

# **IMPACT OF EXTENSIVE STREET TREE LOSS ON URBAN DWELLERS' SENSE OF PLACE**

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I took advantage of a natural experiment that occurred in southeast Michigan when an exotic insect pest caused the death and removal of more than 10,000 urban street trees within several years. Where dead street trees were clustered, the ecological and aesthetic integrity of neighborhoods changed dramatically, and the restorative benefits provided by these trees were lost. This paper will consider the impact of street tree loss on a community's sense of place and resultant interest in environmental stewardship.

In 2007, 1,300 households were selected to receive a four-page survey about their reaction to the loss of street trees and their attitudes toward urban nature. Households were selected based on physical, social, and economic criteria and the property's location on a street with either great (>70 percent) or limited (<30 percent) street tree loss. Forty-three percent of the sample population responded.

The results are described in relation to these categorical topics: sense of place (a psychological measure of security, attachment, contentment), degree of engagement in urban nature as experienced from home and neighborhood, degree of engagement or interest

in helping the ecological recovery process, likelihood of physical participation in habitat creation (spending time, getting dirty), intellectual participation (using educational materials that may alter perception and action), economic participation (spending money on tree installation and habitat improvement), and community participation (planting new trees or enhancing habitat in the neighborhood and nearby park). Eighty-one percent of the survey participants said that street trees contribute to a sense of pride in the neighborhood; 68 percent said they believe that street trees enhance the sense of well-being. Of those who lost street trees in front of their home, 13 percent use their front porch less, 17 percent close the blinds or drapes more often, 11 percent spend more time gardening, and 56 percent report getting less enjoyment from driving down their home street.

The results of this scientific inquiry are being used to inform design options and suggest management strategies for urban nature in residential areas ranging along a continuum of environmental stewardship. This guidance is being shared on the Web site <http://natureforcities.snre.umich.edu/>, developed as an outreach component of this research.