

THE HANSON (NOT HANSEN) LIGNITE BED

by
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In the 1908 biennial report of the North Dakota Geological Survey, State Geologist, A.G. Leonard, named three consecutive beds of coal exposed along the valley of the Little Missouri River south of Bullion Butte - beds G, H, and I (in ascending order). He placed these beds in the "Great Bend Group" of the Fort Union Formation. He used the "Great Bend" designation because the three coals were prominently exposed along the thirty-mile stretch of the north-flowing Little Missouri River where it bends around Bullion Butte (from the old Yule site in Golden Valley County to the mouth of Garner Creek in Billings County; Fig. 1). Leonard's I bed reaches a maximum thickness of 34 or 35 feet in a cut along Sand Creek near the old Russell Ranch (T.135N., R.101W., section 30). This bed was at the time, and remains to this day, the thickest-known exposure of coal in North Dakota.

In 1928, C.J. Hares, geologist with the U.S. Geological Survey, reported on a study of the lignite resources that centered on the "Big Bend" area, stretching north from the South Dakota line almost to Medora and west from the town

of Bowman to the Montana border. Interestingly, Hares had done the fieldwork for the project in 1911 and 1912. He renamed Leonard's bed I the Harmon bed, after he determined that it correlated to the Harmon coal that Leonard and Smith (1907) had named in the Medora area. In addition, Hares applied the name Hansen bed to a thick lignite (Leonard's H bed) that occurs below, and in this area in close proximity to, the Harmon bed. As it turns out, the Harmon bed is not only the thickest known coal in the state (54 feet thick in McKenzie County) but also the most extensive.

As was typical of the time, many of the coal beds were named after ranches in the vicinity of major outcrops or after the small workings from which they were mined. For 75 years, the Harmon and Hansen beds have been reported in the geologic literature. However, in using the name Hansen, we are perpetuating a misspelling by Hares. It seems reasonable, from the context of his report, that Hares named this coal for the exposures of this lignite in the vicinity of the Logging Camp Ranch south of Bullion Butte (Fig. 1). The Logging Camp Ranch, along with the HT Ranch, were famous

ranches that were established in the 1880s by the Little Missouri Horse Company with A.C. Huidekoper as president. The ranches raised thousands of horses that were halter broke and then shipped to Pennsylvania for training before being sold to entities such as the Knickerbocker Ice Company in New York. William Henry Hanson came to North Dakota in 1904 and lived at the Logging Camp Ranch while working for A.C. Huidekoper. W.H. Hanson stayed on at the ranch even after it was sold in 1909, first to Fred Pabst of the Pabst Brewing Company and then to I.P. Baker. The Hansons eventually purchased the Logging Camp Ranch on which the third, fourth, and fifth (counting the children) generation of ranchers live today.

A search of the U.S. Bureau of Land Management General Land Office records found a few Hansens (Jakob L., Anton B., and Peter) in Slope and Bowman County at, or around, the time that Hares was doing his fieldwork but none that resided within his study area. W.H. Hanson and his sons John and Robert were living within Hare's study boundaries in areas that contained prominent outcrops of this coal bed. Based upon this information, it appears obvious that Hares misspelled the family name.

The Harmon and Hanson beds are often

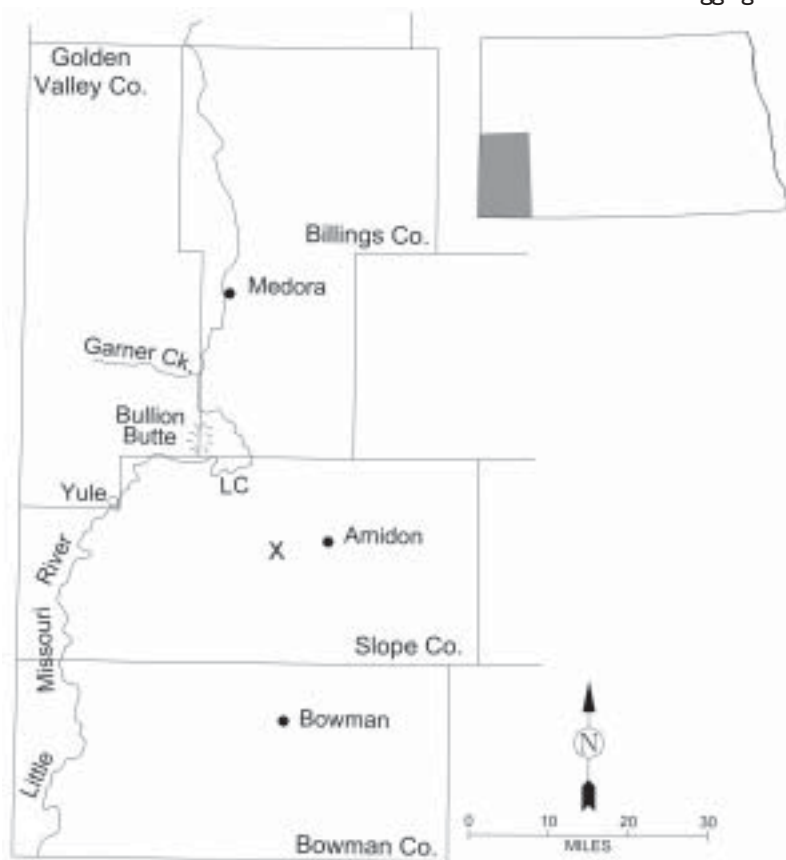


Figure 1. A generalized map of a portion of southwestern North Dakota. The location of the Logging Camp Ranch is noted by LC and the thickest exposure of lignite in the State is marked by an X.

viewed as a coal pair. Therefore, whenever the Harmon bed is mentioned in the geologic literature, so to is the Hanson bed. This is appropriate because the Harmon and Hanson families have historical ties, members of both families worked for A.C. Huidekoper and the Little Missouri Horse Company.

The purpose of this article is to correct this long-standing spelling error. For the past year, the North Dakota Geological Survey has been using the more logical Hanson spelling (NDGS Miscellaneous Map nos. 34 and 35).

Acknowledgments: Information on the history of the Logging Camp Ranch supplied by Robert Lee Hanson. Additional historical information was obtained from two articles in the *Slope Saga*, published in 1976: *Huidekoper*

Ranches Compared by Harry Roberts (pages 1099-1101) and *Logging Camp Ranch* by Louise (Hanson) Kopseng (pages 1101-1104).

Geologic References

- Hares, C.J., 1928. Geology and lignite resources of the Marmarth Field, southwestern North Dakota: U.S. Geological Survey Bulletin 775, 110 p.
- Leonard, A.G., 1908. The geology of southwestern North Dakota with special reference to coal: North Dakota Geological Survey Fifth Biennial Report, p. 27-115.
- Leonard, A.G. and Smith, C.D., 1907. The Sentinel Butte lignite field, North Dakota and Montana: U.S. Geological Survey Bulletin 341, p. 15-35.



View to the northeast across the Little Missouri River Badlands near the Logging Camp Ranch. Rabbit Ears or Teepee Buttes are in the background along the right-hand portion of the photo.



View to the north across the Little Missouri River Valley from the Logging Camp Ranch. The Harmon and Hanson beds are in close proximity stratigraphically in this area. Rabbit Ears or Teepee Buttes are visible in the upper left-hand corner.