



Riverwoods Preservation Council

A group of resident volunteers

dedicated to preserving the ecological heritage of the community.

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Environmental Committee
Village of Riverwoods
c/o Rich Koomjian, Trustee
300 Portwine Road
Riverwoods, IL 60015

Re: Fences and Deer

Dear Trustee Koomjian and Members of the Environmental Committee:

Thank you for inviting the Riverwoods Preservation Council (RPC) to comment on the proposed fence ordinance recommended by the Plan Commission to the Board of Trustees.

Woodland Health Study

As the RPC reported to the Board at its October 20, 2009 meeting, the recently-completed Woodland Health Study leaves no doubt that our woodlands are unhealthy and under great stress. That conclusion was reached using nationally recognized standards employed by well-known experts. In unprotected areas, the woodland understory is minimal, likely the result of a combination of deer browse and closed tree canopy. Without an understory, the critical role played by the interrelationship and diversity of trees, other plants, insects, small mammals and birds is upended. Birds feed their young on a variety of insects. Insects depend on native wildflowers and other plants. Small mammals depend on native plants and insects. Predators such as owls and hawks depend on the presence of small mammals. A variety of trees produces a leaf mixture that determines soil chemistry and microscopic life upon which the flora and fauna depend. Ignoring the interrelationship of species, and allowing the system to remain out of balance, threatens our natural habitat.

The cost of the Woodland Health Study was shared between the RPC and the Village, and RPC appreciates the Board's interest in the subject. As stated, the Study has identified deer browse as one of the primary reasons for the poor condition of the Riverwoods woodlands. If the Board causes the removal or movement of existing deer fences by adoption of the new ordinance, what

The RPC is a tax-exempt 501(c)3 nonprofit corporation, and a member of the Chicago Wilderness coalition. Your contribution is tax-deductible to the full extent allowed by law.

is the Village's proposed solution to the deer browse problem that will remain and will result in overbrowse of the newly unfenced areas?

State of the Woodlands

To the uninitiated, the Riverwoods woodlands may look healthy because they are green and lush. But appearances are deceptive. Much of the green is not a sign of health. It is the green leaves of old trees without the progeny of young saplings. It is the green of non-native plants that do not sustain native wildlife. It is the green of invasive plants that smother native species.

Riverwoods' woodlands are declining in health. Nature is out of balance, and one of the most significant imbalances is the overpopulation of deer. In addition to the conclusions of the Woodland Health Study, RPC has conducted aerial deer surveys for two years which show that deer numbers are very high in the wooded portions of Riverwoods. Protecting properties with fences is one way toward recreating balance. Fencing is not an ideal solution. But it is the only solution presently available to residents of Riverwoods who care about the health of their woodlands.

This situation is not unique in northern Illinois or nationally. Many scientifically valid studies, including those conducted in Lake County and the Chicago metropolitan area, have shown that deer overpopulation and overbrowsing have resulted in declining woodland health. This conclusion also is stated in a recent report by Chicago Wilderness, an alliance of more than 160 local, state and federal administrative agencies, municipalities, universities and non-governmental organizations working to protect, restore, study and manage natural ecosystems of the Chicago region. Chicago Wilderness includes organizations such as USEPA, USDA Forest Service, Illinois Department of Natural Resources, Audubon Society and Lake County Forest Preserve. We have attached a copy of the Chicago Wilderness report.

An Opportunity

The Plan Commission has presented the Board with an opportunity to consider the importance of woodlands to Riverwoods, and the role of deer management in furthering woodland preservation. The RPC believes that woodlands are an integral part of Riverwoods' identity, and the reason many residents chose to live in this community. The RPC also believes that deer management is essential. Deer management can be attained by Village action (e.g., culling, sterilization and/or other means). Deer management can also be attained by voluntary individual action – fencing – since the vast majority of real estate in the Village is privately owned.

Failure to protect woodlands from overbrowsing, and impeding the ability of landowners to protect their own properties, undermines the Village's Woodland Protection Ordinance, ecological provisions of the Riverwoods Comprehensive Plan and Village reforestation and invasives removal programs.

The RPC is prepared to work with the Village to develop an integrated approach to woodland protection that does not endanger restoration efforts by private property owners and the full enjoyment of their properties.

Fences

The Village has chosen not to address the deer threat. Homeowners have been forced to take action by installing polypropylene or welded wire deer fences, at their own expense. Some owners received permits from the Village to install the fences. Other owners sought permits to install deer fences and were told by the Director of Community Services that they did not need permits. Board minutes reflect that the Director of Community Services stated, without contradiction, that deer fences are different than regular fences and do not require permits. The Village chose not to regulate deer fences because it had decided that the deer issue was best addressed by individual homeowners rather than the Village. It would now be highly objectionable if the Village were to penalize residents for the proliferation of deer fences that were installed to preserve their properties. Instead, the Village should be working collaboratively with residents to preserve and restore the remaining woodlands in the Village.

Deer “Channeling”

Many factors cause deer channeling. We’ve heard the argument that deer fences channel or herd deer onto unfenced properties. Deer fences do keep deer off fenced properties and are one cause of deer moving onto unfenced properties. However, using this argument in opposition to deer fences is a very selective use of the facts. It is not only fences that channel deer. Barking dogs, supplemental deer feeding, turf grass lawns and non-native invasive plants also result in channeling of deer.

Address the real problem: few native species can thrive without protection. The deer channeling argument does not recognize the underlying problem in our woodlands. The native woodlands have been so thoroughly overbrowsed that channeling deer onto unfenced properties is unlikely to have a measurable effect on already degraded woodlands. In other words, putting up or taking down a deer fence has a profound effect on the native vegetation within a protected property, but has little effect on native vegetation on nearby unprotected properties.

Take an approach with the least negative impact on the woodlands. Another argument we’ve heard is that deer fences impede the movement of deer through Riverwoods. A survey of fences indicates otherwise. If, however, an examination of the facts shows that deer movement is or might in the future be restricted, one approach would be to require that new fences be installed at least 5 feet from existing fences, to provide a pathway for deer movement.

What Happens if Fences are Removed?

All properties will be equally degraded. With regard to native plants, Riverwoods is a “desert.” Native plants and oak saplings are far from abundant. Oak saplings and other new growth may appear in the spring, only to be devoured by deer during the growing season. Deer fences, together with restoration efforts by owners of fenced properties, turn those deserts into more balanced and natural landscapes. If the deer fences are removed or reduced, previously fenced properties would quickly revert to the degraded state of the unfenced properties due to deer browse. But there would be no counterbalancing improvement in previously unfenced properties. The deer population would ensure that all properties are degraded.

Increased availability of food will result in higher deer population and further deer overbrowse. Deer are voracious and opportunistic eaters, consuming an average of eight pounds of vegetation daily. If fences are removed from properties, deer will not eat more selectively from all properties, but will eat all desirable vegetation from all properties. Studies show that an increased availability of food in an area means that the number and density of deer will increase. Thus, the removal or movement of deer fences is likely to increase the deer population in Riverwoods' woodlands, with further increased deer browse issues.

Do Fences Actually Protect Woodlands?

There is little doubt that deer fences work. The number of white trillium – an indicator species – is vastly higher within a fenced area and near locations where traffic or other factors keep deer away. In most areas frequented by deer, trillium is almost non-existent. Within two or three years after the installation of woodland protection fences, the woodlands begin to recover, often assisted by homeowners performing rehabilitation work such as the planting of native species. Trillium and oak saplings return and are able to survive and thrive.

The Woodland Health Study showed that in the spring the two deer-fenced sites had substantially higher numbers of native species than the unfenced properties. In the fall study, the numbers were not significantly different. AES, the organization that conducted the study, suggested that one of the properties may have been so disturbed by the time its fence was installed that many native species have not yet recovered. In addition, the selected sites were in areas of dense canopy. The Woodland Health Study was a first step. Further study, in areas of both dense and light canopy, is required. We hope the Village will work with us to carry out such a study.

Enclosed is a Spring 2008 photograph of Lots A and B from the Woodland Health Study that shows a dramatic difference between the fenced and unfenced properties. This photograph was taken by professional photographer Mike MacDonald, who provided the image to Chicago Wilderness Magazine for its August, 2008 article about the publication of RPC's woodland guide.

Numerous studies, including the Village's own 1996 study of vegetation at Village Hall, show that unfenced native plants do not thrive in areas without adequate deer management.

Fencing Small Areas

Welded wire fences, which are typically five feet high, are effective for small areas. Since deer can jump fences that are 7 ½ or 8 feet high, welded wire fences used for larger areas must be supplemented by obstacles that discourage deer from jumping the fence. The proposed fence ordinance restricts welded wire and woven wire fences to temporary use in a small circle around very young or short trees and to protect flower or vegetable gardens. If the trees are planted correctly, each tree would require a separate fence. A multitude of trees means a multitude of fences. There is no provision for larger trees. There is no provision for native shrubs and other native understory plants. The result would be a multitude of small fenced areas, which increases

fragmentation of the woodlands and does not provide the large natural areas needed for woodland regeneration and animal habitat.

Woodlands are more than simply an assemblage of trees. Woodlands are a combination of trees of various sizes, together with shrubs and other understory plants. They are large swaths of natural areas, not small islands of nature in the midst of something else.

Variations, Restoration Permits and Grandfathering

Variations. The Plan Commission has suggested that deer fence owners with hardships or special concerns could apply for a variance from the Village. The Zoning Board of Appeals grants very few variances, especially if it is provided no criteria or guidelines concerning woodland preservation.

Restoration Permits. On October 8, the RPC urged the Plan Commission to establish a “special exemption” for properties with deer fences on which woodlands are being restored. We suggested that the owners of these properties could enter into the equivalent of a “restoration permit” with the Village and be required to follow specific woodland rehabilitation protocols. These properties could be part of a larger Village woodland health study, and could have discrete signage specifying their participation in woodland restoration. Such an approach would be an opportunity for the Village to build on the Woodland Protection and tree preservation ordinances, and to establish itself as a leader in woodland protection. At the November 5 Plan Commission meeting, the Village Attorney stated that he didn’t know how such a program would work if there was a transfer of title on the property. We feel that it would be handled in the same manner as any title transfer while a permit is in effect. If the new owner does not fulfill the requirements of the permit, the permit lapses. Alternatively, the term of the permit could run until the original owner transfers title to the property, and then the new owner would be required to reapply for a permit.

Grandfathering. The Village Attorney also stated at the November 5 Plan Commission meeting that it is “not atypical” to change zoning to make previously permitted activities non-compliant, although there may often be a longer grandfathering period than the three years proposed by the Plan Commission. The RPC spoke with several surrounding communities about the initially proposed five-year grandfathering period. Representatives of those communities were surprised that existing fences wouldn’t be completely grandfathered, as would happen in their communities.

Cost of Deer Fences and Gates

The Director of Community Services stated at the November 5, 2009 Plan Commission meeting that it would cost about \$5000 to move a deer fence. It is likely that the cost for moving a deer fence on two acres would be substantially higher. New posts probably would be required. Posts must be imbedded in the ground, and labor is expensive. In addition, the proposed ordinance prohibits driveway gates taller than 6 feet. Many owners installed gates that are the same height as their deer fences, so deer would not jump the fence at the driveway. The gates are an

expensive portion of the total fence cost, and replacing or modifying them would represent a significant cost.

Taking of Private Property

Six foot fences will not protect woodlands. Deer jump 6-foot fences, especially when they see desirable native plants inside the fence. The front, side and back yards comprise most of the undeveloped property on a lot. Residents should be allowed to protect those areas with deer fences that exceed 6 feet in height.

For example, most of south Riverwoods is zoned R-2, with a front yard setback of 60', rear setback of 50' and side setbacks of 40' each for interior lots. Using rough calculations for an average 2-acre interior lot, 1.1 acres of the 2 acres (55%) is within the front, side and back yards and cannot be protected by a deer fence under the proposed ordinance. An even higher portion – 63% – of a corner lot would remain unprotected.

When RPC presented these numbers at the October 8, 2009 Plan Commission meeting, Pat Glenn quickly ran his own set of numbers for an average 2-acre interior lot, and arrived at an even higher percentage than RPC calculated -- 61% -- of the 2-acre property being unfenceable by deer fencing under the proposed ordinance.

If structures and other improvements within the building areas are taken into account, the percentage of the undeveloped portion of a lot that the front, side and back yards represent is even greater. In other words, under the proposed ordinance, use of deer fencing for woodland protection would be limited to only a small fraction of the undeveloped portion of an owner's property.

Many people moved to Riverwoods so they could enjoy the woodlands. They are attempting to restore or preserve their properties for their families and future generations of Riverwoods residents. Prohibiting an owner from preserving or restoring a substantial portion of his or her property would be a frustration of a fundamental ownership right and an inappropriate taking of that property.

Woodland Protection Ordinance

The Village's Woodland Protection Ordinance of 2005 is an important benchmark. It states:

“In the village's woodland ecosystem, the canopy, understory and ground plane (herbaceous) levels each have characteristic species. ... The natural woodland ecology in the village is modified and pressured by human activity and development, the presence of deer herds, in particular, and other wildlife and insect populations, and the proliferation of non-native, invasive species such as buckthorn and garlic mustard. ... Since 1976, the village's woodlands have diminished in quantity and in the quality of the plant community as a result of the pressure factors that are described above. As a result, the village's woodlands have become more fragmented and have suffered a loss in the ability to regenerate the more desirable species of trees and plants of the native landscape... The

maintenance of a healthy woodland environment in the village provides the following benefits: shade and cooling; control of erosion; filtering of water pollutants from stormwater; recharging of aquifers used by residents for drinking water; replenishment of the groundwater table; maintenance of flows into wetlands and streams; cleansing of air pollutants; mitigation of global warming by absorbing greenhouse gasses; and promotion of a biologically diverse community of micro-organisms, plants and animals, protecting some species from extinction while preserving genetic diversity. ... The preservation of woodland areas in the village will provide many essential benefits to the community as a whole, as described in the foregoing sections, and, accordingly, the adoption of a long-term policy of preserving woodland areas is necessary to safeguard, protect and promote the health, safety and welfare of the current and future inhabitants of the village and surrounding areas.”

Removal or severe restriction of deer fences will not further the very sound policies reflected in the Village’s Woodland Protection Ordinance.

Riverwoods Comprehensive Plan

In addition to the Village’s Woodland Protection Ordinance, the Board adopted a Comprehensive Plan in 2006 with provisions specifically addressing woodland protection as a goal. Among other ecology-related goals, the Comprehensive Plan states:

“To the greatest extent possible, objectives are to ... conserve and enhance native trees and plants and other compatible vegetative cover, especially the woodlands” and to “... nurture desirable and endangered wildlife and aquatic species, and enhance their habitats.”

Removal or severe restriction of deer fences also will not further the very sound policies reflected in the Village’s Comprehensive Plan. The Village’s Comprehensive Plan recognizes that, as the fortunate stewards of these woodlands, it is our duty to protect and promote the healthy future of the local ecological system.

Economics

The RPC’s focus is environmental, not financial. We must point out, however, that studies have shown that healthy woodlands increase property values.

Conclusion

The RPC strongly recommends a comprehensive woodland stewardship plan to protect the community’s woodlands. Restrictions without a well-considered plan call into question the dedication of the Village to protecting its woodlands, and the value of other Village programs such as the matching funds programs for reforestation and removal of invasive plants. If restored areas are not protected, such programs are destined to fail.

Further, pushing deer fences to the building setbacks deprives owners who want to restore the woodlands of their right to enjoy the majority of their property. People moved to the wooded

areas of Riverwoods to enjoy those woodlands. They accept the high property taxes they must pay to live on these properties. But payment of high taxes for less than full property rights is neither fair nor reasonable, and the Board should not be putting residents in this position.

Finally, we ask whether the Village may be required to file an environmental impact statement if the Board adopts the proposed fence ordinance, because of the significantly negative impact removal or movement of fences is likely to have on the woodlands. The Board may consider retaining an independent expert to study this question or to further study the Village's woodlands. The RPC stands ready to assist the Village's expert with such studies, as well as helping the Village to develop and implement a comprehensive woodland stewardship plan.

Sincerely,

Riverwoods Preservation Council