

THE HARVARD FOREST -- A WINDOW ON THE WORLD

by Ernest M. Gould, Jr., Forest Economist and Lecturer on Biology

Spurred by mounting concern over the possibility of a timber famine and interest in new ideas like conservation, Harvard started to teach Forestry in 1903. Five years later two alumni offered the University a tract of land in Petersham that was gladly accepted as a field laboratory and demonstration forest. Within six years the Harvard Forest became the year-round headquarters for teachers and graduate students so that by 1914 a community of scholars came to eat, sleep, and live, surrounded by 2500 acres of the woodlands they were studying.

The first job was to manage the "endowment fund" by putting their 12 million board feet of white pine timber on sustained yield. Drawing on the best knowledge available from European and American experience, it was hoped that the work in progress on the land would demonstrate the value of forestry for all to see. What developed, of course, was a well documented case showing that foresters had much to learn -- the teachers didn't know all that was needful about how forests grew, loggers didn't know how best to utilize the trees, fluctuating prices and hurricane damage made strict sustained yield suspect as an investment policy. Much more had to be learned before the forest system could be integrated with social needs, and the recalcitrant nature of this problem has changed the Harvard Forest from demonstration to research.

In This Issue:

"THE HARVARD FOREST -- A WINDOW ON THE WORLD" Dr. Ernie Gould, our co-host at the Field Day, introduces us to the Harvard Forest and its history.

Program for the FIELD DAY on September 18th. Bring your family, friends, lunch, a camera, and clothes suitable for the weather and for walking.

ARTHUR S. PALMER, JR., a Profile.

"RODENTS IN THE FOREST" Walter Lyford continues his Earth Notes series.

SNAP SHOTS of the Directors' meeting and two publications of interest.

After 60 years of experience and experimentation a great deal is known about the origins of our forests and how the land has been used so that our options for the future are much clearer. It is also apparent that the nature of forestry has greatly changed. The original job was to find the best recipe for raising sawtimber in a society that valued products above all else. Today, people in the urban realms of Southern New England also want a pleasant rural environment, and timber is seen as a by-product that can reduce the cost of amenity -- provided harvesting doesn't destroy attractiveness. A modern forester must devise strategies of management that respond to new knowledge and changing social demands. The complexity of the job is reflected by the fact that soil scientists, ecologists, physiologists and economists all find relevant research to do at the Harvard Forest.

In 1763 Jonathan Sanderson bought the 75 acres of woodland around the present Harvard Forest headquarters because he saw land he could clear to make a comfortable subsistence farm for himself and his family. In 1806 his son John took over the place and in response to the bustling times bought 300 more acres to make the place into a commercial farm which the family operated until 1843. With the decline of agriculture the place passed through several hands and eventually was expanded to 900 acres by a communal religious sect. The failure of this group allowed the land to revert to forest before the turn of the century, and when the land became the Prospect Hill Tract of the Harvard Forest the remaining open fields were planted to trees.

The Sandersons, father and son, modified a "howling wilderness" to make it comfortable for themselves, later expansion of farming also enriched food flowing to the region's more distant urban centers. Subsequent events have brought back the forest, and a much more complex social and economic system keeps Petersham a good place to live. Land hereabouts is now chiefly valued as uncrowded living space for a few, and as a pleasant environment for the many seeking relief from everyday urban life. The Harvard Forest remains as an excellent window on the real-world interaction between man and his forested environment.

FIELD DAY, September 18th, at the Harvard Forest in Petersham. The Harvard Forest headquarters is located on the east side of Route 32, three miles north of the center of town. Heading north the sign is not visible until one gets close to it.

11 to 12 noon informal tours of the Fisher Museum with its remarkable dioramas of the forest and agricultural history of the area.

12 to 12:30 lunch period

12:30 to 1:30 informal discussion of landowner problems

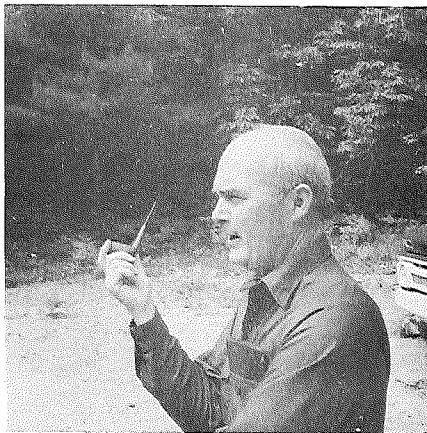
1:30 to about 3:00 tour of plantations with Messrs. Gould and Lyford

ARTHUR S. PALMER JR., MLL DIRECTOR

This has been a good year for blueberries, at least on Streeter Road in Paxton. The pint boxes on the roadside stand were rounded full with berries almost big enough to peel as Stan and Lillian Palmer were working over a pan of freshly picked fruit. Their son Dick showed us through the high bushes, and daughter Cathy rode by bareback on her mare 'Lady.' Next door, on a 39-acre farm lives older daughter Susan with her family. The barn, pastures and fields are geared to horses which the Palmers board for other people.

Winds have been a major factor in their lives. After graduating from Commerce High in Worcester, Stan joined the 8th Air Force in WWII and flew 34 combat missions over Germany. Later he was called up for Korea. In 1946 Stan joined the Paul Revere Life Insurance Company and shortly after that they bought a house in Holden on Route 122A. The tornado of 1953 left only a cellar hole where the house had been; fortunately no one was hurt. Stan is still at Paul Revere where he is now a senior underwriter and where he is known as Art Palmer.

Stan helped to organize the Land League and is the Program Chairman. In April he was elected to the Board to fill the vacancy of Fred Giebel's resignation. Stan feels that it is important to maintain a generous amount of open space to offset increasing development, also that open land should be put to positive use. He dislikes "keep out!" signs unless there is a particular need for them. It is gratifying to learn that the Palmers have had no serious trespassing problems during the 18 years they have lived in Paxton.



Stan Palmer at the June Field Day at Buck Hill

RODENTS IN THE FOREST

by Walter H. Lyford, Soil Scientist with the Harvard Forest

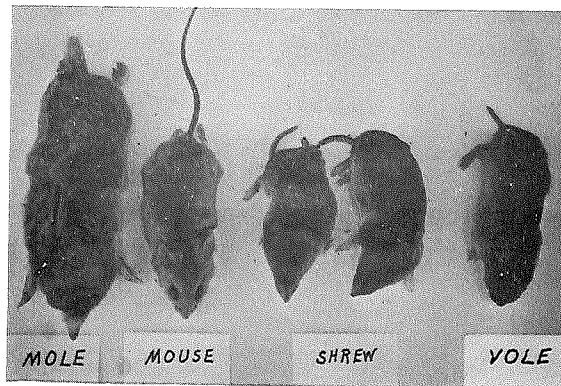
Small burrowing rodents (mice, moles, shrews, voles) are common in the forest. We seldom see them but if we pull away the forest floor their runways can be seen in the very top part of the underlying mineral soil and we can follow continuous runways for 20 feet or more.

At the Harvard Forest we spent a little time a couple years ago investigating the activity of these "fossorial small mammals" to see if they stir the soil appreciably. I often tell students that the A1 horizon, the 1-2 inch thick topmost mineral soil layer just under the forest floor, is the thickness of a mouse's body. For years I've had the hypothesis that this thin soil layer is the result of mixing and remixing by the burrowing of rodents.

To get some notion about the prevalence of runways we removed the forest floor from square yard plots in several kinds of forest and found runways in about 70 out of 100 plots. There was a higher percentage where earthworms were numerous.

Ordinary mouse snap-traps were placed in the runways and baited with peanut butter and other goodies. We caught white footed mice, hairy tailed moles, masked and short-tailed shrews, and pine and red-backed voles.

Unfortunately for my hypothesis it appears that all these rodents use the same runways and the runways may persist for years. The soil mixing may not be as rapid as I thought. Nevertheless I continue to tell the same story!



SNAP SHOTS

At the Directors' meeting on August 3rd it was voted to formally record the Land League in favor of a State Constitutional Amendment which will permit the assessment of agricultural land on the basis of its use and to urge our members to support this proposal when it appears on the ballot in 1972. Also at this meeting a committee was appointed to suggest possible wording of signs which might be useful to League members. These will be available for inspection and comment during the lunch period of the Field Day on September 18th.

League members may be interested in two recent publications of the Soil Conservation Service: "PONDS for Water Supply and Recreation" January 1971, 55 pages, 70¢ -- an introduction to different uses of ponds and available source material, followed by considerable technical data on drainage areas, runoff and construction; and "INVITE BIRDS TO YOUR HOME, Conservation Plantings for the Northeast" December 1969, foldout leaflet with color, 25¢ -- description and pictures of plants and trees with their fruit. Order direct from Government Printing Office, Washington, DC 20402, or stop in at SCS office in Holden.