

# THE TRAWLER QUESTION IN THE UNITED KINGDOM AND CANADA

By H. SCOTT GORDON

THE all-weather ports of the Atlantic coast of Canada are the most advantageously situated for the exploitation of what are probably the most prolific fishing banks in the world. The ruggedness of the Appalachian region not only creates those submarine elevations which form the continental shelf, a natural breeding ground for several important species of food fishes, but also forms the broken peninsular and island land masses which, with their excellent natural harbours, provide incomparable bases from which the exploitation of this resource may be carried on. Yet Canadian fishermen are not the foremost users of the Atlantic Banks and the natural superiority of the Canadian ports, although it is a basic competitive advantage of the most important character, has not resulted in a continuous growth of the Canadian industry relative to the other nations whose vessels use the Atlantic Banks.

At least a major reason (if not the whole) for this failure of the laws of economic location to work out in practice is the slower rate of innovation in the Canadian industry as compared with its principal rivals in the United States and Western Europe. At practically all levels—production, processing, marketing—the Canadian industry lags behind in implementing the developments in science and technology which have been made during the past century. Resistance to change is not unique to the Canadian fishing industry, however. In practically all countries, innovations in methods have been made only against the opposition of established interests; Canada's chief distinction lies in the unusual degree of success which that opposition has had. In the primary phase of the industry, opposition has been especially vocal, and most countries which possess an important fishery have experienced, sometime during the past century, a "trawler controversy"—arguments *pro* and *con* concerning the operations of vessels which catch fish by dragging a large bag-like net over the feeding grounds. In most countries, the trawler controversy is now a matter of historical interest, the efficiency of this method of fishing having been generally recognized and freedom of operation granted to vessels fishing by means of the trawl. In Canada, however, opposition to

trawlers continues to be both vigorous and successful. A change in the official policy has only begun to appear since the end of World War II. Up to that time, trawling by Canadian vessels was practically prohibited although the fishermen of other countries had for years extensively trawled the Banks outside (and inside!) the Canadian three-mile limit.

The trawler controversy in Great Britain preceded that which arose in Canada by some twenty-five years. Yet the spirit of the controversy and the specific arguments of which it was composed, were remarkably alike in both countries. Their most significant difference lies in the lack of success which attended the efforts of opponents of trawling in the United Kingdom, compared to their almost complete victory in Canada. The purpose of this paper is to draw together some of the highlights of the development in both countries. Since the trawler constitutes an economic innovation of a major character, a study of its history in two countries where its fate has been so different may help to throw some light on the conditions of economic change.

Complaints against the trawler and arguments concerning allegedly undesirable effects on the fishery resource are as old as trawling itself. Early in the seventeenth century, Charles I was moved to "take into consideration the great destruction made to fish by a net or engine now called the trawle".<sup>1</sup> These early vessels were only wind-powered of course, and dragged small nets of as little as fifteen feet in length. Looking at their operations in terms of the magnitude of present day fishing activities, it is difficult to see how the argument could have been countenanced that they were destroying the resource. The real source of opposition to them was possessed of a much more distinct private-enterprise basis than this, although, from the early sixteen hundreds to the present day, the arguments of trawler opponents have been full of a conspicuous concern for the general good which was matched only by the avowals of fish processors that they wished to employ trawlers solely in order to bring better and more plentiful food into the reach of the general public.

The controversy continued to smoulder throughout the seventeenth, eighteenth and early nineteenth centuries, but with the development of steam-powered vessels it began to

(1) Graham, M., *The Fish Gale*, p. 59.

assume a leading place among the problems ancillary to the emergence of large-scale technological innovation. It was during the late 1870's that steam-driven trawlers began to operate in the North Sea and by 1883 a Royal Commission had been set up to investigate their activities. Largely because of the trawler and the controversy which surrounded its use, the fishing industry came in for a good deal of public discussion during this period. There was also considerable scientific discussion among biologists, economists and the like, centering chiefly on the question of the possibility of permanently depleting the fishery resources of the sea.<sup>1</sup> Alfred Marshall, who was the founder of modern economics, was interested in this question and his *Principles of Economics* published in 1890 shows the influence of current economic problems nowhere more clearly than on this point. Marshall chose the fishing industry for some of his most important illustrations<sup>2</sup> and in those cases where he employed a number of illustrations from various industries, he invariably included fishing, while the other industries did not appear to possess such a high importance in his thinking. This was due to the fact that the trawler was accomplishing an "industrial revolution" in the fishing industry of Marshall's day which, though not nearly as extensive as that which had occurred previously in agriculture or was then being consolidated in manufacturing and mining, was nevertheless illustratively clear to the student of the principles of economic theory, and was also a matter of practical concern to one interested, as Marshall was, in questions of social policy.

There had been two inquiries into the fisheries of the United Kingdom in the years immediately prior to the introduction of steam trawling and both of them had given some attention to the use of trawl nets (by wind-powered craft). In 1866 Queen Victoria had appointed a "Commission to Inquire into the Sea Fisheries of the United Kingdom." In 1879 there had been another "Report on the Sea Fisheries of England and Wales." These reports had considered the assertion that trawls deplete the fishing resource by destroying spawn and small fish and by disturbing the grounds, the same arguments which are still advanced against the method. They concluded that trawling was not destructive of the resource in

(1) This controversy continues today. See, for example *A Symposium of Fish Populations* (Bulletin of the Bingham Oceanographic Collection, 1948); especially, Burkenroad, M.O., "Fluctuations in the Abundance of Pacific Halibut."

(2) For example, his illustration making clear the analytical use of the concept of time in economic Theory. *Principles of Economics* (eighth edition) pp. 369-371.

any way, and in the words of the Royal Commission of 1866, declared that restriction would only "be equivalent to a diminution of the supply of food to the people; while there is no reason to expect present or future benefit from the restriction." The immense reproductive abilities of fish species and the comparatively small importance of man as a predator were facts known to the biologists at this time and this knowledge seems to have determined the conclusions of these two reports on the trawler question. Thomas Henry Huxley, the great biologist, was a member of the Royal Commission of 1866. He later became Inspector of Fisheries and was known as an uncompromising foe of restriction. In his address inaugurating the International Fisheries Exhibition of 1883 he said: "I believe . . . that the cod fishery, the herring fishery, the pilchard fishery, the mackerel fishery, and probably all the great sea fisheries, are inexhaustible; that is to say that nothing we do seriously affects the number of fish. And any attempt to regulate these fisheries seems consequently, from the nature of the case, to be useless."

Huxley was extremely influential in determining the course of public policy during this crucial period. In an argument in which private economic interests were so visible beneath expressed concern for the public good, the opinions of a disinterested natural scientist and one with such a reputation to boot, was certain to carry considerable weight. While others may have doubted the reliability of the non-interventionist case expressed in as extreme form as Huxley put it, they were in no position to dispute biological opinion. Alfred Marshall for example, who several times in the *Principles* makes reference to the danger of depletion of the sea, is moved by his native caution in the face of such scientific authority to add, however grudgingly: "those might turn out to be right who think that man is responsible for but a small part of the destruction of fish that is constantly going on."<sup>1</sup>

The first special report on the trawler question was that of the "Royal Commission Appointed to Inquire into Trawling", 1885. It arose out of the great number of objections that began to be made by line fishermen after the steam trawler made its appearance. Its terms of reference were specifically to investigate these complaints and the Commission held hearings at the principal ports from which the complaints had come. The Commission also sponsored some scientific investigations

(1) *Op. cit.* p. 371.

of the question. Professor W. C. McIntosh of St. Andrews, the foremost fishery biologist of the time, was commissioned to make trawling experiments in order to assess the scientific validity of the claims made by shore fishermen.

The claims were the same that had been advanced before: that the trawl destroys small fish and spawn, that it disturbs the grounds and that the vessels interfere with and destroy the gear of line fishermen. A fishermen from the town of Staithe expressed the views of the line fishermen with the rough eloquence of a man who feels his livelihood and way of life threatened:

We are all unanimous in this place that fish is fast diminishing in the North Sea, and we believe it is all to this reckless and destructive mode of beam-trawling fishing, especially since the steam trawling begun, . . . and if this present mode of fishing be carried on, the German Ocean will be a dead sea in a short time. As trawlers increase we find that fish decreases. I do not call trawling a fair fishing; it is a reckless way of sweeping all immature fish to destruction. There is no human tongue can tell the destruction that the trawlers do. It is not seen all the spawn and fry that is scattered to the bottom, and what comes to the surface would make a fisherman sit and weep to see it. I believe that if the North Sea were twenty times more prolific in fish then it is this present mode of fishing would ruin it . . .<sup>1</sup>

The Commission discounted most of the claims of line fishermen. Huxley, who was again a member of the Commission, although due to illness he did not sign the report, indicated at some stages of the hearings that he considered the fishermen's statements to be little more than old wives' tales. Professor McIntosh's trawling experiments had also indicated that these claims were groundless. Only on the one point, that trawlers might interfere with line fishermen and damage their gear, did the Commission consider the complaints to have some basis in fact. For the rest, the Report noted:

It is no new matter in the history of our fisheries for one class of fishermen to lay the blame for any decrease in their takes upon another class, whose mode of fishing they consider interferes with their own. The quarrel between seiners and drift-net fishermen is of long standing. On the west coast of Scotland, the drift-men complain of the seiners . . . and we found the larger trawlers imputing the scarcity of fish to the small trawls and shrimp nets.<sup>(2)</sup>

(1) Report of the Royal Commission Appointed to Inquire into Trawling 1885, p. XV.

(2) P. XXXVI

There is no evidence, however, that opposition to trawling was silenced by the Report of the Royal Commission of 1885. Every investigation into the United Kingdom fishery since that date (and there have been at least five major ones) has had to concern itself with the complaints of line fishermen against the trawl. The weight of biological evidence having reduced the potency of some of the old arguments, opposition has centered more and more on the claim that the grounds are overexploited and the trawler is accused of this. The argument for prohibition of trawling on this score, however, would amount to saying that, since the total catch of fish ought to be reduced, a way of accomplishing this is to prohibit the operation of the more efficient catching units. No one would deny that this is a way of reducing the catch, but it is not a method that has anything to recommend it. Economically it is similar to "solving" an unemployment problem by setting men at digging holes and filling them up again.

The trawler won an almost complete victory in the controversy which came to a head in the United Kingdom in the 1880's. Since that time, this method of fishing has been implemented freely and extensively in the United Kingdom industry. Steel-hulled, diesel-driven trawlers now make voyages from English and other western European ports to the banks of Iceland and even to the great continental shelf of the New World. Although there is some evidence that the closer grounds of the North Sea and other European waters are not so prolific as they once were, there is no basis for the belief that it is the particular fishing method employed by the trawler that is responsible.

The fishing banks of the Western Atlantic were first exploited on a large scale by Canadian fishermen by means of the schooner. To the present day, this is the vessel of principal importance in the Canadian Atlantic fishery. The schooner was originally a two-masted wooden sailing vessel, built to carry a large quantity of sail and designed for speed and manoeuvrability. It was primarily a carrying vessel since the actual fishing was done by line from small dories which were lowered over the side when the vessel reached the fishing grounds. There are many fascinating tales told of these early fishermen who would take to their dories often at night in a heaving sea, summer and winter alike, while the vessel was running before a stiff wind. The qualities of personal skill and courage ne-

cessary to catch fish under such conditions created a pride, a legend, and a way of life which do not easily pass away when new technological developments make the old methods obsolete.

The first appearance of the trawler in Canadian waters was sometime during the first decade of the present century. The first vessel to make systematic trawling trials of the Western Atlantic grounds was the "Wren", an English-built steam vessel of steel construction. The "Wren" began operations out of Canso in 1908 and almost immediately encountered the opposition of inshore fishermen. This opposition was sufficiently strong and vocal that the Dominion Government enacted an Order-in-Council<sup>1</sup> on September 9, 1908 which prohibited the operation of steam trawlers within the three mile limit. Since that date, trawling has not been carried on without some form of government restriction.

The offshore banks were situated, in the main, outside the territorial limits, and it was apparent that the 1908 Order-in-Council would not seriously hamper the growth of trawling. On February 6, 1909, the House of Commons passed a resolution stating that in its opinion trawling was destructive of fish life and urging an international agreement prohibiting this method of fishing on the Western Atlantic and Gulf of St. Lawrence Banks. This resolution indicated a realization that prohibition of trawling by Canada would harm only Canadian fishermen, if those of other nations were allowed free use of the offshore grounds. It was clearly stated by the Minister of Fisheries in the House on March 18, 1912 that the policy of the Canadian government was to seek general prohibition of trawling. As a preliminary to this end, the governments of the United States, Newfoundland and Canada agreed in 1912 to undertake separate investigations of the question. The war intervened, however, and the general prohibition which many had anticipated did not materialize. In order to still the clamour raised by line fishermen and vigorously supported by the Provincial Government of Nova Scotia, the Dominion Government in 1915 enacted a regulation of the Customs Act which required masters of trawlers to declare that they would not fish within twelve miles of shore before being granted clearance. The legality of this regulation was doubtful but it was difficult (practically) to contest, and was consequently effective in forcing Canadian trawlers to confine themselves to the farther banks. The stimulus supplied by the war-time shortage of

(1) P.C. 2013

at to overcome these restrictions beginning of trawler construction made the opposition of line fisher-er.

of controversy, the opponents of es that had been considered, and gdom reports of 1866, 1879, and and the scientific investigations of 1885, the House of Commons of February 6, 1911 that trawling e political power of those opposed rated by the fact that restrictions scientific opinion to the contrary. ment of Fisheries in Ottawa there United Kingdom Royal Commis- by the pen of Mr. Wm. A. Found. sages which refer to the scientific ion ruled out the complaints of Mr. Found containing instructions y by accident) included in the mber 24, 1912, almost the exact Government settled on its policy

scale inquiry into the controversy 1928 by the "Royal Commission the Maritime Provinces and the the hearings of the Commission ade by Canadian line fishermen ations before in England; but an hich, in fact, was the root of the t trawler supplies glut the market m selling their product. Divorced xpression the matter was simply tween the line fishermen and the other controversy over the innova- the question of markets that was ty. Line fishermen did not have



If they could have obtained would not have considered spawn and immature fish. hood in jeopardy not because sea, but because it would fill

This the Commission found. The majority report concludes today be considered "purpose the fishermen and recommenders. The significance of the indicated by the manner in attempted to implement the trawlers were required to be Fisheries, the licence fee to haddock and halibut landed of a cent per pound for Canada this method of calculating to the Exchequer Court by the declared *ultra vires*. The licence \$500 annually per vessel.

During the thirties the one. It appeared so regular Commons that it was referred processing and distributing Government to relax the By the time World War II kept in operation on the Canada under the impetus of heavy continuing prosperity of the policies have begun to pass

It is interesting to speculate the outcome of the trawler Britain and Canada. The substantially identical and the opponents of the innovative controversy ended in almost

interests while the Canadian was a case of equally complete success for line fishermen.

One factor that was certainly important in causing such different results was the difference in the geographic situations of the two countries *vis a vis* their productive competitors. The British fishing resource was a sea that was the common property of all the nations of Western Europe. The folly of any action to restrict British fishing was therefore apparent.<sup>1</sup> The palpable impossibility of getting international agreement for the prohibition of trawlers among so many nations was also clear. Although both these conditions turned out to be equally true of the Canadian situation, it was possible to assert the effectiveness of Canadian restrictions and the probability of arriving at agreement among Western Atlantic nations with sufficient cogency to carry the weight of argument.

The political influence of the line fisherman was much greater in Canada than in Great Britain. Not only did he have the support of provincial governments, but Confederation itself was too frequently questioned in Nova Scotia to permit the Dominion Government to disregard strong representations by a substantial industrial class. This was all the more true during the 1930's when the Great Depression struck the fishing communities of Nova Scotia a fearful blow. The upside-down economy of the pre-war decade was one in which restriction of economic innovation was more in line with current thought and practice than was encouragement.

Finally, the influence of scientific and professional opinion cannot be denied. In Great Britain, biological investigations played an important role in determining the course of governmental policy. The fact that Huxley was such an ardent non-interventionist must have been extremely important. In Canada, no similar evidence of the influence of scientific opinion is to be found. The membership of the Royal Commission of 1927-28 contained no scientists and the Commission did not sponsor nor engage in any extended biological investigation. Indeed, as has been indicated above, there would appear to have been a tendency to disregard scientific information when it was available from other quarters.

Restrictive policies against trawlers in this country are now beginning to be relaxed and the Minister of Fisheries has announced the intention of the Dominion Government to develop

(1) This was noted explicitly by the "Report of the Sea Fisheries of England and Wales," 1879, p. XVI.

and modernize the fishing industry of the Canadian Atlantic coast. It is the only large industry of Nova Scotia that possesses a rich and permanent resource base. The prospects for expansion are excellent, but if the history of the past contains any lessons for the future it is that wealth in natural resources alone cannot guarantee progress. Governmental policies are important conditions of economic progress and these are all too frequently the result of political pressures of a sectionalist nature rather than matters of general economic welfare.

*Editor's Note:* Mr. Gordon has been employed during academic vacations by the Fisheries Prices Support Board of the Department of Fisheries. The conclusions drawn and opinions expressed in this article are his own and do not necessarily reflect those of any agency or department of Government.