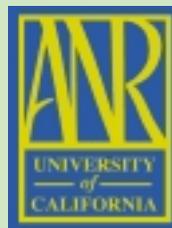


PINE AND CONIFER INFORMATION CHART

NAME	HABIT	HEIGHT	SPREAD	GROWTH	CLIMATE	USE	NOTES
WHITE FIR (ABIES CONCOLOR)	F,P	30'	20'	S	C,I,V,M	S,T,A	GOOD CHRISTMAS TREE
BUNYA-BUNYA (ARAUCARIA BIDWILLII)	P	60'	40'	M	C,I,V	S,	LARGE, HEAVY CONES DANGEROUS
NORFOLK ISLAND OR STAR PINE (ARAUCARIA HETEROPHYLLA)	F,P	50'	20'	M	C,I	S,T,A	SENSITIVE TO COLD
INCENSE CEDAR (CALOCEDRUS DECURRENS)	C	50'	15'	S-M	C,I,V,M,hD	S,A,H,W	ATTRACTIVE BARK
ATLAS CEDAR (CEDRUS ATLANTICA)	P	60'	50'	S	I,V,M,D	S,A	VARIETIES
DEODAR CEDAR (CEDRUS DEODARA)	F,P	60'	40'	F	C,I,V,M,hD	S,A,W	VARIETIES
ARIZONA CYPRESS (CUPRESSUS ARIZONICA)	P,I	30'	15'	R	C,I,V,D	S,H,W	VARIETIES
ITALIAN CYPRESS (CUPRESSUS SEMPERVIRENS)	F,C	40'	8'	S	I,V,D	S,A	VARIETIES
JUNIPER (JUNIPERUS)	V	6-20'	3-12'	S	C,I,V,M,D	S,A,G,H,W,T	MANY SPECIES, VARIETIES, USES
CANARY ISLAND PINE (PINUS CANARIENSIS)	P	60'	25'	R	C,I,V	S,A	GRACEFUL
PINYON PINE (PINUS EDULIS)	P,I	15'	10'	S	C,I,V,M,D	S,A,T	EDIBLE SEEDS
ALEPPO PINE (PINUS HALEPENSIS)	I	50'	35'	M-R	C,I,V,M,D	W	VERY HARDY
ITALIAN STONE PINE (PINUS PINEA)	R	50'	45'	M	C,I,V,D	S,A	IMPOSING, LARGE BUT SPLENDID
JAPANESE BLACK PINE (PINUS THUNBERGIANA)	I	20'	20'	S-M	C,I,V,D	S,A,B,T	PICTURESQUE; TOLERATES HEAVY PRUNING
ORIENTAL ARBORVITAE (PLATYCALDUS ORIENTALIS)	F,C-P	10'	8'	S	C,I,V,M,D	S,A,H,T	VARIETIES; BEST IN SOME SHADE MOUNTAINS, DESERT
REDWOOD (SEQUIOIS SEMPERVIRENS)	C	50'	20'	S-M	C,I,V	S,A,H	VARIETIES; PLANT CLOSELY PRUNE REGULARLY FOR HEDGE; GREAT MASSED FOR NORTH WOODS EFFECT

Form: P=pyramidal; C=conic; R=rounded; F=formal (dense, compact); I=irregular; V=variable. **Growth:** S=<one foot/year; M=1-2 feet per year; F=>2 feet per year. **Climate:** C=within five miles of coast; I=5-15 miles of coast; V=interior valleys (San Fernando, San Gabriel, San Bernardino-Riverside); D=desert; l=low, h=high. **Use:** S=specimen; A=accent; H=hedge; W=wind-break; T=tub; G=groundcover.

GARDEN INFORMATION SERIES



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PINES AND OTHER CONIFERS THEIR SELECTION, PLANTING, AND CARE



PINES AND OTHER CONIFERS

THEIR SELECTION, PLANTING, AND CARE

Pines and other conifers are cone-bearing plants lacking true flowers. They are popularly referred to as evergreens although a few actually lose their leaves in winter. Most pines and conifers provide much refinement in texture, have unusually symmetrical growth especially when young, and look good massed in large plantings if space permits. With age, many conifers become more irregularly shaped and take on a picturesque, stately grandeur. As with other trees, it is most important to select the right conifer for the right place in the home yard or landscape. When selecting a conifer know its ultimate size, growth form and characteristics, and adaptability to a particular environment, and be sure they are compatible with the intended site and use.

SELECTION

As trees, conifers are mostly moderate to large in size. Give them enough space so that when they reach full size branches and roots are not clashing with adjacent structures, trees, pavement, utility lines, and other plants. Most conifers, except for pines, naturally keep their lower branches as they mature, making them good choices for screens or windbreaks. Select a plant with growth characteristics desired to fit the intended use, whether it is groundcover, shrub, screen, windbreak, hedge, specimen, or landscape accent. Where possible select special named varieties (cultivars) noted for a desired growth shape or habit which best fits its intended use. Although most conifers are tolerant of a wide variety of environmental conditions, some have unusually narrow conditions in which they will grow. See the chart for the most common pines and conifers and their environmental adaptability. Refer to the Trees brochure of the Garden Information Center series for planting recommendations.



CARE

Nearly all pines and conifers need full sun, well drained soil, and regular water, especially when young, to grow best. They can be successfully grown in heavier, more poorly drained clay soils but watering must be adjusted so the root zone is not constantly wet. Water established trees and shrubs as deeply but as infrequently possible, usually when the soil one to two inches deep dries out. Apply enough water each time to wet the soil to at least 12 inches deep. Use a shovel or probe to

check if necessary. Once established, some conifers are rather tolerant of lengthy dry periods but it is still best to water regularly throughout the year, even in the winter and especially if rains are light. Pines and conifers require less fertilizer than most other trees and shrubs. Heavy fertilizing can promote rank, unsightly growth, destroying their natural, symmetrical, picturesque form.

Because of their natural tendency to produce a strong, dominant, central leader and their unusually symmetrical form and shape, pines and other conifers usually require less pruning than broad-leaved trees; however, the same principles apply to maintain tree health and structural soundness and, if necessary, to control size. Prune out dead, weak, diseased, and insect-infested branches. Remove low, broken, and crossing branches. Although pruning to control size is not recommended, it might be necessary in some cases; if so, thinning out is preferred rather than heading back. Drastic heading back of a mature tree, popularly called "topping", "coat racking", or

"hat racking", is a severely damaging, unprofessional, and even dangerous practice, and is to be avoided. Prune shrubs to keep their natural shape, thinning out older, taller growth. Remove old growth at or near the ground and leave the younger, shorter stems. Thin out and/or head back new growth as needed to reshape the plant. Prune junipers and similar shrubs with a strongly spreading growth habit by thinning out leggy, overly vigorous branches, especially those overgrowing and shading out lower ones and challenging the shrub's natural pyramidal shape. Prune naturally rounded shrubs like arborvitae by thinning out individual branches, removing about 1/4-1/2 the previous year's growth. Refer to the Pruning Trees and Shrubs brochure of the Garden Information Center series for pruning recommendations and procedures.

Pines and conifers are host to only a few serious pests and diseases. Pests and diseases are best controlled or prevented through proper selection and culture. Select plants well adapted to the environmental conditions

at the intended site. Keeping plants in a healthy, vigorous state makes them less susceptible to many insect pests, such as twig borers and bark beetles, which mainly only attack stressed plants. Perhaps the major cause of stress in conifers is improper watering. Water regularly, as deeply but as infrequently possible. Cypress canker is a serious, often fatal disease affecting cypresses, especially Monterey cypress planted away from the coast and Leyland cypress planted anywhere. Avoid planting Monterey cypress in inland areas and avoid Leyland cypress altogether.

Ask your nursery or garden center professional for additional information and assistance about pines and conifers.

The author is Donald R. Hodel, Environmental Horticulturist, University of California Cooperative Extension, Los Angeles.