B-5015

Texas Agricultural Extension Service

Landscape Development for Texas Coastal Areas

Keith C. Hansen and William C. Welch*

Landscape development for homes and businesses along the Texas coast can pose unique challenges. Plant establishment, growth and development are exposed to drying winds, heat and salt, not to mention insects and diseases. Occasional droughts, severe freezes and porous, sandy soil can add further obstacles to success.

To compensate for these problems and develop a successful landscape, wise plant selection and careful attention to improving environmental conditions through windbreaks, thorough soil preparation, proper after-planting care and efficient irrigation practices are essential. There are no hard and fast rules since conditions vary from location to location. Some experimentation will be necessary, but by following the principles given below, your chances for success will be greatly increased.

This publication is designed to aid those most directly affected by the rigors of living in close proximity to the Gulf Coast. Both those within walking distance of the water and residents further inland should find useful information on coping with landscape plant establishment and maintenance.

Start with a plan

The starting point for every successful landscape is a good plan, preferably on paper and not just in your mind. The process involved in drawing up a landscape design will 1) help you understand, organize and develop your site for the best use and enjoyment; 2) create a visual relationship between the house and the site; and 3) reduce the overall maintenance level.

A professional landscape architect can greatly assist you in the design process. Help can be as simple as generating ideas for your site to as detailed as a completed blueprint design and help with installation.

The steps involved in drawing up a plan begin with a base plan. The base plan (a scale drawing) includes all the major features of the property including the house, property lines, easements, existing walks, drives, fences, trees, etc. The base plan should also indicate compass and prevailing wind directions. Once this plan is completed, you can place tracing paper over it and sketch many possible ideas and solutions to your landscape needs and problems.

To help organize your thoughts, list which things are needed to satisfy your requirements and lifestyle. Study your site to determine where shade and wind protection are needed; where privacy is desired; and which open views to be preserved. Main areas for development may include a children's play area, a work or service area, outdoor entertaining and the area that the public will see and use. Realize the limitations of your site because of proximity to the coast and plan accordingly.

When considering how to develop the site, don't be guided by a stereotyped concept that landscaping should consist of introduced broadleaf evergreen trees and shrubs arranged in traditional or formal ways. Be sure to preserve, as much as possible, any existing vegetation including trees, shrubs, vines and grasses. These native plants are naturally adapted to the difficult coastal conditions. Every effort should be made to incorporate them into the design wherever possible.

Keep in mind that a landscape is not just a group of plants arranged in a certain way. Design is a problem-solving process. By applying known principles of design to parking, pedestrian circulation, and creation of privacy and outdoor living areas, an environment that is functional and attractive can be developed.

An existing site can be greatly improved through creative placement of attractive structures such as shelters or gazebos; decks and paths of treated wood, brick or decorative pavers; a strategically placed sculpture or a small water feature. This can simplify the diffi-

* County Extension Agent-Horticulture and Extension Horticulturist

difficult job of trying to establish plants in an harsh environment.

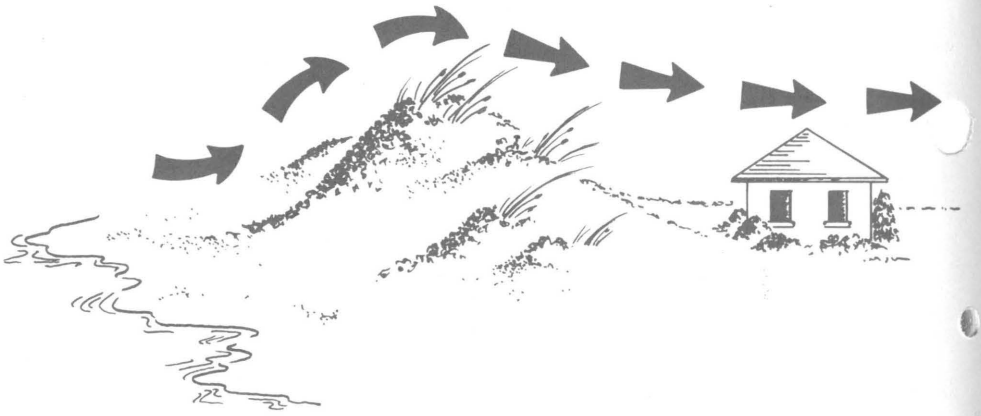
Windbreaks

The variety of plants that can be successfully used along the coast increases substantially as protection increases from prevailing wind, blowing sand and salt spray. Living or constructed windbreaks, walls, fences, buildings or other structures allow many plants to be successfully grown in the lee (area protected from the wind) which would otherwise fail in more exposed locations.

The adverse effects of buffeting winds tend to decrease as one moves away from the immediate coast. For this reason, the plant list in this publication is divided into two zones or belts based on proximity to the coast. This will aid in choosing plants for different exposures.

A windbreak consists of any type of barrier designed to slow down the velocity and redirect the flow of wind. A good windbreak will not create excessive turbulence or wind eddies. Effective windbreaks do not stop the wind, but break its forward movement to slow it down. Solid barriers such as walls and buildings create unexpected wind currents and wind tunnels, often with increased velocity and unpredictable direction. Windbreaks composed of living plants allow some of the wind to slowly penetrate, making them more effective.

Examples of windbreak materials include picket and board fences designed with gaps between pickets, berms, natural sand dunes and rows or hedges of plants. Temporary windbreaks made out of snow fencing, 60 percent shade cloth or other materials can be used until a permanent screen can be established.



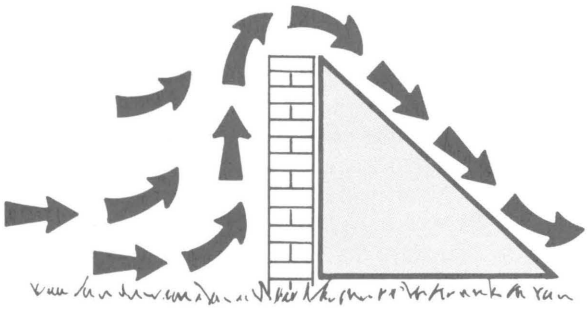
Landscaped berm or dune redirects and slows wind

The lee produced by a windbreak is proportional to the height of the barrier. Areas closest to the windbreak will be the calmest, with wind velocity gradually increasing with distance from the windbreak.

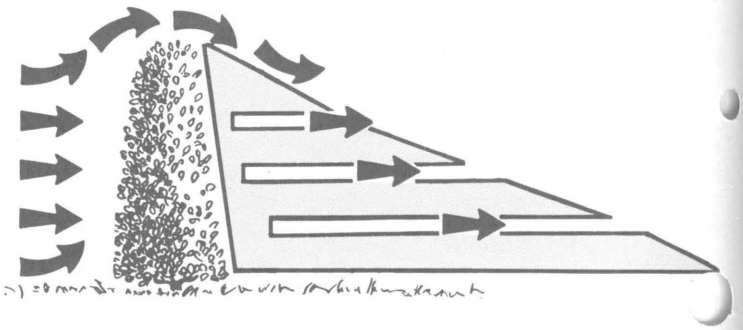
The effective zone of protection created by a windbreak is approximately 25 times its height, although maximum protection wind reduction occurs in a range of 5 to 8 times the height of the screen. Therefore, if planning a windbreak 25 feet tall, it should be located 125 to 200 feet (5 to 8 times 25 feet) from the house or area to be protected for maximum utility. A 10-foot windbreak provides maximum protection to 75 feet and some reduction of wind (about 10 percent) up to 250 feet.

The following criteria are helpful in planning an effective windbreak:

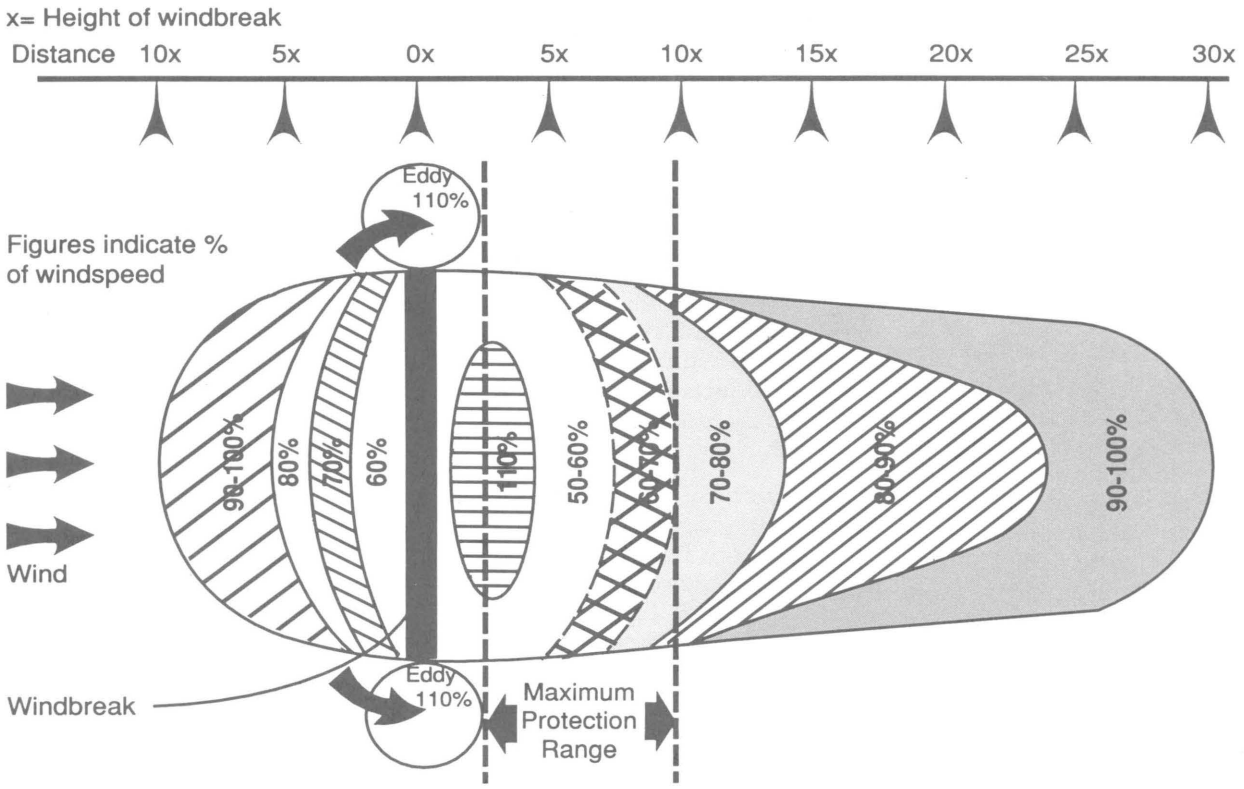
- The optimum solid space or foliage density for the windbreak is about 60 percent. Fences with 1 inch pickets and 1 inch gaps would meet this condition.
- Windbreaks are most effective when they extend to the ground. Do not remove lower branches of trees and shrubs.
- The depth of the planting is important as it relates to the ability of wind to penetrate. For most evergreen plants, two or three rows are sufficient, but for deciduous plants four or five rows may be necessary. Rows should be staggered.
- For small properties, a well-maintained hedge, wider at the base, would serve as an effective windbreak.



The effect of a solid windbreak on air flow



The effect of a penetrable windbreak on air blow



Effect of windbreak on reduction of windspeed

Where space allows, wide windbreaks can be designed to lift wind up and away. You can mimic nature by starting with low growing plants on the windward side and increasing height within the rows. For example, the first row might be pampas grass or oleander; the second, giant reed or pittosporum; and the third row, tamarisk or other tree species.

When selecting plants for a windbreak, choose only the hardiest. Species occurring naturally along the coast are the best candidates since these have proved themselves to be adapted to this harsh environment. Observe local landscapes for good examples of hardy plants.

Soil preparation

Nearly every soil can be improved to increase plant health and conserve water. Both sandy coastal soils and heavier clay soils benefit from the addition of large quantities of organic matter such as shredded pine bark, peat, rice hulls and compost. This will increase the soil's ability to absorb and store both water and nutrients in a form available to the plants. A 4-inch layer of organic matter mixed in with the soil at planting time will aid in the establishment of shrubs and trees. Flower beds and gardens can be amended every time they are replanted.

In sandy soil, strategic planting areas can be modified by incorporating top soil or loam. Make a gradual transition from sand to loam by mixing the first layer of top soil with the sand.

Plant selection

Trees, shrubs and groundcovers should be selected and located with care since the coastal environment is very harsh and unforgiving. Use locally native plants as much as possible, and keep in mind the effects of proximity to the coast. The more your site is exposed to the wind and salt water, the fewer plants there will be to choose from.

The table in this publication contains a list of plants for the entire Texas coastal area. These plants have been tried and tested and will grow in most locations as indicated. Care should be exercised in selecting plants for your area since some plants on the list may be prone to freeze damage under certain circumstances.

The table is broken into two zones or belts based on proximity to the coast. Zone 1 indicates areas near the shore with the most exposure to wind and salt spray. Zone 2 is where there is more protection from the elements. The table also lists plants according to their cold hardiness and identifies them for use on the upper, middle or lower Texas coast. Use these classifications as general guidelines since every situation will be different.

Annual flower beds in strategically located protected areas will provide pockets of color to enhance the landscape. These will

need to be replaced several times a year to look their best.

Your local nursery professionals or county Extension agent can help in the selection and description of plants for your area.

Maintenance

Watering

All plants must receive very good care during the first year or two after planting. They must not suffer a setback due to lack of water. A well-designed irrigation system is essential for continued care of the landscape. Sprinkler irrigation is important for lawns, groundcovers and low growing shrubs since accumulated salt spray can be washed off the plant leaves. Salt on leaves is one of the most damaging factors for non-halophilic plants, so the ability to wash off salts, especially after storms, is important.

Drip or trickle irrigation is one method to increase watering efficiency in many parts of the landscape. Drip systems apply water under low pressure, slowly delivering water through emitters, bubblers or spray heads to the root zone of the plants without waste from overwatering, runoff or applying water where there is no root system. For areas with high salt content in the water, drip irrigation allows better use of this water since less salt is applied to the plants. Drip systems are ideal for shrub, perennial and annual flower beds, vegetable gardens and for establishing trees.

Seek professional irrigation advice for sprinkler systems and experiment with available drip irrigation products in small sections of the landscape to become familiar with this water-saving technique.

For details on drip systems and landscape water conservation, refer to Texas Agricultural Extension Service publication B-1496 - *Efficient Use of Water in the Garden and Landscape* and B-1584 - *Landscape Water Conservation...Xeriscape.*

Mulches

The use of mulch conserves moisture and aids in establishment and maintenance of plants. Mulch is a layer of material covering the soil surface around plants. Organic mulches such as pine bark, compost, wood chips and grass clippings not only conserve moisture but increase the organic content of the soil as they decompose. Organic mulches need to be periodically replenished. Inorganic mulches include lava rock, limestone, pea gravel and permeable landscape fabrics (not sheet plastic).

Mulch around plants reduces evaporation of water from the soil and keeps the soil temperature more moderate, thus creating a more favorable growing environment. Mulch also suppresses weed growth which competes with plants for water, nutrients and light.

Fertility

Most native and many adapted exotic plants require little supplemental fertilization to grow and survive. However, judicious applications of slow release or organic fertilizers in the spring can help maintain healthy plants which will be less prone to stress or injury due to heat, drought or cold. Slow release fertilizers are available over a longer period of time and are less prone to leaching through porous sand. Lawn grasses will need frequent, light applications to remain vigorous and dense.

Acknowledgment

Thanks to the National Park Service and Dianne Crouch, Master Gardener, for contributing art for this publication.

Table Of Landscape Plants

Key - Hardiness: U=Upper Coast, M=Middle Coast, L=Lower Coast, All=All areas
Light: S=Sun, Sh=Shade, E=Either
Zone: 1=Areas directly affected by wind and salt spray; 2=Areas with some protection (see text for more explanation)

Common name	Scientific name	Hardiness	Light	Zone	Notes
	GROUND COVERS				
Asparagus, Sprengeri fern	*Asparagus densiflorus 'Sprengeri'*	L,M	S	1	Root hardy
Algerian Ivy	*Hedera canariensis*	All	Sh	1	Needs shade & some wind protection
Goats-foot Morning Glory	*Ipomoea pes-caprae*	All	S	1	Native, excellent dune stabilizer
Trailing Lantana	*Lantana montevidensis*	All	S	1	Attractive purple flowers, root hardy
Virginia Creeper	*Parthenocissus quinquefolia*	All	E	1	Clings to walls, fall color, winter berries
Stonecrop	*Sedum acre*	All	S	1	Other species such as S. potosinum also good
Asiatic Jasmine	*Trachelospermum asiaticum*	L,M	E	1	Low evergreen groundcover
Confederate Jasmine	*Trachelospermum jasminoides*	L,M	E	1	Fragrant, white spring flowers, evergreen
Wedelia	*Wedelia trilobata*	L,M	S	1	Perennial with yellow flowers, mowable

Common name	Scientific name	Hardiness	Light	Zone	Notes
Shore, Blue Pacific Juniper	Juniperus conferta	All	S	2	Needs good drainage
Lily Turf, Liriope	*Liriope spicata, L. muscari*	All	Sh	2	Needs shade and some wind protection
Japanese, Purpleleaf Honeysuckle	*Lonicera japonica*	All	S	2	Easily grown but can be aggressive
Mondo or Monkey Grass	*Ophiopogon japonicus*	All	Sh	2	Needs some shade
	VINES				
Virginia Creeper	*Parthenocissus quinquefolia*	All	E	1	Clings to walls, fall color, winter berries
Cape Honeysuckle	*Tecomaria capensis*	L,M	S	1	Bright orange flowers attracts humming-birds
Bougainvillea	*Bougainvillea spectabilis*	L,M	S	2	Top may freeze, many colors
Trumpet Vine	*Campsis radicans*	All	E	2	Spring & summer orange blooms, rampant growth
English Ivy	*Hedera helix*	All	Sh	2	Needs shade
Coral Vine	*Antigonon leptopus*	All	S	2	Pink summer bloom, root hardy
Fig Ivy, Creeping Fig	*Ficus pumila*	All	E	2	Clings to walls
Carolina Jessamine	*Gelsemium sempervirens*	All	E	2	Yellow spring flowers
	PERENNIALS				
Yarrow	*Achillea millefolium*	All	E		Attractive foliage and flowers
Hinkley's Columbine	*Aquilegia hinkleyana*	All	Sh		Yellow spring flowers, blue-gray foliage
Southernwood	*Artemisia abrotanum*	All	S		Green, feathery foliage
Butterfly Weed	*Asclepias tuberosa*	All	S		Summer yellow/red flowers
Autumn Aster	*Aster oblongifolius*	All	S		Lavender fall flowers
Canna	*Canna X generalis*	All	S		Herbaceous, leafy perennial; red, pink and yellow summer bloom
Shasta Daisy	*Chrysanthemum maximum*	All	S		White spring flowers
Garden Mum	*Chrysanthemum morifolium*	All	S		Several colors of fall flowers
Baby Sun Coreopsis	*Coreopsis grandiflora*	All	S		Yellow/orange summer flowers
Milk and Wine Lilies	*Crinum hybrids*	All	S		Recurring bloom of pink, white, red flowers from clump of large strap leaves; excellent on coast
Montbretia	*Crocosmia Pottsii*	All	S		Gladiolus relative; orange-red early summer
Cigar Plant	*Cuphea micropetala*	All	S		Red/yellow flowers late summer and fall
Purple Coneflower	*Echinacea purpurea*	All	S		Purple flowers spring through fall
Perennial Ageratum	*Eupatorium coelestinum*	All	S		Lavender-blue flowers summer - fall
Indian Blanket	*Gaillardia* spp.	All	S		Red-yellow blend spring - fall
Gerbera	*Gerbera* spp.	All	E		Needs good soil preparation, protection from afternoon sun and wind; many colors spring - fall
Baby Gladiolus	*Gladiolus Byzantinus*	All	S		Purple or white spring flowers
Firebush	*Hamelia patens*	All	S		Very heat tolerant; red flowers summer - fall
Maximilian Sunflower	*Helianthus maximiliana*	All	S		Yellow flowers late summer - fall
Daylily	*Hemerocallis*	All	S		Many colors of flowers spring - summer
Spring Star Flower	*Ipheion uniflorum*	All	S		Blue spring flowers
Louisiana Iris	*Iris hybrids*	All	S		Rich soil, fall - spring moisture required; several colors of spring flowers
Shrimp Plant	*Justicia brandegeana*	All	E		Yellow or reddish - brown flowers summer - fall
Trailing Lantana	*Lantana montevidensis*	All	S		Purple flowers spring - fall
Lantana	*Lantana* spp.	All	S		Heat and drought tolerant; many colors of flowers spring - fall, attracts butterflies
Red Spider Lily	*Lycoris radiata*	All	S		Red, white or yellow flowers in fall
Turk's Cap	*Malvaviscus arboreus, M. a. var. Drummondii*	All	E		Red flowers summer - fall; attracts hummingbirds

Common name	Scientific name	Hardiness	Light	Zone	Notes
Peppermint	*Mentha piperita*	All	Sh		Rich soil and plenty of moisture required
Narcissus	*Narcissus* spp.	All	S		Small flowered varieties naturalize the best
Oxalis	*Oxalis crassipes*	All	S		Pink spring - summer flowers
Rock Rose	*Pavonia lasiopetala*	All	S		Drought resistant; pink spring - fall flowers
Perennial Phlox	*Phlox paniculata*	All	S		Lavender, pink or white summer flowers
Obedient Plant	*Physostegia virginiana*	All	S		Lavender or white summer and fall flowers
Blue Plumbago	*Plumbago auriculata*	All	E		Blue flowers summer - fall
Oxblood Lily	*Rhodophiala bifida*	All	S		Dark red flowers in early fall
Rosemary	*Rosmarinus officinalis*	L,M	S		Aromatic foliage, blue flowers summer - fall
Mexican Petunia	*Ruellia Brittoniana*	All	S		Very drought tolerant; blue-purple flowers spring - fall; invasive
Blue Shade	*Ruellia* sp.	All	E		Drought tolerant groundcover with blue flowers
Mealy Cup Sage	*Salvia farinacea*	All	S		Drought tolerant; blue or white flowers spring - fall; 'Victoria' dwarf form
Autumn or Cherry Sage	*Salvia greggii*	All	S		Drought tolerant; white, red or pink flowers spring - fall
Santolina, Lavender Cotton	*Santolina* sp.	All	S		Drought tolerant; needs good drainage
Purple Heart	*Setcreasea pallida*	All	S		Drought and heat tolerant; source of purple foliage
Mexican Marigold Mint, Yerba Anise	*Tagetes lucida*	All	S		Yellow flowers fall, aromatic foliage
Common Thyme	*Thyme vulgaris*	All	S		Evergreen, spreading aromatic herb
Verbena, Sand Verbena	*Verbena* spp.	All	S		Heat tolerant, spreading plant with range of colors spring - fall
Rain Lily	*Zephyranthes* spp.	All	S		Summer blooming bulbs of white and pink.
		SHRUBS			
SMALL SHRUBS (1 to 5 feet tall)					
Century Plant	*Agave americana*	All	S	1	Drought tolerant, good as specimen
Pampas Grass	*Cortaderia selloana*	All	S	1	Easily grown 5' to 7' tall
Prickly Pear	*Opuntia* spp.	All	S	1	Spineless forms most useful
Rosemary	*Rosmarinus officinalis*	L,M	S	1	Prostrate and upright forms, can freeze
Yucca (many varieties)	*Yucca* spp.	All	S	1	Extremely tough, heat, drought and salt tolerant
Abelia	*Abelia grandiflora*	All	E	2	Bronze evergreen foliage, white flowers
Agarito	*Berberis trifoliolata*	All	E	2	Spiny leaves, yellow flowers, red fruit
American Beautyberry	*Callicarpa americana*	All	E	2	Clusters of purple fruit, attracts birds, best in shade
Sago Palm	*Cycas revoluta*	L,M	E	2	Slow growing, good as specimen
Coralbean	*Erythrina herbacea*	L,M	E	2	Attractive spikes of red flowers; perennial upper coast
Fatsia	*Fatsia japonica*	All	Sh	2	Needs shade, wind protection
Red Yucca	*Hesperaloe parvifolia*	All	E	2	Red flowers on tall spikes
St. John's Wort, Hypericum	*Hypericum* spp.	All	E	2	Needs some shade, wind protection
Dwarf Yaupon Holly	*Ilex vomitoria 'Nana', 'Stokes Dwarf'*	All	E	2	Glossy evergreen foliage
Juniper, many varieties	*Juniperus chinensis cvs.*	All	S	2	Several forms of tough evergreen shrubs
Oleander	*Nerium oleander*	L,M	S	2	Drought tolerant summer bloomer, can be used in Zone 1
Indian Hawthorn	*Raphiolepis indica*	All	E	2	Spring flowering, blue berries in fall, evergreen

Common name	Scientific name	Hardiness	Light	Zone	Notes
MEDIUM SHRUBS (6 to 9 feet tall)					
Elaeagnus	*Elaeagnus pungens*	All	S	1	Grey-leaved shrub; small, fragrant flowers
Wax Myrtle	*Myrica cerifera*	All	S	1	Native to Texas coast
Pittosporum	*Pittosporum tobira*	L	E	1	Glossy foliage, fragrant flowers
Bamboo	*Bambusa*	All	S	2	Clumping types less aggressive
Bird of Paradise Bush	*Caesalpinia gilliesii*	All	S	2	Attractive summer red and yellow flowers
Hollywood Twisted Juniper	*Juniperus chinensis 'Torulosa', 'Hollywood'*	All	S	2	Large, upright evergreen shrub with unsymmetrical growth
Ligustrum, Glossy Privet	*Ligustrum lucidum*	All	E	2	Large evergreen shrub or small tree
Waxleaf Ligustrum	*Ligustrum japonicum*	All	E	2	Large evergreen shrub
Oleander	*Nerium oleander*	L,M	S	2	Drought tolerant summer bloomer, can be used in Zone 1
Texas Sage, Ceniza	*Leucophyllum* spp.	All	S	2	Needs good drainage
Arborvitae	*Thuja* spp.	All	S	2	Symmetrical evergreen shrub
Common Myrtle	*Myrtus communis*	All	S	2	Small leaves, evergreen
LARGE SHRUBS (greater than 10 feet)					
Feijoa or Pineapple Guava	*Feijoa sellowiana*	All	S	2	Large shrub or small tree
Yaupon Holly	*Ilex vomitoria*	All	E	2	Large shrub or small tree, glossy evergreen foliage, fall red berries
Oleander	*Nerium oleander*	L,M	S	2	Drought tolerant summer bloomer, can be used in Zone 1
Japanese Yew	*Podocarpus macrophylla*	All	E	2	Large, upright evergreen shrub
Arborvitae	*Thuja* spp.	All	S	2	Symmetrical evergreen shrub
	TREES				
SMALL TREES					
Chinaberry, Texas Umbrella	*Melia azedarach*	All	S	1	Brittle wood yet grows well on barrier islands
Huisache	*Acacia farnesiana*	All	S	2	Yellow spring bloom, thorny
Texas Persimmon	*Diospyros texana*	All	S	2	Handsome trunks, black fruit on female - good wildlife food
Southern Golden Raintree	*Koelreuteria bipinnata*	L,M	S	2	Fast growth, handsome fall seed pods
Mulberry	*Morus alba*	All	S	2	Fast growth, invasive roots
Mesquite	*Prosopis glandulosa*	All	S	2	Light green, lacy look; takes wind well
Lavender Chaste Tree, Vitex	*Vitex agnus-castus*	All	S	2	Small tree, lavender bloom in spring
Camphor Tree	*Cinnamonum camphora*	L,M	S	2	Evergreen
Citrus	*Citrus* spp.	L	S	2	Cold hardiness varies among types; some types may be grown on the upper and middle coast (e.g., mandarins, tangelos and kumquats)
Loquat	*Eriobotrya japonica*	All	S	2	Large leaves, edible fruit
Retama	*Parkinsonia aculeata*	All	S	2	Makes light shade; yellow flowers
Japanese Black Pine	*Pinus thunbergia*	All	S	2	Evergreen, interesting form
LARGE TREES					
Australian Pine	*Causarina stricta*	L	S	1	Freezes mid-20s
Tamarisk, Salt Cedar	*Tamarix* spp.	L,M	S	1	Freezes upper teens
Deodar Cedar	*Cedrus deodar*	All	S	2	Pyramidal form
Arizona Cypress	*Cupressus glabra*	All	S	2	Evergreen, useful for windbreaks
Live Oak	*Quercus virginiana*	All	S	2	Evergreen, spreading tree
Eucalyptus	*Eucalyptus* spp.	L	S	2	May freeze, select most hardy spp. (e.g., E. rostrata, camaldulensis, microtheca)

Common name	Scientific name	Hardiness	Light	Zone	Notes
Cottonwood	*Populus deltoides*	All	S	2	Fast but weak growth; takes wind
Bald Cypress, Montezuma Cypress	*Taxodium distichum, T. mucronatum*	All	S	2	Deciduous conifer (T. mucronatum tends to stay evergreen L,M); long-lived
PALMS					
Palmetto Palm	*Sabal minor*	All	E	1	Very short, hardy fan palm
Texas Palmetto	*Sabal texana*	All	S	1	Hardy, very cold tolerant fan plam; slow growing
Cabbage or Florida Palmetto	*Sabal palmetto*	All	S	1	Hardy, very cold tolerant; slow growing, long-lived fan palm
Washington Fan Palm	*Washingtonia filifera and hybrids*	L,M	S	1	Fan palm, may freeze; hardier than W. robusta
Pindo Palm	*Butia capitata*	All	S	2	Slow growing, hardy feather palm
European Fan Palm	*Chamaerops humilis*	L,M	S	2	Hardy, low, clustering fan palm
Phoenix or Canary Island Date Palm	*Phoenix canariensis*	L,M	S	2	Large, slow growing feather palm; may freeze in M
GRASSES FOR LAWN AND TURF					
Buffalograss	*Buchloe dactyloides*	L,M	S		Does best on clay or loamy soil in areas with low rainfall, most drought tolerant
Bermuda grass	*Cynodon dactylon*	All	S		Common on coast
St. Augustine grass	*Stenotaphrum secundatum*	All	E		Requires most water to maintain
Zoysia grass	*Zoysia japonica*	All	E		Slow spreading
Seashore Paspalum, Adalayd	*Paspalum vaginatum*	All	S		High tolerance to salt
NATIVE AND ORNAMENTAL GRASSES FOR ROUGH AREAS					
Sea Coast Blue Stem	*Andropogon scoparius*	All	S	1	
Salt Grass	*Distichlis spicata*	All	S	1	
Lindheimer's Muhly Grass	*Muhlenbergia Lindheimeri*	All	S	2	
Sand Knotgrass	*Paspalum distichum*	All	S	1	
Fountain Grass	*Pennisetum setaceum*	All	S	2	Several cultivars including Purple Fountain Grass
Giant Seaoats	*Uniola paniculata*	All	S	1	Valuable native, soil/dune stabilizer; ornamental seed heads

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