




SECTION 9 -- NEEDLES




<i>Abies concolor</i>	White Fir
<i>Abies nordmanniana</i>	Nordmann Fir
<i>Araucaria bidwillii</i>	Bunya-bunya
<i>Casuarina stricta</i>	She-Oak, Beefwood
<i>Cedrus atlantica</i>	Atlas (Blue) Cedar
<i>Cedrus deodara</i>	Deodar Cedar
<i>Metasequoia glyptostroboides</i>	Dawn Redwood
<i>Picea pungens</i>	Colorado (Blue) Spruce
<i>Pinus brutia</i>	Calabrian Pine
<i>Pinus canariensis</i>	Canary Island Pine
<i>Pinus coulteri</i>	Coulter Pine
<i>Pinus densiflora</i>	Japanese Red Pine
<i>Pinus edulis</i>	Pinon Pine
<i>Pinus eldarica</i>	Afgan Pine
<i>Pinus flexilis</i>	Limber Pine
<i>Pinus halepensis</i>	Allepo Pine
<i>Pinus nigra</i>	Austrian Black Pine
<i>Pinus parviflora</i>	Japanese White Pine
<i>Pinus pinea</i>	Italian Stone Pine
<i>Pinus ponderosa</i>	Ponderosa Pine
<i>Pinus radiata</i>	Monterey Pine
<i>Pinus sabiana</i>	Grey Pine/Foothill Pine/Digger Pine
<i>Pinus strobus</i>	White Pine
<i>Pinus sylvestris</i>	Scotch Pine
<i>Pinus thunbergii</i>	Japanese Black Pine
<i>Pseudotsuga menziesii</i>	Douglas Fir
<i>Sciadopitys verticillata</i>	Japanese Umbrella Pine
<i>Sequoia sempervirens</i>	Coast Redwood
<i>Taxodium distichum</i>	Bald Cypress
<i>Taxodium mucronatum</i>	Montezuma Cypress
<i>Taxus baccata</i>	English Yew




NEEDLE

COMMON	NOT SEEN
RARE BUT FOUND	NOT RECOMMENDED

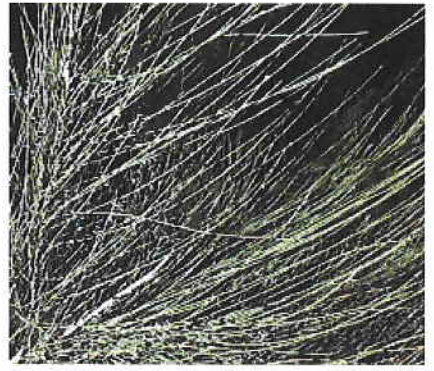
		White Fir	
		NEEDLE	FIR
<p>Average Height: 80' – 120'</p> <p>Average Canopy: 15' – 20'</p> <p>Shape: Conical</p> <p>Leaf: 1 – 2" Gray-green needles</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: Cones</p> <p>Bark: Smooth, whitish gray</p> <p>Other Characteristics: Upright cone</p>		  	
		<i>Abies concolor</i>	






<i>Abies nordmanniana</i>		Nordmann Fir	
	EVERGREEN	FIR	NEEDLE
<p>Average Height: 30' – 50'</p> <p>Average Canopy: 15' – 20'</p> <p>Shape: Conical</p> <p>Leaf: ¾" to 1 ½" Green needles</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: Cones – 6"</p> <p>Bark: Smooth gray/brown</p> <p>Other Characteristics:</p>			
			
			



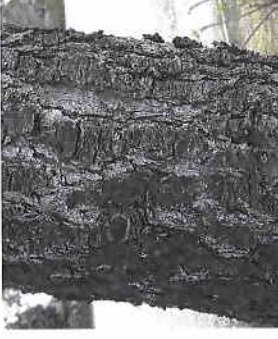

<i>Araucaria bidwillii</i>	Bunya-bunya
	EVERGREEN
<p> Average Height: 80' </p> <p> Average Canopy: 30' – 60' </p> <p> Shape: Cone to rounded </p> <p> Leaf: Evergreen spinney </p> <p> Flowers: Inconspicuous </p> <p> Fruit/Seed: 10 lb. – 15 lb. Cone </p> <p> Bark: Dark brown to black, flaking in scales on mature trees and deeply furrowed. </p> <p> Other Characteristics: Can be grown as houseplant </p>	
	


<i>Casuarina stricta</i>		She-Oak, Beechwood	
	EVERGREEN		NEEDLE

Average Height:
 20' - 35'
Average Canopy:
 20' - 30'
Shape:
 Broad-rounded
Leaf:
 Evergreen
Flowers:
 Inconspicuous
Fruit/Seed:
 3/4" Cones
Bark:
 Light green or light gray,
 exfoliating or furrowed
Other Characteristics:
 Segmented needles



Atlas (Blue) Cedar		NEEDLE	EVERGREEN
<i>Cedrus atlantica</i>			
<p> Average Height: 60' – 90' Average Canopy: 30' – 40' Shape: Conical Leaf: 1" Needles evergreen Flowers: Inconspicuous Fruit/Seed: 2" – 4" Upright cone Bark: Gray Other Characteristics: Bluish color </p>			
		 	
			

Deodar Cedar		<i>Cedrus deodara</i>	
NEEDLE		EVERGREEN	
<p>Average Height: 80' +</p> <p>Average Canopy: 40'</p> <p>Shape: Cone to broad top</p> <p>Leaf: 1 ½" Needles, evergreen</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: 3" – 4" Cone</p> <p>Bark: Dark gray, furrowed</p> <p>Other Characteristics: Grayish green</p>			
   			

<i>Metasequoia gypstrobooides</i>		Dawn Redwood	
	DECIDUOUS		NEEDLE
<p>Average Height: 90' + Average Canopy: 20' + Shape: Cone Cone: Leaf: Bronze brown in fall Flowers: Inconspicuous Fruit/Seed: Small cone Bark: Shredded reddish brown Other Characteristics:</p>			
			

<i>Picea pungens</i>		Colorado (Blue) Spruce	
	EVERGREEN	SPRUCE	NEEDLE




Average Height:
 30' – 60'
Average Canopy:
 15' – 25'
Shape:
 Cone
Leaf:
 Evergreen
Flowers:
 Inconspicuous
Fruit/Seed:
 3" – 4" Cone
Bark:
 Dark gray
Other Characteristics:
 Green to bluish color, may be silver, square needles



<i>Pinus brutia</i>		Calabrian Pine	
EVERGREEN	PINE	2-NEEDLE	NEEDLE

Average Height: **30' - 80'**
 Average Canopy: **15' - 25'**
 Shape: **Conical**
 Leaf: **Evergreen**
 Flowers: **Inconspicuous**
 Fruit/Seed: **3" Oval oblong cones**
 Bark: **Dark gray, furrowed**
 Other Characteristics:



<i>Pinus canariensis</i>		Canary Island Pine	
		NEEDLE	PINE
EVERGREEN	3-NEEDLE	<p>Average Height: 50' – 80'</p> <p>Average Canopy: 25' – 35'</p> <p>Shape: Slender cone</p> <p>Leaf: 9" – 12" Long needles, evergreen</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: 4" – 9" Cone</p> <p>Bark: Brown chunks</p> <p>Other Characteristics: Has 2 different types of needles, small bulish needles at trunk and when tree is small</p>	
			
			
			


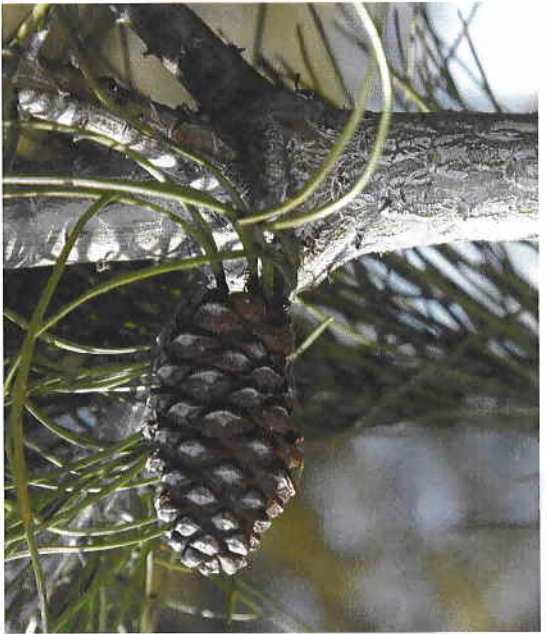
<i>Pinus coulteri</i>		Coulter Pine	
EVERGREEN	3-NEEDLE	PINE	NEEDLE
<p> Average Height: 30' – 80' Average Canopy: 20' – 40' Shape: Wide spreading and open growth Leaf: Evergreen Flowers: Inconspicuous Fruit/Seed: Heavy 10" – 14" cones Bark: Red/brown plates Other Characteristics: </p>			
  			

<i>Pinus densiflora</i>		Japanese Red Pine	
EVERGREEN	2-NEEDLE	PINE	NEEDLE

Average Height:
 40' – 80'
Average Canopy:
 30' – 40'
Shape:
 Broad to irregular
Leaf:
 Evergreen
Flowers:
 Inconspicuous
Fruit/Seed:
 2' Cone
Bark:
 Red/orange
Other Characteristics:



<i>Pinus edulis</i>		Pinon Pine	
EVERGREEN	2-NEEDLE	PINE	NEEDLE
<p>Average Height: 10' - 25'</p> <p>Average Canopy: 10' - 20'</p> <p>Shape: Spreading</p> <p>Leaf: Evergreen</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: 2' - 3' Cone</p>		<p>Bark: Irregularly furrowed with small scales, gray to reddish-brown or nearly black</p> <p>Other Characteristics: Often multi-trunked, can be twisted and crooked</p>	
			
			

<i>Pinus ularica</i>		Afgan Pine	
EVERGREEN	2-NEEDLE	PINE	NEEDLE
<p>Average Height: 30' – 80'</p> <p>Average Canopy: 15' – 20'</p> <p>Shape: Conical</p> <p>Leaf: Evergreen</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: 3" Cone</p> <p>Bark: Medium to dark brown and with a medium heavy texture</p> <p>Other Characteristics: Loses lots of needles, high maintenance tree</p>			
			

<i>Pinus flexilis</i>		Lumber Pine	
EVERGREEN	5-NEEDLES	PINE	NEEDLE

Average Height:
 30' - 55'
Average Canopy:
 15' - 25'
Shape:
 Rounded top
Leaf:
 Evergreen
Flowers:
 Inconspicuous
Fruit/Seed:
 3" - 5" Cone
Bark:
 Young bark is smooth, greenish gray, older bark is rough, blocky and scaly, and dark gray
Other Characteristics:
 Drooping limbs











<i>Pinus halepensis</i>		Allepo Pine	
EVERGREEN	2-NEEDLE	PINE	NEEDLE
<p> Average Height: 30' – 60' Average Canopy: 20' – 40' Shape: Rounded top Leaf: Evergreen Flowers: Inconspicuous Fruity/Seed: 3" Cone Bark: Gray/brown ridges Other Characteristics: Short needles </p>			
  			




<i>Pinus nigra</i>		Austrian Black Pine	
EVERGREEN	2-NEEDLE	PINE	NEEDLE

Average Height:
 40' – 60'
Average Canopy:
 20' – 30'
Shape:
 Stout pyramidal
Leaf:
 Evergreen
Flowers:
 Inconspicuous
Fruit/Seed:
 2" – 3 1/2" Cone
Bark:
 Gray-brown furrows and
 ridges, platy zebra-like pattern
 with maturity
Other Characteristics:












<i>Pinus parviflora</i>		Japanese White Pine	
EVERGREEN	PINE	5-NEEDLE	NEEDLE
<p>Average Height: 20' - 50'</p> <p>Average Canopy: 20' - 50'</p> <p>Shape: Pyramidal changing to flat top with age</p> <p>Leaf: Evergreen</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: 2" - 3" Cone</p> <p>Bark: Dark gray, furrowed</p> <p>Other Characteristics:</p>			
   			

<i>Pinus pinea</i>		Italian Stone Pine	
EVERGREEN	2-NEEDLE	PINE	NEEDLE
<p> Average Height: 40' – 80' Average Canopy: 40' – 60' Shape: Umbrella Top Leaf: Evergreen Flowers: Inconspicuous Fruit/Seed: 4' – 6' Cone Bark: Tight gray/brown Other Characteristics: Commonly multi-trunked, persistent cones </p>			
   			

<i>Pinus ponderosa</i>		Ponderosa Pine	
EVERGREEN	3-NEEDLE	PINE	NEEDLE
<p>Average Height: 50' – 100'</p> <p>Average Canopy: 25' – 30'</p> <p>Shape: Conical</p> <p>Leaf: Evergreen</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: 3' – 5' Cone</p> <p>Bark: Gray to black, scaly on young trees. Thicker up to 4 inches with large, flat, yellow-brown, scaly-topped plates separated by deep furrows with age.</p> <p>Other Characteristics: Straight trunk</p>			
			
			

<i>Pinus radiata</i>		Monterey Pine	
EVERGREEN	PINE	2-3 NEEDLE	NEEDLE
<p> Average Height: 80' – 100' Average Canopy: 25' – 35' Shape: Flattish crown Leaf: Evergreen Flowers: Inconspicuous Fruit/Seed: 3" – 6" Oval cones Bark: Red/brown small plates Other Characteristics: </p>			
			
			
			




<i>Pinus sabiana</i>		Grey Pine/Foothill Pine	
EVERGREEN	3-NEEDLES	PINE	NEEDLE
<p> Average Height: 40' – 80' Average Canopy: 30' – 50' Shape: Irregular Leaf: Evergreen Flowers: Inconspicuous Fruit/Seed: 6" – 10" Cone Bark: Big, deep furrows Other Characteristics: Bluish-gray color, long needles 6" – 8" </p>			
 		 	
			





<i>Pinus strobus</i>		White Pine	
EVERGREEN	EVERGREEN	5 NEEDLE	NEEDLE
<p> Average Height: 50' – 80' Average Canopy: 20' – 40' Shape: Pyramidal and symmetrical Leaf: Soft needles in groups of 5 Flowers: Inconspicuous Fruit/Seed: 3" – 8" Curved cones Bark: Rough gray/brown Other Characteristics: </p>			
   			

<i>Pinus sylvestris</i>		Scotch Pine	
EVERGREEN	PINE	2-NEEDLE	NEEDLE

Average Height:
 30' – 70'
Average Canopy:
 25' – 35'
Shape:
 Narrow pyramid
Leaf:
 2-Needle
Flowers:
 Inconspicuous
Fruit/Seed:
 2" Egg-shaped cones
Bark:
 Rough red/brown
Other Characteristics:
 Fast growing when young











EVERGREEN		PINE	Japanese Black Pine
EVERGREEN		2- NEEDLE	Pinus thunbergii
<p> Average Height: 80' – 100' Average Canopy: 35' – 40' Shape: Irregular and spreading Leaf: 2-Needle Flowers: Inconspicuous Fruit/Seed: 3" Long oval cone Bark: Gray/brown plates Other Characteristics: Bright green needles </p>			
			
			
			

Douglas Fir		<i>Pseudotsuga menziesii</i>	
NEEDLE		EVERGREEN	
<p>Average Height: 100' – 160'</p> <p>Average Canopy: 20' – 30'</p> <p>Shape: Cone</p> <p>Leaf: Evergreen</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: Cone</p> <p>Bark: Gray furrowed</p> <p>Other Characteristics: Unusual cone that hangs down (all true fir cones are erect) with three fingered bract</p>			
			
			
			

<i>Sciadopitys verticillata</i>		(Japanese) Umbrella Pine	
EVERGREEN			NEEDLE
<p> Average Height: 25' – 40' Average Canopy: 25' – 30' Shape: Conical Leaf: Evergreen cladophyll, 2" – 5" flat whorls of 20 to 30 leaves Flowers: Inconspicuous Fruit/Seed: 3" – 5" Cones, thick scales, green turning to brown Bark: Shredded reddish brown Other Characteristics: Slow growing, long lived </p>			
			

<i>Sequoia sempervirens</i>		Coast Redwood	
	EVERGREEN		NEEDLE
<p>Average Height: 200' – 300' Average Canopy: 25' – 35' Shape: Conical Leaf: Evergreen Flowers: Inconspicuous Fruit/Seed: 1" Brown cones Bark: Soft, reddish-brown, stringy Other Characteristics: Grows fast and huge, high water needs</p>			
			
			

<i>Taxodium distichum</i>		Bald Cypress	
		NEEDLE	DECIDUOUS
<p>Average Height: 50' – 70'</p> <p>Average Canopy: 20' – 30'</p> <p>Shape: Cone to broad-topped with age</p> <p>Leaf: Orange-brown in fall</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: 1" Diameter small seed ball (cones)</p> <p>Bark: Small tight furrows</p> <p>Other Characteristics: Red/Brown in fall, bare in winter</p>			
			
			
			

<i>Taxodium mucronatum</i>		Montezuma Cypress	
	EVERGREEN		NEEDLE
<p>Average Height: 75'</p> <p>Average Canopy: 50' +</p> <p>Shape: Spreading</p> <p>Leaf: Evergreen (golden)</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: 1" Diameter small balls (cones)</p> <p>Bark: Gray furrowed</p> <p>Other Characteristics: May partially defoliate in winter</p>			
			

<i>Taxus baccata</i>	English Yew
EVERGREEN	NEEDLE
<p>Average Height: 25' – 45'</p> <p>Average Canopy: 15' – 25'</p> <p>Shape: Pyramidal</p> <p>Leaf: Evergreen</p> <p>Flowers: Inconspicuous</p> <p>Fruit/Seed: Poisonous red berries</p> <p>Bark: Flakey, furrowed reddish brown</p> <p>Other Characteristics: Bright green</p>	
