III. FIELD CONFERENCES

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During the past three years there have been held in the southwest something like twenty geological field conferences. The greater number of these have been under the auspices of the Oklahoma Geological Survey, although three conferences have been held by the West Texas Geological Society and several others by other organizations.

The object of a field conference is two-fold; first, to learn to know men; and, second, to learn geology.

In the old days many geologists were notably self-centered, and sometimes even contentious. The masters, the men who laid down the foundation of our science in America, did not always see eye to eye. The controversies, feuds and even personal animosities of such men as Marsh and Cope; of Hayden and Newberry; and even of our own contemporaries, Stanton and Knowlton, are classics. These men, brilliant though they were, and specialists in their own lines, were not always willing to accept the conclusions of other workers in the same or allied lines of research.

However, as the years have come and gone, and the number of geologists has multiplied in the land, the problems have become more intricate. As these men have been compelled to work together and compare data, these animosities have to a large measure ceased. It is true that a few of the old guard are still hanging on, and there are a few notable exceptions to the general rule, but taking it by and large, geologists as a class do not now take delight in hating each other. Today most geologists accept the viewpoint that was most focibly expressed by James H. Gardner, the incoming president of the American Association of Petroleum Geologists, in his brief address at Houston some years ago, when he said: "We have learned to know that the other fellow may be right, although we know he is wrong." Geologists have learned that no one man has a patent on all the truth. They are coming to realize more and more all the time, that even the humblest geologist may have information which is of value to all the others. They realize that the youngest assistant may perchance find the key which with the help of older heads, may aid in solving the most intricate problem .

If you and I and John Smith, each by himself, and at different times, study a certain formation, we will not always see the same things. Having completed our study, we will go back to our offices and very likely write a report on what we have seen. This report may find its way into type. Not having seen the same things, our reports will not agree in all details, but, having once committed ourselves to type, and, being human, therefore stubborn, we will thereafter each contended mightly for his own particular viewpoint. Being human we may even go so far as to attempt to distort any subsequent facts which may be discovered in order to bolster up our claims. We may even to still farther, and if the matter gets into the controversial stage, we may say unkind things about the other fellow, and we might

possibly become bitter personal enemies. These things have happened times without number and may possibly happen again.

If, however, you and I and John Smith arrange a field conference, and study the same formation at the same time, and wear out some sole leather on the same ledge on the same day, we will most likely not do these foolish things I have just been discussing. You may be able to show John Smith and me an unconformity which we had not seen before. John Smith will very likely pick up a fossil which neither you or I had found, which fossil, being diagnostic may compel both of us to change our ideas. I may possibly point out to you some bit of geology which had escaped both of you. So that by combining the observations of all three of us, and by comparing these data and discussing the same while standing on the ledge, we will, in all probability, arrive at conclusions which are much more apt to be correct, than if the three of us made different observations at different times and under different circumstances. Instead of three different articles being written on the subject setting forth more or less divergent views, it will be necessary to write only one article, and for that reason we will not clutter up the literature with so many papers. Better still, and more important, you and John Smith and I will begin to form public opinion in the matter. It might even happen, that, having come to an agreement on the problem, and each recognizing the other fellow's ability, we will become warm personal friends.

These then are the objects of the field conferences which have been held in Oklahoma and adjacent states during the past few years: to visit together points of geologic interest, to throw into the common pot our combined information, observations and opinions, to stir it up with animated discussions so that each man may be able to take therefrom the particular things he can best use.

The first of the series of field conferences was held in January 1924 in southwestern Oklahoma, participated in by the following geologists: J. W. Beede, J. V. Howell, C. Don Hughes, R. W. Sawyer, F. W. Floyd, Donald M. Allen and Charles N. Gould. The primary object of this conference was to study the Marlow formation, which had been described by Sawyer in a paper read at the Shreveport meeting of the American Association of Petroleum Geologists, and related phenomona. It was at the time of this conference that the Anadarko Basin, as a structural entity, was first determined and located. The results of the study were embodied in a paper entitled, "A new Classification of the Permian Red Beds in Southwestern Oklahoma," published by your speaker.

Not long after the publication of this article there was a demand by the geologists of northwest Texas and western Oklahoma for another field conference and the Geological Survey arranged for this conference. It was held out of Wichita Falls in October 1925. Some twenty-five men attended. The object of the conference was to endeavor to correlate the upper Permian formations of western Oklahoma with those of northwestern Texas. As the result of data secured, a paper was published entitled, "The Correlation of the Permian of Kansas, Oklahoma, and Northern Texas."

From that time on during the past three years, nine conferences have been held under the auspices of the Oklahoma Geological Survey in Oklahoma, Texas, New Mexico, Colorado, Kansas, and Arkansas. Several additional papers have appeared from time to time setting forth correlations and other data obtained on these conferences. The fourth and ninth conferences were held out of Ada, and the Civic clubs of that city have entertained the geologists on Washington's Birthday the last two years. The organization has become a fixed thing so that the people of Ada anticipate a visit from the geologists on the 22nd of February each year. It has been estimated that the total distance traveled by the different men on these various field conferences approximates 185,000 miles.

The following table sets forth the pertinent data regarding the eleven field conferences sponsored by the Oklahoma Geological Survey:

No.	Date	Number of Geologists Present	Where Held
1	Jan. 5-7, 1924	8	Southwestern Oklahoma.
2.	Oct. 19-23, 1925	27	West Texas.
3	November 28, Dec. 4, 1925	39	Southwestern Oklahoma.
4	Feb. 22-24, 1925	45	Ada-Atoka.
5	March 8-10, 1925	16	Northern Oklahoma.
6	June 18-20, 1926	13	Tahlequah.
7	Oct. 11-13, 1926	19	Ouachita Mountains.
8	Nov. 9-20, 1926	36	Western Oklahoma, Panhandle of Texas and N. E. New Mex.
9	Feb. 21-23, 1927	45	Ada-Atoka, Seminole.
10	March 28-29, 1927	81	Ardmore.
11	May 24-30, 1927	33	Northwestern Oklahoma and Southern Kansas.
	Total	362	

The West Texas Geological Society has held three field conferences, the first in the San Saba-San Angelo region, the second in the Glass Mountains and Marathon region, the third in the Pecos-Van Horn-Carlsbad region. Men from Oklahoma have participated in each of these conferences. The Shreveport Geological Society puts on a conference each year and Oklahoma men have participated. The Kansas Geological Society with headquarters at Wichita has an annual field conference and on the last trip got as far away from home as northeastern Iowa and southwestern Wisconsin. About a dozen Oklahoma men participated. The chief object of this conference was to study the surface exposures of the Decoran and other Ordovician formations which were reached at depths of over 4,000 feet in central Kansas. Within the past few weeks two paleontological field conferences have been held, one out of Ada and the other out of Fort Worth.

We are learning that in order to understand thoroughly the geology of Oklahoma, men from this state find it necessary to partici-

pate in field conferences in regions extending all the way from Wisconsin on the northeast to the Rio Grande on the southwest.

The policy of the Oklahoma Geological Survey has been and is to foster field conferences. To that end, the staff of the Survey stands ready to call a conference any time any where, if there is a demand for the same. However, having given the initiative to the matter, and having conducted eleven successful conferences, we feel that from this time on, the initiative should come from interested men. For that reason, it will not be the general policy of the Survey hereafter to call field conferences.