ARIZONA | COLLEGE OF AGRICULTURE & LIFE SCIENCES COOPERATIVE EXTENSION

Tree Care Workshop

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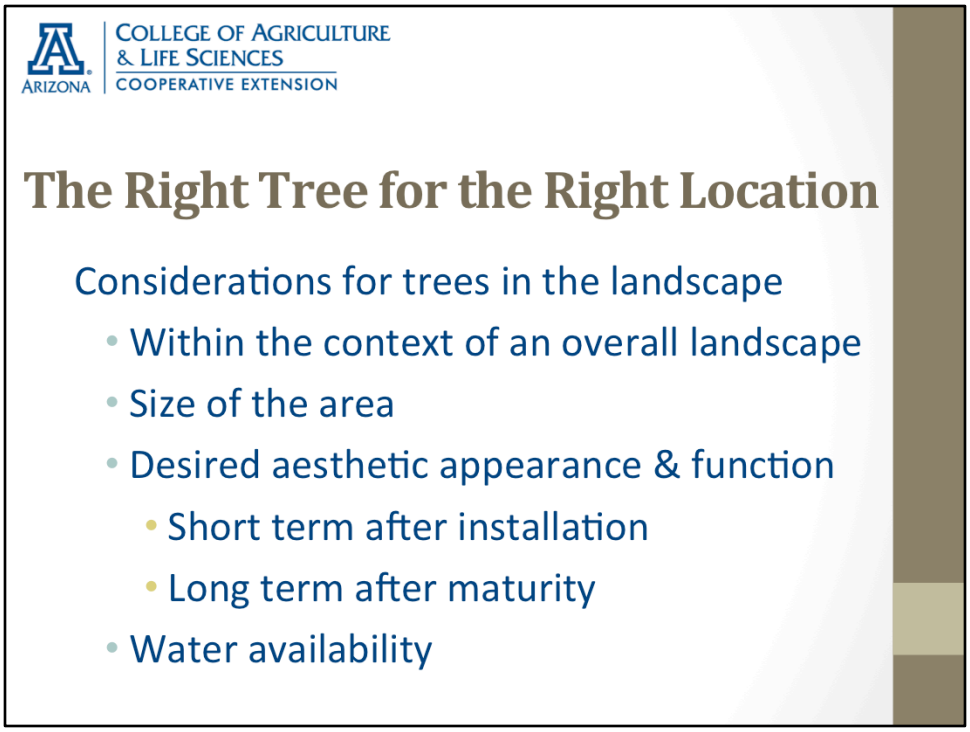
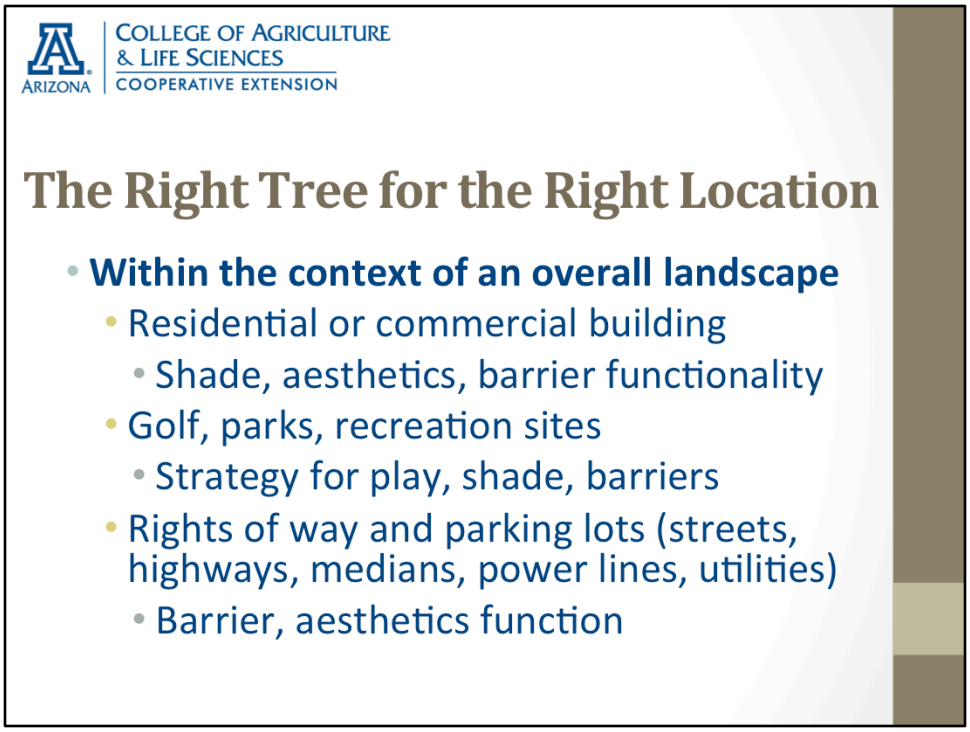


Trees in a landscape offer form and function. In natural settings, trees establish and survive without human intervention. In managed landscapes, humans design the setting, select the desirable plants, place and maintain the plants to provide the aesthetics and necessary function.

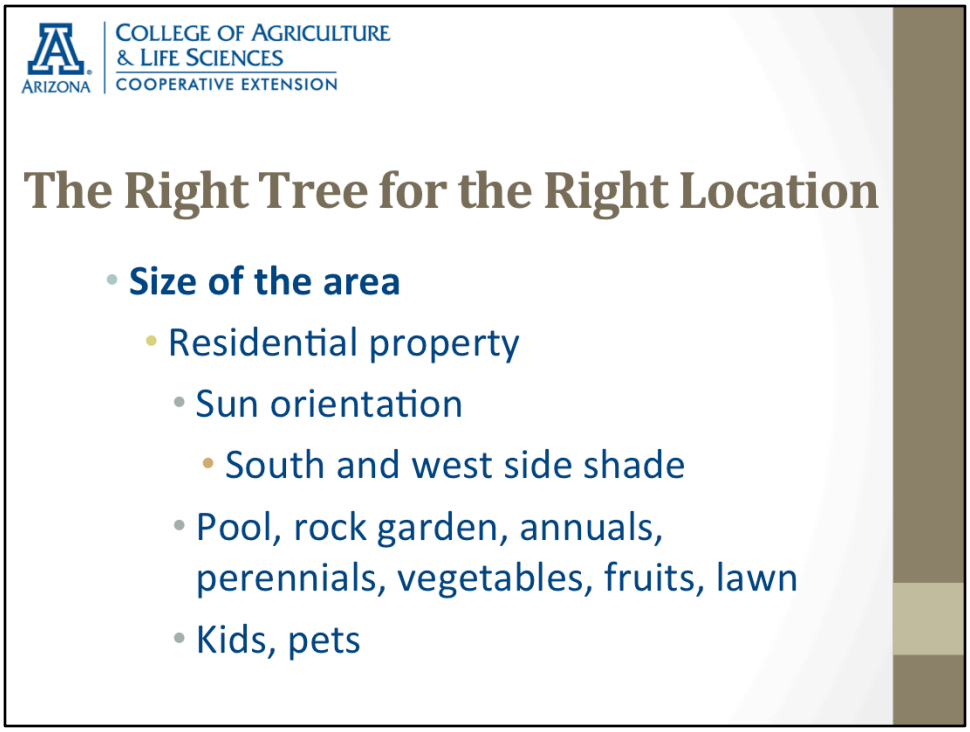
For selecting the "right tree for the right location" in the desert, a starting point might include considerations for how would trees fit in the overall landscape. How would trees fit in wide expanses or within tight confines of space and then how do they fit in the space after a period of time from installation through maturity? In desert landscaping, irrigation and/or rainfall is critical for tree establishment and long-term survival.

Following will be perspectives for considering the "right tree for the right location".

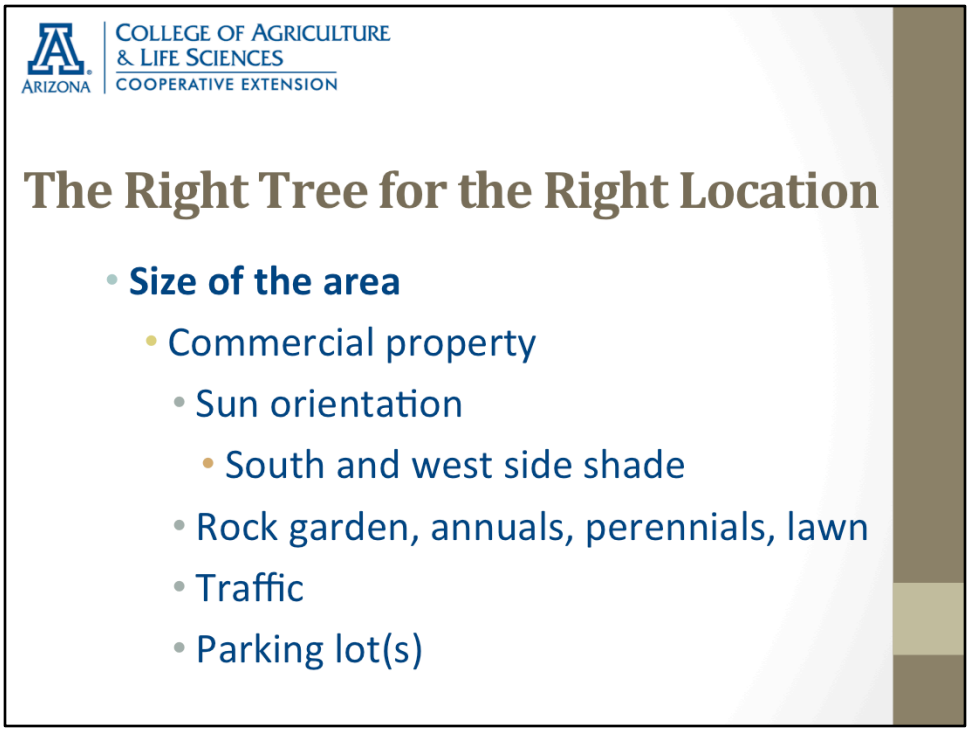


Landscaping trees around residences and commercial building offer aesthetic value and function primarily to provide shade and can delineate lines of sight or direct traffic flow. On golf courses, tree lines direct the strategy for play, provide barriers and offer comfortable shade. Along rights of way and in parking lots, trees offer aesthetics and soften the hardscape as well as function as a barrier.
For an overall landscape perspective, trees on a property add value to the neighborhood (i.e. homeowner associations) and then help to define a community.

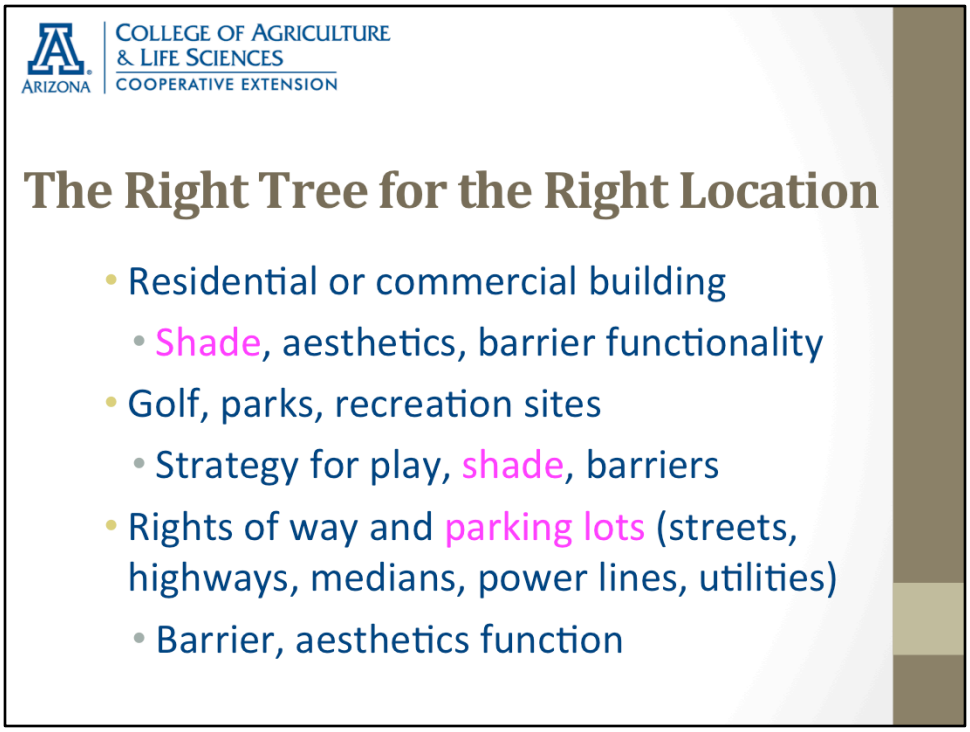
Trees offer aesthetic value to residential / commercial properties. Utility of trees for shade and defining traffic flow or barriers



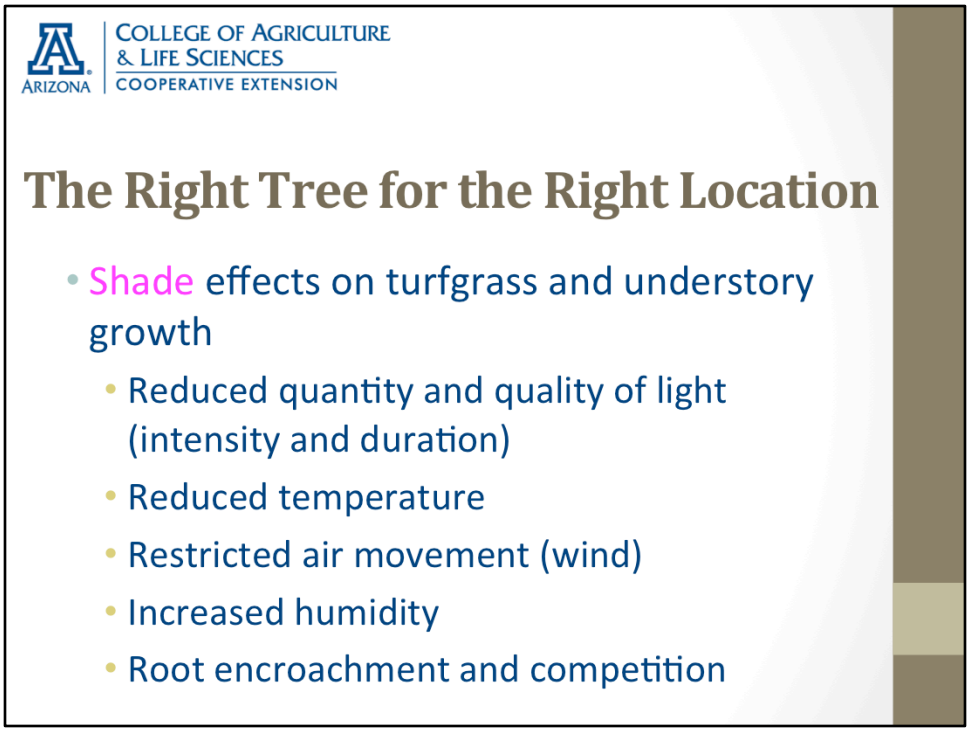
Trees are highly desirable on residential properties to effectively block the extreme summer solar radiation. Electrical utility companies promote planting shade trees on the south and west sides of structures. Deciduous trees function to block the summer sun and allow the winter sun to warm the structure.
Trees offer shade in the yards to allow children and pets to run and play on sunny days.
Large shade trees can be a detriment around swimming pools when leaves, flowers, or seeds drop. Multiple large shade trees can inhibit or suppress understory growth of turfgrass, annual plantings, shrubs, and vegetable gardens.



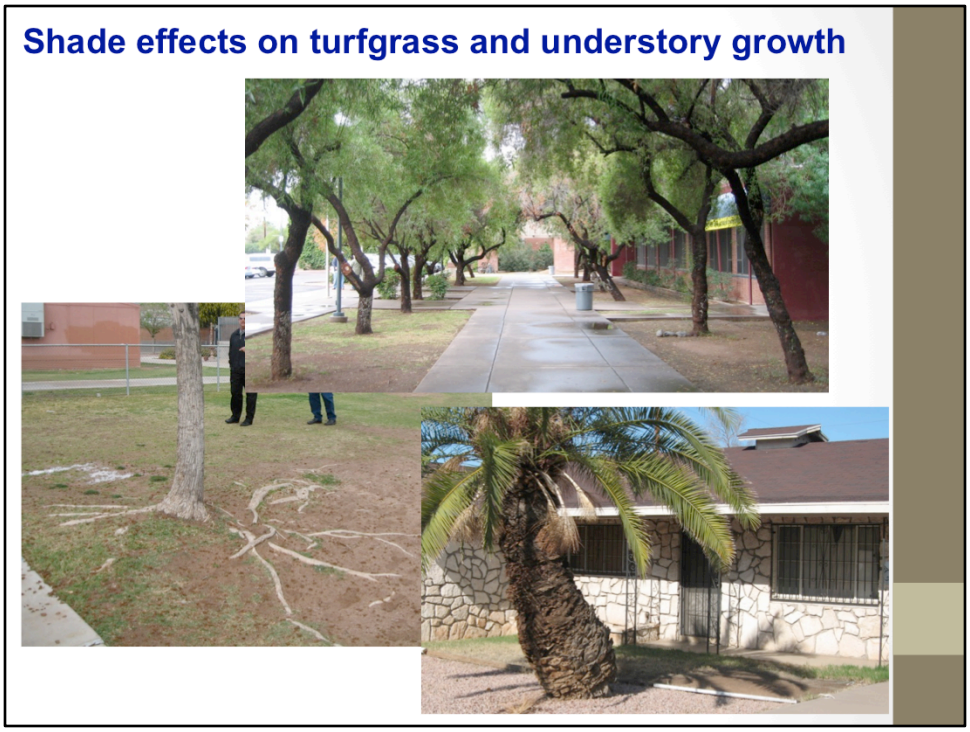
Similar to residential structures, commercial buildings can be effectively cooled by trees in the summer and warmed in the winter with appropriate species selection and placement. Turfgrass and understory shrubs struggle under large shade trees and foot traffic cause additional stress.



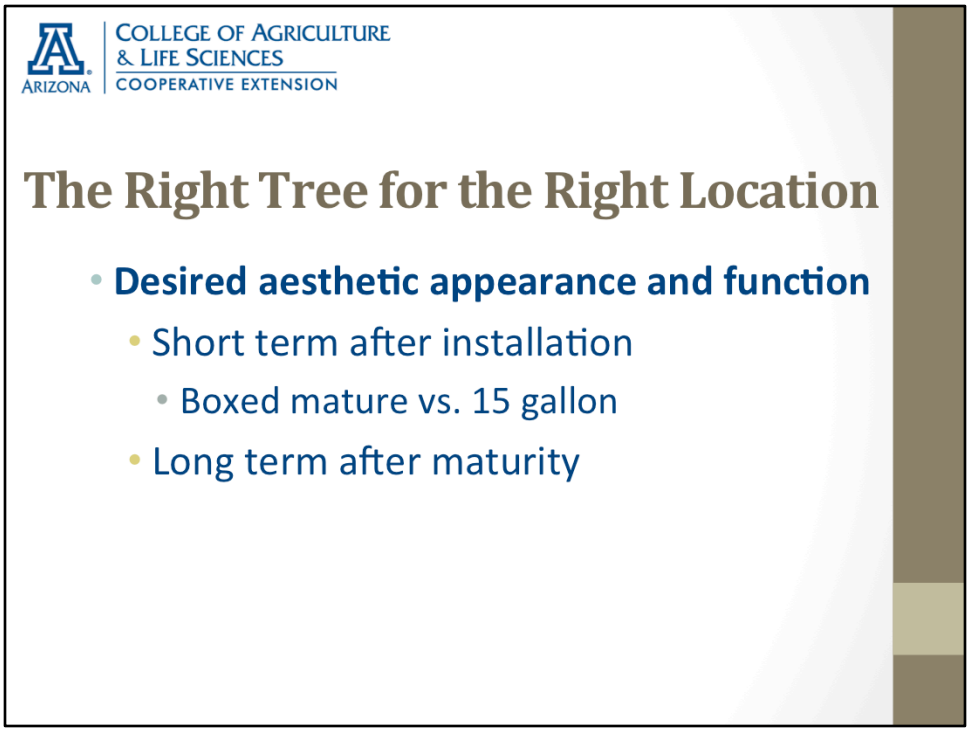
Shade provided by trees is highly valued around structures, in parking lots, and in parks. It protects people, pets, and cars from the intense solar radiation, especially in the summer in the desert.



In the desert, shade is detrimental for optimal bermudagrass growth when photosynthetically active radiation (PAR) is blocked. Shade reduces the air and soil temperatures conducive for active root and shoot growth. Trees can reduce air movement and result in higher humidity that can lead to secondary issues.



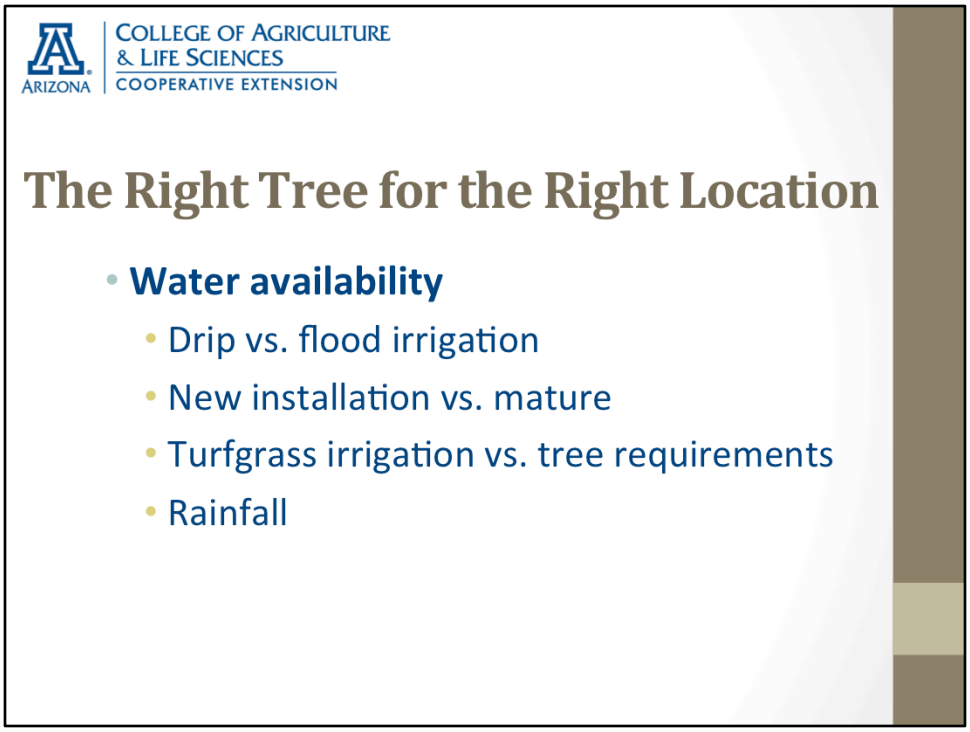
Shade is limits the effective PAR for optimal bermudagrass growth in the desert. Cool-season grasses (e.g. ryegrass, fescues) can perform better under trees.



In planning the landscape design, consider the growth potential of the trees to be planted in the site. Planting a more mature boxed tree will provide a more immediate appearance of a "mature" landscape. Comparatively, a younger and smaller sapling will grow into the space or rapidly overgrow it's limited landscape site.

For the long-term, consider the potential height and breadth of the canopy

Trees in landscapes, especially with irrigation, will fill a space in a very short time. For aesthetic appearance, consider the focus of a newly installed landscape and then the view of a mature tree in the landscape.



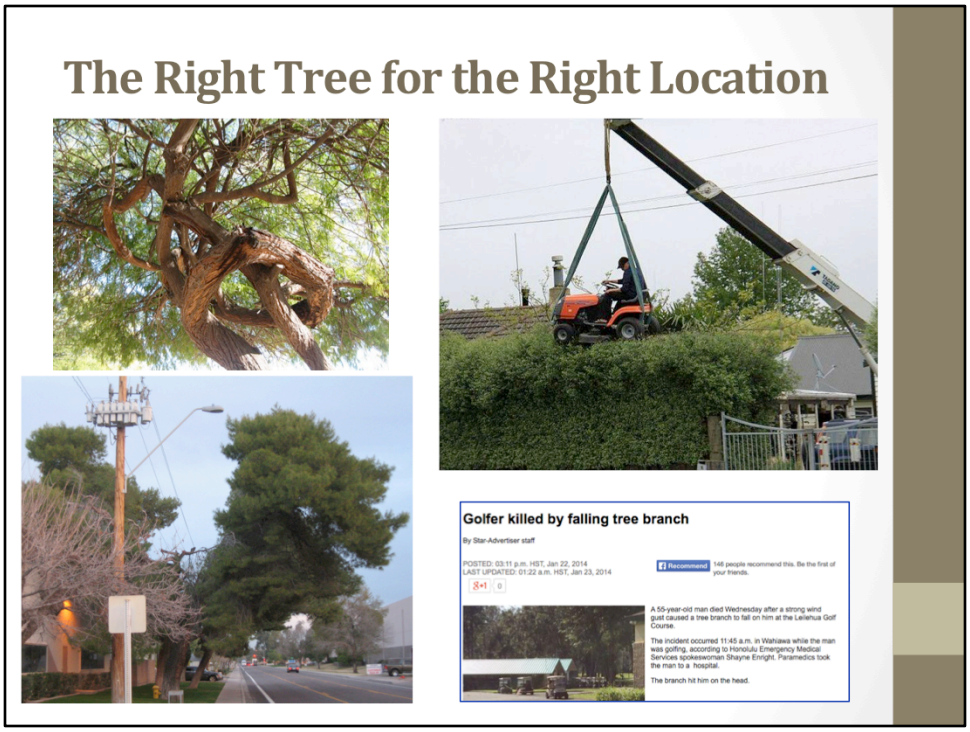
Water conservation efforts and new technologies in irrigation equipment have evolved from perceived water-wasting flood irrigation to drip irrigation applications. The major consideration for installation of drip irrigation should be maintenance and upgrading the system to accommodate maturing trees.
In turf areas, trees should be irrigated deeper and less frequently compared to more frequent and shallower irrigation for grasses.

Irrigation of trees is critical for optimal root development. Deep and infrequent irrigations establish and anchor trees for the long-term versus frequent and shallow irrigations that promote shallow feeder roots near the soil surface.

Selection of trees for landscapes should consider the space that is desired to be filled and the time-span to fill it – immediate or long-term. The function that it performs to provide shade or a barrier.

In desert xeriscapes, drought tolerant species are common – mesquites, palo verdes, acacias, etc. Desert adapted deciduous or evergreen trees are continually being sought – pines, oaks, ashes, elms, olives, citrus, etc.

Following installation, proper care with appropriate irrigation systems, fertility management, and pruning practices should be applied and will be described in following presentations.



When the “right tree for the right location” is planted and properly cared for, the undesirable situations can be avoided.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