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Impact of Stocked Rainbow Trout on Resident Salmonid Populations,

Phase 1, Scoping Study

R&D Progress Report October 1995

Institute of Freshwater Ecology

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R&D Progress Report D02(95)4/1



NRA

National Rivers Authority

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R&D Project D02(95)4

Impact of Stocked Rainbow Trout on Resident Salmonid Populations,

Phase 1, Scoping Study

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R&D Progress Report October 1995

Dissemination Status

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Research Contractor:

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NRA Project Leader

Dr A G Owen - NRA Southern Region

1. Introduction

This report deals with progress from the start of the project to the end of October.

2. Literature Review

Literature searches of ASFA databases for the period 1979-present and of the FBA/IFE current awareness databases have been completed. This raised >500 references concerned with rainbow trout. Titles and abstract of these have been read and from these 87 papers were considered to be relevant. These papers have been obtained and their references searched for further relevant information (mostly pre- 1979). These papers have also been acquired and their bibliographies searched. To date 131 relevant publications have been collected. Several other relevant documents have been identified, mostly available from the USA. These will take a further 2-3 weeks to arrive. It is hoped that this literature, which is considered to be critical, will arrive in time to be incorporated into the review to meet the 30 November deadline.

3. NRA Stocking Policy

A letter (Appendix 1) was sent to each Regional FRCN Manager requesting details of stocking policy. To date, six replies have been received either by letter or telephone. Replies vary in detail. Information asked for on existing practices is usually brief but managers do offer to discuss the matter further if necessary. This would require further time either on the telephone or for visits. Some supplementary information on policy and practices is being received from Area Managers as part of their response to the letter sent (Appendix 2).

4. NRA Data

A letter requesting data from the regions was sent out to all Area FRCN managers in each region. Copies were sent to Regional FRCN Managers to keep them informed of the project. A copy of the letter sent is presented in Appendix 2.

Eighteen replies from the 26 managers have been received. The eight missing replies are from the three regions of Anglian (although a letter has been received from The Regional Fisheries Manager), and from one area each of North West, Severn Trent, Southwestern, Thames and Welsh.

No data on the impact of rainbow trout on existing fish stocks was received from any area region other than Southwestern where a report was written in the Devon area. The South western region of Welsh sent a report on escapees. Most area managers (or their deputies), said they did not have any information on impacts. However, it is likely that they do have data from fishery survey programmes which may provide information on the impacts of rainbow trout, particularly in areas where there are known to be self-sustaining populations. The data have probably not been investigated for impacts and it would require extra effort to, for example, correlate densities of rainbow trout with native salmonids, or compare growth rates in the absence or presence of rainbow trout.

5. Stocking practices

Information in this category was varied in detail. Some sent raw data from Section 30s, mostly for the previous year but some sent data for longer (maximum four years) . Others said they had information but no-one to extract or collate it. Information was stored in different ways in different regions eg on paper forms or on Microfiche.

6. Historical data

Very little data has been sent on this topic mainly because Section 30 forms are a recent introduction. Information may exist within NRA offices but may be time consuming to collate. General information may exist in the literature and will be collated during the review. Some angling club records may provide a better historical picture if they can be identified, but again, extra work to collate this will be required and identification of these clubs will only be possible with the co-operation of the NRA.

7. Self sustaining populations

Most judged this to mean evidence of successful spawning ie the existence of juveniles. Many only have anecdotal evidence (anglers catches) but no hard data. Data is not usually site specific but refers to rivers or tributaries in general. Maps showing these rivers can be presented by the deadline assuming data from the missing areas is received quickly. Maps will include one of the whole of England and Wales and one for each region where populations exist.

8. Risks of stocking

No data is available from the regions. Factors such as disease, competition, predation and hybridisation will be considered from data collected from the literature.

9. Escapees

Very little information came from the regions other than anecdotal from anglers catches. Little information is available on numbers of escapees (or estimates) or why or how escapes happened. No assessments had been made on the effects of escapees or to their eventual fate, with the exception of a report on one event from southwestern area of the Welsh region.

Appendix 1 Letter sent to all Area FRCN Managers

River Laboratory

East Stoke
WAREHAM Dorset
BH20 6BB

7 September 1995

Dear

The IFE is reviewing the Impact of Stocked Rainbow Trout on Resident Salmonid Populations, for the NRA, under R&D Project D02(95)04. The contract requires us:

- (1) to review existing NRA data on the impact of rainbow trout on resident salmonid populations, and
- (2) to review existing NRA policy including existing practices (i.e. what is stocked where and why) and historical introductions.

Please will you supply for your area the following information.

1. **Any data regarding the impact of rainbow trout on resident salmonid populations.**
2. **Details of your local NRA policy on stocking.**
3. **Details of stocking practices within your area covering issues such as numbers, size, location, origin and reason for stocking.**
4. **Any data on historical introductions of rainbow trout.**
5. **Maps indicating where self sustaining rainbow trout populations are known to exist within your area.**

I would also greatly appreciate available information on known or perceived risks of stocking and any instances of escapes of rainbow trout into the wild.

There is a tight schedule for the collation of this information, and to comply with this the information is required by the end of September 1995 at the latest.

Please contact me by phone if you would like to discuss this request.

Best Wishes

Anton Ibbotson (Dr)

Appendix 2 Letter sent to all Regional FRCN Managers

River Laboratory

East Stoke
WAREHAM Dorset
BH20 6BB

Telephone (01929) 462314
International (44929)462 314
Facsimile 01929 462180
Telex 94070672-WARE G
E-MAIL jswe@wpo.nerc.ac.uk
Dr J. Hilton BSc PhD CChem MRSC
Assistant Director

25 September 1995

Dear

NRA R&D PROJECT D02(95)4 Impact of Stocked Rainbow Trout on Resident Salmonid Populations. Phase 1.

Recently, you will have received a copy of a letter sent to your Area FRCN Managers requesting information for the above project. At a recent meeting with Tony Owen, the Topic Leader, he suggested that the Regional FRCN Managers were better placed to supply information on **policy**, including existing practices.

I would be grateful for any information from your region on stocking policy for rainbow trout, either as an official policy document or from papers and minutes of RFAC meetings if these are available.

Yours faithfully

Dr J.S.Welton

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