



Don't Shoot!

➤ SHOOTING at owls and hawks is a good deal like shooting at night watchmen and policemen—except that the owls and hawks can't shoot back. All they can do is die if hit, or leave the neighborhood if they escape our lead, thereby giving free entry to our valuables to thieves whose activities are normally held in check by their presence.

True, one or two species of hawks steal chickens occasionally. True also, owls are hated by other birds, which "gang up" on them whenever they find one by daylight in an exposed place. But to condemn the great majority of harmless and useful hawks for raids which they never commit, and to make common cause with bluejays and wrens against stray owls for their rather rare nest robberies, is simply an ignorant neglect of our own biological interests.

Predators, killers, owls and hawks undoubtedly are. But the prey that they kill consists overwhelmingly of small rodents and other creatures that we human beings commonly label as vermin. Owls without exception, and hawks with only two or three exceptions, are our allies, not our enemies.

They deserve our gratitude, not our gunfire.

Owls especially are valuable as flying mousetraps. They are active when the rodents are most likely to be abroad. Although, contrary to a widespread notion, they cannot see in the dark, they do see well enough to do highly effective hunting in the dim twilight of late evening and pre-dawn, and by the illumination shed by even a sliver of a moon. They are noiseless fliers, so that the rodent quarry has no warning of his impending doom until the sharp talons close on him.

Beginning now, and lasting until spring, is the time when the pressure

of owl and hawk hunting on the rodent populations is most effective, from the human point of view. Food supplies are shortest in the woods and fields, so that hunger drives many wild species to raids on our grain and other stores, to gnawing the bark of young orchard trees, and to many other destructive practices. At the same time, their numbers are at the lowest ebb of the year, for breeding is at a standstill with most species. Every potential mouse parent taken out now means one family fewer among our undesired dependents next year. Owls should therefore be left unmolested in their volunteer role of rodent control agents.

Science News Letter, January 17, 1948

ASTRONOMY

1947 Broke Comet Record

Fourteen were found during the year, nine of which were newly-discovered. Up until this time 1932, when 13 were spotted, was the big year for comet-seekers.

➤ "THE year 1947 was a record-breaking one for comet-seekers," according to Dr. Fred L. Whipple of Harvard College Observatory. Only one comet, seen by many in the southern hemisphere and reported to have broken in two as it became less bright, has been spectacular. But a large number have been visible with a telescope.

A total of 14 comets were found during 1947. This breaks all previous records for comet-finding. Up to this time the all-time record for one year was 13, the number spotted in 1932. Not only were more comets located this year, but the number of newly-discovered ones was greater. Nine of the 14 comets were new finds, five were comets that periodically return to the vicinity of the earth. In 1932 only eight comets were newly discovered.

One-third of the new comets, those visitors from space that remain visible for a few weeks or months then fade away, were spotted by M. J. Bester of Harvard's South African station. Two are known as Bester's comets, while the other bears the name of Rondonina-Bester. It was independently discovered by two people.

Two of the periodic comets visible this year, Faye and Grigg-Skjellerup, were also seen in 1932. Comet Schwassman-Wachmann, also seen both years, is never counted in totalling the number of comets spotted for it is eternally visible. Comet Oterma, another faint comet that never entirely disappears, was not discovered until several years ago.

Another record breaking year for discovering comets was 1927. In that year ten comets, the largest number up to that time, were reported: six were new and the rest periodic visitors on regular return trips. The record for 1947 beats that set 20 years ago both as to new comets and as to total number seen.

Beside the three comets named Bester, other comets discovered this year are: Becvar, Jakovin, Wirtanen, Reinmuth, Honda and 1947 N. This last, the bright new comet with the long tail has not been named for anyone as it is still not known who first found it from the ship in the Pacific.

Science News Letter, January 17, 1948

ANYONE CAN USE A SLIDE RULE

Absolutely no math background needed if you have the **PRACTICAL SLIDE RULE MANUAL** by J. M. Klock, formerly Mathematician for the U. S. Navy and instructor in the Detroit Public Evening Schools. An absolutely non-technical explanation of how to use a slide rule for the fundamental math calculations. **STUDENTS** of all math, science, and technical subjects will find the use of a slide rule to be a great aid in their work. **SHOP AND TECHNICIANS:** special applications made to formulae from mathematics, engineering, aeronautics, air navigation, etc. The slide rule gives rapid solutions to all the basic formulae. **OFFICE:** and business administration applications are numerous. The slide rule is especially valuable in per cent and interest work, and cost accounting. The booklet includes chapters on these subjects. The slide rule is also a valuable rapid estimator.

Large illustrations. Simple and non-technical explanations. Based on 9 terms of teaching adults. With this booklet anyone who knows the simplest arithmetic can easily learn the slide rule. Starts from a simple reading of the scales, and goes on through the most advanced practical work. Booklets are sent postpaid. Send today, and learn a valuable skill.

(Please make checks payable to J. M. Klock). Send \$1.00 to

SLIDE RULE • BOX 2293 • DETROIT 31, MICHIGAN