Illinois Forest Resource Issues

Background: Public concern for improving and sustaining Illinois forests extends back to the loss of forest habitats during the late 1800's and early 1900's. The current policies and programs for managing our forest resources are the culmination of program development efforts that started in the 1930's. While the management of public forest lands (i.e., National Forests) generally takes center stage in our public debates on forestry, the primary focus of forestry issues in Illinois has to be directed to forests lands owned by private landowners. Over 90 percent of the forest land in Illinois is owned by private landowners.

Forestry in Illinois can point to many successes since the start of the 20th Century:

1. millions of acres of forest that were cleared and burned prior to the 1920's have been re-established

2. forest acreage has increased to approximately 5 million acres

3. destructive wildfires have been greatly reduced

4. wildlife species once on the brink of extinction have been reintroduced and are flourishing

5. functional wetlands are being restored.

If asked, many of our citizens would not be aware of the improvements that have been made to the forest resources in Illinois. The issues of federal forest lands combined with the focus on declining rainforests has diverted the attention of the public from local private forest land management issues.

As a result of the efforts and foresight of the foresters and resource managers of the 1920-30's we are able to enjoy the many benefits derived from a healthy and viable forest resource-improved air quality, clean water, abundant wood products, wildlife habitat, and recreation.

We are beginning to see a dramatic change in who owns forests and why they own them. Forests are no longer owned by farmers who live on and off the land. Ownership is shifting to white collar professionals looking to escape from our urban centers. Large forest tracts are being fragmented into smaller less manageable tracts owned by a larger and larger number of individuals each year. Reasons for ownership has shifted from a resource that meets farm operation needs (i.e., fuel wood, lumber for building repair) to one that provides wildlife viewing opportunities and nature appreciation.

In order to develop policies and programs for management of our forest lands we must understand some of the important issues facing Illinois's forests.

Fragmentation: The pattern of forest ownership and the impacts of this shift has become a major concern of forest planners. The division and sale of large forested tracts in Illinois threatens the forest ecosystem values and functions. Average forest ownership in Illinois is approximately 20 acres. This average size will continue to decrease overtime. Small parcels are difficult to manage and present difficulties in maintaining the ecological processes associated with large forested tracts.

As average size decreases, the chances of these holdings being converted to non-forest uses increases. Many of these smaller forest tracts are becoming single family home sites. The shift to home sites has an impact on wildlife populations and the ability to produce future forest products and environmental benefits. In the late 1970's a search for natural communities identified 1,089 important natural areas. Of these areas, 392 contained forest land. However, only 149 of these forested natural areas-a mere 11,593 acres-were rated as relatively undisturbed or mildly disturbed.

The fragmentation and parceling of our forest lands will have a negative impact on the State's economy; the ability to provide clean air and water; recreational opportunities; plant and animal diversity; and aesthetic values provided by our forests. While Illinois forests only occupy 12 percent of the area of the state, they provide habitat for over half of the botanical species native to the state. Forests are essential refuges for wildlife. If we are to protect this irreplaceable biological diversity, we must reduce fragmentation and restore the health and vitality of our forest communities.

Wildlife Diversity: Although stable populations of many wildlife species (i.e., deer, turkey) has occurred, many other species still need protection and enhancement. Increasing emphasis is being placed on the management needs of non-game species including rare, threatened and endangered species and their habitats. As habitat declines, the number of animals capable to inhabit these areas declines.

As large tracts of forest area are broken into small isolated tracts more forest edge is created and more opportunities for edge-adapted species to usurp habitat from forest-interior species. In Illinois much of our remaining forests occur as one of two types:

1. very small isolated patches where the edge-to-center ratio is very high, or

2. riparian zone forests where there is practically no center and lots of edge.

Both of these forest types are very susceptible to the negative effect of habitat edges.

In addition small forest tracts cause reductions in effective population sizes. Population size is the predictor of extinction probability. Also, the disjunction of forest patches inhibits the movement between isolated habitats. This resulting genetic isolation can be detrimental to the long-term health of resident populations due to inbreeding. Inbreeding erodes genetic variability, and eventually, the viability of a given population.

Shifts in species composition from oak-hickory to hard maple and other soft mast species will have a negative impact on all wildlife species-especially neo-tropical birds-in their ability to find suitable food sources, breed, and maintain-let alone increase-population levels.

The variety, frequency, distribution, and health of Illinois' wildlife depends directly on the size, species, and distribution of forest tracts. Functional ecosystems are dependent upon the contiquity and connectivity of forest tracts. Linkages or corridors between forest tracts will enable these forests to provide diverse ecological benefits for our State's game and non-game wildlife.

Timber Supply: Current public discussion has focused on decreasing or even eliminating the harvesting of wood products from public lands as a raw material source for forest products industry. This policy shift has increased the pressure on privately owned forests to meet our Nation's wood products needs. Over the next 25 years the demand for wood will increase by 25 percent. For Illinois, where over 90 percent of the forest land is privately owned, this demand shift to private lands will cause many problems in sustaining ecological function in our forest ecosystems, while at the same time, meeting wood product needs of our forest industries.

Our forest ecosystems support over half of the botanical species native (biological diversity) to Illinois, three-fourths of all wildlife habitat in Illinois, provide watershed protection, and provide forest-based recreational opportunities. In addition, these same forest resources support a forest products industry that employs over 65,000 people, has an annual payroll of approximately $1.9 million, and contributes over $4.5 billion annually to the State's economy through value added by manufacturing. The challenge facing forest managers will be to achieve a sustainable balance between these often conflicting needs.

Natural Resource Education: One of the most profound changes in American society in the 20th Century has been our transition from a rural agronomic society to an urban industrial society. This transition has changed the way we view our natural resources and the environment. With over 80 percent of our population living in urban environments, our citizens have lost their immediate connectivity to the land. This urban population has very limited connection to land and its productive capacity. To a very large segment of our population food comes from the grocery store and wood products come from the lumber yard.

The future of our State's natural resources is directly related to our ability to teach youth and adults about these important natural systems. Without a comprehensive scientific based educational program we will continue to foster and produce citizens who are illiterate about ecological processes and the role these systems play in improving our quality of life.

As we prepare to enter the 21st Century, the problems of our environments demand solutions. An informed public is necessary if we hope to develop policies and programs that sustain our valuable natural resources well into the next Century.