Abstract. This paper identifies the many Texas communities that have tree/plant and landscape ordinances and the laws that govern them. However, numerous Texas communities currently lack ordinances pertaining to landscape concerns.

Résumé. Cet article identifie les communautés texannes qui ont des règlements sur la plantation d'arbres et sur le paysage et les lois qui les gouvernent. Cependant, de nombreuses communautés texannes manquent généralement de règlements ayant trait au paysage.

"No place is complete without trees. A home without trees is charmless; a road without trees is shadeless; a park without trees is purposeless; a country without trees is hopeless" (Anon).

Tree/plant and landscape ordinances that exist in this nation today have been written and adopted by many municipalities in the last 25 years. These ordinances have been adopted at the insistence of conservationists, special interest groups, state and city governments and councils, and public utility companies to protect life and property and the preservation of plants in the rural, suburban and urban landscape (1, 5, 8, 12, 13, 18, 19, 21, 23, 24).

Questions have been asked whether the existence of tree/plant and landscape ordinances help or hinder the development or preservation of the landscape (20). Daniel Webster defines ordinance as "an authoritative rule; an order, decree, or law of a municipal body", whereas others define ordinance as "an authoritative rule or law; a decree or command" or "rules to prevent people from doing things that are not traditional".

Ordinances were adopted to regulate a realistic approach to the usage of vegetation in today's rural/urban sprawl. These ordinances may vary from one region to another, from one community to another, but they all have a common thread that makes them acceptable to the public.

Ordinances protect and enhance property values and aesthetic environments, prevent soil erosion and sedimentation, reduce air pollution, attenuate sound, regulate planting, care, maintenance and repair of trees, shrubs, ground covers and vines, regulate plant removal, and protect rural, suburban and urban water sheds and woodland resources (7, 9, 15, 17, 23). Ordinances may also control the planting of improper species to protect the public, buildings, underground and above ground utilities, protect historical plants and woodlands, enforce plant replacement regulations, and intentional abuse or negligent construction practices, and the removal of hazardous plants from the landscape. Also, these ordinances promote conservation and good public relations. For these reasons and many more, tree/plant and landscape ordinances are a necessity (3, 4, 14, 25).

In recent years, serious attention had been given to the importance of municipal liability. The existence of trees in the urban environment, particularly those under public entity or government control, provide a source of potential civil liability. This liability must be managed to assure the elimination of known dangerous conditions which impose an unreasonable risk of harm to persons and property (10). Public administrators responsible for plant maintenance in the public sector must have a basic knowledge and understanding of the liabilities should damage occur to property or result in the loss of life (2, 10, 11, 16). Therefore, a study was initiated to determine where and to what extent tree/plant or landscape ordinances had been adopted in Texas.

Materials and Methods

In spring, 1989, a mailing of a brief questionnaire was sent to 185 Municipal Recreation and Park Departments, to 18 River Authorities, and to 92 County Park Administrators in Texas. Lists were taken from a 1987-88 Texas Recreation and Park Society Membership Directory and Buyer's Guide (22). The questionnaire included the following checklist: 1) Currently city/county/river authority does not have a tree/plant material/landscape maintenance ordinance. 2) City/county/river authority does not plan to initiate
a plant ordinance. 3) City/county/river authority administrators expect to develop and adopt a plant ordinance within the next one-two years. 4) Plant ordinance adopted since 1986. 5) Plant ordinance updated since 1986. 6) City/county/river authority administrators do not think a plant ordinance has aesthetic merits. 7) City/county/river authority administrators think a plant ordinance has merits but is too costly to implement. 8) No opinion. An analysis of the responses are discussed.

Results and Discussion

Of the 295 questionnaires mailed, the overall return response was 68%. Table 1 gives a summary for each of the governmental units responding to the questionnaire and offering no other responses.

<table>
<thead>
<tr>
<th>Governmental units in Texas</th>
<th>Sent</th>
<th>Returned</th>
<th>% Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal Recreation and Park Departments</td>
<td>185</td>
<td>140</td>
<td>75.7</td>
</tr>
<tr>
<td>River Authorities</td>
<td>18</td>
<td>12</td>
<td>66.7</td>
</tr>
<tr>
<td>County Park Administrators</td>
<td>92</td>
<td>49</td>
<td>53.3</td>
</tr>
<tr>
<td>Totals</td>
<td>295</td>
<td>201</td>
<td>68.1</td>
</tr>
</tbody>
</table>

**Municipal Recreation and Park Departments.** An analysis of the data obtained from the 140 MRPD respondents revealed that:

- Thirty-five units (25.0% responding cities/towns) did not have a tree/plant or landscape ordinance in place.
- Forty-four units (31.4%) did not have a tree/plant or landscape ordinance and did not plan to initiate one in the near future. Three units in this group did not think a plant or landscape ordinance had aesthetic merits, however, ten units thought that a plant or landscape ordinance would have aesthetic merits.
- Fourteen units (10%) did not have a tree/plant or landscape ordinance and offered no other response.
- Twelve units (8.6%) that did not have a tree/plant or landscape ordinance in 1986, however, have since developed and adopted one.
- Nine units (6.4%) that had no tree/plant or landscape ordinance are currently developing one for adoption.
- Twenty-six units (18.6%) have a tree/plant or landscape ordinance in place. One unit in this group had updated their ordinance recently, whereas, seven units expect to update their ordinance within the next two years.

The Texas cities responding to the survey that have municipal tree/plant or landscape ordinances or preservation/landscape ordinances or preservation/landscape guidelines and are located east of the 100th meridian are Addison, Austin, Bryan, Burleson, Cedar Hill, College Station, Corpus Christi, Corsicana, Dallas, Denton, Ennis, Flower Mound, Fort Worth, Galveston, Garland, Grand Prairie, Grapevine, Highland Park, Houston, Huntsville, Irving, Jersey Village, Lufkin, McAllen, New Braunfels, Paris, Richardson, Rockport, Rockwall, Rosenberg, Round Rock, and Wichita Falls. In the western part of the state, the cities that have a tree/plant ordinance are Amarillo, El Paso, Lubbock, Midland, San Angelo, and Sweetwater.

**River Authorities.** Of the twelve river authorities responding:

- Seven units do not have a tree/plant or landscape ordinance nor do they plan to initiate one.
- Four other units do not have a tree/plant or landscape ordinance and offered no other response.
- One unit thought tree/plant ordinance have aesthetic merits and one unit is developing a forestation program to include tree planting.

**County Park Administrators.** In Texas, county governments, county commissioner courts and county park administrators do not have ordinance making authority. Ordinances are usually enacted by the State of Texas Legislature for counties that request them. However, counties do enact laws (ordinances) except in very limited areas and tree/plant or landscape ordinances is not one of them.

Of the forty-nine county respondents:

- Twenty four units (49%), do not have a tree/plant or landscape ordinance.
- Twenty-five other units (51%) also do not have tree/plant or landscape ordinances and would not initiate one if they had the authority to do so.
- Twelve units who do not have an ordinance, did however, feel that a tree/plant or landscape or-
ordinance would have aesthetic merits in their county.

- One unit responded by saying they would not implement a tree/plant or landscape ordinance because they fear they may offend some of the voters in the county.

It is assumed that the other 94 units that did not respond to the questionnaire because 1) they did not want to reveal that their units did not have a tree/plant or landscape ordinance, or 2) a plant ordinance issue was not important enough to respond to, or 3) units did not know how to respond because they were not at all familiar with a tree/plant or landscape ordinance.

A review of the ordinances submitted revealed that some are very explicit, defined and enforced; whereas, others are very general in scope and enforcement. Generally, the ordinances currently enforced in Texas are oriented to stabilize the ecological balance in the community, to ensure that vegetation is replenished, to prevent the overcrowding of land by vegetation in providing adequate light, water and air to plants, to enhance property values and to protect private and public investment, to preserve and protect vegetation of unique identity in the community (woodlands, greenbelts), to protect the public health, safety and general welfare of the community and to soften visual blight created by large expanses of barren asphalt and buildings in a community.

Specifically the purpose and intent of a tree/plant or landscape ordinance was to regulate plant order in the landscape by encouraging the homeowner or businessman to implement plant beautification guidelines that make-up an ordinance.

In Texas, tree/plant or landscape ordinances are designed to regulate one or more of the following:

- To approve and disapprove the planting of certain tree and shrub species to protect pavement, roads, public utilities (power lines, sewers, and fire hydrants).
- To regulate plant placement (location; roadways, schools, parks, playgrounds, railroad crossings, heavily concentrated areas of pedestrians) and spacing between plants in the landscape. Also to encourage and regulate cultural practices; pruning, pest control and plant and stump removal.
- To select plants that are long lived, have a good appearance, and to avoid weed species.
- To protect existing trees and shrubs at construction sites against malicious chemical discharge, grade change, soil compaction, and encroachment of pavement (roadways and sidewalks) upon the root-zone areas of plant materials.
- To implement proper planting techniques and procedures.
- To preserve unique scenic vistas and green corridors within the community, and to improve the aesthetic qualities through the use of landscape materials that include both hardscape and softscape design elements.
- To protect public health, safety and general welfare.
- To protect and preserve endangered plant species.
- To prevent destruction (tree cutting and setting fire) of woody plants on public or private land.
- To provide visual screening and buffering of unsightly areas using acceptable landscape material.
- To regulate irrigation installation in relation to existing trees and plants in the landscape.
- To reserve the community right to enter, and condemn vegetation known to spread disease or are infested with harmful insects.
- To encourage the planting of trees to conserve energy and to stabilize the environmental ecosystem.
- To encourage the planting of woody plants to enhance property values and to establish relative values of vegetation in the existing landscape.
- To develop tree and shrub planting programs.
- To encourage the planting of trees, shrubs, and ground covers to combat soil erosion in areas of high rainfall.
- To encourage planting of xeriscapes in communities having either high or low rainfall.

Several cities in Texas have specific sections in their tree/plant or landscape ordinances that are unique:

- The landscape shall contain at least a minimum of 20% of plant life on a permanent site.
- No synthetic lawns or plants to be installed in lieu of plant materials.
- It is forbidden to tie or hitch a horse or other
animals to any tree less than 15 feet in height or to any plant.

Generally speaking a majority of these ordinances in Texas are enforceable and punishable if not obeyed. If a party violates any provision of an ordinance, he/she shall be guilty of a misdemeanor, and, upon conviction shall be fined an amount not to exceed two hundred dollars. Several communities have set a fine not to exceed five hundred dollars.

A further analysis of these ordinance is that they are similar to those adopted by many communities and cities throughout the nation. It was also interesting to learn that most of the communities which adopted ordinances are located east of the 100th meridian and in localities where precipitation increases (greater than 25 inches annually) both east and southeast in the state (6). In this area of Texas, plant material is abundant because of favorable growing conditions. Eastern Texas is also heavily populated, and the greatest concentration of adopted ordinances are located within a 75-mile radius of the Dallas/Fort Worth metroplex. In Western Texas, west of the 100th meridian, precipitation is less than 10 inches annual rainfall in a vast area. This limits plant growth and tree ordinances are of minor concern. Trees and other woody plants that are planted or volunteer in Western Texas are allowed to grow in the barren landscape without laws to govern their spacing, maintenance, removal, etc.

Though many communities and cities in Texas do not have a tree ordinance, Texans are still keenly interested in plantings to enhance the aesthetic values of their properties and cities. This approach directly preserves the environmental integrity of the community and contributes to the quality of human life in urban living.

Literature Cited