

upper 8 or 10 feet consists of loose white sand, except where locally indurated at base to an ironstone rock, of Pleistocene age. The section, Fig. 11, is a hasty sketch of that portion of the bluff which is best exposed for study.

Several good-sized silicified logs were observed lying loose on the lower slopes of the bluff. As none of these were seen in place, it could not be determined whether they came from the Pleistocene above or the laminated beds beneath. The highest one observed rested upon layer No. 3 at about 20 or 25 feet above the base.

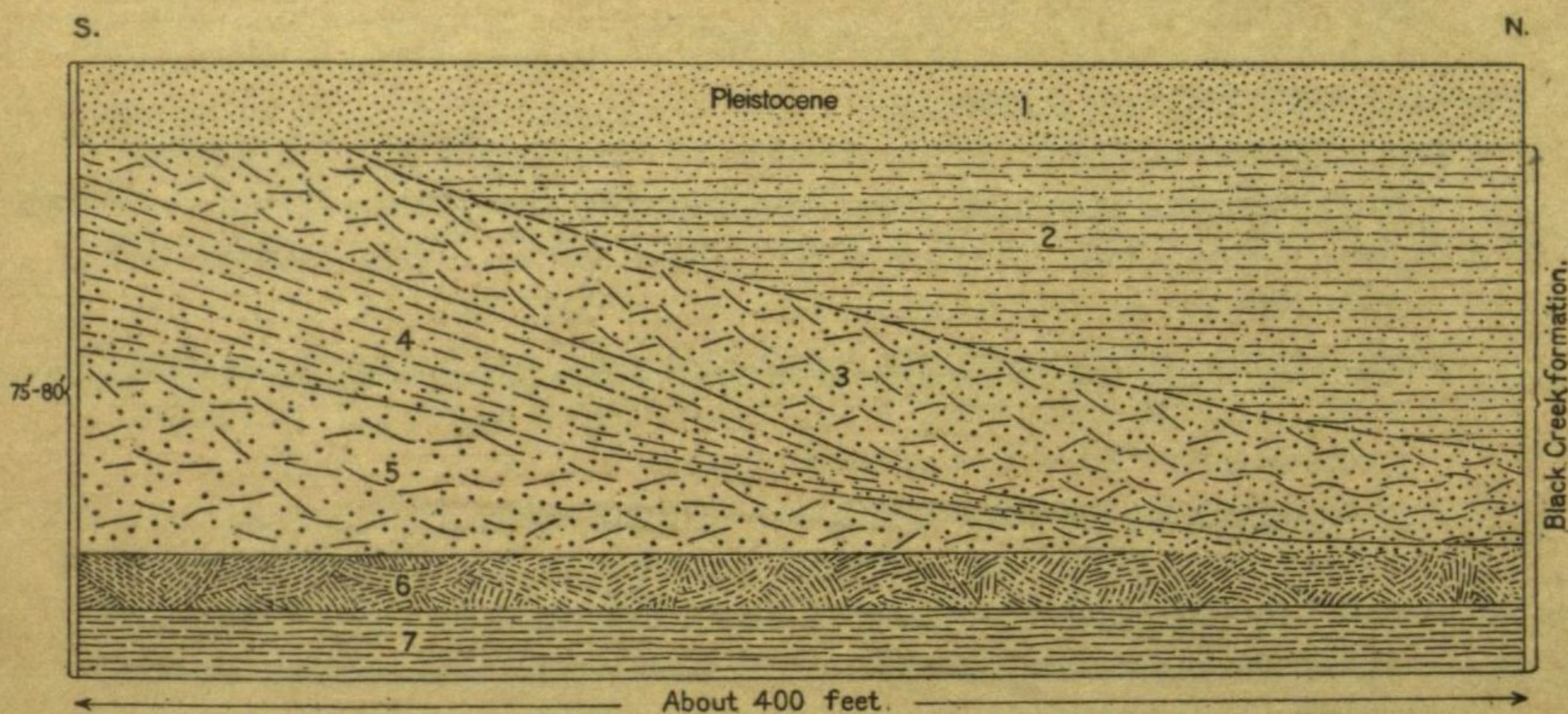


FIG. 11.—Sketch showing the irregularly bedded character of the Black Creek formation; Cape Fear River, Prospect Hall Bluff, N. C.

EXPLANATION OF SECTION.

Pleistocene (Sunderland formation):

1. Loose white sand, except where locally indurated at base to form an ironstone rock.

Cretaceous (Black Creek formation):

2. Dark drab to black, laminated clay with partings and some lenses of sand. Contains some lignite and comminuted vegetable remains.
3. Rather loose, cross-bedded sand, with some laminæ of drab clay. Contains some lignite.
4. Dark drab, laminated clay and loose, light-colored sand.
5. Loose, buff, cross-bedded sand, with a few laminæ of clay.
6. Coarse, cross-bedded sandstone, cemented with iron.
7. Dark drab to black, laminated clay, containing much lignite, in places teredo-bored, concretions of iron sulphide, and much mica. Some of the lignite layers are essentially peat, and in these peaty layers the mica is especially abundant.

Phragmites Pratti Berry and *Salix flexuosa* Newberry were collected at this locality.

Laminated sands and clays, varying in character, but as a rule containing considerable lignite, iron sulphide concretions, and mica, are exposed at many points for the next 16 miles below Prospect Hall, for the most part in low, rather poor bluffs. At the mouth of Harrisons Creek, 83 miles above Wilmington, left bank, a 12- or 15-foot exposure of laminated materials yielded the characteristic Black Creek species *Araucaria bladenensis* Berry and *Phragmites Pratti* Berry.