

## SPEAR-FISHING AND FISH EXTERMINATION

By NORMAN LEWIS

Fish inhabiting shallow coastal waters in all accessible parts of the world are at this moment in the process of being exterminated, through the mass invasion of these waters by spear-fishermen. On the Mediterranean shores of France and Spain, and all round the coastline of Italy the process is almost complete, so far as several species of fish are concerned, and we learn from the magazines of spear-fishing enthusiasts, of new centres of their sport being continually established on the more remote coasts of the Adriatic, of Greece and of North Africa.

In a recently published book on spear-fishing, the information was given that over 10,000 spearguns had been sold in this country alone. This is only a tiny fraction of the number of these guns sold in countries such as France, Spain, Italy and the U.S.A., where this sport first developed. Originally spearguns were powered by elastic bands, which gave them an under-water range of only a few feet, and considerable practice and skill was called for on the part of the hunter. Elastic bands, alas, were soon followed by powerful steel springs, and then by weapons operated by compressed air and by carbon dioxide. The latter type of gun, in almost universal employment in the Western Hemisphere, is a lethal weapon indeed; its killing range extends to about thirty feet and is often augmented by an explosive spearhead. No fish, however powerful, is a proof against this latest production in the under-water armoury—in fact, the bigger the fish, the greater the target area it offers. Even the redoubtable shark comes off worst when attacked in this way, and the hunter does not even risk losing his gun in the frantic attempts of his prey to escape; for the harpoon goes free, attached to a floating buoy and the struggles of the largest fish are soon exhausted. Already these methods have depleted the waters of such resorts as Jamaica and the Bahamas, and American spear-fishing enthusiasts are spreading rapidly into the lesser Caribbean islands, and down the coasts of Mexico and Brazil. Hordes of native imitators, encouraged by the American's example are springing up everywhere.

The sport is an extremely easy one in which to reach a fair proficiency, and so long as virgin territory can be found, the rewards are very tempting. *The Skin-Diver* a U.S. journal devoted to spear-fishing, reports instances where under-water fish-poachers off the Florida coast have taken 1,000 pounds weight in fish in a night. Fish, when encountered in their natural

surroundings, are in most cases tragically tame, and even curious. Far from seeking to escape from the spear-fisherman, they will often approach to within a few feet of the harpoon, or like the tarpon, actually follow him about; so that while any fish are present they can be slaughtered as fast as the hunter can reload his gun.

These shallow-water fish appear to be irreplaceable—or, at any rate, replaceable only over a very long period. In Europe the principal targets of spear-fisherman have been such rock-inhabiting fish as the *merou* (Mediterranean sea-perch), the *sargue* (bream), and *corb* (croaker or drum fish). These beautiful species seem to live out their lives in certain caverns or rocky labyrinths, to which the spear-fisherman has only to track them down to despatch them at his leisure. It is precisely these species, which due to their feeding habits have largely escaped the hook or net of the professional fisherman, that might have provided a valuable study for scientifically-minded observers of the future; but there it is, they have been virtually exterminated, and only the unshootable and relatively insignificant species remain. Old hands speak of the great numbers of big fish seen off the coasts of southern France when they first spear-fished there, not much more than ten years ago. These waters are now barren, and the fish observer or marine photographer of the future has thus been deprived of his innocuous pleasure. Spear-fishermen I have known in Spain, who used to take two or three merous weighing up to fifty pounds each on every expedition, now go a whole season without even glimpsing such a fish. To give an example of the depredations for which one man alone can be responsible, the champion spear-fisherman of Iviza in the Balearic Islands—a young man of twenty-four—is proudly claimed by his native villagers to have practically annihilated the large fish in the island waters in a matter of ten years. A point to remember is that for every fish killed outright, at least two injured fish succeed in escaping. These often survive for days, as I have observed myself when swimming underwater, sometimes bearing upon their bodies the most dreadful wounds.

There seems to be a most urgent need for legislation in this matter. Already most countries have made it illegal to hunt with aqualungs; but this is not enough, for the thousands of holiday spear-fishermen who throng to the shallows of the warm seas every summer, kill or wound innumerable fish without doing more than splash about on the surface. Either spear-fishing must be made illegal, or certain coastal areas must forthwith be

designated as sanctuaries. Speed is vital. Even now, only a few accessible areas (among these, most fortunately, those of our own country) can be saved from the denudation of their fish life.