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## NOTES ON THE FLORA OF LONG ISLAND.

BY SMITH ELY JELLIFFE, M.D., BROOKLYN, N.Y.

THE flora of Long Island is one of some degree of richness, which upon a casual observation would seem to be a somewhat anomalous statement, for it would appear that a sand waste a few miles wide and about a hundred miles in length would hardly be a place upon which a rich or abundant flora could flourish.

Long Island, so geologists tell us, is a portion of the terminal moraine of the glacier that stretched across the country from east to west; traversing the entire length of the island there is a rocky ledge, the so-called "back bone," from which the land falls in more or less steep descents to the north, and in long gradual slopes southward; the whole coast is rich in fresh and salt water marshes, which are more pronounced upon the southern coast.

The earliest notices upon the subject are to be found in a paper published in 1807, entitled "Plantæ Plandomensis," or a catalogue of the plants growing near Plandome, Queens County, by Caspar Wistar Eddy. In 1835, J. B. Zabriskie published a "List of Plants Growing near Erasmus Hall, Flatbush," and from 1843 to 1853 John Torrey M.D., in his publication on the "Flora of New York," included many Long Island plants. In 1874, E. S. Miller and D. W. Young published their "Catalogue of the Plants of Suffolk County," to which additions were made in the Bulletin of the Torrey Botanical Club. This journal also contains many notes upon the island flora. C. H. Peck, N. L. Britton, A. H. Hollick, Geo. D. Hulst, W. H. Rudkin, W. H. Leggett, J. L. Zabriskie, Mrs. E. G. Britton, Mrs. L. D. Pychouska, F. E. Tillinghast and others have contributed notes from time to time upon new or interesting plants found on the island.

In round numbers about 1500 phænogamous plants have been recorded; the work in the cryptogams has been scanty, yet the writer has records of upwards of 750 species, which promises much for the numerical value of this portion of the flora when more completely studied.

The most characteristic of the plants are found in the salt marshes and along the sands of the sea coast, here are a number of interesting grasses and sedges, including *Fuirena squarrosa*, *Heleocharis Robbinsii*, *rostellata* and *melanocarpa*, *Scirpus subterminalis*, *Rhynchospora nitens*, *Calamagrostis Nuttalliana*, *Glycenaspluittana*, *Eragrostis pectinacea* and others; the salt-loving plants as *Ranunculus cymbalaria*, *Lecheas*, *racemulosa*, minor and major; *Hudsonia tomentosa* in quantities and *H. ericoides*, though much rarer, *Prunus maritima* and several of the more common forms are constantly to be found at almost all points along the southern shore. In the fresher marshes *Spiranthes*, *Habenaria*, *Calopogon* and *Pogonia*. *Cypripedium* and *Goodyera* are intermingled with rush and sedge and grass.

Along the ridges and in the higher lands the Composites, Labiates and Graminæ are widely distributed, there seeming to be a nearly equal distribution throughout the three counties. In general, however, the plants found in Suffolk county are among the most characteristic, there being there some fifty or sixty plants that belong to the New Jersey pine-barren flora and whose presence is to be explained upon the geological grounds that this eastern portion of the island was at one time a portion of the Atlantic littoral plain. Among those plants found in Suffolk county, some of which are also to be met with in Queen county, there may be mentioned *Camelina sativa*, *Reseda luteola*, *Drosera longifolia* and *filiformis*, *Ascyrum stans* and *Crux andreae*, *Arenaria squarrosa*, *Polygala lutea*, *Quercus phellos*, *Cyperus dentatus* and *Cupressus thyoides*, as of more particular interest. Recent investigations by Dr. A. H. Hollick, of Columbia College, have been directed to a better understanding of this portion of the flora, and interested botanists are referred to his papers in the Transactions of the New York Academy of Sciences.

The knowledge of the cryptogamic flora is still in its infancy. The ferns are well known and comprise the majority of the common *Aspleniums* and *Aspidiums* with here and there a more or less uncommon form, as *Woodsia obtusa*, *Woodwardia angustifolia*. The Bryophytes are represented by over 100 species, and it is certain that twice that number will be found when the collectors are more numerous and alert. *Catharinea crispa* is one of the rarer plants that has been found. The list of lichens is far from complete, 60 species are recorded and hardly a rock lichen collected. The number of species of fungi is 250, also a new field. The best known of the lower cryptogams are the marine algæ, they having been studied from the time of Professor Bailey to the present. *Bostrychia rivularis*, *Callithamnion dietziae*, which Professor Farlow, from a study of the original specimens in the herbarium of the Long Island Historical Society, is disposed to regard as a var. *laxa* of *C. Baileyi*, *Callithamnion tenue* are a few of those interesting algæ that are more or less uncommon. The diatoms are represented by a list of 78 species, which, with 45 species of fresh-water algæ, completes the numerical enumeration of the island's flora. Figures, however, are totally inadequate to express the characteristics of the flora of any region, however sparse it may be in vegetation, and it is hoped that in the near future a flora of Long Island will be in sufficiently advanced condition to warrant its publication, at least the portion recording the distribution of the phænogamous plants.

## CONSUMPTION AMONG THE COLORED PEOPLE OF THE SOUTHERN STATES.

BY G. W. HUBBARD, M.D., NASHVILLE, TENN.

PROBABLY no greater change in the social condition of a people can be imagined than the transformation of a race from the state of slavery to that of freedom.

The colored people of the late slave-holding States have now been free for twenty-eight years; and their present condition in regard to health and mortality, as compared with that which prevailed before their emancipation, is an interesting question, not only to the physician, but also to the philanthropist and the student of social science.

It is almost, if not quite, impossible to obtain reliable vital statistics concerning the people of the Southern States outside the larger cities and towns; and it is only within a few years that even these have been complete and reliable.

In this article I shall consider only one disease, phthisis pulmonalis; but it may be well to remark that the general death-rate among the colored people in the southern cities, where statistics are attainable, is nearly twice as great as that among the whites.

I have made careful inquiries of many physicians who practised in the South before the late civil war, and it has been their universal testimony that pulmonary consumption was a comparatively rare disease among the slave population, some even affirming that it was entirely unknown. It would probably be safe to say that this disease was very much less frequent among the negroes than among the white people.