

H. A. Gleason presented an illustrated paper of which the following is an abstract.

THE VEGETATIONAL HISTORY OF A BLOWOUT.

Blowouts are saucer-shaped or bowl-shaped excavations caused by the action of wind on sand which is not sufficiently protected by a plant covering. They may reach in Illinois a length of 200 yards or more, and a depth of 10 to 30 feet.

They consist of four physiographic divisions, with each of which a definite association is correlated. The windward slope, occupied by the windward slope association, is situated at the west end of the blowout. On it the sand is being removed by wind and is also sliding down by gravity. The vegetation is composed principally of grasses derived from the vegetation outside the blowout. The deepest part of the blowout is the basin, from which sand is being removed by wind alone. The basin association is composed of a few individuals of deep-rooted perennials. The upward slope at the east side of the basin is called the lee slope. On it the sand is merely in motion, without any essential change in level. It is occupied by the blowsand association, consisting of large numbers of slender, quick-growing annuals. The east end of the blowout is occupied by the deposits, on which sand is being piled by the wind. The vegetation of the deposit association is principally composed of sand-binding perennials, through the agency of which the sand is accumulated into dunes.

The successional relations of these four associations are complex, but lead as a rule to the ultimate dominance of the blowsand association. When the sand has ceased blowing, stabilization of the blowout begins in all four parts, and the area is soon reoccupied by a more luxuriant vegetation.