

# Men and Woodpeckers Alike

*Ornithology*

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California woodpeckers are like men in taking some thought for the morrow. They gather into barns, at least to the extent of sticking acorns into holes which they bore into trees. I have been watching them a good deal lately, to learn more about the way these birds use their heads (chiefly brains and beaks) in solving their economic and social problems.

That they gain a real advantage by their unique provisioning activity is quite clear; and some aspects of the performance are surprisingly well done. But what wastefulness and inefficiency, even to the crassest foolishness, the birds show in some other aspects of their work! A lot of this is due to their doing altogether too much. Hole-making for acorn-storing is a fine thing and is great fun; so the birds go right on making holes whether they are going to put acorns in them or not.

Likewise, gathering acorns and putting them in holes is a fine thing, and great sport besides. Consequently, acorn-storing it is, day in and day out, as long as the acorn harvest

lasts, with very little regard for what the actual needs of the future may be or even as to whether the nuts are being put where they can be got if the effort is made to get them later on.

Some of the collections I have made are of acorns converted into mere rubbish by decay and insect-eating, so long ago and so unprotectedly were they stored.

What has made this field work especially interesting to me was the opportunity to observe the similarity between the way California woodpeckers and California men act in relation to their economic problems.

For instance, on the same day one may observe woodpeckers producing acorn stores far beyond any need or consuming ability of theirs; likewise, men producing raisin grapes in quantities beyond the possibility of disposing of them to anybody's good, and oil men pumping oil out of the ground with all the speed and force they can muster with very little regard to the real need, present or future, for oil by the community.

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## Television in Color—Continued

lamps, unfortunately, are not nearly so bright as neon lamps and it was, therefore, necessary to use various expedients to increase their effective brilliancy. Special lamps to work at high current densities were constructed with long, narrow and hollow cathodes so that streams of cold water could cool them. The cathode is viewed end-on. This greatly foreshortens the thin glowing layer of gas and thus increases its apparent brightness. Even so it is necessary to operate these lamps from a special "I" tube amplifier to obtain currents as high as 200 milliamperes.

The receiving apparatus at present consists of one of the 16-inch television discs used in our earlier experimental work. Behind it are the three special lamps and a lens system which focusses the light into a small aperture in front of the disc. The observer looking into this aperture receives, through each hole of the disc as it passes by, light from the three lamps—each controlled by its appropriate signal from the sending end. When the intensities of the three images are properly adjusted he

therefore sees an image in its true colors, and with the general appearance of a small colored motion picture.

Satisfactory television in colors is a far more difficult task than is monochromatic television. Errors of quality which would pass unnoticed in an image of only one color may be fatal to true color reproduction where three such images are superimposed and viewed simultaneously. In three-color television any deviations from correct tone rendering throw out the balance of the colors so that while the three images might be adjusted to give certain colors properly, others would suffer from excess or deficiency of certain of the constituents.

Color television constitutes a definite further step in the solution of the many problems presented in the electrical communication of images. It is, however, obviously more expensive as well as more difficult than the earlier monochromatic form, involving extra communication channels as well as additional apparatus.

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## First Glances at New Books

THE SUMERIANS—C. Leonard Woolley—*Clarendon Press, Oxford* (\$2.50). Students and other readers who really want to know more about the temples and royal tombs of Ur of the Chaldees will find here a thorough account and will be quite satisfied with the clear explanations and fine photographs. The little volume might have had a wider popular appeal had Mr. Woolley seen fit to recount the manner and procedure in which some of his remarkable finds have been made, and had he presented the richly picturesque existence of the kings of Ur in a more dramatic literary fashion. We are still waiting for those kings to "come alive" as Tutankhamen has done. But then, perhaps, that is another book and another story.

*Archaeology  
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OLD CIVILIZATIONS OF THE NEW WORLD—A. Hyatt Verrill—*Bobbs-Merrill* (\$5). The most solid and spectacular cultures that developed on American soil—chiefly those of the tropics and sub-tropics—are described, so that the layman may better understand and compare the achievements of the Aztecs, the Incas, and the rest.

*Archaeology  
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BEFORE COLUMBUS—Cecil E. Stevens—*Silver, Burdett* (\$1.32). How the Indians of Porto Rico lived before the coming of the white man, told simply in story form for child readers. A good antidote for the idea often gained by children that America before the days of Columbus was merely a wilderness in which painted savages ran wild. The folklore tales brought into the narrative have the color and romance of popular fairy stories.

*Ethnology  
Science News-Letter, July 6, 1929*

OPINIONS RENDERED BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE: 105 to 114—*Smithsonian Institution*. Of interest to systematic zoologists.

*Taxonomy  
Science News-Letter, July 6, 1929*

THE ARCHERS HANDBOOK—Philip Rounseville—*The Archers Company, Pinehurst, N. C.* (25c). A company of craftsmen tell in brief compass the most important facts about the ancient sport of archery and the implements employed therein.

*Sports  
Science News-Letter, July 6, 1929*