**TURFGRASS ECONOMIC SURVEY – 2018**

**Golf Course Version**

OMB No. 0535-NEW

Approval Expires: X/XX/20XX

Project Code: XXX

SurveyID:

**United States**



**Department of Agriculture**

**NATIONAL**

**AGRICULTURAL**

**STATISTICS**

**SERVICE**



**USDA/NASS**

Northeast Region

4050 Crums Mill Road

Suite 203

Harrisburg, PA 17112

Phone: 1-717-787-3904

Fax: 1-855-270-2719 Email: nassrfoner@nass.usda.gov

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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. Golf Course Information

1. Where is this golf course located? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ County

1. Which category best describes this golf course?

 For-profit  Non-profit

1. Which of the following categories best describes this golf course?

 Private  Public/Daily fee  Semi-private

 Governmental/Municipal  Other (specify)\_\_\_\_\_\_\_\_\_\_

1. Are you a member of any of the following professional organizations?

New Jersey Golf Course Owners Association  Yes  No

New Jersey State Golf Association  Yes  No

Golf Course Superintendents Association of New Jersey  Yes  No

1. How much area did this course have in the following categories as of December 2018? Total area (include buildings)…. \_\_\_\_\_\_\_\_\_\_ acres or \_\_\_\_\_\_\_\_\_\_ square feet

Greens…………………………. \_\_\_\_\_\_\_\_\_\_ acres or \_\_\_\_\_\_\_\_\_\_ square feet

Fairways……………………….. \_\_\_\_\_\_\_\_\_\_ acres or \_\_\_\_\_\_\_\_\_\_ square feet

Tees……………………………. \_\_\_\_\_\_\_\_\_\_ acres or \_\_\_\_\_\_\_\_\_\_ square feet

Roughs………………………… \_\_\_\_\_\_\_\_\_\_ acres or \_\_\_\_\_\_\_\_\_\_ square feet

Natural area …………………… \_\_\_\_\_\_\_\_\_\_ acres or \_\_\_\_\_\_\_\_\_\_ square feet

1. Did you expand the area under turf or facilities in 2018?

 Yes  No (skip Question 7)

1. How much new area was established under the following categories in 2018?

Total area (including buildings) \_\_\_\_\_\_\_\_\_\_ acres or \_\_\_\_\_\_\_\_\_\_ square feet

Turf area (fairways, greens, tees, rough, and natural area) \_\_\_\_\_\_\_\_\_\_ acres or \_\_\_\_\_\_\_\_\_\_ square feet

1. How many golf holes are at this course? \_\_\_\_\_\_\_\_\_\_

1. How many rounds of golf were played in 2018 at this course? \_\_\_\_\_\_\_\_\_\_ 9-hole rounds

\_\_\_\_\_\_\_\_\_\_ 18-hole rounds

# B. Turfgrass Specific

1. Please indicate the % of turf area under the following turfgrass varieties on this property?

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

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

\_\_\_\_ % Zoysia \_\_\_\_ % Other/Mixture \_\_\_\_ Don’t know

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  USGA Turf Advisory Svc.

 Lawn & Landscape Contractor  Other (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# C. Turf and Landscape Problems

1. What do you consider to be difficult turf and landscape related problems facing your organization? (Select all that apply under each category).

**a. Regulation**

 Local noise ordinances  Water restrictions  Signposting (chemical applications)

 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 turf-related problems 5 years from now? (Select all that apply under each category).

**a. Regulation**

 Local noise ordinances  Water restrictions  Signposting (chemical applications)

 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) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# D. Expenses

14. **Best Estimate of annual turf-related expenses during the year 2018 (to the nearest $1,000):**

1. **Seed** …….…………………………………………………………………………. $ \_\_\_\_\_\_\_\_\_\_
2. **Sod**…….………………………………………………………………………….… $ \_\_\_\_\_\_\_\_\_\_
3. **Equipment and Operation (exclude labor)**

Tractors (depreciation)……………...……………………………...……… $ \_\_\_\_\_\_\_\_\_\_

Mowers (depreciation)….…………………………………………………. $ \_\_\_\_\_\_\_\_\_\_

Irrigation equipment (depreciation)….…………..……………………...… $ \_\_\_\_\_\_\_\_\_\_

Application equipment (depreciation)…………………………………….. $ \_\_\_\_\_\_\_\_\_\_

Other equipment (depreciation)….……..…………………………………. $ \_\_\_\_\_\_\_\_\_\_

Vehicles (depreciation)………………………………...………………….. $\_\_\_\_\_\_\_\_\_\_

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

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

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

**b) Chemicals**

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

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

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

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

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

**c) Fertilizer and Soil Amendments**

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

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

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

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

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

**d) Labor (salaries/wages, not taxes)**

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

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

Mechanics/Maintenance wages/salaries………...………………………… $ \_\_\_\_\_\_\_\_\_\_

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

**e) Services purchased**

Chemical/fertilizer application.………………….………………………... $ \_\_\_\_\_\_\_\_\_\_

Sod installation…..……...……….…..…………………………….……… $ \_\_\_\_\_\_\_\_\_\_

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

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

1. **Other direct turf-related expenses (Specify)**

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

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

1. **Total Turf-related 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 course as of December 2018 (to the nearest $1,000)? $ \_\_\_\_\_\_\_\_\_

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

1. How many total positions did this golf course have in 2018? \_\_\_\_\_\_\_\_\_\_\_ employees

1. What percentage of this golf course’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 (include maintenance of turf related equipment also).
   * + Year round full-time \_\_\_\_\_\_%
     + Seasonal full-time \_\_\_\_\_\_%
     + Year round part-time \_\_\_\_\_\_%
     + Seasonal part-time \_\_\_\_\_\_%

1. What was the total expenditure on new ornamental plantings in 2018 (to the nearest $1,000)?
   1. Shrubs.………………... $\_\_\_\_\_\_\_\_\_\_
   2. Trees………………….. $\_\_\_\_\_\_\_\_\_\_
   3. Flowers……………….. $\_\_\_\_\_\_\_\_\_\_
   4. Other ………...……..… $\_\_\_\_\_\_\_\_\_\_
   5. Total. ………...……….. $\_\_\_\_\_\_\_\_\_\_

1. What was the total expenditure on the services of ornamental plantings in 2018 (to the nearest $1,000)?
   1. Installation of plantings (shrubs/trees/flowers)……………………………………….. $\_\_\_\_\_\_\_\_\_\_
   2. Pruning/cutting……………………………….……………………………………….. $\_\_\_\_\_\_\_\_\_\_
   3. Herbicides……………………………………………………………………………... $ \_\_\_\_\_\_\_\_\_\_
   4. Insecticides……………………………………………………………………………. $ \_\_\_\_\_\_\_\_\_\_
   5. Other pesticides……………………………………………………………………….. $ \_\_\_\_\_\_\_\_\_\_
   6. Fertilization in liquids and granules…………………………………………..……… $ \_\_\_\_\_\_\_\_\_\_
   7. Irrigation parts and accessories (includes sprinklers, valves, hoses, etc)…….………. $ \_\_\_\_\_\_\_\_\_\_
   8. Landscape materials (mulch, hardscaping, rock, fence, others)……………….…….. . $ \_\_\_\_\_\_\_\_\_\_
   9. Training and training materials………………………………………………….…….. $ \_\_\_\_\_\_\_\_\_\_
   10. Other (specify)..………………………………………………………………….….… $ \_\_\_\_\_\_\_\_\_\_
   11. Total..…………………………………………………………………….…………. ... $ \_\_\_\_\_\_\_\_\_\_

# E. Cultural Practices and Equipment

1. Person(s) responsible for turf care at this golf course?

 Hired maintenance contractor  Employees

1. Person(s) responsible for maintenance of ornamental plantings at this golf course?

 Hired maintenance contractor  Employees

1. What is the average interval between mowings for the following turf areas?

Greens \_\_\_\_\_\_\_days Tees \_\_\_\_\_\_\_days Fairways \_\_\_\_\_\_\_days Rough \_\_\_\_\_\_\_days

1. What is the irrigated turf area on this property? \_\_\_\_\_\_ acres or \_\_\_\_\_\_% of total turf area

1. What type of equipment is used to water the turf? (Select all that apply).

 Hoses and sprinklers  Installed sprinklers, manual

 Installed sprinklers, automatic  Other/Combination (specify) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. How do you monitor the water needs of turf on your site?

 Inspection  Soil Probing  Other (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. How often do you monitor the water needs of turf on your site?

 Daily  Every other day  Twice per week

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

1. Do you regulate the amount of water being applied to turf on your site?

 Yes  No

1. In the growing season, what is the average interval between waterings without rain under the following turf areas?

Greens \_\_\_\_\_\_\_days Tees \_\_\_\_\_\_\_days Fairways \_\_\_\_\_\_\_days Rough \_\_\_\_\_\_\_days

1. What is the length of time you typically water when irrigating the following turf areas?

Greens \_\_\_\_\_\_\_ hours Tees \_\_\_\_\_\_\_ hours Fairways \_\_\_\_\_\_\_ hours Rough \_\_\_\_\_\_\_ hours

1. What was the total amount of water applied to this golf course in 2018? \_\_\_\_\_\_\_gallons

1. On average, how much water per year was applied to this golf course during the past five years? \_\_\_\_\_\_\_gallons

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

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

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

1. Please indicate the proportion of your total turf area receiving fertilizer applications:

\_\_\_\_ % 1-2 times per year

\_\_\_\_ % 3-4 times per year

\_\_\_\_ % 5-6 times per year

\_\_\_\_ % 7 or more times per year

1. Please indicate the proportion of your total turf area receiving other chemical (e.g., insecticides, herbicides, etc.) applications:

\_\_\_\_ % 1-2 times per year

\_\_\_\_ % 3-4 times per year

\_\_\_\_ % 5-6 times per year

\_\_\_\_ % 7 or more times per year

1. What % of your total fungicide budget is spent on the following diseases?

\_\_\_\_ % Dollar Spot \_\_\_\_ % Brown Patch \_\_\_\_ % Anthracnose

\_\_\_\_ % Summer Patch \_\_\_\_ % Leaf Spot \_\_\_\_ % Pythium Blight

\_\_\_\_ % other (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_ Don’t know

\_\_\_\_ % other (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Which practices are performed on your turf? (Select all that apply).

 Biological control  Aeration  Correct drainage

 Soil test  Soil amendments  Top-dressing

 Dethatching  Edging  Clipping removal

 Overseeding  Turf selection  Initial laying of sod

 Mowing  Weed Control  Disease Control

 Insect Control  Other (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# F. Opinion

1. Will this golf course be increasing the area under turf over the next 5 years?

 Definitely will  Probably will  Not sure

 Probably will not  Definitely will not

If so, how much will you expand your turf area? \_\_\_\_\_\_\_\_\_\_\_\_\_ acres

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 organization’s property?

 Always  Sometimes  Never

 Not practical

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 be interested in attending workshops sponsored by Rutgers University on a wide variety of topics related to turfgrass and ornamental plantings?

 Yes  No

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

 Yes  No  Not Sure

# G. General

1. In the past 5 years, was your organization affected by water regulations during a time of drought?

 Yes  No

1. If yes, please estimate the cost of damage to the lawn and ornamental plantings in this property associated with the drought? $ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. If you answered yes to question 50, please estimate the total loss of business in terms of decreased revenue during the drought (to the nearest $1,000)? $ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Did you lose any of the following due to damage associated with the drought (select all that apply)?

 Shrubs  Trees

 Flowers  Lawn

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

1. Do you expect any change in the demand for golfing for the year 2019?

 Increasing  Constant

 Decreasing  Don’t Know

1. What was the total revenue of golf operations during 2018 for each of the following (to the nearest $1,000)?

Member dues……………………………….. $\_\_\_\_\_\_\_\_\_\_

Greens fees…………………….…………… $\_\_\_\_\_\_\_\_\_\_

Cart revenue………………………………... $\_\_\_\_\_\_\_\_\_\_

Driving range………………….…………… $\_\_\_\_\_\_\_\_\_\_

Other (specify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_….…… $\_\_\_\_\_\_\_\_\_\_

Total Revenue………………………….…... $\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
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| Response | | Respondent | | Mode | | Enum. | Eval. | Change |  | Office Use for POID | | | |
| 1-Comp  2-R  3-Inac  4-Office Hold  5-R – Est  6-Inac – Est  7-Off Hold – Est | 9901 | 1-Op/Mgr  2-Sp  3-Acct/Bkpr  4-Partner  9-Oth | 9902 | 1-PASI (Mail)  2-PATI (Tel)  33-PAPI (Face-toFace)  6-Email  7-Fax  19-Other | 9903 | 9998 | 9900 | 9985 | 9989 | \_\_ \_\_ \_\_ - \_\_ \_\_ \_\_ - \_\_ \_\_ \_\_ | | | |
|  |  | | | |
| R. Unit |  | Optional Use | | | |
| 9921 | 9907 |  | 9908 | 9906 | 9916 |
| S/E Name | |  | |  | |  | |  |  |  | | | |