

Lignite and Petroleum Teacher Education Seminars

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For a number of years, the North Dakota Geological Survey has participated in both the North Dakota Petroleum Council's and the Lignite Energy Council's Teacher Education Seminars. The North Dakota Department of Mineral Resources recognizes the importance to our nation of encouraging students to become future scientists and engineers. These teacher seminars are a means of providing information to teachers that can be passed along in the classroom. Lynn Helms provides a series of lectures during the Petroleum Council seminar and he and I assist in leading a fieldtrip to an active drilling rig and production facilities. John Hoganson and I also lecture on fossils, meteorites, and impact structures on the final day of the seminar. John and I also provide lectures on the geology and paleontology that existed in North Dakota prior to and during coal deposition in North Dakota for the Lignite Council seminar. The North Dakota Lignite Council began offering their seminar in 1986 and the North Dakota Petroleum Council in 1994. The North Dakota Petroleum Council's seminar typically occurs during the second week in June and the Lignite Energy Council's seminar the following week. Both seminars extend over a four-day period and include lectures, panel discussions, fieldtrips, and classroom activities. The teachers are able to earn two graduate professional development credits from each of these seminars. Fifteen instructional hours are required for each graduate professional development credit. As part of their

five-year teacher certification, North Dakota teachers must obtain four developmental credits. After July 2011, the requirement will increase to six credits.

The lignite fieldtrip to active coal mines, powerplants, and the coal gasification plant, as well as the petroleum fieldtrip to active drilling rigs, gas plants, and a refinery, are arguably the most important part of these seminars, enabling teachers to see first-hand these industries in operation. The teachers routinely comment on the awesome size and power of the drilling rigs and draglines and are impressed by the strong commitment to safety that they witness on these trips. Over the years, more than 3,000 teachers have attended these seminars.



John Hoganson lectures on prehistoric life in the region to 130 teachers participating in the 2010 North Dakota Lignite Council's Teacher Education Seminar. The majority of participants were from North Dakota, but teachers were also in attendance from western Minnesota, northern South Dakota, and eastern Montana.



The group photo of the 2010 North Dakota Petroleum Council's Teacher Education Seminar provides a rare look at two drilling rigs in close proximity. A pipe wrangler or automated pipe handling system had just been deployed in the closest rig to bring a new section of drill pipe to the rig floor. Photo courtesy of the North Dakota Petroleum Council.