Support for Status Assessment and Conservation Action Plan for the Eastern Black Rail (*Laterallus jamaicensis jamaicensis*) Across the Northeast Region

Project Proposal Submitted to the Northeast Regional Conservation Need Grant Program by:

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Project Description: The eastern Black Rail is the most endangered bird in the Northeast region of the U.S. and along the Atlantic Coast. Populations have declined by 85 % in the Northeast since 1992 and have reached dangerously low levels. Black Rails now breed in only a dozen or fewer locations per state within its breeding range. It is unlikely that Black Rails will persist in the Northeast without timely and appropriate conservation actions. The proposal outlined herein is intended to secure funds to partially support the creation of a Status Assessment and Conservation Action Plan for the Black Rail across the Northeast planning region. Specifically, we are requesting funds to partially support a project facilitator that will provide the value-added synthesis for information resources gathered, facilitate the collection of information from an established consortium of agencies, biologists, academic institutions, and land managers of the Eastern Black Rail Conservation and Management Working Group (see http://www.ccbwm.org/BlackRail), and to construct the action items needed for a successful conservation campaign. We are also requesting funds to support a workshop for members of the working group and other interested persons to take an active part in creating the documents. Final products include a Status Assessment report, Conservation Action Plan report, and associated geo-referenced databases on status, distribution, and spatially explicit conservation priorities. We feel that these products are the necessary steps to secure the future of a declining Black Rail population within the coastal portions New York, New Jersey, Delaware, Maryland, and Virginia.

RCN Topic 4: Identification of Regional Focal Areas and Corridors for the Conservation of Species of Great Conservation Need in the Northeast

Northeast Regional Conservation Needs Funding Request: \$68,926.00

Project Proposal Background:

The Black Rail is the most endangered bird species along the Atlantic Coast. Black Rail populations have been declining in the eastern United States for over a century resulting in a retraction of its breeding range, an overall reduction in the number of breeding locations within its core range, and a loss of individuals within historic strongholds. Populations have become dangerously low in recent decades. Surveys conducted in Virginia and Maryland has indicated that Black Rail populations have declined 85 % since 1992. This evidence further suggests that Black Rails may only breed in a dozen or fewer places in each state of the Chesapeake Bay and likely in fewer locations for all other Northeastern states within the species breeding range. It is unlikely that Black Rails will persist in the Northeastern U.S. without timely and appropriate conservation action.

We believe there are essentially three core population centers for the eastern Black Rail (*Laterallus jamaicensis jamaicensis*) remaining along the Atlantic and Gulf coasts that support the bulk of breeding numbers in the United States. These core centers include; 1) the coastal region from New Jersey through North Carolina, 2) Florida's Atlantic and Gulf Coasts, and 3) Texas. Historically, the northern edge of this breeding range may have once extended as far as Massachusetts but contracted south to New York sometime in the early twentieth century. Black Rails spend the winter along Atlantic coast from New Jersey to Florida and within all states along the Gulf Coast from Florida to Texas. Breeding populations of the eastern United States may also winter in Cuba and the West Indies.

The reasons for the recent dramatic decline of Black Rails are not completely known but may be a result of one or more factors. Negative impacts can include habitat loss and degradation, predation, and environmental contaminants. Along the Atlantic Coast, Black Rails breed within the distinct, upper elevational zone of tidal salt marshes known as the high marsh. The high marsh is particularly susceptible to negative impacts such as sea-level rise, human development, Phragmites invasion, and is in close proximity to upland nest predators. These impacts can be spatially variable so each must be explicitly identified at the site level in order to chart a practical course of remedy. The greatest obstacle in being able to move conservation of Black Rails forward is that the scientific and conservation community lacks a regional synthesis of the required information to enable spatially explicit action.

Most of what we know about the distribution and abundance of Black Rails is based on scattered anecdotal reports, individual studies at local areas, and site specific surveys. These resources provide the raw material to begin assembling the history and current state of Black Rail populations but have never been pooled for regional conservation and management purposes. Black Rails appear in every State Wildlife Action plan as a top priority but the lack of a consolidation for Black Rail information continues to hamper our comprehensive vision of the species' distribution and management targets. Moreover, there has never been a comprehensive status assessment produced for Black Rails nor are there any existing monitoring programs in place to update the health of populations.

The Center for Conservation Biology envisions that a successful conservation campaign for the Black Rail must first be centered on gathering the information needed to formulate management actions, and activating a communication network of agencies, biologists, land managers, and concerned citizens to enable these actions. With this foundation in mind, the Center for Conservation Biology began the first organized conservation approach for the species along the Atlantic and Gulf coasts by establishing the Eastern Black Rail Conservation and Management working group (see http://www.ccb-

wm.org/BlackRail). We targeted membership of this group to integrate the collective knowledge and efforts from a broad range of concerned agencies and biologists. So far, this group's membership is comprised of biologists from the USFWS (Ecological Services offices, program biologists, and refuge biologists throughout the species range), Atlantic Coast Joint Venture, NOAA, Delaware Division of Fish and Wildlife, Maryland Department of Natural Resources, Georgia Department of Natural Resources, Virginia Department of Game and Inland Fisheries, National Audubon Society, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, Southwest Florida Water Management District, Texas Parks and Wildlife, Louisiana Fisheries and Wildlife, Louisiana State University, The Nature Conservancy, several state Audubon Society chapters (e.g., VA, MD, NJ), and private citizens with expert knowledge on this species. This group's near-term objective will be to work together to develop a status assessment and a conservation action plan. Products produced through this effort will have the input of, and will provide direct benefits to, state agencies responsible for implementing State Wildlife Action Plans, federal agencies involved with national and regional conservation, Landscape Conservation Cooperative strategic habitat management implementation, and NGOs involved with bird conservation at regional or national scales. This effort will also benefit other species that co-inhabit salt marsh ecosystems and are themselves high priority conservation targets such as the Saltmarsh Sparrow, Nelson's Sparrow, Clapper Rail, Virginia Rail, Seaside Sparrow, and Henslow's Sparrow.

Project Objectives

This proposed project contains a specific set of objectives to complete 1) a Status Assessment Document, 2) a Conservation Action Document, and 3) associated geo-referenced databases. The information contained in these three elements carries fully or partially across all 7 Regional Conservation Needs (Table 1, next page) however this proposal is being submitted under **RCN Topic #4: Identification of Regional Focal Areas and Corridors for the Conservation of Species of Great Conservation Need in the Northeast**

We envision the project work in two distinct phases. **Phase 1** includes the completion of a Status Assessment document and associated geo-referenced databases used for support of the assessment. **Phase 2** is the completion of a Conservation Action Plan that synthesizes information gathered from Phase 1 into meaningful conservation approaches to halt and reverse population declines of Black Rails. A workshop for each Phase is planned for Northeastern work group members and other interested persons.

We are requesting funds to partially support a project director that will facilitate and complete each phase of the project and the funds to support the hosting of a Northeast Region workshop for Northeast members of the eastern Black Rail Conservation and Management Working group and other interested individuals. Although the Black Rail Conservation and Management Working group encompasses the eastern portion of the species range, the requested funds are to only summarize and synthesize this information for the Northeast breeding range of the Black Rail so includes the states of New York, New Jersey, Delaware, Maryland, and Virginia. The project director would only be partially supported by this funding request but will be fully charged with leading the working group team, completing the final Status Assessment document, and completing associated databases of both phases. In this, the project director will also be charged with value-added synthesis of all information collected. Table 1: Project Objective and RCN Topic Addressed.

Project Objective		Regional Conservation Need Topic Addressed
Phase	1: Status Assessment Document & Geo-	
referenced Distribution Database		
1)	Conduct a workshop for working group	
	members and others to work on the Status	
	Assessment.	
2)	Gather knowledge to identify and describe	RCN 1, RCN 2, RCN 3
	Black Rail populations and habitats.	
3)	Complete a geo-database map of historic	RCN 1, RCN 4
	and contemporary occurrence records.	
4)	Create a bibliography of literature sources	RCN 2
	on Black Rail conservation and ecology;	
5)	Complete a Status Assessment Document	RCN1, RCN 2, RCN 3, RCN 4
Phase 2	2: Conservation Action Plan Document	
1)	Organize a conservation action plan	
	workshop.	
2)	Complete a spatially explicit matrix and map	RCN 4, RCN 5, RCN 7
	for Black Rail population threats (e.g., sea-	
	level rise, development).	
3)	Conduct a stewardship assessment and	RCN 4, RCN 5
	management potential of Black Rail	
	populations.	
4)	Identify a network of prioritized areas for	RCN 4, RCN 5
	protection and management of Black Ralls	
E)	and other marsh birds that share habitat.	
5)	Create explicit state by state / marsh by	RUN 4, RUN 5
	Marsh management guidelines and map for	
6)	Didck halls.	
0)	manned survey locations to maintain status	KCN 5, KCN 0
	information and evaluate conservation	
	actions in an adaptive management schema	
7)	Prioritize research needs that are target a	RCN 5 RCN 6
,,	better understanding of limiting factors	
8)	Develop a communication interface with	BCN 5
07	ongoing management on public and private	
	lands to prioritize the creation and	
	restoration of habitats for Black Rails.	
9)	Complete a Conservation Action Plan	RCN 3, RCN 4, RCN 5, RCN 6, RCN 7
	document.	

Project Timeline

We envision this project will take two years from initiation to complete. Phase 1 is estimated to be finished in one year and Phase 2 one additional year. We are already undertaking this effort without a primary funding source so the initial framework for interagency communication, document outlines, and database structures are already being developed. We will orchestrate a Black Rail status assessment workshop within the first quarter of the Phase 1 funding cycle. The Conservation Action Plan of Phase 2 will be completed within one year and only begin after Phase 1 is completed.

Individual Qualifications

Michael Wilson is the senior biologist at the Center for Conservation Biology and has been working professionally in the field of avian ecology / natural resources management for 18 yrs. Mike's past research and current work has addressed a broad spectrum of management resolutions needed to reduce economic, biological, and abiotic stressors that limit bird species and their populations. Mike has also taken an active role in inter-agency and non-governmental agency initiatives such as Partners in Flight and serves on several national committees. He has direct experience in organizing regional and national projects such as serving as the coordinator for the U.S. Nightjar Survey Network and the eastern Black Rail Conservation and Management Workgroup.

Bryan D. Watts is Mitchell A. Byrd Professor of Conservation Biology and Director of the Center for Conservation Biology at the College of William and Mary. He has worked with birds for more than 35 years, has authored more than 200 publications dealing with bird ecology and conservation, and has managed more than 300 funded projects addressing a wide range of conservation problems. Particular expertise includes population estimation, habitat modeling, migration ecology, ecological/economic tradeoff analysis, conservation planning, and landscape-scale investigations.

David Brinker has been the Central Region Ecologist for the Maryland Department of Natural Resources, Natural Heritage Division since 1989. David's focus during this time has centered on the ecology, monitoring, and management of waterbirds and marshbirds as well as other terrestrial taxa issues. David is a leading expert on Black Rails and has coordinated the only existing long-term / broad scale monitoring program for the species in the eastern United States.