

Natural Resources

Natural Resources

V(A). Planned Program (Summary)

1. Name of the Planned Program

Natural Resources

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
101	Appraisal of Soil Resources			3%	
102	Soil, Plant, Water, Nutrient Relationships			9%	
111	Conservation and Efficient Use of Water			4%	
112	Watershed Protection and Management			7%	
123	Management and Sustainability of Forest Resources			9%	
132	Weather and Climate			4%	
133	Pollution Prevention and Mitigation			7%	
135	Aquatic and Terrestrial Wildlife			36%	
136	Conservation of Biological Diversity			1%	
201	Plant Genome, Genetics, and Genetic Mechanisms			9%	
206	Basic Plant Biology			3%	
304	Animal Genome			2%	
315	Animal Welfare/Well-Being and Protection			4%	
511	New and Improved Non-Food Products and Processes			2%	
Total				100%	

V(C). Planned Program (Inputs)

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

Year: 2007	Extension		Research	
	1862	1890	1862	1890
Plan	0.0	0.0	7.2	0.0
Actual	0.0	0.0	6.3	0.0

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

Extension		Research	
Smith-Lever 3b & 3c 0	1890 Extension 0	Hatch 197820	Evans-Allen 0
1862 Matching 0	1890 Matching 0	1862 Matching 736143	1890 Matching 0
1862 All Other 0	1890 All Other 0	1862 All Other 27932	1890 All Other 0

V(D). Planned Program (Activity)

1. Brief description of the Activity

Conduct research on Maine's ground water and surface water resources. Conduct research on Maine native animal and plant species and their habitats. Investigate soil-landscape relationship in coastal ecosystems. Participate in the National Atmospheric Deposition Program. Publish peer-reviewed journal articles and other publications concerning research. Present findings at professional meetings and at other venues.

2. Brief description of the target audience

Other scientists in plant biology, marine biology, animal biology, evolutionary biology, aquaculture, phycology, molecular biology; teachers at all levels; directors of aquariums and museums, exhibit halls, etc.; cancer biologists and pharmaceutical companies; endangered species biologists/managers; policy makers; state regulatory agencies; environmental consultants

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	0	0	0	0
2007	0	0	0	0

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

Patent Applications Submitted

Year	Target
Plan:	0
2007:	0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

	Extension	Research	Total
Plan			
2007	0	18	18

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

of peer-reviewed publications

Year	Target	Actual
2007	16	18

Output #2

Output Measure

of other types of publications

Year	Target	Actual
2007	14	9

Output #3

Output Measure

of papers presented at professional meetings

Year	Target	Actual
2007	38	42

Output #4

Output Measure

of research projects completed

Year	Target	Actual
2007	3	7

Output #5

Output Measure

Database of harbor seal and gray seal distribution and numbers over time is available as a database and as a google-map add on.

Year	Target	Actual
2007	{No Data Entered}	1

V(G). State Defined Outcomes

O No.	Outcome Name
1	# of complete chloroplast gene sequences submitted to GenBank for public use for <i>Vaucheria litorea</i>
2	# of people increasing their knowledge about the interactions between seals and Atlantic salmon, annually
3	# of people increasing their knowledge about the contribution of watershed nutrient exports to non-point pollution and nutrient cycling in Maine rivers and coastal waters
4	# of lakes from which data are used in a database to quantify statistical relationship and to develop empirical models
5	# of new software programs created to evaluate borehole flow profile data collected using borehole geophysics
6	# of new ground-water-modeling programs created to simulate ground-water flow
7	# of people improving their understanding of habitat requirements for marsh bird species of management concern in Maine, annually
8	# of people developing a better understanding of patterns of adaptive divergence in wild fish populations and the relevance of evolution in fish conservation management, annually
9	# of state and/or federal agencies using information on marsh bird species occurrence and habitat requirements in making assessments and recommendations on development proposals near wetlands
10	# of state agencies using information on marsh bird species occurrence and habitat requirements to develop recovery strategies for rare marsh bird species
11	# of new recommendations for maintaining water quality in Maine rivers and minimizing adverse impacts of non-point pollution
12	# of state agencies using information on watershed nutrient exports for developing new recommendations for maintaining water quality in Maine rivers and minimizing the impacts of non-point pollution
13	# of state agencies using information about the biology of rare wildlife species in Maine to help to create policies to protect species and habitats
14	Number of public school children and other visitors to the area using a checklist for birds for the Dwight B. Demeritt Forest in Orono/Old Town, Maine, and a checklist for birds for the Penobscot Experimental Forest in Bradley/Eddington, Maine
15	Number of Internet-accessible databases containing what may be the largest and most complete set of ecological and physiological data on a wide variety of songbirds from North America.
16	# of lake associations, such as Congress of Lake Associations, promoting maintenance of healthy lake foodwebs
17	# of management agencies using measurement of lake foodweb structure in their lake assessment and education programs
18	# of management agencies using information on seal behavior to create management plans
19	# of rare marsh bird species affected by changes in harvest regulations
20	% decrease in nutrient enrichment of Maine rivers and coastal waters
21	New evolutionary insights useful to management of Maine fishes and building new research programs supported by local and national interests
22	New findings on beaver-modified wetland landscapes
23	New molecular identification key to the 10 species of freshwater mussels in Maine

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
- Populations changes (immigration, new cultural groupings, etc.)
- Other (new invasive species)

Brief Explanation

{No Data Entered}

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

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Comparison between locales where the program operates and sites without program intervention

Evaluation Results

{No Data Entered}

Key Items of Evaluation
{No Data Entered}