

INSECT MONSTERS IN THE SEA

Radio-activity on land surfaces may force hordes of insects to take refuge in the sea and there's no telling how they would change there.

By A Science Writer.

A World War III with atomic and H-bomb weapons will not only bring death to millions of humans but will mean also extinction or a complete change of living for tens of millions of insects that may produce some fantastic switches in Nature's balance.

You've heard a lot about "snorkel" submarines in the world's navies. Germans perfected snorkel subs in World War II. They have revolutionised modern sea warfare.

But aquatic insects invented the snorkel millions of years ago—a long breathing tube reaching to the surface. They've also invented diving bells, and just now are experimenting with gills.

Fish get their oxygen through gills, specialised strainers which extract oxygen from the water and pass it into their circulations. Land insects breathe through their skins, which are pierced with the openings of breathing tubes that branch all through their bodies.

Sea insects can't use the bubble method, or diving bell because the water is too turbulent. The snorkel is no use as water seeps into their skin-pores, filling up their breathing tubes and they "drown." Gills are their only solution.

A water beetle with gills was discovered recently in Africa. This type of river inhabitant began with diving bells or bubbles, but has evolved gills to help itself to more oxygen.

Sea insects aren't numerous, but in those that survive today the old-style breathing tubes are filled with water. They breathe through "gills" instead.

One of the great boons which gills can give insects is increased size. The air which is dissolved in sea water contains nearly twice as much oxygen as in ordinary air.

With adequate gills sea creatures can—and do—grow to huge sizes. With skin-breathing replaced by gill-breathing, sea ants would do likewise.

At first they would live on the ocean floor, crawling around like sea-spiders and excavating nests in the mud. Next they would evolve fins, and cruise round in shoals like fish. As with fish, large types would evolve in the perpetual struggle for prey.

A bull ant's sting is not lethal to humans, but multiply a bull ant's size, and it would be another story. A swarm of such giant sea ants could attack and kill any creature afloat.

Imagine Argentine ants taking to the sea and, helped by gills, growing to monster sizes, then, like crabs, becoming amphibious and making mass raids on the shore by night. Goodbye to surfing and all that!

Yachts and ferries in harbours would be attacked by sea ants resulting in a mass migration from seaside suburbs because of ants' night raids. Ships would have

to be swathed in ant poisons to repel deepsea ants' attacks, while amphibious ants swarming in inland lakes and rivers would make living a nightmare for mankind.

Scientists might toss atom-bombs into the ant-infested sea or empty glorified insecticides into it. But there are 1,392 million billion tons of water in the ocean. The ants would still survive.

It's a gloomy picture that I have painted, but it is all within the bounds of possibility and it all depends on how quickly or efficiently the insect world's experiments in developing their gills work out.

The following are the Aborigines who have received copies of *Dawn* in Queensland. They desire to send their special thanks and appreciation:—

Miss Mary Graham, Cheerbourg Settlement.
Miss D. Anderson, Cheerbourg Settlement.
Mrs. B. Bond, Cheerbourg Settlement.
Mrs. Alice Costello, Cheerbourg Settlement.
Mr. Archie Doctor, Cheerbourg Settlement.
Mr. Tom Fuller, Cheerbourg Settlement.
Mr. C. Georgetown, Cheerbourg Settlement.
Mr. L. Hill, Cheerbourg Settlement.
Mr. E. Pitt, Cheerbourg Settlement.
Mr. N. Skeen, Cheerbourg Settlement.
Mr. Ken West, Cheerbourg Settlement.
Mr. G. Cummins, Palm Island via Townsville.
Mr. Ned Cape Bedford, Palm Island via Townsville.
Mr. Henry Brown, Palm Island via Townsville.
Mr. Donald McDonald, Palm Island via Townsville.
Mr. Davis Harvey, Palm Island via Townsville.
Mr. Ellison Obah, Edmonton via Cairns.
Mr. R. Richardson, Mona Mona Settlement via Mareeba.
Mr. Gay Lord Shaw, Palm Island via Townsville.
Mrs. E. Freeman.
Mr. Davis Harvey.
Mr. H. Brown.
Mr. Stan Victor.
Mr. John Eggmosses, Bundaberg, North Queensland.
Mr. P. Freeman, Woorabinda via Duranga, Rockhampton.
Mrs. J. Daisy.
Mrs. G. Daisy.
Mrs. Tilly Bond.
Mr. Joeman Tamwoy, Cowal Creek, Jacky Jacky, Cape York via Thursday Island.
And all the patients at Fantome Island.