

3. Hawaii's Livestock and Aquaculture Systems For Sustainability and Competitiveness

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V(A). Planned Program (Summary)

1. Name of the Planned Program

3. Hawaii's Livestock and Aquaculture Systems For Sustainability and Competitiveness

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	30%		21%	
303	Genetic Improvement of Animals	20%		15%	
304	Animal Genome	10%		8%	
305	Animal Physiological Processes	10%		26%	
306	Environmental Stress in Animals	5%		10%	
307	Animal Management Systems	15%		7%	
308	Improved Animal Products (Before Harvest)	10%		2%	
312	External Parasites and Pests of Animals	0%		4%	
313	Internal Parasites in Animals	0%		3%	
314	Toxic Chemicals, Poisonous Plants, Naturally Occurring Toxins, and Other Hazards Affecting Animals	0%		4%	
	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	4.6	0.0	3.0	0.0
Actual	3.3	0.0	5.4	0.0

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

Extension		Research	
Smith-Lever 3b & 3c 76346	1890 Extension	Hatch 153197	Evans-Allen 0
1862 Matching 290893	1890 Matching 0	1862 Matching 892590	1890 Matching 0
1862 All Other 92224	1890 All Other 0	1862 All Other 22595	1890 All Other 0

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V(D). Planned Program (Activity)

1. Brief description of the Activity

- Develop marketing models and economic analyses of the key segments of the beef industry. •
- Evaluate best management practices and technologies for conversions of intensive mono cropping systems to sustainable tropical grazing production. •
- Initiate program for genetic identification for the university's beef research herd and seed stock producers and analyze for economically important markers under tropical ecosystems. •
- Conduct research station field days, demonstration sites conferences, and other outreach and educational activities for stakeholders. •
- Develop a gender-specific molecular sex marker in shrimp and prawns. •
- Identify the period when shrimps are receptive to the sex reversing effects of exogenous androgenic hormone.

2. Brief description of the target audience

As intended by the Land Grant perspective, CTAHR's "targeted" clients for this program in **teaching** are the undergraduate and graduate students in agriculture and allied fields. Targeted clients for **research** are peers and extension specialists. Clients for **extension specialists** are CTAHR's county extension agents and the counterpart professional personnel of sister state and federal agencies (such as the Hawai'i State Departments of Agriculture, and Land and Natural Resources, and the USDA Natural Resources Conservation Service, NRCS). Clients for **extension agents** are land users and commodity producers and their organizations, extension staff in other CTAHR units and at sister institutions, and other members of the professional community who deal with livestock and aquaculture industries.

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	600	2200	75	75
2008	1251	3695	82	373

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

Patent Applications Submitted

Year	Target
Plan:	0
2008:	1

Patents listed

Jinzeng Yang; Microsatellite Sequences for Pacific Threadfin Identification and Parental Assignment; Provisional patent filed on 5/2/08.

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	3	10	
2008	4	19	0

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V(F). State Defined Outputs

Output Target

Output #1

Output Measure

Number of workshops, conferences and other outreach events

Year	Target	Actual
2008	10	26

Output #2

Output Measure

Publish scholarly work

Year	Target	Actual
2008	10	23

Output #3

Output Measure

Conduct Mealani Forage Field Day for stakeholders

Year	Target	Actual
2008	1	2

Output #4

Output Measure

Write grant proposal to secure additional funds

Year	Target	Actual
2008	5	20

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V(G). State Defined Outcomes

O No.	Outcome Name
1	Increase sales from shellfish aquaculture industry in Hawai'i
2	Total dollar value of grants and contracts obtained.
3	Number of ranchers who have adopted a recommended practice
4	Increased numbers of beef cattle kept in Hawai'i for local consumption

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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
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3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
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V(H). Planned Program (External Factors)

External factors which affected outcomes

Natural Disasters (drought, weather extremes, etc.)

Economy

Appropriations changes

Public Policy changes

Government Regulations

Competing Public priorities

Competing Programmatic Challenges

Brief Explanation

Cost of petroleum prices have affected the cost of transportation, fuel, fertilizer, and practically everything else. Hawaii is especially vulnerable because of our high dependence on import for energy, foods, and most other materials producers have significant disadvantages.

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

1. Evaluation Studies Planned

Before-After (before and after program)

During (during program)

Evaluation Results

{No Data Entered}

Key Items of Evaluation

{No Data Entered}