one that's always in the water, and not lying on the bank." This is sound advice. If a man will keep on flogging, vary the size of hook to the time of year and state of water, use a dark fly in dull weather and a bright fly in sunny weather, he must be a duffer if he does not meet with sport. Carlisle men, especially professionals, are fond, too fond, of using the angel minnow and phantom. As Dicky Routledge used to say, "They are good flies in the autumn," when fish are not so lively and want sométhing drawn past their noses; but in the spring the fly is far and away the best lure, and can be sunk at least two feet below the surface by fishing a long line and keeping the rod top down. Some of the proprietors, on giving leave, forbid the use of minnows of any kind on their water, as they believe, with some reason, that this sort of fishing makes fish shy.

Next to salmon, trout-fishing is the most important, and, no doubt, it gives sport and pleasure to a much larger number. To get good baskets of trout you must go above Wetheral; and this is not an easy matter, nearly all the water being strictly preserved. But there is a good stretch near Langwathby (where lodgings can be had), which is open to the public, and I have known good sport obtained there. Tickets can be ob-

tained from the Carlisle Angling Association, but they have lost all their water except in the neighbourhood of Carlisle, where trout-fishing is only poor, though it is improving. The season opens on March 1st, and, with favourable conditions of weather and water, good baskets are often got with the fly in this month, but trout are not really in good condition till well into April. The most killing early fly is the dark bloa, made from the inside feather of a waterhen's wing, with purple body, and, with the body changed to yellow, this fly is very good all through the spring. The March brown is seldom used except in a brown water, the ordinary spider orange partridge being found much more killing. In April the feather from the inside of a woodcock's wing with yellow body kills well, and again on summer evenings. In fact, though Greenwell's glory, Wickham's fancy, and other well-known flies are fished by some and do well, a good angler could command good sport throughout the season with the two feathers just mentioned, merely varying the size of hook and colour of body.

When the weather is bright, from the middle of April to middle of May, creeper-fishing is by far the most deadly. This caddis of the stone-fly can be got easily in many parts of the Eden, is baited on two small hooks, with a small shot 10 inches from the bait, is fished up stream in the rough water, and it is not difficult for a novice to learn the art. Following on the creeper comes the stone-fly, locally called the May-fly, which is also a deadly bait. It has one advantage over the creeper, that it is good in thin runs as well as streams; in fact in the same water as

the clear-water worm, which follows it in time, and is killing up to the end of July.

There is a form of fishing rather peculiar to the Eden, viz., bustard fishing at night. June is the best month, and it is used after it becomes too dark for the small fly, say after about 10 to 10.30. The original form used to be a brown wing from an owl or nightjar's feather, rough woolly body tied on a No. 6 or 7 Allingham hook, on which is stuck a maggot. The famous Dicky Routledge, a keen night-fisher, finding the baiting in the dark a nuisance, adopted the plan of tying in at the bend of the hook a small piece of chamois leather, and this form of bustard has ever since been adopted, and kills well, but it requires very quick striking.

In June, 1865, Mr. Jonathan Bell, of Beck Bank, was fishing in the Eden, near Great Salkeld, when he hooked a trout which kept him an hour before he was able to land it. It proved to be a splendid specimen of the brown trout, weighing 7 lb. 5 oz.

Towards the end of July herlings, called locally whitings, begin to appear, sometimes in large shoals, and afford good sport in a full water during the daytime, and in low waters at night. The mode of fishing is much the same as for trout. They are never numerous, except in the Association water, so that it is worth while taking out a ticket, especially as a sea-trout or two may be expected.

The same seasons and modes of angling apply to the tributaries of the Eden so far as concerns trout fishing. There is a considerable amount of open water in some of them, and a ticket covering several miles of the Irthing can be obtained from the Brampton Angling Association at the

small cost of 5*s.* for the season, including the 2*s.* 6*d.* trout licence.

It would be well if no other fish need be mentioned as denizens of the Eden; but, unfortunately, there are pike, chub, dace and eels, which are all treated as pests, and destroyed by the bailiffs as often as possible. There are also some grayling in the upper reaches, which could very well be spared, as they are not much fished for, and are more or less destructive to salmon and trout ova. If all the coarse fish could be eradicated and the netting kept within reasonable bounds, the Eden ought to be one of the best salmon and trout rivers in Great Britain. It is not bad now, but there is great room for improvement.

Tributaries of the Eden

The Lowther

The Lowther runs out of Haweswater, and joins the Eamont near Brougham Hall. It is well stocked with trout and not troubled much by the poaching fraternity, as the bottom is rough, with a good many boulders in places. Part of it is a good deal fished, and consequently the trout run small, but near Askham, where the river is strictly preserved by the Earl of Lonsdale, there are plenty of fine trout, and they are not bad to catch.

The Eamont

The Eamont runs out of Ullswater, and after picking up the water of the Lowther, joins the Eden near Edenhall, Sir R. Musgrave's mansion. A good deal of it is in the hands of a Yorkshire

Angling Club, who employ a regular keeper. With the aid of one of the bailiffs of the Eden Fishery Board, who lives close to Edenhall, and occasionally a gamekeeper, he is able to keep the water pretty clear of night poachers. Otherwise it would be "raked" heavily during the summer. The trout run about three to the pound, and give nice sport. In the autumn there is often some good salmon fishing—two, three or four fish being frequently killed by an angler in one day, when the river is in good ply after a flood. There is seldom any sport in the spring. Salmon do not take the Armathwaite weir much before May, by which time the best of the spring fishing is over. It remains to be seen whether the salmon-pass at the weir will improve matters in this respect. It is more likely to benefit the autumn fishing. The same flies are used as on the Eden.

The Petterill

The Petterill rises in the hills south of Penrith, and is a noted little river, the trout being of superior quality, in fact the best in Cumberland and the earliest in condition. It is, however, a good deal poached above the limit of the Eden Fishery District, which is at Wreay Bridge, about four and a half miles above Carlisle. The "merrie citie" contains a number of night poachers who like to get at water which is out of the regular beat of the water bailiffs, though they get taken in sometimes, being followed to the higher reaches, collared and locked up. Some of the Petterill is preserved, but in the lowest three miles there is little restriction, and it thus affords sport to many who have no

leave in private water. It empties into the Eden half a mile above Carlisle. No salmon can get up the Petterill.

The Caldew

The Caldew rises in the hills about Caldbeck, and is a very rapid stony-bottomed stream, with few good gravel beds for the supply of insect food. Consequently, the trout, though numerous enough, are small as a rule and poor in quality, coming into condition quite a month later than the Petterill trout. Yet the Caldew affords a certain amount of sport to many anglers. In the greater part of it the water is partially open to the public, though a stretch of about a mile just above Carlisle is now in the hands of the Carlisle Angling Association. Only a small charge is made for the use of this piece of water. The Caldew is in the same unfortunate position as the Petterill as regards poaching. The Eden Fishery District extends only as far up as Hawksdale Bridge near the village of Dalston, so that the water above is the happy hunting ground for the shackle-netters. When the Fishery Board was formed in 1870, the upper proprietors in these two little rivers made a successful objection to bring them into the licence duty area, but now some of them are clamouring for admission. No salmon can get over the weir at Holme Head, which is within the city boundaries. Below this autumn fish often spawn, but, as most of the water is abstracted for the use of the numerous mills, and runs down a dam course direct to the Eden, the young fry hatched in the river fall an easy prey to the Carlisle boys in dry weather

The Irthing

The Irthing rises in Northumberland a little to the east of Gilsland, and joins the Eden near the hamlet of Newby, about a mile from Warwick. It is one of the best salmon spawning rivers in Cumberland, and is at times heavily stocked with breeding fish in December and January. And here comes in the hardship to the proprietors. They are expected to protect the young of the salmon, but get nothing in return in the way of salmon fishing. It is doubtful whether a salmon was ever caught in the Irthing by fair means. Fish do not run up in the spring, and very few in the autumn till after the close-season. A few sea-trout and herlings are taken with the rod, especially in the Edmund Castle water. It is a nice little trouting stream, and is nearly all, through the kindness of the Earl of Carlisle, in the hands of the Brampton Angling Association.

J. B. S.

CHAPTER V

ADJACENT RIVERS.—II

THE DERWENT

By Mr. G. E. Lowthian

THE Derwent is about thirty-one miles long. It has its source in the Sprinkling and Styhead Tarns, near the top of Styhead Pass, and after flowing for about seven miles in a northerly direction, it expands into Lake Derwentwater near Lodore; after leaving which, it receives the River Greta on its right bank, near Portinscale. It then flows for about four miles in a north-westerly direction, and expands into Bassenthwaite Lake; after leaving which, at Ouse Bridge, it flows in a westerly direction through Cockermouth, falling into the sea at Workington. It receives on its left bank the Cocker, at Cockermouth, and the Marron, near Marron Junction.

The Derwent contains salmon, grilse, sea-trout, whiting, brown trout, pike, perch, and eels.

Commencing at the low end of Derwentwater Lake, and proceeding down the river, the favourite salmon pools are :—*Between Derwentwater and Bassenthwaite Lakes :*—Shilton Dub, Long Bridge Dub, Birkett Dub, Dick Tyson Island, Howe Watering Place, Long Lonning Dub, High Strangs and High Stock Bridge Dub. *Between Ouse Bridge and Isel*

Bridge :—Bridge Pool, Barkhouse, Boat Dub, Buckholme, Brock Hole, Eel Settings, Long Close, Wash Dub, Longlands Dub, Big Denmark, Low Denmark, and Isel Bridge Dub. *Between Isel Bridge and Derwent Bridge, Cockermouth* :—Isel Bridge Dub, Isel Hall Dub, White Reynolds, Cliff Scaur, Mill Bush, Black Hole, Limekiln, Rothery, Howthwaite, Rough Dub, Barn Dub, Cherry Tree, Lancaster, Little Lad's Hole, Wood End, Ladyboat and Castle Pool. *Between Derwent Bridge and Brigham Railway Bridge* :—Fitz Dam, Banking, Cradles, Whinney Dub, Stoddart Pot, Cunnywath, Red Kirk, Lamb Scaur, Crossa, and Iron Bridge. *Between Broughton Bridge and Penny Bridge* :—Boat Hole, Sandbed, Jerry Pot and Log. *Between Penny Bridge and Marron Junction* :—Mattyturn Dub, Marblesyke, Mill Wood, Mill Dub, White Steel, Garden Hole, Rough Hole, Whalebank, Marron Foot, and Rise Foot. *Between Marron Junction and Camerton Station* :—High and Low Codfit, and Camerton Hall Dub. *Between Camerton Station and the Sea* :—Trout Hole, Coop Dub, Island Point, Yearl Pool, Willows, Flat Dub, and Stainton Hole.

For angling for salmon, August, September, October, and November to 14th are the best months; for sea-trout or morts, July, August, and September, during the day, and July and August at night; for whiting (the young of sea-trout on their first return from the sea, and called "sprods" in the Kent, "herling" on the Scotch coast, and "smelts" in the Ehen), July, August and, September; and for brown trout, April and May.

The most tempting flies for salmon are :—Silver Grey, Jock Scott, Thunder and Lightning, Silver Doctor, Blue Doctor, and local flies, *e.g.* Dun Pea-

cock with white tip (body orange or yellow); Dark Turkey, with white tip (dull red body); Grey Turkey, with dirty white, or yellow tip (blue body).

A successful local angler says, "he has killed more salmon in the Derwent with the 'dark turkey (yellow body with tinsel and red hackle),' than with any other fly; and that in August, woodcock, (with yellow body and a little tinsel) kills well."

Spoon bait is very killing—(No. 4, two inches, No. 5, one and a half inches, and No. 6, an inch, may be used according to condition of water).

The salmon run from 14 lbs. to 25 lbs.; grilse from 3 lbs. to 6 lbs.; sea-trout, from ¾lb. to 4 or 5 lbs.; the whiting, from ½ lb. to ¾ lb.; the brown trout average about ½ lb.

Salmon take best when fresh run. Occasionally fish are got over 40 lbs.; and once a salmon weighing 62 lbs. was killed near Cockermouth with the rod.

The late Mr. John Denwood, of Cockermouth, some years ago, caught seven salmon below Cockermouth with fly, running from 12 lbs. to 20 lbs.

The same angler, on another occasion, while fishing Iron Bridge Dub, Brigham, with fly, hooked a salmon above the bridge. It took down the river, and as he was unable to follow it broke him, carrying away the fly, and between 30 and 40 yards of line. He went upon the bridge to make an inspection, and observing his line, he made his way below the bridge, "rigged up a pair of snigs," and recovered the end of his line, which he securely fastened to that remaining upon his reel, and after an exciting struggle killed his fish. It weighed over 25 lbs.

Salmon usually lie below weirs, and towards the top of big pools, and have a fancy for the still water beneath huge rocks or boulders.

The best time of the day for angling for salmon is between 7 and 11 o'clock in the morning and from 4 o'clock in the afternoon till dusk ; but should the water and weather be favourable, they may be fished for throughout the day.

Salmon usually decline to take when dark clouds impend and the barometer falls steadily for rain, or when the river is rising after rain ; but on a cloudy day with wind from south, or south-west, and occasional gleams of sunshine, the angler may expect sport.

In angling for salmon with fly, cast the line across the stream in a sloping direction, and work fly up and down against the current, under the surface of the water, gradually drawing it up stream, towards the rod point. The angler should strike on feeling the fish, or on seeing it descend, after having seized the fly. Salmon frequently take a sunken fly.

Gaudy flies should be used on a bright day. The writer killed a salmon last season over 20 lb., and hooked another, with Silver Grey, in low water, on a day of dazzling brilliancy.

The angler who wishes to succeed should "keep his fly upon the water." On two separate occasions the writer hooked and killed a salmon at the very moment of his departure, after hope deferred had well nigh made the heart sick. They weighed 20 lbs. and 18 lbs. respectively.

In angling for salmon with lob-worms, use hooks No. 13 to 15 (Kendal size), dressed on strong salmon-gut 1½ yards long, with twisted gut taper

at top, and shotted to correspond with strength of current. Throw up the stream, and let the line gradually descend with the current. The salmon sometimes takes the bait quietly, and hooks himself before the angler is aware; but should the fish commence tugging, line should be given to allow time for swallowing the bait. When the salmon moves away, the angler should strike. It is important after hooking the fish to keep a tight line, and should he indulge in leaping and jumping exercises or make gyrations in the air, to lower the rod top.

The grilse ascend the river towards the end of July. They take a small salmon fly. They, as also the sea-trout, afford lively fishing when fresh run, and require great skill owing to their tender mouths. For sea-trout fishing the following flies are much in vogue:—(1) speckled grey drake (orange or yellow body, with gold tinsel and red hackle). (2) corncrake or partridge tail (orange or yellow body with gold tinsel and red hackle; (3) woodcock and hare lug; (4) do. (silver body); (5) black wing (yellow body); ordinary trout flies during the day; and dark mackerel, grey drake (green body), and white and brown moth, dressed on hooks somewhat larger, at night. The sea-trout have a partiality for gold and silver tinsel. Good sport is to be had with fly at nights with a clouded moon and south wind. The best takes of sea-trout and whiting are made during the day in the freshes with the worm.

The sea-trout do not ascend the river beyond Bassenthwaite Lake, though a few spawn in Bassenthwaite Hall beck.

For brown-trout fishing the following flies kill

well:—Hackle flies; (1) Black Spider, from cock starling neck (brown silk); (2) Red Spider, outside landrail (yellow silk); (3) Dun Spider, under starling wing (yellow silk). Winged flies; (1) Quill feather of starling wing (hare lug body or woodcock under wing); (2) Woodcock Wing (yellow or orange silk); (3) Snipe Feather (purple silk). Fishing in clear water (with Stewart's tackle, worm being used as bait) is successfully followed. In a spate trout greedily take cod bait, sleughs, and maggots or gentles, in the smaller streams.

In 1890, one Thomas Thwaites, a railway labourer, caught in the river Derwent, near Portinscale, with the rod, a lake-trout weighing 10 lbs. 2 oz.; its length was 28¼ inches, and its girth 17 inches. It was stuffed and put into a case which is now fixed to the wall in the entrance hall of the Queen's Hotel, Keswick.

Many years ago two famous local anglers, Kitty Boustead and Tom Musgrave, killed together, in the Borrowdale Beck, between Rosthwaite and Grange Bridge, in a little over two hours, with bracken-clock, in June, forty-four fish, weighing about 22 lbs. The bracken-clock, or fern-fly, comes out in the last week in May, more generally in June. It is found on sunny days among the brackens or ferns on the fells. For fishing bracken-clock, the angler may use hook No. 4 (Kendal size), tied upon gut 6 feet long, and should throw up stream.

A syndicate of riparian owners have leased Lord Lonsdale's rights from the sea to Ripton Hall (over three miles) for the purpose of improving the fishery. If by sale of permits, &c., they do not raise sufficient to pay rent, &c., they make up the deficiency by netting and using the coops.

The greater part of the Derwent can be fished on taking out rod licence and permits ; and Cockermouth is a good place to reside at for fishing the rivers below Bassenthwaite Lake.

TRIBUTARIES OF THE DERWENT

The Cocker

flows from Buttermere, Crummock, and Loweswater Lakes, in a north-westerly direction, through the vale of Lorton, and joins the main river at Cockermouth. The length of its course from Crummock is about 8 miles. It contains salmon, sea trout, and brown trout. Commencing at the low end of Crummock, and descending the river, the favourite salmon dubs are Cornhow Dub, Hall Rake Dub (dam for Lorton Low Mill), High and Low Guards Hole (under Lorton Hall), Boat Dub (below Low Lorton), Old House Dub and Greystone Dub (below Rogerscale), Cinder Dub, (above Stanger), Southwaite Rake (dam for Southwaite Mill), Paper Mill Dam, and Rubby Banks Mill Dam. The river affords good sport for autumn fishing. The best months for angling for salmon are October and November ; for sea-trout, August to November ; and for brown trout April and May. Whitbeck (a tributary of the Cocker) is a favourite run of the sea-trout. The average weight of the salmon is about 13 or 14 lbs. ; of sea-trout about $1\frac{1}{4}$ lbs., and brown trout about $\frac{1}{4}$ lb.

Turkey (yellow body) as a salmon fly ; and Wood-owl (after July) as a trout fly, kill well. The river is not so favourable for brown-trout fishing as it used to be, owing to Cockermouth and Working-

ton receiving their water supply from Crummock, and to there being less cover and shelter for the fish than formerly.

Some years ago, Mr. Wilson, of Fairfield, Lorton, had a private hatchery in his grounds and hatched both Norwegian and Rhine salmon, hoping to introduce an earlier run. He put some thousands of fry into the Cocker, and into the Derwent at Ouse Bridge as soon as they arrived at their feeding stage, but could not perceive any change in the time of the running of these fish, in either the Cocker or the Derwent. He also put some thousands of American brook trout (*Salmo fontinalis*) into the Cocker. He heard of a good many of these being taken, both in the net of the poacher and by the anglers as far down as Broughton in the Derwent, but the river did not seem to suit them, as they failed to multiply naturally. This fish is a species of char. As a pond fish it grows rapidly when artificially fed, and the females have lots of fine healthy ova in them.

Permission to fish must be got from the proprietors.

The Marron,

which rises near Lamplugh, used to be a famous stream for sea-trout, but now it is hardly worth fishing, except in a spate or fresh.

The Greta

is formed by the junction of the Glenderamakin and St. John's becks at Bridge Cottage, near Threlkeld. It flows for about 4¾ miles in a north-westerly direction, and joins the main river near

Portinscale. The Greta contains salmon and trout.

Commencing at Bridge Cottage, and descending the river, the favourite salmon dubs are: Crozier Dub, Sycamore Dub, Cat Crag, Scaur Dub, Rock Dub (Naddle Beck foot), Ash Tree Dub, Birks, Ellers, Brundholme Steps, Willy Dub, High Oak and Low Oak Dubs, Fall Dub, Middle Owlet and Low Owlet Holes, Holly Tree Dub, and Bobbin Mill Dub. The best months for angling for salmon are October and November. The most tempting local flies are (1) Fawn Turkey, with scarlet body and silver tinsel; (2) Freckled Pheasant, with yellow body and silver tinsel, set off with a piece of green peacock for tail. These should be dressed on hooks Nos. 11 and 12 (Kendal size), but if river is high, on hooks Nos. 13 and 14. As many as five salmon have been killed with the fly in one day by a local angler, running from 6 lbs. to 14 lbs., between Briery Mill and Crozier Dub; and the writer has known of a 25 lb. fish being caught with the worm in Owlet Hole.

It may be interesting to note that the late John Bright killed a salmon in Willy Dub.

The average weight of a fish is about 10 lbs. Latterly the salmon have commenced running up Newlands and Borrowdale Becks more freely.

The trout may be angled for with fly, worm, natural minnow or phantom (Nos. 2 and 3), according to state of water. The trout fishing, which has been poor, is improving. The moss is growing again in the bottom of the river, insect life will follow, and then fish.

Many years ago a local angler killed a bull-

trout (*Salmo eriox*), about 17 lbs., in Low Oak Dub, with a salmon-fly, towards the end of August.

The writer thinks if the fish were properly protected, and illegal fishing and pollution put a stop to, the fishing would greatly improve, the lakes forming an inexhaustible supply. The greater part of the rivers may be fished on taking out the 2*s.* 6*d.* Association licence, in addition to the rod licence. Further particulars may be had on applying to Mr. Henry Mayson, Lake Road, Keswick. For fishing the rivers above Bassenthwaite Lake Keswick is a convenient place to reside at.

St. John's Beck

flows from Thirlmere through the Vale of St. John's, in a northerly direction, and falls into the Greta at Bridge Cottage. Its length is about four miles.

Commencing at Smeathwaite Bridge and proceeding down the river, the favourite salmon dubs are :—Roundle Dub, Old Bridge Stream and Oak Dub (opposite Low Bridge End), Bridge Dub, Busks Dub, Middle Field Dub, Sosgill Bridge Dub, Isles Dub, (below Bram Crag), Bridge House Dub, Thack Brow Dub, Wanthwaite Bridge Dub, Waste Dub (above Mirehouse), Rood Dub (opposite Mirehouse), Slewey Dub, Moss Bridge Dub and Wath Dub (above Bridge Cottage).

The St. John's Beck used to be a capital trouting stream, but owing to the abstraction of water from Thirlmere by the Manchester Corporation, and to the trout not having free access to and from the lake, the trout fishing has somewhat deteriorated, though still good.

The Glenderamakin

(Threlkeld beck) rises at Scales Tarn, towards the east end of Saddleback, runs through Mungrisedale, afterwards takes a south-westerly direction, and joins the St. John's Beck at Bridge Cottage. Its length is about 6½ miles. Above Threlkeld Hall it is fairly well stocked with trout.

Gills Beck

(Troutbeck) rises on Matterdale Common, and after flowing past Troutbeck Station falls into the Glenderamakin between Lamb Bridge and Moor End —seven miles above Keswick.

Mosedale Beck

rises at Great Dodd and falls into the Glenderamakin near Wallthwaite—6½ miles above Keswick.

Naddle

rises at Shoulthwaite, and after flowing through the vale of Naddle, falls into the Greta at Langton Moss, near Burns—2¼ miles above Keswick.

Glenderaterra

(Brundholme beck) rises behind Lonscale fell, and joins the Greta at Brundholme Railway Bridge, about 2 miles above Keswick. Its length is about 3 miles.

Watendlath Beck

rises in Blea Tarn, flows through Watendlath tarn, and falls into Derwentwater at Lodore. Its length is about 4 miles.

Brockley Beck

rises on Castle Rigg Fell, and falls into Derwentwater about a mile south of Keswick.

Newlands Beck

rises at Dalehead Tarn, and flows through the vale of Newlands in a northerly direction into Bassenthwaite Lake. Its length is about 7 miles.

Powe Beck

rises at Skelgill, and after running 3 miles in a north-westerly direction, joins the Newlands Beck above Bassenthwaite Lake.

Small trout are fairly numerous in all the above streams, and fair baskets may be had throughout the season, wind and weather being favourable. The trout average about 3 oz.

DUBS BETWEEN THE SEA AND ISEL HALL.

Stainton Hole, Flat Dub, Willows, Yearl Pool, Island Point, Coop Dub, Trout Hole, Camerton Hall Dub, High and Low Codfit, Rise Foot, Marron Foot, Whalebank, Rough Hole, Garden Hole, White Steel, Mill Dub, Mill Wood, Marblesyke (one side), *Mattyturn Dub, Old Bridge Dub, Log, Jerry Pot, Sandbed, Boat Hole, Weirs, Ironbridge, Crossa, Lamb Scaur, Red Kirk, Cunnywath, Stoddart Pot, Whinney Dub, Cradles, Banking, Fitz Dam, Castle Pool, Ladyboat,* Wood End, Little Lad's Hole, Lancaster, Cherry Tree, Barn Dub, Rough Dub, Howthwaite, Rothery, Limekiln,

Black Hole, Mill Bush, Cliff Scaur, White Reynolds, Isel Hall Dub, Isel Bridge Dub.

N.B.—All the dubs from Stainton Hole up to Ladyboat, which are printed in italics, may be fished on obtaining licences and permits from the Fishery Board. The dubs from Wood End to Isel Bridge are reserved.

POOLS BETWEEN OUSE BRIDGE AND ISEL BRIDGE

Bridge Pool, Barkhouse, Boat Dub, Buckholme. *Brock Hole, Eel Settings, Long Close, Wash Dub, Longlands Dub, Big Denmark, Low Denmark, and Isel Bridge Dub.*

The dubs printed in italics are in Sir Wilfrid Lawson's fishery, and permission to fish same may be had on application to Mr. T. C. Burn, Clerk to Derwent Fishery Board, Cockermouth, for Thursdays, Fridays, and Saturdays.

The other dubs are in Mr. Hartley's fishery.

Mr. Harrison, of Dunthwaite, and Rev. Canon Hoskins, of Higham, grant permission for certain days in the week.

G. E. L.

CHAPTER VI

WINDERMERE

THE earliest accounts of Windermere in relation to the fish it contains are those of Nicholson and Burn (1777) (who quote Sir Daniel Fleming, a still earlier authority), and Clarke (1787). Incidentally it may be stated that, just a century ago, the value of the fishing in Windermere was £12. Nicholson and Burn write as follows:—

"The large lake called Windermere-Water is in this division. The islands within it are all in Windermere parish. The rector hath for time immemorial had a pleasure-boat upon it; and he hath a prescription of so much a boat, in lieu of all the tithe fish that are caught in the lake.

"The lake is from one to two miles broad, and extends with crooked banks for the space of about 13 miles, but in a straight line drawn from one end to the other perhaps not above 8 or 9 miles, being in some places of a wonderful depth, and of a clear, pebbly bottom; breeding good store of fish, as eels, trouts (both common and grey trouts), pikes, bass or perch, skellies, and particularly char, which is a fish generally about nine inches long, the rareness of which fish occasions many pots of chars to be sent to London and other places yearly as presents. There are three sorts of chars, first, the male, being large, with a red belly, but the fish therefore somewhat white within, having a soft roe, and these are called milting chars; secondly, the female, being also

large, with not so red a belly, but the fish thereof very red within, having its belly full of hard roes or spawn, called roneing chars; thirdly, the female being not so large, nor so red on the outside, but the reddest within, having no roes in its belly, and these are called gelt chars.

"Sir Daniel Fleming says, there are no chars to be found save only in this lake and Coningston Water. Some other waters (he says) pretend to have chars in them, as Buttermere in Cumberland, and Ulleswater (which is between Westmorland and Cumberland), but these are generally esteemed by knowing persons to be only case, a kind of fish somewhat like unto a char, but not near so valuable, but the owners of the fishery in Ulleswater do not assent to this position.

"The fishery in the lake is farmed by several persons who all together pay to the king's receiver for fishing £6 a year, or for the fishing and ferry together £6 13*s.* 8*d.* And so it descends to their executors and administrators.

"The fishing is divided into three cables as they call them: 1. The high cable, from the water head to the char bed, half a mile above Calgarth. 2. The middle cable, from thence to below the ferry. 3. The lower cable, from thence to Newby. And in each cable there are four fisheries.

"Out of this lake there yearly pass up the river Rowthey many very large trouts, and up the river Brathey great store of case (which are like the char, but spawn at another season of the year). And although these two rivers do run a good way together in one channel before they disembogue into Windermere Water, and are both very clear and bottomed alike, yet scarce ever any trouts are found in Brathey, or case in Rowthey. Some few salmon also, at the spawning season, come from the sea through the lake and up the river Rowthey, but none ever up Brathey."

Windermere is so well known as the largest and most visited of the lakes, that it is almost superfluous to go over its dimensions. It is 10½ miles in length, its greatest breadth being 1610 yards, its mean breadth 950 yards. These dimensions give an area of 5·69 square miles, and the circumference of the lake is about 23 miles. Its height above sea-

level is 130 feet; and as the depth of any lake has an important relation to its fish-carrying capacity, it may be stated that the maximum depth of Windermere is 219 feet, its mean depth 78½ feet.

The islands of a lake are also important in the same connection, and Windermere has fourteen or fifteen, Belle Isle (formerly Curwen's Island), Ling Holme, Silver Holme, Blake Holme, Lady Holme, and Hen Holme, being among the more important. Of these Belle Isle (nearly opposite Bowness) is the largest. It is about 20 acres in extent, is well wooded, and visitors are allowed to land upon it. The shores of Belle Isle, as well as the shores of the other islands, afford some of the best fishing ground in the whole of the lake.

The islands are either in the centre or southern reaches of the lake, none being in the upper (deeper) reaches. Commencing at the northern extremity, the principal points of the lake are as follows: Waterhead (Ambleside), whence the lake steamers start; Low Wood (eastern shore); Bowness Bay (roughly the centre of the lake); the Ferry Hotel[1] (opposite Bowness); Storrs Hall (eastern shore); and (inappropriately named) Lake Side — the southern extremity of the lake, the terminus of the Furness Railway.

Windermere's principal feeders are the Rothay, the Brathay, the Troutbeck, and Cunsey Beck, The Brathay descends from the Langdale Pikes flowing through Langdale and Elter Water; the Rothay has its source above Grasmere, and flows through the vale of Rydal. These two effect a junction just before entering the lake at its northern

[1] The ferry-boat plies whenever passengers wish to cross the lake.

extremity. The Troutbeck flows down the valley of the same name ; and Cunsey Beck is the effluent of Esthwaite Water, entering the lake near Rawlinson Nab. The effluent of Windermere is the Leven, which debouches at Lake Side, and, after a course of five miles flows into Morecame Bay. A mile from Lakeside the Leven is spanned by Newby Bridge.

The lake maintains a fairly uniform level, and perhaps its most striking characteristic is its river-like character. The mountains are finely grouped about the head of Windermere ; and, for the most part, its shores are well wooded. They are also abundantly indented, and the bays afford some of the best fishing.

Whether Windermere is actually the most prolific of the lakes from a fish-producing standpoint, or is merely the lake of greatest latent capacity, is a question which it would be difficult to answer. That, in this same capacity, it is one of the finest sheets of water in Great Britain there can be no question.

From whatever standpoint it is viewed, or however familiar one may be with its varying aspects, the charm of its great beauty is one that never fails. It is alike beautiful in spring, in summer, in autumn, in winter ; and only those who know the "river-lake" as comparative strangers are bold enough to set the transcendent beauty of one season against another.

Its ordinary aspects are known to thousands of people ; fewer know the great charm of trout-fishing through a summer night ; and fewer still, perhaps, the almost inexpressible beauty of being abroad on the lake just at the dawn of a

new day in May or early June. These are things which must be experienced—they leave impressions which can never be translated.

In night-trolling for trout it is rarely that one is altogether unsuccessful, and every trout that is taken is a trout indeed, the bigger fish constituting a basket in themselves. The dawn-fishing for char with plumbline is a much more uncertain process, and the results are more in the nature of extremes—one usually gets no char at all or a fair take.

But for every enthusiast who fishes Windermere for trout and char there are twenty whose prey are pike or the bold-biting perch; and if there were no pike or perch in Windermere there would be but little fishing in the queen of the lakes. These two constitute the visitors' fishes, and to catch pike needs but little skill, to catch perch needs no skill at all. With the guidance of a boatman to indicate the likely ground, it is no exaggeration to say that a man who can wield a rod may expect to bag ten or a dozen pike a day, or as many dozen perch. The amount of pleasure to be derived from the catch will greatly depend upon the previous experience of the angler; if he is experienced he may set down the fish as "small"; if a novice he will declare the basket a magnificent one, and marvel at his skill. In the contemplation of what he has actually accomplished, he will forget all the fish he knocked off the tackle in his mad attempts to get them into the boat—will be deaf to the suppressed language of the boatman that a fifteen pound pike should fall to a fool who failed to land it, and that, too, when it was hooked in two places.

Fortunately (or unfortunately?) perch exist in millions, and pike in thousands; and their very abundance goes far to injure the fish-producing capacity of the lake. If their numbers were greatly reduced, as many fish would be actually taken as now, only they would give much better sport, and the size would be greatly increased. Nothing which anglers with rod and line can do can make any appreciable difference upon the quantity of fish in the lake; and it is a question for the authorities whether systematic netting for coarse fish ought not to be allowed over a series of years, with arrangements for carefully watching the results. In this connection it ought to be borne in mind that a perch produces 50,000 eggs for every pound of its live-weight, and a pike 18,000 eggs. A large number of these, of course, are destroyed; but these figures suggest the possible increase of the species under favourable conditions such as exist in Windermere.

And here I may set down what I believe to be an important fact in connection with trout-fishing on Windermere, which, if it has ever been recorded, has not been given the attention it requires. The question has been put a thousand times: Why cannot Windermere be converted into a Loch Leven? or, in other words, why cannot it be made to swarm with trout, and so become an angler's paradise. The answer lies in the physical configuration of the lake. Windermere, as already stated, has a maximum depth of 219 feet, a mean depth of 78½ feet; and until the lake bottom can be raised so as to give a greater area of shallow water conditions, so long will the quantity of its trout and trout-fishing be limited.

The fish found in Windermere are :—

Salmon,	Pike,
Trout,	Perch,
[Bull-Trout],	Roach,[1]
Salmon-Trout,	Minnow,
[Great Lake Trout],	Stickleback,
Char,	Eel (Broad-nosed),
Eel (Sharp-nosed).	

From the angler's standpoint, four of these are important, the others in a smaller degree only.

A fairly long acquaintance with the various species of fish found in Windermere suggests much interesting matter in connection with their life-history, habits, food, spawning, &c. As, however, the same species are found in several of the lakes and rivers, these are treated of in the chapter entitled, "Notes on the Natural History of the Fishes of the District."

It may be as well, then, to come at once to the fishing as actually practised in Windermere, reserving "Char and Char Fishing" for special treatment in a separate chapter.

Trout are taken by fly-fishing round the margin of the lake, and by trolling in deep water. The former is successfully practised in April, May, and in the early part of June, whilst trolling lasts longer.

Fly-fishing commences with April, and if the season is a normal one, April and May usually

[1] Kirkbride, a fisherman who has spent his life on the lake has, upon rare occasions, taken roach in Windermere. Upon one occasion he took two half-pound fish in a trout-setting and released them. The general absence of roach in the lake is probably owing to the great number of predatory fish which it contains.

prove the best fishing months. The green drake, however, often extends the season well on into June. July is probably the "deadest" month, but a second season commences with September, and continues to the end.

As on other lakes, a wind is essential for successful fly-fishing on Windermere. "A big rough fly for a big rough wind" is a truism here as elsewhere; and if the angler is fortunate to have a southerly wind and a cloudy sky, he can only blame his lack of skill if he does not get fish.

How true it is, however, that one never knows in fishing what perfect conditions are may be illustrated from the following experience. Early in the season of 1898 I had started out to fish on a not unlikely day. The day, however, "developed." It rained, it blew, it hailed, it snowed—and occasionally it did all these at once. On this day (fishing in Haweswater) I had by far the best fishing of the season, viz., forty trout and two char. Upon this occasion I used big flies with plenty of tinsel about them.

The best trout ground is along the shallow margins of the lake, and it is here the fishing is done. A boat (not too narrow) is almost invariably used, preferably one with a fair amount of stability. This is kept moving slowly, the angler casting towards the shore. During the day the fish mostly lie just where the bank shelves down to deeper water, and the angler cannot do better than follow this plan. Roughly speaking, the line indicated is about forty yards from the shore. The angler should always fish with the wind—not against it—and if the boat is rowed slowly parallel

with the shore a great extent of ground can be covered. In this connection it need hardly be stated that it is better to fish a small extent of water carefully than a larger area loosely. One of Messrs. Farlow's 10 feet or 11 feet perfect cork-handle trout rods is perfection for this class of fishing. A light, strong rod of this description enables an angler to fish well within himself without tiring. A long line is quite unnecessary. When a fish rises, do not snatch the flies away; it is better to be too slow than too quick. Nearly every good fish will hook itself if allowed. There are times, when fish are not well on the feed, that are exceptions, and when other methods must be resorted to. Having hooked a trout, lose no time in using the net. If a heavy fish, bid your boatman make for deep water. Keep up a steady strain, as a slack line, even for a moment, generally proves fatal.

As to the best parts of the lake for fly-fishing—taking first the southern reaches—the western shore is the better, the neighbourhood of Graythwaite being especially good. The shoals north of Belle Isle are also good trout ground. The shallower bays between Bowness and Storrs Hall (eastern shore) may also be mentioned.

In the northern portion of the lake, the ground from Holme Crag to Lowwood is good; also from Ecclerigg boathouse to the White Cross—especially the shallow bay north of the Cross. On the opposite (western) shore there is fair fishing from Green Tuft to Wray Point; and the reach in High Wray Bay from Mossy Stone to Quaker Nab is a splendid one—and right up to the Vicarage boathouse.

Flies.

The flies taken on Windermere are few in number, but they are effective.

(1) The March Brown is one of the best all-round flies, and the female is more killing than the male. Perhaps an exception to this is on cold, dark days, when the male proves the more effective.

(2) Next in importance to the March Brown is the Orange Woodcock. This should be dressed with the bright outside feather from the wing of the cock, with a yellowish orange body. There is another variety of this fly dressed from the pale feather from the inside of the wing, and a body of lighter yellow.

(3) A third killing fly is a nondescript, dressed as follows:—Body, black floss silk, ribbed with gold thread, two turns of blackcock's hackle. Wing, the light tipped glossy black feather from the outside of a starling's wing.

A cast of the above flies, dressed in two sizes (Nos. 1 and 3) will kill well from the opening of the season to the advent of the Green Drake. When this is "on" the fish will look at scarcely anything else.

A reliable autumn cast is August Dun: Black Hackle with a body of black ostrich herl; Red Hackle, with body of peacock herl.

The following river flies, dressed on larger hooks, answer fairly well on Windermere:—

Blue dun, Coch-y-bondhu,
Dark snipe, Greenwell's glory,
Black Gnat, &c.

The following are also proved flies:—

The Zulu, Claret and teal,
White tip.

"Broughton Point" is a good general fly here, as it is on Ullswater, Coniston, and on most of the smaller lakes.

The importance of the size of the flies used can hardly be exaggerated. If the surface of the water is just rippled, a No. 1 hook is large enough, while with half a gale a No. 4 is not too large. Nos. 2 and 3 are the most useful sizes; and the angler will be fully equipped if he has half a dozen patterns of flies dressed in three sizes. With an equal amount of wind, a bright day requires a size less fly than a dark day. With regard to kind of hook a well-known lake angler expresses it as his opinion that the sneck-bend is best for small hooks (sizes 0, 1, 2)—while Limericks give better holding power in Nos. 3 and 4.

To come now to trolling for trout. The best time for this is from the middle of April to the middle of June. The most successful fishing is done from sunset until dark, and again at dawn. The later in the season trolling is indulged the more pleasurable it becomes, but by July the fish have almost stopped taking. All the biggest trout are got in this way. Personally I have rarely taken a fish of less than 1 lb. in weight, the majority running from 1 lb. to 2 lbs. Fish of 3 lbs. and 4 lbs. are not uncommon, and on successive nights in the 1898 season a gentleman had two trout weighing $4\frac{1}{2}$ lbs. and $5\frac{1}{4}$ lbs. respectively. The latter was, I believe, the largest fish of the year; but I have known a trout of 7 lbs. and another of 8 lbs. taken by trolling, the latter I believe the largest taken in Windermere. On the particular evenings referred to I had three trout weighing $1\frac{1}{2}$ lbs., 2 lbs., and $2\frac{1}{2}$ lbs. For night-

Trolling for Trout

trolling I have invariably found the shores of Belle Isle and "between the islands" the best and most successful ground. I have also taken some good fish on the east shore of the lake from Parsonage Bay to Storrs Hall. Personally I have not tried experiments with a variety of baits, having invariably used a natural bait on one rod, an artificial on the other—and the results have been peculiarly constant, viz., for every trout taken on the artificial I have had two on the natural bait. I have heard a great deal as to the deadliness of the pearl minnow, but have had no experience of it. In trolling for trout one is not much bothered with other fish taking the bait, but every now and then there comes a night when the catch consists of pike, and nothing but pike. This is a great nuisance, but the pike taken in this way are splendidly fed fish.

Trolling (trailing would be more accurate) is, of course, done from a boat, and two rods are used. Whilst these should be fairly stiff they should at the same time have a good deal of play in them, and 14 feet is a convenient length. A fine, strong, well-dressed line is necessary, and from 35 to 40 yards is played out. No leads are used, the weight of the line being sufficient to sink it. The trace has three swivels, and is made up of stout, round gut. The seven-hook pattern flight answers well, and all the parts should be of the best material. Passing over the actual baiting of the flight let me say a word as to the minnows. Always select the biggest and brightest, avoiding those with dark backs and red bellies. This is a point it is well to note, as the biggest trout are invariably taken with a large minnow. Before

running out the whole of the line be certain that the minnow spins properly. When this is neglected, as it sometimes is, a good deal of time and temper is wasted. The boat is rowed at about $1\frac{1}{2}$ miles an hour, and from forty to eighty yards from the shore gives the best results. If a bell is used on the rod it will give notice when a fish strikes, but personally I think a bell a nuisance. A Windermere trout lets you know soon enough when he is hooked, but delicate handing is required to bring him safely to the net. The rod is laid in the boat and the line drawn in hand over hand. I have occasionally "lifted" fish, but this is unwise, and a capacious landing-net should always be carried.

Trout may occasionally be got by trolling on a dull, cloudy day, with wind, the only difference in the method of procedure being that a greater quantity of line is necessary, and the bait requires to be sunk a little.

A small char or trout, baited on a flight of suitable size, dressed on grilse gut, with trace to correspond, will sometimes account for a heavy fish. Indeed a char, if one can be got small enough, is by far the best bait for a big fish.

In conclusion let me state that there is a great charm about trolling on Windermere, and the angler will never forget a summer night so spent. As the light fades the sounds on the lake become fewer and fewer, and by midnight one is alone on the lake. There is no sound save that of the oars in the rowlocks and the soft swish of the water. The experience is pleasant enough in itself, but trout-fishing, and with good sport, one realises that life is a delightful thing.

Pike Fishing

Although the pike cannot be denominated a "game" fish, it is certainly a "sporting" fish; and on Windermere it probably provides sport for a greater number of anglers than all other kinds of fish (save perch) together. Pike in Windermere are exceedingly abundant—far too much so, in fact, whether one looks at it from the standpoint of the pike fisher or the trout angler. This over-abundance, together with the low temperature of the water, has probably something to do with their small size; for the Windermere pike compare unfavourably in size (although not in quality) with those of many southern waters, with such conditions, for instance, as are found in the Norfolk Broads district. Although pike up to 22 lbs. have been taken by trolling (a pike of 29¼ lbs. has been taken in a net), it must be confessed that the great majority of fish taken by pike fishers would hardly be considered "takeable" fish in southern waters. There are, however, no handsomer fish than those of Windermere, and one enthusiast compares them to the Muskalonge of the Canadian lakes. They are also strong fish and good fighters. Windermere being within what is primarily a salmon and trout fishery district, the pike fisher has this considerable advantage—that he can follow his sport the year through. In other words, *Esox lucius* is accounted vermin, and has no protection whatever, not even in the spawning season. It is then, in fact, that the war of extermination is most strongly waged, and as many as 5,000 lbs. of pike are destroyed in a season.

Trolling from a boat with two rods is the method most commonly adopted on Windermere in pike-

fishing, natural and artificial baits being used. There is now a large selection of the latter, but it will be found that the natural bait kills the biggest fish. Specially large minnows are used, but more commonly small perch, having first had the back fin cut off. Small trout are held in great repute for pike, but, although I have frequently tried them, never with anything like pronounced success.

The live snap tackle is also used, with a perch or small trout for bait, and paternostering is practised to a much smaller degree. Trimmers are also an institution, although considered nearly akin to poaching. Schoolboys (as well as boys of a larger growth) get a good deal of pleasurable excitement out of trimmering, and in Windermere it certainly does no harm. Trimmers are mainly fished in the weedy bays, and an individual often has as many as twenty fishing at once. A small perch is the almost invariable bait.

If an angler wishes for a good day's sport, and cares nothing about having a big fish or a heavy total weight, the following plan is recommended :—

> On any calm day, preferably in July, carefully select a number of the largest minnows you can get, and place them in a minnow-can. The minnows should be as carefully chosen as though for night-trouting. A moderately stiff light rod of about fourteen feet is best, with reel and dressed line. Your tackle is to be three feet of sound, round gut, not too thick, with a small plummet at the end. Just above the lead, a small stout hook, whipped on some six inches of gut, is to be affixed—in fact a stout perch paternoster with only one hook. Slip this hook through both lips of a minnow and

try round the weeds, and especially in the open spaces between the weeds. The moment you feel a bite, strike firmly but gently, and keep your fish as much as possible out of the weeds. Lots of jack of from 1 lb. to 2 lbs. may be taken in this way, and sometimes a really good fish is got. Of course now and then one of them manages to nip off the hook with its sharp teeth, but it is an easy matter to slip on another, especially if fixed by a loop as described for perch-fishing. But the sport is really good ; for a pike finely hooked on gut tackle is as much unlike the same fish taken by trolling with several large hooks in its mouth as can well be imagined. Many a trout taken with the minnow does not fight as well for a time as does a pike, but the pike gives in sooner than the trout. Still, fishing for jack with what is practically perch tackle is by no means a bad way of passing a hot July day, when most other kinds of angling are out of the question ; and there is the satisfaction that you are thinning the number of pike.

The shallow water from Belle Isle to Rawlinson's Nab is good pike ground, and better still is the Parsonage Bay ; while, further down the lake, Grass Holme is a favourite spot. At the first-named place I have more than once had a pike on each rod at the same time, and upon one occasion almost succeeded in landing three fish with two baits—a bigger fish having seized a smaller one as it was being pulled in. At the head of the lake there is good trolling along the western shore from Waterhead to Wadbarrow. Castle Bay and Green Tuft are also good localities. It should be remembered that pike are usually found in the shallower weedy bays, and not far from the shore. In this they are not unlike trout, only whilst the former prefer weeds, trout love to haunt the pebbly shallows.

Perch fishing on Windermere gives great pleasure to a host of visitors, and perch fishing has been described as the chief industry of Bowness. These bold-biting fish exist in the lake in hundreds of thousands, and are mainly captured by float-fishing from a boat. Minnows and small red worms are used as bait, and there is scarcely any limit to the number of fish that may be caught. The perch taken in this way are exceedingly small, and those who are ambitious to catch larger fish use a paternoster, fishing in deeper water. It need hardly be remarked that a paternoster is a small leaden plummet with a yard of gut attached, and on which two hooks are used. The perch taken in this way are larger only by comparison; for although one of 2 lbs. 3 oz. has been taken, the over-abundance of perch in the lake keeps down the average size to an extreme degree.

Whatever mode of perch fishing is adopted, care should be taken that the bait is actually on the bottom, as a suspended worm or minnow is always an object of suspicion. The fish may be seen swimming round it, but that is as far as they will go.

An old method of perch fishing is still practised by local anglers with a "beam"—a piece of stout wire about a foot in length and weighted in the middle. To each end is fastened a length of gut bearing a hook. A line is fastened to the weight, and the contrivance is worked like an ordinary hand-line.

I have more than once expressed the opinion that the millions of perch that exist in Windermere, by overtaxing the food supply, may go far to ruin the lake for angling.

Clarke (1787) in his *Survey of the Lakes*, writes as follows of Windermere :—

"The fishing in this lake is a freehold belonging to several men, which together pay a quit rent of six pounds to the lord of the manor, but it is not very valuable ; for the pike, the most voracious of all freshwater fish, is in plenty here the whole year, and destroys the other fish. Here also are trouts, eels, perch, and char ; the trouts are scarce and bad, though some are pretty large ; they are, however, ill-fed, owing, as I suppose, to not venturing to seek food for fear of their natural enemy, the pike. On the 28th of October, 1784, I was upon the shore about Cunza, when I observed a boat coming towards me, and near the same time perceived it stop and the men in it take something out of the water ; on their coming ashore, they told me that in coming they saw two large trouts floating upon the surface of the lake with their bellies uppermost, close alongside each other, and seemingly dead. On laying hold of one of them they seemed to be entangled, but in lifting it out of the water the other made its escape ; they then discovered that they had seized between them a small trout, and each seemed determined to lose its life rather than its prey ; they had struggled till life was almost spent, and both might have been easily taken if the fishermen had believed either to be alive ; the lesser, which they took, weighed about a pound and a half, but was very ill-fed ; the other they supposed to weigh above two pounds, their being obliged to prey upon their own species is a proof of the great scarcity of their proper food.

"The char in this lake are of excellent quality for potting, many pots of which are sent to different parts of the Kingdom every year ; I do not, however, think them superior in quality to the Ulswater char, and are distinguishable from them more by their colour than taste, so much alike, indeed, are they that many pots of Ulswater trout are sold for Winandermere char. They are taken in this lake in perfection only from the beginning of September to the middle of February, during which time they assemble themselves in what is here called Schools, like herring ; sometimes near the shore, sometimes near the middle of the lake ; when thus assembled (if observed by the fishermen who watch at these seasons), they surround them with nets and take them

with their boats without dragging them on shore. There are two kinds of char here as well as in Ulswater, viz., the silver and the golden char, which some have distinguished by the male and female. That, however, I deny, from my own observations, too tedious to mention here. They are two different species, commonly here known by the white-bellyd and the red-bellyd char, the white are much more valuable ; in this lake both kinds are larger than in Ulswater ; the golden or red-bellyd char in Ulswater are never used for potting, but are sold at the rate of two pence or three pence a pound with the coarser trouts, which here are distinguished in value, not by their size, but by their tongue.

"In the latter end of summer, amazing quantities of winged pissmires (or ants) alight upon the surface of this lake, upon which animal the char feed with wonderful greediness, and to this food some attribute the colour of their flesh in the autumnal season. Pike is taken with nets, and sometimes with the bait, but not very often, and affords little entertainment to the angler ; perch in like manner, and eels, but more frequently with the bait.

"The fishery belongs to the lord of the manor, viz., the King, and is divided into what is called (here) three cables ; the rector having the tenth for tythe ; but this is settled by a prescription of so much a boat.

"The ferry, or navigation cross, then, is freehold, paying a merk lord's rent, and is the property of Mr. Braithwaite, of Harrowslack."

CHAPTER VII

ULLSWATER

ULLSWATER is the second largest of the English lakes, and it is done in the grandest setting. It is 7½ miles in length, ¾ mile in breadth, and 476 feet above sea level. Its maximum depth is 205 feet, mean depth 83 feet, and it covers 2,201 acres.

Unlike the majority of the lakes, Ullswater consists of three well-defined reaches, and considerable elevation has to be attained before the whole of the lake can be seen at one time. The northern reach is the shortest; it stretches from Patterdale to House Holme, and is about a mile in length, its course being due north. The second (3 miles) runs north-east to Skelly Nab, where the lake is narrowest. The southern reach (3 miles) runs from Howtown Wyke to Pooley Bridge.

The principal feeders of Ullswater are the Goldrill, Grisedale, Glenridding, and Fusedale becks. The Goldrill comes down Patterdale, and receives the waters of Angle Tarn, Brothers Water, and Hayeswater.[1] Glencoin beck enters the lake at the junction of the upper and middle reaches, and there are other more or less important feeders. The

[1] The Grisedale beck empties the tarn of that name, and Glenridding beck Red and Keppel Cove tarns,—two sheets of water in the upper valleys near Helvellyn.

effluent of Ullswater is the Eamont, itself a tributary of the Eden.

The lake contains several islets—Wall Holme, House Holme, Ling Holme and Cherry Holme. These are small, and neither add to the picturesqueness of the lake nor are they of importance from the angler's standpoint—with the reservation that the shallow shores of islands are usually good trout ground.

Although Ullswater is well stocked with fish, it can hardly be compared with Windermere and other of the lakes, either as to its fish-producing capacity or for the sport it affords.

It contains trout, char, pike, perch, gwyniad and eels. Salmon run through the lake in autumn, and occasionally a chub is caught at the Pooley end of the lake, that has come up from the river.

Speaking generally, the fish are comparatively small, and all the evidence points to the fact that, both from a fishing-producing and sport-yielding standpoint, the lake is inferior to what it was in times past. This fact may be capable of explanation, and one or two factors will be mentioned in this connection later.

There are several rights of fishery[1] which are

[1] "There are only two kinds of nets used in Ullswater for the taking of fish, the drawing net and the driving net. The drawing net is generally about thirty yards long, and four deep; the upper edge floated with cork, and the lower edge weighted with lead. The method of using it is thus:—They put the net into the water and let the ropes (fastened to each end of it) run to a length proportioned to the depth of the water; they then by the help of these ropes drag the net to the shore, and take out the fish. It is evident, however, that this net cannot be used where the shore is stony; to remedy this, therefore, the driving net has been contrived, and has

more or less exercised. Probably the fish and fishing in the lake would be improved if the netting were done more systematically.

A century ago char were common in Ullswater. At some time subsequent to this they steadily declined; until about twenty years ago they became practically extinct. There is little doubt but that this result was principally brought about by pollution from the Greenside lead mines. Confirmation in this is found in the fact that the char used to spawn only in Glenridding beck (the beck in which the washing of the lead ore is done), and the ova being killed, the practical extermination of the char was brought about. It is well known that char, unlike trout, are very local in their haunts and habits, and, if one spawning ground for any reason becomes unsuitable, they do not

only lately been introduced here. The driving net is made of fine, small, bleached thread, and has only one rope to it, to the end whereof is fixed a float that enables the fishers to find the net. This net they place parallel to the shore, at the depth of two fathoms or less, and usually have several of them in the water at once. When they take up one of them, they first row the boat between the net and the shore, disturbing the water as much as they can; this affrights the fish (who are generally near the shore), and makes them run for the deeps, when they are intercepted by the small and almost invisible net, placed to receive them; the fishers then haul the net into their boat, and take out the fish (which are generally caught either by their gills or middle), without being obliged to go ashore; it is, however, plain that by these nets neither very large nor very small fish can be taken. Before the invention of driving nets the greatest part of the lake was protected by its stony bottom, so that the angler might, in five or six hours, catch from fifteen to twenty pounds of fish; since this invention has taken place, the fish are so far decreased in number that he will seldom take half that quantity."—Clarke's *Survey of the Lakes*, 1787.

resort to another. The lead-mines have been in active operation for nearly a century, and this period has sufficed to exterminate the species. Owing to its great depth, Ullswater is peculiarly favourable for char, and this makes the extermination of the fish all the more regrettable. In 1895, however, Major Parkin (who has fishery rights on the lake), in conjunction with Mr. Bush, turned 10,000 char fry into the lake, and it is hoped that in time they may effectually re-stock Ullswater with this handsome fish.[1] In times past most of the char in Ullswater were caught by putting a net across the lake at a place called the Narrows, from Skelly Nab to Hallin End. Defoe and Dr. Heysham also mention the Ullswater char.

When char were common in the lake, small takes were occasionally had with the fly, but they were more commonly taken by trolling. The late G. F. Braithwaite frequently fished Ullswater, and had many takes of both trout and char, the heaviest char he ever took being just under 1 lb. in weight.

The trout in Ullswater do not run to a large size—they average about three or four to the pound. Fish of one pound are not at all uncommon, and trout of 2 lbs. and 3 lbs. have been taken with the

[1] Major Parkin informs me (May, 1898) that as yet nothing has been seen of these fish. This is regrettable, and in the writer's opinion it is a pity that yearling char were not substituted for fry, as it is always questionable whether it is wise to turn fry into any large sheet of water which already contains predatory fish. The mortality among fry is invariably great (often as high as 90 per cent.), while yearlings, if turned down at suitable places, are well able to take care of themselves.

fly; but the fish which establishes the record was one of 8 lbs., caught in the middle of the lake opposite Ravencragg. By methods other than rod and line, large fish are, of course, occasionally taken; and this season Major Parkin's men had two trout of 3½ lbs. and 5 lbs. 2 oz. respectively.

Trolling is not nearly as much practised as formerly, although the larger fish are taken in this way, the natural minnow proving the best bait.

According to the portion of Ullswater in which trout are taken, they are pink-fleshed or white. The larger fish taken in the nets are almost invariably pink, although the white-fleshed ones, after the top feed has come on, are sweet and good.

Probably the best ground in Ullswater is that from Sandwike to Rainsbeck (on the Cumberland side); but in a strong wind, probably the best fishing in the whole of the lake is to be had in Howtown Bay. This is the fact to-day, and it is interesting to note that a century ago the same portions of the lake were considered the best for anglers.

Good fish are invariably to be found at the mouth of Fusedale beck, and this applies to the other becks which are free from pollution.

The most killing flies for Ullswater are as follows:—Early in the season, March brown, Broughton Point, Steel's fancy (a local fly), dotterel, and dark snipe; while later, the cow-dung fly may be substituted for the March brown. These should be dressed on a No. 3 hook, or No. 4 if fished in a wind. The bracken-clock proves killing when it comes on, and the "sleugh is a most deadly bait in the fell becks. April, May, and June are the best fishing months. In May,

mainly on favourable days, the following individual catches have been made by a persevering angler :— 8½ lbs., 11 lbs., 9¾ lbs., 10 lbs., 11¼ lbs.

It is interesting to note that the Ullswater trout will now rise more readily to a more brightly-, even gaudily-, coloured fly than they would at one time. Whether they get satiated with bottom food and require tempting, or they have not had fancy flies sufficiently offered them before, is a question—but the fact remains. I have noticed the same fact in connection with the trout in Haweswater, particularly upon one occasion. On my cast was a brilliantly-coloured fly of nondescript pattern, which I hesitated at putting on, and yet almost every fish was killed on this fly, and a small char in addition. The green and grey drakes are fished in their season, and the butcher proves very killing in June.

Of late years the trout in Ullswater have decreased both in size and quantity, and various opinions have been adduced to account for this; and there can be no question that fifty years ago the lake was much more prolific than it is to day. One is that the fish in the lower portion of the lake used to descend the Eamont in order to run up the Lowther. About 1864, however, a weir was placed across the Eamont above its junction with the Lowther, in connection with the water-supply of Penrith. The fish pass in this weir proved accessible to salmon, but not to trout, and, once over the obstacle, they were unable to return. This view is sometimes contested, but that depletion of the trout at the Pooley end of the lake followed upon the construction of this weir there can be no question.

Another reason assigned for the deterioration is on account of the enormous increase of perch in the lake. Netting perch for sale was done away with about twenty-five years ago, and the great increase is consequent upon this. In these circumstances there is always the risk of the fish in the lake overtaxing the food-supply, and as fish increase in numbers they degenerate in size. This fact is very forcibly demonstrated in Coniston. Both trout and perch swarm in the lake, but are very small in size. The only remedy is systematic netting; and in doing this there need not be the slightest fear that the fishery will be injured. The opposite effect will be the result; and this may be looked for about the end of the second season after the netting is first commenced.

For many years perch have been increasing in Ullswater, until now they are in great abundance, but small in size. They are not netted, and afford neither food nor sport. Netting them, on account of their small size, would not be remunerative; but, unless the various fisheries in the lake are to be permanently injured, serious netting will have to be done sooner or later. At one time, perch of 1 lb. in weight were not uncommon, and 1½ lb. fish, and upwards, have been taken; but such perch rarely, if ever, occur now-a-days. What are captured are mainly fingerlings.

Richardson was an accurate observer, and he refers to perch of 5 lbs. in weight, as witness the following:—

"Bass is the usual name for them [perch] here [Ullswater]; in an inquisition, taken in the time of Queen Elizabeth, they are called Basse, Barce, and Barcelles. They never go out of the lake; they deposit their spawn among weeds near the

shore, where the water is deep, in the month of May. It is frequently drawn up by nets along with the weeds, by which means myriads are destroyed. Some of these fishes will weigh 5 lbs."

The gwyniad (locally skelly) occurs in Ullswater, but is much less numerous than formerly. Its existence in this lake is mentioned as far back as 1686, and under the name of "skelly" Clarke mentions it in his *Survey*. The skellies spawn in the winter among the mud at the bottom of the lake, he states, and proceeds: "The *Skelly* is remarkable for this, no bait has ever been found which they will take." As a comment on this, the writer once took a "skelly" on a fly whilst fishing for trout in Haweswater; but this, of course, was exceptional, and Clarke's statement, although a century old, is probably substantially true.

He proceeds:—

"They seem to be a species of *freshwater herrings*; as they resemble the sea herring both in size and shape. Like the herring, they assemble in vast numbers during the harvest months, rippling the surface of the water, and are called "Schools," or (in the country dialect) Skeguls or Skellies. When they lie in water not too deep, vast numbers are taken at one draught, sometimes ten or twelve thousands. Sometimes the schools lie so near together, and the fishermen take such numbers, that carts are employed to carry them to the adjacent market towns. They weigh about five ounces each, and 800 are commonly reckoned as many as one horse can draw. They are at these times extremely cheap, generally a penny a pound, but I have seen two Winchester pecks of them sold for a shilling."

As already stated the gwyniad, or freshwater herring, is a fast vanishing species in Ullswater, although why this is so is difficult to determine. The causes which have almost exterminated the char, and reduced the number of trout, may be at

work in this case also ; but as the three species of fish live and spawn under greatly different conditions this is hardly likely.

The late G. F. Braithwaite notices that the gwyniad was fast dying out in Ullswater, at the same time recording the fact that the late Richard Mounsey (well known on Ullswater) once saw two cartloads taken out at a draught. I have recorded a somewhat parallel take in Haweswater where, however, the number of skellies seems to be as great as it has ever been.

Whether the great lake trout (*Salmo ferox*) is a true species or merely a variety of the common trout (*Salmo fario*) is a question that is discussed elsewhere in this volume; but that it has always been looked upon as a species in the districts where it occurs is certain ; and it is inseparably associated with Ullswater, being frequently called the Ullswater trout, as in the following paragraph : —"This species is, I believe, found nowhere in Cumberland, except in the lake from whence it takes its name. Some specimens of this trout are said to weigh between 50 and 60 lbs." And again : "It is here [*i.e.* Ullswater] called Grey trout, and is sometimes, though but rarely, taken in season ; one in good condition was killed 36 lbs. weight ; and Mr. Clarke says they sometimes weigh upwards of 50 lbs. We conjecture that this is the fish called in the lakes of Derwent, Bassenthwaite, &c., *Hard Head*."[1] The late Richard Mounsey,

[1] "SIR,— . . . . Whilst I am now writing, a Westmorland acquaintance of mine coming to see me, in Discourse did accidentally mind me of the Surprize I was in, some years since, at Lowther Hall in Cumberland, the house of Sir John Lowther, seeing at Sir John's table a freshwater trout,

of Howtown remembered parties of men coming to Patterdale in the autumn for the express purpose of spearing this fish, one fish speared in Goldrill Beck being 18 lbs. weight. It is now many years since I have seen a *ferox* from Ullswater (I have taken the fish in Windermere), and it is probable that the species has become extinct within the past few years.

Clarke calls this fish the Grey-trout, and the following circumstantial account of it will prove interesting.

"A fish peculiar to this lake and Buttermere (where there are very few) is called grey trout. These grey trouts in form resemble the other trouts, but are much larger, weighing from 30 to 40 pounds; one was killed a few years ago which weighed 56, but the ordinary weight is from 7 to 20 pounds each. They are chiefly found in the deep water below House Holm island; they are, however, sometimes taken in all parts of the lake, though but seldom, except in October, which is their spawning time. During that month the King of Patterdale usually sets a net across the foot of Goldrill beck, where most of them go up to spawn; a few, indeed, attempt getting up at Glenridding beck, but not one has been known to enter any other of the streams. Some of the trouts, however, escape the nets, but are generally taken by the neighbouring farmers, who strike them at night time with spears by the light of a torch.

"These unlawful practices the gentlemen of the neighbourhood have not been able to prevent. It is indeed impossible they should, for the farmers of the fisheries connived at them, because the grey trout prey upon the small trouts and char, upon which their profits depend, and so voracious are they

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which was 38 inches in length and 27 in girth, taken in Hull'swater, a large lake in Westmorland, in which, I was assured by Sir John and other persons of unquestionable credit, trouts of that size (nay, larger), are frequently taken." —Captain Hatton to John Ray, October 25, 1692.

that I have seen two trouts, near a pound weight each, taken out of the belly of the large ones. They are taken with nets, but will sometimes rise at the fly; their strength, however, makes them very difficult to take.

"One indeed I killed by accident, for it had taken the fly as my rod was lying over the edge of the boat; it dragged the rod into the water, and then struggled with it till weary. The fish weighed upwards of 7 pounds, and was the only one I ever caught with a line.

"They are a very fine fish when caught in the proper season, and even those killed in the streams are by some much relished when pickled or dried."

CHAPTER VIII

CONISTON LAKE

CONISTON (or more properly Thurston water) is the third largest lake of the district, being six miles in length, and about three-quarters of a mile in breadth. Its area is 1,210 acres, and its height above sea level 146 feet. Its principal feeders are Yewdale Beck, draining Yewdale and Tilberthwaite, and Church Beck. Its effluent is the river Crake.

Coniston lies parallel to and above five miles west of Windermere. Its setting is of a soft and more sylvan character than that of most of the lakes, except on its northern extremity. Here the mountains are finely massed, the most striking being Coniston Old Man (Maën = steep rock) 2,633 feet; and Wetherlam.

However keen the angler may be on wetting his line in the lake, he should not omit to climb to the summit of the Old Man. If he is fortunate in getting favourable atmospheric conditions the prospect from the cairn on the summit is one that will astonish and delight him. On the shoulder of the mountain is Levers Water, and as he proceeds up the path he will come upon one of those solitary mountain tarns—Low Water—which are so charac-

teristic of, and lend such a charm to, the district. But neither of these will have any special interest for him, for, with the exception of a few small trout and perch in Low Water, they do not contain fish. Having reached the summit a glorious prospect is opened to the view. The head of Windermere is seen to the east, and the whole reach of beautiful Coniston stretches before him—a silvery mirror done in a setting of green and gold. To the east is Esthwaite Water ; and, in different directions, are not less than nine sheets of water. To the south are the golden estuaries of the Kent, Leven and Duddon—when the writer last saw them, wrapped in a purple haze of evening light. Lying off the long line of coast is the Isle of Man ; and beyond, the north coast of Wales. Snowdon may be seen on a clear day. To the north are Scawfell, Bowfell, and Blackcombe ; and, nearer at hand, a trout and char containing tarn, Gait's Water. (See "Mountain Tarns.")

To descend to the lake. Coniston has two islands—Knott Island and Peel Island—but they do not add much to the beauty of the lake. Knott Island (on the east shore) has a picturesque group of Scotch firs, but it loses much through being near the mainland ; in fact, during times of drought, it ceases to be an island. It behoves the angler when flogging the strait to be careful, as there are a number of jagged rocks near the surface. Peel Island is further south, but is little more than a picturesquely situated mass of rock covered with trees and vegetation.

To the angler the shores of an island are always worth trying, as, having as a rule shallow water

Photo by A. Pettitt.

CONISTON WATER.

[*To face p.* 97.

conditions and the vegetation providing food, they are almost invariably good trout ground. The stranger angler on Windermere, for instance, could never be far wrong if he devoted himself exclusively to the rocky ledges of the islands, and here the writer has taken the largest and best fish he has ever caught in the district.

Coniston Water ought to be (and might be) an angler's paradise. Its greatest enthusiast, however, could hardly describe it as such. In the whole of the district there is no single lake which is more peculiarly adapted to yield such a number of game fish, and sport, as Coniston. It is surrounded by food-abounding shores (an important consideration) and it swarms with fish. For the most part, however, these are small in size.

The species it contains are trout, char, pike, perch, eels and minnows. Salmon run through the lake to the streams above.

There were at one time extensive pollutions from the copper mines, but these have not now been working for some time. The lake, too, is legitimately fished, and it is therefore difficult to account for the comparative poorness of the results.

That the configuration of Coniston is favourable to all the forms of fish life found in it there can be no question. It has extensive areas of shallow, pebbly shores, suitable for trout; deep water conditions essential to char; and the pike and perch are equally well provided with food and suitable surroundings. I have closely examined and fished Coniston in varying conditions, and have come to the conclusion that what the lake lacks is (for a time at least) systematic netting

conducted under some authoritative governing body. *It contains far too many fish.*

What is wanted is that numbers of these should be taken out, and the results carefully watched—not that money should be thrown away in pouring additional fish into the lake, which is being done.

When a fish-producing lake is not netted, the fishery is certain to degenerate, and that is what Coniston is suffering from. The pike and perch (particularly the latter) ought to be rigorously netted ; and an interchange of trout might be made with some neighbouring water. The netting applies to the minnows in an even greater degree, only to substantially reduce their number would be almost impracticable. I have it on the authority of one who has spent thirty years on the lake, that in winter fully an acre of water may be seen packed with minnows, and that over this area it would be impossible to let a pebble fall without coming in contact with a fish. I have reason to believe that this statement is accurate, and, if so, it is no wonder that Coniston fails as an angling lake. The systematic netting of hitherto neglected sheets of water has almost invariably proved successful in providing sport and increasing the size of fish. In confirmation of this, let me give an illustration from within the Lake District itself. Take the case of the irregular chain of lakes, Buttermere, Crummock and Loweswater.

Buttermere is preserved but not netted, and its trout run three to the pound.

Crummock — divided from Buttermere by a stretch of meadow only—is netted (there are parts where netting is impracticable) and the trout average half a pound.

Loweswater—three-quarters of a mile distant—is regularly and systematically netted, and its trout average a pound apiece. And yet all these fish exist under practically identical conditions.

As to whether Coniston has ever been a really productive lake, except in the numerical sense, is a question. There are three or four exclusive rights of fishery, but the nets have never been used other than intermittently. When the fishery rights were let, they were given up because the professional fishermen could not make them pay. This non-success was attributed to unfair methods of fishing, and to deterioration owing to pollution from the mines.

At one period the whole of the lake fisheries were leased by Mr. Marshall (who had himself private rights), but the fishing was done by agents, and results did not justify its continuance. Trout and char were chiefly taken, the trout proving most remunerative. At this time, for the reasons stated, the char were comparatively few in numbers; but, as a result of the netting, they increased in size. Concurrently with this both trout and char fry were being turned into the lake, about 1,000,000 in all.

During the period referred to (although the netting was on a very limited scale) it is interesting to note that there was an increase in size in the fish.

Trolling went on concurrently, and for twelve days in one season an angler averaged six fish a day. The first season after the nets were taken off, one angler had 509 trout and char; in the succeeding season 393; and in subsequent years 197, 168, 146, 21 and 20. As the fishing degenerated, less and less attention was paid to the lake.

After the netting period it was not uncommon for a single fisherman to use a couple of plumb lines, two laths, and two rods—nearly a score of baits in all. At this period there was no close-time.

To-day, all the kinds of fish already mentioned are abundant in the lake.

Eels abound and are most destructive. When the trout are spawning they are on the "redds" devouring the spawn. They also follow the char for a like purpose. At present eels are taken on night-lines only, although there are eel-coops at Nibthwaite, Backbarrow, and Penny Bridge. These are on the Crake, Coniston's effluent, and are fairly productive in the autumn.

Pike and perch run to a fairly large size, the former up to 16 lbs., and even larger fish have been taken. In Coniston neither are much fished for.

Char are plentiful but small. According to different extremes of the season they average four and five to the pound. They are bright, well-fed fish, and, for their size, give good sport. Coniston char are thick in the shoulders, thicker than the larger char from Windermere. During May, in a favourable season, an angler trolling had 23, 12, 17. and 26 char on four days, the best fishing being had before 11 a.m. The 78 fish averaged a little over five to the pound. Earlier in the season the plumb-line is used, but as more fish are got by the easier method of trolling, the plumb-line is not much in favour. A metal bait is used or a natural minnow. The best take of char with fly in Coniston that has come under my notice was twenty-three fish ; but this is exceptional.

Trout, however, afford much the best fishing,

There are numerous shallow, pebbly bays, and food is abundant. The east shore of the lake affords the best trout-ground, particularly at the north end. Good fish, too, are generally found on the west bank at the north end of the lake, just off the big bank of stones. The shallow estuaries of the feeders are less promising than they look, but this is probably owing to the shallowness through silting up.

April, May, and the early part of June are undoubtedly the best months; and personally the writer has found a cast made up as follows the most effective:—March brown, woodcock, and a nondescript chestnut-brown fly with tinsel body; later, March brown, green-drake, and Zulu.

Good fish may be taken with winged flies at the close of hot days if not dressed on too large hook, No. 3 for preference. A white and a brown bustard also prove useful. The Bracken-clock does better on the tributary streams than on the lake itself. Squally winds and choppy black water are common on Coniston, and these put the trout down at once.

Better trout are got by trolling (averaging over half a pound) than with the fly; but there is a good deal of luck in trolling, and once a fish is hooked it merely requires carefully hauling in, and netting, a thing at which a novice may become competent in a day. The fine art of the fly-fisher is lacking, and the enjoyment much less keen. To put it plainly, trolling is scarcely skilled sport.

Mr. Arthur Severn, of Brantwood, who has fished Coniston practically all his life, kindly sends me the following note on the fishing in that lake:—

"There are quantities of char in Coniston, but

the time varies for catching them. The plumb-line is not much used here, because it is considered more bother than it is worth. Trolling is done with about 40 yards of line and a char-bait, or natural minnow; and if the weather gets warm at the end of April the char come close to the surface, and can be caught till about the end of June. If, however, the weather is cold, they will not take properly till about the end of May. The largest take that I know of has been three dozen in a day. In September they will, as a rule, take again.

"The trout-fishing begins on April 1st, and is at its best in May. The local people troll, which is a poor way to catch trout. They get very few, but the largest are caught on the minnow; the fly will catch far more. Wading from the shore is a very successful method of fishing, but one wants to know the lake well. It is a good rule always to fish where the bottom is stony, and not to fish places full of weeds, mud or clay.

"A good wind is a necessity; not a wind which is squally, such as east or west, but sometimes even then they will rise well, but only on the windy side of the lake. A good south or south-west wind is best, and a clear day with the sun flashing in and out. A north wind is sometimes very good. Of course one is often deceived, and finds one cannot rise a fish, although the conditions seem favourable; but to persevere is best; they will be certain to rise all at once, and will stop rising just as suddenly. This, of course, is natural. Fishing in rain is often successful, but not if the lake is rising.

"The trout all through the season take the red-hackle, March brown, hare's ear and woodcock;

and owls are excellent flies. The March brown is not much good after May. You don't want to use flies too large, and the gut should be fine.

"Fishing from a boat is always pleasant. You must fish in water from 2 to about 4 feet. The whole secret of fishing from a boat is to have an experienced person at the oars. The boat should be kept parallel with the shore, and it should go very slowly, and with the wind. A light wind is useless. No matter how cleanly you throw, the fish will seldom take any notice of your flies. I have never fished a whole day for trout, but in a few hours have got about nine brace. The whole thing, however, depends on getting the right wind, enough of it, and a *steady wind.*

"I really do not think that netting the trout [with a view of improving the fishing] would do any good here. They are not too numerous, and there is plenty of food. I think that there is too much bottom food, consequently the trout don't really rise as freely as they should.

"The average size of the trout in the lake is three to the pound, but they are frequently caught from half-a-pound to three-quarters. The largest I have ever caught with the fly was $1\frac{3}{4}$ lbs., and occasionally I have caught them about a pound. I have seen one of 3 lbs., which was caught trolling. It is always good fly-fishing at the mouths of the streams which run into Coniston when there is plenty of water coming down. Fishing in the stream is disappointing, as the trout are very small; but if there is plenty of rain one may always expect to catch a few good fish (which have come up from the lake) when the stream is beginning to fine down. There are plenty of pike

and perch in Coniston, which are well worth fishing for; but I feel sure the trout fishing would be improved if these fish were exterminated."

To a little work by the late John Beever, of The Thwaite, Coniston, Mr. A. and Mr. A. R. Severn append the following "Notes" on artificial flies which they have found successful on and about Coniston Lake. As these gentlemen are practical anglers the list will be found a valuable one.

THE BLUE DUN

appears about the end of March, and is a good fly all through the season, especially on cold, dark days. It is equally useful for lake and stream fishing.

Body, dubbed with the fur of a water-rat, and ribbed with yellow silk; legs, dun hen's hackle; wings, from the feather of the starling's wing; tail, two strands of a grizzle cock's hackle. Hook, No. 10, or 7 or 8 for a lake.

THE ALDER.

Also very good both for lake and stream fishing. It comes in May, and will kill fish even when the May-fly is on the water.

Body, peacock's herl tied with dark brown silk; legs, coch-a-bonddu hackle; wings, the brown speckled feather of a Mallard's back. Hook, No. 8.

If this fly be dressed on a 6 or 7 hook, and winged with the red rump feather of a pheasant, it will be found an excellent lake fly.

THE PHEASANT AND GREEN.

Good throughout the season, and best on a dark day. The fish will often take it when they refuse others.

Hook, No. 7; silk, apple-green; wing, from a hen pheasant's tail; legs, black. This fly may be used successfully on any of the English lakes.

THE HARE'S EAR.

A capital fly for June and August.

Body, the fur of the hare's ear; wings, the feather from a starling's wing; tail, two fibres of the brown feather from a

starling's wing. Hook, about No. 10 for streams, but on a lake about No. 7 and 8.

This fly will often kill fish with a woodcock's or pheasant's wing.

THE SOLDIER PALMER.

This fly will take almost anywhere.

Body, red mohair ribbed with gold twist, and over all, a red cock's hackle.

HOFLAND'S FANCY.

This is a south country fly, which we have used with success after sunset in the Lake District, for both lake and stream fishing.

Body, a reddish-brown silk ; legs, red hackle ; wings, from a woodcock's tail ; two or three fibres of a red hackle.

THE RED PALMER

is a good fly either for lakes or streams throughout the season. Body, peacock's herl ; a red cock's hackle over all. Hook, about No. 8.

MR. PRITT'S FLIES.

There are also a number of North Country hackle flies invented by Mr. Pritt. They are used very successfully in the Lake District, in Yorkshire, and in a few other counties. Some of the principal are dark snipe and purple ; dark woodcock, partridge and orange ; night hawk ; brown owl, and dark starling. They can be got from Hutchinson, of Kendal, or at any good tackle shop.

Coniston is very much altered since the mine water came into it. Has known his brother get 50 dozen char in Coniston. His brother has got 250 dozen in the season. Attributes the present decrease to the mine water. When his brother was fishing, the mines were working more actively than they are now. Does not know whether the char have increased since the close time was instituted.—Evidence by James Fisher, before Buckland and Walpole's Lake District Fisheries Commission, February, 1878.

CHAPTER IX

DERWENTWATER

DERWENTWATER (Keswick Water, Daaran Water) is at once the most beautiful and most treacherous of all the lakes.[1] Its beauty is mainly due to its setting, and the five islands which stud its surface; its treachery to the contrary winds which sweep down the many valleys which more or less converge upon it.

Derwentwater is nearly three miles in length, and its extreme breadth is 1·21 miles—greater than that of any other lake. Its altitude is 238 feet, it is the shallowest of the lakes, its mean depth being 18 feet only. Around none of the lakes of the district are the mountains so finely grouped as around Derwentwater—on every side they encircle the lake. Of these the mighty mass

[1] Since this was written a terrible accident has occurred upon Derwentwater. By this the lives of five young women belonging to a "Home Reading Union" were lost. This accident is all the more regrettable, as it might have been prevented. The boat, in which were eight persons, was swamped owing to being overladen and caught in rough water. It is strange that, with the most treacherous sheets of water in the country, the supervision of boats in the Lake District is of so lax a description.

of Skiddaw (3,059 feet) is the most impressive; whilst Scafell, Hindscarth, Robinson, High Stile, and Red Pike come into view. In the nearer foregrounds are Walla Crag, Falcon Crag, Gowder Crag, and Castle Crag, whilst in the distance rises Glaramara. On the west are Causey Pike, Cat Bells, and the heights above the Newlands valley.

Of the islands Derwent Island has the largest area, about 6 acres. This is the only one inhabited; upon it is the residence of Mr. Marshall. All the islands are beautifully wooded. St. Herbert's Island has its name from a tradition that St. Herbert resided upon it. Although St. Herbert is said to have died A.D. 687, ruined remains of what are said to be the oratory and cell of the hermitage are still in evidence. About Lord's Island a good deal of half-historical, half-legendary lore still centres. This was at one time the island home of the Earls of Derwentwater. A local legend has it that the greater part of the Derwentwater plate is still at the bottom of the lake, so that if any angler comes across it he will know to whom it belongs. Lord's Island is said to have been originally a peninsula, but was severed from the mainland for purposes of protection, the waters of the lake making a natural fosse. Traces of massive walls and pleasure gardens are still to be found upon the island. Rampsholme is a small island covered with firs and coppice. Otter Isle is smaller still; while Tripet Holme and the two Lingholmes are little more than rocky shoals that show above the surface. The islands of the lake are mentioned because the shores of islands are usually good

trout-ground, and those of Derwentwater are no exception to the rule.

"The floating island was visible during our stay, exactly in the position which Mr. Symons assigns to it in his book, *The Floating Island in Derwentwater*. Only a small area of the weed-covered carpet of the lake had risen to the surface like a large blister, and the surface was not solid enough to land on. The water between the floating island and the shore to east and south was in no place more than 3 feet deep, and usually considerably less. Probing the margin of the island, we found that a boat-hook could easily be driven in 5 feet 6 inches without meeting a solid foundation. On its withdrawal it was followed by a rush of gas smelling slightly of sulphuretted hydrogen, but, as the wind was high and rain falling at the time, it was impossible to find whether it would burn. My observation of the island inclines me to believe in Mr. Symons' theory of its formation by the buoying effect of gas entangled in the vegetable felt. I would meet his difficulty as to why the peaty carpet should not be thick enough to form 'bobbing islands' in other parts of the lake, by the observation that in no other part is the floor of the lake so flat for a large area, and that, in the bay where the floating island lies, the current of the Derwent and the Watendlath Beck probably give rise to an eddy which promotes the accumulation of fine sediment, the aëration of the water, and the healthy growth of water-plants."[1]

Derwentwater has its origin in Sprinkling and Styehead Tarns.

[1] H. R. MILL, in *The Bathymetrical Survey of the English Lakes*.

The infant Derwent flows through Derwentwater, connects it with Bassenthwaite (through which it runs), debouches at Ouse Bridge, thence to Cockermouth, thence to Workington, where it empties into the sea. In the grounds of Barrow House is the Barrow Fall, 124 feet in height.

Viewed from the side of (say) Skiddaw it will be seen that Derwentwater and Bassenthwaite are really one lake, separated only by a low alluvial plain, formed by the Greta and Newlands Beck. This plain is so flat that when the rivers and lakes are in flood it is occasionally completely submerged, and a continuous sheet of water stretches for 10 miles.

In this connection it may be mentioned that Derwentwater is subject to greater fluctuations as to its volume of water than any other lake. Accurate data are available on this point, and these show that the lake attained its greatest recorded height on November 26, 1861. Upon this occasion its average depth of 18 feet was increased to 27 feet 5 inches.

Derwentwater contains Trout, Pike, Perch and Vendace.

Trout are fairly abundant and increasing, and although the average size is not great (two or three to the pound) 1 lb. fish are not uncommon, and individual fish from 1 lb. to 6 lbs. are taken every season.

April, May, and early June are the best fishing months, and the trout rise again in August and September.

Here, as elsewhere, the largest fish are taken by

trolling, the most successful baits being natural minnow and phantom. The writer has taken two fish on the former to one on the latter; but others have had a different experience. These baits should be on Nos. 4, 5, or 6 hooks. The best months for trolling are April, May and June. As the season advances, it will be found that trolling will give the best results the later in the day it is pursued, and some very large fish have been taken between midnight and dawn.

The most killing trout-flies are woodcock (brown floss, silk body); partridge (orange body); corncrake (body same colour, with a little gold twist); and the drake (fished wet). These should be dressed on Nos. 4, 5 and 6 hooks (Kendal size).

The best fish are killed during the time of the green and grey drakes, and with the former, in one day, an angler had six trout weighing 10 lbs.; the same gentleman having taken, with fly (corncrake), at the mouth of Brockley Beck, a $5\frac{1}{4}$ lbs. trout. Another angler in drake time has taken seven trout in a day, running from 1 lb. to 3 lbs. This gentleman (Mr. G. E. Lowthian) upon one occasion had three fish on at the same time (two trout and a perch) and, moreover, managed to kill them. The trout scaled $1\frac{1}{2}$ lbs. each. A $9\frac{1}{2}$ lbs. trout was caught with minnow in the river (not many yards from the lake), and taking this for a Derwentwater trout it is the largest fish recorded. I possess a photograph, however, of a larger fish, but this was caught in the effluent, the Derwent, near Portinscale, in 1890. Its dimensions are as follows: weight, 10 lbs. 2 ozs.; length, $28\frac{1}{4}$ inches; girth, 17 inches.

The Derwentwater trout are well-fed, they fight well, and are pink-fleshed.

A great many years ago the Derwentwater fishermen gave up the "lath" or "otter" by common agreement, substituting trolling as their method of fishing. By this latter method the more frank among them (of which was the famous William Bowe—Billy Boo he was generally called) admitted that they got as many, or more, fish, as by "lathing." Trolling in this instance really consisted in trailing the flies. Each man would have three or four rods mounted in the stern of his boat, and on each line were run three large flies. In this way, in a good breeze, numbers of fine fish were got.

Of late years salmon in considerable numbers have found their way into Derwentwater, and are occasionally taken by the fishermen when trolling for trout and pike.

Pike abound and run to a large size, fish of 29 lbs. and 34 lbs. having been obtained. They are mainly taken by trolling with spoon or phantom (No. 8), and by setting floats or trimmers, live perch being used as bait.

Occasionally, on Derwentwater, pike rise to the fly, and rare accidental captures are made in this way. Pike and perch fishing commences on June 15. Perch here are numerous, and, I think, larger than elsewhere in the district. I have seen, and taken, better samples of perch in Derwentwater than in any other lake; 1 lb. fish are common, and an individual perch of 3¼ lbs. has been taken. Live minnows and red worms are the best baits. Large numbers of perch can be taken without much skill by float-fishing; but if it is desired to take the

larger fish it is best to use the "paternoster" in deep water, or to fish with hand- or side-lines.

Many years ago char[1] were introduced into Derwentwater, but for obvious reasons the experiment has not proved successful. So far as I am aware no recent example of the char has been taken, either with the rod, by trolling, or in the nets. If the char had found the waters of the lake congenial, it is reasonable to suppose that from time to time individuals would have been taken by those who constantly fish the lake. Probably in this case the usual error was made—that of turning down char fry only, a fatal blunder in large sheets of water.

A good deal of confusion has arisen as to char being found in Derwentwater, some writers asserting its presence, others denying it. These are one-half truths. The fish is not indigenous, but has several times been introduced. The experiment, however, has never long succeeded, the fish being unable to establish themselves.

The vendace occurs in Derwentwater, unless indeed it has already become extinct. The fishermen aver that it still occurs, but of late years specimens have been of the rarest occurrence. There is a specimen preserved in the Keswick Museum; and some years ago William Bowe, a boatman, picked up a dead vendace on the margin of the lake. This fish weighed about a third of a pound, and is still preserved. An angler who has spent the greater part of his life at Keswick tells me that he has never known a

[1] Derwentwater is popularly reputed to be one of the deepest lakes, but the contrary is the fact. Consequently it is unsuitable to char—essentially a deep-water fish.

vendace taken with rod-and-line. The fact of the extreme scarcity of this fish is at variance with the statements contained in the appended note by Dr. Davy, although allowance must be made for the time which has elapsed since it was written.

"PISCATOR.—As to your second inquiry, the fish of Derwentwater—they are of several kinds—trout, pike, perch, eel, vendace, minnow, thornback. Is not this an ample list? I was about to add, salmon and sea-trout; but I remembered that these are now become so rare as not to deserve being mentioned, the capture of one or the other having become the merest accident. The same remark applies to the capture of the vendace; not because it is so rare, but because it is contrary to the habits of this fish to take the fly, or any of the baits commonly used here in angling. I have heard of one instance only of its having been taken with the artificial fly, and that by an old fisherman of long experience, and likewise of one only of its having been captured with the worm. The fish on which the angler must chiefly depend for sport is the trout, and next to the trout, the pike and perch. The trout is pretty abundant, especially since more care has been taken of the fishing, through the meritorious exertions of an angling association, and since the use of the base lath or otter has been prohibited.

"AMICUS.—I am surprised to hear you say that the vendace is found here, and moreover, that it is not rare. I had always supposed that it is confined to Lochmaben, in Dumfriesshire, and the adjoining lakes.

"PISCATOR.—That is still the general belief, indeed; it is only recently that it has been ascertained, in a satisfactory manner, to have a larger range of localities. In this lake, within the last eight years, a good many have been taken by the net, and many also in the same way in Bassenthwaite Lake, that which receives the Derwent, and is distant from this only about three or four miles. That it is not a scarce fish here may, I think, be inferred from the circumstances of two lately having been killed by a stroke of an oar; and that the fish is a true vendace I am satisfied, having compared a specimen from Lochmaben with one from Derwentwater, and also with one from Bassenthwaite Lake, and

found them similar. The two first mentioned I can show you at home ; I owe them to the kindness of friends ; the last you may see in the Museum of Keswick, which is worthy of a visit on other accounts."[1]

It is said that about sixty years since, a distinct kind of sea-trout—thought to have been a species—ran up the Derwent in large numbers in March, and many were killed with both fly and worm. The fish were "very blue on the back, and had numerous dark spots on the sides."[2] These blue-backs subsequently disappeared, and the opinion was expressed that they were destroyed by the coops, which were then in both night and day. It seems that no one thought it worth while to preserve one of these migratory strangers, and, from the meagre description given, it is difficult to surmise what they might be.

Eels are abundant in Derwentwater and its tributaries, and run up to 6 lbs. in weight. Eel-coops are on several of the rivers.

[1] *The Angler in the Lake District*, by Dr. Davy, 1857.

[2] Mr. J. S. Mawson, the Larches, Keswick, kindly writes me concerning these fish :—The salmon-trout, which came up the Derwent about fifty years ago, were usually about 2 lbs. in weight ; they were very blue on the back, and had large spots on the sides. They came up the river in March. When, a few years ago, I told the lessee of the Salmon Hall Fishery that these fish had disappeared from the river, he told me that the Peats, who rented the fishery for many years, had kept the "coops" in until the new salmon-trout were extinct. He added that the same fish were in a river at Kirkcudbright, and that he would get some ova and introduce them again. He was, however, soon after taken ill, and I am afraid that he never got it done.

CHAPTER X

Smaller Lakes.—I

BUTTERMERE, CRUMMOCK, LOWESWATER

Seeing that these three lakes form an irregular chain, it will be convenient to take them together, especially as they may be fished from a common centre. Buttermere (three hotels) is the best centre for this purpose.

The chief effluent of Buttermere is the infant Cocker. It flows through the lake, continues through a strip of meadow land, and connects Buttermere with Crummock. Flowing through the latter lake, it makes its exit at Scale Hill, and is then a respectable trout stream well stocked with fish. Continuing its course for seven miles, it enters the Derwent at Cockermouth.

This seven miles would provide the angler with a good day's fishing (there is, however, an Angling Association on the way), especially if the stream were swollen, when he would be certain to fill his pannier with good, if somewhat small, trout. The best fish, however, are caught with minnow at dusk.

BUTTERMERE

Buttermere lies in the depression between Robinson and Hindscarth—two mountains which rise abruptly from its brink on the east, and by Haystacks, High Crag, High Stile and Red Pike on the west.

It is $1\frac{1}{4}$ mile long, and about $\frac{1}{2}$ mile broad. Neither Buttermere nor Crummock, with which it is connected by a stretch of meadow, are at any great elevation; the former being 330 feet above sea level, the latter 320 feet.

The lake contains trout, char, pike and perch, and, on the whole, the angling may be considered good. The lake is preserved, but permission to fish may be obtained through the proprietor of the two inns—the "Buttermere" and the "Victoria." There is no boat for public hire, but the use of the hotel boat may be obtained.

The best fishing months are April, May and September;[1] and among the most killing flies are the following:—March brown, woodcock with orange body, and hare-lug; a fly like Greenwell's glory, an exaggerated blue dun, a black spider, red palmer, and coch-y-bundhu, a bloa wing and dark body, light woodcock wing, with a fuzzy yellow body, and an alder fly, that is, grouse hackle or wing, and peacock herl body. I quote from an angler who has frequently fished the lake.

Those who fish Buttermere should not omit to try the fly after dark, especially in hot weather. Two flies on the cast are enough, and these may

[1] A good deal of fishing is done here in July and August, but holiday anglers will not find the trout to rise and hold as in the earlier months mentioned.

the Buttermere trout are the best in England. [In its early days the Solway Fishery obtained both fish and ova from Buttermere, and trout of this variety now regularly appear on its price lists.] Although they are certainly superior to the fish of many of the Scottish lochs, they do not surpass the Windermere trout, nor are they superior to those of the neighbouring Crummock.

The Red Pike, or south-west side of the lake, is deep, but the opposite and shallower shore is the better trout ground.

Char[1] are rarely taken with the fly in Buttermere, nor, for the matter of that, in any of the lakes, and are hardly worth the angler's attention.

The pike here are numerous and well fed; the methods of fishing for them being the same as obtains in the other lakes and tarns.

The hotels are between Buttermere and Crummock (just where the road from Honister joins that from the vale of Newlands), and form a convenient centre for both lakes.

CRUMMOCK WATER

Crummock is situated among the boldest and most rugged surroundings, and its deep seclusion adds much to its charm. Looking up the lake

[1] "The fourth remarkable lake is Buttermere, wherein is bred a sort of fish called Charrs, much like the Ullswater Trout; the male is grey, the female yellow-bellied; the flesh upon them is red, and crisp to the taste. They are more luscious and delicious than the Trout. They are in this country baked in pots well seasoned with spices, and sent up to London as a great rarity. . . . These Charrs are a fish bred in this water, and are peculiar to it and Windermere-water."—*Essay towards a Natural History of Westmorland and Cumberland*, 1709.

from its lower extremity two promontories appear to divide it into separate reaches. A point a little above Mellbreak commands the whole of Buttermere and Crummock, and the mountains which more immediately shut in the latter are Grassmoor on the east and Mellbreak on the west. These, with the neighbouring mountains, contribute much to the bold and naked grandeur of the whole. About a mile from the lake on the Scale Hill side is Scale Force, the loftiest waterfall in the Lake District. The water takes a single leap of 120 feet, and lies in a hollow on the side of Red Pike.

Crummock is about 3 miles long by ¾ of a mile in breadth, and is the most important of the present series of lakes.

As in the case of Buttermere it contains trout, char, pike and perch; and, as salmon run through Crummock into Buttermere, they are occasionally taken. The quality of the trout in the former is probably superior (they are certainly larger, averaging half-a-pound) to those in the latter, but among anglers who have had experience of both lakes opinion is divided upon this point. Both, however, are pink fleshed, and game, fighting fish. Crummock is netted by the lord of the manor (there are, however, certain rocky portions which cannot be netted); Buttermere escapes. This is probably why the Crummock trout are the larger.

This is comparatively an early lake—the earliest of the series.

The flies are the same as for Buttermere. A gentleman who has fished the lake for fifty years upon one occasion handed me a cast of flies, and

upon this he took his stand. They were the March brown, Wickham fancy, and Zulu. Later in the season he used the black gnat; and, when they came on, the green and grey Drakes—otherwise he almost invariably fished the cast mentioned.

Good trout are taken by trolling, the best time for which is on a warm evening when the water is unruffled. Natural and artificial minnows make the best baits. The fish got by trolling are, of course, heavier than those taken with the fly; and those got from a boat are, in turn, larger than those caught from the side. By trolling, the fish run from ¾ lb. to 1½ lb. and up to 2½ lbs. and 3 lbs.

Occasionally a single char is taken when trolling with a small spoon.[1] Some actual fishings in Crummock are as follows: 12 fish; 15 fish; 16 fish (7 lbs.); 38 fish (12 lbs.)—taken partly from boat and partly from bank, reducing the weight; 40 fish (nearly 20 lbs.)—two rods, in May.[2]

[1] "An occasional char may be taken by trailing when rowing from one part of the lake to another. A friend of mine tells me he once caught one on his fly, which was trailing behind the boat as he changed his beat; but the best chance is with one of those spoons which revolve on a pin and have a bit of red yarn tied so as to hide the hook—not too large a size, and weighted so as to spin pretty deep with sixty yards of line out. Sometimes, I am told, if you are a lucky and persevering individual, you can by this means get four or five char in a day, averaging ½ lb. each; but you must not expect another such day for a considerable time, and unless you keep on persevering you may miss it altogether."

[2] "I find noted for two rods per day, baskets (some of which were taken from the shore) of 11 trout up to 19 trout; also 31 trout, weighing 10½ lbs.; 49 trout, 16½ lbs.; 11 trout in 2½ hours; 39 trout, 13 lbs.; 37 trout, about 12 lbs. So far this season 8 or 9 trout per boat has been the rule, but

A grilse of 5 lbs., and a salmon 11 lbs. have been killed on trout tackle on different occasions, but to get a freshly run salmon on Crummock is a rare event. Kelts are sometimes troublesome. Upon one occasion Mr. Marshall's men took a 16 lbs. salmon in the nets near the effluent of the lake. Salmon, of course, spawn in Crummock as well as in Buttermere and the head waters—and sea trout run in the autumn.

The eastern side of Crummock affords much the best fishing, a wooded promontory on the south-east shore being particularly good. This also applies to the long stretch of wooded shore near Scale Hill; and round the islands should be carefully fished. Of these Crummock has four, but their picturesqueness is lost owing to their being near the mainland. Another splendid bit of trout ground is the great sloping gravel bed at the foot of Mellbreak. In the past, more so than now, local anglers used to get a variety of trout up to 10 lbs. and 12 lbs. Whether these were merely big brown trout or *S. ferox* is a question. The natives call them expressively "hardheads." A 13 lbs. fish of this description was taken by a gentleman when fly-fishing—but it had swallowed a small trout which had taken his fly. These big fish were mainly taken in the autumn with worm, when the angler was fishing at a stream mouth in a spate; and many a man has suddenly been given to wonder what he had got hold of.

Crummock is a specially interesting lake in

one boat had 25 trout. The best—in fact, very nearly all—fishing is with the fly; a good breeze and a clear sky being stated as the requisite atmospherical conditions by the *habitués*."

many ways. Otters frequent it, as do cormorants throughout the year. One or more sentinel herons seem never absent, and as many as eleven have been counted at one time. Here their food seems to consist of small eels. On Hindscarth, Grasmoor, and Robinson, the mountains overlooking Crummock, the rare dotterel breeds.

Crummock may most conveniently be fished from the same centres as Buttermere, and from Scale Hill.

LOWESWATER.

Loweswater is two miles from Scale Hill and lies in the valley between Blake Fell and Low Fell. Its effluent flows into Crummock Lake. A road skirts the lake and the best view of it is had from Mellbreak. It is softer and more sylvan in character than either Buttermere or Crummock, and differs from the other lakes of the district in having the loftiest mountain passes at its foot.

From the head of Crummock, Loweswater is three-quarters of a mile distant only; and seeing that it contains the finest trout in the whole of the district, it will be a little exasperating to the angler to be told that the lake is private and the fishing strictly preserved.

Loweswater contains trout, pike and perch.

Char have been introduced from Crummock and elsewhere, but it is doubtful whether any char remain to-day. This is probably owing to the fact that the lake is comparatively shallow, containing as it does a good deal of sub-aqueous vegetation.

This, and the great abundance of food in the lake, probably accounts for the large size of the

trout. Another factor in this connection is that the lake is netted—which invariably tends to increase the size of the fish.

The pike and perch also run to a large size, and recently two individual pike have been taken weighing 20 lbs. and 22 lbs. respectively.

The magnificent trout of the lake average from 1 lb. to 2 lbs. and fish of 4 lbs., 5 lbs. and 6 lbs. are not at all uncommon. The few privileged anglers (mostly residents) who obtain permission to fish are limited strictly to six trout, but this number constitutes (or ought to constitute) a satisfying basket. It has been stated that an individual basket of twenty-three fish, weighing nearly 40 lbs., induced the owner of the lake to fix the limit. These were taken with the green drake.

The flies mentioned for Buttermere are those that kill here, but in May and June, whilst the green and grey drake are "on," nothing can compete with them. When the bracken-clock makes its appearance the trout gorge themselves on these, and fly-fishing is "off" so long as the clock lasts.

One virtue of Loweswater is that the fishing commences earlier and ends later than either in Crummock or Buttermere.

There is just one chance for the outside angler on Loweswater. If he cannot fish the lake from the private boat of Mr. Marshall (the lord of the manor) he may, under certain circumstances, get a small stretch of fishing round the sides. Several farms run down to the lake, and if lodgings be taken at one of these the farmer would doubtless give permission. This is done in practice when, as a rule, no fault is found.

Owing to its shallowness this is a good lake for night fishing from the sides with winged flies, and this method is most successful after a hot day. As twilight deepens into darkness it is well to put on fairly large bustards.

What a skilled angler might do on Loweswater trolling for trout from sunset to dark can only be surmised—but it is certain that the result would constitute a red-letter day in his existence. If any reader ever gets this opportunity let him use two rods, having a natural minnow on one, on the other an artificial—a pearl minnow for preference.

Cormorants fish this lake a great deal, particularly in autumn. One which was shot when it came up after a long dive disgorged a ¾lb. trout.

A friend sends me the following interesting note as to the means which have been taken to keep up the stock of trout in Loweswater, a private sheet of water, and one of the best stocked lakes in the district. He writes:—

"I may tell you my opinion on the results of a small hatchery which has been carried on for some years on the shores of Loweswater. The attendant is a gamekeeper of Mr. Marshall's, the owner of the property. I have had this hatchery under my eyes for three or four years, and have seen the results, which are, without doubt, very good. I do not know any place in England which is as full of trout as Loweswater; and Crummock, the adjoining lake, has a very fair stock. Both are fished hard with rod, and are netted for trout fairly regularly in parts, so that there is a constant and steady depletion of fish; and yet the means of artificial propagation keep up the stock to a very full head. The hatching apparatus is in a sort of hog-house shed, and consists of three troughs with glass-grills. The ova are obtained from trout on the estate, and the keeper conducts the whole of the hatching operations. For some years they tried keeping the fish until one- and two-years-old, but they

encountered such difficulties and lost such a large proportion of those fish hatched out, that they ultimately abandoned the principle altogether. For many years past they have simply turned down the young fish (as soon as the yoke sac had been absorbed) into the streams which run into the lakes named. Before this was done the artificial hatching operations, so far as could be seen, did no good ; but as soon as the alteration was made, and the young fish turned out at once, the fisheries began to improve and are now as I have stated."

Loweswater may be fished from Buttermere (3 miles) : from Scale Hill (1 mile) ; from Cockermouth (7 miles) ; or from the farms on its immediate shores.

BASSENTHWAITE LAKE.

Lying as it does rather out of the beaten track, Bassenthwaite Lake is less visited than other of the minor lakes. Surveying it from any of the surrounding heights, it looks as though at one time it might have been connected with Derwentwater. The two lakes are connected by an alluvial plain, through which, for a distance of three miles, runs the river Derwent. The Derwent has its origin in Watendlath and Sprinkling Tarns, runs through Derwentwater, connects the latter with Bassenthwaite, and forms the effluent of that lake.

Bassenthwaite is $3\frac{3}{4}$ miles in length, and varies in breadth from $\frac{1}{4}$ to $\frac{3}{4}$ of a mile, the broadest part of the lake being at the bay below Bassenthwaite Lake station. Curiously enough, Bassenthwaite is exactly the same size as Derwentwater (a little over 2 square miles). The drainage area ($91\frac{1}{2}$ square miles) is forty-four times the area of the lake, and is greater than that of any other lake.

Directly or indirectly, Bassenthwaite receives in addition to the Derwent the Greta, Naddle, and St. John's Becks, the Glenderaterra, Glenderamackin, Newlands Beck, Beck Wythop, Dubwath Beck, Dash Beck, Chapel Beck, and other smaller feeders. The west side of the lake is richly wooded ; while the east is deeply indented with three fine bays.

From the angler's standpoint, Bassenthwaite is of minor importance. It contains trout, pike, perch, vendace and eels ; and salmon run through it to spawn during October and November.

The trout are large, but, for some reason, very rarely rise well to the fly. In fact, the only success with the fly is had among the smaller fish (really the brook-trout), which are found where the feeders enter the lake. These run from ¼ to ½ lb. each. The larger trout are taken by trolling, the best time for which in this lake is soon after dawn. Trolling at night almost invariably proves unsuccessful. The best bait is natural minnow. Of a series of trout taken by one angler, by trolling, in the present season (1898) the smallest was 14 ozs., the largest 5¼ lbs.

The perch here are exceedingly small, and average under ¼ lb. each. Individuals run up to 3 lbs. ; and I have seen four or five taken from Bassenthwaite of between 2 and 3 lbs. each. The perch spawn in April.

It is said that pike are decreasing in Bassenthwaite, the reason assigned being that the water from the lead mines has partially destroyed the pike spawn. A pike angler who regularly fishes Bassenthwaite informs me that his largest fish this season was 16 lbs. ; and fish of 17 lbs. and 25 lbs.

respectively may be seen at the Pheasant Inn (Peel Wyke) on the shores of the lake.

In the Keswick Museum there is the preserved head of a pike with the following inscription:— "Caught in Bassenthwaite, by trolling, July 12th, 1861, weight 34 lbs."

The methods of pike-fishing are trolling with the spoon or phantom; or by setting trimmers, live perch being used for bait. At one time pike fishing was much commoner on Bassenthwaite that it is to-day. There were more boats on the lake, and rules were laid down as to methods, so many trimmers, for instance, being allowed per boat. Pike and perch fishing commences on June 16.

There are eel-coops on the Derwent (the effluent), and eels descending from the lake have been caught up to 6 lbs. in weight.

Bassenthwaite is one of the few lakes in which the vendace is found. It is, however, rarely taken, and even then at long intervals.

Char have been introduced, but the experiment has not succeeded.

If Bassenthwaite cannot be strongly recommended to the angler, the naturalist will find a good deal to interest him. Cormorants ("scarf" and "scart" the country people call them) fish the lake the year through; the kingfisher is a resident; and herons are always to be seen, sentinel-like, on its shores. This year there are two broods of otters near the effluent. In Wythop Woods there is a heronry, consisting of sixty nests, one of the largest in the district.

Lord Leconfield is owner and lord of the manor of Bassenthwaite, and occasionally exercises his right of fishery in the lake. Sir Henry Vane leases

a fishery right and nets usually during the shooting season. No difficulty, however, will be experienced by anglers who wish to fish the lake with rod and line.

There are two fairly confortable inns on the lake —one at Braithwaite, 4 miles from Keswick; the other at Peel Wyke, near Bassenthwaite Lake Station. From the latter Cockermouth is distant 5 miles.

THIRLMERE.

Thirlmere (anciently Leathes Water) before its conversion was a long narrow lake, 3 miles in length by ¼ mile in breadth. It lies at the foot of Helvellyn, and on the north side of Dunmail Raise —just on the border line of Cumberland and Westmorland. Originally it covered 330 acres, its greatest depth was 112 feet, and its altitude 533 feet. Its shores contracted towards the centre to such an extent that the narrow strait was crossed by a ford, and an ancient Celtic bridge constructed in three divisions. The view of Thirlmere most commonly seen—that from the Grasmere and Keswick road—is the least impressive, and, viewed from more advantageous points, Thirlmere will be voted by no means the least beautiful of the lakes.

The physical features just mentioned are, of course, all altered now. So that Manchester could have its water-supply from Thirlmere it was necessary to enlarge its area and increase its depth. In this connection two details may be mentioned as showing how peculiarly well adapted Thirlmere is for the purpose to which it has been put. Its drainage area is 11,000 acres, and sometimes 15 or

16 cascades of the purest water may be seen running down the mountain sides into it at one time. Moreover it is situate in the heart of almost the heaviest rainfall in the country. Raising the level of the lake was done by constructing a dam across its northern end, across the effluent, St. John's Beck. The effect of this has been to raise the level of the lake by 20 feet, which has increased its area from 330 acres to 565 acres. By raising the lake to 50 feet (which can be done without further outlay) an area of 793 acres will be obtained.

When the conversion of Thirlmere was proposed, a great outcry was raised against it—mainly on æsthetic grounds. The result, however, is a splendid justification for those who have carried out the scheme, and is moreover a magnificent triumph of engineering skill. Instead of the scenery being marred, it has been improved. Art has excelled nature. The new Thirlmere is a finer sheet of water than the old ; its sides have been planted ; an entirely new road has been made along its western shore ; while on its eastern side the old tortuous track has been substituted by a splendid 36-feet road, one of the best pieces of "macadam" in the country.

The Thirlmere of old contained trout, pike and perch, and for its trout it was justly famous. The peaty holes, known as Wythburn bogs, contained fine yellow trout, and good fish could always be obtained near the mouths of the numerous feeders. Now, being the private property of the Manchester Corporation, Thirlmere is closed to the angler ; although, since its completion, it has been restocked with trout. The probabilities are, from what can

be observed from its shores, that the lake teems with good trout, and there are special reasons why this should be so. The newly submerged portions of the lake amount to 235 acres, an area rich in natural fish food. This is an illustration of a fact which has been long known, although, for obvious reasons, it is rarely that it can be put in practice.

WASTWATER

Wastwater is perhaps the most impressive of all the lakes. There is a solemn grandeur about it at all times, but when lashed by a storm, with black impending clouds, it suggests a veritable mountain inferno. Lying at the foot of Scafell and Scafell Pikes, Wastwater is three miles long, ½ mile broad, and 200 feet above sea-level. As Derwentwater is the shallowest of the lakes, Wastwater is the deepest, its mean depth being 134½ feet, its maximum 258 feet. On its left bank are the finest "screes" in the whole of the Lake District. The extremities of Wastwater present a greater contrast than those of any other lake. At its head are rugged masses of mountain presenting a magnificent front; while much of its lower end is embowered in woods. The lake has one small rocky island, close to the right shore and near its lower end. Over and Nether becks, having their origin in mountain tarns, are Wastwater's principal feeders; the river Irt, rising on Scafell, is its effluent.

The lake contains trout and char[1]—the former

[1] "I am assured, if the wind does not fail us, we may have a good chance of taking some nice trout, and perhaps a charr. Trout and charr are the principal fish as constant

in abundance—and both salmon and sea-trout find their way into it by way of the Irt. Bull-trout are also said to occur in Wastwater. Owing to the great depth and consequent low temperature of the lake, the trout are late in coming into condition. In fact, there is no fishing in the earlier months, and good takes are rarely had before July, and the fishing improves through August and September. The flies used are those recommended for other of the smaller lakes and tarns ; here, however, the addition of a bit of bright tinsel always seems to prove an attraction. Davy recommends the coch-y-bondhu, Broughton Point, and red hackle as the most killing flies. Night-fishing with bustards, especially in hot weather, should not be neglected. As a rule the best and biggest trout are taken in this way.

The best trout ground is that furnished by the pebbly deltas of the mountain becks. Along the right shore there are also several little bays between rocky headlands, the water averaging under 12 feet, where many good trout are to be found. When lath-fishing was permissible, as many as 47 lbs. of trout were taken by one individual in a single day.

Lord Leconfield, who issues licences, is owner of Wastwater, and the fishing may be described as public—with restrictions. For instance, the only method of fishing allowed is by rod and line ; "laths," night-lines, &c., being prohibited. By

residents, besides which there are perch and the migratory ones, the salmon, morts, and spod ; but these latter are rarely taken with the fly : nor must I omit another, the bottling, the history of which is somewhat obscure."—*The Angler in the Lake District.*

way of affording protection to the migratory *Salmonidæ*, none of the salmon-kind may be taken. In my own opinion, with the exception of smolts, there is little chance of this restriction being abused. It tends, however, towards protection, inasmuch as it affords a considerable area of good spawning ground. When the fish are on the "redds" a good deal of salmon poaching is done in the Irt. The lord of the manor occasionally nets the lake for trout. Boats can be hired, and the best centres for fishing the lake are Wastdale Head, Nether Wastdale and Strands.

ENNERDALE WATER

Ennerdale is one of the least known of the minor lakes, but by no means of least importance from a fishing-standpoint. Lying out of the beaten track of tourists it is but little visited. Situated among the wildest scenery, there is a peculiar charm in its very isolation. The mountains are splendidly grouped at its head, the most conspicuous of which is Pillar, the steepest mountain in the district (2,927 feet).

The lake shore has two precipitous crags—Bowness Knoll on the north, and Angler's Crag on the south. A small island lies in the middle of the lake, off the sudden curve of the left shore.

The Pillar Rock affords one of the few difficult climbs in the Lake District. It was first climbed by a dalesman, named Atkinson; but once the rock was explored a comparatively easy way was found, and now a considerable number of tourists climb it annually.

Ennerdale Water is nearly 2½ miles in length, and about two-thirds of a mile broad. Whilst its mean depth is 62 feet, its maximum depth is 148 feet; and its height above sea-level is about 368 feet. The river Liza (or Lissa) and Smithy beck are its principal feeders. Its effluent is the Ehen, which flows by Egremont to the sea at Sellafield.

The lake contains trout,[1] bull-trout, and char. As there are no pike in Ennerdale, the trout are numerous but small. They average between three and four to the pound and rise well to the fly. They are, however, a little late in coming into condition.

The char[2] here do not attain to the size of those in Windermere, but, unlike them, they occasionally rise well to the fly (a red ant for preference), and are lively when hooked. Although some of

[1] "I have heard of an angler who, at a favourable time and season, has killed here in one day, with his single rod, fourteen dozen, many a pound weight. Trout of six pounds are occasionally taken with the troll, and of eight pounds with the net."—Davy's *Angler in the Lake District.*

[2] PISCATOR.—"I wish to show you the charr-dubb—the breeding place of the charr, of which I made mention to you on a former occasion. . . . . We are nearing the head of the lake. . . . . Here, I am told, a good many charr are known to spawn." AMICUS.—"And now you say we must land, to see the charr-dubb." PISCATOR.—"Here we are at it. Observe it well; how shallow it is,—now the water is low, not more than two or three feet deep . . . . composed of sand, gravel, and stones." AMICUS.—"Our boatman tells me that in November, when the charr enter the dubb, so great is the crowd of fish, that the water is actually darkened with them."—*The Angler in the Lake District.*

the char here spawn in the feeders, the majority spawn in the lake itself.

Boats are kept, and the Angler's Inn, situate at the foot of the lake, will be found comfortable, but of somewhat limited accommodation.

CHAPTER XI

Smaller Lakes.—II

RYDAL WATER

If Rydal is one of the smallest it is certainly one of the most beautiful of the lakes. It should be seen from the west bank to be appreciated, and this may be gained by the rustic bridge crossing the Rothay, then continuing by a path which leads through a farmyard. Viewed from here the river and lake are alike beautiful.

Rydal itself teems with associations of Wordsworth, and both Hartley Coleridge and De Quincey resided here. Wordsworth wrote much of his most enduring work at Rydal Mount. The view from the grassy mound in front of the house is strikingly beautiful, commanding the whole of the Rothay valley, with a portion of Windermere. There is, too, a summer-house in the grounds, from which there is a charming view of Rydal Water.

Quite near, in the Rydal Hall grounds, are the famous Rydal Falls, which should be visited. With the exception of a portion of the left bank,

Rydalmere is the private property of Mr. H. Le Fleming (the lord of the manor), but permission is given to fish. This, too, applies to the boats.

As in the case of Grasmere, Rydal contains trout, pike and perch. The trout are large, but not numerous; and the pike and perch attain to a fair size and give good sport.

Of the two lakes this is probably the better stocked. Since a considerable portion of the lake is comparatively shallow, persistent netting and re-stocking would convert it into splendid trout ground. After running through Grasmere, the Rothay flows through Rydal lake and on into Windermere, consequently a good many fish spawn in it. The lake is 181 feet above sea-level.

"Here you see the mountains in magnificent composition, and craggy coppices with intervening green fields shelving down to the green margin. Rydal is a small lake, not much more than a mile round, and of a very peculiar character. It has a reedy inlet and outlet, and the angler thinks of pike when he looks upon such harbours. The heronry on the high pine-trees of the island connects the scene with the ancient park of Rydal, whose oak woods although thinned and decayed, still preserve the majestic and venerable character of antiquity and baronial state."—PROFESSOR WILSON.

In winter Rydal affords magnificent skating, and is courteously thrown open to the public.

HAWESWATER

Haweswater (344 acres), which may be described as on the confines of the Lake District, is (perhaps with the exception of Ennerdale) the least known and least visited of all the English lakes. It is

nine miles from Penrith (L. and N.W. main line); two miles from Lowther; and, on its southern extremity, about a mile from Mardale Green. These facts at once suggest *why* it is so little visited.

The Penrith road runs parallel to the lake along the whole of its length ($2\frac{1}{2}$ miles), and its west bank, which is finely wooded, is bounded by Naddle Forest. Here the red deer from Martindale Forest often stray; and, when hunted, almost invariably make for the lake, where they are taken. The mountain group at the head of the lake is strikingly fine; Harter Fell, High Street, and Kidsty Pike towering over it in impressive grandeur.

The principal feeder to Haweswater is Mardale Beck; its effluent the Lowther.

The lake contains trout, char, and gwyniad or freshwater herring ("skellies"); chub are found in the effluent, and may run into the lake. I have not been able to prove conclusively that the so-called great lake trout exist in Haweswater, but that they did so at one time there can be no question.[1]

Haweswater is the private property of Lord Lonsdale, whose Water-bailiff has the supervision of the lake. Four or five boats are constantly kept upon it, and his lordship's comfortable boat-house is at the service of visitors who have permission to fish. Application for this

[1] In his *Survey of the Lakes*, Clarke records that a pair of white-tailed eagles bred on Walla Crag, overlooking Haweswater. The birds laid two eggs, and when the young were hatched it was that there were taken from the vicinity of the nest thirty-five fish (mostly lake trout), seven lambs, besides other provision of game. The trout were caught in Haweswater.

privilege must be made to the steward at Lowther Castle.

The lake contains abundance of trout, with the advantage that they rise well to the fly. Although their size is fair, a great improvement in this respect might be brought about if the lake were harder and more systematically fished. As it is, however, an angler of fair skill, and provided with appropriate flies, may reckon on a basket of twenty or thirty trout a day. The flies may be fairly large and of the bustard order. Trout up to 4 or 5 lbs. have been taken, but these are rare. The lake is netted to supply Lowther Castle, but it requires harder netting still if the best results are to be obtained.

Haweswater is also well stocked with char, but these again are small—considerably smaller than those of Windermere, for instance. Of late years Windermere char have been brought to Haweswater with the object of infusing new blood, and so increasing the size. Unfortunately, this has not resulted; and here, again, greatly reducing the number of the fish would considerably increase the size. The Haweswater char rise more freely to the fly than those of any other lake, and a basket of trout taken with the fly will almost always contain one or two—sometimes a gwyniad in addition. Almost any small red fly will take them, and most of these are of a nondescript character. The Haweswater char spawn on the banks of the lake.

The gwyniad is common in the lake, and large takes are often made in the Lowther Castle nets. Upon one occasion nearly a thousand fish were taken at a "setting," the details of the take

being within the writer's knowledge. The "skelly" will occasionally rise at the fly, and single fish are sometimes taken when fly-fishing for trout.

The fishing *par excellence* in Haweswater, however, is trout-fishing. This is exceptionally good; the trout are free risers, and a fair basket may almost always be made; in fact, in the writer's opinion, this is the most dependable lake in the district. For instance, in May, 1898, the writer had forty-two trout, and this on one of the most unlikely days imaginable. And it may be taken that if the fish have been rising during the day, a second bag may almost certainly be had by using the "bustard" after dusk.

The inaccessibility of Haweswater has been mentioned. From Kendal the best road for the pedestrian is up Kentmere and over Nan Bield Pass, and (following the effluent from Small Water) on to Mardale Green. From Penrith to Haweswater there is a fairly good road passing through Askham and Bampton. From Ambleside the way lies across Woundale Bottom, up Thornthwaite Crag by the Monument, along the top, then dropping down by the Kidsty Pike track.

GRASMERE

Grasmere, from the fact of its beauty and literary associations, is one of the best known lakes in the district. It is embosomed among mountains, and but few sheets of water in Great Britain have a more beautiful setting.[1] It has Helm Crag

[1] "It was sunset when we approached Grasmere. The solemn heights towards the setting sun showed their dark

on the north, Loughrigg on the south, a panorama of hills crowned by Fairfield on the east, and Silver Howe on the west. The last-named is the scene of the great Guide's Race, upon the occasion of the famous Grasmere Sports—the "Derby of the Dales," as Miss Braddon has called it. Wordsworth and De Quincey lived here, and, as is well known, the former is buried in Grasmere church yard.

The Rothay, a capital trout stream, and one of the affluents of Windermere, runs hard by.

It may here be remarked that the Rothay valley contains five sheets of water of varying size—from the tiny Codale Tarn to majestic Windermere; and between these are Easdale Tarn, Grasmere and Rydal Mere. With the exception of the last, however, these beautiful sheets of water are more renowned for their scenery than for the fishing they afford.

The lake is about one mile in length, three-quarters of a mile in breadth, and lies 208 feet above sea-level. From the lake itself can be best seen the magnificent amphitheatre of mountains which surround it.

Grasmere contains trout, pike, perch and eels, but no char. Salmon occasionally run into the lake and its tributaries to spawn, and quantities of

sides reflected in the water with wonderful distinctness. The effect of this lake upon the spirit was immediate; awakening a feeling of something profound in one's own nature. Windermere was tranquil, but it was a cheerful tranquility; its genius was peace, but peace with a smiling aspect. Grasmere seemed to be formed amidst the mountain recesses expressly as an abode for lonely, silent, pensive meditation."—CHANNING.

salmon-fry pass down the Rothay in due course. A good many of these (of 2, 3 and 4 ozs.) are taken by the natives, but they prove a great nuisance to the legitimate angler. The trout are sparsely scattered along the shores, and occasionally (when trying for pike) a big one is taken. Still, this is hardly a trout water, and cannot be seriously recommended in this respect.

Pike and perch are fairly abundant, the former attaining to a large size. The perch are good, although not large, and afford a good deal of pleasant fishing to visitors—and certainly fishing cannot be done in more pleasant surroundings. The lake is moderately netted, but the fish taken are for the convenience of the proprietor, residents, and the visitors at the hotels.

Grasmere itself is one of the best general centres for the Lake District; and, of course, the lakes and tarns enumerated above can be fished from it. Accommodation, of course, is abundant, and boats, tackle, &c., are always obtainable for the fishing.

ESTHWAITE WATER

The west bank of Windermere is hemmed in by Furness Fells, and between these and Coniston lies Esthwaite Water. Proceeding from the Ferry, it lies to the left, off the Hawkshead and Coniston road; continuing along which for about two miles Esthwaite Water comes into view, with Hawkshead at the upper end. It is about one and a half miles in length by half a mile in breadth.

The lake is private property, but, by a system of licences, the public is allowed to fish. About twenty-five years ago a trial took place as to the

fishery rights in the lake, the litigants being the inhabitants of Hawkshead and Colonel Sandys. The former claimed the rights of fishing, but it was decided that these were vested in Colonel Sandys; hence the imposition of fees and licences. Seeing that the public have had the right of fishing from time immemorial, the latter can hardly be said to be drawn in a generous spirit. One licence has to be taken to fish for pike and perch; a second for trout; a third to use a boat; and each and all of these are for a single day only. Then there are ten or twelve conditions attaching to each licence, one of which, for instance, is that "towing a line through the water by rowing will be considered *otter-fishing*." These matters are mentioned so that the unwary angler may be on the alert; and on Esthwaite Water he will need to be a "contemplative" angler indeed lest he transgress.

The setting of Esthwaite is pastoral rather than rugged, being surrounded by farm lands and coppice woods. Two promontories nearly divide it, and the best view of the lake is obtained from an eminence on the west side looking north. Its chief feeder rises on Yewdale Fells, and its effluent is Cunsey Beck, which flows into Windermere.

The lake contains trout, pike and perch in large quantities. Although fairly good trout may be had in some parts of the lake, the principal fishing is for pike and perch. The pike here are good, they come freely, and a decent catch may always be depended on. As well as in summer, they bite well in September and October, which is seldom the case in Windermere. To an angler accustomed to fish in the South or Midlands this may seem a commonplace, but the fact is that both

pike and perch bite best and are habitually fished for in summer, and not, as in other districts, in autumn and winter, when they are, of course, in the very best condition. There may be something in the fact that in an area which is primarily a salmon and trout district, the coarse fish are left to visitors ; or, in other words, that they are not generally fished for by natives when they are most in season. As compared with Windermere, the pike in Esthwaite run to a larger average size, and they are equally good fish.

Here the favourite method of pike-fishing is by trolling, and occasional exceptionally large perch are got whilst trolling for pike. The most killing natural pike baits are small roach and perch (the natives cut the dorsal fin off when a perch is used) ; and phantoms or wagtails if artificials are used.

One of the best takes of pike that has been had in Esthwaite Lake during the present season was by two gentlemen from Birkenhead. The catch was at the end of July, and consisted of twenty-four fish, the largest being 11¼ lbs. One of them fished a spoon, the other a natural bait on a spinner.

The perch here run fairly large and bite freely. They are taken by float-fishing or with a paternoster.

In fishing Esthwaite it is advisable to get a local man to row the boat, as, late in the season, the reeds and weeds are troublesome.

Two or three days may be pleasantly spent here in late summer or early autumn ; and the lake may be fished from the Ferry on Windermere ; from Far Sawrey, Near Sawrey or Hawkshead. Accommodation is good and charges reasonable.

At the Red Lion, Hawkshead, a man, boat, and, if necessary, tackle may be hired. For those fond of coarse-fishing it may be doubted whether better general sport can be had in the district than here.

CHAPTER XII

Mountain Tarns

Scattered among the mountains of the Lake District are almost innumerable tarns, most of which contain fish, many of them trout. In extent they range from fifty acres to mere rock pools; but, from their situation, all of them are interesting, and there is a charm about tarn fishing peculiar to itself. Those who tramp the lonely hills see these tarns under the greatest variety of aspect. Reflecting the blue sky, they add a peculiar beauty to the surrounding hills; but seen under sterner aspects nothing can be more sombre and gloomy. Under storm-clouds their waters are black as ink, and they seem as though no life could exist in them. As already stated, most of them contain trout, some char, others pike and perch. The more inaccessible tarns are rarely fished save by the heron, or some wandering poacher who runs his proscribed "lath" or "otter" across them; but for this very reason, those most remote are often best worth the angler's attention. As to the quality of the fish they contain, much depends upon the nature of the bottom. If this is black and peaty, the fish will be comparatively worth-

less ; if, on the other hand, it has pebbly marges, then the fish are bright and silvery and as toothsome as the best river trout. Owing to their altitude, the fish in the tarns are somewhat late in coming into condition, and usually it is the end of June before they are at their best, at which time a basket of fifty trout taken from a mountain tarn makes a pleasing picture.

In these mountain solitudes, so long as there is a ripple, the angler is less dependent on the weather than in other kinds of fishing. With appropriate flies (dressed on not too large hooks) he can generally make a basket, but there are several conditions which should be borne in mind. It will almost invariably be found that a tarn has a deep side and a shallow one. The deep side is that nearest the pass against which so many of the tarns nestle—the shallow one that which merges away on the opposite shore. The trout mainly resort to the latter, and those taken here will be found to be brighter and in better condition than the fish from the deeper and blacker water.

Few of the tarns have boats upon them, although a boat is always a great convenience. As in lake fishing, the fish haunt the spots where the shore shelves into deeper water, and these are the places it is impracticable to fish from the bank. Most of the tarns, however, must be fished from the shore.

As to flies, it is difficult to speak precisely. Here, at all events, fancy flies are useless ; nor are the delicate duns and spinners much better. As a rule small dark flies prove most effective, and these should be dressed upon No. 2, or, at most, No. 3 hooks. March brown, orange wood-

cock, dark snipe, and dark partridge are all good patterns; while black gnat, corncrake, and coch-y-bundu will be found useful for a change.

As already stated, the illegal lath or "otter" is not infrequently used, almost invariably with success, and the chances of molestation are small. Those who practise this killing method of fishing are wily enough to leave their lath (secreting it among the heather or stones) where it is used, not carrying it about with them.

One of the most killing methods of tarn fishing is with the natural bracken-clock. This is one of the best baits for either mountain stream or tarn. In the former it is simply dibbled into each pool walking up stream. On a tarn it is more difficult to manipulate. Still, the clock is a fairly tough customer, and with a little practice a reasonable amount of line can be got out without flicking the fly off. If the weather is seasonable, the bracken-clock comes on about the last week in May and lasts until the middle of June.

When at their best the tarn trout run four or five in the pound, and many of them are richly marked. Those of Small Water, for instance, are said to be brilliantly spotted with vermilion, but with thirty trout taken from this tarn before me I cannot say that this beauty of marking is particularly striking. The trout from Hayeswater are an exception as to size, averaging half a pound; and they are pink-fleshed. At the other extremity are the Blea Water trout, which are not only small but poor.

Before enumerating the mountain tarns it may be well to add a few general observations. From

the middle of May to the end of June is the best time for fishing. September is fairly good; July is unfavourable and unproductive. In practice, Nos. 2, 3 and 4 hooks, according to wind and weather, will be found most successful. A common failing, and one which causes disappointment, is using hooks which are too large.

The best general flies for spring fishing are dark snipe and purple, woodcock and orange, teal and claret, partridge and grouse hackles. For autumn fishing, Zulu, August dun, coch-y-bundu, red hackle, black hackle. In warm weather fish may be taken at night with the bustard and moth, although at this time almost any reddish or brown fly succeeds as well.

Throughout June the natural bracken-clock is greedily taken on the tarns and will kill for a fortnight after it has disappeared from the low-lands. When all other flies fail a small coachman often proves effective, and this is a good general fly. Worm fishing is occasionally practised but does not prove specially deadly.

The angler who indulges in tarn fishing should burden himself as little as possible, as there are few forms of sport which entail harder work. A light 10 ft. or 10½ ft. rod will do all that is required; and the "Perfect" cork-handle, green-heart trout rods of this description made by Messrs. Farlow, of the Strand, are ideal for the purpose. With one of these the writer has fished most of the tarns in the Lake District, and nothing could be more useful or appropriate. They will kill any fish the angler is likely to come across, and for lightness and effectiveness nothing could be better.

SMALL WATER

Small Water (11 acres) lies immediately beneath Kentmere High Street (2,633 feet), and abounds in trout. Owing to its altitude these are rather late in coming into condition, but at any time from the middle of May a good basket may be made, By the end of August, when the trout are at their best, they average about a quarter of a pound each. They are silvery fish and beautifully marked. Their bright colour is probably owing to the fact of the light colour of the bottom of the tarn on the side furthest from the pass. Small Water fishes best in a wind, south or south-west for preference. During the day small, dark hackle flies will be found most effective, but for night fishing winged flies may be used. With these, on the shallows, very nice fish may be had, and a night spent in fishing will afford an enjoyable and impressive experience, especially to a stranger. Mardale (Dun Bull Hotel, unpretentious but good in every way) is the best centre for Small Water, It may also be approached from Longsleddale by Gatescarth Pass, and from Kentmere by Nan Bield Pass. Mardale Beck is the effluent of the tarn and affords plenty of small brook trout after rain.

DEVOKE WATER

Devoke Water is a moorland tarn at the foot of Birker Fell. It is about half a mile in length, and contains trout of peculiarly fine quality—said to have been introduced from Italy by the monks of Furness Abbey. They are pink-fleshed, and

rise well to the fly. This is an early piece of water, the trout being in good condition in March, and going back by the end of August. The Lin Beck flows out of Devoke Water and enters the Esk a little below the King of Prussia Inn. A boat is kept on the tarn, permission for the use of which may be obtained from the steward of the Manor, or through the landlord of the inn.

BROTHERS' WATER

This (40 acres) is one of the best and most easily accessible of the tarns. It is situate about three miles from Patterdale on the Kirkstone road, and has considerable natural beauty. The Red Screes constitute its watershed, and the becks draining into it are well stocked with yellow brook trout. Its ancient name was Broaderwater, of which Brothers' Water is probably a corruption. The more popular, but probably mythical derivation, is from the fact of two brothers having been drowned in it; but confirmation is wanting The tarn contains trout, pike, perch and eels. The trout are both good in quality and fairly large. The best fish are obtained off the reed-beds between the beck and the road. The north or Patterdale end of the tarn is the shallower, and here the trout are more plentiful, if smaller. The tarn fishes best in a north and south wind, *i.e.* a wind blowing in the direction of the valley. A boat may be hired from the hotel (close by), and this ought to be taken advantage of. Fish may generally be got between the hotel and the Kirkstone beck delta. The tarn is a late one; in this

instance, July and August being the best months; but unfortunately it carries a good deal of troublesome weed. During times of flood the "grey" trout of Ullswater find their way into the tarn, and when the water is discoloured by the peat they are occasionally taken. Low Hartsop is less than a mile distant, and coaches pass daily between Ambleside and Patterdale.

EASEDALE TARN

Easedale Tarn (25 acres) is about $3\frac{1}{2}$ miles from Grasmere, and is one of the finest tarns in the district. It is reached by ascending a steep path by the side of Easedale Force, and then proceeding $1\frac{1}{2}$ miles over a moor. A little above it is CODALE TARN, from which a stream flows into Easedale Tarn. "The ascent to it is steep, but the scenery will repay the trouble. Surrounded by lofty cliffs, it is a perfect picture of loneliness and seclusion." Easedale Tarn contains trout and perch; Codale, trout only. In the latter the trout cannot be said to be abundant, but they are fine fish, running up to 1 lb. The Easedale trout are rather poor. The best fly-fishing months are April and May. In June the bracken-clock comes on, and then for some weeks fly-fishing is at a discount. The flies used here are mainly those dressed from woodcock and waterhen; but, as in so many of the tarns, almost any small dark fly will kill. Bracken-clocks may be found in plenty on the marges of the tarn. Good takes of trout are often had at night on the shallows with winged flies. The late Dr. Davy, thinking Easedale peculiarly favourable for the growth of char, introduced a

considerable number of fry, but although these succeeded for a time they gradually died out, and not one is to be found in the water to-day. For anglers intending to fish Easedale, Grasmere is the best centre, and lodgings may be had at more than one farmhouse in the vicinity. A boat for hire is kept on the tarn.

ANGLE TARN

Angle Tarn (Patterdale) is about 20 acres in extent, and is situate among the Pikes (Martindale Common). Its effluent enters the Goldrill 1½ miles above Patterdale. The tarn contains trout, pike, perch and eels; and permission to fish it must be obtained from Lord Lonsdale's Estates offices, Penrith. The tarn is easily accessible, being about 3 miles from Low Hartsop, (on the Patterdale and Ambleside road), the best centre from which to fish it. The trout are numerous and fairly good.

HAYES WATER [1]

Hayes Water (38 acres) is one of the most important tarns from the angler's standpoint. It lies under the north-west side of Kentmere High Street, filling the entire depression between that

[1] Haweswater, Small Water, Blea Water, Brothers' Water, Hayes Water, Angle Tarn, a fishery in Ullswater, the greater part of the Lowther and portions of the Eamont—these are subject to the provisions of the Solway Act. It does not prescribe any close time for trout. The whole, or nearly the whole of these waters are not within a Fishery District. These lakes are all private property and as a private regulation Lord Lonsdale has kept the close season for trout in the Salmon Acts.

and Brock's Edge. This is not a true tarn, but has the configuration of a lake. Its borders are steep but not rugged. It is approached from Hartsop by a rough sledge track. It contains trout and perch, and the former are probably superior to those of any other tarn trout in the district. These average half-a-pound, and are pink-fleshed. This superiority is probably due to the fact that the bottom of the lakelet is almost entirely covered with stony *débris*. The left bank is the better for fishing, and near the upper end are some rocky shallows which afford good night fishing. The effluent of the tarn flows down Hayes Water Ghyll ; and the Ullswater grey trout occasionally get into the deeper dubs, but are not known to have entered the tarn itself. There is a boat, the key of which is kept at the Brothers' Water Hotel.

STICKLE TARN

This is a semi-private piece of water (permission is given to fish), n w partly converted into a reservoir. It lies several hundred feet above the well-known Dungeon Ghyll, and is a lonely sheet of water. Pavey Ark rises abruptly from its brink. It has always been rather famous for its trout, which are beautiful bright fish, and well flavoured. These average about three to the pound. Stickle is a somewhat difficult tarn to fish. In addition to trout it contains pike and perch, but these are poor. As in most tarns, the effluent end affords much the best fishing ; the only exception to this being in flood time, when the trout swarm round the mouth of the beck from Sergeant Man, the only feeder of appreciable and constant volume. Flies,

dressed from woodcock and waterhen. In season the bracken-clock swarms, and proves killing whilst it lasts. From the fact of its being well sheltered, the tarn is an early one; April and May are the best months.

BLEA WATER [1]

Blea Water (41 acres) nestles under High Street. A considerable sheet of water, it contains trout of poor colour and quality. This may probably be accounted for by the fact that it swarms with fish, and is not netted. It is, however, regularly lathed," and the lathing is done with a good deal of boldness, as this, like several other tarns and streams, is not within the jurisdiction of any Fishery Board. Anglers fishing Blea Water should avoid that side of the tarn nearest High Street. The best (in fact, the only) centre from which to fish Blea Water is the Dun Bull Hotel, Mardale (a satisfactory house with very reasonable charges).

Blea Water must not be confounded with Blea Tarn, which is semi-private. There is a boat upon it, the property of Mr. Astley, of Elterwater. Blea Tarn is best seen from the south, looking up the pass into the Langdale Pikes. Trout are fairly plentiful, but never seem to get into good condition. The local anglers describe them as "slinky."

KENTMERE TARN

Kentmere Tarn (now converted into a reservoir) lies beneath Nan Bield Pass, and contains a large quantity of fair-sized trout—nothing else. Owing

[1] Blea Water and Small Water are within half a mile of each other, and may be fished upon the same excursion. As stated, the latter is much the better.

Photo by Valentine.

[*To face p.* 155

BLEA TARN.

to its being immediately against the watershed, it is a rather late tarn. In the summer of 1896 the tarn was run off for repairs to the sluice, when the writer saw thousands of trout, averaging three and four to the pound. There were no big fish and no very small ones. As many as possible were saved, these being placed in the "dubs" of the fell becks until the tarn was again allowed to fill, when they were replaced in the water. Staveley (Kendal and Windermere line) is the best centre from which to fish the tarn.

ELTER WATER

Elter Water is an irregular sheet of water (186 feet above sea level), situate at the point of divergence of the Great and Little Langdales. It contains pike and perch, a prodigious number of eels, but few trout. These are large in size, but deficient in quality. Pike are mainly taken by trimmers. The only good trout (smaller than those in the tarn) are the occasional migrants from the Elter and Little Langdale becks. In the narrow stretch of meadow between these two deltas excellent sport is had. Nearly the whole of the left bank is fringed by coppice, and this side provides the best fishing. Another good place is near the Brathay outlet. A chain of islets almost divides the lake. The boats are private property. This tarn is fairly early; the best months being April, May and June. Flies—woodcock and waterhen. Elterwater is the best centre, whilst Langdale and Skelwith are both convenient. Ambleside is four miles distant; Grasmere, three and a half. The road from Ambleside to Dungeon Ghyll runs within a few hundred yards of the tarn.

LITTLE LANGDALE TARN

Little Langdale Tarn occupies a portion of the valley of that name. It contains a great quantity of small trout as well as perch. The trout average 3 or 4 ozs. only. They are good in quality; but whether the angler will care to fish for these fingerlings is a question. April and May are the best fishing months, and the suitable flies those used in the smaller tarns. A boat is indispensable, and one may be hired. A coach road runs up the valley, and accommodation is plentiful.

GATES WATER

Gates (or Goats) Water is a small but interesting tarn, picturesquely situated between Coniston Old Man and the great precipice of Dow Crag. In circumference it is about half a mile. From Coniston, the most easily accessible centre, it may be approached round the shoulder of the Old Man (by the Walney Scar road), or it will be seen by walking a few yards west from the summit of the mountain. Seen from this point, except during the finest weather, it lies sombre and black in its gloomy recess. The descent from the *col* to the tarn is quite practicable and worth making, if only for the new aspect of the scenery it presents. Although small, from the angler's standpoint, the tarn is a not unimportant one. It contains trout and char—one of the few tarns where the latter beautiful fish is found. The angler whose ambition it is to take char can almost certainly gratify his desire here; as, if the right flies are fished (reddish-brown, and dressed on small hooks), he is almost certain to succeed.

In a note, Mr. Arthur Severn, as a result of his personal experience, tells me that the tarn is full of trout and char, the former running about five to the pound. The largest char he himself has taken was ¼ lb.; but an old angler, resident in Coniston, fishing Gates Water from 3 to 7.30 A.M., caught seventy char. The man stated that he used a sort of grub, which he threw like a fly, letting it sink a little, and then drawing it towards him in jerks, and the char took it instantly. The char in Gates Water (according to the late Dr. Davy) take the artificial fly readily; but Mr. Severn thinks it a disappointing place for fly-fishing.

The Gates Water char are small (much smaller than those of Windermere), but they are brightly coloured, well-flavoured fish; and, under favourable circumstances, from a dozen to twenty may be basketed. Char from here have frequently been transported to Coniston; in fact, it has been stated that Coniston lake was originally stocked from Gates Water. The trout are of the ordinary tarn variety, and rise well to the fly. There is no cover round Gates Water, and probably the goodness of the fish is attributable to the considerable water-shed which drains into it. Gates Water is 1,645 feet above sea level, the fourth highest tarn in the Lake District.

SEATHWAITE TARN

The narrow pass in front of Gates Water is Gates Hause, and over the pass is Seathwaite Tarn—a sheet of water specially interesting on account of its association with Wordsworth's Wonderful Walker. Part of Walker's stipend consisted in the right to net the tarn; and here is that great

and good man's record in a word:—"He was a simple, zealous and laborious pastor. The income of his living when he took it was £5, and, though afterwards increased, at no time exceeded £50." He was literally "passing rich on £40 a year"—or less, brought up eight children, and died worth £2,000. Close to the church is the parsonage, a small cottage covered with climbing roses, in which Walker lived. His employments were multifarious: he was the parish priest, schoolmaster, and doctor of the district; he made wills and prepared and engrossed deeds; was the amanuensis of his uneducated parishioners, sold home-brewed beer, cultivated his glebe with his own hands, spun wool, made his own clothing, and worked for wages at haymaking and sheep-shearing. The little chapel is scarcely larger than a labourer's cottage. Walker's pew is shown, lined with cloth woven by himself.

Seathwaite tarn contains both trout and char, and is well worth the attention of the angler who may find himself in this out-of-the-way valley. The tarn is 1210 feet above sea level. On the tarn is an islet upon which a single pair of herring-gulls breed annually.

Referring to Seathwaite Tarn, Mr. Arthur Severn thinks it much superior to Gates Water. This he attributes to the fact of there being plenty of food in the shape of flies, and to the tarn containing a good deal of vegetation—in contradistinction to Gates Water, which has a rocky bottom. It swarms with trout, and upon an unlikely day Mr. Severn and his brother had 28 well-conditioned trout running four or five to the pound, the largest being 7 ozs. Upon one occasion, another angler of my acquaintance had 30 trout. The fish are too

numerous and want thinning. There is good stream fishing in the affluent to Seathwaite Tarn, as there is in Tarn beck, its effluent, which runs into the Duddon. The tarn being in a secluded valley is very rarely fished. Occasionally trout a pound weight are caught in it.

The Rawlinsons, of Duddon Hall, are lords of the Manor of Seathwaite, and it was the custom of the late Major Rawlinson to go up to Seathwaite Tarn once a year to exercise his rights of netting. The occasion was usually chosen when a house-party was at the Hall, and the day afforded a pleasant picnic. A fire was lighted, and the trout and char taken were grilled in the hot ashes.

WHINFELL TARN

Whinfell Tarn is a pleasantly situated mountain mere lying at the foot of Whinfell Beacon, about five miles north of Kendal. The tarn, which is well stocked, contains coarse fish only—pike, perch, roach, rudd, tench, and eels. The pike are well-fed fish and run up to 15 lbs.—one of 12 lbs. being caught by a lady fishing with the writer. Of late years the perch here have degenerated both in size and numbers, but rudd are plentiful and run up to a large size. Probably Whinfell Tarn is the only sheet of water in the district which contains rudd. Common in southern waters, it is always a rare fish in the north. The writer has taken rudd here with roach tackle and baits, but on one memorable occasion took upwards of a hundred fish in a comparatively short time, which weighed nearly a hundredweight. This was at the close of a hot day in July, when it was observed that shoals of large

rudd were swimming about on the surface of the tarn taking small flies. Happening to have a cast of trout flies on gut, these were put on, and a fish was taken at almost every throw. The cast became so abraded that it smashed, and hauling in the big rudd was at an end. The catch, with the crimson sun on their golden scales, was an exceedingly handsome one—but the appearance of a rudd is the best part of him. For many years the rudd in this tarn were called "bream," but there is not the slightest doubt as to the real identity of the fish. A boat can be hired on Whinfell for a nominal sum, and the homeliest accommodation can be got at one or other of the neighbouring farms on the most reasonable terms. The tench, which are rarely fished for, run up to seven pounds; and the eels also grow to a large size. There is an eel-coop on the effluent stream which takes a fair quantity of fish when the eels are running in the autumn.

RED TARN

Red Tarn lies immediately beneath Helvellyn and is at a greater elevation than any other tarn in the district, viz., 2,356 feet. Although Red Tarn contains trout, it is more interesting for its associations than for the fishing it affords. Here Wordsworth used to fish, and Christopher North (Prof. Wilson) when he was resident at Elleray. The writer has encamped by the side of Red Tarn for ten days at a stretch, and can testify to its loneliness and deep solitude. Here the familiar sounds are the hoarse croak of the raven, the mewing squeal of the buzzard (now our largest bird of prey) and the ceaseless wail of the summer-

snipe. The tarn certainly contains brown trout, and is reputed to contain a "scaled" variety running up to a pound in weight; but although I have fished the tarn at every hour of the day and night I have never been fortunate enough to catch one of these fish. Speaking generally, the Red Tarn fishing cannot be recommended, although late in the season a fair take may sometimes be had with winged flies at dusk. The tarn is occasionally fished with the now illegal "lath," or "otter." On Striding Edge, which overhangs Red Tarn, a cross marks the spot where a mountain foxhunter, named Dixon, was killed; and near by is the spot where the remains of the young Quaker, Gough, who perished in a snowstorm on the hills, were, for three months, watched by his dog—a touching incident commemorated by both Wordsworth and Scott.

CHAPTER XIII

Rough Notes on the Natural History of the Fishes of the District

I. GAME FISH

The Brown Trout (*Salmo fario*). This is the common trout of the rivers and lakes of the district. It is probably more widely distributed than any other fish. There is scarcely any running water in which it does not occur, and it is found at an altitude of nearly 3,000 feet. In colouring and several outward characteristics trout differ more widely than any other fish, and it may be said that almost every river, lake and tarn has its own peculiar trout. This is owing to the peculiar surroundings in which trout find themselves; and we can go in gradation from the black troutlets of a fell-beck tributary to the lusty trout of the same river miles below its source; and from the ill-fed fish of a bleak mountain tarn to the 6 lbs. and 7 lbs. monsters of Windermere. Yet all these are varieties of the brown trout, but varieties only; for, although differing so widely in outward appearance, they present no specific differences. In fact, I know no creature which so quickly conforms to the surroundings in which it finds itself as the common brown trout.

The two main factors which account for the differences just mentioned are in the nature of the rivers and lakes in which the fish are found, and in the food supply. A good illustration is furnished by the Mint and Sprint, the two tributaries of the Kent. These are each about ten miles in length, rise near to each other, and flow down almost parallel valleys. The trout in the Mint are short, well-fed, silvery fish, whilst those in the Sprint are dark golden colour, with big heads, and rarely get into really good condition. The first-named stream has a bright gravelly bottom ; the latter rises at a considerable altitude, and has black, rocky pools over the greater part of its course.

Why the trout of Red Tarn should be deformed, owing to an enlargement of the shoulders, or why the Small Water fish have a plenitude of bright vermilion spots, I am at a loss to explain. These, however, are well-defined local peculiarities.

The late G. F. Braithwaite remarks upon a fish of 4 or 5 ozs. in weight which makes its appearance in the lower parts of the Kent in March and April. He describes it as a pretty fish, in appearance like a fully grown smolt, with brilliant red spots, dead fin fringed with crimson, the bright scales coming off with slight handling.

I know this handsome little fellow, and have occasionally caught him. I am convinced that he is nothing more than a small trout masquerading as a salmon. He lives in brackish water; his brilliant suit being the result of the better and more abundant food which he obtains in that portion of the river where the tidal influence ex-

hausts itself. He is a plucky little fellow, and when hooked fights for all he is worth.

Then there is

"a trout caught in a tributary to the Eden, in a valley in Mallerstang called Divockdale, which has a red fringe round the tail and dorsal fin—finger marked along the sides, on which are several bright crimson spots. The sides have also a beautiful azure tint—the belly is white, one supposition advanced is that they are char. Specimens were sent to the late Mr. Buckland, but I believe, no opinion was received from him. On careful inspection the idea of their being char cannot be borne out—their scales are much larger than those of char, and that fish is not an inhabitant of rapid streams during the whole of the year."

I submitted the above paragraph to a gentleman who knows the Eden by heart—Mr. J. Bedwell Slater—and his reply was precisely what I expected. He writes as follows:—

"I have no doubt whatever that the fish described in the above note are *Salmo fario*. I have seen so many varieties of trout as to colouring that it would take a very curious specimen to surprise me. In most cases I believe the colour of the bottom of the river has much to do with the colour. In the Eden above Armathwaite, within a mile, I have killed bright, light-coloured trout out of a pretty stream; black, ugly-looking brutes off black, mossy rocks; and trout of a pale green colour out of a pool which looks green when the sun is shining owing to the colour of the bottom—and they are always the same in these parts. This, as you know, is the same as in many land animals. I cannot account for the red fringe, but I have myself caught trout with a good deal more red than common on dorsal fin and tail."

Mr. Slater proceeds:—

"I enclose you rough sketch of a trout such as I have caught several of near Sebergham, in the Caldew. I am no hand at drawing, so you must make all allowances; but I am not exaggerating the malformation. The first one I

caught gave me the impression that an injury had caused it. On dissection, however, I found the spine quite healthy, and following the curve of the fish. The late Dick Routledge caught three or four one day. . . . They are, as far as I know, confined to a stretch of about a mile."

The food of trout is very various, and, according as this is rich and abundant or poor, so is the flesh pink or white. Abundance of crustacea, either in salt or fresh water, has the effect of making the flesh red; and trout found in brackish water, or near an estuary, are invariably pink-fleshed. Almost all the big Windermere trout taken by trolling are pink-fleshed, and this is doubtless owing to the abundance of the mollusc known as the freshwater-snail. In certain places these molluscs cover the floor of the lake in thousands, and a 1 lb. trout has been taken having thirteen of them in its maw at one time. Pollution is fatal to this and other lower forms of life, thus showing that it does indirect, as well as direct, harm to fisheries. Apart from winged food, probably minnows constitute the chief food of trout; and in the larger lakes, Windermere for instance, the bigger fish feed upon the smaller members of their own kind, upon small perch, and char. In fact, large trout are almost omnivorous. I have recorded elsewhere the fact of a large trout taking a smaller one which was hooked; and in the lower part of the Kent a 1 lb. trout was observed swimming about in a piece of slack water with a fairly large fluke in its mouth, which it found, of course, impossible to swallow.

Although there are exceptional rivers and tarns, the spawning season for trout throughout the Lake District may be taken as from about the end

of October to the middle of February. Should there be high waters, however, they may be seen "running" as early as the first week in August.

Into various of the Lake District waters the following species of trout have been turned down; but, except in the case of the Loch Leven trout (if this *is* a species), the experiments have not been of such a nature as to enable one to draw deductions:—

Loch Leven trout (*Salmo Levenensis*).
American Brook trout (*Salmo fontinalis*).
Rainbow trout (*Salmo irideus*).

The first and second have been turned down in the Eden; the second and third, in limited numbers, in the Kent; the first into Windermere. I believe, however, that *Levenensis* is indigenous to the last-named lake.

In August, 1826, the *Westmorland Gazette* contained a paragraph stating that a trout had lived fifty-three years in a well in the orchard of Mr. William Mossop, of Broad Hall, near Broughton-in-Furness.

THE SALMON (*Salmo salar*)

With all our practical and scientific means of investigation, it is strange how much remains to be known about the salmon. There are certain phases of its life-history which yet remain a mystery, and which the closest scrutiny has not enabled us to unravel. Its food, its migrations, its spawning, its varying appearance in different rivers—these are points on which there is but little precise knowledge. There is, however, one fact in connection with the

salmon which is now placed outside the range of controversy. It is definitely known that in the great majority of cases salmon return to spawn in the river where they were bred. What it is that enables a fresh-run fish to do this is not accurately known, though Buckland was of the opinion that the chief sense employed was that of smell. A fact that bears on this point is that salmon are turned back by pollution—that they refuse to enter impure rivers which they once frequented.

This aristocrat of the waters is essentially a sea-fish; and at whatever season it may enter a river, the act is closely connected with the reproduction of its kind. Salmon run in English rivers from January to December, although the autumn months mark the time of the heaviest migrations. Entering rivers to spawn, going down to the sea, and re-entering the rivers constitutes, shortly, the life-history of the salmon. Speaking generally, it feeds but little, if at all, in fresh water and loses weight; in the sea it feeds ravenously, and increases at a remarkable rate.

It is not my intention—this is not the place—to enter into vexed questions concerning the salmon; but it may be well to set down a few facts concerning the fish in the rivers of the Lake District. That salmon has always been plentiful here there is abundant evidence. Our rivers were systematically netted as early as the fourteenth century. At quite early dates the importance of protection was appreciated and close-times instituted. Primitive methods of marking salmon to ascertain their rate of growth (by sticking pins into their fins) was practised in the Eden upwards of two centuries ago.

In the Derwent salmon "run" during August, September, October, and November. Grilse ascend the river towards the end of July; and salmon-trout in July, August, and September. Both salmon and salmon-trout run into the Bassenthwaite and Derwentwater (through which the Derwent flows); and this applies to Crummock Lake and to the Cocker, (which flows through it) being a tributary of the Derwent. Salmon in the Derwent run from 14 lbs. to 25 lbs. and are occasionally taken up to 40 lbs. The record salmon for the river, taken with rod-and-line, was one of 62 lbs., killed near Cockermouth.[1]

The Derwent

The Kent is a late river, the fish not making their appearance before the end of August. Through September, October, and November they run in increasing quantities until towards the end of the year there is a fair show of salmon in the river. As a rule these are comparatively small, *i.e.* 10 lbs., 12 lbs. and 14 lbs. Individual fish run to 30 lbs. and upwards; and the largest, taken with rod-and-line, was of this weight. This fish was taken at the Waiste, by Mr. R. Garnett, on November 2, 1896, with a Silver Doctor. Larger fish are, of course, taken in the nets. Salmon get up the main tributary of the Kent—the Mint—in small numbers, but there is an impassable obstruction on the Sprint. The

The Kent

[1] So far as I am aware this is the largest salmon taken in the Lake District. The largest individual take of salmon with fly which has come to my knowledge also occurred on the Derwent. The fortunate angler was the late Mr. John Denwood, of Cockermouth, who caught seven salmon in one day varying from 12 lbs. to 20 lbs.

head waters of the Kent also would afford valuable spawning ground, but this is lost owing to the weir of the Staveley Old Mill being inaccessible to salmon.

The Bela

Salmon and sea-trout run up the Bela at the same time as in the Kent, and if the river were more accessible to the *Salmonidæ* a considerable extent of valuable spawning ground would be opened out. There exists, however, an old weir in connection with the paper-mill which is impassable, and so this breeding ground is lost.

The Eden

The Eden is an exceedingly early river, and there are three distinct migrations of salmon—the first in early spring, the second in summer, and a third in the autumn. Unless stopped by ice the first run begins in December, and has even been known as early as November. The second takes place in June or July ; and the last, which consists of the real spawning fish, in October. The earliest or spring fish are those that provide the best sport for the angler.

The largest salmon taken with rod-and-line in the Eden was one of 55½ lbs. It was a male fish of the following dimensions—length 51 inches, girth 29 inches, breadth of tail 14 inches. It was hooked in Cat Clint and killed in Colley's Nab (the Corby Castle Water). The captor was a Mr. Frances, of Liverpool.

To show to what an extent salmon poaching was at one time practised in the Eden, it may be stated that in 1827 no less than 20 shackle and other illegal nets were publicly burned in the Appleby market place. These were the property of a gang of poachers, and, as the nets were new

they would be worth between £30 and £40. Similar seizings and burnings took place at Kendal, the nets being hidden in the chimneys of the poachers' houses, and made to form parts of beds. Upon one occasion a poacher's wife wove a fine net about her portly person, and then covered it up with a loose dress. When the police and water-bailiffs arrived she superintended their search through the premises, but no net could be found.

The Leven

In the Leven, salmon begin to run in June, and continue until December; the greatest number of fish, however, run during October. The weight of evidence seems to show that a greater number of salmon enter the Leven now that Windermere is opened out.

In Windermere

But few salmon entered Windermere prior to the removal of the rocky obstructions in the Leven—Windermere's effluent. After this salmon began to enter the lake freely, and the removal of the obstruction also admitted salmon-trout and "bull-trout"—hitherto unknown in the lake. Salmon run through the Leven from June until the end of the year. Two results were anticipitated from the admission of the migratory Salmonidæ to Windermere—the opening up of a large area of new spawning ground, and the conversion of Windermere into a salmon angling lake. Needless to state, the last object has not been attained. It is true that a freshly run grilse has been taken in Windermere by rod-and-line, but this has been the solitary exception.

Freshly run salmon have also been taken in the char nets, and this not uncommonly. A spent kelt (a male of 16½ lbs.) was taken from the lake

—a fish which must have weighed up to 30 lbs. when in condition. For some reason the mortality of kelts in Windermere is unusually high, much higher than in any of the rivers of the district, and as many as fourteen dead fish have been counted over a comparatively small area of the lake bottom. It is asserted that most of the "salmon" which are seen or caught in Windermere and its tributaries (especially the Troutbeck) are bull-trout (*Salmo eriox*). With this opinion I do not for a moment agree.

The result, however, of opening up Windermere to salmon is seen in the immense numbers of salmon-fry which now annually pass down the lake to the sea.

Salmon spawn in Rydal, Grasmere,[1] in the Troutbeck, and on the banks of the lake itself.

THE SALMON TROUT (*Salmo trutta*)

"In the Kent a little below Kendal I have had fine diversion with the salmon-trout which run up the river from the sea." This is how Samuel Taylor writes in 1800, and if he were here to-day he might have his "fine diversion" still. Salmon-trout still make up the rivers of the district from June to October, and are known by several local names, the most common of these being "mort." The first flood in July brings the fish in quantity, and when freshly run they afford splendid sport,

[1] "In the first week of November, many years ago, the lake was alive with big fish, which he believed to have been salmon."—Sir Robert Farquhar's evidence.

taking greedily and fighting pluckily. In a freshet they are mostly taken with worm, but they afford the best sport with fly. If the water is low they do not take well until dark, although a few good fish may generally be got just as the light is going. A list of flies suitable for Salmon-trout is given in the chapter specially devoted to "Flies;" and a detailed method of fishing for them will be found in the chapter on the river Kent. I have taken these fish on a No. 2 hook and also on a big salmon-fly. I have several times noticed them eject both minnows and small trout when in the landing-net. Anglers will have noticed the difference between the salmon-trout and brown-trout in taking the fly. The latter sends a nervous tremor up the line, the former gives a steady tug. When the fish first enter the river they are as bright as silver, but they get redder and lose in condition as the season advances. By the first fortnight of November—I am speaking mainly of the Kent—they are insipid and unfit for food. Instead of the flesh being firm and pink it is white and flabby. Spawning takes place in November and December. In the Lake District the fish run from ½ lb. to 6 lbs. and 7 lbs. in weight.

The sprod (*Salmo albus*) is also found in all the rivers of the district which contain the migratory Salmonidæ. This is the whiting of the Eden; the smelt of the Irt, Calder, and Ehen; the herling of the Esk. There can be but little doubt that this is the young of the sea-trout on its first return from the sea. At all events an examination, even over a large number of specimens, reveals no specific difference, and speaking generally what applies to

the one applies to the other. They run from four to the pound up to ¾ lb. and 1 lb. in weight. The males contain milt, the females ova.

The Smelt or Sparling (*Osmerus eperlanus*)

The smelt or sparling is an abundant fish in the estuaries of many of our rivers. Except for a brief period of existence in the sea they spawn and get their food in brackish water. This is a bright looking fish, and is said to be redolent of cucumber by some, of green rushes by others. Certain it is the odour is a pleasant and refreshing one. The sparling fisheries are much less important now than formerly. The principal fishery in the district is in the Leven and Duddon estuary. Mr. S. Hart Jackson gave Buckland the information that the sparling came into the bay in the early autumn, following the way of the salmon; that they were heavy with spawn in February; that spawning commenced about the middle of March and was completed by the middle of April. Yarrell states that Col. Meynell, of Yarm, kept smelts for four years in a freshwater pond having no communication with the sea, where they continued to thrive and propagated abundantly. When the pond was drawn, the fishermen of the Tees considered that they had never seen a finer lot of smelts, there being no loss of flavour or quality.

LOCHLEVEN TROUT (*Salmo levenensis*)

There is much to be said for the Lochleven trout being a distinct species, and Dr. Günther is of this view. My own opinion is that it is a variety only—but this is stated with all respect to the eminent authority just mentioned. This trout is well known as occurring in Windermere, and the majority of fish got by trolling here belong to this variety. Out of a number of large fish which I caught in the lake during the 1898 season, two only were brown trout, the remainder Lochlevens. In Windermere, I have never upon a single occasion taken this fish when fly-fishing from the shore or from a boat—a striking reversal of the experience of known facts on Lochleven. Lochleven trout have been turned down in the Eden and Kent, and in the latter river, at all events, have proved fairly successful.

THE BULL TROUT (*Salmo eriox*)

Throughout the Lake District the bull-trout is almost invariably believed to be a true species, but all the specimens which have been submitted to competent authorities have been referable to the salmon-trout or the common brown-trout. However, the fish which is known as the bull-trout is found in Windermere[1] Wastwater, Ennerdale

[1] A gentleman who had fished Windermere practically all his life writes me as follows :—" Every year this fish appears in greater or smaller numbers and varying in weight from ½ lb. to 7 lbs., although the latter weight is very exceptional. . . . . Most of the so-called salmon seen or caught in the lake and its tributaries, especially the Troutbeck, are neither

and Crummock, and in some of the tributaries of the Eden. At Crummock a fish of this variety was taken by Isaac Tyson with the net weighing 14 lbs. This variety is found in several rivers common to salmon and sea-trout, and its varietal distinctions vary greatly with local conditions. Round-tail is one of its provincial names, and so much does the bull-trout resemble the true salmon in appearance, that, after the tail has been clipped square, it is sold as such. This resemblance between the two extends to haunt and habit, food, spawning and migration. The bull-trout attains to a considerable weight, and, according to its condition the flesh is pink or yellowish white. As a game fish it affords capital sport, and fights as vigorously as the salmon or brown trout. Of the bull-trout the late Dr. Heysham writes as follows :— "This species has, I believe, never been described by authors, having been considered by them as a variety of sea-trout. All the fishermen in this country, however, consider it as a distinct species, and can distinguish it from the former at the first glance. The head is thicker than the head of the sea-trout, and it is also deeper at the shoulders. The scales upon the back are smaller and not so numerous. The tail fin is shorter, and can scarcely be said to be forked. The dead or bastard fin is placed nearer the tail, and further from the dorsal fin than in the sea-trout. They vary in weight from 2 to 10 and even 20 lbs ; but, in general, seldom ex-

more nor less than bull-trout. A rough and ready method, but a very accurate one, to tell a salmon from a bull-trout is to look at the roof of its mouth. Along the middle of the roof there is a row of teeth (vomers) in the bull-trout whereas an adult salmon has but two, or at most, three."

ceed 7 or 8 lbs. The fish, when cut, is much whiter than the other species, and is very insipid.

GREAT LAKE TROUT

Although the literature of the English Lake District Fisheries is of the sparsest possible character, any writer who has even touched the fringe of the subject mentions the Ullswater trout, the great grey trout, the great lake trout, synonyms for one and the same fish. The great lake trout is almost invariably referred to in a specific sense, as though it were a well-defined species (as possibly it may be) with well-marked characteristics and structural peculiarities. I may add that this is the fish referred to in Derwentwater, Bassenthwaite, and Crummock as the " Hard-head."

My own opinion—and I state it with all deference to the opinion of others—is that the great lake trout is nothing more than a variety of the common brown trout of our lakes and rivers—having acquired its size, predatory habits, and several small physical peculiarities from the favourable food circumstances in which it finds itself—and from its comparative immunity to capture owing to the deep-water conditions which it almost invariably affects.

As already stated, none of the earlier writers misses mention of the great lake trout. Dr. Heysham (who contributed a list of Animals to *Hutchinson's History of Cumberland*), calls the fish the Ullswater trout, because he believes it to be " found no where in Cumberland except in the lake from which it takes its name." He also calls it grey trout. Its weight he modestly puts at

between 50 lbs. and 60 lbs. Then comes Walker who, in his *Remarks made in a Tour from London to the Lakes* (1792), has something to say of the great lake trout:—"The grey trout of this lake grows to 30 or 40 pounds weight, and goes up the brooks and rivers to spawn, and takes up its abode in the deepest part of the water at other times, and therefore is very seldom caught."

Next comes Richardson, also a contributor to the *History of Cumberland.* Whilst Walker refers to Windermere, Richardson writes of Ullswater. "It is here called grey trout, and is sometimes, though but rarely, taken in season; one in good condition was killed 36 lbs.; and Mr. Clarke says they sometimes weigh upwards of 50 lbs." I imagine that Richardson in this matter was writing at second hand.

So far as the Lake District is concerned, Clarke may be said to be the father of the great lake trout. He calls it the grey trout, and believes it to be peculiar to Ullswater and Buttermere—in the latter of which, however, he states there are "very few." This was in 1787. These grey trouts, he writes, "in form resemble the other trouts, but are much larger, weighing from 30 to 40 pounds; one was killed a few years ago which weighed 56, but the ordinary weight is from 7 to 20 pounds each. They are chiefly found in the deep water below House Holm Island; they are, however, sometimes taken in all parts of the lake, though but seldom except in October, which is their spawning time." In another part of the present work Clarke's account of the great lake trout is quoted in *extenso*, and I need only add here that he remarks that they rarely rise to the fly, that their strength is very

great, and that he has seen trout of 1 lb. in weight taken out of their stomachs. One of them which took the fly, as his rod lay over the side of the boat, weighed 7 lbs., and was "the only one I ever saw caught with a line."

These mentions of the fish are over a century old, but the great lake trout has been in evidence ever since, but always in diminishing numbers and weight, and Windermere, rather than Ullswater, has, for the most part, had the honour of producing it. A $7\frac{3}{4}$ lbs. trout, taken in a "top" net near Rawlinson's Nab, was pronounced an undoubted *S. ferox.*

The facts to be gleaned from these old authors is that the great lake trout ranges in weight from 3 lbs. to 56 lbs. (is it not somewhat strange that no one ever seems to have seen a Ferox of less than 3 lbs. in weight?); that they feed on other fish, trout for preference; that they spawn in October and November; that they practically never take the fly.

From the following correspondence it will be seen that about thirty years ago a number of gentlemen interested in local fishery matters (all of whom I believe were members of the Kent [Lake District] Fishery Board) endeavoured to have the identity of this great lake trout cleared up, the late Major Elms sending to *The Field* two fish, taken in Windermere, for inspection.

MAJOR ELMS TO THE EDITOR OF "THE FIELD."

Great Lake Trout from Windermere.

I have forwarded you a box containing two fish. We have had a discussion among ourselves as to what the fish are, some saying they are salmon, others differing and calling them white or bull-trout. If you will kindly have

them examined by a competent authority, and will let me know what they are, I shall feel very much obliged.—(T. ELMS, Hon. Sec. Windermere Fishing Association, Bowness, Nov. 14.)

EDITOR OF "THE FIELD" TO MAJOR ELMS.

The fish forwarded were magnificent male specimens of *Salmo ferox*, the Great Lake Trout. This a very well marked species, distinguished, amongst other characters, by the squareness of the tail; the close-set double row of vomerine teeth, which extend the whole length of the bone down the roof of the mouth, and which are absent in the adult salmon; the smallness of the scales, which are so numerous that from thirteen to sixteen may be counted, extending from the adipose or dead fin, to the lateral line of the body; and above all, by the peculiar shape of the præoperculum, or foremost division, or scale, of the gill-cover. This is crescent, the higher and lower margin gradually rounding into each other without forming an angle. The sides of the head and body are covered with numerous round, deep black spots, which have a pale or blood-red margin during the spawning season. The Great Lake Trout is a non-migratory species, inhabiting large lakes. The collection in the British Museum was without any examples from Windermere, and the splendid specimens forwarded have been received as valuable additions to the national collection.—EDITOR "THE FIELD."

MR. JOHN FELL (CHAIRMAN, BOARD OF CONSERVATORS) TO MR. F. M. T. JONES.

Barrow-in-Furness,
Nov. 20, 1867.

MY DEAR SIR,—

I have seen *The Field*. There can be no doubt that the two fish sent were *Salmo ferox*—Great Lake Trout. There is a further question now to set at rest—that is, are all the large fish frequenting the tributaries of Windermere *Salmo ferox?* I think it most desirable that from each river—Brathay, Rothay, Troutbeck, and Cunsey Beck—some large spawning fish should be taken in order to fully dispose of the difficulty which at present arises, whether the *Salmo*

salar or other of the migratory species do ascend the upper streams of the lake to breed. I should certainly say that it would be an error not to preserve the *Salmo ferox*. His existence to the extent now probable was never known to me before. His voracity will be more gratified in the lake than in the streams, which he ascends only for a short time and special purpose—and I should incline to the idea, as they have been known to take perch, that they may from their abundance constitute a fair proportion of his fish food. Anyhow, the position of his vomerine teeth at once clears up any doubt as to his being a salmon—which scarcely has any. . . . .

In haste, yours very truly,
JOHN FELL.

Hawesmead, Kendal,
Dec. 14, '67.

DEAR MR. JONES,—

I have been much interested in reading the letters you so kindly sent me. Mr. Fell is quite right when he says that in the spawning season the male fish especially become altered in general appearance. This remark applies also to the female, and but for special characteristics such as the tail, teeth, and gill-covers, it would be difficult to designate them. I will give you the description of the one sent by S. H. le Fleming, whom I saw to-day at Beetham.

Length	$25\frac{1}{2}$ inches.
Greatest depth	$5\frac{1}{2}$ „
Length of head	$5\frac{3}{4}$ „
Width of tail (square)	6 „

5 rows of teeth on vomer, those down the middle thus :—
\/ Dark on back, shading to a dirty-white, with slight
\/ lake tinge ; spotted on sides and below lateral line—
\/ large black spots surrounded by a red ring. Jaws
\/ capacious ; dorsal fin spotted ; others dark-looking ; scales small and covered with a thick glaze. Skin thick ; flesh full red ; teeth strong—$6\frac{1}{2}$ lbs. I now return the papers, and have no doubt of its being a Ferox. I may also add that the gill-covers answered the description in *The Field*.

Yours truly,
GEO. FOSTER BRAITHWAITE.

Bowness,
Nov. 17, 1867.

My Dear Mr. Jones,—

I now forward you the last *Field*, in which, at page 410, you will see an account of your two fish. It must be rather a change for them from the Rothay to the British Museum. I should have written to you to acknowledge the receipt of the fish, but have been far from well. I showed the fish to many people here. I said they were the *Salmo ferox;* one of the fishermen said they were the Grey Trout; another that he had never seen anything like them before; a third that they were Sea- (meaning, I suppose, migratory) fish. To-morrow, if fine and calm, we shall be taking char spawn. If you would like to come and look on or help, we shall be I suppose somewhere between Wray Castle and Bell Grange soon after ten o'clock. If you think Mr. Balme or General le Fleming would like to see the description of our fish, pray show them the paper, but as it does not belong to me please let me have it back in two or three days with the direction written on the cover, as it has to form part of a volume of *The Field.* Mr. Balme wishes to have some char spawn—would the General like some as well? I believe it does better when taken in February, as then the weather gets warmer and the eggs hatch with much more certainty than they do through the cold of the winter.

Believe me, yours truly,
T. Elms.

P.S.—I did not know Buckland's address, or would have sent the fish to him, but the authority of *The Field* is quite as good.

Frank Buckland to Mr. F. M. T. Jones,
Secretary of State Home Dept.
Feb., '68.

Dear Sir,—

Thanks for your kindness. The fish was certainly a "Great Lake Trout," *Salmo ferox.* He has gone too far, or I would have had him stuffed for you.

Yours obly.,
Frank Buckland.

P.S.—These fish are indigenous to your part of the world, not common.

DR. GÜNTHER TO MR. F. M. T. JONES,
British Museum (Natural History),
Cromwell Road,
London, S.W.
18/5/92.

DEAR SIR,—

Doggeth, of Cambridge, has sent to me the stuffed fish about which you communicated with me.

Will you refresh my memory as to the point or points on which my opinion is desired?

I believe you wish me to send the specimen to the owner, Mr. Wheatly Balme, when I have done with it.

Yours truly,
A. GÜNTHER.

6/6/92.

DEAR SIR,—

I received from the Cambridge taxidermist the stuffed fish about which you were desirous of having my opinion.

So much is certain that this fish is not a salmon, nor is it the migratory sea-trout (*Salmo trutta*).

The different races of river and lake-trout are most difficult to distinguish from fresh specimens; and in many cases it is impossible to determine them when the specimens are stuffed.

Your fish, as far as external characters go, comes nearest to what is called *Salmo ferox*, if this is a distinct species from *Salmo fario*. *Salmo ferox* enters rivers freely, particularly for the purpose of spawning, but it does so also at other times of the year.

Believe me,
Yours faithfully,
A. GÜNTHER.

F. M. T. Jones, Esqre.

P.S.—I may mention that the British Museum Collection contains two fish from Lake Windermere, which I had named many years ago *Salmo ferox*, and which are the same as your fish.

29/6/92.

DEAR SIR,—

I have sent the fish to your address (to Windermere Station). I had no expenses in the matter.

In my opinion it is not advisable to preserve *Salmo ferox* or any of the non-migratory trout along with salmon.

I remain,

Yours truly,

A. GÜNTHER.

F. M. T. Jones, Esqre.

I think it may fairly be inferred from the above correspondence that the gentlemen subscribing to it are of the opinion that the great lake trout is a distinct species, having specific characteristics both in structure and habits. As already stated, my own opinion is that this fish is nothing more than a variety of the common brown trout. I have carefully examined a considerable number of big trout taken from Windermere—some of which were stoutly averred to be *Salmo ferox*—but have never been able to detect any specific difference. Several writers mention the "rich lake colour" of the fish as distinctive—but this is peculiar to almost every large trout taken from Windermere. It may be replied that both Buckland and Dr. Günther call this fish the great lake trout, which is true, but the latter—the first living authority on fishes—significantly adds "*if it is a species.*"

THE VENDACE (*Coregonus vandesius*)

The vendace is the rarest of the fish found in the Lake District—and outside it is said to occur in Great Britain in Lochmaben (Dumfriesshire) only. I have seen vendace taken from Windermere, Derwentwater, Bassenthwaite Lake, and from the river Greta—but not more than half a dozen specimens in all. Housman, in *Hutchinson's History of Cumberland*, states that there are *vendesses* in

Bassenthwaite ; and Thomas Bell, giving evidence before the late Frank Buckland and Mr. Spencer Walpole, at Keswick (1878), testifies as follows :— "There are vendace in Bassenthwaite. Has seen them taken out of Bassenthwaite. Does not think there are many vendace now. The pike eat them. Cannot tell when they spawn." And upon the same occasion John Alcock states :— "There are vendace in the lake, but they are very rare." Individual specimens are preserved at the Keswick Museum and by private individuals in the same district—a fact showing how extremely rare the species has become. It is rather curious that from time to time individual specimens are washed up, either dead or in a dying condition, on the shores of Derwentwater and Bassenthwaite. Dr. Davy states that "within the past eight years [*i.e.* prior to 1857] a good many have been taken with the net, and many also in the same way in Bassenthwaite Lake, that which receives the Derwent, and is distant from this only three or four miles. That it is not a scarce fish here, may, I think, be inferred from the circumstances of two lately having been killed by a stroke of the oar." That the fish of Derwentwater, Bassenthwaite, and Lochmaben are identical, Davy proved by a close comparison of fish from the three lakes.

My friend, the late G. F. Braithwaite, knew the vendace of Lochmaben, where he often went to fish. Here it is comparatively common, and as his knowledge of the species is at first hand I take the liberty of quoting the following facts concerning it :—"In its general habits the vendace nearly resembles the gwyniad or fresh-water herring of Ullswater. They swim in large shoals, and in warm weather

often retire to deep water. Feeding principally on minute entomostracous animals, they rarely take the angler's bait, and when wanted for the table a net is employed for their capture. They spawn in November, congregating in large shoals, frequently rising to the surface like the common herring and making a similar noise by their rise and fall to and from the surface; they have a few very minute teeth on the tongue only, but the mouth is well adapted to the food on which they live. The upper parts of the body are of a delicate greenish-brown or olive colour, shading gradually towards the belly into a clear silver. The dorsal fin is dark olive and the lower fins are all bluish-white. The flesh is exceedingly delicate and fully justifies the estimation in which it is held."

THE GWYNIAD (*Coregonus clupeoides*)[1]

The gwyniad or fresh-water herring is found in both Ullswater and Haweswater, and is always referred to by the natives as the skelly. In Ullswater thirty years ago, the gwyniad was common, whilst now it is comparatively rare. Its occurrence here was mentioned as long ago as 1686 (Willughby). In Haweswater it is as abundant as it has ever been. Dr. Davy states that the gwyniad also occurs in Red Tarn, at the foot of Helvellyn,

[1] Gwyniad or schelly. The scheely, as it is called in Cumberland, is an inhabitant of almost all our large lakes, and is so numerous in Ullswater that thousands of them are sometimes taken at one draught. A few of them sometimes leave Ullswater, go down the river Eamont into the Eden, and now and then a solitary one is taken below the bay of Armathwaite.—Dr. Heysham in *Hutchinson's History of Cumberland.*

but I have failed to discover it although I have frequently fished the tarn.

It is difficult to say whether the gwyniad more resembles the herring or the trout—it is rounder than the former, thicker set than the latter. The local name "skelly" is probably from the large scales with which the fish is covered. The Welsh name gwyniad has reference to the silvery whiteness of the fish.

I have frequently of late had the opportunity of observing the habits of the gwyniad in Haweswater. The fish are gregarious; the shoals comprise a great number of individuals; and in fine, warm weather they frequently move and play about on the surface of the water. It has frequently been stated that the gwyniad does not take the fly. It would be truer to say that it does not habitually take flies. When the fish are swimming on the surface of the water on a warm evening they may be seen to take small flies, and I have myself taken a gwyniad on a trout-fly. It is also within my personal knowledge that a trout, a char, and a gwyniad have been taken on a red-spinner (on a No. 3 hook) on the same day.

The gwyniad is however essentially a coarse fish. It is almost invariably taken by netting, and, like most coarse fish, its flesh is poor and insipid.

The gwyniad deposits its spawn, not in tributary streams, but on the sides of the lake, and spawning takes place in April and May, the fish again coming into condition by the end of June.

The large draughts of "skellies" have often been alluded to. Details of one such draught in Haweswater I had from one of the netters—Mr. Noble Ewebank, a tenant of the Earl of Lonsdale. The

draught contained about 1,400 fish and filled a cart.

That the gwyniad of Ullswater and Haweswater is the gwyniad proper I have no doubt, having carefully examined several specimens; but its identity was confirmed by one of the first authorities in the country. I mention this because the late Frank Buckland makes the following statement, which from its vagueness, seems to leave the identity of this fish in doubt :—" The gwyniad is not found in Windermere, or any fish at all resembling it. There is a fish found in Ullswater and its tributaries, known by the name of skelly, which bears a considerable resemblance. His skin is almost of a pearly whiteness." I believe Buckland to be in error in his reference to the "skelly" occurring in the tributaries of Ullswater. The *chub* occurs in some of them, *and on account of its scales it is invariably called "skelly" by the natives.* As Buckland, usually such an accurate observer, did not see the fish, the confusion of local names doubtless misled him.

THE CHAR (*Salmo Willughbii*)

(*See* Chapter XV)

THE SWISS CHAR (*Salmo Alpinus*)

"At my suggestion, my friend, Mr. Fell, chairman of the Kent district, fitted up an admirable nursery for young fish close under his drawing-room windows. I sent him up some young Swiss char, which became quite tame and thrived admirably."—*British Fishes*, by Frank Buckland.

THE GRAYLING (*Thymallus vulgaris*)

Although Dr. Heysham describes the grayling as occurring in the Eden and Esk, it is strange that this should be so at so early a period, as the local introduction of this fish is of comparatively recent date. It has been introduced in several portions of the Eden, particularly in the upper reaches, but the native anglers are of the opinion that it could very well be spared. Grayling are not much fished for, and it is averred that they are more or less destructive to the ova of salmon and trout. This is true. I am aware that in other parts of the country there is a great Trout *versus* Grayling controversy, but I have no wish to enter upon it here. It has been stated that grayling are found in the Mint (one of the tributaries of the Kent) but for this statement there is no foundation.

CHAPTER XIV

Rough Notes on the Natural History of the Fishes of the District

II. COARSE FISH

THE PERCH (*Perca fluviatilis*)

THERE is scarcely a lake or tarn in the whole of the district, except those at the greatest altitude, in which the perch is not found. It occurs in almost incredible numbers in some of the larger lakes,—Windermere and Ullswater for instance—and it is probably no exaggeration to say that it exists in the former in millions. Speaking generally, the size is small, size being in inverse ratio to the quantity of fish in any particular water. This is probably attributable to the fact of the fish overstepping the food supply; and this is borne out by the fact that in some of the smaller lakes where perch are regularly netted they run to a much larger size. Although the perch is a "coarse" fish, probably that does not preclude its being called a sporting one. At all events in the Lake District it serves several useful purposes—it forms a considerable item in the food supply of trout and char; it keeps down minnows; and it affords abundant sport and pleasure to an army of visitors.

Fishing for perch was a popular pursuit on Windermere a century ago, and to-day this bold biter affords sport to unskilled visitors when every other kind of fishing fails. About 200 rods and 50 boats are on hire at Bowness, and these are mostly employed by visitors in catching perch. In fact the perch has been described as the "great staple" of Bowness. This statement takes no count of the boats at Ambleside and Lakeside, used mainly for the same purpose. At one time perch had but little protection, nor was protection necessary. They were netted the year through, but in spite of this they flourished abundantly. At present they have too much protection, and the fear is that their over abundance may go far to ruin the fishing of the lake. In fact, to a great extent perch in Windermere should be treated as vermin, and a premium put upon their reduction. At present they have a close-time, but this is quite unnecessary. Perch are not now netted in Windermere, and in consequence their size is annually decreasing. When coarse-fish netting was worth the while of the professional fishermen, thousands of small perch were occasionally brought up from the deep water by the small-meshed nets. These could not get down again in consequence of the distention of the air-bladder. Then the lake might be seen covered with distended fish. This occurred every spring, and was owing to the small-meshed nets used. At that time tons of perch were taken when spawning —in May and June—when they were unfit, of course, for food.

To give an example of the number of perch in Windermere to-day, it may be stated that in no part of the lake can a bait be dropped without in a few

moments having a perch upon it. Large perch have been taken in most of the lakes and tarns. A $4\frac{3}{4}$ lbs. perch has been taken in Windermere; a 5 lbs. perch in Ullswater; and a $5\frac{1}{2}$ lbs. perch in Bigland Tarn.

Perch spawn in April and May among the "meakins" on the margins of the lake; and, it ought to be remembered in this connection that a $\frac{1}{4}$ lb. perch will deposit about 15,000 eggs. In the Lake District perch serve a good many purposes in the economy of fishing. They provide the chief food of the pike, they are taken by trout and char, and in fishing for pike they are the chief bait. By way of illustrating the boldness with which perch bite, a local couplet has it

> "When bracken [*i.e.* fern] is out of crook,
> Bass will bite at the bare hook."

THE PIKE (*Esox lucius*)

In what is primarily a salmon and trout fishery district, the pike is naturally looked upon as a predatory fish, and is kept in check accordingly, about 5,000 lbs. being killed annually by the Water-bailiffs in Windermere alone. These fish are mainly destroyed on the shallows in March and April where they have come to spawn. From whatever cause (probably on account of the lower temperature of the water), pike in the Lake District do not attain to the size of fish of the same species inhabiting more southern waters as, for instance, the Norfolk Broads. Still, fish of considerable dimensions have been taken in one or other of the

lakes. A 29¼ lbs. pike was taken in Windermere in the nets, the largest taken by trolling being 22 lbs. Windermere pike are far superior to the fish of southern rivers; and it is said that, when in prime condition, they resemble in colour the muskalonge of the Canadian lakes. Pike of 29 lbs. and 34 lbs. have been taken in Derwentwater; and fish of 17 lbs., 25 lbs. and 34 lbs. respectively in Bassenthwaite. All the lakes, and many of the tarns, produce abundance of pike, Esthwaite Water particularly containing large numbers. Here, during the present season, a couple of anglers took twenty-four fish, the largest being 11¼ lbs. A lady, fishing with the writer in Whinfell Tarn, captured a 12 lbs. pike—a well-fed fish, measuring 36 inches. Pike are mainly taken by trolling with spoon or phantom, and by setting trimmers. This latter method is less criticised here than it would be in other districts. Pike are also found in the deeper parts of the rivers of the district, and are in great abundance in the Kendal and Lancaster Canal. As to the food of the pike, they will take when hungry anything living that they can gorge. In Windermere the staple of their food is perch. When fishing on the lake I have taken trout, char, perch, and minnows from their maws in varying stages of maceration; and in Bassenthwaite the pike are said to have been mainly instrumental in exterminating the vendace.

THE ROACH (*Leuciscus rutilus*)

Seeing that the roach is a fish of many waters, it is curious how extremely local is its distribution

in the Lake District. So far as I am aware it is not found in a single lake, and in three small tarns only—Skelsmergh, Whinfell, and Grayrigg. It occurs sparsely in the "logged" waters of the Eden, Kent, and Irt; but, on the other hand, is extremely plentiful in the Kendal and Lancaster Canal, and in the Carlisle Canal. Kirkbride, a Windermere boatman, once took three roach in the lake, and, as they were the first he had seen, returned them to the water unhurt. They were never heard of again. It is not unlikely that these had been brought as live-bait for pike, as live-baiting is occasionally done by strangers. For this purpose local anglers use small perch with the dorsal fin cut off, or large minnows. Owing to the drainage of the Kendal Canal, roach periodically become a plague in the Kent, swarming in the best trout pools. Under these circumstances I have upon several occasions superintended the netting of them. Upon one occasion, at a single draught, we had upwards of forty fish, averaging nearly half a pound each, and lying upon the grass they afforded a beautiful sight. There is a short period when the roach rises to the fly like a trout. This is just after returning to the deep water after scouring on the pebbly bottoms after spawning.

Although the roach is a coarse fish he is a very Beau Brummel of the waters, and his character in the water is in keeping with his aristocratic appearance out of it. All his movements are slow and studied. Whatever he does he does gracefully. He is never in a hurry, and rarely commits himself. Sometimes he will bite; sometimes he will not; one never knows the reason why. To catch him

the angler must have a subtle eye and a steady hand. If he is curious, he is at the same time excessively suspicious; and to catch him one must use the finest possible tackle. This does not apply to the smaller roach, which are "water-sheep" indeed.

THE GUDGEON (*Gobio fluviatilis*)

So far as I am aware, the gudgeon occurs nowhere in the Lake District except in the Kendal and Lancaster Canal; and from here, when the water is run off, it occasionally finds its way into the lower reaches of the Kent, where, upon rare occasions, it is taken by anglers when trout fishing. Twenty years ago the gudgeon was not uncommon at a particular point near Sedgwick, but now it is of the rarest occurrence.

THE DACE (*Leuciscus vulgaris*)

The dace is said to occur locally in the Eden. It is, however, generally absent from the district.

THE CHUB (*Leuciscus cephalus*)

The chub[1] occurs in several Cumberland rivers, and is here called the "skelly;" but it should be

[1] "Chub or Chevin. They go down the lake into the Eamont to spawn; they sometimes weigh 5 lbs. They are commonly called *Chevin* here; on the Eden, the Irthing, and some other rivers in the county, they are called *Skelly*, from the large scales upon them." And again: "The skelly is

borne in mind that the "skelly" proper is the gwyniad. It is found in the Eden, Eamont, and Esk; from the Eamont occasionally finding its way into the upper reaches of Ullswater.

THE BREAM (*Abramis brama*)

I confess to being considerably astonished upon first reading Dr. Day's *Fishes of Great Britain and Ireland* to find that "the lakes of Cumberland produce large quantities of bream of considerable size." This is an invention; and the only excuse for it is that possibly bream have been confused with rudd, between which there is a considerable resemblance. Even then, however, the rudd only occurs in a single tarn (Whinfell). The bream is absent from the Lake District.

THE RUDD (*Leuciscus erythrophthalmus*)

This, although common in southern waters, is one of the most locally distributed of the fishes of the district. So far as the writer is aware it occurs in Whinfell Tarn only—situate at the foot of Whinfell Beacon. For many years the few country people who fished this tarn called the rudd a bream; but

plentiful in almost all of our rivers and frequents deep holes; in warm weather it lies near the surface under the shade of a tree. School-boys make a paste of bread and some narcotic vegetable, which they throw into the holes in the river where they frequent, which the skelly greedily devours and soon becomes intoxicated, by which means they take great numbers."—Dr. Heysham.

upon taking a couple of fish, each of which weighed nearly 1 lb., the writer saw that they were rudd, and Dr. Günther subsequently identified the species from specimens submitted to him by Mr. Joseph Severs, of Kendal. The rudd has been called a bastard-bream and a bastard-roach, and at one time it was thought to be a hybrid between these two. It is, however, a distinct species. In its time of spawning, food, haunts, and general characteristics the rudd has much in common with the roach, and the description by a friend, upon being shown two fish, as "a roach done in gold instead of silver" is a happy one. The rudd is a capricious feeder, and after failing upon several occasions to take a single fish with ordinary tackle, the writer once, in a comparatively short time, took upwards of a hundred, which weighed nearly as many pounds. These were taken on an old trout-cast dressed on gut, at the end of a summer's day just as the sun was sinking. This was merely a fortunate accident, as the cast was put on only half in earnest after seeing the rudd sailing about on the top of the water, taking in various kinds of small flies. A peculiarity of this take was that every fish was almost the same size, 1 lb. During the day the rudd lies in the deepest part of its haunt, making for the shallows at morning and evening. At the former time it is a ground feeder; but when it rises from the deeper water it takes flies from the surface. A local name for the rudd is "red-eye," and of all coarse fish it is probably the handsomest.

THE SHARP-NOSED EEL (*Anguilla vulgaris*)

is common throughout the Lake District, and generally distributed. It periodically descends to the sea, October marking the time of the heaviest migrations. As well as occurring in most of the lakes and rivers, eels are found in several of the mountain tarns at a considerable elevation. Windermere, Ullswater, and Coniston have always furnished large quantities of eels; and there are one or more eel-coops on the effluents of each of these lakes. The eels found in Esthwaite Water are both large and numerous. The Crake (draining Coniston) has at least three eel-coops; and one of those on the Leven—Windermere's effluent—is said to be worth £50 a year. The eel-coops on the Leven are at Newby Bridge, Backbarrow and Penny Bridge.

Referring to eels descending from Ullswater[1] to the sea, Richardson, in 1793, writes as follows:—"Here is an immense quantity of the Silver Eel. . . . They are taken in August, September, and October, in nets, at Eel-stank, about half a mile down the river Eamont. In five or six hours eight or ten horse-loads have been caught; but such large quantities only on the darkest and stormiest

[1] "An expeditious method of taking eels is used here. Two or more persons go in a boat on a summer morning, from three till six o'clock. One gently moves the boat by the margin of the lake, whilst the other looks for eels; he no sooner sees one than he sticks it with an eel spear, and by this method great numbers are sometimes caught. I once saw a perch which weighed five pounds struck in this manner."—Clarke's *Survey of the Lakes.*

nights. The largest commonly go last; some have weighed upwards of 9 lbs. It is worthy of remark that they scarcely stir if the moon peeps out, or when there is lightning; the fishermen even think the light of a candle prevents their motion. When snow appears on the hills, they cease to descend."

Richardson rightly opined that the eels go down to the sea to breed, and he remarks that in the Derwent the young eels come up the river in April, in size "about the thickness and length of a common knitting-needle."

Throughout the Lake District eels are taken mainly on night-lines, these being sunk so as to prevent trout taking the bait—usually lob-worms. Eels attain to a large size. I have seen one of 6 lbs. taken from an eel-ark at Whinfell Tarn. This fish measured exactly 3 feet, and is the largest that has come under my notice. Bevans, one of the Water-bailiffs, stated that he had seen a 9 lbs. eel taken out of Windermere, and a $5\frac{1}{2}$ lbs. eel is said to have been caught in the Eden, at Armathwaite. The coops are first set in August, September, and October, and are fished until the approach of winter. The river watchers notice the young elvers running up the rivers in spring. These ascend in enormous quantities, and no obstruction is sufficient to bar their progress. In certain districts ropes of plaited straw are suspended over weirs to aid them in their ascent. From the angler's standpoint eels are undesirable in either lake or river, as they are great devourers of spawn, and they may frequently be seen rummaging on the trout and char "redds." Eels are bright

and silvery when taken from gravelly streams, darker when from muddy bottoms. Eel-spearing is a favourite pursuit in many parts of the district, especially in the Kent "Pool."

The Broad-nosed Eel (*Anguilla latirostris*) is perhaps less commonly distributed than the last. It affects more the estuaries of rivers, and has a preference for deep holes. I have noticed it in several tarns, and in very large numbers in the Kent estuary. It does not attain to so large a size as the preceding species. (Is the Broad-nosed Eel a distinct species?)

THE LOACH (*Nemachilus barbatulus*)

The tiny loach is essentially a fish of shallow-water conditions. In its haunt it is quite a hermit, and loves to lie under loose, flat stones, from between which it is slow to emerge. It is nocturnal in habit, and becomes quite lively when in search of food at twilight. This consists of tiny insects and larvæ, and boys frequently entice the loach from its dark retreat by dangling before it a small red-worm. This predilection for worms is also seen during a freshet, for then, like trout, the loach gets into the quiet eddies and backwaters, waiting for the soft-bodied creatures to pass. Sometimes it may be seen foraging among the aquatic grasses for anything which may have lodged there.

The loach spawns in spring; though the only fact on this head which is known with certainty is its exceeding prolificness. It has been remarked that the loach is particularly active at night, and,

when trout-fishing, we have frequently noticed it take to the shallow water, where it seems to enjoy swimming about with its back fin protruding. Eels feed much upon loach, as do otters; hence the three are night feeders. The body is covered with a smooth, slimy secretion, and on this account several of the water-birds reject it. In an extemporised aquarium half-a-dozen loach are swimming before me. With the light full upon them, they seem but little inclined to come from among their gravel, though now and again one of them takes a turn round the little world of waters to see what it can pick up. These little hermits are pugnacious enough, and show desperate fight when one offers to invade the domain of its neighbour. The most striking characteristic are six barbules about the mouth, which make the loach resemble a barbel in miniature. These testify to the fact of their living at the bottom of streams and using the mouth as a sucker in search of food. These barbules give the loach its popular name of "beardie;" it is also known locally as "eelie" and "eel-roach." Like most fishes, the loach has the power to take on itself the colour of the stream which it haunts, and those before me are greenish brown, spotted and clouded with darker brown; beneath, pale, yellowish white. The irides are blue; a medial line runs along the body, and the tail is beautifully barred.

The loach occurs in most of the rivers and streams of Westmorland and Cumberland. It is common in the Kent, and its tributaries, the Mint and Sprint. It also occurs in the Eden and its tributaries, and in the Eamont. As a rule the

loach does not exceed more than a couple of inches in length, but Richardson, the old Cumberland naturalist, says, "We saw one in the Vennet in Westmorland, which measured 5 inches; the largest here [he is writing of the Ullswater district] not more than 4. They are held in estimation by anglers, as a bait for trout, being tougher skinned than the minime. Vulgarly called Lob-loach."

In many parts of the district the loach proves a deadly bait for trout[1] when used on a "night-line" —in most rivers a prohibited instrument—and eels are very fond of it. In fact, to those who use "night-lines" the eel is a great nuisance, because it generally takes the bait before a trout has time to do so.

A close cousin to the loach, and the only other British fish of the same genus, is the SPINED-LOACH or GROUNDLING, a much rarer species than the foregoing, and less widely distributed.

Of the STICKLEBACKS the following species are found in the Lake District:

The THREE-SPINED STICKLEBACK (*Gastrosteus aculeatus*). A variety of this also occurs, viz. the SMOOTH-TAILED STICKLEBACK.

The FOUR-SPINED STICKLEBACK (*Gastrosteus spinulosus*).

The TEN-SPINED STICKLEBACK (*Gastrosteus pungitius*). Over a century ago Richardson mentions this as occurring in Ullswater, and adds that it is vulgarly called "Prickly Dick."

The sticklebacks are found in most of the rivers and brooks of the district, in the large lakes, and in

[1] Upon one occasion, spinning a natural minnow, a friend of the writer took a ½ lb. trout which had a live loach in its mouth.

some of the tarns. A special interest attaches to them, owing to their being nest-builders. They are comparatively unimportant from a fishery standpoint, but are fed upon by most of the larger kinds of fish. Trout, char, and perch certainly feed upon them. Sticklebacks are extremely abundant on the margin of Windermere, and when the mesh of the trout and char nets were much less than at present, large shoals used to be brought to the surface.

CHAPTER XV.

The Char—Char Fishing.

THE CHAR

ALTHOUGH the species of British char are somewhat obscure, it is now clearly established that that occurring in the English Lake District is *Salmo Willughbii.* Of the other British species the one which bears the greatest resemblance to the Windermere char is the Welsh char, *Salmo perisii.*

It need hardly be stated that *Salmo Willughbii* is not confined to Windermere, but occurs in Coniston, Crummock, Ennerdale Lake, Haweswater, Buttermere, Wastwater, and Ullswater; as well as in Gaits Water and Seathwaite Tarn. A careful examination of fish from the lakes and tarns enumerated above reveals no specific difference, all belonging to *S. Willughbii.*

Dr. Günther, who has paid special attention to the British chars, gives the following specific description of the Windermere char :—

"Body compressed, slightly elevated, its greatest depth being one-fourth of the distance of the snout from the end of the middle caudal rays. Head compressed, *interorbital space*[1]

[1] The two most important points in which this species differs structurally from the allied Welsh species I print in italics.

convex, its width being less than twice the diameter of the eye. Jaws of the male of equal length anteriorly ; teeth of moderate strength, four in each intermaxillary, twenty in each maxillary. Length of the pectoral less than that of the head, much more than half the distance between its root and that of the ventral ; *the base of the pectoral is entirely free, and not overlapped by the gill-cover apparatus ; the nostrils are situated immediately before the eye ; the posterior is the wider, and the cutaneous bridge between the two is not developed into a flap.*

"The scales are thin and small, those on the back rudimentary and hidden in the skin. The colour on the sides of the back is a dark sea-green, passing into blackish on the back on the greater part of the dorsal and caudal. Sides with a slight silvery shade, passing into a beautiful deep red on the belly. Pectoral greenish, passing into reddish posteriorly, the upper margin being white ; ventral red, with white outer margin, and with a blackish shade within the margin ; anal reddish, with a blackish shade over the whole of the middle, and with white anterior margin ; sides of the head silvery, lower parts minutely dotted with black."

I may remark that the white margins of the pectoral, anal, and ventral fins are very conspicuous in living specimens of these char as seen when swimming in the water.

Whether the Windermere char is indigenous to the district, or whether it is a naturalised alien, is uncertain. As, however, there is no proof of its having been introduced, it may fairly be considered as indigenous.

Among the first to mention the char as occurring in the Lake District is Sir Daniel Fleming (*circa* 1655); and it is somewhat curious that the references in the Rydal Household-book almost all refer to char from Coniston—when one would have thought that the fish would have been more conveniently procured from Windermere. The Flemings, however, have always owned a fishery in

Coniston, hence their obtaining char from that lake. Of the early writers who mention this fish, Ray calls it "Red Charre" and "Gilt Charre;" Defoe, the "Char-fish;" Camden, the "Golden Alpine Trout."

The Windermere char are larger and better fed than those found in the neighbouring lakes. Whilst the Windermere fish have increased in size, those in Coniston have degenerated. The average of the Crummock and Ennerdale fish is about the same, viz. three to the pound, odd ones being had over a pound in weight. The Haweswater char, although abundant, are the smallest in size.

The increase in size of the mesh in Windermere has raised the average from three to two to the pound. Prior to this a single net, capable of taking the smallest fish, has been known to catch from 500 to 600 fish in a day.[1] For some reason the size of the fish during the past two years has been greater than ever before. This increase in size is perhaps not difficult to account for. The food-supply has some bearing upon it, but size and weight are really determined by the amount of netting. The waters of the Lake District furnish an object lesson in this respect.

[1] "In Windermere the measures taken for the protection of char have borne excellent results. The stock of these fish and the quantity taken have greatly increased. The size is also improving, but it would seem worth while to try the introduction of fresh blood from abroad, since, possibly from long interbreeding, the variety in this lake runs very small. The largest taken within memory was one of 2¼ lbs. During my visit I saw a large number of fish, but none were over ½ lb. in weight, and the average would be about three to the pound."—*Mr. Berrington's Report, Salmon and Freshwater Fisheries*, 1890.

The harder a lake is netted, the greater is the average size of its fish—and this seems to apply to all the species. For the reason stated, Windermere has the largest trout and char, Haweswater the smallest.

The Windermere char which have come under my notice this season (1898)[1] averaged slightly upwards of ½ lb. each; and the 104 fish referred to in Harrison Chapman's letter (printed in another part of this chapter) averaged ¾ lb. each. Individual char of 1½ lbs., 2 lbs., and 2¼ lbs. have been taken in Windermere. These fish have all been taken in the nets. The largest char taken by angling weighed 1 lb. 6 ozs. On the question of size Mr. W. Harrison, of Skelwith Bridge, estimates Windermere char which are caught by trolling at between two and three to the pound; whilst those taken in the nets are larger, three fish weighing about 2 lbs. After nine inches, a well-conditioned char weighs about 1 oz. for every inch of its length.

Owing to its affecting deep water, less is accurately known as to the food of char than might be supposed. That the bulk of its food is taken from the bottom is certain. But little can be learnt from opening newly caught char; for digestion being rapid, the traces of food are slight. This in itself, however, is evidence of a negative kind. It proves that much of its food consists of various of the lower forms of life found in deep water. Several species of the *Mollusca* and

[1] The fish taken early in the season are not included in this. Although large, they were soft and poor even early in June—a quite unusual circumstance. The preceding winter was a remarkably open one.

Entomostraca have been found in the stomachs of char, also the larvæ of aquatic insects. The minute fry of other freshwater fish are also known to form part of its sustenance ; and in Windermere, sticklebacks and tiny perch have been proved to constitute its food at times. Upon one occasion a perch, three inches in length, was taken from the stomach of a char, and another individual, which rose to the fly, was found to be gorged with sticklebacks. That it feeds on minnows is well known, these being frequently used as baits. At one time char were regularly caught with worm at night, and I have recorded in the chapter on "Mountain Tarns" an instance of a resident angler taking seventy fish, in Gaits Water, with a grub. This he "threw like a fly, letting it sink a little, and then drawing it towards him in jerks—when the char took it instantly." The minnow is fed upon principally in autumn.

Whilst the bulk of the char's food is taken at or near the bottom, it occasionally takes flies from the surface. This is mainly in early summer. In May they frequently feed upon a small black fly with light wings. On a calm morning myriads of these dead insects have drifted into long streaks, and upon them the fish may be seen feeding. A teal and red body has, in certain instances, proved successful in taking char ; and when they have been taken accidentally, a small but brightly coloured trout-fly has almost invariably been the lure. In Ennerdale they take the red ant.

The rise of a char is very unlike that of a trout. There is no splash—just a gentle breaking of the water. When char are rising in this way the Windermere fishermen call it "belbing."

I have caught an occasional char with fly in both Windermere and Haweswater—but, in the former, always when fishing for trout. When the angler is successful with trout in Haweswater, he is almost certain to have a char or two among his catch; and, as an experiment only, the char may be fished for here with fair prospects of, at least, some success. Almost any red or dark brown fly will do if dressed on sufficiently small hooks. Char feed greedily upon the green drake and bracken-clock in season, and in autumn they may be seen sucking down the winged ant. It is somewhat remarkable that in June, when there is the greatest quantity of flies and other surface food, that char are then bottom feeders.

These facts are only another way of saying that the char is not a sporting fish—and this it must be confessed is the fact. Every angler is interested in the char—but not for the sport it affords. It is not only our most beautiful freshwater fish, but the most mysterious.

A peculiarity concerning Windermere char is the irregular way in which they feed. Occasionally they take freely at one end of the lake, whilst nothing is doing at the other—and this is not because the fish are absent. Then again, especially in summer, the area over which they "take" is extremely limited. For instance, for weeks during 1896 no fish could be got except in the two miles at the north end of the lake; whilst during the summer of 1897 scarcely any char were obtained in the same stretch of water. Many anglers and fishermen believe that the char from the north and south ends of the lake never pass the islands—these being about midway in the lake; also

that the movements of the char are extremely local.

The mystery which surrounds this fish is perhaps most pronounced in relation to its spawning. In Crummock, Buttermere, Coniston, Ennerdale, Wastwater, and Gaits Water, the char spawn on the sides of the lake ; in Ullswater they used to spawn in the lake itself, and in Glenridding beck ; in Windermere they spawn mainly in the lake, and, to a smaller extent, in the river Brathay.

It has been stated almost times without number that of the streams at the head of Windermere the trout go up the Rothay to spawn, the char up the Brathay. This is too general a statement, and is far from accurate. Trout spawn indiscriminately in both the Rothay and Brathay. For trout, however, the bed of the former is superior to that of the latter.

As the spawning season advances, the char, like the trout, run up both streams ;[1] but, without remaining, the char that make up the Rothay at once

[1] This fact was known to Sir Daniel Fleming upwards of two centuries ago, as witness the following :—"Up the river Routha go yearly plenty of large trouts, and up Brathy many case (a fish very like a charr, but of a different species, it spawning at another time of the year), and though these waters run a good way in one channel before they fall into Winander-meer-water, and are both very clear and bottomed alike, yet the owners of Rydal-hall (to whom the fishing of both these rivers doth belong, and have a fish-ark or coop in either river), scarce ever got any trouts in Brathy, or case in Routha-meer, in which are several islands and store of fish as pikes, perch, trouts, and eeles, the fishing whereof, as also Elterwater, Longbrigge Tarn, and other waters in the parish of Grasmere, have time out of mind belonged to the lords of the said manor."

return and run up the Brathay. Nor is this difficult to explain. The temperature of the Brathay is several degrees lower than that of the Rothay, and its colder and deeper rocky pools are more congenial to the char.

This is probably to be accounted for by the fact that the Rothay flows through Grasmere and Rydal Water before entering the lake—a circumstance which it is well known invariably raises the temperature of the water.

The number of char which now spawn in the Brathay is small compared with that of twenty or more years ago, and is annually decreasing. Nor are the fry of char now ever seen in the stream.

The spot where the char spawn is the same year by year—just opposite the wooded knoll some two hundred yards above the Church Bridge. Formerly the spawning fish were more widely distributed, and among the places where they spawned were the Badger Wheel and the King Wheel.

As the close-time for char in Windermere, Coniston, &c., is the same as that for trout—viz. between the 2nd of October and the 31st of March—it may be taken that, in the opinion of those best able to judge, the char spawn in October and November, and are again in condition by April. And substantially this is so—but with a considerable reservation. The fishermen who have spent their lives on the lake, and other close observers, state—what indeed has been known for a century—that there are, as they express it, "two distinct kinds" of char in the lake, the red char and the silver char; and that the one spawns in November, the other in February. It is further stated that the red fish spawn on the banks of the lake in November,

in a few feet of water; while the silver char spawn in the lake in February, in deep water—at Holbeck Point and Millerground Bay among other places. These are facts which no one probably will seek to controvert, but the deductions drawn from them are, I am convinced, inaccurate. I have carefully examined a large series of these red and silver fish, and can find no specific distinction whatever. That they are one and the same species there can be no doubt, but that they spawn at different times of the year is equally certain.[1] I confess myself quite unable to account for this, unless the age of the fish has some bearing upon the point. From personal observation, however, I can state (a fact which hitherto I have not seen mentioned), viz. that Windermere contains a considerable number of "gelt" char—that is, fish which do not spawn in a particular season—and this fact suggests, among others, the following interesting questions :—

1. At what age does the char first spawn?
2. Once a spawner, does the fish spawn annually?
3. Does the age of the fish when it first commences to spawn, or the fact of there being gelt fish in the lake, account for char being found on the spawning beds at different seasons — roughly November and February?

Owing to its affecting deep water, and the mystery that surrounds it, the life-history of the char is difficult to follow; but once we get an

[1] During 1898 none of the char taken up to the *middle of May* were fit for food. The majority looked as though they had just come off the "redds."

answer to the questions just stated, there will be little of mystery left concerning it.

I may add that of two female fish examined by the late Dr. Gough on January 20th, one had shed its spawn, but had not recovered its condition ; the other contained roe, but the ova was so slightly developed (on both sides) that a considerable time would be required before the fish was ready to deposit them. In the light of what has been already stated, these two specimens might represent the early and late examples of the reproductive functions.

The protection afforded to char in Windermere has had most beneficial results. The effect has been an increase both in the number and size of the fish. Originally, there was no close-time for char; and prior to the legislation on their behalf, the methods of fishing were of the most destructive kind. The fish were even taken off the "redds" when spawning. They were got with click hooks, others by netting, and some were shot. Up to 1850 comparatively small nets were used, but, subsequent to that date, very much larger ones. These nets had cheeks, or wings, with a pocket behind ; and the mesh was so small that fish half-an-inch in length were taken.

In 1878 a new order of things commenced. A close-time was fixed, the destructive nets were abolished, and the size of the mesh so regulated that no fish of less than a third of a pound could be taken. These regulations have had the desired result. The char is naturally a prolific fish, and to-day there are probably more and larger fish in Windermere than ever before.

But little has been done towards replenishing the stock of char. About thirty years ago, however, a small private hatchery for the artificial propagation of salmon, trout and char was started at Wansfell, on the banks of Windermere, and here as many as 180,000 char fry were hatched in the boxes in a season and turned into the lake. This experiment was continued for five years, and, so far as char were concerned, was a success. As to salmon, however, the experiment proved a comparative failure.

That char can be reared and kept in confinement is often demonstrated now-a-days by pisciculturists; but their knowledge was forestalled by the host of mine inn at Waterhead, Coniston, more than sixty years ago, as witness the following:—

"When at the inn at Waterhead at the northern extremity of Coniston Water, during a tour to the English Lakes in June, 1835, a number of char from this lake were kept alive by our host in a capacious wooden box or trough, into which a constant stream of water poured. They were fine examples of the species, about a foot in length. Here I was informed that a supply of this delicate fish was always kept up, that the 'curious' visitor might gratify his taste at any season by having fresh char set before him at the rate of ten shillings for the dozen of fish."

The following note, which I find among my papers, shows that by permission of the Fishery Board (Kent) char are occasionally transplanted from one lake to another. This is done with the object of infusing new blood, and so increasing the size of the fish or increasing the stock. The Windermere char are much larger than those found in Coniston.

Bowness, Novr. 12, 1892.

SIR,—

You will remember that Mr. Barratt, of Coniston, asked for and obtained permission to take char from here to Coniston. I beg respectfully to inform you that we have supplied Coniston Lake with some splendid char. I met Hully by appointment on Thursday last, and in one draw, ten fathoms from the shore, we got more than we required. I had received three tanks from the Lunesdale Hatchery, and we put all the char we thought possible to take, viz. 104. Of that number (*en route*) we lost 9. When you take into consideration the distance, I don't think this is bad work in small tanks. I average the char taken to Coniston as near as possible ¾ lb. each.

I am, Sir,

Your Obedient Servant,

HARRISON CHAPMAN.

To John Watson, Esqre.

Char have always been a delicacy obtainable at the Lakes, and "potted" char and "char-pyes" are mentioned by Sir Daniel Fleming upwards of two centuries ago, as witness the following:—

"Mar. 6. Paid John Banckes which he had paid at Kendall, February 23, 1666, for the carryage of a char-pye unto the Earl of Carlisle at London, being 4 stone and 5 lbs., 9*s.* 0*d.*—Mar. 2. Paid unto John Banckes which he had disbursed at Kendall last Satterday, for the carryage of two char-pies unto London—to the Lord Arlington and Joseph Williamson, Esq.—to Will Banckes, carryer, weight 6 stone 7 lbs.—the sum of £1."

As showing the abundance of .har in Coniston as far back as 1662, Adam Fleming is recorded as having brought "eleven dozen of charrs from Connistone for four pies;" and from the *Transactions* of the Cumberland and Westmorland Antiquarian and Archæological Society I take the following

interesting letter, contained in a paper by John Fell, Esqre., on *Home Life in North Lonsdale*:—

"Potted char seems even in the eighteenth century to have been much prized, although I fear the seasonable condition of the fish was obscured by the seasoning of the cooks of the period. A curious letter from the Duke of Montagu has been preserved, dated the 27th of January, 1738. Unless char have entirely abandoned their habits at the present date, such fish as the Duke begged for would be in the worst condition after spawning. The following is a copy of the Duke of Montagu's letter to Mr. Atkinson, of Dalton:—

'MR. ATKINSON,—

'I received yours of the 1 of this month, and also the Pott of Charr which you sent by that day's Carrier, which was the best I ever eat, and I would have you send me some of the same sort by every Carryer, take care to Pick the hen fish and those that are of the Red Kind, and let them be potted and seasoned just as that Pot was, for it cant be beter.

'As I recon it is now the best season for Charr, I would have you send me some fresh ones, directed to my Lord Lovell who is Postmaster Generall, as you did the year before last, which I think was by an express, but these came in a wooden box, which made it to great a weight for the Post to carry conveniently, therefore these shoud be put into some sort of a ——— basket and the fish packed in it in moss or some sort of thing that will keep them from bruzing and not give them a taste. You let me know what day they will be in town that I may give Ld. Lovell notice of it that they may not lye at the Post Office.

'Let them you send me be well chosen fish, and all of the Red sort.

'When you have Particulars of the Bloom Smithy Rents you'l send them me.

'I am, yours,

'London, Jan. 27, 'MONTAGU.
'1738.'"

Char Fishing

It has already been stated that the char cannot fairly be described as a sporting fish, and the instances recorded of its having been taken with fly are only the exceptional cases which prove the rule. The fact of the char spending the greater part of the year in deep water regulates the methods of fishing for it.

These are (1) by nets; (2) by trolling with plumb-line; and (3) ordinary trolling.

As to the former method—netting—but little need be said. The nets are shot in deep water, where the char are likely to be at any particular season, and are drawn on to the shallows. Reference has already been made to the destructive methods of netting in the past, and as to the smallness of the mesh ($\frac{3}{4}$ inch), but now the size of the mesh is $1\frac{1}{4}$ inches from knot to knot. This allows anything under about one-third of a pound to escape.

In the early part of the season the "deep nets" are used, but as the fish come nearer to the surface these are discontinued, and "top nets" come into use. The deep nets can be used in 30 or 40 feet of water; they are about 35 yards in length and 6 yards deep. The nets are weighted with stones, which have the effect of stirring up the mud, and thus concealing the net from the fish.

The plumb-line is an instrument contrived to meet the fact of the char swimming and feeding at varying depths, and is fished from a rod. The "plumb" takes the shape of a cone with an elliptical base, weighing from $1\frac{1}{2}$ to 2 lbs., and has a "feather," or metal rudder, to keep

it from twisting. The great point is that the artificial baits—spoons or bright bits of metal—shall be spun steadily at varying depths.

Two rods, or stout ash saplings, each of about 12 feet in length, are used, one on each side the boat; and each line has from four to six baits on it. To each rod is attached a bell, so that the fisherman may know when the bait is struck. The line (which should be of well-dressed hemp) is about 26 yards in length, and to it are lashed six droppers, or tail-lines.

It is, however, unnecessary here to go into all the minutiæ of the plumb-line tackle or the niceties of using it. For those specially interested, however, an exhaustive account of both is given in one of the appendices to this volume. The construction of the tackle and the method of using it is given in considerable detail; and as the information has been obtained from an expert char-fisher, it will, it is believed, be found correct.

From the middle of April to the end of May is the best period for plumb-lining. From early June to mid-July the results are poor; while from the latter date to the end of the season the fishing again becomes fair. These dates are, of course, approximate, and much depends upon weather, food-supply, &c. For the visitor who wishes to try his hand at this delicate and always precarious method of char fishing the best time is the month of May.

For an expert who knows the lake, a score of char is an exceptionally good day's fishing, while six or eight fish are a fair average take. The largest number of char taken by one boat (two men) is seventy-five. This occurred many years ago.

The cost of a licence to use a net for taking char is £1 13*s.* 4*d.*; for a plumb-line, 5*s.*

As to the quantity of char taken in Windermere by netting, I am in a position to give the takes from that lake for a period of six years—viz. 1893 to 1898. These are as follows:—

1893	2,791 lbs. of char.
1894	5,318 „
1895	3,289 „
1896	5,634 „
1897	3,431 „
1898	3,126 „

the average over six years being 3,965 lbs. The value of these taken at 1*s.* per lb., represents £1,179 9*s.*

It ought to be stated that during this period, owing to the char fisheries being in the hands of the English Lake District Angling Association, the netting was advisedly restricted, three boats only being employed. When, however, the lake was netted by professional fishermen, with, perhaps, eight or ten boats, the takes would be considerably greater. A single boat has been known to take as many as 70 lbs. of fish. The above refers to Windermere only.

It would be interesting to compare the yield of char now with what it was at some time considerably antecedent, and the following estimate dates back to 1820.

We may form some idea of the probable quantity of char procured in one season. I suppose, during this period, there are not less than 150 dozen of pots used for potting char, which makes 1,800—and as there are pots of various sizes,

usually sold from 5*s.* 3*d.* to one guinea each, if we average the number of fish contained in each pot at six (perhaps seven would be nearer the truth), we shall find the number of char caught in one season to be 10,800, which, averaging them at a ¼ lb. each, will amount to 2,700 lbs. weight. In the above number of char there are 900 dozens, which, at 8*s.* per dozen (the price the fishers sell them for), make the sum £360, obtained for one kind of fish only, procured from the lakes. What may be the *annual amount* of the fisheries of the lakes of the North of England I have no means of ascertaining ; but I have to observe that the char that are potted are by no means all which the lakes supply ; for considerable quantities are sent, *fresh from the water*, in baskets, to the principal places both of England and Scotland ; besides, it may be noticed that many are used in various ways at home, so that we may safely estimate the annual number supplied by the lakes at 12,000.

No doubt this is a rough comparison, but it is one that can be fairly made, and is interesting as far as it goes. The above quotation is from a letter written by John Swainson, of Kendal, in 1819.

It may be added that the price of char in 1820 was 8*d.* per lb., now it is 1*s.* 6*d.*

CHAPTER XVI

Lake and River Flies

The following list may be said to comprise the best general flies used in the Lake District. Many others might, of course, be added ; but it is thought best to load the list as little as possible—and the flies enumerated ought to take the angler through the season.

The name by which a fly is generally known is given first, the local name following in brackets, *e.g.* " Snipe Bloa (Light Snipe)."

The size of the hooks in the following list is that of the Kendal scale,[1] the smallest hook being 00, the next smallest 0, then 1, 2, 3, and so on.

Snipe Bloa (*Light Snipe*)

Hackle.—From inside jack snipe's wing.

Body.—Yellow silk.

This is one of the best flies for the rivers and

[1] For upwards of a century these hooks have been manufactured by the Messrs. Addlington and Hutchinson, of Kendal, my native town, and their first aim has always been to make hooks of the very finest quality. This spirit, exercised over a century, has given their hooks a world-wide repute. I have rarely known one of their hooks either break or " straighten " under fair treatment—and what this means to the angler need not be stated.

streams of the district, and can be fished with success the year round. No cast should be without one. Many good anglers fish nothing but this fly—one at the top and at the bottom of their cast—with a dark fly in the middle, throughout the season.

Dark Snipe

Hackle.—From outside a jack snipe's wing.

Body.—Dirty yellow, orange and purple silk.

In the early part of the season this fly dressed with the dirty yellow body will be found to be most destructive. Later on the orange body will be found an excellent fly, especially if the day be inclined to be bright and sunny. The purple bodied fly answers the same purpose, but generally the orange body will be found to be the better of the two.

Winter Brown (Light Woodcock)

Hackle.—From inside a woodcock's wing.

Body.—Yellow or golden orange silk.

This is an excellent fly at the commencement of the season, and no cast is complete without one, especially in the higher parts of the district. It can be fished well into the middle of May.

Light Brown (Dark Woodcock)

Hackle.—From outside woodcock's wing

Body.—Golden orange or orange silk.

The remarks on the Winter Brown apply equally to this fly.

Orange Partridge

Hackle.—From dark speckled feather partridge back.

Body.—Orange silk.

This is an excellent fly and may be fished with confidence throughout the season, its killing properties are, however, at their best in the spring.

Yellow Partridge

Hackle.—From partridge back, but of lighter colour than the last named.

Body.—Yellow or golden yellow silk.

A killing fly in the early part of the season, especially on the smaller streams.

Waterhen Bloa

Hackle.—From inside waterhen's wing.

Body.—Yellow or purple silk.

This fly should be fished during March, April, and May, and again in September. Trout take it best on a cold, dull, windy day.

March Brown

Hackle.—From partridge back. Medium colour and well speckled.

Body.—Dirty yellow silk, heavily ribbed with clean straw silk.

This fly does not usually make its appearance in the Lake District until April, and, should the weather be cold, its arrival is delayed well into the middle of the month. It can be fished until the latter end of May ; many anglers, however, fish at least one of these flies on their cast throughout the season.

Starling Bloa (*Light Starling*)

Hackle.—From inside starling's wing.
Body.—Yellow silk.

This fly, like the Snipe Bloa, should be fished the entire season ; it is pre-eminently one of our best flies. From May this fly should be dressed as follows. Take a feather with a creamy tip, wax the yellow silk slightly, and rib the body with pale straw. On a dark, dull "fishy" day this fly is invaluable.

May Fly

The May Fly—also known as the Stone Fly and Creeper—appears on the streams about the middle of May and lasts some three or four weeks. The invariable rule in the district is to fish the natural fly—the female for preference. It is generally fished on two hooks, size No. 4 (Kendal-bend), the head of the fly pointing towards the rod top. A fine gut line of 10 or 12 feet should be used, and when the water is low, the method of fishing should always be up stream. Generally speaking, the lower the water the better the basket will turn out.

Willow Fly (*Golden Plover*)

Hackle.—From neck or breast of golden plover.
Body.—Light golden yellow.

This beautiful fly appears about the middle of May and lasts for about six weeks. Trout take it with avidity. When fish are rising at this, the cast should have on two flies, one at the top, one at the bottom.

Black Gnat

Hackle.—From inside jack snipe's or young starling's wing.

Body.—Black ostrich herl, or three twisted fibres from feather of rook's tail.

This fly is on the water about the same time as the preceding one, but lasts somewhat longer. On account of its small size it is difficult to imitate. The best sized hook to use is a No. 2 Kendal sneck-bend; but before dressing the gnat, break a small portion off the shank. It is always as well to have some half-dozen casts when this and the Willow Fly are on, dividing them into two equal portions, having, as before stated, two Willow Flies on the top and bottom of the cast, with a Black Gnat in the middle, and *vice versâ*.

Brown or Rose Beetle (*Bracken-clock*)

This insect makes its appearance about the middle of May and lasts well into June. Like the May Fly it is always fished in its natural state, but only one hook (No. 4) is required. For some unexplained reason this insect has become almost extinct on the Kent, where formerly it could be seen in thousands. On this stream it is now little or no good fishing it.

Green Drake

This fly appears on the water towards the end of May and lasts some three or four weeks.

It is invariably fished in its natural state, the method of fishing being similar to that of the May Fly. Like the Bracken-clock, the Green Drake has almost disappeared from the Kent.

Cinnamon (Corncrake)

Hackle.—From inside or outside corncrake's wing.
Body.—Yellow silk.

A capital fly for the summer months, especially in the evening.

Dotterel

Hackle.—From neck, breast, or wings of dotterel.
Body.—Pale yellow silk, or pale yellow ribbed with light straw silk.

This fly is unquestionably one of the best night flies for the summer months, and may be fished from that time to the end of the season with excellent results.

NIGHT FLIES

It will be noticed that in the foregoing list, all flies with the exception of the March brown and green drake are "hackle" flies. In the Lake District winged flies are but seldom used for trout on streams during the day.

The reverse is the case in night fishing, when winged flies are the rule. The best feathers for wings are woodcock, brown-owl, corncrake, starling, and snipe. A little dubbing from a hare's-lug should be inserted under the shoulder of the fly.

Stout hair is preferable to gut for the casting-line, as night fishing can only be pursued when the streams are low in the summer months. The advantage gained is that hair, however stout it may be, has a greater floating capacity than gut, thus

keeping the flies off the bed of the stream, an essential when the waters are dead low. When possible, up-stream fishing will be found the most deadly at night. The angler should take care that the light—which will generally be in the northern part of the sky—falls on the stream from the opposite bank from which he is fishing. By its aid, together with a little practical experience, he will find himself able to detect a rising fish almost as readily at night as by day. The large white, brown, and yellow moths found flying about at hay-time often secure the best fish. These should be impaled on a No. 4 or 5 sneck-bend hook. Given a fish rising close to the bank, bob the moth about, when it will generally be taken. This style of fishing is, however, but slow at best; and although some good fish fall victims to it, it can hardly be recommended.

SEA-TROUT FLIES

The flies contained in the subjoined list are standard patterns for the whole of the Lake District:—

1. Wings, from speckled feather of partridge tail; hackle, black and white; body, sky blue.

2. Wings, from brown feather of partridge tail, with body and hackle of same colour.

3. Wings, from brown woodcock's tail or wing; hackle, from light yellow to dark brown; body as hackle.

4. Wings, from tail feather of grouse; hackle, black; body, light yellow.

5. Wings, dark mallard; hackle, black; body, either claret or green.

6. Wings, peacock; hackle, black and white; body, sky blue.

7. Wings, peacock; hackle, brown red; body, yellow to brown red.

8. Wings, heron; hackle, blue feather from jay's wing; body, blue or blood red.

9. Wings, from nightjar's tail or wing—tail for preference; hackle, brown to brown red; body as hackle.

10. March brown.

These flies should be dressed on hooks ranging from Nos. 3 to 10 (Kendal size). Sizes Nos. 3 and 4 are best dressed on sneck-bends; over and above that the Limerick-bend will be found the more serviceable. The most useful sizes are Nos. 4, 5 and 6.

Most anglers have their own flies for individual streams. It is well to follow the advice of a local angler, or, at any rate, his preference should be given a fair trial. Generally speaking, however, the above list will be found to contain the most killing flies for the Lake District.

All the flies mentioned in the above list are admirably dressed by Messrs. C. Farlow and Co., of the Strand, London. Practical experience proves that only the best materials are used in their construction; and I have found that their Sea-trout and Lake flies prove very effective in the rivers and lakes of the North. Once more I may warn anglers against having their flies for these waters dressed on too large hooks.

CHAPTER XVII

Improvement of Fisheries—Re-stocking

Up to the present time the efforts directed towards the improvement of the Lake District fisheries have been mainly of a negative kind. The powers with which Fishery Boards are invested are of a somewhat restricted nature, and hitherto their efforts have been mainly in the direction of instituting "close-times"; regulating the size of mesh of nets; preserving the breeding fish on the spawning grounds; and, in a smaller degree, in rendering access of fish up rivers easier. A considerable amount of good work has been done in this connection, but much remains to be done. The productiveness of the great chain of lakes and rivers is but little, if any, in excess of what it was thirty years ago; for whilst preservation has shown beneficial results in some directions, over-stocking has had an opposite effect.

The fish in most of the lakes are the produce of those which have been there from time immemorial; there has been but little infusion of new blood; in many instances, the fish have been allowed to increase in such numbers as to overstep the food-supply, with the result that

most waters are overstocked ; in-and-in breeding has tended to dwarf species ; and no attempt at cultivating the waters—a system commonly followed in Catholic times—has been made.

Nor, in the principal lakes at all events, has discrimination been exercised between the game or sporting fish on the one hand, and coarse fish on the other.

The transference of char from one lake to another has been carried out in several instances ; and irresponsible experiments (such as turning down trout-fry) have been tried in Windermere, Coniston, and other lakes.

Probably no striking results in the improvement of our fisheries will be achieved until a responsible governing body takes some particular sheet of water in hand and works on a well-thought-out plan for a definite object, and over a series of years. The results of such an experiment would be invaluable. They would afford *data* which would prove of more or less general application to the whole district.

Immediately the subject were approached, however, several difficulties would present themselves. A consideration of the case of Windermere at once suggests a set of problems. For instance :—

1. Have we sufficient accurate knowledge of the life-history of the char, particularly in relation to its spawning, to be confident that the present "close-time" conduces to its increase?

2. Are the most economical results obtained by taking char only of such a size as cannot go through a mesh of $1\frac{1}{4}$ inches?

3. Then as to the mode of capture. In the general interest, seeing that occasionally char can

be taken only in a single "cubble," is it more certain that *ten* nets restricted to certain portions of the lake (as of old) would kill fewer fish than (say) *five* nets (as now) fishing in any and every part of the lake; and further, would the former necessarily kill double the number of the latter?

Owing to the great depth and other physical peculiarities of Windermere its trout are not free risers. They feed off the bottom. In fact, it is only under certain specially favourable conditions, and over a short period, that they rise at all. Can anything be done by introducing the progeny of fish which rise freely at fly in other lakes (Loch Leven for instance) to improve this state of affairs?

Then with regard to the big cannibal trout which are so common in the lake—should these be protected or taken out? Certain it is that they do not rise at the fly, and consequently would never be taken by anglers (this, of course, is always excepting "trailing," which is sport to one man, and a species of poaching to another).

The access of salmon to Windermere has been made easy by the removal of obstacles in the Leven; and it is an interesting question as to how far the presence of salmon in the lake will prejudicially affect trout. Can we have both; or which is to be given precedence; or, on the other hand, are salmon to be debarred from the spawning facilities which the tributaries of the lake afford, so that a few more trout may be killed? The fact of the salmon's reproducing its kind is the chief factor here, because salmon are rarely, if ever, caught in the lake except by accident.

The trout angler would exterminate them, the pike fisher preserve them. The ground, however, is easier here, because it is now generally agreed that the best trout are found in lakes containing pike, provided the water is of varying depths. Pike therefore are beneficial provided they are not allowed to get the upper hand. Judicious netting of pike in Windermere would therefore increase the *number* of trout and raise the average *size* of the pike—a consummation which would satisfy both trout anglers and pike fishers.

Eels too are often exceedingly destructive, and ought to be kept down. A single eel has been known to devour 80 fry of the rainbow-trout in a night.

And then comes the most difficult problem of all—that concerning perch. Unless some check is kept upon them they increase enormously under favourable conditions. A perch of 3 lbs. 2 ozs. was found to contain 155,620 eggs. There are millions of perch in Windermere, and it is common knowledge that it is almost impossible to let down a bait anywhere in the lake without immediately getting a perch upon it. *And perch in Windermere have not been netted for six or seven years.* They are annually decreasing in size, and the drain upon the fish-food of Windermere by these millions of fingerlings may, in a short time, go far to ruin the lake. True, the perch-fry afford food for the other fishes (in the fry stage both trout and char feed upon them); but only pike tackle grown perch. (The perch has a formidable dorsal fin and knows how to use it with effect.) A

remedy for this over stocking may come (it has visited Windermere before) in the shape of a disease which carries off perch by hundreds of thousands—but this is an undesirable solution of the difficulty.

The above facts are mentioned only as showing the difficulties which beset any attempt to improve the Lake fisheries, and what applies to Windermere is more or less applicable to the neighbouring waters. A parallel case to the number of perch in Windermere is the over-abundance of char in Coniston. For some years past Coniston Water has not been netted, with the result that it swarms with myriads of untakable char.

In this general connection, however, certain broad facts stand out. Chief among these is that the harder a lake is netted (within reasonable bounds, with proper instruments, and due observance of close-times) the more fish will it produce—not only in size but number. At first sight this seems a contradiction, but actual facts bear it out.

An admirable illustration within the Lake District itself is furnished by Buttermere, Crummock, and Loweswater—the chain of lakes in the Derwent watershed. Stated as briefly as possible the facts are these :—Buttermere (the first of the chain) is netted in the least degree ; its trout run *three* to the pound. Crummock is more systematically netted, and its trout run *two* to the pound. Whilst Loweswater, which is fished hardest of all, and is regularly netted, contains the largest trout. These

run from 1 lb. upwards, and fish of from 2 lbs. to 3 lbs. are not at all uncommon. In all these lakes there is a constant and steady depletion of fish. There is no attempt to replenish Buttermere and Crummock with trout, but re-stocking with home-reared fish goes on annually at Loweswater. How this is done will be found under the head "*Smaller Lakes.*"

Mr. S. Hart Jackson, the Honorary Clerk to the Kent (Lake District) Fishery Board, informs me that he does not know of any place in England which is so full of good trout as Loweswater. Crummock (the adjoining lake) he adds, "has a very fair stock."

The converse of this state of things is found in Wastwater, Haweswater, and Ennerdale, where trout swarm but are miserably small in size.

The above facts are intended only to indicate some general principles in this connection, and to show that the improvement of a fishery is more likely to be brought about by turning to the best account the existing materials, rather than by turning down fish. Than this, nothing requires greater discrimination, and not unfrequently costly consignments of trout are wasted by indiscriminate restocking.

What has been already stated will show that before any actual restocking is done, it is absolutely necessary that a careful examination should be made as to

(1) The *nature* of the water into which the fish are to be turned.

(2) The *kinds* of fish already in it.

(3) The *stock* it already contains.

Actual restocking is usually done by one of the following methods :—By laying down

		£	s.	d.	
Eyed ova . .	at	0	10	0	per thousand.
Fry	„	1	0	0	„
Yearlings . .	„	10	0	0	„
Two-year-olds	„	25	0	0	„

These are average prices, and are for common brown trout. I have omitted anything over two-year-olds, because fish above that age are, owing to the great cost of carriage, practically prohibitive. With this choice the difficulty is to judge which method will give the best return for the cost.

Looking to the above table, the great temptation in restocking is to purchase fry ; and generally the best reason that can be given for this is *that* 10,000 *fry can be purchased for* £10. The deduction is easy to read—the fry, if turned down in suitable places, can take care of themselves ; that 10,000 fry will stock any reasonable extent of water ; that in two seasons this same water will contain 10,000 takable trout—and the thing is done.

Now this is an order of things that never occurs in nature—but only on paper.

Fry are, of course, successfully reared, but in quantities under only what are practically artificial conditions, and where constant specialist care can be given—and constant means daily or oftener. There are tiny natural streams favourably placed and peculiarly well adapted where a large percentage of fry grow into yearlings, but even under

the most favourable conditions the mortality[1] is great. Fry are usually turned down about three months after hatching, say in April and May.

Fry are lively little things, about an inch in length. If acclimatised they may be turned into streams after they have been feeding for about a couple of months. In the case of large freshwater lakes, it is advisable to turn in fry at a considerable distance above the outlet, whence they will descend in from eight to eighteen months. One of the secrets of turning down fry is that the streams in which they are to begin the battle of life are suitable to their requirements. The stream, in the first place, should be absolutely without pollution ; it should have a clean, gravel bed, with many little bays and shallows. The fry haunt the pebbly reaches, these affording them the greatest protection. The more thickly grown are the banks with plants and trees, and the stream-margin with brambles and cresses, the better. The first bring food, the second afford protection. About 4 inches of running water is the best depth for fry, and "hides" and "rests" should be inserted for them. These may consist of two bits of brick placed about 4 inches apart, and covered in with a piece of slate. Into these the fry dart when disturbed, and are there safe from their larger enemies. When the fry descend from the streams, they are from 2 to 4 inches in length.

The deduction is that fry should never be turned into large sheets of water which already contain numbers of predatory fish, not even where the conditions appear otherwise favourable. Especially is this true where there are few shallow-water con-

[1] A number of instances are given in the chapter entitled *Friends and Enemies of Fisheries.*

ditions, when the fish have absolutely no means of escape. For even in these situations yearling trout will be found, and a yearling trout grows and flourishes on nothing so well as the fry of its own species. It may be mentioned that fry begin to tell on rod-fishing between twenty-four and thirty months after transplanting.

Putting aside trout-fry, then, we come to yearlings—trout of from ten to fourteen months old. These can be purchased at £10 a thousand (*S. fontinalis* are 25 per cent., and *S. irideus* 100 per cent., higher).

When sent out, these are about 3 inches in length. They have many advantages. They travel well; they are much less delicate than fry; they are able to look after themselves; they easily accommodate themselves to new water; and, given favourable conditions, they grow rapidly. In short, yearlings are *par excellence* the best size for re-stocking for general purposes. Yearlings are usually turned down in the spring months, and have many fewer enemies than fry. When turned down in autumn, they will, in an open winter, double their length between October and May.

We now come to the question of two-year-olds, *i.e.*, trout from twenty-two to twenty-six months old. They cost £25 per thousand. There can be no question that this is the most effective method of stocking deep lakes, reservoirs, &c., except for the great cost which it entails. The cost of transit has been already remarked upon. Two-year-olds are from 6 to 8 inches in length, and if turned down in early spring often attain to half a pound by the end of the ensuing summer. In this connection it must not be

imagined that when two-year-olds are used in stocking there the matter ends; for even if the turning down has been safely accomplished, the fish require time to get used to the *ephemeræ*, &c., in place of the artificial food of the commercial fishery.

Of course, larger fish than these can be obtained for money—trout from 2 lbs. to 5 lbs. in weight—which will give immediate sport. These, however, need not be considered here.

In conclusion, it may be remarked that when experiments are made with a view to improving fishery, these should always be made where the *elements of success are present*—and this holds good of Windermere. Its trout and char are excellent and well flavoured, food is abundant and that this is of the highest quality is proved by the beautiful pink flesh of its trout. The task of improving the Windermere fishery is a great one; but it is one which can be accomplished.

At my invitation, Captain Ormrod, of Wyresdale Park, Lancashire, who has made a special study of the subject of the improvement of fisheries, kindly sends me the following interesting contribution:—

I have always looked upon the Lake District as thousands of acres of water almost wasted, but capable of being one of the finest fishing districts in the world.

Now, sir, it does not matter what steps you take with regard to improving lakes or rivers, it all comes to the same thing, and that is money; and I hardly think that people would be induced to start any scheme for improving "The Lakes" unless they had some reasonable expectation of not only success, but of their money returning to them a proper interest.

It is certain that one must be very careful how one inter-

feres with nature and disturbs the balance of animal or vegetable life.

Imagine a Fishery starting with the idea of improving Lake Windermere, for instance, and being mismanaged as so many are. Not only would a great deal of money and time be lost, but more harm might happen to the lake in a few years by this injudicious management than by any natural means.

I consider it quite out of the question to think of improving *the larger lakes* at present. Beyond keeping down the perch, which are far too numerous, I should not interfere with the present state of things. Perch can be netted out during the spawning season very easily, and destroyed. They do little harm to trout except for the fact of their being most voracious, and where there are a lot of perch there cannot be many trout.

What I should suggest is that a start should be made with one of the smallest lakes in the Lake District.

If the thing is properly managed in a practical manner, in three years' time the fame of this little lake will have reached over England. New fishing hotels will be started on its banks ; fishing tickets will be sold which will begin to repay the outlay ; and hotel managers who live on other lakes less favoured will be clamouring for some way of introducing fresh blood into their waters, so that they too may benefit by the influx of angling visitors. There is no exaggeration in all this.

I myself had a barren piece of water—Nickey Nook Reservoir—where the trout were bottom feeders, because there was such a lot of food and so few trout. They grew to an enormous size, but never rose to a fly ; the only way we could catch them occasionally was with a minnow. Now all this is changed.

Most of these monsters were destroyed, the lake was restocked with thousands of yearlings, and to-day it is one of the finest pieces of water in the country. One can go up there and get 20 or 30 fish almost at any time, fine fish too ! Now the ideal lake I would start with must have a small watershed only. It would be well if there was a hotel or good inn on or near it, and that it was accessible to the public.

I should not care if it was infested with pike or perch ;

but give me a free hand, and in three years this little lake will be an example and an encouragement for further re-stocking. I am not going to discuss the advisability of stocking with fry, yearlings, two-year-olds, &c. ; but would remark that from what I know of the Lakes, would make stocking with anything less than good-sized yearlings a waste of time and money.

Some people think that the cheapest way would be to start a small hatchery of your own in the Lake District. I need not go into the ins and outs of the question ; but I can assure you that unless things are done on a large scale, there cannot be any success ; and a small hatchery could never pay or produce fish at the same price as they can be bought from a commercial fishery.

I myself have tried a small fishery, and I know what it means : it must mean immense loss ; and unless a fishery is capable of producing between £3,000 and £4,000 worth of fish every year, it is hardly likely to last long. And I am sure there would be no chance of the people in the Lake District taking this quantity annually ; it does not matter about its position, its water supply, or natural advantage. Unless on a large scale it is doomed to failure.

There is one thing I lay great emphasis on. That is the whole system of buying fish artificially reared is completely wrong. Such have too often been overcrowded in ponds, they have lived in water which is virtually stagnant ; for although fresh water is allowed to circulate in such ponds, it is not what the fish are accustomed to living in a natural running river. Moreover, most of the fisheries feed their fish with horse-flesh, and nothing else. The fish do not get accustomed to look out for the natural food which is so essential for them, and which improves their quality and flavour. When turned into rivers the majority of them drop down for miles before they try to stem the current they are unused to.

All this I have proved by personal observation, and I am quite certain there is more profit to the purchaser if he can buy 100 fish from running water which have been used to a natural river life, natural surroundings, and natural food, than by 500 tame, horse-fed, pond-kept, flabby brutes from half stagnant ponds.

At Wyresdale we have gone in for copying nature as far

as possible, and two-year-olds are sold out of a river, the screens of which pass the whole river. The fish are kept under natural circumstances, and when turned out are ready to fight their own battle.

I am certain that if the stocking of the Lake District is carried out in a practical manner there will be a good return for the investment; and it would be of the greatest advantage not only to sportsmen, but to every hotel-keeper and resident in the neighbourhood.

Now, I consider that these lakes, which are public fishing, should be stocked by the public; but the public are not likely to stock lakes unless they are taught that it is to their interest to do so.

The lake or mere that is selected for the suggested experiment should either be private fishing, and the person who owns it should be willing to co-operate in this scheme; or those who stock it should have the exclusive right of fishing, i.e., of taking fish in the spawning season for purposes of spawning, or by letting fishing tickets at any price they choose to name.

To give you an idea of the cost of stocking a virgin piece of water that has not any fish in it, I take for example a lake of about 20 acres in extent that I have just completed. It is 20 feet in its deepest part, planted and arranged specially for fish, and fed by a small mountain stream. This place has been stocked at a cost of about £180.

We turned in about 10,000 selected yearlings, and after leaving them three months—so that they would become used to the place, and by knowing their way about be able to escape their natural enemies—we then introduced 2,000 selected two-year-olds. This we consider an average stocking, as there were no fish in it, and the water is so full of food it could have grown twice that number for the first three years. The fish put in were common Brown-trout and Rainbows in equal numbers. As these fish spawn at different seasons, they do not breed with one another, and practically give sport all the year round.

If one could find a small mere or lake from 40 to 50 acres, it would be sufficiently large for the experiment. The restocking alone could not be done under £200, and added to this there would be the cost of a watcher or keeper all the year round.

About 100 half-crown fishing tickets per annum would pay good interest on the outlay. As a half-crown ticket may only be for a day or a week, I think this estimate is very low.

In conclusion, I can only say that I shall be delighted to help forward any really practical movement towards the improvement of the fishing of the English Lake District.

I remain,

Yours truly,

PETER ORMROD.

To JOHN WATSON, Esq.

CHAPTER XVIII

Nature by the Waterside

FRIENDS AND ENEMIES OF FISHERIES

MODERN fish culture has brought about a revolution in relation to the fish-producing capacity of our lakes and rivers. Given water, and not specially unfavourable conditions, sporting fishes can be had in plenty. But whilst the raising of a stock is easy, it is by no means easy always to conserve it. In addition to man, there are always agencies at work that tend to diminution. If this applies to fish in the mature stage, it applies with a hundred-fold more weight to the same when immature. The enemies of fish are in the air, in the water, on the land; and it is only when these are enumerated that we are able to form any adequate idea of their number and methods of destruction.

Quite an army of enemies prey upon the ova immediately they are spawned. An ill-timed flood will destroy millions, tearing them from the gravel and laying them bare to a host of enemies. Mature, unfertile fish, haunt the skirts of the spawning grounds, and for a considerable time live almost entirely upon spawn; and

At Spawning

this applies equally to yearling salmon and trout. Here is an instance of a species preying on itself.[1] A pair of trout were observed spawning on a shallow ford, and another just below them devouring the ova as fast as it was deposited by the spawner. The thief was netted, and in its stomach was found upwards of two ounces of ova, or about 300 eggs. Eels work up the gravel beds, and the small river lamprey has been observed in the like pursuit. Even water beetles and their larvæ must, on account of their numbers and voracity, come within the reckoning; and among the most destructive of these are the larvæ of the dragon- and May-flies and freshwater shrimp. Recently, in the Coniston district, an instance occurred of the last-named destroying numbers of trout-fry.

The salmon deposits nearly a thousand eggs for every pound of its live-weight; and from the quantity of spawn in most salmon rivers, it would seem that nothing which man could do, save pollution, would have any appreciable influence upon the increase of the species, and the fecundity of trout is greater even than that of salmon. The eggs of the latter are nearly as large as a garden pea, those of big trout only slightly less. The ova are of a delicate salmon colour, and the cell-

[1] An instance of a trout taking another trout which was already hooked occurred in the district, and was recorded in *The Field* at the time. Mr. William Atkinson was fishing in one of our local rivers (the Lune) when he hooked a 2 oz. trout. Whilst landing the fingerling it was seized by a larger fish, both of which, by careful manipulation, were landed. The bigger fish relinquished its hold immediately it touched the landing-net—but too late. It weighed 21 oz., but was a poor fish for its size. In its stomach were the half-digested remains of another troutlet.

walls are semi-transparent, so much so that the embryo shows plainly through. Although delicate in appearance, they are elastic and capable of sustaining great pressure, and an egg thrown upon a flat surface will rebound like an india-rubber ball. The economy of the extreme prolificness of the game-fishes can best be understood when we come to consider the host of enemies which thus beset them in the first stages of their existence. Nature is prolific in her waste, and a whole army of nature's poachers have to be satisfied. So true is this, that the yearly yield of the largest salmon-producing river in the kingdom is computed at about the produce of *one female fish* of from 15 to 20 lbs. in weight, the produce of all the rest being lost or wasted.

A great deal of un-natural history has been written concerning the otter. That it destroys fish cannot be denied; but careful observation goes to show that eels and freshwater cray-fish constitute a considerable portion of its food. Otters are common in the Lake District, and the more observant anglers and otter-hunters confirm this view. I have lived all my life on the banks of a famous trout-stream (the Kent) and have invariably found trout most abundant near the haunts of the otter. The otter destroys fewer fish than is generally supposed. This may appear a bold statement, but it is a fact. It is confirmed by water-bailiffs, otter-hunters and fish-poachers. Of forty-five dead otters killed in hunting, in two only were there the remains of fish food, and this consisted of eels—deadly enemies to trout streams or salmon rivers. These forty-five otters were, for the most part killed before six in the morning, and, conse-

The Otter

quently, when their stomachs were most likely to contain traces of what had been taken in their night's fishing. I have carefully examined, with the aid of a lens, the dried excrement of otters in five cases, all taken from near holts on Lake District streams. In four cases these consisted of the hard body cases of crayfish, in the fifth the same with the scales of some coarse fish—probably the perch. I have in my mind's eye a famous river reach where otters and plenty of trout exist side by side; and where the fastnesses of the former are impregnable, disease is foreign to the stream. The economy of the otter ought not to be overlooked in connection with sport and our fish supply. Probably its increasing rarity has much to do with salmon disease, as had the extermination of the larger birds of prey with grouse-disease. A falcon always takes the easiest chance; and so does an otter. In each case they kill off the weakest and thereby tend to stamp out disease. As a fish preserver I started with certain prejudices against the otter, but observation over many years has swept these away. I do not wish to defend it beyond a certain point, but I am convinced that on a trout-stream otters do much more good than harm.

It may be interesting to add that at Bassenthwaite Lake a man and his son trained a pair of otters to catch fish in the lake. They would return when called upon, or follow their master home when the fishing was done. One of my friends has to-day a young otter which he leads about in a leash.

The Heron

Although I am afraid the heron must be written down an enemy of both game and coarse fish, yet it is such a fine bird, and employs such sportsmanlike methods, that every angler

ought to prove its friend. It is a fast-vanishing species, and the number of herons in the Lake District is but small compared with half a century ago. One of the largest heronries in the country is in Dallam Tower Woods on the Bela ; another is in Wythop Woods, overhanging Bassenthwaite Lake ; a third at Killington Reservoir ; a decaying one on Rydal Water ; and most of the adjacent Cumberland rivers has a heronry in close proximity. A fact that proves the heron a formidable trout-stream poacher is shown by the fact that one which was shot at on a rearing-pond immediately disgorged *fifty fry*. When fishing it wades cautiously with lowered head and outstretched neck, each step being taken by a foot drawn gently out of the water, and as quickly replaced in advance. Woe to the trout or samlet that comes within range of the heron's formidable pike, for it is at once impaled and gulped down. Nothing from the size of fry to mature fish comes amiss to the heron, and the young whilst still in the nest consume great quantities. Their swallow is insatiable, though sometimes they gaff an individual which is difficult to dispose of. As an example of "the biter bit," it is related that a heron was seen one evening going to a piece of water to feed ; the spot was visited next morning, when it was discovered that the bird had struck its beak through the head of an eel, piercing both eyes ; the eel thus held had coiled itself so tightly round the neck of the heron as to stop the bird's respiration, and both were dead. It has been suggested that a heron's services in the destruction of pike, coarse fish, rats, &c., may fairly be set off against its depredations in trout-streams. But to this statement I must dissent ; and if a trout-stream and a

heronry are to flourish in the same district the former must be carefully watched.

In past times the fish in the Lakes attracted some of the nobler birds of prey, such as the Golden and White-tailed Eagles, and the Osprey. The first named formerly bred in the neighbourhood of Ullswater; whilst during the second half of the last, and the beginning of the present centuries, the White-tailed or Sea eagle was by no means uncommon among the Lakes. Of a dozen eyries of this fine bird one was on Wallow Crag, near Haweswater; and from the vicinity of one of the nests, when the birds had young, thirty-five fish (mostly lake trout) were taken. It also nested among the precipitous mountains which surround the head of Ullswater; and here, as in the case above mentioned, its prey consisted mainly of Great Lake trout and the waterfowl of the lakes. Another bird which the fish in the lakes attracted is the Osprey. Even now scarcely a year passes but what individuals occur. Once it bred commonly in the district, and almost every mountain top, with wood in the vicinity, had its pair. Wordsworth describes watching a pair of them fishing, and Dr. Davy not unfrequently saw them dashing into the tarns. The last-named always refers to this bird as the Gray or Fishing eagle.

Birds of Prey

The dotterel is an interesting bird from the angler's standpoint. It still breeds upon the top of our highest mountains, but in ever decreasing numbers. This is owing to the persistency with which it is hunted down for feathers for fly-dressing. I have found it breeding upon Skiddaw, Sca Fell, and Helvellyn; and in 1895 I was instrumental in inducing the Westmorland County

The Dotterel

Council to give this interesting species special protection during the breeding season. The following quotation explains the persecution which the dotterel at one time experienced in the Lake District: "Years ago it was quite the custom amongst the miners to have a day's dotterel shooting, and through the shepherds or the miners seeing them when going to their work, it soon got abroad when the dotterel had arrived in spring, and every man who could procure the loan of a gun would have a day ''mangt dotterel,' whilst they were as tame as barn-door fowls, and before they had distributed themselves over the fells. But now, through the mines being mostly closed, the gun-tax, the extermination of vermin, and anglers using feathers for artificial flies that are but little inferior to those of the dotterel and more easily procured, one can hardly understand their scarcity." In the writer's opinion the dotterel's decrease is almost entirely due to the great demand for skins. The birds were mainly shot either on their spring or autumnal migration, and at the former season I remember an instance when seventeen birds were bagged in a morning. The large price offered for the skins acted as a prize for the dotterel's extermination; and some years ago a quarryman had a dog which was trained to find the nests. It is probable that the virtue of flies dressed from dotterel's feathers has always been exaggerated, and in my own opinion a good imitation (from a starling's wing) almost invariably proves as killing; and this is the opinion of most Lake District anglers. Upon one occasion the police authorities handed me four skins taken from a poacher, and although I used the pick of the feathers the flies did not prove specially deadly.

This beautiful little gull is a great destroyer of both salmon and trout in the fry and yearling stage; and the number of smelts they destroy at certain seasons is almost incredible. The bird, with its laughing cry, hovers over the stream or estuary, and never lets slip an opportunity of snapping up a trout or samlet that has left its place of safety. Francis Francis was fully aware of this fact, and sets down both gulls and terns as notorious offenders. A couple of hundred gulls will devour a thousand smolts per day; and the birds may be seen at Loch Lomond travelling to and from Gull Island and the burns all day, each with a trout or parr in its beak. I have frequently witnessed the like performance on the Kent and Duddon Sands. This must have a considerable effect on the future supply of grilse.

The Black-headed Gull

Of all the birds of the streams and lakes none is so beautiful as the kingfisher; and its presence is peculiarly in keeping with the rapid, rocky trout streams which it loves to haunt. It is, however, one of the most persistent of trout-stream poachers; and it is stated that as many as eighty of these beautiful birds have been killed in a season on a famous fishery in the midlands. However one may wish to protect the kingfisher, there is no denying the fact of its *penchant* for fish, especially the fry of salmon and trout; the bad habit is bred in him. As in the case of the heron, nothing will save fry from these marauders but covering in the rearing ponds with the finest wire net.

The Kingfisher

The following is no fanciful picture. I have witnessed something like it a score of times. Over there is an overhanging bough, and upon it

has just alighted a kingfisher.[1] At first it is motionless, then it assumes more animation. Then it falls, hangs for a moment in the air like a kestrel, and returns to its perch. Again it darts with unerring aim and secures something. This is tossed, beaten and broken with its formidable beak, and swallowed head foremost. This process is again and again repeated, and we find that the prey is small fish. From watching an hour we gain some estimation of the vast number of immature fish which a pair of kingfishers and their young must destroy in a single season.

The Dipper

As to just what part the dipper plays in the economy of salmon rivers and trout streams naturalists are by no means agreed. Frank Buckland said that one might as well shoot a swallow skimming over a turnip field as a dipper over the spawning grounds. And this view I

[1] "Then the kingfisher, with rufous breast and glorious mantle of blue, would dart like a plummet from his roost, and seize unerringly any little truant which passed within his ken. The appetite of this bird was miraculous; I never saw him satisfied. He would sit for hours on a projecting bough, his body almost perpendicular, his head thrown back between his shoulders; eyeing with an abstracted air the heavens above or the rocks around him, he seemed intent only upon exhibiting the glorious lustre of his plumage, and the brilliant colours with which his azure back was shaded; but let a careless samlet stray beneath him, and in a twinkling his nonchalant attitude was abandoned. With a turn so quick that the eye could scarce follow it, his tail took the place of his head, and, falling rather than flying, he would seize his victim, toss him once into the air, catch him as he fell, head foremost, and swallow him in a second. This manœuvre he would repeat from morning till night; such a greedy, insatiable little wretch I never saw."—*The Autobiography of a Salmon.*

believe to be the right one. For fifteen years back I have systematically watched and examined those parts of the rivers Kent, Mint and Sprint where trout spawn. On these, fish of every size were upon the gravel beds which constitute the spawning "redds." Almost at every turn the dipper glinted from a grey stone and went piping up stream. As some of these were seen actually rummaging among the pebbles a few were shot for examination. Although the *post-mortems* were carefully conducted, no trace in any single instance of the presence of ova of either trout or salmon could be found—only larvæ of water-haunting insects, roughly representing the four great families of trout-flies. It may be admitted that individual dippers have been seen with tiny fish in their bills, and dippers in confinement have been fed upon them. It may be asserted, then, that the water-ouzel has been known to eat fish, but that fish form no chief portion of its food; and finally, that it would be quite incorrect to describe it as a fish-eating bird, and therefore as an enemy to salmon and trout. On the other hand it is not difficult to show that it is indirectly beneficial to a fishery. It is well known that among the chief enemies to spawn are the larvæ known as caddis-worms, that of the dragon-fly, May-fly and stone-fly, and also of the various water-beetles. Now, all these have been found in the stomach of the dipper, and therefore it must confer a decided benefit on the salmon and trout streams where it haunts.

Waterfowl are among the trout-stream poachers, and the swan is a perfect gourmand. Some of the best streams in the district have been seriously injured in this respect, and this is not to be

Water-fowl

wondered at when a swan will devour a gallon of fish spawn every day while it remains unhatched, if he can get it; and it is easily found. Both wild and domestic ducks are destructive to spawn, and almost live on the "redds" during the breeding season. We have more than once shot moorhens in autumn with spawn dripping from their bills, and the birds themselves gorged with it. The Coot has been charged with the same crime, although as yet guilt has only been brought home to it with regard to coarse fish. The grebe or dabduck must be looked upon as an arrant little poacher not only of eggs and fry but of fish in every stage of growth. It is said that a pair of dabducks will do more harm on a river than a pair of otters, which, however, is perhaps not so terrible as it sounds. Several pairs of grebes fishing a mile of river, as I have known, would certainly injure it; and the late Mr. Bartlett stated that a pair of these birds which he kept in confinement cost the Zoological Society a considerable sum in providing small fish for them. Frank Buckland had a grebe sent to him which had been choked by a bullhead, and the same fate has not unfrequently befallen kingfishers and other aquatic birds.

The Cormorant

This is another enemy, a poacher, that studies the migratory and local movements of fish, and acts accordingly. It is the habit of this bird (fortunately it is not common in the Lake District) to visit small rivers which flow into the sea, especially during the late winter and early spring months. At these seasons the smolts are preparing to come down, and the salmon kelts and sea-trout are assembling in the deeper pools prior to their return to salt water. A brace of

cormorants which were shot at their fishing were found to contain twenty-six and fourteen salmon smolts respectively, and a trustworthy water bailiff asserts that he once watched a couple of cormorants hunt and kill a kelt salmon, and that after dragging it ashore they commenced tearing it up, when they were driven off. It was once thought that both the cormorant and heron only ate that which they could swallow whole, but this is now known not to be strictly correct.

The fact of members of the *Salmonidæ* devouring the spawn of their own kind has been already referred to, and unfortunately the practice is continued after the eggs are hatched. The big fish sometimes so terrify the tiny trout and samlets that the latter throw themselves clean out of the water and lie gasping on the pebbles, while the would-be devourer beats about the shallows disappointed at losing his prey ; and the pike is a greater water-wolf still. The pike has been known to increase at the enormous rate of from eight to ten pounds a year when favourably placed for feeding. So voracious a creature is the pike, and furnished with such digestion, that it will destroy a half-pound trout a day for twelve months—a terrible drain upon any stream. Then it has an all-capacious maw for silvery smolts as they are making their way down to the sea, and of these at certain seasons it destroys myriads. Of course, pike keep coarse fish under, which are indirectly injurious to trout, and in their way confer a benefit upon the angler. There is another way in which he is beneficial, and that is as a scavenger. A diseased salmon or trout never lives more than a

Pike
Kelts

few minutes in his presence, for he gulps down fish, fungus and all. In this connection there is one fact which ought not to be overlooked. Of late years disease has played terrible havoc in some of the best rivers in the country. In one of these, known to the writer, scarcely a fish is caught which does not show scars left by the disease—want of tail, partial loss of fins, and white patches where the fungus has previously grown. That numbers of fish do survive there can be no question; and that the disease may be prevented at the cost of a few fish I have but little doubt. This may be considered a bold assertion; but in these days of artificial rearing, restocking and preservation, anglers and angling associations are apt either to forget or to ignore the balance of nature. Now, nature rarely overlooks an insult. Destroy her appointed instruments and beware of her revenge. That the salmon and trout may live, a whole host of stream-haunting creatures are condemned, and that often upon the most insufficient evidence.

Smolts

There is one wholesale method of destruction that particularly affects salmon which cannot be passed over. This is done by nets, and is usually practised at the mouths of rivers, and generally without the slightest regard to the economy of the fish supply; and it has been found that as salmon and the means of transit increase, so does the number of destructive nets. Theoretically, legislation is levelled against this wanton destruction, but practically the law is a dead letter. At every tide, in certain seasons, hundreds of thousands of salmon fry and smolts are sacrificed; and in a certain firth it is recorded how a fisher-

man in his nets walked, in many places, knee deep in dead smolts, and that the ground for a considerable distance was silvered with their scales. Under these circumstances the samlets sometimes accumulate to such an extent that they have to be carted on to the nearest land and used as manure. This waste of valuable fish food is so great that it can hardly be reckoned, and in future years must tell greatly upon the British yield of salmon.

APPENDIX I

Plumb-line Fishing for Char

A PLUMB-LINE, as its name implies, has a leaden weight at the bottom. This weight, or plumb, is a cone with an elliptical base, weighing from a pound and a half to two pounds, and having a "feather" or metal rudder to keep it from twisting. An average plumb-line consists of twenty-six yards of well-dressed stout line, to which are lashed six droppers, or tail-lines. The top dropper is about five yards from the top of the line, the others following at intervals of four yards, while the bottom dropper is about a yard from the plumb. The junction of the droppers with the main line is effected by means of "shackles." Shackles are made of stout brass wire securely soldered. At either end of the shackle is an eye or circle, the upper eye being about half an inch in diameter, while the lower is barely an eighth of an inch. These eyes are about an inch and a half from each other. Round the upper eye is fastened an 8-link, to which the main line is knotted and whipped to prevent chafing. The next section of the line is similarly knotted and whipped to the lower eye.

The Plumb-line

It will thus be seen that the main line is in seven distinct pieces. One piece of five yards from the bell to the first shackle; five pieces of four yards; and the odd piece, of about a yard, from the bottom shackle to the plumb. Round the straight portion of the shackle another piece of wire is fixed, by means of an eye, at right angles; and to this, each separate tail-line is knotted and whipped. The bottom dropper is four yards long and the others are a yard longer in succession, thus making the top one nine yards in length. Each dropper

terminates in a trace of medium lake gut, three yards in length, and having a brass swivel at either end and in the middle. Thus the top dropper is twelve yards long from the bait to the main line, whilst the bottom one is seven yards.

Baits

The baits are made of thin metal, so shaped that the wings or ears are on the principle of an Archimedean screw, which causes them to revolve rapidly when drawn through the water. Each bait carries a treble hook, linked through a hole in the bait by means of an 8-link. Some anglers fasten the bait to the trace with an 8-link, while others use a watch spring swivel, which is a great convenience if one wants to change one's bait. Char baits are made of various metals; but copper, electroplated with silver on one side, is the most reliable. A good variation of this is to have a few baits gilded on the copper side with gold leaf; and also a few gilded on the silver side. Many trollers have baits of real gold plate; while some of the more ingenious have barred baits, made of strips of metal soldered together. In fact the varieties of baits are almost endless. Brass and copper is sometimes a good bait in summer, and brass and red in spring; while a bit of lacquered tobacco box will sometimes take well. It is probably owing to slight variations in the light that one bait will kill fairly well when the char will not look at another; for often times the variation in shade is so slight that none but the most practised eye can detect it. As a rule, light copper and silver is by far the best; yet there are times when for days together scarcely a fish will be caught on these baits. A beginner should have his first set of tackle made by a thoroughly reliable man, who will put on a good general selection of baits, and he should not move his baits until experience has taught him when and how to do so.

Speed for Trolling

The speed at which the troller rows his boat should not be more than one-and-a-half miles per hour, and some trollers go little over one mile per hour. Another important point is the portion of the lake to be fished. The neophyte should notice where the other char fishers are, and row towards them; in fact, it will often pay to keep the lines in the boat until professional fishermen are sighted.

Before starting, carefully examine how the butts of the rods are fastened to the boat, and make sure that by no chance can one rod work loose; neglect of this precaution generally means a lost line. A stout strip of wood should be screwed to the top inside plank of the boat on either side, projecting three or four inches above the gunwale, to serve as a stay for the rod. Also a large copper nail should be knocked into the gunwale (just in front of the offset) for about an inch, and the remainder of the nail allowed to project upwards.

It is well, for the first few times at any rate, to have some one to row the boat, if an old char fisher, so much the better; but if alone, the angler must remember that his boat must never be allowed to stop while he has a line in the water. Therefore he must give a couple of strokes with his oars between each operation.

First see that the plumb is securely fixed to the main line. Let the plumb sink until you come to the shackle. Place the larger end of the shackle upon the nail. Give two strokes with oars. Take hold of bottom bait. Throw it into the water, and *see that it spins*. Let out tail line until you come to the shackle. Give two strokes. Lift shackle off and let out main line until next shackle is reached. Place shackle on nail. Give two strokes. Let out next bait and dropper, and so proceed until the top shackle is reached. *Before* lifting off this shackle, securely fasten the line to the rod, and make perfectly sure that no jerk or strain will cause it to come loose. Give two or three good strokes. Lift off the shackle, let the line pass through the fingers till no more is left. Place the butt of the rod in the slot made to receive it, and allow the rod to rest against the wooden upright. A few steady strokes with the oar next to the rod, and one side is complete. The same operations must be gone through with the other side, bearing in mind to pull harder with the oar next the rod that is fishing, in order to prevent the boat turning round.

Letting out the Lines

You now row steadily forward until your bell tells you there is a run. Wait a short time to see if the fish is hooked, for it is no joke taking in a whole side and then letting it out for a fish that has never been hooked. If the fish is hooked it will soon

When a fish strikes

pull again. Before commencing to take in, bear in mind that the fish you propose to catch is exceedingly tender in the mouth, more so even than a grayling. There must be no jerking with the oars, no rough pulling at the line; in short, as honest Izaak said of the frog, "You must handle him as if you loved him." Place the landing net, with the net hanging over the stern of the boat, so that you may pick it up in an instant. Having seen that everything is ready, slowly lift the rod back into the boat, so that the top of the rod points towards the bow of the boat. Take hold of the main line with the hand nearest to it and give a stroke with the other. Take in the main line to the top shackle and place this on the nail. Give two strokes and then pull in the dropper, coiling the line neatly upon the stern sheet. Place the bait on the side next the gunwale. Give two strokes. Haul in the main line to the second shackle, which place on nail. Proceed thus, laying the line coil upon coil, until you reach the dropper, upon which is the fish. Never let the fish have a dead pull upon the nail. Take the dropper in one hand while you place the shackle upon the nail with the other. Never let go of the dropper. Keep the boat going with the other hand. Two things must be avoided at all hazards—one is letting the line slack, i.e. allowing the fish to rush forward faster than you are hauling in; the other is allowing the fish to get under the boat; either of these is generally fatal. Having pulled the dropper in until you reach the gut, give a stroke forward, rise to your feet, step to the back of the boat, catch up your net, and with one clear stroke net your fish. Shake out the fish into the back of the boat, and let out as before.

The most expert angler will lose many fish; sometimes they will not hold. I remember once having nine runs before I got a single fish, while the next eight runs accounted for eight fish. On an average you should get three fish out of every five runs. A score char is an exceptionally good day's fishing, while six or eight fish per day are a fair average take. The largest number taken by one boat (two men) is seventy-five, but that was many years ago.

Proportion of runs to fish

In all kinds of angling hurry is the enemy of success;

but in char-fishing this is especially so, for if one is in too great a hurry one is almost sure to get the various tail lines mixed together and a set of char tackle "weel hankled" is something to remember. You will have to go on shore or go home.

Care should be taken that the landing net is thoroughly well dressed to prevent the hooks getting fast in it. The bowl or rim ought to be about fourteen inches in diameter, and the shaft should not be less than four or more than five feet in length, well balanced and tapered. Many anglers prefer a sixteen-inch bowl, but the above is amply large enough for char, and it is very important that you should strike quickly, for a char comes off the hook very easily.

Occasionally a big trout or a seafish will seize your bait, or even a pike. Most trollers know what it is to be broken by these gentry, but on the other hand they sometimes pay for their temerity with their life. A couple of years since Mr. J. Satterthwaite killed a twelve-pound pike on an ordinary set of char tackle. A four-pound trout is twice as difficult to kill on char tackle as on an ordinary rod, and requires the most skilful and careful handling. But big fish are very rare, and one may troll for weeks without hooking anything but char, especially during the summer months. If by chance a big fish is hooked, turn your boat slowly so that you may sail with the wind. (This is also necessary when char fishing if the wind be strong.) Then take in the opposite plumb line. This is a most excellent wrinkle; for, if you try to work the fish with the other line out, the chances are that it will dash into the free side and fasten itself. Once fast, he will soon tear out the hook or smash the tackle. Having taken in the one side commence upon the other. Be sure when you come to the fish not to put the shackle on the nail until you have got a couple of feet of line into your hand. Experience alone will teach how much strain to put on the line; but fight your fish boldly, it is far more likely to succeed than allowing it to rush about as it pleases.

APPENDIX II

Close Times in the Five North-Western Fishery Districts

The Kent, &c.,	Close time for Salmon: (*a*) Nets: Sept. 15—Mar. 15; (*b*) Rods: Nov. 15—Mar. 31.
	Close time for Trout: Duddon, Windermere, Coniston, Oct. 2—Mar. 31. Bela, Sept. 1—Feb. 15. Elsewhere, Oct. 2—Mar. 1.
The Derwent	Close time for Salmon: (*a*) Nets: Sept. 15—Mar. 10; (*b*) Rods: Nov. 15—Mar 10.
	Close time for Trout: Sept. 15—Mar. 10.
The Eden	Close time for Salmon: (*a*) Nets: Sept. 10—Feb. 10 (Solway Firth); (*b*) Rods: Nov. 16—Feb. 15.
	Close time for Trout: Oct. 16—Feb. 28.
The Lune	Close time for Salmon: (*a*) Nets: Sept. 1—Mar. 1; (*b*) Rods: Nov. 2—Mar. 1.
	Close time for Trout: Oct. 2—Mar. 1.
West Cumberland	Close time for Salmon: (*a*) Nets: Sept. 15—Mar. 31; (*b*) Rods: Nov. 1—Mar. 10.
	Close time for Trout: Sept. 2—Mar. 10.

APPENDIX III

Distributors of Licences in the Kent (Lake District) Fishery District

Kendal	Messrs. Atkinson and Pollitt, *Gazette* Office.
Ulverston	Messrs. S. Hart Jackson and Son (Clerks to the Board), 49, Market Street.
Ulverston	Mr. James Atkinson, Stationer.
Coniston	Mr. R. Bowness, Post Office.
Broughton-in-Furness	Mr. J. F. Dawson, Post Office.
Bowness	Mr. R. Robinson, Post Office.
Ambleside	Mr. W. J. Ewington, Post Office.
Dalton	Mr. C. Godby, Post Office.
Grasmere	Mr. J. C. Hodgson, Post Office.
Milnthorpe	Mr. Thomas Stainton, Hang Bridge.
Cartmel	Mr. Teasdale, Post Office.
Newby Bridge . . .	Mr. Thomas Wren, Post Office.
Hawkshead	Mr. R. A. Simon, Draper.
Kirkby	Mr. Thomas Barr, Post Office.
Barrow	Messrs. S. Hart Jackson and Son, 3, Lawson Street.

APPENDIX IV

Angling Associations.

English Lake District Angling Association. Secretary, Mr. George Gatey, Solicitor, Ambleside.

Carlisle Angling Association. Hon. Secretary, Mr. H. H. Hodgkinson, Carlisle.

Kent Angling Association. Hon. Secretary, Mr. C. Hutchinson, Finkle Street, Kendal.

Ambleside River Anglers' Association. Hon. Secretary, Mr. R. Satterthwaite, Vicarage Road, Ambleside.

Leven Angling Association. Hon. Secretary, Mr. A. B. Dickson, Haverthwaite.

Ulverston Angling Association.

Keswick Angling Association. Hon. Secretary, Mr. John Gibson, Savings Bank, Keswick.

Bela Angling Association. Hon. Secretary, Mr. Lewis Elburn, Milnthorpe.

Coniston Angling Association. Hon. Secretary, Mr. T. Mandell, Fern Vale, Coniston.

Brampton Angling Association, Brampton.

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