

ENTOMOLOGY

Insects Are Building Up

➤ **BOLL WEEVILS** are building up their numbers in the maturing cotton fields of the Southland, while grasshopper populations are becoming heavier in several states west of the Mississippi, the U. S. Department of Agriculture has revealed.

Boll weevils are increasing rapidly in the lower Rio Grande valley and are migrating. They were found at rates of 66 per acre on untreated fields and 21 per acre on treated fields. Throughout the weevil areas of Texas, they are present in much larger numbers than last year, the report said.

In southwest Arkansas, some fields have up to 1,500 weevils per acre. Of 22 fields checked in Alabama, 19 showed weevil infestation. The delta counties of Mississippi showed an average of 65 weevils per acre compared with 52 the previous week.

Grasshoppers are becoming a problem now in southwest and central Missouri, doing damage to alfalfa. Grasshopper counts on the margins of fields range from 20 up to 300 and 400 per square yard.

Heavy, widespread infestation by grasshoppers is reported from several counties in Texas and New Mexico. To combat out-

breaks, 176,000 acres of rangeland are being sprayed in two New Mexico counties. Nearly all fields in northeast Kansas show adult grasshoppers, and some damage is reported to alfalfa.

Thirty-inch corn in Illinois has 200 egg masses of the European corn borer per 100 plants. Cool weather has kept this corn borer back in Iowa, but 10% of the corn crop in the central and northern areas of the state may have heavy damage if weather favors egg-laying and hatching.

The alfalfa weevil has been reported for the first time from the state of Washington. In New Jersey, this weevil has defoliated many unsprayed fields and damaged some treated fields in the southern area.

Living specimens of a fig wax scale were intercepted on fig cuttings sent in the mail from Italy. This insect is injurious to figs in parts of Europe, Asia, Australia and South America.

This fig wax scale secretes a "honey dew," which furnishes food for a sooty mold that develops on the figs, making them unsuitable for drying.

Science News Letter, July 2, 1955

PSYCHOLOGY

Self Judgment Poor

➤ A **MAN** is a remarkably poor judge of himself, Dr. Wilse B. Webb, psychologist of the U. S. Naval School of Aviation Medicine, Pensacola, Fla., has found.

And any one of his companions is likely to be as far off in judging the man as he is himself.

When his friends pool their judgments of him, however, they can classify him fairly well, and the larger the number taking part in the group judgment, the more accurate it will be.

Dr. Webb drew these conclusions after comparing the self-ratings of Naval Aviation Cadets with ratings of them by others in the group and with the results of objective tests.

Although ratings were made on several traits, including leadership, social adequacy, intelligence, possibility of success in flight training and possibility of success as a Naval aviator, comparisons were made only for intelligence because for this trait objective scientific tests were available.

The group ratings for the men agreed fairly well with the test scores. The self-ratings were way off. And the judgment of any one cadet on any other was likely to be just as bad as the man's judgment of himself.

Each man really has three selves, Dr. Webb concluded. There is his "objective self," the real him as shown by scientific tests. Then there is his social self, or the summation of the group's attitude toward

him. And, finally, there is his "self concept," or his own assessment of his abilities.

Perhaps a man's opinion of himself might be closer to reality, Dr. Webb suggested, if he rated himself on the same traits several times over a period of time and the average rating was determined.

It is quite possible, too, he stated, that a man's true self might change over time to become more like his associate's opinion of him.

Results of Dr. Webb's study are reported in the *Journal of Consulting Psychology* (June).

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ZOOLOGY

Bat Makes Own Belfry For Daytime Sleep

➤ A **BAT** that builds its own belfry inhabits Barro Colorado Island in the Canal Zone, the Smithsonian Institution reported.

Known as *Uroderma*, the nocturnal creature is a tent-maker. For its home, it cuts and bends a palm or coconut leaf into a tent shape, then spends the day inside.

Several bats often share the same home-made apartment at the Institution's jungle wildlife preserve and biological experiment station. When it gets too hot and uncomfortable inside the tent, it is reputed, the bats turn on the air-conditioning. That is, the bats fan one another with their wings.

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• RADIO

Saturday, July 9, 1955, 5:00-5:15 p.m. EDT
"Adventures in Science" with Watson Davis, director of Science Service, over CBS Radio Network. Check your local CBS station.

Francis W. Davis, consulting engineer of Waltham, Mass., and inventor of power steering for motor vehicles, will discuss "Hydraulic Power Steering."

PHYSICS

Highest Energies Reached in Accelerator

➤ **THE HIGHEST** man-made energies ever reached are given atomic particles in the University of California's bevatron, the world's most powerful atom smasher at Berkeley, Dr. Walter H. Barkas has reported.

The physicist said that nearly all of the strange nuclear fragments found in cosmic rays are generated by the machine, which has accelerated protons to 6.2 billion electron volts. The protons, hearts of hydrogen atoms, are used to probe the complex structure of atomic cores.

Dr. Barkas, a physicist at the University's Radiation Laboratory, told the Pacific Division of the American Association for the Advancement of Science meeting in Pasadena, Calif., that research so far has been of a survey type.

Now-puzzling questions concerning the short lifetimes and other basic facts about the so-called K particles may be removed by studying the high concentration of them produced in the bevatron under controlled conditions, Dr. Barkas said.

The bevatron cost \$9,000,000. Particles travel 300,000 miles in being whirled up to their energies. It has the world's largest magnet, 135 feet in outside diameter, weighing 10,000 tons.

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MEDICINE

Aspirin Stops Return Of Kidney Stones

➤ **DAILY DOSES** of aspirin has stopped kidney stones from forming again in patients who had had frequent repeat attacks of kidney stones, Drs. Edwin L. Prien of Brookline, Mass., and Burnham S. Walker of Boston reported at the meeting of the American Medical Association in Atlantic City, N. J.

The daily aspirin also stopped the growth of existing stones.

These results were obtained in 17 of 19 patients who have been taking the aspirin for more than a year.

The aspirin apparently acts by combining, or conjugating, with glucuronic acid. A crude extract of human kidney excretion which contains glucuronic acid in conjugated form has been found to check the precipitation of calcium salts. Kidney stones containing calcium were the kind stopped by the daily aspirin.

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