



## LOUISIANA DEPARTMENT OF AGRICULTURE & FORESTRY

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# LANDSCAPING THE HOME FOR ENERGY CONSERVATION

Note No. 4

With the high cost of energy, the use of plants in the home landscape to conserve energy is 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 cost.

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 condition costs. In the winter these trees lose their leaves and let in the sun's rays to reduce heating costs.

- Plant deciduous trees that will grow to considerable size when mature (50 to 75 feet). Plant them at least 25 - 30 feet from the house and 20 - 25 feet apart.

- Plant trees that have strong wood and good structural characteristics, such as

Southern red oak	Baldcypress	Live oak
Sawtooth oak	Green ash	Red maple
Cherrybark oak	Shumard oak	Winged elm
White oak		

Some trees that should not be planted close to your home include:

Siberian elm	Willow	Water oak
Silver maple	Pecan	

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

Landscaping the Home for Energy Conservation -- continued

- 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 | Holly        | Wax myrtle  |
| Yaupon            | Crepe 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%

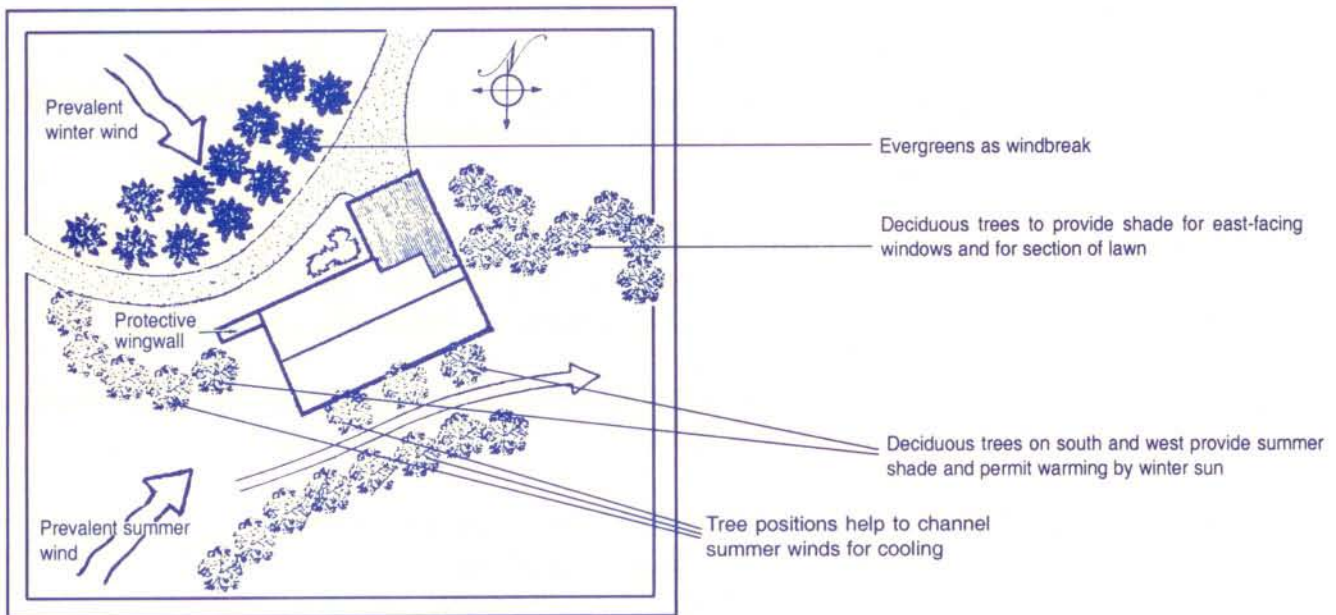
Those evergreens that do well in full sun conditions are:

- |                   |               |            |
|-------------------|---------------|------------|
| Eastern red cedar | Loblolly pine | Wax myrtle |
| Slash 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 | Sweetbay | Holly |
|---------------|----------|----------|-------|

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



**OTHER URBAN FORESTRY NOTES AVAILABLE**

- Note No. 1 "Guidelines for Fertilizing Yard Trees"
- Note No. 2 "Pruning Shade Trees"
- Note No. 3 "Planting Instructions for Shade Trees"
- Note No. 4 "Landscaping the Home for Energy Conservation"
- Note No. 5 "Planting Trees During Construction"
- Note No. 6 "Additional Tips for Successful Shade Trees"