F-LOAK *Quercus virginiana* Temporarily Flooded Forest Alliance
Live Oak Temporarily Flooded Forest Alliance

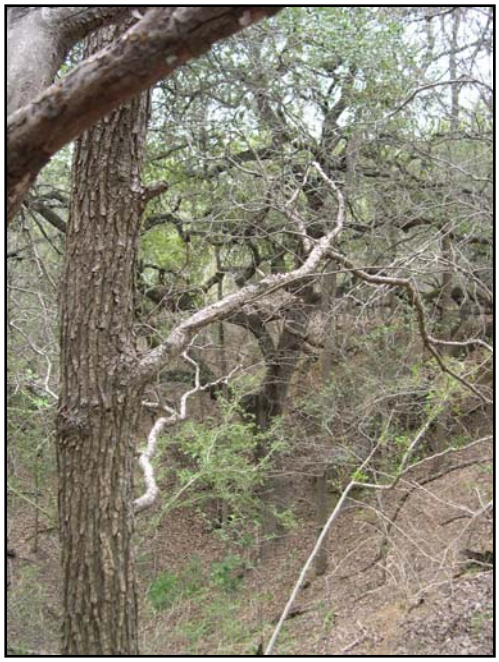
Associations and Alliances
Quercus virginiana Temporarily Flooded Forest Alliance

Common Species
Quercus virginiana
Ulmus crassifolia
Chasmanthium latifolium
Elymus virginicus

Description
This type occurred primarily on the Rancho unit along Picosa Creek about 150 m north of the San Antonio River but it was also used to map other small stands of live oak surrounding the Missions unit. This type usually occurs as either isolated stands of live oak in urban settings or in conjunction with the Cedar Elm – Sugarberry / Possum-haw / Virginia Wild Rye Forest map class in natural environments. This type is characterized by the presence of *Quercus virginiana*, which dominates the canopy layer. Cover in the canopy stratum is usually over 80% and the subcanopy cover is about 30%. Typically *Ulmus crassifolia* and a few other deciduous tree species are present in this type. The shrub layer is almost absent and the herbaceous layer is very sparse, which may be related to periodic flash or sheet flooding. The shade-tolerant grasses, *Chasmanthium latifolium* and *Elymus virginicus* are the only common herbs. This type was very distinctive on the 2003 color infrared imagery due to the evergreen crowns of the live oaks. Live oak crowns appeared as bright red circles contrasted with the dark gray of the surrounding deciduous trees.

Range and Distribution

Representative Ground Photo



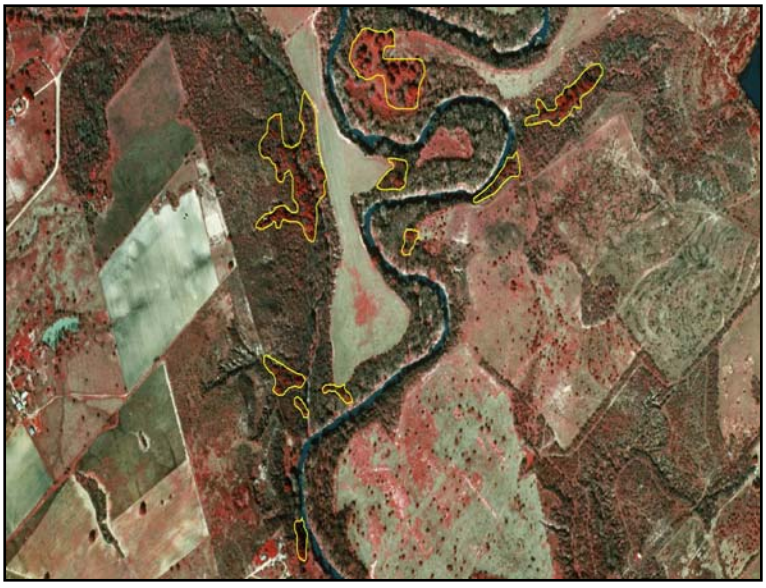


Photo Signature Example

A.57 *Quercus virginiana* Temporarily Flooded Forest Alliance

Translated Name: Live Oak Temporarily Flooded Forest Alliance
Common Name: Live Oak Temporarily Flooded Forest Alliance

ENVIRONMENTAL DESCRIPTION

The environmental factors that influence the composition and structure of this community are: climate, topography, soils, and possibly past management or chance events. This community occurs on the higher terraces and tributary banks along the San Antonio River. The community occurs on alluvium-derived silt-loam with good water availability. The environmental factors appear to be very similar to those for the adjacent ***Ulmus crassifolia – Celtis laevigata / Ilex decidua / Elymus virginicus*** **Forest** and the controlling factors distinguishing the two classes is not understood. Flooding of major proportions does not occur as it once did due to impoundments along the river.

VEGETATION DESCRIPTION

The canopy ranges from 15 to 20 m high with a cover of 80 percent. The subcanopy cover is light at 30%. *Quercus virginiana* dominates over *Ulmus crassifolia*, and few other tree species are present. The shrub layer is almost lacking and the ground layer is very sparse, which may be related to periodic flash or sheet flooding. The shade-tolerant grasses, *Chasmanthium latifolium* and *Elymus virginicus* are the only common herbs.

FLORISTIC COMPOSITION

Species Name	Stratum	Lifeform
Quercus virginiana	Shrub/sapling (tall & short)	Evergreen sclerophyllous tree
Ulmus crassifolia	Tree (canopy & subcanopy)	Broad-leaved deciduous tree
Chasmanthium latifolium	Herb (field)	Graminoid
Elymus virginicus	Herb (field)	Graminoid

OTHER NOTEWORTHY SPECIES

Species Name	GRank	Animal	Note (*specify Rare (geog area), Invasive, Animal, or Other*)

CLASSIFICATION & OTHER COMMENTS

Classification Comments: Further research may suggest combining this class and the ***Ulmus crassifolia – Celtis laevigata / Ilex decidua / Elymus virginicus*** **Forest**. The live oak in this plot was called *Q. fusiformis* by the field crew. NPS and SAAN staffs do not believe *Q. fusiformis* is found in the park so specimens called *Q. fusiformis* by the field crew are believed to be *Q. virginiana.*

Other Comments:

ELEMENT DISTRIBUTION

This association occurs only on the Rancho Unit along Picosa Creek about 150 m north of the San Antonio River.

ELEMENT SOURCES

Inventory Notes:
Plots: SAAN.28
Description Author(s): R. Sanders