



Bobwhite

► **BOBWHITE** IS a bird that stays put. He likes it where he is and he does not squander a wing-beat on migration. Winter or summer, hot or cold, bobwhite rarely strays outside a ten-mile radius of his native hatch.

This speaks well for the hardiness of the bird, for like other quail and partridges of the *Perdidae* family, bobwhites nest on the ground. They usually find a sheltered place like a depression in the grass or at the base of a tree or bush to make their nests of grass and stems.

In these snug sanctuaries, families of bobwhites huddle together with no apparent discomfort from the winter's worst weather. The greatest hazard of overwintering from the bobwhite's point of view is too much snow. Bobwhites feed on seeds and berries, and as long as the snow does not cover up the total available supply, they manage nicely.

Bobwhites are small birds, averaging about ten inches in length. Their bills are short and thick, their feet are strong and well adapted to scratching. Distinctive features are a white line over the eye, a white throat, and a white under-body barred with black. The overall coloring is reddish brown, with a gray tail.

If you were to ask whether the bobwhite is a quail or a partridge, the answer would depend on the part of the country you were in. In the East, the name quail is used interchangeably with bobwhite: bobwhite is quail and quail is bobwhite. In the South bobwhite is called partridge. To complicate matters further, the ruffed grouse, which belongs to a distinct family, is referred to as a partridge in New England.

The name bobwhite comes from the distinctive and easily imitated call, which is a musical phrase whistled cheerfully, usually from atop a post, bush, or rock. If you are willing to meet the bird halfway, you can distinctly hear him calling "bobwhite, poor-bob-white," with the last note rising sharply.

That the precise meaning of the bird's call lies chiefly in the ear of the listener is borne out by the fact that in New England it is said that the bobwhite's call is a weather forecast. If the two-note call is sounded, he is issuing a warning, "more wet." If instead he utters the three-note whistle, he is predicting "no more wet."

The small cheerful bird does man a valuable service as a weed-killer. Bobwhites have a great appetite for weed seeds. They consume great quantities of ragweed, pigweed, foxtail grass seed and other unwanted weed varieties.

Science News Letter, March 20, 1954

PHYSICS

1,000 Cubic Feet For Atomic Car Battery

► **DOMESTIC USES** of atomic energy are a long way off, Michael C. Ellison, editor of the National Scientific Laboratories' *Transistor Research Bulletin* (Feb.), reports.

An atomic auto battery made in the light of current knowledge would take up 1,000 cubic feet of space and would cost some wealthy motorist \$8,000,000. A cube-shaped atomic flashlight cell would measure one foot on a side and would sell for \$8,000.

With full production funneled into the project, it would take about nine years to amass the necessary amount of germanium which, when bombarded with beta rays from radioactive strontium 90, would produce enough electricity to start a car or power the headlights.

Although Mr. Ellison believes atomic batteries, such as the recent Radio Corporation of America development (see SNL, Feb. 6, p. 83), may be used as underwater power supplies for transistorized amplifiers along ocean-crossing cables, he thinks atomic scientists will have to discover a new principle of converting atomic energy into electricity before the household will be equipped with atomic vacuum cleaners.

Mr. Ellison said that atomic energy probably has "a tremendous future" in the home, but that many technical and commercial difficulties must first be overcome.

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Questions

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METALLURGY

Carbide May Triple Power of Jet Engines

► **THE POWER** of jet engines may be tripled through use of a new metal being produced in Latrobe, Pa.

Called Kentanium, it exhibits high strength at 2,000 degrees Fahrenheit, which is 500 degrees hotter than working temperatures of some of the "super alloys" now being used in scorchingly hot jet engines.

Engineers of Kennametal Inc. report the metal is made principally of titanium carbide, with small percentages of tantalum and columbium carbide mixed in. Nickel is used as a "binder."

Kentanium is said to resist oxidation at high temperatures, and is about two-thirds as dense as some of the super alloys known for their heat- and corrosion-resisting qualities and for their strengths at high temperatures.

Some compositions of the new metal have withstood brief exposures to temperatures as high as 4,500 degrees Fahrenheit, the International Nickel Company reports.

Science News Letter, March 20, 1954

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