

V(A). Planned Program (Summary)

Program # 9

1. Name of the Planned Program

Global Fod Security and Hunger: strategies to improve growth and performance of guinea fowl

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
302	Nutrient Utilization in Animals				50%
307	Animal Management Systems				50%
	Total				100%

V(C). Planned Program (Inputs)

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

Year: 2009	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.0	0.0	3.6
Actual	0.0	0.0	0.0	2.8

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	0	84632
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	44524
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	0	136424

V(D). Planned Program (Activity)

1. Brief description of the Activity

To enhance performance and adoption of guinea fowl as alternative livestock for small scale farmers the following activities will be carried out:

- Determine optimum floor space allowance for guinea fowl;
- Determine optimum requirement for dietary calcium and phosphorus by guinea fowl; and
- Determine optimum dietary requirement for methionine and lysine by guinea fowl.

2. Brief description of the target audience

Guinea fowl and poultry industries, small farmers, scientific community, extension specialists.

V(E). Planned Program (Outputs)

1. Standard output measures

2009	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	0	0	0	0
Actual	0	0	0	0

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

Patent Applications Submitted

Year: 2009

Plan: 0

Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2009	Extension	Research	Total
Plan	0	2	
Actual	0	1	1

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Scientific publications concerning the optimization of parameters for guinea fowl production

Year	Target	Actual
2009	2	1

Output #2

Output Measure

- Dietary recommendations to guinea fowl producers for optimal production

Year	Target	Actual
2009	1	1

Output #3

Output Measure

- Technique to determine optimal nutrient composition of guinea fowl diet

Year	Target	Actual
2009	1	1

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Dietary recommendations for amino acid and mineral nutrition of guinea fowl
2	Percentage of producers realizing savings in feeding costs
3	Percentage of producers aware of recommendations for floor space, calcium and phosphorus
4	Percentage of producers implementing recommendations
5	Percentage of producers realizing profitability after adoption of recommendations

Outcome #1

1. Outcome Measures

Dietary recommendations for amino acid and mineral nutrition of guinea fowl

2. Associated Institution Types

- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	1	1

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

There are currently no guidelines for optimum amino acid and mineral nutrition requirements for Guinea fowl. As commercial production of this species increases, such requirements must be known to optimize producer efficiency.

What has been done

Ongoing experiments in optimizing amino acid and mineral nutrition levels.

Results

Dietary recommendation of calcium and phosphorus for Pearl Gray guinea fowl layers has been determined and communicated to the Guinea fowl production community.

4. Associated Knowledge Areas

KA Code	Knowledge Area
302	Nutrient Utilization in Animals
307	Animal Management Systems

Outcome #2

1. Outcome Measures

Percentage of producers realizing savings in feeding costs

2. Associated Institution Types

- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
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2009 0 0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

The costs associated with the production of Guinea fowl need to be minimized for producers to realize maximum profit as this species becomes more accepted in American diets.

What has been done

Requirement for calcium and phosphorus for the Pearl Gray guinea fowl layer were determined and communicated to stakeholders via scientific, popular, and grower target publications and presentations.

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
307	Animal Management Systems

Outcome #3

1. Outcome Measures

Percentage of producers aware of recommendations for floor space, calcium and phosphorus

2. Associated Institution Types

- 1890 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	90	50

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Optimum floor space utilization can minimize production costs and increase profitability of Guinea fowl production.

What has been done

Optimum floor space requirement for Guinea fowl (French) and the Pearl Gray guinea fowl was determined and the findings will be presented to the Guinea Fowl Breeders Association and poultry producers at scientific forums.

Results

Producers can now increase the efficiency of their operations. Percentage of producers reached was less than planned due to limited attendance at appropriate meetings.

4. Associated Knowledge Areas

KA Code	Knowledge Area
302	Nutrient Utilization in Animals
307	Animal Management Systems

Outcome #4

1. Outcome Measures

Percentage of producers implementing recommendations

2. Associated Institution Types

- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	80	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Implementation of recommendations of optimum floor space and calcium and phosphorus requirements will decrease the cost of production of guinea fowl.

What has been done

Floor space, calcium, and phosphorus requirements have been determined and communicated to producers.

Results

Assessment of adoption of recommendations has not been completed yet.

4. Associated Knowledge Areas

KA Code	Knowledge Area
302	Nutrient Utilization in Animals
307	Animal Management Systems

Outcome #5

1. Outcome Measures

Percentage of producers realizing profitability after adoption of recommendations

2. Associated Institution Types

- 1890 Research

3a. Outcome Type:

Change in Condition Outcome Measure

3b. Quantitative Outcome

Year	Quantitative Target	Actual
2009	80	0

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

Adoption of recommended floor space, calcium, and phosphorus requirements can increase profitability of Guinea fowl production.

What has been done

Optimal floor space, calcium and phosphorus requirements have been determined and communicated to producers.

Results

Assessment of profitability has not been completed yet.

4. Associated Knowledge Areas

KA Code	Knowledge Area
302	Nutrient Utilization in Animals
307	Animal Management Systems

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Appropriations changes
- Competing Programmatic Challenges

Brief Explanation

{No Data Entered}

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

1. Evaluation Studies Planned

- After Only (post program)
- During (during program)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}