



LOUISIANA DEPARTMENT OF AGRICULTURE & FORESTRY

BOB ODOM, COMMISSIONER
W.G. "BUD" COURSON, DEPUTY COMMISSIONER



Office of Forestry
P. O. Box 1628
Baton Rouge, LA 70821
(225) 925-4500 ~ Fax: (225) 922-2356

LANDSCAPING THE HOME FOR ENERGY CONSERVATION

With the increasing costs of energy, the use of plants in the home landscape to conserve energy is coming to the forefront as a major consideration in planning a home site.

In a forest, the ground temperature can be as much as 25 degrees cooler than the temperature above the trees. You can create this same cooling effect by planting a well-planned forest around your house, thereby greatly reducing heating and cooling costs.

Recent experiments have shown that energy savings averaging 30% and as much as 60% are possible using various landscaping techniques. Here are some general guidelines you can follow:

1. Plant deciduous trees (trees that lose their leaves in the fall or winter) along the south, southwest and west sides of your house. Deciduous trees will block out the hot summer sun reducing air conditioning costs. In the winter these trees lose their leaves and let in the sun's rays to reduce heating costs.
 - o Plant deciduous trees that will grow to considerable size when mature (50 to 75 feet). Plant them at least 25 to 30 feet from the house and 15 to 20 feet apart.
 - o Plant trees that have strong wood and good structural characteristics, such as

Southern red oak	cypress	live oak
sawtooth oak	green ash	red maple
cherrybark oak	shumard oak	water oak
Chinese elm (<u>Ulmus parvifolia</u>)		white oak

Trees that do not do well in Louisiana and should be avoided include

Siberian elm (Ulmus pumila)
silver maple (Acer saccharinum)

The trees will require pruning as they grow to ensure a high canopy, to prevent damage to the house roof.

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- Consider planting trees that are small (less than 25 feet tall when mature) on the south, southwest, or west side of the air conditioner condenser so that the unit doesn't have to work as hard and can save up to 3% on air conditioning costs. Examples are

Japanese magnolia
yaupon

holly
crepe myrtle

wax myrtle
river birch

2. Plant evergreen trees (two or more rows) on the north and northwest side of the house to block winter winds.

- They are most effective if planted four to six times their mature height from the house. If done properly, energy consumption for heat can be reduced up to 30%.

Those evergreens that do well in full sun conditions are

Eastern red cedar
slash pine

loblolly pine
spruce pine

Among evergreen plants that will serve well as a wind screen and will grow in the partial shade of larger trees are

cherry laurel

magnolia

sweet bay

Regular tree maintenance and tree fertilization programs will significantly improve a tree's health and growth and are strongly recommended by urban foresters.

