

## GEOLOGY FOR EVERYONE

BY

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Educational records show that no more than 50 of the 900 high schools of Illinois make any attempt to teach the essentials of earth history to their students. This means that most of our boys and girls of today are growing up with mistaken ideas, or with no ideas at all, about the nature of the earth on which they live; about its origin and the geologic processes which have made it what it is and which are still in ceaseless operation; or about local geological conditions in various parts of the state. Unless they go on to college, there is little chance that they will ever assimilate this most broadening of all information.

Like most areas of similar size, Illinois has had a surprising and interesting history which we can read from the various rock formations and glacial deposits which are present within its area. The facts about this earth history as applied to our state should be common knowledge.

During the past twenty-five years the State Geological Survey has been accumulating a vast amount of such information on our geology, paleontology, physiography, and mineral resources. This information is mostly in published form and is, of course, available to all who desire it; but most of it is presented in a technical manner and is therefore unsuited for proper dissemination among the people in general, who support the investigations, and the hundreds of high-school science teachers in Illinois who have in many ways indicated a need for it in their very important work.

There is no question, then, as to the positive existence of a long-neglected field for extension work on the part of the State Geological Survey; nor is there any question as to our obligation in inaugurating a practicable and definite program of educational cooperation which will adequately meet the situation. With the help of local educators, we have worked out what we believe to be a sound program, by which certain new services are made available, especially to science teachers. The program will function in four ways:

(1) The State Geological Survey will publish a series of educational bulletins in which the facts about the marine submergences, mineral resources, glacial invasions, coal beds, and petroleum accumulation

in Illinois will be simply and interestingly related from the standpoint of the state as a whole. Other educational bulletins will present the geological stories of specific local areas in the state. These bulletins are primarily intended to inform the high-school teacher and the layman, but they will be interestingly written in language sufficiently simple to make them eligible for use as supplementary reading material for high-school classes.

(2) The Survey is preparing to distribute to the high schools representative collections of the common rocks, minerals, and fossils of Illinois. Two different sets will be supplied to each school petitioning for them. One set is to be used for exhibition in the school, and the specimens will be mounted on a backboard suitable for cabinet framing, with a descriptive label below each. The other set will be composed of loose specimens for actual class use. A supplementary study manual, in which the various mineral resources of Illinois are discussed, is now in manuscript form, and printed copies of it will be distributed with the collections.

(3) The Survey is offering the services of certain members of its staff for the purpose of conducting field trips in various parts of the state for groups of teachers and others who wish to obtain first-hand information on the facts of earth history and general geology. For this purpose the state has been divided into six districts, in each of which one trip will be given each year. Especially important localities will be visited repeatedly, but as far as possible, general yearly repetition will be avoided for obvious reasons. The trips will be held on Saturdays, two in the spring and four in the fall. Groups are being organized in each district for the trips to be given this year, and it is expected that they will continue to function permanently as earth-history field-study clubs. The first trip this year will be held on May 10, in the Fox River Valley, north of Elgin. Later, trips will be made to the Starved Rock and La Salle region, the Quincy region, the Rock Island area, the Mattoon and Effingham area; and one excursion will be devoted to a tour through one of the large coal mines of southern Illinois.

(4) Certain members of the Survey staff can be secured to deliver occasional illustrated lectures or addresses on various subjects related to our investigations, before teachers' meetings, civic gatherings, etc.

Our program has been announced to the teachers in several ways: by newspaper and magazine articles, letters, mimeographed forms, and by verbal announcements before various sections of the annual meeting of the state high-school teachers' conference. The reaction of the teachers

to our plan has been very favorable. So far, they are showing especial interest in our projected field trips and in the sets of rocks, minerals and fossils which will soon be distributed.

The motivation of this whole field of educational extension will constitute an attractive occupation, since it actually amounts to teaching under ideal circumstances—the presentation of the facts of earth history to different groups in all parts of the state; groups of intellectually mature people, with a manifested and active interest in the most broadening and intimate of all sciences. Their interest will be either purposely or unconsciously transmitted to their students, which is our ultimate purpose; and I venture to predict that the students' interest will be reflected by a marked increase in the number of registrations for courses in geology in the colleges and universities of the state.