

Agricultural & Food Biosecurity

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V(A). Planned Program (Summary)

1. Name of the Planned Program

Agricultural & Food Biosecurity

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
136	Conservation of Biological Diversity			50%	
213	Weeds Affecting Plants			50%	
Total				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	0.0	0.0	0.3	0.0
Actual	0.0	0.0	0.3	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	23483	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	23483	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	19897	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Molecular markers are being developed to resolve population structure of the invasive red algae *Neosiphonia harveyi*. These markers will be used to survey new and extant populations of the alga from Long Island through the Gulf of Maine. The genotypes of these populations will be compared to extant populations in Europe and Ireland and to populations in the Sea of Japan to determine whether there have been one or multiple introductions of the invasive alga in the Gulf of Maine, relative to the recent explosive expansion of this alga. Research during this initial year was focused on the putative vector *Codium Fragile* in the Gulf of Maine. Many of the collected samples were found to contain samples of *N. harveyi*. A collection database was established for current and future applications.

2. Brief description of the target audience

Scientists in this and related disciplines, K-12 students, undergraduate and graduate university students, ecosystem managers, fisheries cooperatives, and the public.

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	50	20	0	50
2008	0	30	0	60

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

Patent Applications Submitted

Year Target

Plan: 0

2008: 0

Patents listed

None

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan	0	0	
2008	0	0	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

Peer Review Publications

Year	Target	Actual
2008	1	0

Output #2

Output Measure

Non peer reviewed publications including abstracts

Year	Target	Actual
2008	2	0

V(G). State Defined Outcomes

O No.	Outcome Name
1	Members of the general public identifying the algal in new locations along the Gulf of Maine
2	Number of citations from publications

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

Appropriations changes

Brief Explanation

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

1. Evaluation Studies Planned

Before-After (before and after program)

During (during program)

Evaluation Results

Key Items of Evaluation