

OILY WATERS.

(From "*American Forests*.")

Oil leaks from a thousand and one sources have become a conservation problem of no mean dimension. The needless waste of oil, it is readily apparent, is a factor in shortening the life of our oil resources; but that is not the phase of the problem which legislation now pending in Congress seeks to ameliorate. This legislation, introduced by Representative Grant M. Hudson, of Michigan, and known as Bill H.R. 10625, is aimed to prevent the destruction of plant and animal life resulting from uncontrolled oil leaks and wastage.

One needs only to visualise the hundreds of thousands of places at which oil is used to-day to appreciate the magnitude of the problem of oil wastage and its menace to plant and animal life if not properly controlled. Wasted oil from any or all of these diversified sources finds its way to the ground or into sewers and is washed into streams or lakes. Much of it finally reaches the sea. Oil does not mix with water but is carried by water; and, as almost everyone knows, oil is incompatible to animals, birds and plants. Dr. G. W. Field, an eminent biologist who has made a life study of pollution, says in respect of oil waste in our streams:

"The oil forms a film over the water, spreading to rivers, bayous, marsh lands and the sea coast. It has been proved that an oil film one-millionth of an inch thick is sufficient to ruin the waters for fisheries. This film affects the fisheries in two ways; by destroying the fish eggs or the young fish, and by destroying the food upon which fish feed.

"Most fish deposit 'pelagic' eggs which, at a certain time in their life cycle, rise to the surface of the water. Here they come in contact with the oil and are destroyed. This oil film, too, becomes weighted with dust and minute debris, until it finally sinks through the water, carrying down with it all the microscopic plants and animalcules upon which fish feed, destroying them. This weighted oil film finally comes to rest on the bottom, destroying oysters and shrimps and killing the food plants which grow on the bottom."

These ill effects, Dr. Field says, may sound fantastic, but they have been proved beyond any doubt. Hunters tell of shores strewn with dead ducks which have starved in the midst of plenty. Examination of the birds' feathers revealed a coating of oil heavy enough to keep the birds from flying. With surrounding aquatic and plant life killed, the imprisoned birds succumbed to starvation.