

The National Anguilla Club

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CONTENTS

EDITORIAL.. .. .	12
EEL FISHING IN KENYA, by Andrew Hunter	13
WHAT A RUN, by David Ball.. . . .	16
THE WHITEMERE MONSTER, by David Holman and Alan Hawkins ..	16
TREES POOL, by Clive Houghton.. .. .	17
TREES POOL, by Alan Hawkins	21
A REPORT ON THE 1973 REPORTING SCHEME, PART 1, by Alan Hawkins	25

EDITORIAL

It has seemed strange, this year, to actually suffer from the effects of the Close season. Up until now, enough waters have remained open, by one devious means or another, to permit angling to go on more or less unhindered. But this year there seems to have been a panicky rush to lock the gates. One wonders why.

Let us consider an interesting case history. Until 1974, Leisure Sport allowed close-season angling on all 11 pits in their Yately waters because, it was said, Dr. Anne Powell was conducting a series of experiments to determine the effects of close-season angling on the health of fish stocks. What did these experiments consist of? They consisted of one uninteresting little pit closed to angling where hundreds of jack pike were slowly starving to death having eaten everything else - presumably this was the unfished control. And they consisted of a net strung exactly across the centre of another pit; you were allowed to fish one side of the net, but not the other. In principle, a good idea, by sampling fish from each side and comparing them, it should have been possible to work out the effects of angling pressure.

But there was a snag. The pit with the net was about as far from the car park as you can get at Yately. Now, at least 90% of all Yately anglers patronise the lake alongside the car park. About 9% fish the three lakes immediately adjacent to the car park pit. Only about 1% fishes the pit with the net, and most of that 1% is me. And I fish exclusively for eels, all of which I take away!

Well, surprise, surprise, the latest Leisure Sport handbook says that the results of their biological research at Yately suggest that there is no deleterious effect from close season fishing. They did, however, admit that fishing pressure was a bit on the low side - though obviously, in their opinion not low enough to invalidate the results.

The queer thing is, just as they announce that close season fishing does no harm, they up and lock the gates. It seems a bit weak, somehow. Two perfectly good ways of carrying on occur to me. The first is to have the courage of one's (supposed) convictions and having 'proved' it is all right, to carry on. The other way is to continue the 'experiments'. From Leisure Sport's point of view, the loss of substantial revenue during the close season must be something of a blow.

The plot thickens if one takes Tri-Lakes fishery into account. This is slap-bang in the middle of the Leisure Sport pits; very much part of the same system it is perfectly possible (though illegal) to simultaneously fish one rod in Tri-Lakes, and the other in any one of three Leisure sport pits. Now Tri-Lakes, at 50 p per day, remains open every close season, including this one. They make no fuss about it, they just do it.

Frankly, I think it high time this close season nonsense was ended once and for all. More credible authorities than Leisure sport have failed to show it does any significant damage; much less than done, for example, by the power-boat and water-ski merchants. Do they have a close season?

Angling, to my mind, is about human enjoyment. It is only indirectly concerned with fish conservation, and, in any case, we now have the ability to quickly restock any waters in the unlikely event of them suffering more from angling in April and May than from the other ten months of the year.

Alan Hawkins.

EEL FISHING IN KENYA

by Andrew Hunter

(One of David Holman's friends moved out to Kenya a few years ago and, being a keen eel fisherman, was determined not to let the small matter of a few thousand miles change his sport. He has very generously written us a piece on his experiences in Africa - experiences to make our mouths drool a little. Andrew also sent us some excellent colour photographs; unfortunately our Bulletin has not yet reached the level of sophistication that will let us include colour prints, but at least some of the members were able to see them at the recent Whit trip).

.....

The most common freshwater eel in Kenya and the one which attains the greatest size is Anguilla labiata. It is a mottled green and brown fading to a dirty yellow underneath and differs from the European eel and the other smaller type found in Kenya (Anguilla Mossambica) by (a) having rudimentary barbels 1/8" long protruding from the upper jaw near the nostrils and (b) by its size!

My personal best is a 15 $\frac{1}{2}$ pounder which I believe is a rod-caught record in Kenya. (Not surprising since I only know five or six other people who fish for them!) I have seen a piece of an eel from a farmer friend's deep freeze which was caught on a hand line and apparently weighed 25lbs.

The main habitat of the eels in Kenya are the two principal rivers, the Tana and the Athi which join some 150 miles from Nairobi and eventually flow into the Indian ocean north of Malindi on Kenya's coast-line. I imagine that their life cycle must be similar to that of the European eel in that they return to the sea only to breed.

Having done a lot of fishing for eels in the U.K. with my very dedicated pal, Dave Holman, I was delighted on my arrival in Kenya in 1970 to hear that large eels were occasionally caught on hand-lines and in nets. It was some time, however, before I actually met anyone who had seen one. Eventually I was talking to an Asian chap about fishing when he told me that he had caught a large eel on a hand-line at a place called Kindaruma on the Tana river. Shortly after this I arranged an eel-fishing safari up there with a friend.

Kindaruma is a Hydro-electric dam - 107 miles from Nairobi on some of the worst 'roads' in the Country. Pot-holes and fine dust are the order of the day in dry weather whilst mud and water constitute quite a hazard during the rainy season (March to May - long rains, and in September - short rains). The dam is approximately 1 $\frac{3}{4}$ miles long and a $\frac{1}{2}$ mile wide with an average depth of about 15 - 20 ft., except near the dam wall where it is, of course, considerably deeper.

It is difficult to describe the excitement we both felt on our arrival at the dam at about 4 O'clock in the afternoon on that first trip. We were loaded with tent, grub, tackle and by far the most important item, a cooler box full of cold Tusker lager! Hippos were grunting and snorting over in the comparatively cool water where the river Tana flows in and a couple of crocs sun-bathed on a sandy bank a couple of hundred yards away. I might add that a .22 rifle was usually included in our equipment in the early days though we never needed to use it. Not knowing what to use as bait at this stage we had brought Ox-hearts and other delightful offal delicacies to try and it was two chunks of this that went hurtling out to our chopped liver ground-baited patch, 25 yards or so from the bank, on conventional ledger tackle.

It was about 6 O'clock before the first run happened and in the meantime we had been amusing ourselves by catching Tilapia (a perch-sized fish weighing $\frac{1}{2}$ lb. and incidentally tasting delicious) and barbus, a silvery scrapper

which looks like a cross between a bream and a barbel. I heard a noise and turned round to see the silver paper on my Mk. IV carp-rod jam in the ring and the line pur off the open spool of my Mitchell. I do not mind admitting that my heart was pounding away like a Perkins diesel as I clipped the bale arm over and struck. I felt the distinct thump thump of an eel for a few seconds before the line went slack and I reeled in a mangled piece of heart folded over the hook point so that it couldn't possibly penetrate.

The next bait was put on more carefully with the point of the hook actually protruding. Another run, but this time it was dropped, probably the hook point had pricked the eel and scared it.

This failure to hook a fish properly went on until just before dark (7 pm all the year round) when with about our 5th run, the hook went home and after quite a scrap, a 4lb eel emerged and was duly unclipped and popped into the waiting keep-net. It was at that point that I realised one of my many early errors. That eel had run maybe 50 yards (I was fed up with not hooking them properly) before I had struck and yet the thing was only lip-hooked. I came to the conclusion that maybe meat was not a very suitable bait after all as they seemed to use it as submarine chewing-gum and wouldn't swallow it.

Just about then I caught a small tilapia about 3" long and decided to try it. Not ten minutes later, with dusk closing in, together with the usual fantastic assortment of nocturnal sounds (frogs, crickets and the occasional elephant trumpeting irritably from the bush across the dam) the silver paper rocketed into the rings with a sound that drowned everything else. I let it go and suddenly it stopped. Would it go again, or was this another dropped bait? Sure enough, within half a minute it was off again and even before I struck I knew I would connect.

I hit it, and the rod arched over until I thought it must break. (I have since abandoned the Mk IV as being far too light for the job.) Eventually after quite a long fight an 8½ lb eel was wrestled ashore.

After this, things went quiet and we pitched the tent (not the easiest of things to do in the dark) fixed up some food and drank to the largest eel I had ever seen.

Next morning we were up bright and early although it was 8.30 before we got the first run. After this we picked up eels quite steadily, using small tilapia as bait, until about 12.30 when once again everything went quiet and after another couple of hours we regretfully packed up and headed for home.

Our total catch of eels on that first trip was nine weighing from 3 lbs (we don't normally get any smaller) to 8½ lbs.

One of the biggest problems with the eels at Kindaruma has always been getting them out once they have been fought to the bank. We've tried an immense landing net which we eventually had to give up as by the time we had made one big enough it wouldn't fit into the car! A gaff is quite effective for the larger ones, but personally I do not like using it.

Finally we adopted the wrestling method, i.e. when the eel has been brought into shallow water, one of us gets behind it and tries to scoop it out onto the bank, often with hilarious results. Once on the bank a miniature rugby scrum usually develops as Anguilla labiata is far more agile out of the water than the European eel and can move surprisingly quickly. To give you an idea of how agile, a 10 lb. eel a friend of mine caught one evening jumped out of a sack I was holding off the ground - the following morning!

Although in the U.K. Dave and I found that the most successful time for eel fishing was at night, especially between dusk and midnight, out here from 5 pm till dark, and morning from 8 am till 1 or 2 pm are best. Night-time rarely produces much and by early afternoon I suspect it is too hot.

One notable exception to this was on my 4th trip to Kindaruma when I hooked

something about midnight which I just couldn't stop. It took my 18lb line to the end of the spool and me up to my knees in water (a habit I don't normally pursue at night in crocodile infested water) before I was forced to save the rod by pointing the top at the fish and heard the line snap like a pistol shot.

Quite a few people have suggested it was a crocodile but I think I know what an eel feels like by now, and am certain that it was indeed an eel, although how big, I wouldn't like to guess. I have caught several double figure eels since and have been present when several more have been caught but I've never felt anything like that completely uncontrollable run that night.

I came back to the UK for a short time in 1972 and managed to persuade Dave to sell me a beautiful eleven foot fast-taper, hollow glass rod which he had built and which is superb for eel fishing out here. To give you some idea of its power, I subdued a 70 lb. Nile perch up at Lake Rudolf with it on 20 lb. line last year. It also handled the 15½ lb. eel without any serious problems, although I did have to give line several times and the fight, I suppose, lasted 20 minutes.

The reel I use with this rod is a Mitchell 408 salt-water reel and holds 300 yards of 18 lb. test. I reckon any eel that beats me on that lot deserves its freedom.

The six largest eels we've taken are:-

15:8	1973
13:0	1971
12:12	1973
10:8	1972
10:6	1971
9:12	1970

A recent addition to the list is a specimen of 15:6 taken on May 12th this year.

I am sure that there are much bigger ones to be had, but one of the main problems at Kindaruma is the fluctuation of the water level. Often we arrive there after 2½ hrs hard driving, only to find that the level has dropped and that sand banks are showing all over the dam - especially over the last 18 months as a new Hydro-Electric scheme is being built 5 miles upstream from Kindaruma at Kamburu.

At the time of writing, the new valley has just been flooded and when it has settled down I will be giving this new and larger water a thorough going over.

I am looking forward to Dave's proposed visit out here, as I'm sure if anyone can get a 20lb. eel out of the dam, it's him. I would like to add that should anyone else be interested in coming on a fishing holiday, I would be more than pleased to look after them.

Apart from the eel fishing, the trout, cat-fish and sea-fishing (I have my own boat down at Mombasa) have to be seen to be believed, and the £130 spent on the return air-fare guarantees the fishing holiday of a life-time.

P.O. Box 46562,
Nairobi
Kenya

Now then, Arthur; we have been talking for a while about how we would all like to go on an expedition if we could only find the right place. We'll take it in turns to watch out for crocodiles, and how are club funds, Clive?

Seriously, though, I am sure Andrew Hunter would welcome a letter from any of you, and given £130, I, for one, might be booking my flight.

WHAT A RUN!

by David Ball.

It is time, I feel, before vicious rumour distorts the facts, to tell the plain unvarnished truth about the epic catch in the Thames.

Note, in the first place, that it was a boat rudder, and not a boat propellor. As everyone knows, weight for weight, the fight of a rudder is far stronger and more prolonged than that of a mere prop.

We were fishing, John, Richard and I, on a warm sultry summer evening with an embarrassing number of bleak dead-baits in the Thames at Kingston. John and Richard like true Anguilla Club members were sleeping soundly. I was engaged in knitting an unusual little garment with an SS4, a Mitchell Intermediate, and a lot of 15lb monofilament.

Then the piercing tone and red light of my left-hand rod. I had (I maintain) one hell of a run, struck, felt (I say) one surge of power, and then the line went solid. I heaved for some time and then called the others.

The S50 creaked, the line stretched and twanged, and lots of little muscles I never knew I had protested loudly. Slowly I gained on the monster, but if I relaxed only a little it plunged to the depths again.

"Must be enormous," I panted. "Hell of a run."

"Could be another bootlace in a Christmas tree." said John - I did not answer verbally.

At last a great shape swirled briefly on the surface and vanished again. It was too dark to make out how large it was, but the fight seemed to have gone out of it and I led it to the edge and heaved it out.

At last we knew the truth about the Kingston monster.

*

THE WHITEMERE MONSTER

by David Holman and Alan Hawkins

While on the general subject of things that go bump in the night, those of you who diligently browse amongst our past Bulletins may recall a somewhat improbable tale of your worthy Chairman being stalked by some monstrous entity around the banks of Whitemere one dark and stormy night. Now there are those, I well know, who secretly believe the supposed 'monster' to be no more than incipient D.T's, produced by a week's heavy drinking and afternoons baking under the hot sun. A dark suspicion which must have gained ground recently when the same worthy was observed to indulge in some pretty peculiar activities after a particularly heavy session in the bar at Westfield Lakes. Be that as it may, the Whitemere thing did, I assure you exist. And almost certainly still does. To convince all the sceptics, I have independent corroboration of the story. From a man of such impeccable character that his word can hardly be doubted even if (I have to admit it) mine can. David Holman, to be precise, and I can do little better than to quote direct from his letter.

'I was especially interested in the (article) entitled "Whitemere revisited" The "Thing" in the wood was a true account of exactly what happened to two of us when fishing the Mere about 1965, and although this was the only occasion we fished the swim I remember the lilies quite clearly.

We were both experienced night anglers but not as brave as you (not true, Ed) we cowered as it crashed towards us. Then it turned and seemed to follow the path away.

"Must be Ronald Biggs," we thought (he had recently escaped). We had both been severely scared and I was very glad I hadn't been out on my own.

"Perhaps it had been a badger?" my mate asked. All I could think, if it had been a badger, he must have been pulling a coal wagon, and why would it smash up branches like it did?'

And in a second letter, Dave goes on to say:-

'This night at Whitemere frightened both of us and I didn't go night fishing again on my own for a long time. Andy, (the lad with the Kenya eels) said afterwards that he would have swum for it, if he could have moved. What puzzled us most was that it had been so close to us, breaking up branches and crashing about and yet we could not find anything next morning that had been recently broken and the ground, although wet, had only been disturbed by us.'

*

TREES POOL

by Clive Houghton

Trees pool was, by my standards, an exceptional water. Although John Harris and I failed to capture a really large eel from it I feel that we did learn much which will stand us in good stead when we fish similar waters in the future. Accordingly, I have decided to publish this article for two reasons. The first is to attempt to clarify my own ideas on our experiences at this water and the second is to assist others in the group who may face the prospect of fishing similar waters.

Before describing the fishing, I feel that a diagram and a brief description would be helpful.

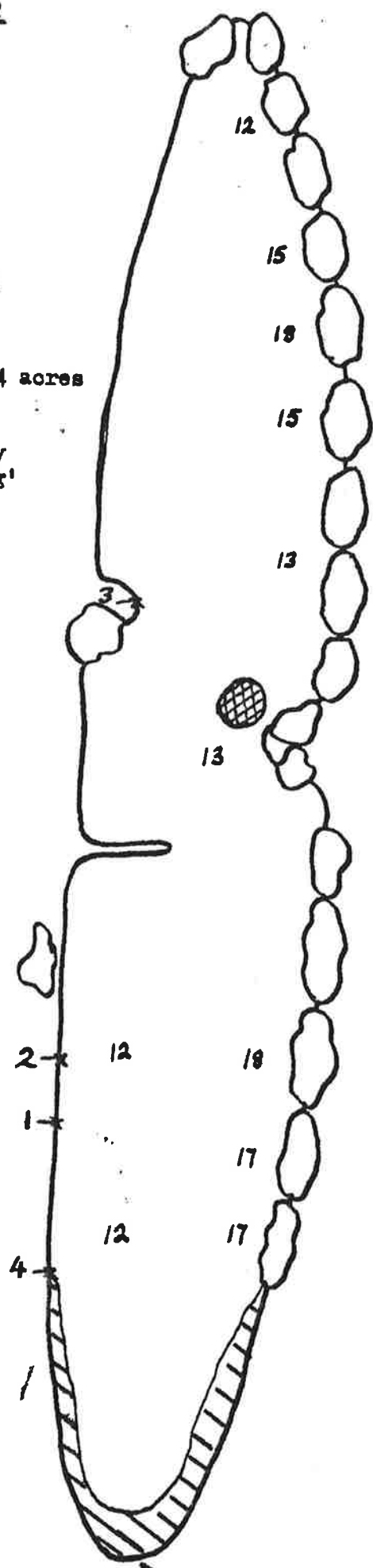
An outline map of the water is shown overleaf. The water is a gravel pit; we believe that it has been filled for approximately thirty years. As can be seen from the diagram, a stream passes the water some thirty yards away - despite the fact that it is nearly dry in summer it is the only possible access for elvers. (Unless the water possesses an underground access about which we are unaware). Apart from one or two small patches, surface weed is non-existent; the water is fairly clear with a good average depth and in most places is five or six feet deep within a yard or so of the bank. The heavily wooded bank is extremely steep, too steep in fact to fish effectively from; accordingly we fished from the other bank from which we could cast across the pool. We soon discovered the existence of the deep channel whose location can be seen on the diagram; once we had done so our efforts were concentrated upon it. Nevertheless, baits were also fished in other areas and eels were caught by doing so.




TREES POOL

Class 2.2

Size 3 - 4 acres

All depths measured by 'Depthaplug'



-  Trees
-  Surface Weed
-  Reeds
- 12 ft** Depths in Feet

Stream:
Presumed access

About 30 yds

John Harris located the water in the season before I first fished there. In two sessions he took four eels between 2:13 and 3:5. Naturally when we were in the same area the following year he suggested that we took time out to fish it, even though it was the middle of the day.

We began fishing at one in the afternoon in the swims marked 1 & 2 in the diagram. We fished until four-thirty and then left having taken one eel; however, this weighed 4:6 $\frac{1}{2}$, so we were naturally rather keen to return!

During the rest of the season we spent a total of 436 rod hours on the water, capturing seventeen eels averaging just over three pounds each. The best fish weighed 5:0 $\frac{1}{2}$ and came on a night session which produced other fish of 3:11 and 4:6 plus three smaller ones. I think it would be fair to summarise the water as being above average, both for the rate of catch and for the average size of the eels caught. As to the likelihood of it producing bigger fish I will discuss my thoughts on this in more detail later.

Several interesting points arose during the time spent fishing the pool, the first of these was missed runs, and seemed to effect only myself and not John. I feel that this was due to the fact that the problem only arose at the end of the season, at which time I was fishing the water alone. I began to experience stop-start runs of the type normally produced by that obliging creature, the 1 $\frac{1}{2}$ lb. jack pike. A few yards of line would be taken, there would be a short pause and the process would be repeated, possibly up to half a dozen times. The eventual strike invariably produced an eel of over two pounds, or a complete miss. On a couple of occasions, however, I did manage to connect briefly with one of these twitchers, on each occasion it was definitely an eel, and in one case, a very good eel indeed. Both fish parted company with the hook as I began to pump them in, causing me to think that they were only very lightly hooked in the first instance. The problem reached its extreme on one night session which produced seven runs for three eels between 2:11 and 3:1 - pity I missed the other four! I should emphasise that I have never come across this problem on other waters, I do not know any solution to it, and would be grateful for any ideas from other Club members.

Having covered the one purely negative point which arose, let us move on to more positive things. Firstly, the capture of eels in the daytime. We all know about Abberton, but I often feel that group members are loathe to learn from results elsewhere and to turn new techniques to good use on their own waters. Don't think that I am adopting a holier than thou attitude here; in some respects I have been guilty of this failing myself, as I hope to show later on. At the time we fished Trees Pool, John Harris was the only group member to my knowledge, apart from those fishing Abberton, to deliberately set out to catch eels in the daytime. His results were occasionally spectacular; however, it was left to a friend of ours, not a group member, to really strike gold. His first ever session in John's company resulted in fish of 5:4 and 4:2. An examination of my personal records reveals an even more surprising feature; of a total of 14 eels of 4 lb. plus which I have known to be caught by friends and myself from waters in our locality in the last four seasons, no less than ten of them have been caught in the light. More importantly, six of the fish have been taken as a result of deliberate short sessions in the daylight. One during a morning session, three during the afternoon, and two on evening session; both the evening fish were taken well before dark.

Total Eels	17	Median	3:1
Total Rod Hours	416	Lower quartile	2:10
Mean RH/E	25	Upper quartile	3:14
RH/2	26		
RH/3	46		
RH/4	104		

These figures place Trees Pool second from the top of our overall list for waters up to and including 1972, and fourth in the list for results on dead-bait only. To suggest, as Clive does, that the water is a bit above average is thus a little modest; it is very much above average, a very good water indeed. Clive's claims that this water not only produces good quality fish, but also produces them at an encouraging speed, are also borne out by the figures.

Now to get to a more detailed discussion of the points raised. A useful place to start, it seems to me, is to consider the suggestion that sport declined with successive visits to the water, and that most of the big fish were caught first. Below, I have tabulated the results session by session as in our standard form 4 method :-

Swim No	1+2	1+4	1+3	1	1	1	1
Date	26/6	22/7	23/7	27/8	28/8	2/9	3/9
Total RH	15	24	164	42	69	39	63
Total Eels	1	2	6	2	3	1	2
RH/E	15	12	27	21	33	29	31
Cumulative RH	15	39	203	245	314	353	416
Cumulative Eels	1	3	9	11	14	15	17
Cumulative RH/E	15	13	23	22	22	24	26
Eel Weights 1.	4:6½	3:8	2:8½	2:13½	2:13½	3:2	2:12
2.		3:4	2:5½	4:0	3:1		2:1
3.			3:11½		2:11		
4.			4:6				
5.			1:13½				
6.			5:0½				

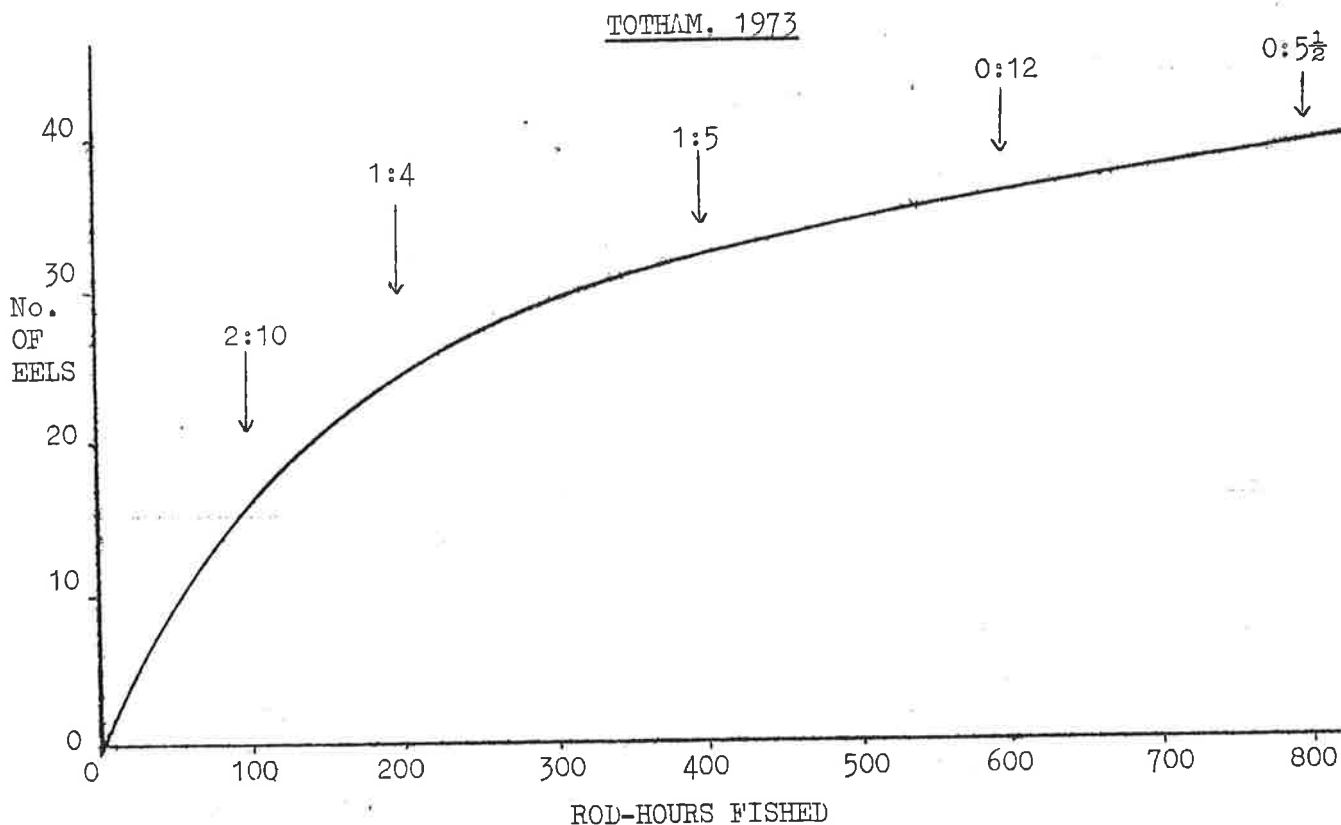
As you will see, I have combined John Harris' and Clive Houghton's results to produce an overall picture; this has the complication that different swims and grouped together, but, as Clive has already stated, different swims did not show up with markedly different results.

As far as rate-of-catch is concerned, there was a slight overall drift towards slower sport, but this was not great; certainly, the decrease was not enough to put anyone off fishing the water and is unlikely to be statistically significant. The situation is complicated somewhat by the fact that some sessions were exclusively daylight affairs, whereas others were the more traditional overnight trips. Undoubtedly this makes a difference, but the data are rather too small to permit useful separation.

Turning to the other aspect, the size of the eels caught, the statement that fish became progressively smaller as time went on is only marginally supported by the data, as a glance at the table above will show. To summarise it a little further, the median weights of successive groups of six eels were:-

1st group, 3:6; 2nd group, 3:7; 3rd group (5 only) 2:12.

Nevertheless, I do believe that Clive is correct in saying that sport does tend to decline in a rather disappointing way in small pits of the type he describes. An excellent example of this turned up last year from Terry Jefferson and Chris Davy, at a water called Totham Pit. This is a small Essex gravel pit, and the pattern of results is set out in the graph below. What I have done is to divide the time fished into successive 100 rod-hour periods, and then plotted the number of eels caught in each period.



Thus, in the first 100 rod-hours, 16 eels were caught; in the next 100, 9 fish were taken, then 3, and so on. Progressively, as time went on, the eels caught became fewer, and the rate of catch became steadily slower.

What is more interesting, however, is the trend in the weight of the eels caught. This is shown on the diagram by the arrows; the median weight of the first 16 eels was 2:10, the median weight of the eels caught between 100 and 200 rod-hours was 1:4, and, at the end, the median weight for eels taken between 600 and 800 rod hours was a miserable 0:5 1/2. At Totham, therefore, the quality of fish caught declined in a very convincing way, giving, I think, precisely the sort of pattern Clive Houghton was talking about.

There are also several other waters where this sort of effect has been found, for example, Newton pond, or Elvington pond - both small Yorks pits. The interesting question is why do we get this pattern of results, why should the eels caught get smaller as time goes on.

Two possible explanations occur to me. The first is that big eels may tend to dominate smaller ones, controlling a particular territory and having (on average) first refusal at any food item in the area. On this hypothesis, only when the big fish have been removed do the bootlaces get a chance at the baits. The second idea was suggested to me by one of the Tenchfishers - John Spilsbury. His suggestion was that big eels may move further and faster in search of food than little ones, thus tending, on average, to find food items quicker than the small ones. This also would give the

type of result we observe, and I do not know how we can distinguish between these two possibilities. One thing that might be relevant, however, is the tendency for eels to become cannibals in densely populated waters. It has, for example, long been known that eel steaks are an excellent bait for the larger eels at Butlers pit and, more recently, Dave Ball discovered that he had more runs, and caught more eels at East Halton pit using eel steaks as bait than using more conventional dead-baits. If bootlaces run a real danger of being eaten if they are abroad when a big eel is on the prowl, then it seems quite probable that bootlaces learn to keep their heads down when larger fish are moving - i.e. the dominance idea. But this is only surmise, and it will be difficult to prove one way or the other.

Turning now to another point Clive raised, I think his comments about hot-spots were of very great interest. Particularly the notion that once a hot spot has been located, there is little point in moving to other swims on the same water. Once again, this is borne out by other waters, for example Newton pond. Here, there are two swims, which actually cover almost the same area, which produce nearly all the eels from this water. Now, continuous fishing at Newton produces the decline in rate of catch and of eel size as we have noted above for Totham. And once one is onto the path of diminishing returns, there is little point in trying a new swim - other swims will not produce either.

The thing to do at Newton is to wait a while, to give the water a rest of a few months. Then, the 'hot' swims will produce eels rapidly again for a short while!

From these sorts of result, it seems to me that only a fraction of the eels present at any one time in a water are actually accessible to angling. Much the same was said by Fred Taylor in the Angling Press a while back, when he commented that he had been astonished at the number of eels found in a pool being drained, especially since very few were ever caught by angling in the water.

Speaking personally, I suspect that there are two types of eel in our waters (in angling terms, that is). There are those which live in such an area, or feed in such a way, that they are accessible to our baits, and are prepared to take them. But, I believe, there are also eels which live entirely in places where we cannot get a bait (in a dense weed bed, for example), or, are so pre-occupied with a particular type of food (a mussel bed, for example) that they would not take our baits even if they found them.

Over a period of time, there is an interchange between these two populations. Some of the weed bed eels move into open water, and some of the open water fish move into the weed. But if we remove all the open water fish, the resultant flow will be entirely from the 'weedbed' to the 'open water'. Hence, after a suitable time interval, an apparently fished out swim will miraculously start producing again.

The definition of a hot spot, therefore, becomes an area which is occupied by eels accessible to angling. It does not necessarily contain a high proportion of the eels actually in the water, it is simply the only place where the fish live in such a way that they can be caught.

Small waters, such as Trees Pool, may have only one, or perhaps two, of these 'hot spots'. On larger waters, I believe that the same may occur, but that the 'hot spots' may be more numerous, or cover a much greater area - for example, the effective hot spot of a large London gravel pit may be the whole of the water above, say, 12 feet in depth (which can be most of the lake, and gives rise to the familiar location problem).

A REPORT ON THE 1973 REPORTING SCHEME: PART 1.

by Alan Hawkins.

As before, I propose to split the results of the 1973 reporting scheme between two Bulletin articles. In this, the first, I shall discuss members' performance during 1973 - very much the material I presented at our last Spring GM. The second article will be concerned with results from individual fisheries, updating our lists of waters to include 1973, and, for the first time, considering what we have learned from the repeat sessions scheme from two years of study.

I would apologise for the lateness in getting this material out. A major problem is that all the session reports and report forms were not to hand until early Spring, and by that time I was somewhat pre-occupied with preparations for the forthcoming NASG conference. However, I believe our new way of working, with regional reporting officers, will overcome this problem in the future; certainly, the members in my group are being prompt in sending me material, and they are to be congratulated on co-operating so well.

Now to the results: Nineteen members took part in the 1973 scheme and reported 418 eels taken in 13,160 rod-hours of angling.

The number of eels caught ranged from 1 to 60 per member. The median number caught was 10, the lower quartile (LQ) was 5, the upper quartile (UQ) was 35. The four members above the UQ caught 188 (45%) of the eels, the four least successful members caught 11 (3%) of the eels.

The effort recorded ranged from $67\frac{1}{2}$ to $1,573\frac{1}{2}$ RH per member. The median effort was 525 RH, the LQ was 335 and the UQ was 1,136 RH. The four most active members put in a total of 5,333 RH (40%) of the effort, the four least active members put in a total of $651\frac{1}{2}$ (5%). In 1973, it was noteworthy that no less than 6 members each contributed over 1000 RH effort - a quite outstanding performance reflecting great dedication to the sport, and in general the level of effort was up on 1972 by a substantial margin. This can only be to the good of the Club and it is to be hoped that members maintain the same enthusiasm through 1974.

At the AGM, members decided they wanted a more detailed breakdown of members' performance than had been customary hitherto; especially, they wanted to know the numbers of eels of a given size (2lb plus) that we each had caught. The relevant facts are therefore set out in Table 1, overleaf.

Speaking personally, I am not greatly in favour of publishing these data, for, I feel, they may lead to individual jealousies, or criticism of the less successful individuals. This, to my mind, is quite contrary to the spirit of the Anguilla Club, which places emphasis on effort and group participation, rather than upon individual success. There are many reasons for not catching numbers of large eels, not all of which are concerned with personal skill. One also has to find the right waters - there is more than a small element of luck here - and one's personal life has to be such that one can exploit the waters at the most appropriate times. Not all of us can do this.

Anyway, for what they are worth, the figures are set out in Table 1, and require no further comment.

The 1973 season marking the seventh year of the National Anguilla Club's reporting scheme, it is instructive to compare some of the facts relating to members performance from year to year. The relevant figures are set out in Table 2, overleaf.

Table 1. Performance of Individual Members, 1973.

Member	RH	E	RH/E	2+	3+	4+	5+
Ball	1,573 $\frac{1}{2}$	38	41	10	2	1	-
Billington	1,178 $\frac{1}{2}$	35	34	9	6	-	-
Bowyer	232	10	23	7	3	1	-
Brown	260 $\frac{1}{2}$	14	19	3	-	-	-
Crawford	414	5	83	3	1	-	-
Davy	442	50	9	31	16	3	-
Goldsmith	467 $\frac{1}{2}$	9	52	4	-	-	-
Grey	628	27	23	6	1	-	-
Hansen	337	3	112	3	1	-	-
Hawkins	956	40	24	7	2	-	-
Hope	1,322	27	49	11	2	1	-
Jefferson	525	35	15	21	11	2	-
Orme	1,136 $\frac{1}{2}$	12	95	1	-	-	-
Smith, A	92	4	23	3	3	-	-
Smith, D	335	23	15	4	-	-	-
Szwechlowicz	67 $\frac{1}{2}$	1	67	1	-	-	-
Sutton	1,053	21	50	6	4	2	1
Vandercruysen	605 $\frac{1}{2}$	3	202	1	1	-	-
Watson	1,444 $\frac{1}{2}$	60	24	18	12	5	2

Table 2. Members' Performance, 1967 - 1973.

No. Reporting	1967	1968	1969	1970	1971	1972	1973
No. reporting	19	22	26	20	24	18	19
Median No. of Eels	7	8	10	13	11	11	10
UQ	12	18	24	24	20	29	35
LQ	3	3	4	2	6	3	5
Median No. of RH	329	266	288	255	479	425	525
UQ	1184	442	662	357	742	650	1136
LQ	214	108	126	153	281	186	335
Total E	204	294	423	334	363	322	418
Total RH	11300	10100	11600	8200	11970	7534	13160
RH/E	55	34	27	25	33	23	31

Taking each item of Table 2 in turn we can see that the number of members reporting in 1973 was 19, somewhat less than the total Club membership. Perhaps difficulties in handling the various forms contributed to this; if so, the revised way of working should ensure a better return for 1974.

As far as the number of eels caught per member is concerned, the median number - 10 - is well within the normal seasonal range; indeed the median has not changed greatly over the years. Much the same can be said for the LQ. By contrast, however, the UQ again rose, this time to 35, reflecting a general trend for the more successful anglers to go progressively further ahead from season to season. As before, there was no great relationship between rod-hours fished and eels caught, reflecting once again marked differences between fishing styles and water choice within the membership.

The effort put in was the highest in the Club's history and reflects, as noted before, a very high level of enthusiasm within the Club. Unfortunately, however, the eels caught did not increase quite proportionally (at least by comparison with 1972) and the rate-of-catch returned to about the 1971 level. It may well be, however, that 1972 will turn out to be a quite

unusual, not only in terms of rate-of-catch, but also in terms of the size of eels caught and the performance of different bait types (see below)

2. The Overall Results: eels caught.

As in previous years, it is necessary to separate Abberton Reservoir from the main body of the results, since this water remains exceptional in the rate-of-catch, size of eels caught and the time of day at which they are caught. This does not mean that Abberton results are wasted; indeed, I have now devoted two Bulletin articles to results from this water; simply that Abberton results could bias the other results towards an unrealistic pattern for the majority of the waters we fish. As before, therefore, the following discussion is concerned with all eels except those caught at this reservoir, termed 'all other' in the tables which follow.

The overall results for the 1972 season are set out in Table 3, and are compared with results for previous seasons in Table 4.

Table 3. The Overall Result, 1973

Weight Range	Abberton Res.		All Other		Total 1973	
	N	CF%	N	CF%	N	CF%
0 -1	0		109	29	109	26.
1 -2	7		152	70	159	64
2 -3	18		67	88	85	85
3 -4	17		33	97	50	96
4 -5	3		9	99	12	99
5 -6	0		3	100	3	100
Total E	45		373		418	
Total RH	142		13,018		13,160	
Mean RH/E	3		35		31	
RH/2	4		118		87	
Median	2:14		1:7			
UQ	3:5		2:4			
LQ	2:2½		0:14			
IQR	1:2½		2:6			

Table 4. Annual Trends 1967 - 1973 and cumulative total, 'All Other'

Weight Range	1967		1968		1969		1970		1971		1972		1973		Cumulative 1967 - 73	
	N	CF%	N	CF%	N	CF%	N	CF%	N	CF%	N	CF%	N	CF%	N	CF%
0 - 1	111	54	157	53	181	43	131	39	118	35	60	24	109	29	867	39
1 - 2	51	79	81	81	179	85	129	78	105	67	96	62	152	70	783	75
2 - 3	24	91	38	94	43	95	48	92	71	88	64	88	67	88	355	91
3 - 4	15	98	13	98	11	98	21	98	30	97	22	97	33	97	145	98.5
4 - 5	2	99.5	3	99.5	7	99.5	3	99.5	8	99.2	7	99.2	12	99	42	99.5
5 - 6	1	100.	2	100	2	100	2	100	2	99.8	2	100	3	100	14	99.9
6 - 7	0		0		0		0		1	100	0		0		1	100
Total E	204		294		423		334		363		251		373		2,204	
Total RH	11,300		10,100		11,600		8,220		12,000		7,304		13,160		79,684	
RH/E	55		34		27		25		35		29		35		36	
RH/2	270		180		180		110		100		77		118		120	
RH/3	630		560		580		316		291		251		290		400	
Median	0:13		0:14		1:2		1:2		1:5		1:9		1:7			
UQ	1:12		*:11		1:9		1:14		2:5		2:7		2:4			
LQ	0:8		0:8		0:11		0:11		0:11		1:1		0:14			
IQR	1:4		1:3		0:14		1:3		1:10		1:6		2:6			

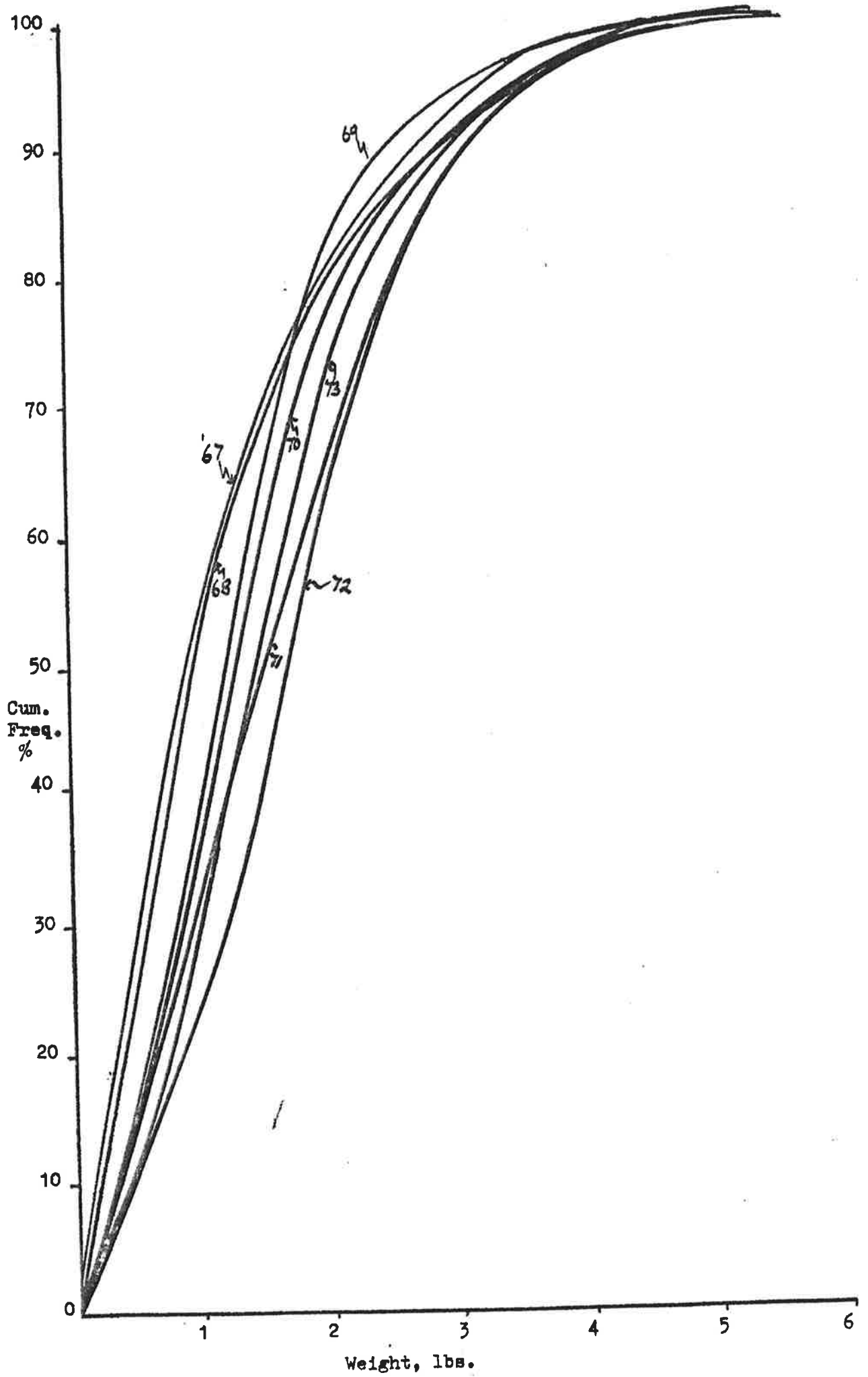
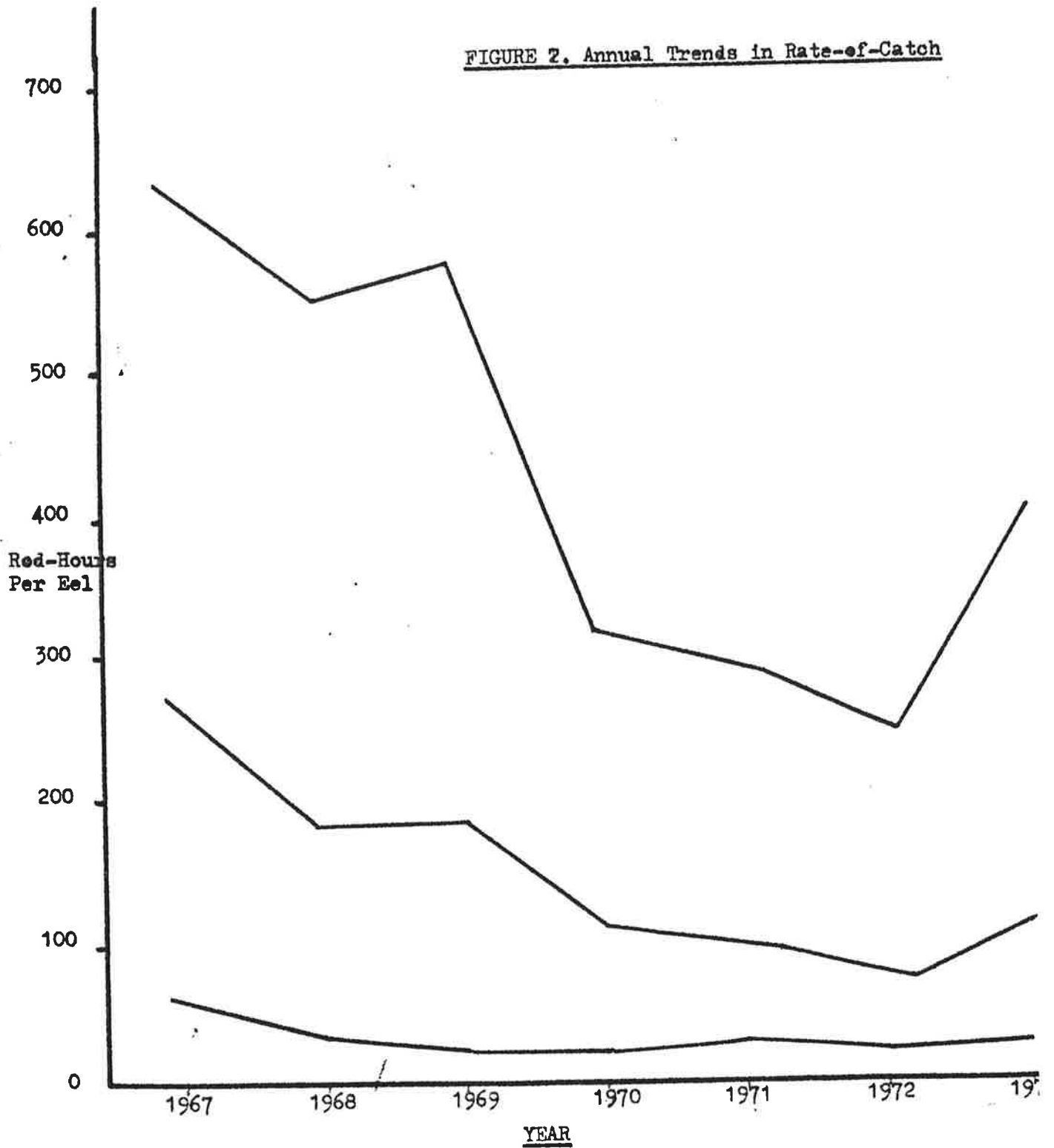


FIGURE 2. Annual Trends in Rate-of-Catch



Two of the more important measures of progress, rate-of-catch and cumulative frequency, are also set out in diagram form in Figs 1 and 2, covering the years 1967 - 1973. Taking rate-of-catch first, it is obvious that in 1973 we suffered a sharp reversal of the healthy downward trend in the time taken to catch eels, and that reversal extended into the higher weight brackets as well as the overall RH/E figures. The average size of the eels was also a little lower than in 1971 and 1972.

Why did this happen? From previous years, it seemed as if we were set fair towards a steady, if not dramatic, improvement from year to year. And then, out of the blue, we suddenly go back about 2 years.

One explanation can be ruled out immediately; it cannot be put down to lack of enthusiasm within the Club for, as we have seen; the effort put in in 1973 was the highest ever. Perhaps, indeed, members were overenthusiastic, and tended to go eel fishing even when a study of the Report issues would suggest conditions were not particularly favourable to success - this would certainly decrease the rate-of-catch.

I think, however, that there may be two other reasons also. First, a large part of the progress from 1967-1972 was due to the often spectacular success of the Yorks group, who not only found some excellent waters to fish (see Trees Pool in this Bulletin, for example), but also had plenty of skill to exploit these waters. In 1973, however, the effort from the Yorks area was very much lower, as inspection of Table 1 will confirm. Instead, effort was switched to other, and less profitable areas; in particular 1973 saw the birth of a large group in the London area who have no choice but to fish slower and less remunerative waters.

Secondly, 1973 once again saw the intake of numbers of new and relatively inexperienced members; at the same time, some of the old hands ceased to report. Up till now, the Club has absorbed new members without any adverse effect on results; it may be, however, that in 1973 we perhaps took on a little more than we could cope with and still maintain our impetus. However, maintenance of records is no reason for excluding people from our Club, and while it may have contributed to the 1973 results, I do not believe we should restrict membership on this account.

3. Effect of Bait Choice.

Once again, worm and Dead-bait formed the major part of all the baits used by Anguilla Club members in 1973, with a relatively small amount of effort being devoted to a miscellany of other baits including maggots, bream guts, and swan mussel. As before, the time spent on these other baits is insufficient to permit of detailed analysis, but a comparison of worm and dead bait is of interest.

The numbers of eels caught, and size distribution, are set out in Table 5, below.

Table 5. Worm versus Dead-bait, 1973.

	<u>WORM</u>		<u>DB</u>	
No.	No.	CF%	No.	CF%
0 - 1	77	38	28	17
1 - 2	81	79	68	59
2 - 3	22	89	44	86
3 - 4	15	97	16	96
4 - 5	4	99	5	99
5 - 6	2	100	1	100
Total	201		162	

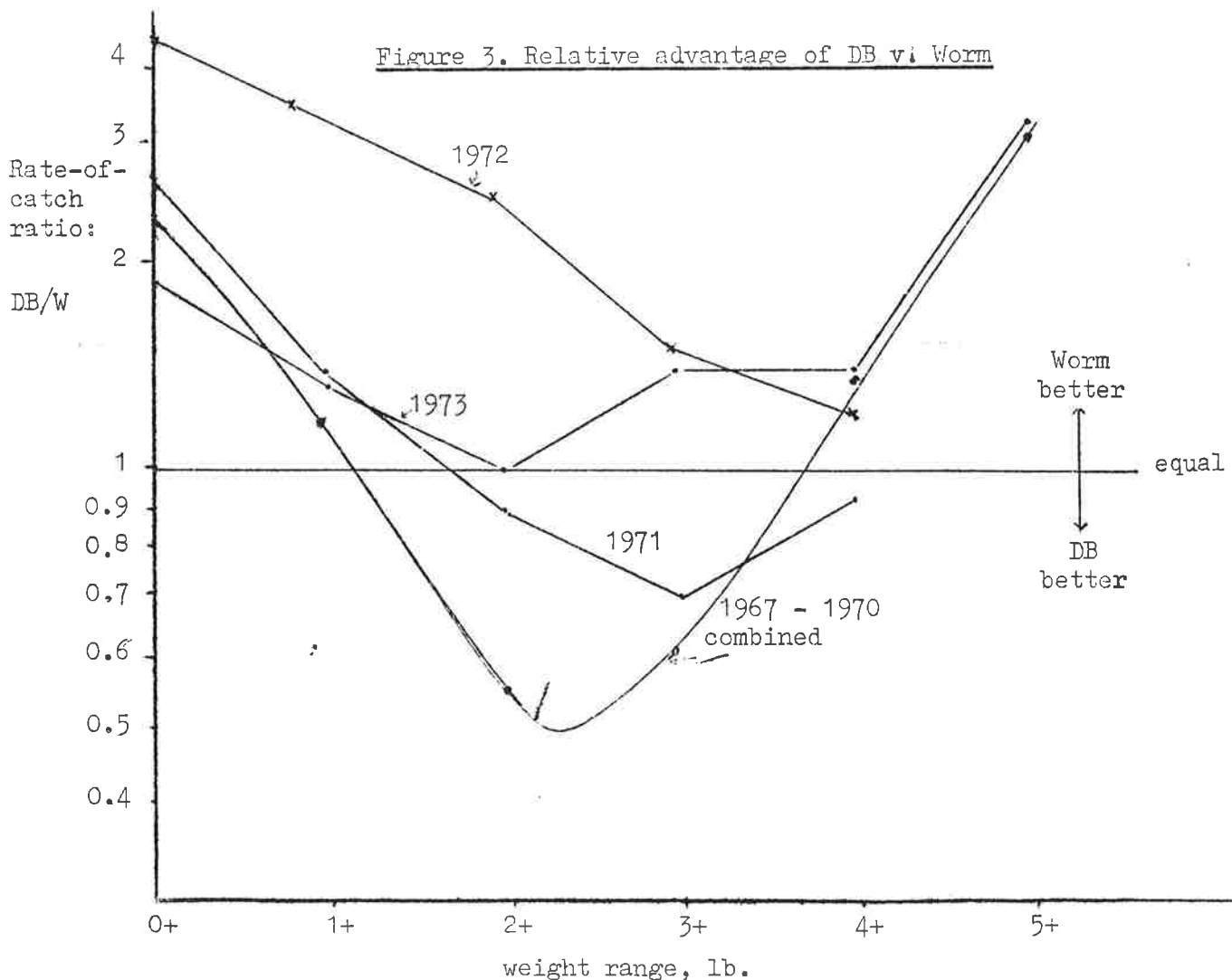
Fairly similar numbers of eels were caught on dead-bait and on worm in 1973. As before, there was a tendency for the fish caught on DB to be bigger, but in 1973, this really only applied to eels up to about 2 lbs in weight. Thus, the cumulative frequency table (Table 5) suggests that worms produced relatively large numbers of eels in the 0 - 1 lb range, at the expense of relatively few in the range 1 - 2 lbs. For DB, however, the reverse is true, with relatively small numbers of 0 - 1 lb eels, but relatively large numbers of 1 -2 lb eels.

Above 2 lbs, the proportion of eels in succeeding weight classes is similar for both worm and dead bait, thus, for example, 11% of worm eels exceeded 3 lbs, 14% of DB eels exceeded 3 lbs - not a great difference.

Data on rate-of-catch are set out in Table 6, and further examined in the graphs of Figure 3, below.

Table 6. Rate-of-catch, Worm versus Dead-bait, 1971-73

	<u>WORM</u>			<u>Dead Bait</u>			<u>Ratio DB/W</u>		
	1971	1972	1973	1971	1972	1973	1971	1972	1973
RH/E	20	12.5	25	53	55	47	2.7	4.4	1.9
RH/1	43	18.5	40	60	62	57	1.4	3.3	1.4
RH/2	110	43	115	97	108	116	0.88	2.5	1.0
RH/3	360	172	240	240	260	348	0.67	1.5	1.45
RH/4	1,100	630	828	960	860	1,280	0.9	1.3	1.5



The Table (6) contains results for the last three years, because there have been substantial changes from season to season in the behaviour of worm baits, and it is useful to have three years' results for comparison.

As noted in the previous report on the 1972 season (Bulletin 10,3, April 1972) 1972 was quite remarkable in the very high rate-of-catch for worm baits. A glance at Table 6 will show, however, that this encouraging trend was not maintained in 1973, and rates-of-catch on worm went back to about the 1971 level. By contrast, results on DB have changed relatively little over the last few years, although 1973 gave somewhat slower returns on this bait for the larger size groups of eels.

The question again arises whether worm or DB was the better choice for all eels in 1973. This is shown in Figure 3, where the relative advantages of DB and worm for eels of given sizes are shown diagrammatically. As can be seen, for all eels, regardless of size, worm bait produced at nearly twice the rate of DB. For eels of 1lb plus, the advantage was not so marked, and for eels of 2lb plus, there was no difference between the baits. As one moves into the higher weight brackets, however, the advantage swings progressively further back towards worm. The result is a V shaped curve, rather similar in form to the combined results for 1967 - 1970 also plotted. But unlike these combined results, there is no point on the curve at which worm actually becomes inferior to DB, and for most of its length worms proved superior.

In six out of seven years, then, the relative advantage of DB and worm has produced a V shaped curve. The exception was 1972, which, as we have seen gave unusually good results on worm. Clearly, the type of distribution shown in Figure 3. has to be accepted as genuine, odd though it is. The message, however, is fairly clear. Almost without exception, the bigger eels (4lb plus) have been caught faster on worm than DB. Worm has also always produced the faster overall rate-of-catch. The only advantage for DB, therefore, appears to be in selecting for a class of eels around the 2lb mark; it generally appears inferior to W for eels below 2lbs, and inferior also for eels substantially bigger than 2lbs. Why this should be so is mysterious in the extreme, but accept it we must and act accordingly.

This does not mean, of course, that there is no place for DB fishing in our sport. There are waters where bootlaces are such a problem that worm fishing is a plague and a nuisance; Clive Houghton has already remarked on this in the present issue. But, it seems, in situations where worm is practical we ought to give it preference.

4. Day versus Night, 1973

Relevant facts on day versus night are set out in Table 7, below

Table 7. Day v. Night, 1973

	OVERALL *		WORM		DB	
	Day	Night	Day	Night	Day	Night
Total E	78	295	50	150	21	142
Total RH	3,999½	9,018½	1,583	3,385	2,264½	5,423½
RH/E	51	31	32	22	108	38
Advantage for night fishing	1.6 X		1.5		2.8 X	

* includes 10 eels and 362 RH for other baits

The table shows that, as usual, night time fishing was more productive than angling during the day, and, again as usual, that the decrease in rate-of-catch during the day was much greater on DB than on worm. This confirms a previous finding, namely, that worm is a better overall daytime bait than DB.

5. Conclusions.

Although the 1973 results suggest that the Anguilla Club took a step backwards in its attempts to catch bigger eels faster, I do not think we should be unduly concerned about this apparent reversal. Several possible explanations for it have already been given; another may turn out to be that the year before - 1972 - was truly exceptional, and that by using it as a standard we are making an unfair comparison for ourselves.

Whatever, else, the fact remains that in 1973 the Club put in more time, and caught more eels, than in any previous season in its history. This cannot be bad. And although the overall pattern was perhaps a bit less than we had hoped for, the year was marked by some truly remarkable individual performances amongst our members; while we have anglers of such ability within the Club the outlook is healthy indeed.

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