

PHYSICS-BIOLOGY

Atom Bomb Blast Effects

Will probably kill and stun fish in the Bikini lagoon. May also start a local tidal wave to wash over the islands.

► **ATOMIC BLASTS** that will destroy and damage guinea-pig ships in the lagoon of Bikini atoll next May and August will make Friday dinners very cheap for a while. The terrific concussion, even from the bomb that will be exploded in the air, will undoubtedly kill all fish for a considerable area, and stun others for miles around. And when the second bomb is exploded at the surface of the water the effect will be even more severe, because of the absence of any air cushion.

Not only the many-colored tropical fish and sharks will be the victims of the concussion; other sea life on the bottom, such as octopuses and squid, lobsters and crabs, will feel the effects. How much the blast will affect lower types of marine animals, like sponges and coral polyps, will remain a problem until after the event; in general, these humbler forms of animal life can take a terrific battering and then regenerate themselves.

How much effect there will be from the heat released by the explosion is another problematic matter. Very likely,

however, only a relatively small volume of water will be turned to steam, for water has a most amazing heat-absorptive power. So while some of the fish may come up ready-cooked, or even overdone, those farther away from the center of explosion will suffer mainly from the blast.

The disputed lingering radioactive effects, much discussed after the explosions in New Mexico and Japan, will mean less in Bikini lagoon. Some radioactive properties will undoubtedly be imparted to the water and the salts dissolved in it, but it is unlikely to last long: water flows away too soon, and becomes too mixed with unaffected water masses out of range at the moment of the explosion.

The blasts, of course, are likely to kick up quite a commotion in the 20-by-30-mile, saucer-like body of shallow water within the ring of the score or so of islands that constitute Bikini atoll. It is highly probable that one or more local

tidal waves may be sent washing over the low islands, which are never more than a few feet above high tide mark, doing the same kind of damage that is wrought by an earthquake wave, though less than is done by the longer violence of waves driven by a typhoon. Direct effect of the blast on the vegetation and land life of the islands will of course depend largely on how far off shore the bomb explosions take place.

A group of biologists, particularly marine biologists, are to be included in the scientific party that will be sent to study the effects of the bombs. They will not only record data on destruction to marine life but will probably be able to reap an incidental harvest of specimens otherwise hard to get, which may be killed and dislodged from their homes among the coral by the volcanic violence of the blasts. Follow up studies, on both marine and land life, will be carried on for many months.

Science News Letter, February 2, 1946

Land released from growing feed for horses and other work animals, now replaced by motor power, is sufficient to feed 18,000,000 head of cattle.

Narcissus fly larvae are killed by a new Dutch process in which the infected bulbs are subjected to pressure in a mixture of carbon dioxide and oxygen.

Clip and mail this Coupon



LANGUAGE IS POWER

... Forge ahead, win special assignments, promotion, better job in global peace time opportunities through ability to speak a foreign language.

MASTER A NEW LANGUAGE quickly, easily, correctly by LINGUAPHONE

The world-famous Linguaphone Conversational Method brings voices of native teachers INTO YOUR OWN HOME. You learn the new language by LISTENING. It's amazingly simple; thousands have succeeded.

HOME-STUDY COURSES IN 29 LANGUAGES

Send for FREE book—

LINGUAPHONE INSTITUTE
31 RCA Bldg., New York 20 • Circle 7-0830

LINGUAPHONE INSTITUTE,
31 RCA Bldg., New York 20, N. Y.
Send me the FREE Linguaphone Book.

Name.....
Address..... City.....
Language Interested.....

To SCIENCE NEWS LETTER, 1719 N St., N.W., Washington 6, D. C.

- Start my subscription to SCIENCE NEWS LETTER for 1 year, \$5
 Renew 2 years, \$8
 (No extra postage to anywhere in the world)

To CHEMISTRY, 1719 N St., N.W., Washington 6, D. C.

- Start my subscription to CHEMISTRY for 1 year, \$2.50
 Renew 2 years, \$4.00

To THINGS of SCIENCE, 1719 N St., N.W., Washington 6, D. C.

- Enter my membership in THINGS for 6 months, \$2
 Renew 1 year, \$4

To SCIENCE CLUBS OF AMERICA, 1719 N St., N.W., Washington 6, D. C.

- Send me information on organizing a science club.
 Enroll me as an associate of Science Clubs of America, 25 cents is enclosed.

Name.....

Street Address.....

City and State.....