



Insects in Winter

► WINTER is commonly thought of as a time of death for the lesser winged and creeping creatures—insects, spiders, centipedes and the like. We are used to the migration of birds and the hibernation of mammals; but insects we think of as either perishing with the first stiff frost or spinning themselves into sheltering cocoons and sleeping it out as pupae.

We are of course well used to seeing

surviving flies and mosquitoes flitting about in our houses and occasional spiders and centipedes furtively on the crawl at odd times during the winter. However, we are prone to take credit to ourselves for involuntarily providing shelter for these undesired guests. Outside, assuredly, insects cannot live through the season's severity, we think.

It comes as a surprise to many of us, therefore, to see occasionally, during a January thaw, and more frequently as late winter merges into early spring, a considerable population of adult insects creeping or flitting about in the short release that the midday hours give them from the stiff thralldom winter normally imposes on them.

Almost everyone gets to see winter-wandering ladybird beetles and those odd-shaped but attractively-colored insects, the

box-elder bugs. Unobservant indeed must be the person who fails to notice woolly-bear caterpillars hastening, humpity-hump, across sunny sidewalks and patches of bare earth.

Rarer is the treat afforded by the mourning-cloak butterfly, and you have to walk the winter woods for a chance to see it. There are other butterflies that over-winter in the adult state, but they are smaller and less conspicuously colored than the mourning-cloak, and hence less likely to be noticed. Even the mourning-cloak is not apt to catch your eye unless it is in flight or preparing to take off. Then the light-bordered dark upper surfaces of its wings are visible. When it is resting, whether in active state or chilled into immobility as it clings to a tree, these are folded up together and only the camouflaging, bark-colored under sides are presented.

Science News Letter, January 22, 1949

METEOROLOGY

Record-Breaking Cold

► SO YOU think it's cold, do you? Well, take it from the old-timers, it got lots colder when Grandpa was a boy!

That's not just garrulous old age bragging about its own departed frost-bitten toes; it's a matter of cold, scientific fact. The biggest cold wave that has hit this country in the 70 years of official records kept by the U. S. Weather Bureau was the one that came just a month less than 50 years ago, in February, 1899. That was the time the thermometer got down to two below zero at Tallahassee, in northern Florida.

The same cold wave established record lows that have not been matched since, in nine states: Ohio, 39 below; Virginia, 29 below; Kentucky, 30 below; Mississippi and Louisiana, tied at 16 below; Texas, 23 below; Florida (as already mentioned), 2 below; Nebraska, 47 below; Montana, 63 below.

There was another February cold wave in 1905, that set a few low records: Alabama, 18 below; Arkansas, 20 below; Kansas and Missouri both 40 below; Oklahoma, 27 below.

The coldest cold wave that ever did hit the country invaded the northern Rocky Mountain region in 1933. Like the 1899 and 1905 frostbiters, it came in February. However, it did not spread far. It hung up the all-time low-temperature record for the entire United States when it curdled the mercury in the bulb of a thermometer at a ranger station in Yellowstone National Park (Wyoming) at 66 below zero Fahrenheit. It also set all-time low records of 54 below in Oregon and Colorado, tied a previous low of minus 50 in Utah, and then slowly warmed up.

Here are the record low temperatures (without dates) for states not already mentioned. All figures, of course, are in degrees

below zero Fahrenheit: Maine 48, New Hampshire 46, Vermont 50, Massachusetts 30, Rhode Island 23, Connecticut 32, New York 52, Pennsylvania 42, New Jersey 34, Delaware 17, Maryland 40, Virginia 29, West Virginia 37, North Carolina 21, South Carolina 13, Georgia 17, Alabama 18, Tennessee 32, Ohio 39, Indiana 33, Illinois 35, Michigan 51, Wisconsin 54, Iowa 47, Minnesota 59, North Dakota 60, South Dakota 58, Nebraska 47, Arkansas 29, New Mexico 46, Arizona 33, Nevada 50, Washington 42, Oregon 54, and California 45.

Obviously, many of these low temperatures were reached only at high altitudes; states without mountains, like Florida, cannot hope to compete with states that have them, like California, when it comes to frostbite honors. But then, maybe they wouldn't want to.

Science News Letter, January 22, 1949

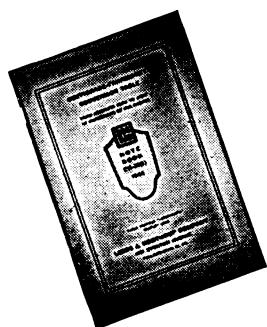
WILDLIFE

Loose Dogs Kill Deer; Owners Given Warning

► EXTERMINATION of timber-wolves in most of the states of the Union has meant little respite for deer; dogs on the loose have taken their places. In New York State alone, the Wildlife Management Institute declares, free-hunting dogs killed a thousand deer during a 10-day period.

Owners of dogs are cautioned to keep their dogs chained up, for the good of the dogs as well as for saving of the deer. Game management authorities in most states are empowered to kill dogs found worrying deer—and with the bloody example of New York before them are very likely to do it.

Science News Letter, January 22, 1949



QUICK-READING TEMPERATURE-CONVERSION TABLES

For speed, when you're converting degrees F to C, and vice versa, you can now use a simple, compact "Sauveur-type" table all the way from absolute zero to 3350 C and 6062 F, in increments of one degree.

For quantities, there's a slight charge: ten copies for 75c; 50 for \$3.25; 100 for \$6.00. To minimize bookkeeping, kindly order from our Advertising Dept., and include check for exact amount . . . but please note that a single copy will be sent free on request. Better get one! Ask for Note Book EN-33(1).



Jrl. Ad EN-33 (1a)