

the beach to the plant and from the plant to the beach again, but also an actual migration of combined nitrogen from lower to higher levels.

The subjoined table, which exhibits the results of a number of analyses¹ of the top nine inches of soil, shows the superior richness in nitrogen of the ground occupied by *Suæda* over that round about. The samples were collected from an outer zone 12 feet 6 inches from the centre of a *Suæda* bush high up on the Blakeney Bank, from a middle zone 4 feet 6 inches distant, and from the area of the bush itself. The results were as follows:—

Position of Samples.	Organic Matter per cent.	Nitrogen (Ammonia and Nitrates) Pts. per Mill.
Outer zone (mean of 4 determinations) ...	1.07	2.35
Middle zone (mean of 4 determinations) ...	1.4	3.2
Area of bush (mean of 5 determinations) ...	2.7	5.1

Other analyses of shingle from the trough and sides of gullies of transport in the neighbourhood showed the organic matter present to be practically nil.

Whilst the great majority of *Suæda* bushes on the Blakeney Bank have been derived from plants which established originally in the drift line at the foot of the bank, a certain number² of seedlings establish directly at higher levels, and even on the crest itself. Observation of several of these continued over a period of seven years shows that, whilst for rapidity of growth they cannot compare with drift-derived specimens, they none the less hold their own and make sturdy plants.

The importance of constant supplies of drift from the landward side in promoting the establishment of vegetation on a beach is emphasized by the great sterility of those stretches of the Blakeney and other beaches which are encumbered with

¹ Made by Dr. H. B. Hutchinson of the Rothamsted Laboratory, who gives us permission to use his results.

² About fifty such plants were discovered on a mile-and-three-quarters stretch of the bank.