Letters

River Basin Surveys: Publishing Is Prolific

As a Smithsonian Institution River Basin Surveys archeologist, I read with particular interest Wedel's thoughtful and comprehensive summary of the River Basin Surveys program of archeological salvage in the Missouri River Basin (5 May, p. 589); archeologists everywhere will welcome this evaluation, carried out with the National Park Service, as it is without precedent in scope, urgency, and achievements in recovering a vast segment of North American prehistory. Wedel's remarks are a fitting sequel to Johnson's excellent review ("Archeology in an emergency," 17 June 1966, p. 1592) of the 20-year history of federal salvage archeology.

With regard to the River Basin Surveys publications, these include the regular series of area appraisals, chronological statements, a respectable and well-known group of reports in the old River Basin Surveys Papers series, and several other types of issues. The River Basin Surveys has also published annual summaries of field activities in the Missouri Basin-this year we will issue the 12th of such résumés. As a practical matter, these do not attempt to be synthetic or broadly related to regional prehistory and even if it were practical to compile such reviews, their issuance and obsolescence would be virtually simultaneous. The annual exchange of current interpretative data as Wedel mentioned has been one of the prime functions of the Plains Conference which will convene this year at the University of Minnesota for its 25th meeting.

Most important of all are the new River Basin Surveys series, *Publications* in Salvage Archeology. Although only a year old, four major monographs, totaling nearly 500 printed pages, have thus far appeared. In addition, River Basin Surveys personnel are major contributors to the quarterly *Plains Anthropologist* and furnished more than half of the articles and other contents of the last volume of this regional journal. Additional reporting by staff archeologists is commonly found in the principal archeological journal, American Antiquity. Publications in Salvage Archeology has been well received and is now scheduled for quarterly issue. The Smithsonian Institution River Basin Surveys is proud of both its field operations and its publication program.

The program is remarkable because the entire salvage effort in the Missouri Basin has been achieved at a fraction of 1 percent of the cost of the large water-control projects which required that the salvage be done.

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Science Education:

Is It Relevant Today?

Abelson's editorial ("Excessive educational pressures," 12 May, p. 741) on lingering "sequelae" resulting from Sputnik, particularly in American secondary education, touches on a most critical problem in the teaching of science . . . [as it concerns the] drift of students away from science and engineering. The way we are teaching science in the colleges and universities, we seem to forget that a certain proportion of scientists are won to their careers after taking an elementary course at college to satisfy an institutional science requirement. My casual conversations with colleagues across the country make very obvious the fact that they consider the elementary course, in fact much of the undergraduate major program, a gross nuisance and deterrent to the more important business of pursuing research, winning grants, and devoting time to the already committed graduate student. Packaged lectures and cookbook laboratory exercises largely delivered by graduate students or obsolete professors emphasize just this situation. But I guess we can't be blamed. We must remain the only profession in the nation hired for one job and paid for another.

Yet some individuals in some departments at some institutions have made a viable compromise. In devoting special effort to undergraduate instruction with

particular emphasis and imagination on the elementary course, involving junior and senior majors in faculty research, these schools have much to be proud of. I cite as examples, among others, the geology program at Franklin and Marshall, Amherst, and Pomona; physics at Reed; biology at Oberlin; and chemistry at Carleton.

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I seriously doubt that the high pressure for so-called "excellence" or the 17-hour work day of the student is responsible for the dropouts and lagging enrollments in the science and technological curricula. Even a young student is not above putting in long grinding hours if the candle seems worth it. There is at least one much more fundamental factor in this shift. This is the student's doubt concerning the relevance and value of the effort. On the one hand, he sees his progress down the trail of science as an excursion into more and more complicated meaninglessness, intriguing though it may be. On the other hand, he looks around at the landscape of technology and wonders if the antibiotics and automation justify all the smog and social chaos. It is not surprising that they are turning to the social sciences, the humanistic studies, and the Peace Corps —or are dropping out. These young people are neither lazy nor stupid. They see where some real problems lie. The best are trying to prepare to meet these problems responsibly. Othersthe dropouts-are unable to spot anything significant to struggle for in the jungle of curricular tabulations. As science teachers, it appears we either do not speak plainly, or young people of today doubt that we have anything important to say.

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Students are directing their attention to the social sciences and communication arts because that is where the challenges are. Do we need another billion electron volts as compared to some predictable way of reducing alienation and the growth of a disaffiliated subculture?

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