

# Birds

## Open Ocean MAM Strategy Workshop



Birds are one of the six restoration types assigned to the Open Ocean Restoration Area as part of the *Deepwater Horizon* settlement and Consent Decree. The *Deepwater Horizon* oil spill exposed at least 93 species of birds to physical contact with oil in the environment and ingestion of oil during preening and foraging through contaminated prey, water, and/or sediment. The purpose of this workshop is to obtain input on data needed for restoration planning, implementation, and evaluation given the established goals and approaches noted below.

### RESTORATION GOALS

- Restore lost birds by facilitating additional production and/or reduced mortality of injured bird species
- Restore or protect habitats on which injured birds rely
- Restore injured birds by species where actions would provide the greatest benefits within geographic ranges that include the GOM

### RESTORATION APPROACHES

- Restore and conserve bird nesting and foraging habitat
- Establish or re-establish breeding colonies
- Prevent incidental bird mortality



**TABLE 1. Crosswalk of Restoration Approaches and Techniques to Bird Subgroups**

This table provides a crosswalk between PDARP Restoration Approaches and Techniques and the bird subgroups likely to benefit from the Approach and Technique.

Table 1. Potential restoration approaches and techniques for bird subgroups described in Section 1.2. An “X” denotes subgroups that will likely benefit from the corresponding approaches and techniques.

Approach	Technique	Northern GOM nesting birds					Non-GOM nesting birds				
		Colonial waterbirds	Solitary beach nesting birds	Marsh birds	Osprey	Northern nesting birds	Northern shorebirds	Prairie pothole nesting birds	Boreal forest nesting birds	Caribbean nesting birds	Pelagic birds
<b>Restore and conserve bird nesting and foraging habitat</b>	Enhance habitat through vegetation management	X	X	X		X	X	X	X	X	X
	Restore or create riverine islands	X				X					
	Create or enhance oyster shell rakes and beds	X	X				X				
	Nesting and foraging area stewardship	X	X	X	X	X	X	X	X	X	X
	Provide or enhance artificial nest sites	X			X	X		X	X	X	X
	Increase availability of foraging habitat at inland, managed moist-soil impoundments, agricultural fields, aquaculture ponds, and wetlands	X		X	X		X	X	X		
	Create, restore, or enhance coastal wetlands through placement of dredged material	X		X			X	X	X		
	Backfill canals			X				X			
	Restore hydrologic connections to enhance coastal habitats	X	X	X	X		X	X	X		
	Construct groins, breakwaters, or use sediment bypass methods	X	X	X		X		X	X		
	Renourish beaches through sediment addition	X	X			X					
	Restore dune and beach systems through the use of passive techniques to trap sand	X	X			X	X				
	Restore or construct barrier and coastal islands and headlands via placement of dredged sediments	X	X			X	X		X		
	Plant vegetation on dunes and back-barrier marsh	X		X							
	Backfill scars with sediment							X			
	Revegetate SAV beds via propagation and/or transplanting							X	X		
	Protect SAV beds with buoys, signage, and/or other protective measures							X	X		
	Protect and enhance SAV through wave attenuation structures							X	X		
	Acquire lands for conservation (habitat acquisition through fee-title and/or easement purchases)	X	X	X		X	X	X	X	X	
	Develop and implement management actions in conservation areas and/or restoration projects	X	X	X	X	X	X	X	X	X	X
<b>Establish or re-establish breeding colonies</b>	Use acoustic vocalization playbacks and decoys to attract breeding adults to restoration sites	X				X				X	
<b>Prevent incidental bird mortality</b>	Remove derelict fishing gear	X	X		X	X			X	X	
	Support bird rehabilitation centers	X	X		X	X	X		X	X	
	Reduce collisions by modifying lighting and/or lighting patterns on oil and gas platforms					X			X	X	
	Reduce seabird bycatch through voluntary fishing gear and/or technique modification					X			X	X	



## Breakout Group Guiding Questions

There are a number of unknowns in avian restoration; however, the workshop's goal is to focus on what science and monitoring is needed to inform restoration planning and implementation, and understand restoration outcomes.

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What data are needed for planning/implementation?

What data are needed for evaluation?

What data are needed for adaptive management?

What are the key takeaways from our discussion today?