**TURFGRASS ECONOMIC SURVEY – 2018**

**Sod Producer Version**

OMB No. 0535-NEW

Approval Expires: X/XX/20XX

Project Code: XXX

SurveyID:

**United States**



**Department of Agriculture**

**NATIONAL**

**AGRICULTURAL**

**STATISTICS**

**SERVICE**



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**INSTRUCTIONS**:

· Report for **all** land operated, including land rented from others, in New Jersey.

· Report for all seasons (winter, spring, summer, and fall) during 2018.

# A. Company information

1. Where is your company located?

Primary county: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ List any additional counties: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. How long has your company been in business? \_\_\_\_\_\_\_\_\_\_ years

1. What was your operation’s total land area under the following categories in 2018?

Total area \_\_\_\_\_\_\_\_\_\_ acres

Turf area \_\_\_\_\_\_\_\_\_\_ acres

1. Did you expand your turf operation in 2018?

 Yes  No (if no, skip Question 5)

1. How much turf area was increased under the following categories during 2018?

For production in 2018 \_\_\_\_\_\_\_\_\_\_ acres

In anticipation for 2019 **\_\_\_\_\_\_\_\_\_\_** acres

1. Are you a member of a sod producers organization?

New Jersey Cultivated Sod Assoc.  Yes  No

Turfgrass Producers International  Yes  No

1. Please indicate whether membership in an organization has been helpful in your business.

New Jersey Cultivated Sod Assoc.  Very Helpful  Helpful  No Help

Turfgrass Producers International  Very Helpful  Helpful  No Help

# B. Turfgrass Specific

1. Please indicate the percentage of each type of turfgrass you grow and sell? (select all that apply).

\_\_\_\_ % Kentucky Bluegrass \_\_\_\_ % Perennial Ryegrass \_\_\_\_ % Annual Bluegrass

\_\_\_\_ % Fine Fescue \_\_\_\_ % Tall Fescue \_\_\_\_ % Bentgrass

\_\_\_\_ % Zoysia

\_\_\_\_ % Other Mixture(specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. How is your sod harvested?

 big-roll sod

 palletized sod

 both (specify) \_\_\_\_\_\_ % big-roll sod \_\_\_\_\_\_ % palletized sod

1. What are the important sources of information for your turf-related problems? (Select all that apply).

 Rutgers Cooperative Extension Agent or Specialist  Cook College Office of Continuing Professional Education

 Rutgers University (other)  Private consultant

 Commercial Tech Rep.  Peers

 Industry magazines  Professional Organization

 Internet  TV/Radio

 Books  Other (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# C. Clients

1. Please indicate the percentage of sales ($) to the following clients in 2018.
   1. Wholesale to landscape contractors…………………………………….… \_\_\_\_\_ (%)
   2. Wholesale to other growers…………………………………………….… \_\_\_\_\_ (%)
   3. Wholesale to retailers……………………………………………….…….. \_\_\_\_\_(%)
   4. Wholesale to institutions (athletic fields, golf courses, schools, etc.) …... \_\_\_\_\_ (%)
   5. Own use (installed)…………………………………………………… …. \_\_\_\_\_ (%)
   6. Retail to public………………………………………………………….… \_\_\_\_\_ (%)
   7. Other (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_…………………………… \_\_\_\_\_ (%)

1. Do you sell and install turfgrass directly to consumers?  Yes  No

1. Based on your company’s sales, which of your client groups have experienced the highest rate of growth in the past 5 years? Please rank the top three in descending order.

Fastest growing client group **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

2nd fastest growing client group **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

3rd highest growing client group **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

# D. Sod-related Problems

1. What do you consider to be difficult problems facing your industry? (Select all that apply under each category).

**a. Regulation**

 Local noise ordinances  Water restrictions

 Pesticide application (amount, type of chemical)  Other (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**b. Management**

 Labor availability  Immigration laws  Employee training

 Health issues due to turf activity (i.e., poisoning, etc.)  Language barriers

 Other (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. **Turfgrass**

 Soil related  Diseases  Insects

 Weeds  Equipment Cost  Erosion

 Water related  Shade  Traffic

 Other (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Which do you anticipate to be the major problems facing the sod industry 5 years from now? (Select all that apply under each category).

**a. Regulation**

 Local noise ordinances  Water restrictions

 Pesticide application (amount, type of chemical)  Other (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**b. Management**

 Labor availability  Immigration laws  Employee training

 Health issues due to turf activity (i.e., poisoning, etc.)  Language barriers

 Other (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. **Turfgrass**

 Soil related  Diseases  Insects

 Weeds  Equipment Cost  Erosion

 Water related  Shade  Traffic

 Other (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# E. Expenses

16. **Best Estimate of sod-growing expenses during the year 2018 (to the nearest $1,000):**

1. **Seed** ………………………………………………………………………………… **$ \_\_\_\_\_\_\_\_\_\_**
2. **Equipment and Operation (include depreciation, exclude labor)**

Tractors.…………………...…..…………………………………...……… $ \_\_\_\_\_\_\_\_\_\_

Mowers……………………………………………………………..……... $ \_\_\_\_\_\_\_\_\_\_

Irrigation equipment.….…………..……………………………….……… $ \_\_\_\_\_\_\_\_\_\_

Sweepers………….. ….…………..……………………………….……… $ \_\_\_\_\_\_\_\_\_\_

Seeders...………….. ….…………..……………………………….……… $ \_\_\_\_\_\_\_\_\_\_

Harvester………….. ….…………..……………………………….……… $ \_\_\_\_\_\_\_\_\_\_

Land Preparation Equipment (i.e., plows,disks,levelers)…………..……... $ \_\_\_\_\_\_\_\_\_\_

Chemical application equipment (i.e., sprayers)……….. ….…………..… $ \_\_\_\_\_\_\_\_\_\_

Other implements…………………………………………………..…… $ \_\_\_\_\_\_\_\_\_\_

Fuel, lube and electricity..…………………………………………....…… $ \_\_\_\_\_\_\_\_\_\_

Repairs and maintenance.………………………………………...…..…… $ \_\_\_\_\_\_\_\_\_\_

Equipment rental…..…………………………………………………….… $ \_\_\_\_\_\_\_\_\_\_

**b) Chemicals**

Weed control products….……..………………………….….……………. $ \_\_\_\_\_\_\_\_\_\_

Insect control products……..…………………………….………...……… $ \_\_\_\_\_\_\_\_\_\_

Disease control products..……………….............…………………..…..… $ \_\_\_\_\_\_\_\_\_\_

Plant-growth regulators…………….……………...…………………….… $ \_\_\_\_\_\_\_\_\_\_

Bio-stimulants… …….…………….………………...………………….… $ \_\_\_\_\_\_\_\_\_\_

Other ……………………………....…………………………………….… $ \_\_\_\_\_\_\_\_\_\_

1. **Fertilizer and Soil Amendments**

Fertilizer ………...………………………………………………………… $ \_\_\_\_\_\_\_\_\_\_

Organic Fertilizer .………………………………………………………… $ \_\_\_\_\_\_\_\_\_\_

Lime….. ………...………………………………………………………… $ \_\_\_\_\_\_\_\_\_\_

Manure and compost.……………………………………………………… $ \_\_\_\_\_\_\_\_\_\_

Other ……………………………....…………………………………….… $ \_\_\_\_\_\_\_\_\_\_

1. **Labor (salaries/wages, not taxes, not management)**

Production wages/salaries(establishment, maintenance and harvesting)…. $ \_\_\_\_\_\_\_\_\_\_

Transportation………………...…………………………………………… $ \_\_\_\_\_\_\_\_\_\_

Supervisory wages/salaries……….…………………………………….… $ \_\_\_\_\_\_\_\_\_\_

Clerical/sales wages/salaries………………………………………………. $ \_\_\_\_\_\_\_\_\_\_

**e) Services purchased**

Fertilizer application………...…………………………………………...... $ \_\_\_\_\_\_\_\_\_\_

Lime application……………...…………………………………………..... $ \_\_\_\_\_\_\_\_\_\_

Pesticide application………...…………………………………………...... $ \_\_\_\_\_\_\_\_\_\_

Sod harvesting………..…...…………………………………………..…… $ \_\_\_\_\_\_\_\_\_\_

Transport services…………...………………………………………..…… $ \_\_\_\_\_\_\_\_\_\_

Irrigation installation…………...……………………………………..…… $ \_\_\_\_\_\_\_\_\_\_

Other contract labor…………………………………………………...…… $ \_\_\_\_\_\_\_\_\_\_

**f) Advertising cost….…….…………………………………………………………… $ \_\_\_\_\_\_\_\_\_\_**

1. **Other direct expenses (Specify)**

…………………………………………………………...………………... $ \_\_\_\_\_\_\_\_\_\_

…………………………………………………………….….…………… $ \_\_\_\_\_\_\_\_\_\_

………………….…….…..……………………………………………….. $ \_\_\_\_\_\_\_\_\_\_

…………………………………………………………………………….. $ \_\_\_\_\_\_\_\_\_\_

……………………....…………………………………………………..… $ \_\_\_\_\_\_\_\_\_\_

1. **Total Sod-growing Expenses……………………………………………………... $ \_\_\_\_\_\_\_\_\_\_**

1. Equipment/supplies purchased in 2018 from vendors outside of New Jersey was \_\_\_\_\_\_% of total expense.

1. What was the estimated value of turf related buildings and land owned and used by this firm as of December

2018 (to the nearest $1,000)? $ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What was the estimated value of turf related equipment owned and used by this firm as of December 2018 (to the nearest $1,000)? (include tractors, mowers, sweepers, seeders, etc.) $ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. How many positions did this company have in 2018? \_\_\_\_\_\_\_\_\_\_\_ employees

1. What percentage of the your company’s total workforce do the following categories represent?
   * Year round full-time \_\_\_\_\_\_%
   * Seasonal full-time \_\_\_\_\_\_%
   * Year round part-time \_\_\_\_\_\_%
   * Seasonal part-time \_\_\_\_\_\_%

1. Please indicate the percentage of total hours devoted to turf-related activities by the following employees.
   * Year round full-time \_\_\_\_\_\_%
   * Seasonal full-time \_\_\_\_\_\_%
   * Year round part-time \_\_\_\_\_\_%
   * Seasonal part-time \_\_\_\_\_\_%

# F. Cultural Practices and Equipment

1. What types of mower are primarily used by your company (select all that apply)?

 Tractor –drawn rotary  Tractor-drawn reel

 Other (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What type of mower blade do you primarily use?

 Mulching  Non-mulching

1. What is the average interval between mowings during the growing season? \_\_\_\_\_\_\_\_\_days

1. What type of equipment do you use to water the sod?

 Manual hand-move  Center pivot

 Manual wheel-move  Other (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is the average interval between waterings without rain? \_\_\_\_\_\_\_\_\_days  Don’t know

1. What is the typical length of time you water when irrigating? \_\_\_\_\_\_\_\_\_hours  Don’t know

1. What are the sources of water used? (indicate percentage provided by each)

\_\_\_\_ % Municipal \_\_\_\_ % Recycled \_\_\_\_ % Wells

\_\_\_\_ % Surface water \_\_\_\_ % Other (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# G. Sales

1. What was the total billing for sod for the year 2018 (to the nearest $1,000)? $ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What percentage of sod sales was sold out-of-state? \_\_\_\_\_\_\_\_\_\_ %

1. Please indicate your organization’s methods of advertising used in 2018. (select all that apply).

 Newspaper  Direct Mail  Radio

 Television  Signs  Brochures

 Internet  Other (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# H. Opinion

1. How do you feel the demand for sod will change over the next 5 years?

 Increasing  Constant

 Decreasing  Don’t know

1. In the past 5 years, were you affected by water regulations during the time of drought?

 Yes  No (skip next question)

1. Please estimate the total loss of business in terms of decreased revenue during the drought (to the nearest $1,000)?

$ \_\_\_\_\_\_\_\_\_\_

1. Do you believe turfgrass represents a healthy environment?

 Yes  No  Don’t know

1. Do you believe pesticide residues on turf present potential health risks to turf users?

 Yes  No  Don’t know

1. Is it important to develop turfgrasses that require less pesticide inputs?

 Yes  No  Don’t know

1. Is it important to develop turfgrasses that use less water?

 Yes  No  Don’t know

1. Do you know what Integrated Pest Management (IPM) is?

 Yes  No

1. Which of the following best fits your view of what IPM is?

 No chemical use  Pesticide use as last resort  Least toxic chemical use

 Best use of chemical, cultural, biological, and genetic pest control strategies

1. Do you use IPM on your operation?

 Always  Sometimes  Never

 Not practical

1. Would you be interested in attending workshops sponsored by Rutgers University on proper establishment, maintenance, harvesting and marketing of sod?

 Yes  No

1. Do you understand how Rutgers Cooperative Extension (RCE) services can help you?

 Yes  No  Not familiar with RCE

1. How do you perceive Rutgers Cooperative Extension?

 Very helpful  Helpful  Fair

 Not helpful  Don’t know

1. How do you perceive Cook College Office of Continuing Professional Education?

 Very helpful  Helpful  Fair

 Not helpful  Don’t know

1. Please "grade" the Rutgers Turfgrass program in the following areas, using the appropriate number.

1 = Excellent 2 = Good 3 = Fair 4 = Unsatisfactory 5 = Don’t know

\_\_\_\_\_ Research \_\_\_\_\_ Undergraduate Education

\_\_\_\_\_ Extension/Outreach \_\_\_\_\_ Web-Page content

1. Would you grow/maintain a genetically modified turfgrass or ornamental plant if it were proved to be safe?

 Yes  No  Not Sure

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
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