



Southern Illinois University at Edwardsville | Edwardsville, Illinois 62026

October 24, 1978

The Honorable Vince De Muzio
4 Valley Lane
Carlinville, IL 62626

Dear Senator De Muzio:

I am sorry to have missed you and Ted Woodbury Sunday, on your tour of the proposed timber sales area in Pere Marquette Park. I surveyed the ecology of the bruned area and would like to give you my impressions of the forest and of the timber cutting idea.

In the first place, I am strongly opposed to lumbering and hunting activities in state parks. The original park statutes make it clear that the parks were set up as sanctuaries for people and living things. Any kind of harvest has to be looked on as desecration of the peoples trust unless some kind of ecological catastrophe needs to be headed off. There is certainly no such danger, now or foreseeable.

Now that you know my general point of view, I would like to add specific reasons why lumbering is a very bad idea in this case.

1. The trees themselves are not high grade timber. The bole (lower trunk) is very short ranging from 12 feet to 15-20 feet before heavily branched portions. Many of the trees have twisted grain (as seen from the spiral effect of lightening scars) which makes poor timber.
2. The area is not overmature. The larger trees have a large low crown which indicates that the area was nearly clearcut in the past and the large trees branched out with little competition from other trees.
3. The fire damaged trees are, for the most part, still alive and will continue to be a seed source for some time to come. In addition, the hollow trunks of some and the dead portions of the crown are essential woodpecker nest areas and owl nesting areas. Owls especially are getting rarer in Illinois, mainly because suitable habitat is getting scarcer. Our parks should provide this habitat.
4. Fire is a natural feature of woodland areas and the kind of wildlife attracted to a brushy fire damaged area will be different than that found in, for instance, meadows or undamaged mature forest.

5. Regeneration of trees in that area of the park will be very slow. The soil is thin and clayey, and the area has little water reserve available on the rocky, well drained slopes. In this year, which has had better than average rainfall, the streams have been dry for many weeks. The annual growth rings of trees have been shown scientifically to be the best indicators of growing conditions in a given area. The stumps which I inspected showed a growth rate of 17 rings per centimeter of radius (Sassafras), 20 per cm (dogwood) and 20-22 per cm (black oak). That can be interpreted as the number of years of growth that it takes to produce a one centimeter increase in radius of the trunk. This is very slow growth and it is due not to crowding but to poor soil and severe water stresses in the area.

Harvesting many of the oaks will actually retard the process of secondary succession. The seedling of oak trees, the climax dominants of the area, need a fairly dense forest canopy as shelter for the seedlings. Numerous openings in the canopy caused by logging will cause an increase in the already numerous Sassafras trees, a sunloving species. It would be well into the twenty-first century before a young oak forest would reestablish itself on that site.

6. Logging, even when done selectively, is very damaging to the trails and steep slopes. The effect is similar to that caused by off-road vehicles in that the bare areas caused by wheels and dragging logs will cause erosian channels in the thin soils.

7. One of the very damaging attitudes perpetrated by foresters is the idea of the over-mature forest. We have very few examples of virgin forests left in this country and most of these are in the Great Smokies. A visit to such a forest is a breathtaking and momentous experience. Trees over 20 feet in circumference and in good health are common. Many are well over 500 years old. Naturally, dying and dead trees are also present but they serve as nesting grounds for a great range of animals, plants, fungi and bacteria. The decayed remains of forest giants serve as a direct source of nutrient for young trees.

Recent research even suggests that hollow trees are not necessarily pathological but that the tree actually gains nutritionally. The heartwood of old trees changes chemically in a way that encourages the growth of heartrot fungi. The resulting hollow tree produces roots oriented so as to recycle the growing pile of organic waste at the base of the hollow. This use of resources gives the tree a competitive edge in a habitat where nutrients are in high demand.

One might as well suggest that our human population is getting overmature since the average age is rising. This kind of attitude obviously overlooks the many aspects of human experience just as foresters only take lumber value into consideration when looking at a forest. The question really is, should the state parks just be woodlots for the convenience of those who would exploit them. Should an Illinois kid who visits the park a century from now say "This looks just like the brush lot behind our barn, so what!" or should he say "This is magnificent, I never knew that a forest could look like this!"

Economists at "Resources for the future" have demonstrated that the scarcity value of natural land will continue to rise sharply. Population pressure will put terrible demands on private lands in the next century and the few remaining natural parklands will be increasingly treasured by the citizens. Will they thank us for sensitivity and foresight in our stewardship of these lands or will we be damned for our greed, ignorance, and lack of respect. This legacy, either way, will be the true measure of our system of government and of our civilization.

Thanks for your interest and I hope some of the above may be useful to you.

Sincerely yours,

Richard C. Keating
Professor

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cc: Ted Woodbury