

# TURFGRASS RESEARCH 2015



JULY 2015



Kansas State University  
Agricultural Experiment Station  
and Cooperative Extension Service

K-State Research and Extension is an equal  
opportunity provider and employer.

## Effects of Home Value, Home Age, and Lot Size on Lawn Watering Practices of Residential Homeowners

*Dale Bremer<sup>1</sup>, Steve Keeley<sup>1</sup>, and Abigail Jager<sup>2</sup>*

**Summary.** Lawn care and lawn watering practices of residential homeowners were significantly affected by home value and home age, but lot size was less a factor.

**Rationale.** Urbanization is increasing the land area covered with turfgrasses, which may affect water quantity and quality. Inaccurate perceptions about water requirements for turfgrass, or embellished expectations about lawn appearance (e.g., maintaining perfectly green lawns, even during drought) may result in over-irrigation. Residential home dwellers may need to reduce irrigation inputs to conserve water and improve water quality.

**Objectives.** Determine how home value, home age, and lot size affect the perceptions, knowledge, and behaviors of residential homeowners in Olathe and Wichita, Kansas, regarding irrigation and lawn care during summer months.

**Study Description.** A survey (Figure 1) was mailed to 9,992 homeowners in Olathe and 15,534 homeowners in Wichita, with a return rate of 12%. Home values were grouped as: <\$150,000; \$150,000 to \$200,000; \$200,000 to \$250,000; and >\$250,000. Home ages were grouped as: 1) >30 years old; 2) 15 to 30 years old; and 3) <15 years old. Lot sizes were grouped as: 1) <9,000 ft<sup>2</sup>; 2) 9,000 to 14,000 ft<sup>2</sup>; and 3) >14,000 ft<sup>2</sup>. Lot size did not equate strictly to lawn size, but also included the home, garage, impervious surfaces, etc.

<sup>1</sup> Department of Horticulture, Forestry and Recreation Resources

<sup>2</sup> Department of Statistics

View all turfgrass research reports online at: <http://newprairiepress.org/kaesrr>



**Results.** Owners of more expensive and/or newer homes were more likely to: water frequently, water on a routine schedule, feel it was important to have a green lawn all the time, have an in-ground sprinkler system, and sweep or blow grass clippings and lawn care products off impervious surfaces. Owners of less expensive and/or older homes were more likely to: never water or water infrequently, water based on the lawn's appearance rather than on a routine schedule, consider it less important to have a green lawn, not have an in-ground sprinkler system, and leave grass clippings and lawn care products on impervious surfaces rather than blowing them off. A small percentage of homeowners who swept or blew clippings and/or lawn-care products did so into streets/storm drains. Owners of less expensive and/or older homes were somewhat more likely to engage in this practice.

**Recommendation.** Educational efforts to improve lawn water conservation should be concentrated on homeowners in more expensive and/or newer homes because they water more frequently and routinely. Efforts to protect surface water quality should include homeowners of less expensive and/or older homes.



Kansas State University  
Agricultural Experiment Station  
and Cooperative Extension Service





This is a survey of homeowners' opinions about and methods of watering their lawns from June-August. It is part of a study being conducted by researchers at Kansas State, Colorado State, and Northwest Missouri State Universities, with funding from the U.S. Department of Agriculture. All responses and information will be kept strictly confidential. Your participation is greatly appreciated!

## Watering Your Lawn

Please select only one answer per question unless otherwise noted.

- How often do you water your lawn during dry periods of the summer?
  - Never (skip to #5)
  - Once per week or less
  - 2-3 times/week
  - 3-4 times/week
  - 5-7 times/week
  - More than once per day
- How do you decide when it is time to water your lawn?
  - Regular/routine schedule
  - When lawn looks dry
  - When weather is hot & dry
  - Other \_\_\_\_\_
- How do you decide how much to water your lawn?
  - Same amount every time
  - I apply more if my lawn looks dry
  - I apply more if weather is hot & dry
  - Other \_\_\_\_\_
- When you water, how long do you water each area of your lawn?
  - Less than 15 min
  - 15-30 min
  - 30-45 min
  - 45-60 min
  - 1-2 hours
  - Other \_\_\_\_\_
 Do you know how much water you are applying in each area during that time period?
  - Inches
  - Gallons
  - Not something I measure
- Do you know what type of grass you have in your lawn?  Yes  No  
If yes, what type of grass? \_\_\_\_\_
- How much total water do you think your lawn requires per week?
  - Inches
  - Gallons
  - I don't know
- On a scale of 1 to 5, how important are each of the following considerations in your decisions about your lawn (1= not important, 5=very important):
  - 1 2 3 4 5 I like my lawn to look green all the time.
  - 1 2 3 4 5 I try to keep my water bill from getting too high.
  - 1 2 3 4 5 I want to make sure that I keep my lawn alive during hot/dry weather.
  - 1 2 3 4 5 I am concerned about water conservation.
  - 1 2 3 4 5 It is important that my neighborhood stays looking nice.
  - 1 2 3 4 5 I try to follow current lawn care guidelines and recommendations.
- Do you sweep or blow your driveway after:
  - Applying lawn care products?  Yes  No  N/A
  - Mowing? (grass clippings)  Yes  No  N/A
  - If yes, do you sweep or blow:  Back onto lawn?  Into street or storm drain?
- Do you have an in-ground lawn sprinkler system?  Yes  No  
If yes, how actively do you adjust your sprinkler timer?
  - Never or rarely
  - Seasonally (spring, summer, fall)
  - Monthly
  - Weekly or biweekly
  - When lawn looks dry
  - Daily
- Do you own your home?  Yes  No  
Do you water and maintain your lawn yourself?  Yes  No  
Do you have a swimming pool or other significant water feature?  Yes  No  
About how large is your lawn?  less than 1/2 acre  1/2 to 1 acre  over 1 acre
- Would you be willing to participate in a follow up interview?  Yes  No  
If so, how may we contact you? \_\_\_\_\_

Everyone returning this survey within 30 days will be entered into a drawing for a \$100 gift card (people who agree to a follow up interview will double their chances of winning). For more information about this project or to access this survey online, go to [www.ksuturf.com](http://www.ksuturf.com).



Kansas State University  
Agricultural Experiment Station  
and Cooperative Extension Service

Figure 1. This survey was developed to determine how residential homeowners make decisions about lawn care and watering during in the summer months.

