

Utilitarian Song

► SPRING bird songs have already filled the air where winter has retreated, and will soon be heard to the northern boundary and up the highest mountains. There have been robins and red-winged blackbirds; presently there will be wrens and bluebirds, thrushes and orioles.

Romanticists of all schools have for centuries rhapsodized over the sweet songs of birds, hailing them as "nature's troubadours" and all that sort of thing. Since

many bird songs do sound very sweet to human ears, it is only natural for us to suppose that birds sing for the same reasons that we do: that they are feeling happy, or want to attract favorable attention to themselves, or are trying to please their friends or offspring. Such "anthropopsyching" is a mental groove very easy to slip into.

However, more objective observations made by cooler-brained field scientists seem to indicate that birds do not necessarily sing through sheer exuberance of feeling or from love of mate or family. Certainly the first song-outpourings we hear in spring can not come from such causes, for neither families nor nests exist as yet, and even the prospective mates have not yet put in their appearance. First bird songs are heard only by males.

The reason is highly utilitarian. Practically all song birds migrate in waves, with the males traveling in advance of the females. Upon arriving at an area that promises to supply good hunting for the prospective nestlings, each male bird picks out a tract that will supply his family's needs. Then he proceeds to stake claim to it by perching in some prominent place and singing as loudly as he can. However pleasant his song may sound to human ears, it is probably disagreeable to a later-coming male, for it warns him, in effect: "This territory is mine; move on or prepare to exchange buffets!"

Bird song as an expression of bird pugnaciousness reaches an easily observed climax when a cat gets near a wren house. Between furious lunges at Tabby's bewildered head, the wren will perch on a twig and sing as if to burst his throat. And when the furred ogre has slunk away he will sing again, for as much as a half-hour. Just like that equally assertive though less tuneful male—the rooster.

Science News Letter, March 19, 1949

WILDLIFE

Winter-Killed Animals Mean More Coyotes and Buzzards

► COYOTES, buzzards and other predators and scavengers will find rich pickings for a while after melting snows in the West lay bare the carcasses of livestock and game animals and birds killed in this winter's terrific blizzards. This grisly clean-up job will be a service to human inhabitants of the land, but at the same time it will help produce a bigger population of these prowlers, Frederick C. Lincoln of the U. S. Fish and Wildlife Service stated.

This is because there will be a much bigger than ordinary supply of food for the coyote cubs and the nestlings of the buzzards and crows, Mr. Lincoln pointed out. A higher percentage of them will survive and grow up, to hunt hungrily for food next winter. And because the breeding stock of deer, sage grouse and pheasants has been severely reduced, along with the

livestock losses, next winter is likely to be a hard-times season for the predators.

This in turn will bring about an increased number of predator raids on domestic animals, especially sheep, he continued, adding: "We shall not be surprised if stockmen make more demands on us for the services of our hunters."

Science News Letter, March 19, 1949

ENTOMOLOGY

Biological Warfare Tested Against Insect Foe in West

► BIOLOGICAL warfare methods are being tested against enemy hordes in California. The enemy is the alfalfa caterpillar, and the weapon used against it is the virus of a wilt disease that apparently affects no other insect and is known to be harmless to man and his animal dependents.

Sprayed on the fields where the caterpillars are feeding, the virus produces a sweepingly fatal epidemic. In one test plot, the number of active caterpillars was reduced to four, while in an unsprayed control plot the number rose from 96 to 154 in 11 days. Further tests are being made.

Science News Letter, March 19, 1949

Words in Science— TRANSISTOR

► AN invention which will make possible more rugged radios is the transistor, pronounced tran-sis-tor, with the stress on "sis."

The transistor may very well in future be the successor to the vacuum tube. It is a bit of semi-conducting germanium metal that amplifies or oscillates current without the complexity of plates and wires in an airless bulb.

The transistor will be a small instrument, slimmer than a pencil and less than an inch long, making possible smaller radios. The conductivity of a semi-conductor, such as germanium, is controlled by changing the electronic structure of a small bit of material under the influence of the incoming current, fed to it through a fine wire.

Science News Letter, March 19, 1949



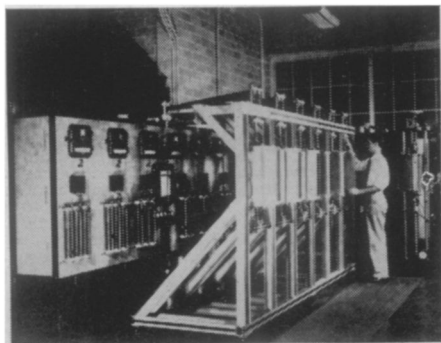
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