ECOLOGY

NATURE RAMBLINGS by Frank Thone

Pine and Prickly Pear

PINE trees and prickly pear cacti are in some ways surprisingly alike.

We seldom think of them as sharing common properties, to be sure. Traditionally, cacti are creatures of the desert—of heat and glaring sun and parched aridity. Equally by tradition, pines are of the North, of fogs and weeping rains and soggy, mossy ground. Kipling's "Recessional," dividing the world between Palm and Pine, expresses perfectly the common notion of tree geography; and Longfellow's "Evangeline," setting the chill but moist Acadian landscape with "murmuring pines and hemlocks," gives a good popular-ecological picture of the pine's habitat.

But at least one genus of cacti, the prickly-pears, are by no means confined to torrid lands, nor yet to deserts in the ordinary sense of the word. And the genus *Pinus* has deep overlaps into the territories of both palm and cacti.

Prickly-pear cacti grow native and naturally in such decidedly un-desert States as Illinois, Michigan, New Jersey, Florida, and far northward into the Peace River valley in western Canada. In Florida they even grow in swamps; in sub-Arctic Canada they hold out against winters six months long.

People often account for their presence in these unexpected places by supposing that they are escapes from cultivation, but such is not the case. They occupy waste lands—the sand dunes of Lake Michigan and the seashore, rocky clifftops and hillsides where other plants do not thrive because of lack of water and mineral nutrients. They would as readily spread into good plowland as any other weed, but for the fact that other plants rapidly outgrow them and outshade them—and cacti cannot tolerate shade.

Of pines a very similar story can be told. As the cacti venture far into the North, so do the pines march southward. The dry plateaus of Mexico and our own Southwest have abundant growths of pine, and pines form the greater part of endless, monotonous forests in Florida and over the whole Coastal Plain of the South.

In this sandy soil, which has too little nourishment for the faster-growing competing plants that dominate richer areas, the slow-starting, patient-growing pine and prickly pear manage to pick up their livings, and are frequently found growing together in quiet vegetable amicability. They are far from Acadia, far from Arizona, yet they are thoroughly and comfortably at home.

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● RADIO

March 23, 5:15 p.m., E.S.T.

LIFE IN THE LATE STONE AGE—Prof. V. Gordon Childe of the University of Edinburgh.

March 30, 5:15 p.m., E.S.T.

CLOTHES AND THE CHILD—Miss Ruth O'Brien of the U. S. Bureau of Home Economics.

In the Science Service series of radio discussions led by Watson Davis, Director, over the Columbia Broadcasting System.

PUBLIC HEALTH

Flu Vaccination Successful In New Jersey Colony

VACCINATION against influenza has succeeded in actual practice.

A group of men and boys at New Jersey State Colony were protected against this disease during an epidemic by vaccination with active human influenza virus, Drs. Joseph Stokes, Jr., Alice D. Chenoweth, Arthur D. Waltz, Ralph G. Gladen and Dorothy Shaw, of the University of Pennsylvania and Children's Hospital, now report. (*Journal of Clinical Investigation,* March.)

The vaccine was given at the outbreak of the influenza epidemic in and around Philadelphia in February and March last year. In the vaccinated group of 110 men and boys, 3 had typical influenza with fever. In an unvaccinated group of 550 at the same institution, 12.5 per cent developed influenza with fever.

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Cities in Mesopotamia had kings as early as 3000 B.C.