Survey of Local Forestry-Related Ordinances and Regulations in the South
by
Jonathan J. Spink, Harry L. Haney, Jr., and John L. Greene

Abstract
A survey of the 13 southern states was conducted in 1999-2000 to obtain a comprehensive list of forestry-related ordinances enacted by various local governments. Each ordinance was examined to determine the date of adoption, regulatory objective, and its regulatory provisions. Based on the regulatory objective, the ordinances were categorized into five general types: environmental protection, tree protection, public property protection/safety, timber harvesting, and special feature protection. Current survey results were compared to a similar study (Martus 1992) to analyze the changes that have occurred in the South regarding local regulation. The 2000 study identified 346 forestry-related ordinances in 10 of the 13 southern states. This is a substantial increase from the previous study, which reported 141 ordinances in seven southern states. As with the 1992 study, the 2000 survey found that the protection of public roadways and public safety is the predominant objective of ordinances passed in the South. This survey shows an increasing trend in the number of local ordinances impacting forestry activities. Approximately 80 percent of the existing ordinances have been enacted in the last 10 years.

INTRODUCTION
In recent years, society's environmental sensitivity has expanded, urbanites lacking exposure to natural resources have migrated into rural areas seeking better lifestyles, and growing cities have endeavored to maintain greenways (Johnson 1993, Martus et al. 1995, Egan et al. 2000). These trends have prompted local governments to adopt ordinances intended to protect the environment, aesthetics and open space, and public safety. These regulations influence how forest managers operate on private lands.

The effects of local ordinances on forest management are of utmost concern to forestry professionals and landowners. Regulation not only impacts landowner profits by increasing harvesting costs and subsequently reducing stumpage prices, but they also create a checkerboard effect of conflicting ordinances (Provencher et al. 1982, Shaffer 1991, Martus 1992, Martus et al. 1995). In order to effectively analyze the impacts of local ordinances a firm understanding of their characteristics is required.

A study undertaken a decade ago also identified units of local government in the South that had enacted ordinances (Martus 1992, Greene and Haines 1993). The study also was designed to determine the

METHODS
The survey began with the previous list of ordinances and used a branching or boundary spanning approach to identify local government units that had enacted ordinances. Once identified, the governments were contacted to procure copies of each ordinance. Any law, ordinance, zoning law, or tree protection enactment that had been or could reasonably be used to restrict logging, silvicultural activities, and the hauling of forest products were sought. This process was continued until all leads were exhausted. Each enactment was examined to determine the date of adoption, regulatory objective, and provisions.

ASSESSMENT OF LOCAL ORDINANCES
In 1992, Martus identified 141 ordinances in seven of the thirteen states where 98 percent were distributed in Virginia, Georgia, Florida, and Louisiana.

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2 The 13 southern states include Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia.

3 Results as of March 20, 2000.
(Figure 1). Of the 135 enacting local governments, 87 percent were primarily counties or parishes.

Since this original study, the number of ordinances has grown more than two fold. The 2000 study identified 346 forestry-related ordinances distributed among 264 individual governments in ten states (Figure 2). Of the enacting governments, 83 percent were counties or parishes. This slight drop was due to the increase in city government involvement from 8 percent in 1992 to 13 percent in 2000. Neither study identified any local ordinances in Kentucky, Tennessee, or Oklahoma.

This trend, which began in 1970, appears to be leveling-off in the latter periods (Figure 3). This appearance may be deceiving, however, because two state mandates (discussed in the next section) accelerated the adoption rate of local ordinances in the early 1990s. Local governments independently enacted approximately 75 ordinances in the respective period. If Figure 3 were altered to only show independent ordinances, it would illustrate an increasing trend (Figure 4).

Proliferation- A general assessment of the escalation in the number of local ordinances can be inferred from the information given above. To evaluate the proliferation more definitively, however, the dates of adoption were examined. Of the 346 laws identified, 341 ordinances had identifiable dates of enactment. If these, 80 percent were enacted in the last ten years, with 44 percent having been enacted within the last five years (Figure 3). The total number of local ordinances has essentially doubled every five years since 1970.

Possible Causes- Local ordinances have proliferated for several reasons including the aforementioned state mandates, urban sprawl, exurbanization, social conflict, community mobilization, and the protection of public investments. Some 18 percent of the ordinances are accounted for by state mandates. Virginia mandated local governments to enact watershed preservation ordinances pursuant to the
Chesapeake Bay Preservation Act. Similarly, Florida required county governments to construct land development codes, some of which contained silvicultural implications. By the summer of 2000, Virginia may impose stricter provisions through an updated Chesapeake Bay Preservation Act.

Like state mandated ordinances, the growth of cities has been another cause to the proliferation of local statutes. The Department of Agriculture recently issued the National Resources Inventory (NRI) in December of 1999. The NRI reported that on a national scale, forested acreages are declining at a rate of over 3 million acres a year due to urban sprawl. City growth and the subsequent deterioration of the urban forest is a major contributor to the proliferation of local ordinances in the form of tree protection and timber harvesting statutes.

Not only are cities expanding, but urban residents also are migrating into rural areas seeking improved lifestyles. Exurbanization introduces both social conflict and community mobilization. Modern technologies have broken our bonds with the land and consequently, urbanites lack exposure to natural resources and logging practices (Provencher et al. 1982, Glickman 1999). Moreover, urban residents are very familiar with community organization and lobbying practices in local city legislatures. This experience is being utilized in areas where local residents have historically been more accepting of forestry practices. Urbanites react strongly to the unpleasant appearance of timber harvesting sites and push for an ordinance despite uncertainties as to their legality and effectiveness.

Lastly, many states in the South have a long tradition of protecting public investments in roadways. The earliest identified ordinance was in 1934 to protect parish right-of-ways and ditches from logging debris. Common protection ordinances have been the core focus of local regulation for many decades.

**REGULATORY OBJECTIVES**
The stated objectives of local ordinances provide insight into the purpose of enactment and the attitudes of the adopting government and constituents. Each ordinance was placed into one of five classifications:

**Timber Harvesting (TH)**- Timber harvesting ordinances were adopted to specifically restrict forestry and silvicultural operations. All ordinances that refer to the regulation of timber harvesting, skid and haul road construction, harvest methods, equipment, or any other silvicultural activity on private property were included. Common provisions included management plans, harvest permits, adherence to best management practices (BMP’s) and streamside management zones (SMZ’s). Approximately one-tenth of the ordinances identified are in this category (Table 1).

**Public Property Protection (PP)**- Ordinances categorized as public property protection were generally enacted to protect public investments in roads, bridges, ditches, and right-of-ways. Consequently, they affect public safety by placing limitations on log trucks and/or heavy-laden vehicles. Road damage, mud and logging debris, and interference with traffic flows are common hazards addressed by these ordinances. Surety or cash bonds (ranging from $500 to $25,000), hauling permits, culverts placed in county ditches, and the posting of warning signs near egress points are standard requirements. As noted above, local ordinances in the South emphasize public road protection and the subsequent safety of drivers. Almost one-half of the 346 ordinances fall into this category (Table 1).

**Tree Protection (TP)**- Tree protection ordinances were primarily associated with the preservation of woodlots in urban areas with regards to the clearing of land associated with development. Common provisions included permits, management or erosion control plans, basal area retention thresholds, replanting, and the use of buffer strips. Popular landscaping laws were beyond the scope of this study. About 14 percent of the ordinances identified are in this category (Table 1).

**Environmental Protection (EP)**- The protection of environmental features from “land disturbing” activities is an increasing trend among ordinances passed by local governments. Under this pretense, soil erosion plans, use of SMZ’s and buffer strips, and permits were commonly required. Less than one-tenth of the ordinances are of this type (Table 1).

**Special Feature Protection (SP)**- Special feature protection laws were adopted to protect specific areas that have scenic or environmental values. Scenic river corridors, highway overlay districts, wetlands, view sheds, and special habitats are examples. Common provisions prohibit tree cutting and require the use of buffers, permits to cut trees, and local government notification. Over one-fifth of the ordinances identified in the study are of this type, but most were passed in Virginia as mandated by the Chesapeake Bay Protection Act (Table 1, Figure 8).
Table 1. Distribution of Objectives

<table>
<thead>
<tr>
<th>Objective</th>
<th>Total</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>TH</td>
<td>35</td>
<td>10%</td>
</tr>
<tr>
<td>PP</td>
<td>158</td>
<td>46%</td>
</tr>
<tr>
<td>TP</td>
<td>48</td>
<td>14%</td>
</tr>
<tr>
<td>EP</td>
<td>26</td>
<td>8%</td>
</tr>
<tr>
<td>SP</td>
<td>79</td>
<td>22%</td>
</tr>
<tr>
<td>Total</td>
<td>346</td>
<td>100%</td>
</tr>
</tbody>
</table>

On an individual state level, the focus of local regulation varies (Figure’s 5 through 9). Public property protection ordinances make up the majority of local regulation in Alabama (67%), Arkansas (83%), Georgia (72%), Louisiana (86%), Mississippi (100%), and Texas (55%). Tree protection laws dominate in Florida, North Carolina, and South Carolina where they comprise 41 percent, 40 percent, and 56 percent of the state totals, respectively. Due to the Chesapeake Bay Preservation Act, seventy-eight percent of Virginia’s ordinances are classified as special feature protection.

At some future point, the trend in hauling ordinances seems likely to level out. The focus of local ordinances may then shift from public property protection ordinances to environmental protection, tree protection, special feature protection, and timber harvesting ordinances. Nonetheless, the number of local regulations will continue to boom if mitigation practices are overlooked in resolving the inherent conflicts between the growth of local communities and conventional forest production.
PREEMPTIVE / PREVENTATIVE MEASURES
Because local ordinances impact how forest managers effectively manage private forests, the forestry community has been practicing ethical and stewardship-based forestry so that regulation is not warranted. However, various other measures to prevent or preempt local regulation on a localized level were discovered as a result of the data collection process.

State “Right to Practice” Laws- State “Right to Practice Forestry” laws are mandates that attempt to insure that forest landowners can continue to grow and harvest timber. In the process, they limit the ability of local governments to restrict forestry practices. Kentucky, Virginia, North Carolina, and Louisiana have passed forms of “Right to Practice” Acts. Kentucky has been the most successful in deterring local regulation (Figures 1 and 2). In Contrast, the North Carolina act just protects forestry from being considered a “nuisance” in local government legislation. The effectiveness of Virginia’s law will depend on the result of a pending State Supreme Court case. Currently, the Virginia Supreme Court has issued authority to local governments to enact legislation, as they deem justifiable.

State Forestry Associations- State forestry associations have been successful with preventing local ordinance adoption. For example, the Mississippi Forestry Association (MFA) has organized county forestry associations that are increasingly aware of localized problems and are mobile to act promptly. The MFA’s success has resulted in a relatively low number of ordinances (Figures 1, 2, and 9).

County Road Commissions- A relatively unused, but effective, technique is the use of a county road commission comprised of road superintendents, loggers, and foresters. For example, Macon County, Alabama utilizes such a system relatively well. The duty of the commission is to prevent roadway damage by having the forest industry supervise itself. If a problem arises, the commission attempts to correct it in a timely manner or the threat of county intervention and legislation looms.

Private Forestry Interests- Forest products companies owning timberland are impacted by local ordinances, as well private landowners. Various firms obligate their foresters to keep track of local governments that show interests in developing legislation. This has been a useful mitigation practice.

FUTURE ANALYSIS
After a complete list of local, forestry-related ordinances is obtained, the demographic and resource factors associated with the proliferation of local regulation will be analyzed. The objectives are to examine the correlation between localities that regulate forestry activities and per-capita income, population, and resource factors using Geographic Information Systems and discriminant analysis or logit and probit models. Regression functions may be derived to help determine factors that influence various types of local ordinances. This may indicate underlying rationales for the proliferation of local ordinances and offer foci for future study.

CONCLUSION
Local forest regulations have proliferated dramatically in recent years. Statutes impact how forest managers operate on private property. Not only do laws restrict quality land management, but they also have economic implications such as reduced stumpage values. These effects and impacts may be magnified in the South due to 1) the simultaneous trends of population growth and the shift of timber demand to the southeast and 2) the importance of forest industry to southern state and local economies (Cubbage 1991).

Without ameliorating measures such as “Right To Practice” forestry laws, county forest landowners associations, commissions, and stewardship-based forest management, it may be impractical to practice forestry in increasingly large areas of the South. This intolerable condition may result in state intervention.

Literature Cited


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Table of Contents

Letter from the Editor

Table of Contents

Presented Abstracts and Papers

**Session Ia: Hardwood Markets**

1. Options for Small-diameter Hardwood Utilization: Past and Present  
   *Matthew Bumgardner, Bruce Hansen, Albert Schuler, and Philip Araman*  
   Page 1

2. A Regional Examination of the Eastern “Grade” Hardwood Sawmilling Industry  
   *William Luppold and John Baumgras*  
   Page 8

3. Development of a Hardwood Grade Market in East Texas  
   *A. Gordon Holley and Gary D. Kronrad*  
   Page 13

4. Where have all the logs gone? A spatial analysis of timber exportation in Illinois  
   and Wood Products Sector within the Southern Illinois Region.  
   *Eric M. White, Andrew D. Carver, and John E. Phelps*  
   Page 14

**Session Ib: Nonindustrial Private Forests**

5. Forest Management Assistance and Non-Industrial Private Forestland Owners in West Virginia  
   *Rory Fraser and Daniel Magill*  
   Page 20

6. Commodity and Non-Commodity Valuation of a Small Acreage Non-Industrial Landowner Holding  
   *Jeff Earl, Robert Breighton, and Richard Kluender*  
   Page 27

7. Highlights of the National Evaluation of the Forest Stewardship Planning Program  
   *Robert J. Moulton and J. Dixon Esseks*  
   Page 33

8. Sticks, Carrots, and Reforestation Investment  
   *Daowei Zhang and Warren Flick*  
   Page 39

**Session Ic: Regulations/BMP’s**

9. Costs of Silvicultural BMPs on Private Forest lands in East Texas  
   *Judy C. Haney, A. Gordon Holley, and Gary D. Kronrad*  
   Page 40

10. Survey of Local Forestry-Related Ordinances and Regulation in the South  
    *Jonathan J. Spink, Harry L. Haney, Jr., John L. Greene*  
    Page 41

11. Regional Forestry Practices and Forest Management Certification  
    *Steverson O. Moffat, and Frederick W. Cubbage*  
    Page 47

**Session IIa: International Forestry**

12. Weak Complementarity and Ecosystem Benefits Estimation: Soil Conservation in Flores,  
    Indonesia  
    *Jeannette Espinoza, Subhrendu Pattanayak, and Erin Sills*  
    Page 53

13. Prospects for Foreign Investment in Russian Forest Industries  
    *Natalia V. Kirillova and Matthew H. Pelki*  
    Page 58

14. Export price and exchange rate effects in European roundwood markets  
    *Anne Toppinen, Ritva Toivonen, and Riitta Hänninen*  
    Page 64

15. Economics of Forest Restoration in Western Siberia  
    *Matthew H. Pelki, Natalia V. Kirillova, and Vladimir N. Sedykh*  
    Page 70
Letter from the Editor

These are the proceedings of the 30th Annual Meeting of the Southern Forest Economics Workers held at the Embassy Suites Hotel, Lexington, Kentucky on March 26-28, 2000. The conference was hosted by the University of Kentucky, College of Agriculture and Department of Forestry. Lexington is the most northern location ever for the SOFEW meeting, and we enjoyed hosting many of our “northern” colleagues from the Pacific Northwest, New England, and Lake States as well as international presenters from Finland, Sweden, and Russia. All in all, the 86 participants represented 21 states in the U.S.A. and four countries.

The 2000 workshop focused on hardwoods as an undeveloped resource, but also included presentations on international forestry, best management practices, regional economic analyses and timber supply, non-timber economics, timber trend analysis, agroforestry, and cost/price functions. The participants in SOFEW 2000 had the opportunity to hear 43 presentations during the two-day program. Since this was the last SOFEW meeting of the 20th Century, Marcella Szymanski, facilitated a discussion of forest economics issues for the 21st Century. Participants identified four major issues that will impact forest economics during the start of the new century and listed current conditions, the desired future state, and listed ways forest economists could assist in moving from current conditions to the desired state. The four issues identified are:

1) The U.S. is a net importer of wood fiber
2) Growing public opposition to growing trees (for fiber)
3) Land-use planning (urbanization, land use changes)
4) Increasing awareness of forest practices

The results of this special session can be found in the final paper of this proceedings.

I'd like to extend a special thanks to Dean C. Oran Little of the University of Kentucky College of Agriculture for his keynote address. And special thanks to Don Graves, Jim Ringe, and Natalia Kirillova for their help before and during the conference. A special thanks to all the session moderators who kept the program running and on time – I really appreciated those who volunteered so readily.

Finally, thanks to the authors and participants – the high quality of the presentations and papers are in keeping with SOFEW’s tradition of excellence.

Copies of the proceedings are available for $20 per copy and may be ordered through the SOFEW homepage or by contacting me at the address listed below.

Best wishes,

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