# Health and Well-being of Livestock

Health and Well-being of Livestock

## V(A). Planned Program (Summary)

### 1. Name of the Planned Program

Health and Well-being of Livestock

## V(B). Program Knowledge Area(s)

### 1. Program Knowledge Areas and Percentage

| KA Code | Knowledge Area | %1862 Extension | %1890 Extension | %1862 Research | %1890 Research |
|---|---|---|---|---|---|
| 301 | Reproductive Performance of Animals | 50% | | 50% | |
| 302 | Nutrient Utilization in Animals | 20% | | 20% | |
| 305 | Animal Physiological Processes | 10% | | 10% | |
| 311 | Animal Diseases | 20% | | 20% | |
| | **Total** | 100% | | 100% | |

## V(C). Planned Program (Inputs)

### 1. Actual amount of professional FTE/SYs expended this Program

| Year: 2008 | Extension | | Research | |
|---|---|---|---|---|
| | 1862 | 1890 | 1862 | 1890 |
| Plan | 0.3 | 0.0 | 1.3 | 0.0 |
| Actual | 0.9 | 0.0 | 1.8 | 0.0 |

### 2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

| Extension | | Research | |
|---|---|---|---|
| Smith-Lever 3b & 3c | 1890 Extension | Hatch | Evans-Allen |
| 0 | 0 | 60337 | 0 |
| 1862 Matching | 1890 Matching | 1862 Matching | 1890 Matching |
| 53997 | 0 | 63723 | 0 |
| 1862 All Other | 1890 All Other | 1862 All Other | 1890 All Other |
| 0 | 0 | 0 | 0 |

## V(D). Planned Program (Activity)

### 1. Brief description of the Activity

Research was conducted to examine the role of selenium on and vitamin E on immune system function of lambs. Investigations also were undertaken to investigate cellular and molecular regulation of spermatogenesis and male fertility and sperm cellular functions that contribute to in vivo fertility in livestock.

### 2. Brief description of the target audience

The target audiences for these programs are livestock farmers in the Northeast and nationwide, the livestock artificial insemination industry and 4-H youth programs.

## V(E). Planned Program (Outputs)

### 1. Standard output measures

**Target for the number of persons (contacts) reached through direct and indirect contact methods**

| | Direct Contacts Adults | Indirect Contacts Adults | Direct Contacts Youth | Indirect Contacts Youth |
|---|---|---|---|---|
| Year | Target | Target | Target | Target |
| Plan | 100 | 1000 | 50 | 100 |
| 2008 | 100 | 1000 | 30 | 0 |

### 2. Number of Patent Applications Submitted (Standard Research Output)

**Patent Applications Submitted**

| Year | Target |
|---|---|
| Plan: | 0 |
| 2008: | 0 |

**Patents listed**

### 3. Publications (Standard General Output Measure)

**Number of Peer Reviewed Publications**

| | Extension | Research | Total |
|---|---|---|---|
| Plan | 0 | 0 | |
| 2008 | 0 | 1 | 1 |

## V(F). State Defined Outputs

**Output Target**
**Output #1**

**Output Measure**
Peer reviewed publications

| Year | Target | Actual |
|---|---|---|
| 2008 | 2 | 0 |

**Output #2**

**Output Measure**
Student training

| Year | Target | Actual |
|---|---|---|
| 2008 | 2 | 5 |

**Output #3**

**Output Measure**
Scientific and Professional Presentations

| Year | Target | Actual |
|---|---|---|
| 2008 | 2 | 3 |

**Output #4**

**Output Measure**
Public presentations

| Year | Target | Actual |
|---|---|---|
| 2008 | 3 | 0 |

**Output #5**

**Output Measure**
Website development and refinement

| Year | Target | Actual |
|---|---|---|
| 2008 | 1 | 0 |

**Output #6**

**Output Measure**
Abstracts

| Year | Target | Actual |
|---|---|---|
| 2008 | 2 | 1 |

**Output #7**

**Output Measure**
Fact sheets, bulletins and newsletters

| Year | Target | Actual |
|---|---|---|
| 2008 | 2 | 0 |

**Output #8**

**Output Measure**
MS Theses and PhD Dissertations

| Year | Target | Actual |
|---|---|---|
| 2008 | 1 | 0 |

## V(G). State Defined Outcomes

| O No. | Outcome Name |
|---|---|
| 1 | Development of fertility assays for use in AI industry |
| 2 | Modification of animal feeds which will result in the improvement of immune status and disease resistance |

Health and Well-being of Livestock
**Outcome #1**

**1. Outcome Measures**

*Not reporting on this Outcome for this Annual Report*

**2. Associated Institution Types**

**3a. Outcome Type:**

**3b. Quantitative Outcome**

| Year | Quantitative Target | Actual |
|---|---|---|

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

**What has been done**

**Results**

**4. Associated Knowledge Areas**

| KA Code | Knowledge Area |
|---|---|

## V(H). Planned Program (External Factors)

**External factors which affected outcomes**

Appropriations changes

**Brief Explanation**

## V(I). Planned Program (Evaluation Studies and Data Collection)

**1. Evaluation Studies Planned**

During (during program)

**Evaluation Results**

The programs are both active and data continue to be collected. At this time interest in the research has been expressed both by the research community and agricultural interests.

**Key Items of Evaluation**