

# **Pheasant Stocking in NJ:**

**A New Approach to Bird Allocation**

**NJ Division of Fish and Wildlife**

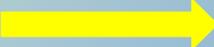
**September 2016**

# New Allocation Model

**Goal:** Develop an *objective approach* for distributing pheasant among WMAs to *maximize hunter safety & satisfaction*



# Development Process and Next Steps

- Jan2015 : Pheasant & Quail Stamp Buyer Survey
- Jan 2015 – Jan 2016: Internal meetings and draft model development
- Jan 2016 : Presentation to F&G Council's Game Committee
-  • March 2016: Presentation to Fish & Game Council
- June 2016: Presentations at State Federation
- June 2016: P&Q Stamp Buyers Stakeholder Meetings
- July/August 2016: Revise & Finalize
-  • September 2016: Presentation to F&G Council – Vote to Adopt
- Sept/October 2016: Division Reps present, additional public outreach
- November 2016: Begin Stocking according to Pheasant Allocation Formula

# Stakeholders Meeting Results

Percent

| Question   | North        |           |          | Central        |          |          | South         |           |          | YES | No | total |
|--|--------------|-----------|----------|----------------|----------|----------|---------------|-----------|----------|-----|----|-------|
|  | YES          | NO        | N/A      | YES            | NO       | N/A      | YES           | NO        | N/A      |     |    |       |
| 1) Do you agree that the primary goals of the NJ Division of Fish & Wildlife's Pheasant Stocking Program should be to maximize hunter safety and hunter satisfaction?  | 25           | 1         | 0        | 20             | 0        | 0        | 35            | 0         | 0        | 99  | 1  | 81    |
| 2) Do you agree that an objective approach to pheasant allocation (using measurable parameters) is an appropriate way to determine the number of pheasants each Wildlife Management Area should receive in a given year? | 21           | 5         | 1        | 17             | 2        | 1        | 33            | 2         | 0        | 89  | 11 | 80    |
| 3) Do you agree that setting stocking levels according to area stocked & proximity to stamp buyers can increase overall hunter safety & hunter satisfaction?   | 15           | 10        | 0        | 19             | 0        | 2        | 31            | 4         | 1        | 82  | 18 | 79    |
| 4) Are there parameters other than "stocked area, proximity to stamp-buyers, and land ownership" that you feel should be considered in the Pheasant Stocking Allocation Formula?   | 20           | 2         | 4        | 12             | 6        | 1        | 20            | 12        | 3        | 72  | 28 | 72    |
| 5) Generally speaking, do you support the Division moving forward with allocating pheasants to WMAs according to the formula presented at tonight's meeting?   | 13           | 13        | 1        | 19             | 1        | 1        | 33            | 1         | 1        | 81  | 19 | 80    |
| <b>TOTAL</b>   | <b>94</b>    | <b>31</b> | <b>6</b> | <b>87</b>      | <b>9</b> | <b>5</b> | <b>152</b>    | <b>19</b> | <b>5</b> |     |    |       |
|  | WMA          | Tally     |          | WMA            | Tally    |          | WMA           | Tally     |          |     |    |       |
| 6) WMAs Hunted   | Berk. Valley | 7         |          | Assunpink      | 14       |          | Dix           | 3         |          |     |    |       |
|  | Black River  | 6         |          | Colliers Mills | 11       |          | Glassboro     | 8         |          |     |    |       |
|  | Clinton      | 3         |          | Fort Dix       | 0        |          | Heislerville  | 3         |          |     |    |       |
|  | DWNRA        | 11        |          | Greenwood      | 2        |          | Mad Horse     | 4         |          |     |    |       |
|  | Flatbrook    | 7         |          | Manahawkin     | 3        |          | Millville     | 16        |          |     |    |       |
|  | Pequest      | 9         |          | Manasquan      | 0        |          | Nantuxent     | 5         |          |     |    |       |
|  | Walpack      | 3         |          | Medford        | 1        |          | Port Republic | 7         |          |     |    |       |
|  | Whittingham  | 9         |          | Stafford Forge | 8        |          | Tuckahoe      | 5         |          |     |    |       |
|  |              |           |          |                |          |          | Winslow       | 12        |          |     |    |       |
|  |              |           |          |                |          |          | Peaslee       | 1         |          |     |    |       |

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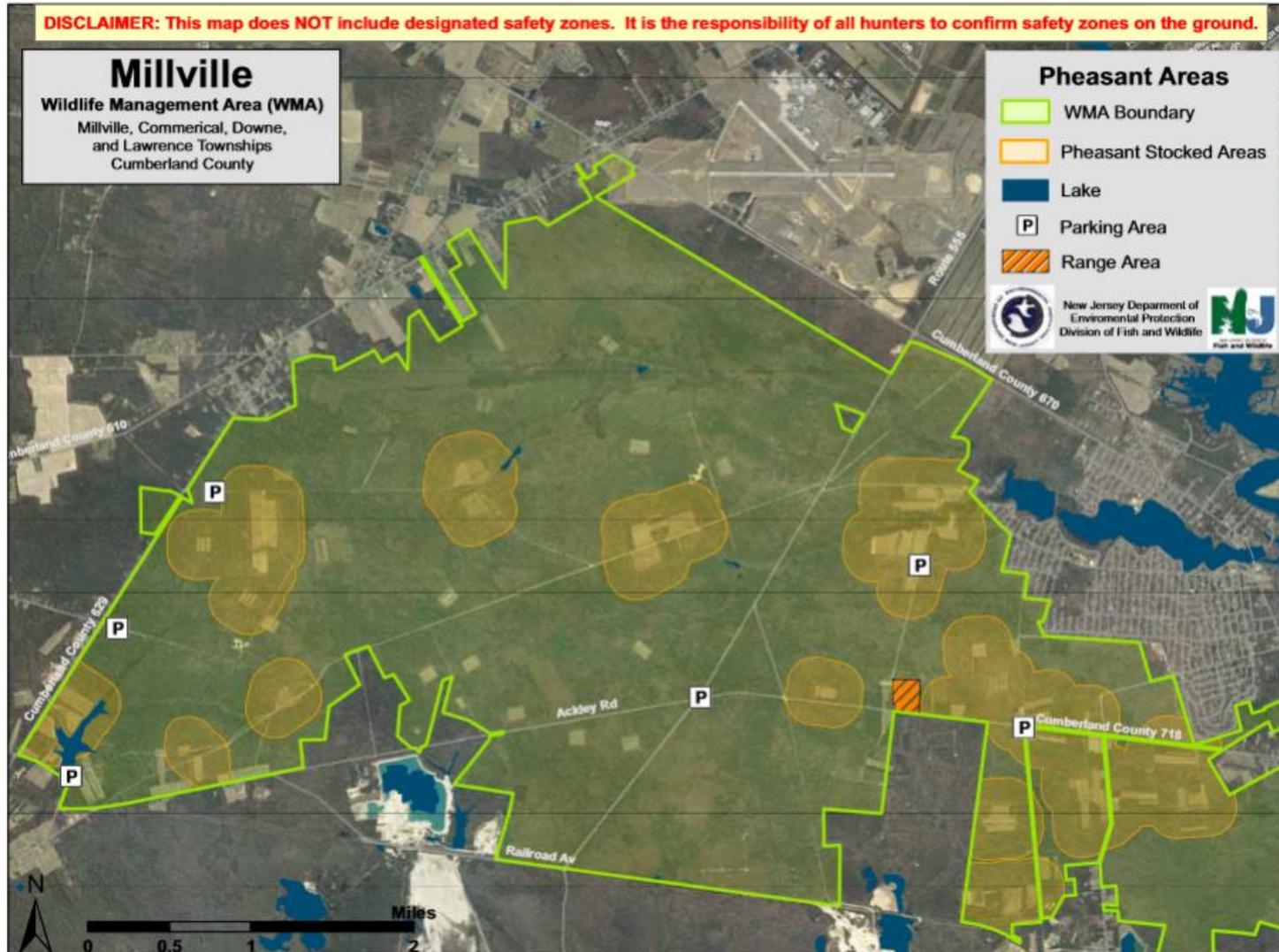
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# Field Aggregates

2,801 Acres Stocked  
390 Field Acres



# New Allocation Formula

$$\text{WMA}_1 \% \text{ Pheasant} = \frac{P_1}{P_{\text{sum}}} \times 100$$

$$P = A (D+1) O$$

*P = pheasant factor; A = area variable; D = proximity to stamp buyer variable  
O = ownership variable*

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$$P = A + C (D+1)$$

*P = pheasant factor; A = area variable; D = proximity to stamp buyer variable  
~~Θ = ownership variable; C = field aggregate correction~~*

# New Allocation Model

$$\text{WMA}_1 \% \text{ Pheasant} = \frac{P_1}{P_{\text{sum}}} \times 100$$

$$A = (1^{\text{st}} 60 \text{ ac} * 1) + (\text{ac} > 60 * 0.1)$$

$$P = A + C (D+1)$$

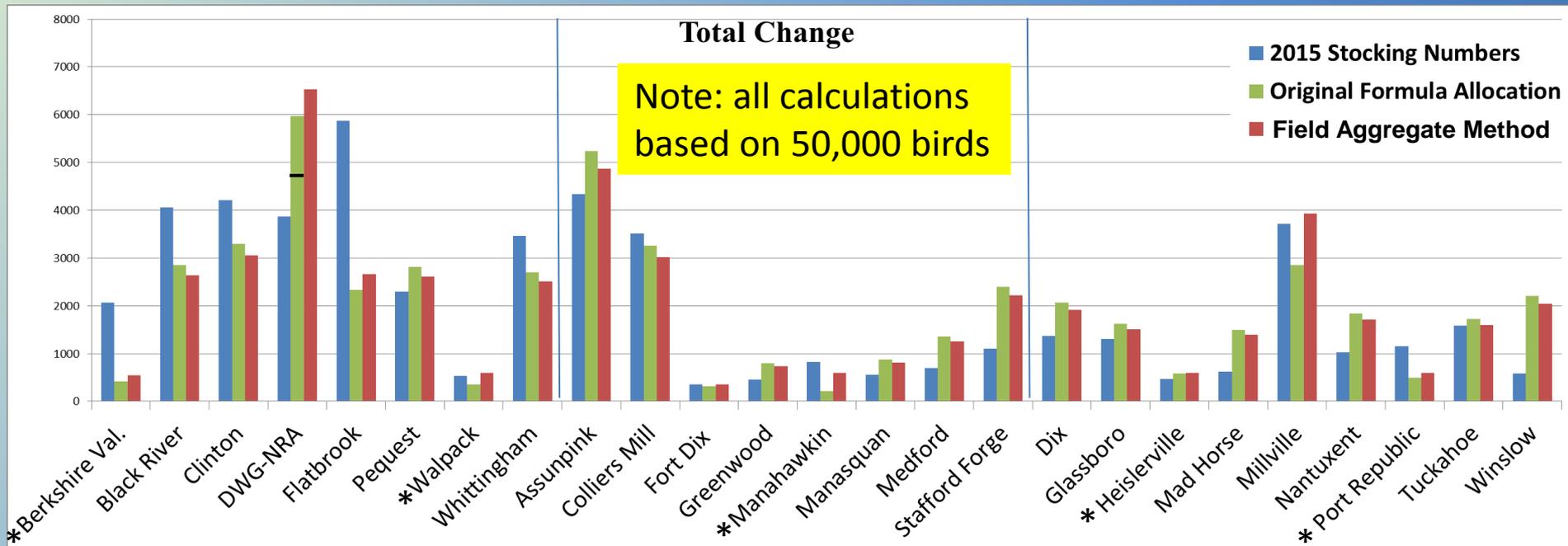
**C = 0 if < 6 field clusters/aggregates  
15 if 6 - 9 field clusters  
30 if 10 - 12 field clusters  
45 if > 12 field clusters**

*P = pheasant factor; A = area variable; D = proximity to stamp buyer variable;  
C = field aggregate correction*

# Summary of Changes

1. Removed “Ownership Variable”
2. Added value for multiple large field aggregates
3. Set a minimum of 600 birds/season to stocked WMAs

# Pheasant Allocation Formula (Comparison of Methods)



## Changes Under "Aggregate Allocation"

1. Addition of "Field Aggregate Correction"
2. Set minimum allocation number to 600 birds for any single WMA \*

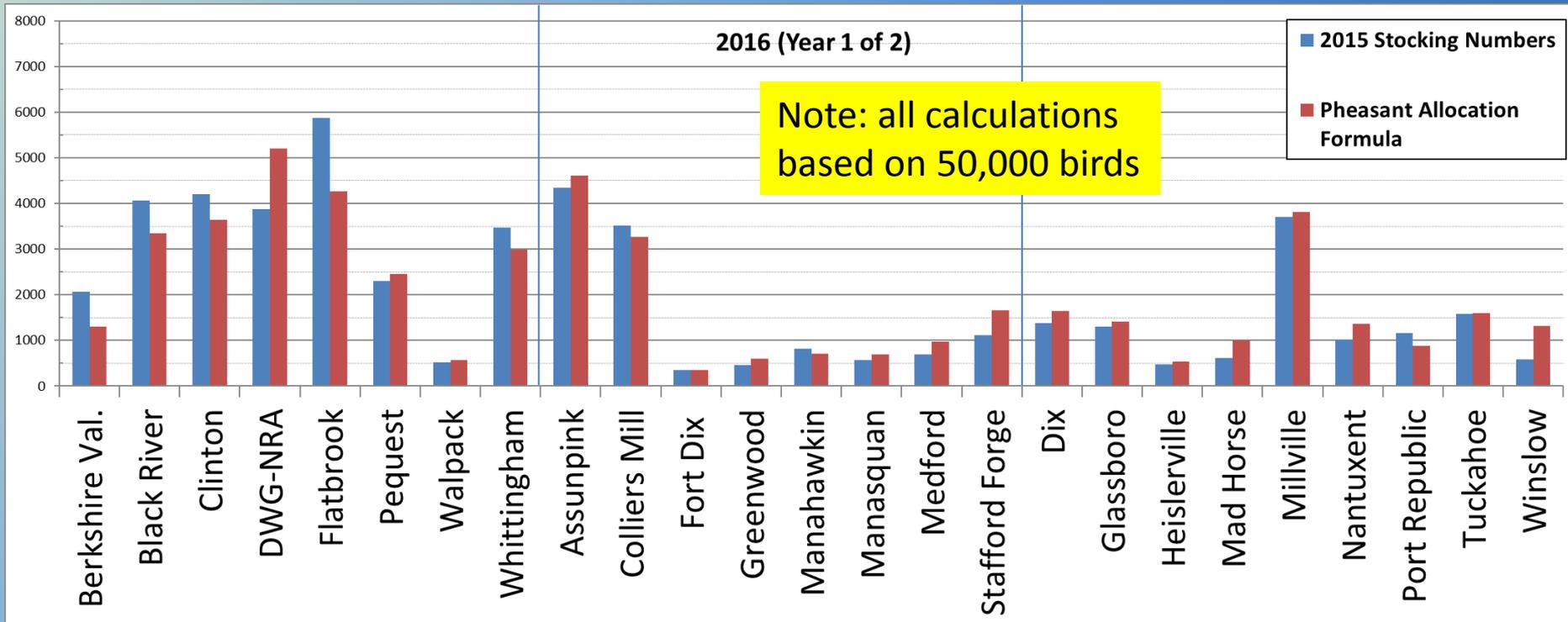
## Regional Change w/ Aggregate Correction

|         | 2015 | New |
|---------|------|-----|
| North   | 53%  | 42% |
| Central | 24%  | 28% |
| South   | 24%  | 30% |

Note: "ownership variable" was removed from both formula calculations (this previously reduced the number of birds at the Delaware Water Gap)

# 2016 Stocking

(50% of total change)



**NJ Division of Fish and Wildlife**  
2016 Pheasant Days to Hunt

**Region: North Jersey**

| Area                      | Saturday<br>11/12 | Tuesday<br>11/15 | Thursday<br>11/17 | Saturday<br>11/19 | Tuesday<br>11/22 | Thursday<br>11/24 | Saturday<br>11/26 | Thursday<br>12/1 | Saturday<br>12/3 | Tuesday<br>12/13 | Saturday<br>12/17 | Tuesday<br>12/20 | Thursday<br>12/22 | Saturday<br>12/24 | Thursday<br>12/29 | Total         |
|---------------------------|-------------------|------------------|-------------------|-------------------|------------------|-------------------|-------------------|------------------|------------------|------------------|-------------------|------------------|-------------------|-------------------|-------------------|---------------|
| Berkshire Valley          | 170               | 50               | 40                | 130               | 40               | 160               | 130               | 30               | 100              | 100              | 90                | 90               | 80                | 60                | 30                | 1,300         |
| Black River               | 430               | 130              | 100               | 330               | 110              | 410               | 320               | 90               | 250              | 260              | 230               | 220              | 210               | 150               | 90                | 3,330         |
| Clinton                   | 470               | 140              | 110               | 360               | 120              | 450               | 350               | 90               | 270              | 280              | 250               | 240              | 230               | 160               | 90                | 3,610         |
| Delaware Water Gap N.R.A. | 670               | 200              | 160               | 520               | 170              | 640               | 500               | 130              | 380              | 410              | 360               | 340              | 320               | 240               | 130               | 5,170         |
| Flatbrook                 | 550               | 160              | 130               | 420               | 140              | 530               | 410               | 110              | 320              | 330              | 290               | 280              | 270               | 190               | 110               | 4,240         |
| Pequest                   | 320               | 90               | 70                | 240               | 80               | 300               | 230               | 60               | 180              | 190              | 170               | 160              | 150               | 110               | 60                | 2,410         |
| Walpack                   | 80                | 20               | 20                | 60                | 20               | 70                | 60                | 20               | 40               | 50               | 40                | 40               | 40                | 30                | 20                | 610           |
| Whittingham               | 380               | 110              | 90                | 300               | 100              | 370               | 280               | 80               | 220              | 230              | 200               | 200              | 190               | 140               | 80                | 2,970         |
| <b>Total</b>              | <b>3,070</b>      | <b>900</b>       | <b>720</b>        | <b>2,360</b>      | <b>780</b>       | <b>2,930</b>      | <b>2,280</b>      | <b>610</b>       | <b>1,760</b>     | <b>1,850</b>     | <b>1,630</b>      | <b>1,570</b>     | <b>1,490</b>      | <b>1,080</b>      | <b>610</b>        | <b>23,640</b> |

**Region: Central Jersey**

| Area                   | Saturday<br>11/12 | Tuesday<br>11/15 | Thursday<br>11/17 | Saturday<br>11/19 | Tuesday<br>11/22 | Thursday<br>11/24 | Saturday<br>11/26 | Thursday<br>12/1 | Saturday<br>12/3 | Tuesday<br>12/13 | Saturday<br>12/17 | Tuesday<br>12/20 | Thursday<br>12/22 | Saturday<br>12/24 | Thursday<br>12/29 | Total         |
|------------------------|-------------------|------------------|-------------------|-------------------|------------------|-------------------|-------------------|------------------|------------------|------------------|-------------------|------------------|-------------------|-------------------|-------------------|---------------|
| Assunpink              | 590               | 180              | 140               | 460               | 150              | 570               | 440               | 120              | 340              | 360              | 310               | 300              | 290               | 210               | 120               | 4,580         |
| Colliers Mills         | 420               | 130              | 100               | 330               | 110              | 410               | 310               | 80               | 240              | 260              | 220               | 220              | 200               | 150               | 80                | 3,260         |
| Greenwood-Howardsville | 80                | 20               | 20                | 60                | 20               | 70                | 60                | 20               | 40               | 50               | 40                | 40               | 40                | 30                | 20                | 610           |
| Manahawkin             | 90                | 30               | 20                | 70                | 20               | 90                | 70                | 20               | 50               | 60               | 50                | 50               | 40                | 30                | 20                | 710           |
| Manasquan              | 90                | 30               | 20                | 70                | 20               | 90                | 70                | 20               | 50               | 50               | 50                | 50               | 40                | 30                | 20                | 700           |
| Medford                | 130               | 40               | 30                | 100               | 30               | 120               | 90                | 30               | 70               | 80               | 70                | 60               | 60                | 40                | 30                | 980           |
| Stafford Forge         | 210               | 60               | 50                | 170               | 60               | 210               | 160               | 40               | 120              | 130              | 110               | 110              | 100               | 80                | 40                | 1,650         |
| Fort Dix               | 60                | 0                | 0                 | 50                | 50               | 70                | 60                | 60               | 0                | 0                | 0                 | 0                | 0                 | 0                 | 0                 | 350           |
| <b>Total</b>           | <b>1,670</b>      | <b>490</b>       | <b>380</b>        | <b>1,310</b>      | <b>460</b>       | <b>1,630</b>      | <b>1,260</b>      | <b>390</b>       | <b>910</b>       | <b>990</b>       | <b>850</b>        | <b>830</b>       | <b>770</b>        | <b>570</b>        | <b>330</b>        | <b>12,840</b> |

**Region: South Jersey**

| Area                   | Saturday<br>11/12 | Tuesday<br>11/15 | Thursday<br>11/17 | Saturday<br>11/19 | Tuesday<br>11/22 | Thursday<br>11/24 | Saturday<br>11/26 | Thursday<br>12/1 | Saturday<br>12/3 | Tuesday<br>12/13 | Saturday<br>12/17 | Tuesday<br>12/20 | Thursday<br>12/22 | Saturday<br>12/24 | Thursday<br>12/29 | Total         |
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| Dix                    | 210               | 60               | 50                | 160               | 50               | 200               | 160               | 40               | 120              | 130              | 110               | 110              | 100               | 70                | 40                | 1,610         |
| Glassboro              | 180               | 50               | 40                | 140               | 50               | 170               | 130               | 40               | 100              | 110              | 100               | 90               | 90                | 60                | 40                | 1,390         |
| Heislerville           | 80                | 20               | 20                | 60                | 20               | 70                | 60                | 20               | 40               | 50               | 40                | 40               | 40                | 30                | 20                | 610           |
| Mad Horse              | 130               | 40               | 30                | 100               | 30               | 130               | 100               | 30               | 70               | 80               | 70                | 70               | 60                | 50                | 30                | 1,020         |
| Millville              | 490               | 150              | 120               | 380               | 130              | 470               | 360               | 100              | 280              | 300              | 260               | 250              | 240               | 170               | 100               | 3,800         |
| Nantuxent              | 180               | 50               | 40                | 140               | 50               | 170               | 130               | 40               | 100              | 110              | 90                | 90               | 90                | 60                | 40                | 1,380         |
| Port Republic          | 110               | 30               | 30                | 90                | 30               | 110               | 80                | 20               | 70               | 70               | 60                | 60               | 50                | 40                | 20                | 870           |
| Tuckahoe               | 200               | 60               | 50                | 160               | 50               | 200               | 150               | 40               | 120              | 120              | 110               | 100              | 100               | 70                | 40                | 1,570         |
| Winslow                | 170               | 50               | 40                | 130               | 40               | 160               | 130               | 30               | 100              | 100              | 90                | 90               | 80                | 60                | 30                | 1,300         |
| <b>Total</b>           | <b>1,750</b>      | <b>510</b>       | <b>420</b>        | <b>1,360</b>      | <b>450</b>       | <b>1,680</b>      | <b>1,300</b>      | <b>360</b>       | <b>1,000</b>     | <b>1,070</b>     | <b>930</b>        | <b>900</b>       | <b>850</b>        | <b>610</b>        | <b>360</b>        | <b>13,550</b> |
| WMA % per stocking day | 13%               | 4%               | 3%                | 10%               | 3%               | 12%               | 10%               | 3%               | 7%               | 8%               | 7%                | 7%               | 6%                | 5%                | 3%                |               |

North 23,640  
Central 12,840  
South 13,550  
Total 50,030

# Assisting Stamp Buyers w/Change

- Postcard to stamp buyers
- Email to stamp buyers
- Email to listserv
- Website
- Division Reps
- Pheasant-stocked area maps
- Phased in change

*Division of Fish and Wildlife  
Mail Code 501-03  
P.O. Box 420  
Trenton, NJ 08625-0420*



Dear Pheasant Hunter,

Thank you for continuing to support the Rockport Game Farm through your Pheasant & Quail Stamp purchases. Each dollar helps to raise, feed and stock more than 50,000 pheasants annually.

This year brings significant change to our pheasant stocking program. Working with stakeholders, the Division has developed a Pheasant Allocation Formula to equitably distribute birds throughout the state. Details can be found at [www.njfishandwildlife.com/pheasallocation.htm](http://www.njfishandwildlife.com/pheasallocation.htm).

Wishing you a safe and successful Small Game Season,

- Dave Chanda, Director 

