

CASE STUDY: Trilogy at Redmond Ridge Transition to Sustainable Lawn Care Practices

Overview

In 2015, **Trilogy at Redmond Ridge** transitioned its communal lawn areas from a traditional management strategy to one grounded in sustainable methods. The management team implemented two changes:

- mulch mowing instead of removing grass clippings; and
- reduced lawn fertilization (four applications per year to three).



BOTTOM LINE COST SAVINGS:

\$7,200 in 2015

- ✓ Mulch mowing cut labor by \$4,600 and grass disposal by \$1,000 for a \$5,600 total decrease.
- Fertilizing costs decreased by more than \$1,500.



Changes were evaluated by comparing 2014 and 2015 lawn care costs and surveying residents before and after the transition. In addition, three test plots were selected for a side-by-side comparison of lawn

quality, total ground cover, and appearance. This two-year study (2014–2016) was conducted by Seattle Public Utilities, Washington State University, Trilogy at Redmond Ridge, and Pacific Landscape Management.

Outcomes

1 – Residents are more satisfied with lawn appearance.

- More residents were satisfied with lawn appearance after the transition (42% before and 63% after).
- Dissatisfaction fell from 27% to 10%.





2 – Residents are more satisfied with lawn color.

- More residents were satisfied with lawn color after the transition (37% before and 69% after).
- Dissatisfied residents mainly mentioned uneven color, brown patches, and moss.



About the

same

35%

A little

worse

A lot

worse

3 – Residents think lawns look better compared to the previous year.

- After the transition, 61% who lived in Trilogy in 2014 said they did not notice any differences in the lawn in 2015 compared to the previous year.
- When asked to compare the lawn to this time last year, 49% said it looked better while 16% said it looked worse. The rest said it looked about the same.

Test Plot Study

Three comparable side-by-side lawn plots at Trilogy were selected for a two-year controlled study (2014– 2016) to 1) compare mulch-mowed versus nonmulch-mowed plots and 2) investigate the effect of two versus four fertilizer applications per year. Changes in ground cover percent, soil organic matter content, and soil pH were measured.

In the baseline, percent lawn cover for plot #3 was lower than for the other two sites. Over the two years, variation in percent lawn cover declined among the three plots. The percent of lawn cover appears to be affected mainly by season—relatively higher in spring 2016 than in the baseline or fall 2015



Mulch mowFertilizing FrequencyPlot #1 (control)NoFour times per yearPlot #2YesThree times per yearPlot #3YesTwo times per year

and 2016—and not by plot. There were slight to no differences in soil pH and organic matter among the three plots after one and two years.

Much

better

A little

better

Overall, observations suggest that treatment plots achieved similar lawn conditions as the control plot. However, without repeating the study at more sites, we are not able to conclude whether other sites with different soil conditions would achieve similar results.

Resources

Seattle Public Utilities "For Landscape Professionals" (See "Lawn" section for lawn care guides in English and Spanish, and this case study; see "IPM" section for weed and pest control): www.seattle.gov/util/landscapeprofessionals

WSU Cooperative Extension research and home lawn guides: <u>http://www.puyallup.wsu.edu/turf</u> and <u>http://gardening.wsu.edu/lawns</u>