## A REVISED CLASSIFICATION OF BEACH CUSPS

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## ABSTRACT

In a former article (Evans 1938) I explained the formation of beach cusps, and suggested a classification based on origin. Further study and observation has shown that perhaps one of the types given is not a true cusp, and that two others, although very different in appearance, are closely related in origin.

In my first paper, the classes are numbered. Here I suggest a descriptive term for each class.

Class 1. Very large capelike cusps formed during storms along beaches that are susceptible to considerable erosion and deposition. These are formed only during storms and might be called "storm cusps."

Class 2. Large cusps which have their apexes continuing out into the lake as a ridge of sand on the lake bottom perpendicular to the shoreline. These are formed only along beaches where the water is very shallow. They could be called "shallow-water cusps."

**Classes 1** and 2, although they are quite different in appearance, are very much alike in method of formation. Each has a long ridge extending out beyond the submerged end and made up of sediments carried out from the ahore.

Class 3. Cusplike forms that occur individually along the beach as a result of deposition or erosion resulting from the presence of an obstruction. These are single cusps that never occur in series. They could well be called "obstruction cusps."

Class 4. Very small cusps formed at the lower ends of grooves which are sometimes formed just above the water line and are perpendicular to it. These are not true cusps. They are a type of rill mark. Could be called "rill cusps."

Class 5. The "ideal" cusps which usually occur in series and come nearest of all to being evenly spaced. This is the kind of cusp usually noticed along a beach. It occurs in groups and appears to be fairly evenly spaced. Should be called "series cusps."

## LITERATURE CITED

Evans, O. F. 1938. The classification and origin of beach cusps. J. Geol. 46: 615-637.