HIGHWAY CORRIDOR RESPONSIBILITY

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INTRODUCTION

As highways cross the nation they provide safe travel for the vacationers, commuters, truckers, the military, farmers, congressmen, our families, and friends. Highway corridors provide safe passage for many plant invaders as well. Highway vegetation managers manage millions of acres of rights-of-way that cross your land. It is imperative that we understand each other's management strategies and cooperate as much as possible. If we do not, plant invaders that have no respect of political boundaries will prevail. This paper examines why roadside vegetation managers operate the way they do. Both negative and positive examples of current practices are noted. Future practices are predicted.

State and interstate highways are typically maintained by state highway agency crews. A few states, such as Wisconsin and Tennessee, engage county maintenance forces to do vegetation management. It should be understood that the Federal Highway Administration does not own or have management responsibilities over the many acres of roadsides that parallel our nation's roadways; but rather serves as an advisor and information resource for all the states. States do not own all of the roadsides, but rather lease much of the right-of-way. As a consequence, adjacent landowners often participate in vegetation management on these lands. Some states allow farmers, in particular, to harvest hay from the rights-of-way during drought years. Utility companies have access to these same roadsides. The intended users of a roadside are errant vehicles that require a recovery zone to minimize injury. Of course, that same land accommodates directional and information signs. The roadsides are, therefore, operational areas for many uses. These uses must be considered by vegetation managers.

Each state makes vegetation management decisions based on the years of experience in that state. Vegetation management policies have evolved differently in different places due to climate constraints, policy changes, public demand, and all the uses mentioned. Safety will always be the number one requirement affecting decisions. In the past, many decisions were affected by an unwritten, but widely known, policy of managing our nation's roadsides as if they were our nation's front lawns. This notion prevailed in the 1930's, when many state roadside development programs were begun. When herbicides became technically available in the 1950's, spray-mow approaches became the norm to give the public that manicured look. In the 1970's, after the energy crunch, roadside maintenance quickly changed due to the increased cost of labor-intensive management. Alternatives were sought, and in many states, more ecological solutions were found. The idea of "working with nature," reducing chemical use, timing mowings, and adding prescribed burns,

defined the ecological approach. As new management tools were sought, the idea of integrated roadside vegetation management (IRVM) emerged as the common sense approach of the 80's. What if we no longer used a blanket approach, or one size fits all, but used the right tool for the right problem, site-specifically! With that background in common, each state's vegetation policy continues to be unique because of the other factors that influence decisions.

Some decisions made by state highway agencies (SHA) that have had negative environmental consequences, have included nameless states who have: 1) mowed around and saved Tree of Heaven (*Ailanthus altissima*) to save a tree, 2) planted Black Locust (*Robinea pseudoacaia*) because the seedlings were free, 3) planted Purple Loosestrife (*Lythrum salicaria*) for beautification purposes, and 4) pictured Kudzu (*Pueraria lobata*) in a wildflower brochure, and so on. The public, who knew about the predictable consequences of these invasive plants, viewed these decision-makers as thoughtless.

Some SHA decisions with positive environmental consequences include: 1) the Florida Department of Transportation, motivated by the invasion of Tropical Soda Apple, now requires weed-free certification of sod used in construction projects, 2) the Tennessee Department of Transportation successfully funded a biocontrol study on Musk Thistle, 3) the Utah Department of Transportation has trained its workers to identify and control new invasive plants at Utah's borders, 4) a six-State partnership of Texas, Oklahoma, Missouri, Kansas, Iowa, and Minnesota have taken inventory and are developing a coordinated vegetation management plan for a highway corridor from Mexico to Canada, 5) the Iowa Department of Transportation has backed an ecotype approach to native seed production and use on planting projects to outcompete noxious weeds, 6) a coalition of SHAs and industry recently produced a guide to Integrated Roadside Vegetation Management, and finally, 7) in 1997, four State Departments of Transportation endorsed support for the National Strategy for Invasive Plant Management. These states demonstrate a proactive trend towards highway corridor responsibility.

CONCLUSION

It will take time for all states to get on board with the IRVM approach. They continue to make the best decisions they can with the information they have at the time. This author can foresee a time when each state has its own IRVM plan for all segments of highways it has inventoried. In the meantime, exotic plant pests continue to move across the country through highway corridors. Teasel has been seen from Arkansas to Idaho. Russian olive spreads from the midwest to the southwest. Johnsongrass migrates from the south northward. Kudzu now adapts to cold climates! Purple loosestrife is spotted in every state. Leafy spurge and knapweed extend from the deciduous forest throughout the plains.

Obstacles to highway agencies controlling these invasive species remain. Many states in the northeast and the south still do not have state noxious weed lists that help identify priorities for IRVM. Some state agencies have not yet embraced IRVM. Additionally, some SHAs are still planting invasive plants like Oxeye daisy, dame's rocket, queen anne's lace, smooth brome, sweet clover, and crownvetch. All of these are known to be invasive by land managers. All appear on one or more state's noxious weed lists and, therefore, should be suspect in adjacent states. To further complicate invasive species control, funding for this roadside activity has not been historically

significant. As state agencies "do more with less," invasive species control or integrated roadside vegetation management will have less resources. These are the obstacles that roadside vegetation mangers are up against. They need public support and influence to obtain the resources they need to learn more and do better!

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