



Plant Pioneers

PLANT communities in the far North are as mixed-up and disorderly as human communities in a newly-opened gold-rush country, and for essentially similar reasons. Just as in an absolutely raw pioneer settlement you find miner and banker, gambler and preacher, bar-keeper and doctor all rubbing elbows simply because the land is pioneer and there has not yet been time for society to stratify and each man to find his own niche, so in the Arctic you find "upland" and "lowland" trees, bog plants and dry-land plants, all in a grand anarchic jumble because the land has been open to plant settlement, too, for only a comparatively short time and things haven't stabilized themselves there yet as they have here in the temperate zone, where beech associates with maple but not with oak, and where cactus is accepted in a sage-brush society but cannot make its way among the close-shouldering haughty grasses of the moister meadows and prairies.

This key to the riddle of botanical anarchy in the Arctic has been found by Prof. Robert F. Griggs of George Washington University, after he had racked his wits over it in vain through half-a-dozen expeditions into Alaska and other northern lands.

The solution to the puzzle of Arctic vegetation was reached first by Dr. Griggs when he discovered evidence that the forest front in Alaska is advancing, and advancing rather rapidly at that. Then came the finding of Norse burials in the old Greenland colony, where the skeletons were dug out of perpetually frozen soil, yet penetrated with the roots of trees—indicative that the climate has become more rigorous since the Viking days in Greenland, a

thousand years ago. These and other evidences pointed to a genuine recency in the exposure of Arctic soil to seeding by plants. Arctic soil is new soil, juvenile, even infantile soil. It is anybody's race to see who arrives first, and any plant that manages to get itself rooted holds its place in the sun, with little competition or crowding from its neighbors and only the rigors of the climate and the difficulty of sucking a living out of the raw earth to limit its opportunities.

The higgledy-piggledy, casteless disarray of Arctic vegetation Dr. Griggs has likened to the equally mixed and chancy distribution of wild plants—mostly weeds—found on fallow plowland. Indeed, Arctic soil is like plowland to some extent, being constantly worked and overturned by frost action, so that no plant is guaranteed a permanent roothold.

Arctic plants are not merely like weeds. Many of them actually are weeds. Very prominent in Arctic plant society are such species as dandelion, sheep-sorrel, chickweed, narrow-leaved plantain, smartweed, yarrow and fireweed. Meek but tough and enterprising, these have inherited the Arctic earth.

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SOCIOLOGY

Race Crossing Inevitable Where Races Are Neighbors

NAZIS in Germany, the late unlauded Klan in this country, nativists and pure-race enthusiasts everywhere, have nought but their pains for their labors in any land where two or more different races live side by side. The races will inevitably mingle blood.

"Among the few statements that the scientist who studies human beings may make without fear of serious contradiction is that human groups do not meet but that they mingle their blood-streams," said Prof. Melville J. Herskovits of Northwestern University, in an address given in Chicago recently under the auspices of Science Service.

Not even the almost universal tendency of peoples to persecute and penalize the racial hybrid serves to prevent race crossing, Prof. Herskovits declared. In our own West the "squaw man" was an object of contempt, and his sons looked down upon as "half-breeds"; in India, where not merely to

SEISMOLOGY

Desert Earthquake Opens Deep Crack in Ground

See Front Cover

JUST suppose the half-mile long earth crack, a portion of which is pictured on the front cover of this week's SCIENCE NEWS LETTER, had split into being beneath the business district of a big city. It was created with a shock estimated to have been stronger than the one that damaged Long Beach, Calif., on March 10, 1933.

Fortunately its location was the desert near the northeast edge of Great Salt Lake, latitude 41.6 degrees north and longitude 112.7 degrees west, according to final calculations of seismologists. Date, March 12. (See SNL, March 17, p. 169; March 24, p. 184.)

So strong was this earthquake that it registered on instruments at the U. S. Coast and Geodetic Survey observatory at Cheltenham, Md., that are primarily intended for recording the magnetic field of the earth. For ten minutes at the time of the main shock the magnetic needle wrote a record of earth tremors, and in the afternoon another shock set it in motion for eight minutes.

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mate with but even to touch an out-caste merits eternal damnation, inter-caste children are born none the less.

These offspring of race crossing offer the student of human heredity his most interesting, perhaps his best, opportunity to study the Mendelian mode of inheritance, insofar as it affects human beings; for obviously not even the most enthusiastic eugenists can pen up young men and women like guinea pigs.

One of the really well assured results of such studies, Prof. Herskovits stated, is the establishment of the wholly fictional character of the "throw-back" tar-colored baby, born to parents with slight traces of Negro blood in their veins. We can depend upon children of mixed ancestry to "average" between their parents in skin color, hair character and other racial marks. If a black baby is born to such parents, something besides remote ancestry is amiss.

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