

A GUIDE TO THE NEW REPORTING SCHEME

1972

CONTENTS

1. Introduction
2. Administration
 - 2.1 Water Description Questionnaire
 - 2.2 Session Reporting Scheme
3. How to Complete the Water Description Questionnaire
 - 3.1 General Comment
 - 3.2 Notes on Specific Questions
4. How to Complete the Session Report Forms
 - 4.1 Old Session Report Forms
 - 4.2 Form 1
 - 4.3 Form 2
 - 4.4 Form 3
 - 4.5 Form 4
5. Conclusion

1. INTRODUCTION

In accordance with the decisions taken at the last AGM., considerable changes have been made to the NAC. reporting scheme for the coming season. The purpose of this guide, therefore, is to explain the new scheme, and in this introductory section it is hoped to give some of the thinking behind the new developments, and to show why the scheme takes the form it does.

The new scheme differs from the past in being primarily aimed at the characteristics of individual fisheries. It is intended that this will eventually enable us to make better use of the waters we already fish, and will also give us a better understanding of what to look for when we approach new waters. As before, however, the results we get will depend on the effort put in by individual members; this is especially true now that we are introducing a new scheme that will undoubtedly contain a few snags to be sorted out, before everything goes as smoothly as it has in the past. Nevertheless, it is clear that we must change if we are to progress, and I would urge you all to support the new scheme, because the potential rewards are very great.

In 1972, reporting will centre around water descriptions. The purpose of this is basically very simple; we want to try and relate water type to eel fishing potential. For example, it would be useful to know if there is any evidence to suggest that clay pits may be better than gravel pits, or vice-versa. or whether small waters offer better prospects than large waters. Because the Club already has a large number of fisheries on record, all catalogued in terms of eel fishing results, half the work is over before we start. Clearly the first thing to do is to get descriptions in for waters we already know something about, and then gradually extend the scheme to new waters as fishing results become available to make the effort worthwhile.

Initially the descriptions will be restricted to still waters - the 2:1 and 2:2 waters of the past scheme. There are two reasons for this, firstly that this limitation will make a difficult job of analysis considerably easier, and secondly because we are generally much more interested in this type of fishery than in running water.

There is one major difficulty in this work, however. Until we have some results available, we cannot know precisely what features of waters are likely to be important in terms of their eel fishing potential. The only way round this is to make our descriptions pretty comprehensive for a start, and hope that we may be able to eliminate unimportant factors later as experience is gained. Because of this need for a lot of information, a detailed questionnaire has been provided which will form the basis of the scheme in these early stages. Detailed information on how to fill this questionnaire in is given in section 3; at this point, therefore, it

is sufficient to make a few general points. One of the important things to make clear is that the questionnaire will be regarded as highly confidential material, and that there will be no risk of giving away vital information about one's own project waters. The precise contents of each questionnaire will be known only to the member filling the form in and to the Club's analyst, and the forms will not be circulated to anyone else without written permission from the member concerned. Once the forms have been analysed, Bulletin articles on the results will be written in such a way that this confidentiality is not lost; in particular precise locations and names of waters will not be given unless permission is obtained to do so.

A second important point is how we select waters for this detailed analysis. Clearly, it is not worth filling in a questionnaire on any water before enough information has been gained to judge its performance as an eel fishery. Therefore, water descriptions are wanted only from lakes which satisfy one of other of the following two conditions. Either, the water should have yielded a minimum of 11 eels on DB or worm, or it should have been fished for a minimum of 100 rod hours on DB or worm in 'favourable' conditions'. It is as well to be quite clear what is meant by this. To be selected, 11 or more eels must have been caught on one bait; it is no use looking at waters where a total of 11 eels have come from a combination of two or more baits. Similarly, the one bait rule applies to the rod-hours criterion also, while in this context, 'favourable conditions' may be taken to mean in the Summer and at night for most waters - i.e. conditions when eels are most likely to have been caught. Clearly, some flexibility must be allowed here, especially for the one or two 'day-time' waters known to the Club.

A moments' thought will show that these criteria allow us to look at waters in two ways. If the minimum no. of eels criterion is satisfied, then we can use the data from the questionnaire to try and sort out factors in waters that lead to the production of either large or small eels. If only a few eels are available, but enough time has been put in, then we can at least use the data to try and answer the important question of what factors give a water a fast or a slow rate-of-catch.

Once the 1971 results have been analysed in full, it is intended to circulate an up to date list of all waters which qualify for the questionnaire. This should be available shortly, but in the meantime, every member will know some waters which amply satisfy the above criteria, and there is therefore no reason why an immediate start should not be made.

The session reporting side of our scheme is much simpler than in previous seasons. As we know, the session reporting system of previous years has been most successful, but has now reached the limit of its usefulness. Therefore, all that is retained are those parts of the old scheme that are essential to back up the water descriptions. The standard session report form will still be used, however, for bankside recording, but several of the sections are no longer strictly necessary and can be regarded as optional. The way to use the session reports of 1972 is explained in more detail in section 4.

The Club can no longer expect one man to do all the analysis of the forms, and the new scheme therefore make provision for each member to work out his own results himself. Because the scheme is less comprehensive than in previous years, the arithmetic involved is correspondingly less complicated. A set of standard forms have been devised to help with this analysis and full details of how to use them are given in section 4. It is intended that these forms should achieve two things; they should provide each of us with a handy summary of our own results so that we can assess our performance and make plans for future campaigns, and they should also provide a useful set of data to be added to the general Club records for the main programme of work.

One small section has been added to the session reporting scheme. This concerns the effect on eel fishing results, of repeatedly fishing the same swim and seeks to find out in general terms whether it is better to flog one swim repeatedly, or to move to a fresh swim each time a water is visited. The work involved in this is relatively small, and clearly may yield some very valuable information. The way to tackle this particular project is explained in section 4.5.

Considerable care has been taken in the preparation of this Guide to make sure we all understand both the purpose and the operation of the new scheme. Please read it carefully, file it with your other Club material, and refer to it at intervals during the season. As with any new scheme, difficulties may arise, and the Committee will be pleased to answer any questions you may have on this project. Just as in previous years, strict adherence to the specified administration of all aspects of the scheme is vital to the success of the work. And with a greater reliance on individual members to do some of the analysis, the importance of correct reporting is greater than ever. So please be sure that your reports are as accurate as you can make them; to echo past Guides, careless and unreliable reports are worse than useless - they sabotage the efforts of your fellow members.

2. ADMINISTRATION

2.1. Water Description Questionnaires

As was explained in the introduction, a list will shortly be circulated containing the names of all waters for which sufficient records are available to make a description worthwhile. Any member who is familiar with any of these waters is cordially requested to complete a description form about them.

It is probable that many of the waters will be known to more than one member. In these cases, it would be most helpful if the individuals concerned could fill in a separate form without discussing amongst themselves what they put down. There is a very good reason for this apparently strange way of working. Many of the questions on the form can only be answered in terms of an individual opinion, and the results will not therefore be strictly factual, but expressions of individual beliefs. There is, unfortunately, no way round this, unless we all turn ourselves into professional scientists and take a load of complex instruments to the bankside. The best thing we can do, therefore, is to try and obtain more than one point of view about these dubious cases, so that the analyst can at least see where points of difference arise, and can take a more informed view of the water in question. So please try to fill in these forms alone, and do not discuss what you are going to put down until they are completed.

When the forms are completed, they should be sent to:-

A F Hawkins,
28, Deerhurst Avenue,
WINNERSH,
Nr. Wokingham,
Berkshire.

Clearly, a certain minimum number of completed questionnaires will be needed before it is worth beginning the complex job of analysis. If the scheme is to yield a quick return, therefore, it is important that the initial set of questionnaires should be dealt with as rapidly as possible. However, it is obviously better that the forms should be correct and slow, than rapid and wrong, and it may be that members will need to wait until waters are revisited during the coming season before committing themselves to a description.

So as to keep everyone in the picture, it is intended that the Newsheet will in future contain information on how the scheme is going; in particular members will be kept informed on what waters have received description, and which still require to be tackled. As soon as any useful material emerges from this exercise, it will be published in the Club Bulletin.

2.2. Session Reporting Scheme

This side of the scheme is aimed at defining the potential of a water in terms of eel size and rate of catch. To do this, bankside notes, simple arithmetic, and four analytical forms are required. Previously we have made only bankside notes and relied on someone else to do the hard part, these times are now past and we will in future do our own hard work. In an attempt to simplify matters the scope of the old SR ~~Forms~~ scheme has been reduced, and the five forms take you from "bankside notes" to "final results". Reporting will be done on a yearly basis each water being reported separately, ie each water you fish you will have four analytical forms covering all your fishing at that water in that year. Now this entails a lot of forms, therefore they are arranged in "sets" neatly arranged in folders so that everything is bound under one cover. Each folder contains five sets (to cover five waters), and describes one years fishing only, for 1973 onwards fresh folders will be issued.

Although the water description is concerned only with lakes, this new session reporting scheme covers all waters, therefore proceed from the old SR forms to the analytical forms only when the water is seriously fished. As a guide the "100 rod hours or 11 eels" rule should be applied. Waters that are fished less frequently than 100 RH should still be reported on the old SR form.

Now to the forms themselves. The old SR form will be used for making bankside notes and will be kept in a separate folder, NOT in the bound folder. Four new forms are involved, these are Forms 1 - 4. Form 1 is an intermediate stage of analysis and records information regarding rod hours, bait and time in such a manner as to facilitate completion of forms 3 and 4. Most of your tiresome work will be filling in this form from your notes on the old SR form. Form 2 lists all eels caught on the water in that year. Form 3 is in two parts, i) a monthly log of effort in rod hours and success in RH/E for each bait and period of day, ii) a list of all eels caught in weight order with median and quartile values of weight. Form 4 describes the effect of repeat sessions in one swim.

The folder containing Forms 1 - 4 will be sent to the Clubs Analyst, when requested at the end of the season, for checking and extraction of information. At this stage the water description information and session report information will be put together, and a comprehensive report issued. When this is completed the folders will be returned. It may be necessary to call in the old SR forms for some waters, specific requests will be made for these direct to individual members.

To sum up then, You will each receive 30 old SR forms plus a folder containing five sets of analytical forms. Fill in the old SR form after each session and the analytical forms as necessary, using the instructions given in section 4.

Keep all forms in a tidy manner at home using the folders provided and it should be plain sailing.

Extra forms can be obtained from Geoff Swailes.

3. HOW TO COMPLETE THE WATER DESCRIPTION QUESTIONNAIRE

3.1. General Comments

The form has been designed to involve us in a minimum of work in filling it in. The majority of questions therefore requires no more than a tick alongside the most appropriate answer. The form appears lengthy for two main reasons. Firstly, because we do not know what factors are going to be important, and so it has to be comprehensive; and secondly, because a number of things we need to know could not be answered directly without specialised knowledge - therefore, we have to try and ask the same thing indirectly in a roundabout way.

3.2. Notes on Specific Questions

A. Location. The reason for requiring the precise location of water is to be able to relate it more accurately to its surrounding so that we can, for example, work out in great detail the route by which eels enter and leave if this should seem important. Nevertheless, members may feel that they would prefer not to give precise map references to their waters, although it should be emphasised again that this information will be strictly confidential. Therefore, the amount of information given in this section must, to some extent, be left to the discretion of individual members; it is worth pointing out, however, that the more complete the form, the more valuable it is likely to prove to the Club as a whole.

C: 5. Colour of water The definition of 'clear' should read:-

Clear (see into 6 ft. or more)?

G. 1. Other Fish. As a first thought on waters, it seems probable that other fish species may have a considerable effect on the growth and numbers of eels, either by preying upon them, or by competing with them for food. For large eels, also, small fish of other species can clearly be important as food. Therefore, it seemed essential to include a section on other fish, even though it will be difficult to answer in an objective way. The following suggestions are therefore offered to help in completing this section.

Firstly, it should be stressed that all we can expect from this section are member's individual opinions on what they think the fish population is like, based both on their own experience and from conversation with other anglers and club officials. Clearly, this is a far from ideal situation, and this section is therefore one where more than one opinion will be especially helpful.

Numbers of fish: The category rare should be reserved for cases where a fish is known to be present, but in such small numbers that it is rarely seen or caught. For the average angler, there would be too few fish to make it worthwhile angling for them. Common should describe the average condition in most waters of similar type, normally, the fish should be present in sufficient quantity for the average angler to fish for them. Abundant should be reserved for cases where fish are obviously present in numbers far greater than usual. As a broad generalisation, very large numbers often means that the fish are smaller than average, so we might expect an association between Abundant and Small/Stunted in our questionnaires.

Size of fish: It is important to be quite clear what is wanted here. We require to know what the majority of the fish population is like, and are definitely not interested in the odd exceptional specimen. For example, if a water is swarming with tiny roach, and everything over about 4 oz. is a rare capture, then Small/Stunted is the category to use, - even if Joe Bloggs once managed to extract a fish of two pounds. As you will appreciate, the odd specimen fish is not likely to have much impression on the water as a whole but the bulk of the population may be extremely significant.

From the above, it will be apparent that the category Above Average will be used relatively infrequently, for there are few waters where the average expectation for any particular species is well above normal. As a rough guide, therefore, a set of size limits is set out below to correspond to the three size categories on the questionnaire.

	<u>Small/Stunted</u> expect to catch fish no bigger than:-	<u>Average</u> expect to catch fish no bigger than:-	<u>Above Average</u> expect to catch fish bigger than:-
Trout	8oz	1½lb	1½lb
Pike	5lb	15lb	15lb
Perch	6oz	1½lb	1½lb
Roach/Rudd	6oz	1lb	1lb
Tench	1½lb	3½lb	3½lb
Bream	1½lb	3½lb	3½lb
Common carp	5lb	15lb	15lb

J. General Comment Please do not hesitate to make full use of this section.

At this stage of the game, even seemingly irrelevant items may turn out to be of great importance, so anything you have to say could be of considerable value.

K. Map. A sketch map of the water can be of the greatest practical help in analysis of questionnaires of this type, as it might well point out significant features which are not obvious from the general questions. It should be emphasised

therefore, that this section is most important, and as suggested on the questionnaire itself, particular attention should be paid to possible sources of access for eels.

4. HOW TO COMPLETE THE SESSION REPORT FORMS

As you know the overall aim of the project is to correlate the biological assessment of a water as given by the water questionnaire, with the practical assessment as given by the catch over a period of time. This section is confined to the workings of the "practical assessment".

It is intended that you do as much analysis of your results as possible and the forms have been designed to assist this work. If all goes according to plan then at the end of the year you will have a complete record of your effort and results conveniently broken down to show the effects of i) time of day, ii) time of year and iii) bait type. Also catches will be listed and weights expressed as medians and quartiles. Briefly then we aim to identify;

1. the size of eels in the water
2. the effect of bait type on eel weight
3. the effect of time of day or year on eel weight and bait choice
4. variations in rate of catch throughout the year
5. the effect of repeat sessions in the same swim.

Some degree of personal effort will be required from each of you if you want your water to be assessed in this way, because as with all things, ones reward is closely related to ones effort.

As you are all familiar with "rod hours per eel" this unit is used to assess all our results, added advantages being that water-water comparisons can be made and individual waters can be compared with the National Grand Average.

Due to limitations in our stencilling equipment it was not possible to draw, in Forms 1 - 4, the horizontal and vertical lines indicating just where one should enter one's figures. Would each of you then, on receipt of the forms (ie now), draw in the lines yourself using pencil or biro. The placement of the lines should be obvious but if in doubt contact Geoff Swailes. By next year this defect will be remedied.

4.1. Old Session Report Form

These are being used to enable you to start on familiar ground and to use up the present stock. Eventually a more suitable form will be designed but these should suit us for this year. They should be completed in the usual manner with only slight modifications as follows:-

Item 2. Class of Water The previous notations are still to be followed:-

- ie 1.1 Upland River
- 1.2 Lowland River
- 1.3 Tidal River
- 2.1 Lakes etc with outflow
- 2.2 " " totally enclosed
- 2.3 Canals and Drains
- 3.1 Esturies and Creeks
- 3.2 Salt Lagoons
- 3.3 The Sea

Item 3 Include here also the session number and swim number. See notes on Form 1 below.

Items 4 and 5 These need not be completed, however nothing is lost if you should decide to do so and your record will be more comprehensive.

Item 6. Comment Include here the source of your dead bait, ie same lake, nearby river, or whatever. Dave Smith is interested in this factor and will report the results as a "topic" report.

Item 7 Complete in usual manner.

Item 8 You will find it useful to alter "Full description off bait" to "Bait/Period" and enter DB/Day, DB/Night, Worm/Day etc in columns 1-5. Then complete for "rod hours and No of eels".

Item 9 Change "Bait No" to "Bait" and record DB,W or O. The actual bait used could be written in this side, in the "For office use only" column as this is not now required.

Swim details are not strictly required and are thus optional.

4.2 Form 1

This is designed as an intermediate stage of analysis and merely records information regarding rod hours, bait and time in such a manner as to facilitate the completion of Forms 3 and 4. After each session one block of this form must be completed (there are six blocks to the front page). At the head of each block enter Date and Time, Session No., and Swim No., notes on three are as follows.

Date and Time To keep our job easy sessions should last no longer than 24 hours. Longer periods must be broken down into units of 24 hours maximum, these can of course cover evening, night and morning as one session.

Session No. Each session at a water must be given a session number, these will run consecutively and refer only to that water, ie if water A is fished 8 times and water B 6 times then A will have session numbers 1 - 8, and B session numbers 1 - 6. Session number is also required on Form 4, it is introduced to assist the cross check on information between forms and to link the old session report forms to the new system.

Swim Number This is required to complete Form 4, and is required for lakes only. Each swim that you fish must be given a swim number, this must be pre determined before you start fishing and adhered to throughout the season. When two or more members fish one lake then you must agree among yourselves on the allocation of swim numbers, if possible the location of each swim should be indicated on the map in the water questionnaire. It is up to the individual how he defines his swim boundaries, but the maximum suggested size is 100 yds x 100 yds. Obviously the size will vary according to ^{the} size of the water and the nature of the swim.

Notes on the remaining items on Form 1 are as follows:

Dead-bait Include the use of all fish dead baits irrespective of size and species.

Worm No distinction is made regarding the number of worms used.

Other This refers to a bait "other" than dead bait or worm. It is included to allow some freedom in bait reporting but must obviously be restricted to one bait to be specified at the start of your years fishing at the water. If any other baits are used then these can not be reported at all in the new forms, but can be reported in the old SR forms.

Day and Night To make your life simple, for the purpose of this exercise night on any day of the month starts at 30 minutes past sunset on the 15th of the month, similarly day starts 30 minutes before sunrise on the 15th. These times are given below and should be used to separate day rod hours and night rod hours.

<u>Month</u>	<u>Day</u>	<u>BST</u>	<u>Night</u>	<u>BST</u>	<u>Day</u>
March		19.35		07.00	
April		20.30		05.35	
May		21.15		04.45	
June		21.50		04.15	

<u>Month</u>	<u>Day</u>	<u>BST</u>	<u>Night</u>	<u>BST</u>	<u>Day</u>
July		21.40		04.30	
August		20.50		05.20	
September		19.45		06.05	
October		18.35		07.00	

Rod Hours Fished From your notes in the old SR forms item 9, calculate the number of rod hours fished in each of the categories, DB Night DB Day etc. Write in the nearest whole number of hours, eg 4hrs 20 mins = 4 hrs, 4hrs 40 mins = 5 hrs.

Number of Eels caught Just enter how many were caught in each category of bait and time.

Eel Numbers The numbers you give here are NOT those in item 7 of the old session report form, this point MUST be appreciated. The numbers required are those given in Form 2 (see below), this lists all eels caught from the water in the order of their capture. This number is required for cross checking of information between forms.

4.3. FORM 2

This is a re-hash of item 7 of the old SR forms and is self explanatory. One new point is "Period", insert here "day" or "night" to describe the period of capture. This is included to assist the club analyst in later work covering all results. The form must record each and every eel caught, in the order of capture; at the end of the year it will be used to complete a section of Form 3.

4.4. FORM 3

This is in two parts; i) a monthly log of effort in rod hours, results in numbers of eels caught and success rate in RH/E, for each bait and period fished; ii) a list of all eels caught in weight order with median and quartile values of weight.

Monthly Log To complete this, from Form 1 add up the number of rod hours spent fishing dead bait in the month during the day, add up the number of eels caught, calculate RH/E. Proceed then to dead bait for night rod hours; proceed to worm etc. Complete this each month so that you can spot trends as they occur and avoid a backlog of work. The total columns at the side and bottom are, I hope, self explanatory.

List of Eels Complete this section at the end of the season. List all eels (Form 2) caught on worm, in order of weight in the column headed "worm". Against "No" write the weight, eg 4:9, Note that the eel number used in Forms 2 and 1 is not used here. Similarly, complete for dead bait and other, in "total" list all eels in order of weight.

Now to the calculations. Complete these if you can, if in doubt write in pencil.

Median (M). This is the weight of the middle eel. Upper Quartile (U Q) and Lower Quartile (L Q), UQ is halfway between the middle and largest eel, L Q is halfway between the middle and smallest eel. For example in an odd numbered list say 9, M is the weight of the 5th eel LQ is the average of the 2nd and 3rd, U Q is the average of the 7th and 8th. In an even number list, say 10, M is the average of the 5th and 6th, L Q is the 3rd and U Q is the 8th eel.

Inter Quartile range describes the weight range of eels that are most frequently caught and is given by U Q minus L Q. eg U Q 3:2 L Q 1:10 I Q R = 1:8.

4.5. FORM 4 - Effect of repeat session at the same swim

This must be completed after every session, for 2:1 and 2:2 waters only as other waters are not included in this survey. Use one horizontal block per swim. Enter Session No/Date as on Form 1. Total RH, total eels and RH/E are self explanatory, calculate RH/E to nearest whole number. The cumulative values of RH, eels and RH/E are really running totals, they are included to indicate how the RH/E varies as the swim is constantly re-visited.

For example if five sessions gave results as follows,

Session No,	1	2	3	4	5
Total RH	25	19	36	18	24
Total Eels	4	2	2	1	0
Then the "cumulatives" would be					
Cumulative RH	25	44	80	98	122
" Eels	4	6	8	9	9
" RH/E	6	7	10	11	14

Eel Weights Put here the eel weight. If more than five eels are caught then carry on in the next column but do not use the remainder of the second column for your next entry.

5. CONCLUSION

In conclusion then, a few comments are offered. Firstly it is most important for you to keep in mind the aim of the project as a whole. This is to relate the biological assessment with the practical assessment, so that any biological or environmental factor found to affect eeling potential can be recognised during one's first survey. Also it is worth reiterating that you will get ^{out} what you put into it, if you dont put your effort in then no one is going to plead with you.

Help and explanations of course will be gladly given when requested. Point three, no one pretends that the scheme or the forms are perfect, they are not, maybe they will require modifications to ask less, more or other questions.

Only time and experience will tell.