

R/TRA/FIS/2#01

Falkland Islands Fisheries Department



Fishing Log Book

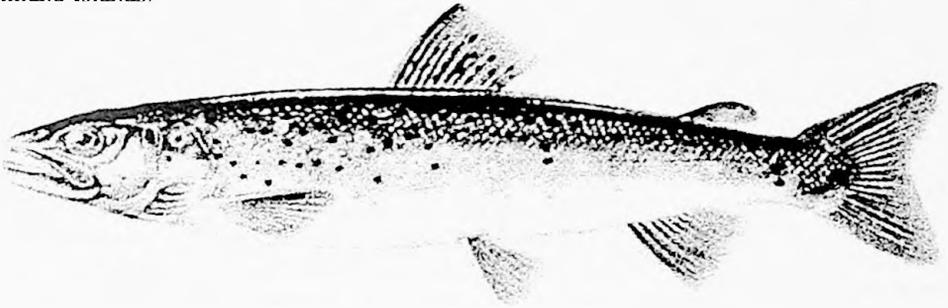
GAMEFISH
SURVEY



(Please return catch reporting forms to the Fisheries Department at the
end of the season.)

FISH IDENTIFICATION

A brief synopsis of the main features of fish liable to be caught in the streams and rivers of the Falkland Islands.



Length to 80cms (31.5 inches), weight to 9kg (20lbs)

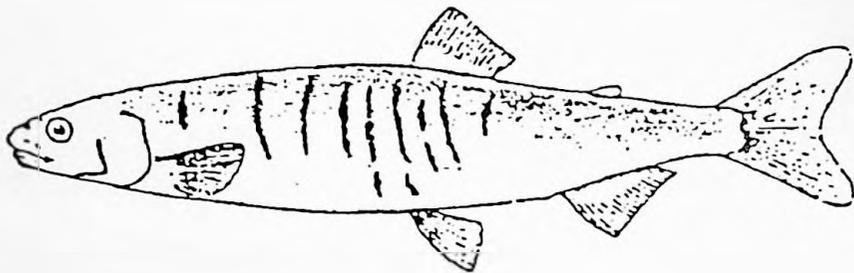
The Brown trout and Sea trout, *Salmo trutta* (Salmonidae) have been introduced to the Islands. Both the river dwelling and migratory forms of this species show the characteristic colouration of this group being decorated with predominantly black spots. Resident, river trout are dark peaty brown above with pale brown or yellow flanks. The body is heavily spotted with black, brown and red spots. The returning migratory fish are dark blue/black above with silver sides and flanks. The body is spotted with black both above and below the lateral line. As in the northern hemisphere stocks, the silver colouration changes gradually to a red/brown as the fish remains in the river.



Length to 60cms (23.6 inches), weight to 11kg (25lbs)

The 'Mullet' (*Eleginops maclovinus*) is a member of the group of fish collectively known as the 'Antarctic rock cods' (Nototheniidae). It is a marine fish which is common in the estuaries and creeks around the Islands, especially in summer. Fish of 20+ lbs have been recorded and individuals weighing 3-10lbs are common.

The upper half of the fish varies from black to muddy green with the lower half ranging from grey through cream, to brilliant white. Large scales cover the body and the general stocky form of the fish is complimented by a large head and broad gaping mouth.



Length to 29cms (11.5 inches), weight to 1kg (2.2lbs)

Aplochiton zebra (Aplochitonidae), known locally as the 'trout' is one of the indigenous freshwater fish species still to be found in some of the rivers of the Islands. The fish are the southern hemisphere equivalents of the salmon and trout of the northern hemisphere (Salmonidae) and belong to the same scientific order, Salmoniformes. They share the characteristics of being tolerant of fresh and salt water, migrating to sea, living in cold water and being predaceous.

The fish are grey/green/brown above with a pale dull brown to white belly. Intensity of colouration varies as does the density and intensity of the characteristic black bars which are evident on the flanks of the fish.

FALKLAND ISLANDS FISHERIES DEPARTMENT

GAMEFISH SURVEY

To combine the interests of both Angler and scientist, the Fisheries Department is operating a long term programme to monitor and assess the rate of exploitation, distribution and population structure of the Island's gamefish, with particular attention being paid to the introduced trout stocks.

Brown trout (*Salmo trutta*) were introduced to the Islands from Chile and Great Britain between the period of 1940-1952. Subsequent introduction of Sea trout followed from 1961-1964 with Atlantic Salmon (*Salmo salar*) also being liberated to a number of river systems over this period.

Apart from a detailed report by Dr. Leslie Stewart in 1973, on the introduction, distribution and expansion of the original trout stocks, little scientific information has been collected on these introduced species. That which has, has been recorded by dedicated anglers and interested parties and is of much historical importance.

This survey is adding to and complimenting this data base with the age structure, growth rate and reproductive potential of the local stocks being examined using a programme of fish tagging, scale analysis and otolith (Ear bone) reading. More detailed work on the genetics of the Trout population is also on-going with the primary aim of assessing whether the fish stocks present in the Island's rivers are isolated genetic stocks or are of uniform character. It is hoped to compare introduced trout from the Islands with specimens from Chilean and U.K. sites of original collection to determine whether any changes in the genetic character of the trout have occurred from that of the original stock.

LOGBOOK COMPLETION

The longterm success of this survey depends on your participation and careful completion of the catch reporting forms. The following is a guide to the correct completion of these data sheets;

'DATE' and 'LICENCE NUMBER' boxes are to be completed with the appropriate digits.

'DATE' is in the format; Day/Month/Year.

'LOCATION'. Use a single reporting form for each location fished. Complete this section by ticking the appropriate box. If the location fished is not present in the main list complete the underlying box with the river or Creek name.

'FISHING METHOD'. Indicate by tick mark the fishing method used.

'RIVER HEIGHT' and 'WEATHER CONDITIONS'. Complete using tickmarks in the boxes provided. Intermediate wind directions may be entered by completing two boxes i.e. N + W = NW.

CATCH DETAILS

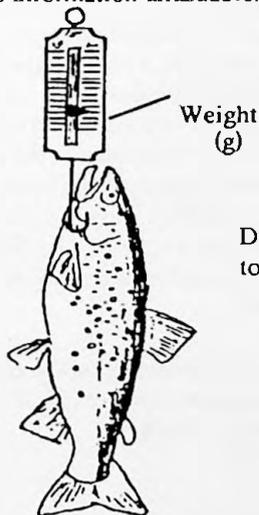
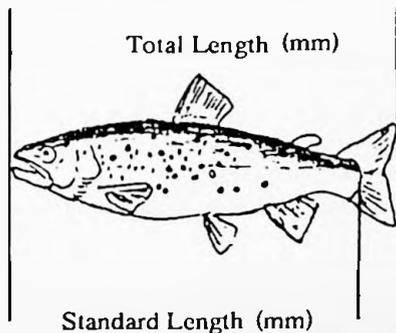
Insert the total number of fish caught along with the total number of hours fished, in this section.

IMPORTANT : Please record unsuccessful fishing trips by completing the form, inserting the number of hours fished and zero as the number of fish caught. This is of real importance in assessing the amount of fishing pressure on rivers and creeks.

RETAINED FISH

'SPECIES'. The descriptive local name for the fish species caught i.e. Brown trout, Sea trout, Mullet, Local Trout, should be recorded in this column. **DO NOT** use the single word 'Trout' as this causes confusion and may render the information unusable.

MEASUREMENT GUIDE



Measure the length and weight of retained fish as detailed above. Length should be measured using a tape measure or ruler. Rough estimates should be avoided.

'SEX'. If this column is completed the sex of the fish **MUST** be determined by the internal examination of the sexual organs. Except in the case of mature male fish, which have a strongly

hooked lower jaw, please do not sex individuals from external appearance.

'COLOUR'. This column is to be completed only for introduced trout and describes the external appearance of the fish. This will help determine the extent to which fresh run, estuarine and river based fish make up the total trout population.

'POOL/RIVER SECTION'. This column is the locally recognised name for a particular river reach or pool. Where no recognised name exists, a landmark or similar geographical descriptive should be used.

'TIME CAUGHT'. The time of catch should be entered in this column. This will allow weather patterns, tides and river conditions to be correlated in the analysis of fish behaviour and catch rates.

'TAG N^o'. Should the fish be tagged, the tag number should be recorded here. If a tagged fish is kept please return the tag to the Fisheries Department. It is most important that the details of any tagged fish that are returned are recorded. Tags are embedded in the fish and are removed by cutting into the flesh and prising out.

STOMACH CONTENTS OF RETAINED FISH.

It would be of great interest, and use, to this survey if the stomach contents of those fish retained could be recorded. The numbers of each food item should be entered in the relevant columns. The column 'Wood/Weed etc.' should be used to describe any non-food or unusual items present in the stomach.

RETURNED FISH

DO NOT weigh any fish to be returned. This can cause an increase in stress leading to the death of the fish. Complete all other sections as for retained fish.

RETURNING FISH

In the interests of conservation please use the utmost care in extracting hooks and measuring fish to be returned. Fish should not be roughly beached or hauled over stony ground. If possible fish should be unhooked in the water. Where this cannot be achieved wet hands should be used at all times when handling fish and measurement of the length of the fish should be carried out as quickly as possible, preferably in the shade and out of the sun. When returning the fish to the river support the fish gently from below with two hands. Orientate the fish with its head pointing upstream, if possible, allowing water to flow over the gills. As the fish revives allow it to move from your hands and away. **DO NOT** push or throw the fish forward.

If it is intended to return the majority of fish caught, consideration should be given to the use of barbless hooks.

If you have any comments on the survey or wish to know more about any aspect of the collected information please contact : Dr. C. P. Nolan, Senior Fisheries Scientist, P.O. Box 122, Stanley (Phone Stanley 27260).

