



AT HOME ON THE RANGE—*The grasshopper Melanoplus bilituratus, one of the range pests, is not the rancher's pet.*

AGRICULTURE

Grasshopper Control

► **SPRAY TEAMS** in the states most heavily infested with grasshoppers have been racing against the clock to finish spraying thousands of acres before the grasshoppers lay their eggs.

The grasshoppers mature in July, Leo Iverson of the U. S. Department of Agriculture's plant pest control division in Washington, D. C., said, and they then begin laying eggs. If the spraying is not done before egg laying, next year's grasshopper crop will be well on its way and all the spraying will have to be done again next year.

Spraying of 360,000 acres in Montana and nearly 70,000 in North Dakota, the hardest hit states, was completed in July, Mr. Iverson said. In these areas, grasshopper counts ranged from 30 to 60 insects per square yard; in a few spots, 200 per square yard.

Hot, dry spring and summer weather is the biggest factor in these heavy infestations. The situation in the southwestern states is serious but not of plague proportions. Infestations have been reported from

New Mexico and Texas. New Mexico has 350,000 acres with counts of 12 to 45 hoppers per square yard, and Oklahoma's highest counts are 15 to 25.

No one knows exactly how much damage the grasshoppers have done to the western range, but ranchers consider spraying, at a contract cost of 46 cents to 63 cents per acre, depending on the size of the acreage involved, cheaper than losing grass.

The usual arrangement is for a group of ranchers to have their lands sprayed at one time. The Federal Government pays one-third and the rancher pays the rest unless the state has funds available, in which case it pays one-third.

So far this year, Mr. Iverson said, the Department of Agriculture has contributed \$270,000 toward spraying 400,000 acres. In 1958, the last big grasshopper year, \$1,260,000 in Government funds were spent to spray 5,000,000 acres.

The spray being used is an oil solution of aldrin. Once it has been applied to a field, the grasshoppers are under control.

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they were able to ward off an attacking shark in clear oceanic waters," he said.

The panel keeps a world "Shark Attack File" and attempts to verify and document all reported attacks. Their newly released 1960 census lists 30 unprovoked attacks during the year, compared with 36 in 1959. There were five 1960 fatalities (eight less than in 1959) and 23 injuries, some of them severe. No one was killed in U. S. waters.

There were 12 attacks last year by sharks that had been provoked by being caught, trapped, speared, injured or pursued by humans. None of these was fatal.

A lark with a shark is dangerous, the panel warned. They cautioned swimmers and skin divers against hunting, provoking or hanging onto the tails of sharks, or otherwise "playing" with them.

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PUBLIC HEALTH

Tons of Crops Seized For Too Much Poison

► **THE FOOD and Drug Administration** has to seize tons of crops each year that have too much poison on them to be safe, Representative John E. Fogarty (D-R.I.), chairman of the Appropriations Subcommittee covering health matters, said.

"I never pass a produce market or eat a vegetable salad without wondering if these vegetables are from the few shipments the FDA inspects for safety," Congressman Fogarty told the Association of Food and Drug Officials of the United States in his keynote address in Washington, D. C.

The Congressman said there was a serious question as to whether the \$23,580,000 appropriation recommended for 1962 would be adequate to provide funds for all the responsibilities of the FDA.

New drugs are being placed on the market at a rate of more than one a day, but they must be cleared and labeled for safety before they reach the market.

"The regulatory program facing state and local food and drug officials is tremendous," the Congressman said, adding that they have a big stake in controlling the \$500,000,000 a year business in nutritional quackery, in curbing the cancer racket that takes in more than \$50,000,000 a year, and in wiping out the arthritis and rheumatism quackery that milks the public of \$250,000,000 annually.

He recommended a study of state and local operations by a citizens' advisory committee patterned on the committee that studied FDA in 1955.

"If responsible citizens of your communities will examine their consumer needs in the health, food and drug field," he pointed out, "and then examine the resources of their local government to fill these needs, the result will be not only better understanding of your problems but also better support of your appropriations, laws and activities."

The Congressman said the 1955 citizens' study of FDA needs to be repeated and that he was sure the present Administration would see that a new study was made to cover the changes of the past six years.

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PUBLIC HEALTH

Shark Attack Dangers

► **SHARKS GENERALLY** attack humans during daylight hours, but statistics dating back to the year 1580 show that the dangers of swimming in shark-infested waters may be even greater at night.

A 380-year historical record of 790 reported attacks, on file with the Shark Research Panel of the American Institute of Biological Sciences, Washington, D. C., show that 94.3% occurred in daylight, when swimmers and fishermen are most active.

This leaves 5.7% as nighttime attacks. Dr. Leonard P. Schultz, a member of the

panel and curator of fishes for the Smithsonian Institution, believes the percentage of swimmers likely to be in the water in darkness, as compared to daylight, is "significantly smaller" than the percentage attacked by sharks at night.

"If that is true," he reasons, "then it is more dangerous to swim at night."

Reporting in *Science*, 134:87, 1961, Dr. Schultz also notes that in murky waters, as at night, a swimmer may be unable to see and avoid an oncoming shark.

"Many swimmers have pointed out that