

## TROUT IN THE PEAT-STAINED WATERS OF THE SOUTHERN CAPE

THE dark peat-stained and acid waters which extend around the southern tip of the continent for about 300 miles, from the Elgin district above Sir Lowry Pass along the "Garden Route" to the Humansdorp district, have been tried with trout on many occasions since the beginning of the century with but slight success.

An exception was the Gwaayang River in the George district where brown trout managed to establish a small colony, although angling results were rather inferior. In this instance, however, it is notable that trout fry were planted, not eyed ova.

S. A. Hey in his Fisheries Survey, 1925-6 (*Inland Waters Report*, No. 1, Dept of Mines and Industries, 1926) found that the Gwaayang River held a few brown trout, progeny of 150 fry put into the Witfontein tributary in 1909, and 400 placed in the main stream in 1910. Up to the time of his visit in October 1925 he had examined several highly peat-stained streams in which unsuccessful attempts had been made to establish trout, and although rumours had been current from time to time that trout had been seen or caught, in this and other streams in the district he could get no definite evidence.

He went with Col. R. P. Preston-Whyte of George to find out if trout were to be caught in the district, and they fished the Gwaayang for two days and managed to secure three brown trout, one of seven inches long, and two of about 1 lb. and 2 lb. Col. Preston-Whyte had since caught trout in other reaches of this river. S. A. Hey recommended that this and other streams be stocked with yearling rainbow trout.

Col. Preston-Whyte, writing to Mr. Cecil H. Martin on September 29, 1965, from Greytown, Natal, stated that he came to George in 1925, and learnt that the Gwaayang had been stocked earlier with brown trout fry, released where the road to Herolds Bay crossed the river by Bob Simmonds of the Dept. of Forestry. He had caught quite a few brown trout in a section of the river, from some falls in the Blanco area down to the railway and road, but had never found any above or below that section. He had photographs of trout he caught there, and had even taken Lord Baden-Powell down while he was at George and he had got one much to his delight. Mr. James Martin caught a brown trout of about 2 lb. before the Colonel came to George.

Later, Col. Preston-Whyte put some thousands of rainbow trout ova from Jonkershoek in the Gwaayang River at the bridge at the bottom of Montagu Pass, and also 10,000 in the Touw River, George district, above the road bridge. He used the "Chaplin" hatching tins, and although in both cases the eggs hatched well, he never saw any results. He left George in 1942.

S. A. Hey, in his further Fisheries Survey, 1926-7 (*Inland Waters Report*, No. 3, Dept. of Mines and Industries, 1928) dealt with his experimental hatching of eyed rainbow trout ova from Jonkershoek in coastal streams between the Bloukrans and Storms rivers, in peat-stained water on forest reserve, streams from the Tsitsikamma mountain range with high annual rainfall. He carried out the experiments rather late in the hatching season, from August 17, 1926, when only about 20,000 ova could be supplied. He gave very full details of the experiment, which was carried out with the aid of forestry officers. In general, mortality was very heavy and sometimes complete, and surviving alevins were sickly. He sums up: "Failure probably due to excess humic acid in water" and also mentioned the deposit of "dark tenacious matter"—which was

found characteristic in later ova experiments in heavily peat-stained water (Harrison, PISCATOR No. 56, Summer 1962/1963—re trout ova in acid water, page 98).

S. A. Hey concluded that further expenditure in connection with the introduction of trout to these waters was not justified.

Harrison and du Plessis, in survey October 1946, found Cape kurpers *Sandelia capensis* and galaxias *Galaxias zebratus* native in the Gwaayang River (*In. Fish. Dept. Report, No. 3, 1946*). Current reports state that bluegill sunfish have now been widely distributed by private persons in the waters of the George district. A.C.H.