News of Science

New Editor for AAAS Journals

On 1 Jan. 1956 Graham DuShane, professor of biology on leave from Stanford University, will become editor of *Science* and *The Scientific Monthly*. Chosen after careful search, DuShane brings to this important post an admirable combination of editorial and scholarly talents. Born in Indiana in 1910, DuShane graduated from Wabash College in 1930 and entered the graduate school of Yale University to study embryological problems with Ross G. Harrison. After receiving the doctoral degree (1934), he spent two research-years at the University of Iowa (1934–35) and Stanford University (1935–36)—the latter on appointment as National Research Council fellow. In 1936 DuShane joined the staff of the department of zoology of the University of Chicago, where he remained for 10 years. In 1946 he returned to Stanford with the rank of professor and there has been primarily concerned with furthering the university's program in general biology and embryology.

Such a brief, although notable, biography does not in itself make explicit the qualifications of the man for the exacting position he has consented to accept. Responsibility for appointing the editor rests with the board of directors of the Association. In sessions devoted to this task the board saw merit in recruiting an able person with a background of professional journalism, provided that he had consistently demonstrated deep understanding of the affairs of science. Alternatively, the argument was advanced (and perhaps with greater frequency) that science should be run by its practitioners: that the editor should be a broadly informed scientist endowed with an urge and the flair to *communicate* the findings, and implications, of science with vigor and judgment. Actually, the final decision was reached, not so much on the basis of past training, but in the time-honored way of seeking the best man. This led to DuShane.

Numerous distinctions have come to DuShane in research and in teaching. His work on amphibian morphogenesis is widely and appreciatively cited. His research papers are characterized by a balance, all too rare, of history, analysis, and synthesis. Indeed, his writings in general (including correspondence) are both originally phrased and broadly informed. His success as a teacher is equally noteworthy. In partial documentation of this may be mentioned the award of the $1000 prize for excellence of undergraduate teaching at the University of Chicago, the acknowledged success of his biology courses at Stanford University, and the publication of two manuals for laboratory instruction. Also at Stanford, DuShane spent much time as a member of appointive and elective faculty committees devoted largely to educational planning and matters of curriculum. It is reasonable to say that these experiences have taught him much about human behavior, including the possibilities of agreement and disagreement. This background certainly will stand him in good stead as he faces the actual problems of an editorship. In 1951–52 he was president of the Stanford chapter of the American Association of University Professors and held a similar office for the Society of the Sigma Xi in 1955–56.

DuShane's advice has been frequently sought by both commercial and academic publishers as well as by editors of learned journals. In this role his response has been generous and cogent, and it is not too much to assert that frequently he has quietly improved manuscripts and suggested areas that merit further treatment in the literature. At one time DuShane was a consultant in biology to the *Encyclopaedia Britannica,* and he still prepares each year an informative article on zoology for their *Book of the Year.*

Those of us who have known Graham DuShane as colleague and friend are sincere in our belief that his editorship will be distinguished. His unusually comprehensive knowledge of science in general, his impatience with false notions of hierarchies among the several sciences, his facility with the written and spoken word, and his conviction that science and scientists deserve expert interpretation to the public, all augur well for the future of our two journals.

We welcome DuShane to his new position and what we hope will be his new career.

THOMAS PARK
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Poverty Point Excavations

Archeological materials that were excavated last spring from Poverty Point site on Bayou Macon, 5 miles northeast of Epps, La., are being studied and cataloged by James A. Ford, associate curator of North American archeology at the American Museum of Natural History. He headed a study group that included Junius B. Bird, associate curator of archeology at the American Museum of Natural History, and Stewart Neitzel, archeologist of the Louisiana State Parks Commission.

According to Ford, Poverty Point, which is the site of the oldest known village in the lower Mississippi Valley, was inhabited by an advanced Stone Age Indian people between 800 and 400 B.C., and the initial settlement marked the beginning of what may be called the "American Neolithic" period. Focal point of the ancient community was a great mound of earth that was constructed in the shape of a flying bird. The mound is now 70 feet higher than the surrounding alluvial flats.

The remains of the village are a few hundred yards east of the great mound; they form a half-octagon about ¾ mile in diameter. The houses were built on artificial ridges that formed concentric octagons, and excavations have shown that the sides of these ridges served as refuse heaps for the community.

A second mound, some 56 feet high and lying to the north of the village, is also constructed in the shape of a bird. The artificial nature of both bird-effigy mounds is beyond question, Ford reported, for examination of their earth has revealed the imprints of baskets used to carry clay for their construction. The absence of human artifacts in both mounds indicates that they served some purpose other than habitation.

Excavation of a third mound close to

the village disclosed a charred fragment of human bone—the first bone of any kind to be found at the site. This and other unidentifiable bone fragments, found in an extensive ash bed, constitute possible evidence of cremation.

In light of his discoveries and the dates assigned by radioactivity measurements to several specific articles, Ford believes that the Poverty Point culture may represent the earliest southward movement of people of the Hopewell culture.

Artifacts recovered by Ford's group show that the prehistoric inhabitants of the village had begun to make clay pottery as well as utensils of copper and soapstone. They used hematite bolas and fashioned jewelry out of quartz and jasper. Because many of the raw materials used in these artifacts do not occur naturally in Louisiana, their presence is considered to be evidence that the villagers traded with people of other regions.

The use of bird effigies, both in earth mounds and on vessels and ornaments, is not uncommon in "American Neolithic" cultures, Ford said. Bird effigies seem to have had religious significance and to have figured in ceremonies and cures. However, the giant bird represented in the large mound at Poverty Point appears to be flying due north, while the bird of the smaller mound is headed due west. The directions, in each case, are within a single degree of the true direction. The knowledge of astronomy implied, together with the geometric design of the villages, indicates a greater familiarity with the rudiments of science than has been heretofore attributed to aboriginal Americans.

News Briefs

■ The following research projects were reported in the 6 Aug. issue of *Nature*.

The chromosomes of palms have been almost impossible to study because of their habit of clumping. A. K. Sharma and S. K. Sarkar of the University of Calcutta have now found that excellent fixation and spreading of these refractory chromosomes may be obtained by treating the root-tip cells with aesculine, an alkaloid obtained from the horse-chestnut. None of the chemical agents satisfactory with other plants has served to do this.

J. Langridge of the University of Adelaide reports that he has obtained a biochemical mutation in one of the flowering plants, the cruciferous *Arabidopsis thaliana*. By developing a method for growing it in aseptic culture, he obtained after x-ray treatment a mutant type that is unable to synthesize thiamine (vitamin B_1).

A recent study of the polyhedral virus, which causes a blood disease in the cranefly, *Tipula paludosa*, reveals that the multiplication of the virus takes place inside the nuclei of the blood cells. Kenneth M. Smith, of the Virus Research Unit, Cambridge, England, has published electron micrographs which show that the rod-shaped virus particles form in the nucleus, that each becomes surrounded by a vesicle, and that these vesicles collect into an aggregate inside the nuclear membrane. Then the vesicles appear to contract, and eventually a polyhedral crystal of the virus is extruded into the cytoplasm.

B. P. Wiesner and J. Yudkin of the University of London have tested the effects of a variety of antimitotic agents upon the fertility of mice. One of these agents, podophyllin, regularly interrupts pregnancy when administered 3 days or more after the time of mating. No resistance to the drug seems to be built up, and full fertility returns when the drug is no longer administered, at least after 3 interrupted pregnancies had occurred. The drug was not effective when administered immediately after mating. It produced no noticeable side-effects. —B.G.

■ An expedition of the Academy of Natural Sciences of Philadelphia left for Peru on 10 Sept. to make a study of the aquatic life of the Amazon. The two sites to be studied are Iquitos and Tingo Maria. Ruth Patrick, curator of limnology, heads the expedition group, which consists of Matthew H. Hohn, algologist; Selwyn S. Roback, entomologist; Frederick A. Aldrich, invertebrate zoologist; Yvonne Swabey, chemist; John Cairns, Jr., protozoologist; Charles C. G. Chaplin, associate in the academy's fish department; and Josephine deN. Henry, associate in the photography department.

The expedition is supported by the Catherwood Foundation of Bryn Mawr, Pa., of which Cummins Catherwood is president. This foundation sponsored a preliminary visit to the Amazon headwaters in June, when Patrick, Hohn, and H. Radclyffe Roberts, director of the academy, selected the survey sites.

The purpose of the expedition is to determine whether or not there is a greater diversity and a greater abundance of aquatic life in tropical streams than in similar ones in the temperate zone.

Two methods of study will be used. In one a group of scientists will collect the various groups of aquatic life in selected sections of the river; identify their species, and correlate them as to numbers and kinds with findings in similar temperate-zone rivers. The second method will employ the Catherwood diatometer, an instrument containing laboratory slides that is floated in streams to collect diatoms. The structure of the population of diatoms will be compared with populations in similar temperate-zone rivers.

■ The Army is cutting back on its privately contracted bacteriological and chemical warefare research at Camp Detrick, near Frederick, Md. A $2,750,000 annual contract with the Ralph M. Parsons Co. of Los Angeles was terminated in August. The firm is said to have employed 450 persons at Detrick.

■ The Tennessee Valley Authority has announced a 5-year extension of its fertilizer research and testing contracts with agricultural experiment stations in eight states. Included are the seven Tennessee Valley states of Alabama, Georgia, Mississippi, Tennessee, Virginia, North Carolina and Kentucky, and the State of Washington.

■ The Norwegian Meteorological Institute is expanding its radio meteorographic station on Bear Island and establishing a new station at Isfjord in Spitzbergen as part of a plan to improve weather forecasting in the arctic regions. Norway also operates meteorological stations at Jan Mayen and Hopen in the Arctic.

Scientists in the News

E. DAHL-IVERSEN, professor of surgery at the University of Copenhagen, Denmark, will deliver this year's Charles H. Mayo memorial lectures at Northwestern University medical school. On 26 Oct. he will discuss the functions of the endocrine organs during the postoperative period.

Dahl-Iversen, well-known for his surgical work in the field of endocrine glands, is also chief of surgical services of the University Surgical Clinic at Rigshospitalet, Copenhagen. He is to be awarded an honorary fellowship in the American College of Surgeons at its annual clinical congress which meets in Chicago, 31 Oct.–4 Nov.

HENRY H. BABCOCK, former superintendent of the Butler Hospital in Providence, R.I., has been appointed to the staff of the department of hygiene at Harvard University. Butler Hospital, a 111-year-old institution for the mentally ill, was forced to close because of mounting operating deficits.

EDWARD F. HAMMEL of the University of California's Los Alamos Scientific Laboratory has been selected as the recipient of the American Chemical Society's California Section award for