### NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2012 ABSTRACT

Quarter: (circle one)
 $2012 1^{st}$   $2012 2^{nd}$   $2012 3^{rd}$   $2012 4^{th}$ 

<u>Grant Number and Title</u>: NALCC 2011(8) Assessing Priority Amphibian & Reptile Conservation Areas (PARCAs) and Vulnerability to Climate Change in the North Atlantic Landscape Conservation Cooperative

<u>Grant Receipt/Organization</u>: Association of Fish and Wildlife Agencies, University of Maine (USGS MCFWRU), University of Georgia

Grant Project Leader: Priya Nanjappa

Please provide a short (1-2 paragraphs) abstract that addresses EACH of the following: the objectives of your project, accomplishments to date, future plans and timelines with an estimate for when the project will be completed.

**Objective 1:** Work directly with state fish and wildlife agency personnel throughout the NA-LCC states to gather data toward PARCA criteria review and proposed conservation area identification. To address this objective, **UGA** continued to obtain locality data on key species from the states that will help locate potential PARCAs and assist with mapping climate change vulnerability for target species (and simultaneously, long-term PARCA viability). **UGA** is also in consistent contact with the PIs leading an effort in the South Atlantic LCC to identify PARCAs in that region. **UMaine** has a new Post-Doc, Dr. Allison Moody, who, with Loftin and deMaynadier, has developed a timeline for goals to achieve by 31 December, with a focus on compiling the species locality records database and spatial data layers needed to describe relevant landscape conditions. They will also use Maine species locality data to test a prototype of PARCA over a restricted area and limited suite of species. Moody assembled a list of northeastern contacts that may have spatially explicit locality data and drafted a letter requesting their assistance. The letter was sent on 8 October and follow-up phone calls will begin by 22 October.

**Objective 2:** Providing maps and other tools related to climate change vulnerability. To address this objective, **UGA** is developing models for all species in the state of Maine, as Maine will serve as a testing ground for implementing the full PARCA process.

**Objective 4:** Conduct an analysis of candidate PARCAs to help identify those highest priority conservation areas supporting reptiles and amphibians in the Northeast that are not currently protected. To address this objective, Moody at **UMaine** has developed a comprehensive list of reptile and amphibian species in the Northeast with status ranks and is reviewing literature related to species distribution models and related to other LCC projects including works by

Anderson and McGarigal that are being reviewed to identify common objectives and approaches to conservation area design. In the next quarter, Moody will continue compilation of locality data, in collaboration with Barrett, as well as spatial/landscape data layers. Models of species distribution and PARCAs will be produced during the next quarter using data provided by Maine Department of Inland Fisheries and Wildlife to test methodology and as an example to present to state fish and wildlife agency personnel.

**Objective 6:** Communicate results to key state, federal, and NGO partners via publications and a Northeast regional workshop. To address this objective, Loftin and deMaynadier at **UMaine** attended the NEPARC (Northeast Partners in Amphibian and Reptile Conservation) annual meeting, presented the PARCA project to the assembled amphibian and reptile researchers, and participated in a discussion/workshop about NEPARC and the NA LCC. Loftin, Moody, deMaynadier, and Barrett participated in a conference call to discuss project activities and opportunities to share data and analyses, and Moody contacted J.J. Apodaca to learn about the Orianne Society's approach to the SEPARCA project.

AFWA had minimal contributions this quarter due to the Project Leader being on maternity leave. AFWA did assist with coordinating reporting but the work will not be billed until the  $4^{\text{th}}$  quarter. Work on Objective 3 will be addressed during 2013, and Objectives 5 – 6 will be finalized in 2014.

### NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2012 PROGRESS REPORT

Quarter: (circle one)
 $2012 1^{st}$   $2012 2^{nd}$   $2012 3^{rd}$   $2012 4^{th}$ 

#### <u>Grant Number and Title</u>: Grant 2011-08; **ASSESSING PRIORITY AMPHIBIAN AND REPTILE** CONSERVATION AREAS (PARCAS) AND VULNERABILITY TO CLIMATE CHANGE IN THE NORTH ATLANTIC LANDSCAPE

<u>Grant Receipt/Organization</u>: Association of Fish and Wildlife Agencies, University of Maine (USGS MCFWRU), University of Georgia

Grant Project Leader: Priya Nanjappa

Were planned goals/objectives achieved last quarter? Yes (as described in "Progress Achieved" section below)

<u>NALCC Conservation Need Addressed</u>: Progress was made toward addressing the final goal of establishing PARCAs within the North Atlantic LCC and evaluating their long-term vulnerability to climate change.

Progress Achieved: (For each Goal/Objective, list Planned and Actual Accomplishments)

**Objective 1:** Work directly with state fish and wildlife agency personnel throughout the NA-LCC states to gather data toward PARCA criteria review and proposed conservation area identification.

<u>UGA</u>: Barrett continued to maintain close contact and discussions with the PIs tasked with identifying PARCAs in the South Atlantic LCC. Specifically, he has had several phone conversations and an in-person meeting with Chris Jenkins (Reptile and Amphibian Subcommittee meeting at the Association of Fish and Wildlife Agencies conference in Hilton Head, SC; 11 September 2012) on this topic. Overall, this collaboration helps to ensure continuity between our NA-LCC efforts and their efforts in the south.

<u>UMaine</u>: Moody assembled a list of Northeastern contacts that may have spatially explicit locality data and drafted a letter requesting their assistance. The letter was sent 08 October and follow-up phone calls will begin by 22 October. Moody, Loftin, and deMaynadier met with the Maine Department of Inland Fisheries and Wildlife species data manager to discuss using Maine data in the initial PARCA designation to assess methodology.

**Objective 2**: Provide spatially-explicit maps of current and future climatic suitability for priority amphibians and reptiles in the NA-LCC region, and then use these data a) to rank species vulnerability to climate change based projected losses in the species' ranges, and b) to identify areas within the NA-LCC where either there are high losses of vulnerable species or there is high potential for climatic refugia for priority species, and c) identify species for which this Objective cannot be completed due to gaps in current known distributional data and thus identifies priorities for species data acquisition.

<u>UGA</u>: Barrett is continuing to build and refine the species locality databases, which are essential for generating products associated with Objective 2. Our current focus is on developing models for all 10 amphibians on our focal list that are in Maine. This state will serve as a proving ground for our PARCA implementation procedure.

**Objective 3**: Summarize these results with respect to species occurring on lands under current state and federal management.

This objective has not been addressed at this time.

# **Objective 4:** Conduct an analysis of candidate PARCAs to help identify those highest priority conservation areas supporting reptiles and amphibians in the Northeast that are not currently protected.

<u>UMaine</u>: Moody has developed a comprehensive list of reptile and amphibian species in the Northeast with status ranks (NatureServe global, national, and state ranks; IUCN ranks; ESA status; state SGCN ranks) in order to accomplish PARCA selection criteria. She is also reviewing literature related to species distribution models, conservation area determination, and web-available resources from other LCC projects.

**Objective 5**: Incorporate climate vulnerability projections into final PARCA analysis, including a ranking of high priority current and future conservation areas.

This objective has not been addressed at this time.

# **Objective 6:** Communicate results to key state, federal, and NGO partners via publications and a Northeast regional workshop.

<u>UMaine</u>: Loftin and deMaynadier attended the NEPARC (Northeast Partners in Amphibian and Reptile Conservation) annual meeting 24-26 July in New Hamphire, and presented the PARCA project to the assembled amphibian and reptile researchers. The team has participated in a conference call with Barrett and another with J.J. Apodaca to discuss project methodology. Moody and deMaynadier attended the 09 October NA-LCC meeting in New Gloucester, Maine, and informally discussed the PARCA project with attendees.

Summary of Progress: (Provide a paragraph describing progress, work to come, and timelines)

<u>AFWA</u>: AFWA had minimal contributions this quarter due to the Project Leader being on maternity leave. AFWA did assist with coordinating reporting but the work will not be billed until the 4<sup>th</sup> quarter. <u>UGA</u>: Barrett and colleagues are continuing to collect locality data required for generating models from NA-LCC states (especially Maine). They continue to be in contact with the group identifying PARCAs in the South Atlantic LCC to ensure our efforts are parallel. They have begun to build climate change vulnerability models for species where the database has been sufficiently developed (especially in Maine). Barrett has recently taken a job at Clemson University. As a result, he recently filed a final report with WMI and the University of Georgia so that funding to UGA can be transferred back to WMI and a new agreement can be reached with Clemson University.

<u>UMaine</u>: Since the last quarter, Moody has started the postdoctoral position at UMaine and with Loftin and deMaynadier, completed safety and orientation requirements of the University of Maine and US Geological Survey, purchased a project computer workstation, and has developed a timeline for goals to achieve by December 31, with a focus on compiling species locality records database and spatial data layers needed to describe relevant landscape conditions. They will also use Maine species locality data to test a prototype of PARCA over a restricted area (Maine) and limited suite of species. Conference calls or in-person meetings have been held with Barrett, the principle investigator of the SA-LCC PARCA project (Joseph Apodaca) and the GIS expert for the state of Maine (Don Katnick). These have allowed the UMaine group to ensure they are not replicating other's efforts, that their methods will be comparable with the SA-LCC, and that their data needs can be addressed by state GIS records.

### Difficulties Encountered: None

#### Activities Anticipated Next Quarter:

- 1. (UGA) Continued climate change vulnerability model construction
- 2. (UGA) Continued incorporation of state-held locality data
- 3. (UGA) Hire a postdoctoral research to assist with climate niche modeling
- 4. (UMaine) Moody will continue compilation of locality data, in collaboration with Barrett, as well as spatial/landscape data layers. Using data provided by deMaynadier from Maine, models of species distribution and PARCAs will be produced to test methodology and as an example to present to state fish and wildlife agency personnel. Barrett has been invited to UMaine in Spring 2013 to present his work in the Wildlife Ecology Seminar Series and consult with the Maine team.

Expected End Date: December 31, 2014

Costs:

Funds Expended Previous to this Report: \$53,385.75

Amount of NALCC Funds Requested within this Report: All funds requested as part of the financial reports from individual grant collaborators; we are requesting no additional NALCC funds within this progress report.

Total Approved Budgeted NALCC Funds: \$315,902

Are you within the approved budget plan? YES

Are you within approved budget categories? YES

Signature:

Date: 4 December 2012

### NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2012 FINANCIAL REPORTING FORM

Quarter: (circle one)	2012 1 <sup>st</sup>	2012 2 <sup>nd</sup>	2012 3 <sup>rd</sup>	2012 4 <sup>th</sup>

Grant Number and Title: 2011-06

Grant Receipt/Organization: University of Georgia Research Foundation

Grant Project Leader: Kyle Barrett Acct#: 20-21-RR272-382 Inv#: V00032591RF

### A. List Total Eligible Cost Summary For This Quarter Only:

	NALC	CC GRANT	
Time Period (circle one)	Jan 1 to Mar 31 A	pr 1 to Jun 30 Jul 1 to Sept 30	Oct 1 to Dec 31
	NALCC FUNDS	NON-FEDERAL MATCH*	TOTAL
Personal Service Cost			
Salaries and/or Wages	3,910.87		3,910.87
Fringe Benefits	1,194.65		1,194.65
Indirect Cost Rate 20 %	1,021.10	970.05	1,991.15
Non-personal Service Cost			
Travel			
Equipment			
Supplies & Materials			
<b>Contractual Services</b>			
Indirect Cost Rate%			
Total	6,126.62	970.05	7,096.67

\*If specified in contract

#### B. <u>List Cumulative Total Eligible Costs Claimed From The Beginning of Agreement Up To And</u> Including Those Listed Above:

Total Life-to-Date Expenses	\$41,317.93	
Less Previous Payments Processed	\$35,191.31	<u> </u>
Total Amount Due Grantee Now:	\$6,126.62	

10/10 1) anala 11 Pamela Ray, Director

10/9/12

Final

Pamela Ray, Difector UGA Contracts & Grants

### PERSONAL SERVICES SUMMARY PROJECT WAGES SUBMITTED FOR REIMBURSEMENT AND 3RD PARTY MATCH\*

		NALCC	GRANT	Sugar Parts	
Date(s)	Name, Affiliation, Title	Hourly Rate	Task	Hours Claimed	Total Cost
07/01/12 - 09/30/12	Russell, Kyle Barrett, UGA, Postdoc	\$3,250/month	See progress report	0.249998 months	\$820.87
07/01/12 – 09/30/12	Nathan Nibbelink, UGA, Associate Professor	\$6,180/month	See progress report	0.5 month	\$3,090

\*Matching hours only need to be documented if required by your contract

**NOTE:** If daily time and activity records for each individual employee, signed by the appropriate supervisor, which document the above summarized personal services performed in relation to the project, are not attached, the following certification must be signed prior to reimbursement of those costs.

### CERTIFICATION OF PROJECT WAGES AND 3RD PARTY MATCH

I hereby certify that daily time and activity records for each individual detailing the specific hours devoted solely to this project which are distinguishable from work done on other projects during the same time frame, maintained in accordance with all applicable federal, state and general municipal accounting practices and procedures are available in our files for inspection.

1/ por

Authorized Representative

## NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2012 FINANCIAL REPORTING FORM

Quarter: (circle one)
 $2012 1^{st}$   $2012 2^{nd}$   $2012 3^{rd}$   $2012 4^{th}$ 

#### Grant Number and Title: Grant 2011-06; ASSESSING PRIORITY AMPHIBIAN AND REPTILE CONSERVATION AREAS (PARCAS) AND VULNERABILITY TO CLIMATE CHANGE IN THE NORTH ATLANTIC LANDSCAPE

Grant Receipt/Organization: AFWA

Grant Project Leader: Priya Nanjappa

#### A. List Total Eligible Cost Summary For This Quarter Only:

	NAL	CC GRANT	
Time Period (circle one)	Jan 1 to Mar 31	Apr 1 to Jun 30 Jul 1 to Sept 3	9 Oct 1 to Dec 31
	NALCC FUNDS	NON-FEDERAL MATCH	TOTAL
Personal Service Cost			
Salaries and/or Wages	0	0	0
Fringe Benefits	0	0	0
Indirect Cost Rate%	0	0	0
<u>Non-personal Service</u> <u>Cost</u>			
Travel	0	0	0
Equipment	0	0	0
Supplies & Materials	0	0	0
Contractual Services	0	0	0
Total	0	0	0

#### B. <u>List Cumulative Total Eligible Costs Claimed From The Beginning of Agreement Up To And</u> Including Those Listed Above:

Total Life-to-Date Expenses	\$0	
Less Previous Payments Processed	\$0	
Total Amount Due Grantee Now:	\$0	

## PERSONAL SERVICES SUMMARY GRANTEE AND 3RD PARTY MATCH

		NALCC	GRANT		
Date(s)	Name, Affiliation, Title	Hourly Rate	Task	<b>Hours Claimed</b>	Total Cost
		1			
			<u>.</u>	<b>.</b>	
					· · · · ·

**NOTE:** If daily time and activity records for each individual employee, signed by the appropriate supervisor, which document the above summarized personal services performed in relation to the project, are not attached, the following certification must be signed prior to reimbursement of those costs.

### **CERTIFICATION OF GRANTEE AND 3RD PARTY MATCH**

I hereby certify that daily time and activity records for each individual detailing the specific hours devoted solely to this project which are distinguishable from work done on other projects during the same time frame, maintained in accordance with all applicable federal, state and general municipal accounting practices and procedures are available in our files for inspection.

Authorized Representative

### **Office of Research and Sponsored Programs**

University of Maine 5717 Corbett Hall Room 400 Orono, Maine 04469-5717

#### Project Sponsor:

WILDLIFE MANAGEMENT INSTITUTE, INCORPORATED ATTN: SCOT WILLIAMSON VICE PRESIDENT 4426 VT ROUTE 215N CABOT, VT 05647



Invoice/Statement No: **24043** Project-Account No: **5405368-43700** Grant/Contract: **2011-08** Billing Date: **10/3/2012** Fed. Employer ID No: **01-6000769** Department-Fund: **5525980-20** 

#### PERIOD: 7/1/2012 TO 9/30/2012

REQUEST FOR REIMBURSEMENT OF EXPENDITURES ON RESEARCH PROJECT AGREEMENT REFERENCE NO: 2011-08 CONCERNING, "ASSESSING PRIORITY AMPHIBIAN REPTILE CONSERVATION AREAS (PARCAS)." (PRINCIPAL INVESTIGATOR: CYNTHIA S. LOFTIN)

		Allio	Junt	
	SPO	NSOR	UMAI	NE
	Current	Cumulative	Current	Cumulative
SALARIES	\$5,260.87	\$5,260.87	\$0.00	\$0.00
EMPLOYEE BENEFITS	\$2,572.57	\$2,572.57	\$0.00	\$0.00
NON-CAPITAL EQUIPMENT	\$2,658.58	\$2,658.58	\$0.00	\$0.00
TOTAL DIRECT COSTS	\$10,492.02	\$10,492.02	\$0.00	\$0.00
INDIRECT COSTS @ 15%	\$1.573.80	\$1.573.80	\$2.916.78	\$2.916.78
TOTAL PROJECT COSTS	\$12,065.82	\$12,065.82	\$2,916.78	\$2,916.78

AMOUNT DUE THIS BILLING PERIOD	Prior Invoices Unpaid	Total Outstanding	Payments to Date	Cumulative Claim
\$12,065.82	\$0.00	\$12,065.82	\$0.00	\$12,065.82

Robert Las

Please show account or invoice number on remittance and make payable to University of Maine. Mail to Office of Research & Sponsored Programs 5717 Corbett Hall Room 400, Orono, ME 04469-5717 ROBERT LAVIGNE, ACCOUNTANT TELEPHONE: (207) 581-1482