



The Sex Life of a Tree

While sitting on the severed stump of a giant tree one evening, I began to think how different the life of a tree must be. Basking in the energy flow of the sun. Quietly growing. Rooted and peaceful. Yet what do they miss? What must the sex-life of a tree be like—standing forever alone and apart from others?

Yet, think! Leaves caressed by the winds, bringing scents of faraway places. The long, quiet winters—growing and developing inside—focussing energy into the flowers and pollen that burst forth with the warm sun and rain of spring. Think then of that grand and glorious orgy of spring—making love and joining together with every tree in the community, wave after wave of pollen washing over you from tip to root with every breeze, the tips of every branch and twig tingling and flower upon flower upon flower bursting into the creation of new life. What have we to match that? And the long, heavy summers bringing that new life to fruition. The sex life of a tree is different from ours, yet part of a grand cycle that has a meaning and a grandeur at least equal to our own.

***The International Book of Trees*, Hugh Johnson, 1973, \$29.95 from:**

Simon & Schuster
630 Fifth Avenue
New York, NY 10020

This is the finest and most beautiful guide to becoming a tree lover I've ever found. It's an incredible collection. Almost 250 pages of the best color pictures I've seen of every kind of tree in different seasons—their leaves, bark, flowers and structure, along with encyclopedic information on the different kinds of trees. Combine that with beautifully illustrated explanations of how a tree grows and works, trees and weather, hardiness zones, trees and wildlife, planting and caring for trees, a useful index to trees, the meaning of botanical names, a guide to choosing trees (which resent moving, have ornamental bark, tolerate heavy shade, etc.), charts of rate of growth and ultimate size, a 12-month calendar of ornamental flowers, fruit, and foliage, and much more! Have your library get it, and you may want to save up for your own copy.

- 80 to 90% of a tree is water, drawn from the ground by its roots. Of the remaining 10 to 20%, no less than 91% is derived from the atmosphere by the leaves, which are thus the tree's main feeding organs.
- The sap of a tree carries nutrients to its roots. Removing the bark of a tree deprives the roots, not the tree above, of nourishment.
- Pears, apples and almonds are related to roses.
- A line of ancient gnarled beeches occur through Denmark, Champagne and Brittany, whose malformation is believed to have been caused by a radioactive meteor several centuries ago.
- The "Chinese cedar" or "toon" tree, common in Paris, would probably be extinct if Parisian gourmets realized the delicacy of its onion-flavored leaves and shoots.

***Forest Farming*, J. Sholto Douglas and Robert A. de Jart, 1976, 3.85£ from:**

Watkins Publishing
45 Lower Belgrave St.
London SW1W 0LT England

Some time ago I read J. Russel Smith's pioneering book, *Tree Crops: A Permanent Culture* (1950, Devin-Adair Co., 1 Park Ave., Old Greenwich, CT 06870, \$7.95). It hit a sensitive chord—I had felt strange about farming practices in the Northwest where we irrigate field crops through our 6-month summer drought while native trees are able to suck up deeper ground water left from the 6-month winter deluge of rain. I thought it sure would be simpler if we could live on nuts and

acorns, but assumed trees were much less productive than field crops.

Forest Farming goes the important next step of showing that in food productivity alone tree crops can produce 10 to 15 times as much food per acre as field crops. It also thoroughly explores other important features of forest farming—timber and firewood production, ability to use hillsides unsuitable for field crops, lower labor demands, combination of tree crops and pasturage or livestock foraging, multi-level farming, production of medicines, chemicals, oils, etc. from trees, use of trees in desert reclamation (some trees have 100-foot taproots to draw up deep groundwater), leguminous trees which improve soil fertility, and the importance of vegetation in tropical forests where nutrients are held in *vegetation* rather than in the soil where the rains would leach them away, etc.

***Losing Ground*, Eric Eckholm, 1976, \$3.95 from:
W. W. Norton & Co.
500 Fifth Avenue
New York, NY 10036**

We hear so much about our problems every day that is usually seems better to spend our energy on resolving rather than declaring them. A few things come along, though, that give important enough perspective on problems to be worth reading. *Topsoil and Civilization*, by V. G. Carter and T. Dale (1974, Univ. of Oklahoma Press, 1005 Asp Ave., Norman, OK 73069, \$2.95) is one. *Losing Ground* is another. Eckholm draws together the global environmental effects of population pressures—deforestation of mountains for lumber and firewood and for urgent though destructive hillside farming, salting and silting of irrigation systems, destruction of tropical forest ecosystems, destruction of world fisheries, desert expansion and dry-plains dustbowls. The message is important and sobering—environmental damage from overpopulation is likely to cause a major and largely permanent decrease in the number of people our food systems can feed.

Forest Farming offers some answers for combining soil conservation with increased food production, but any possible food production is rapidly overtaken by population growth. The basic solution that we avoid coming to grips with is accepting the responsibility to limit our numbers to what we can produce, and regional and local self-reliance seems central to that. As long as someone else will help us out every lean year there is no incentive for restraint. Again the Chinese have a lesson—each region must take care of its own population and food. In bad years food is *loaned*, but must be repaid.

***The Improved Nut Trees of North America*, Clarence A. Reed and John Davidson, 1954, \$10 from:**

Devin-Adair Co.
1 Park Ave.
Old Greenwich, CT 06870

When you are ready to go nuts, this book gives a practical guide. Covers walnuts, beech, hickory, pecan, chestnut, oak, filbert, and more specialized nut trees—choice of species, propagation and culture of nut trees, causes of damage to trees, development and filling of nuts, and a list of nut nurseries.

A final bit of useful esoterica which we haven't been able to track down yet—*The Eucalyptus* by A. R. Penfold, published in 1961 by Interscience. We found this in the library at VITA and it looks quite interesting. A voluminous study of the many uses of that diverse group of trees—various kinds of oil production, medical applications, how to use structurally, etc. (TB)