Gulf Oil Spill



Field Survey Report and Recommendations

July 19, 2010



Report Background and Introduction

American Bird Conservancy's (ABC's) Vice President, Mike Parr, and Director of Public Relations, Bob Johns, visited parts of the Gulf region affected by the Deepwater Horizon oil spill for six days (From July 1 – July 6, 2010) to gain a first-hand impression of the disaster's impacts on behalf of ABC and its supporters. They surveyed parts of Barataria Bay, the Mississippi Delta's South Pass, and Breton Island by boat with assistance from the U.S. Fish and Wildlife Service (FWS) and the Barataria-Terrebonne National Estuary Program; joined a Coast Guard over-flight of Barataria Bay, the Mississippi Delta, and the spill site; surveyed much of the beachfront along the coast of Mississippi; and visited Dauphin Island, Alabama (see Appendix 1 on p. 12 for a map of the areas surveyed). In addition to making personal observations and field surveys of birds, they interviewed, both formally on camera and informally in person or by phone, a wide range of officials, affected local people, and interested organizations, ranging from fishing charter captains to the President of Plaquemines parish.

About American Bird Conservancy

American Bird Conservancy (ABC) is a 501(c)(3), not-for profit organization whose mission is to conserve native wild birds and their habitats throughout the Americas.

We envision an Americas-wide landscape where diverse interests collaborate to ensure that native bird species and their habitats are protected, where their protection is valued by society, and they are routinely considered in all land-use and policy decision-making.

ABC is the only U.S.-based group with a major focus on bird habitat conservation throughout the entire Americas. ABC acts across the full spectrum of threats to birds to safeguard the rarest bird species, restore habitats, and reduce threats, unifying and strengthening the bird conservation movement.

ABC advances bird conservation through direct action and by finding and engaging the people and groups needed to succeed, regardless of their political, economic, or social point of view. ABC seeks innovative, fair solutions to difficult issues.

ABC aspires to lead bird conservation by analyzing issues using the best available science; facilitating networks and partnerships; sharing information; developing and implementing collaborative strategies; and establishing measurable outputs.

For eight consecutive years, ABC has been rated a 4-Star, "Exceptional" charity by the independent group Charity Navigator; a status achieved by fewer than 1% of all U.S. charities.

Recommendations

While there are clearly a range of priorities for the region including permanently stopping the leak, cleaning up the at-sea oil, and restoring the coastline, the following is a summary of ABC's additional priority urgent recommendations for birds based on this visit:

1). Use "ocean boom" wherever possible; pick up oiled sorbent boom more quickly

ABC observed several types of boom in use during the trip. The orange or yellow "harbor" boom currently deployed to protect bird colonies in Barataria Bay (and widely elsewhere) is inadequate and should be replaced with the more robust "ocean boom" immediately. ABC observed widespread instances where harbor boom either separated from its anchoring devices, broke apart and was floating without effect, was washed ashore, or cases where even minimal wave action was breaching the boom. The "ocean boom" that was being used around Breton Island, in contrast, appeared to be working quite well and was staying anchored and intact. This was particularly surprising in light of the fact that Breton Island is some ten miles into the Gulf and is therefore subject to substantial wind and wave action from all directions. This ocean boom will withstand major weather events, it would appear that ocean boom has the capability to stand up to the routine weather events the area experiences on a regular basis, while the harbor boom was in such disarray in so many places that its effectiveness is truly marginal at best. Further, sorbent boom which is designed to absorb floating oil is not being collected sufficiently rapidly once it is oiled. In one case, on Queen Bess Island in Barataria Bay, young Royal Terns appear to be becoming oiled in part as a result of contact with sorbent boom washed up at their colony.



Photos: 1. Ocean boom anchored and operational at Breton Island; 2. Orange "harbor" boom blown into the mangroves and providing no protection to Mangrove Island; 3. Failed harbor and sorbent boom at Mangrove Island; 4. Ocean boom operational in foreground, yellow harbor boom (background) blown onto the shoreline and non-operational at Breton Island;
5. Oiled sorbent boom next to oiled Royal Tern chicks on Queen Bess Island; 6. Remnant piece of boom at South Pass; a large slick of oil was offshore close to this location 24 hours later with no beach protection or skimmer boats (see p. 5 below).

2). Fence and protect sensitive beach nesting areas; reduce disturbance to birds from cleanup operations

Cleanup crews are causing significant disturbance and habitat destruction to beach roosting and nesting birds, especially in Least Tern colonies. These activities should be discontinued immediately until qualified biologists can join and direct the workgroups. Further, air boats are another source of bird disturbance. ABC observed extended instances where air boats appeared to be operated with complete disregard for the obvious noise impacts (these boats operate alongside some cleanup crews using unmuffled airplane propellers as a power source) and stress their operations were causing to large numbers of birds nearby. For example, large flocks of pelicans and terns were repeatedly flushed from roosting sites at South Pass by air boats. The air boats also frequently ran over the boom, and in some places the boom appeared to be sagging in the water at these locations.

The placement of "shoreseal" or "tiger" boom which is used to prevent oil from washing high up onto beaches should also be reviewed for bird impacts. It does nothing to protect birds that forage along the tideline such as Sanderlings, and can impact Least Tern nesting areas.



Photos: 7. Black Skimmer and Least Tern colony un-posted or fenced within feet of I-90 in Mississippi; a member of the public was wandering close to the birds at one point; 8. Grader leveling beach close to a Least Tern colony; 9. Adult Least Tern (arrowed) roosting in tire tracks of heavy machinery: this bird was feeding a fledged chick a few minutes earlier which was a few feet to its right when this photo was taken; 10. Dune buggy tracks close to un-posted Least Tern nesting area at Elmer's Island; 11. Airboat (arrowed) flushing pelicans and terns at South Pass; 12. Cleanup crew on Mississippi beach: most of the state's beaches appear to have been graded with heavy machinery prior to being cleaned by these crews (and no oil was visible from I-90 on any beach in Mississippi being cleaned by crews - the highway runs parallel to the beach and is separated from the sand only by a sidewalk affording an excellent view). While the main Least Tern sites are posted and some are fenced, crews and equipment are all over other areas where small numbers of Least Terns are also present.

3). Deploy adequately sized and equipped oil skimmers close to the coast with better coordinated real-time oil reports to eliminate oil BEFORE it hits beaches

Near-shore oil slicks are not being skimmed effectively and an improved system of spotting and skimming these slicks is urgently needed. Once the oil hits the beaches and marshes it is significantly more difficult to deal with. We suggest an improved system of early morning over-flights that can quickly and accurately alert cleanup organizers by radio where oil is advancing toward shore so that appropriate skimmers and other equipment can be deployed immediately to extract the oil from the water before it hits land or the marginally effective booms. Larger vessels, or vessels deploying more robust skimming equipment are urgently needed to protect near-shore areas since most converted shrimp boats appear unable to operate effectively as skimmers in even moderate sea conditions.



Photos: 13. A converted shrimp boat is idled and ineffective in a light sea; 14. Partially buried boom on the beach at Elmer's Island close to the location where we recorded an oiled Wilson's Plover and a Piping Plover; 15. A Sanderling (arrowed) foraging near the tideline on the unprotected beach at Elmer's Island close to the plover area.





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Above: Top photo (16) shows the location of oil (arrowed) at South Pass, the bottom photo (17) shows the location of cleanup vessels (white dots arrowed inside red oval). The pictures were taken within minutes of each other at around 11:00 am on July 4th. The letter "A" in the white box is placed over the same piece of marsh in each photo for reference. Note that the dark patches in both photos are cloud-shadow not oil (the oil is reddish in color). B shows the location that can be seen in photo 6 at the bottom of page 2 where boom has been displaced and the pass is unprotected.

4). Create a staging and recovery area for heavily oiled birds close to the coast

A staging/cleaning area for the most fragile oiled birds is needed prior to their transport to the main bird cleaning facility which is about to be moved to Hammond, Louisiana (which is more than 100 miles inland from the mouth of the Mississippi Delta, whereas the current facility at Fort Jackson is just 35 miles from South Pass). Similar facilities may be needed in other parts of the Gulf region.

We also suggest that the staff charged with the capture of oil-damaged birds are provided with training in rescuing birds. Birds should also be released sufficiently far from the spill site that they are not at risk of re-oiling. Some birds should be satellite tracked to determine their movements post-release to help guide future releases.



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Photos: 18. Oiled Roseate Spoonbill on boom prior to rescue at Mangrove Island; 19. Same bird cleaned by International Bird Rescue Research and close to being ready for release; 20. Young Brown Pelicans awaiting release.

5). Restore eroded island habitat for nesting birds

Post-cleanup bird restoration should concentrate on expanding eroded islands that can provide bird nesting habitat (such as Breton Island and possibly other islands in the Chandeleur group) with Mississippi dredge spoil and other necessary materials. Breton Island, which is home to a dense nesting colony of seabirds (primarily Brown Pelicans, Royal Terns, and Sandwich Terns) has shrunk in size very significantly in recent years due to coastal erosion (once three miles long it is now just a few hundred yards in length and may soon disappear altogether).

Seabird nesting islands should also be restored in Barataria Bay, and perhaps elsewhere, using dredge spoil to recreate historical islands that have been lost to erosion, and by planting native black mangrove.

Enhanced protection is required for Least Tern and Black Skimmer nesting colonies along the Mississippi coastline near Gulfport and Biloxi. These colonies are reported to have shrunk in size significantly over their historical numbers and many key sites are completely open and not posted or fenced. Some nesting areas have been graded by heavy beach cleanup equipment and the public can wander among nesting birds in places. Based on their proximity to residences and recreational beaches, the nesting colonies must also be highly vulnerable to cat predation and disturbance by people and dogs.



Map: 21. Current extent of Breton Island (yellow) and estimated former extent (red) from Google Earth. Photos: 22. Taken from the camera position indicated on the map, towards the arrowed gas rig across what was once Breton Island (according to a local boat captain, twenty years ago, the island extended the three miles to the gas rig's current location); 23. Dense nesting colony of Royal and Sandwich Terns on Breton Island.



Oiled birds



Photos: 24. Oiled Roseate Spoonbill fledglings at Mangrove Island; 25. Failed attempt to capture a pelican (not the flying bird but a young bird that moved further into the mangrove); 26.Oiled adult Royal Tern on Elmer's Island that was later rescued.

During the visit, ABC staff observed oiled birds (mostly fledglings) at several locations. ABC also observed both failed and successful capture of oiled birds. Note that one major difficulty with oiled birds is that lightly or moderately oiled birds are often still able to fly and can be impossible to capture. The following oiled birds were recorded (list below), though some other birds that may have been oiled were also seen distantly (e.g. preening Black-crowned Night-Heron juveniles next to oiled Roseate Spoonbills on Mangrove Island – these birds are naturally brown in color and so oil is hard to confirm from a distance). We also saw many non-oiled birds of the species below, the number of obviously oiled birds being less than 1% of all birds observed (though other observers we talked to had seen more). We also note that some other species have been received at the bird rescue center including, for e.g., Tricolored Heron, which we observed being cleaned there.

Royal Tern: 15+ moderately oiled fledglings on Queen Bess Island, Barataria Bay; one moderately oiled adult on the east end of Elmer's Island (pictured above: called in and later rescued by FWS); one lightly oiled adult at Breton Island.

Roseate Spoonbill: eight moderately oiled fledglings on Mangrove Island, Barataria Bay (one rescued by FWS crew accompanying ABC, and cleaned by the International Bird Rescue Research Center - see photos 18 and 19 above).

Sandwich Tern: one lightly oiled adult on Dauphin Island, Alabama.

Black Skimmer: one lightly oiled adult near Gulfport, Mississippi.

Wilson's Plover: one moderately oiled chick on Elmer's Island.

Snowy Egret: one lightly oiled adult on Elmer's Island.

Cattle Egret: two heavily oiled birds on Mangrove Island, Barataria Bay.

Great Egret: at least one moderately oiled adult on Mangrove Island.

Brown Pelican: at least one lightly oiled bird on Queen Bess Island, Barataria Bay.

Other bird observations of interest

Additional bird species were observed that were not oiled, but were in areas where some oil was present or in areas that were unprotected from oil and could easily be affected in the near future: **Piping Plover** (one on Elmer's Island).

Red Knot (two on Elmer's Island).

Willet (common).

Laughing Gull (abundant).

White Ibis (common).

Ruddy Turnstone (one or a few individuals at multiple sites).

Sanderling (c. 20 total at Elmer's Island and South Pass).

Semipalmated Plover (3-4 at Elmer's Island and South Pass).

Short-billed Dowitcher (one on Elmer's Island, c. 50 Grand Isle but not on beach).

Black-bellied Plover (c. 5-10 at Elmer's Island and South Pass).

Whimbrel (one at South Pass).

Gull-billed Tern (one at South Pass, two at Dauphin Island, 2-4 at Grand Isle but not on beach).

Caspian Tern (one at South Pass, three or four at Cypress Cove - which is upriver and away from the current oil zone).

Least Tern (c. 200+ along Mississippi shore, many at Grand Isle, and fewer at other sites mentioned).

Black Skimmer (many; most c. 100 on Mississippi beaches near Gulfport/Biloxi).

American Oystercatcher (two at Grand Isle).

Yellowlegs sp. (two silent, distant birds flew by at South Pass).

Forster's Tern (few in the Mississippi River).

Osprey (2-4 north of South Pass on the river).

Common Nighthawk (c. 10 nesting on beaches at South Pass and Elmer's island).

Tricolored Heron (common).

Reddish Egret (few, e.g. at Elmer's Island).

Sula sp. (assume Northern Gannet) (one distant at Dauphin Island).

Shorebirds were also seen in small numbers on flooded fields around Grand Isle and Venice. These included a few **Marbled Godwits** and small numbers of **Short-billed Dowitchers**. It is presumed that these are birds that failed to breed and may have summered in the Gulf area. No juvenile or first-winter shorebirds were recorded other than species that nest locally.

Other comments

We observed no heavy oiling of beaches. A light sheen was washing up along the tideline on Elmer's Island (see photo 27 below) and small traces of brown sticky oil were also present there. Globs of sticky brown oil were observed south of Breton Island floating in the seawater. Apparent oil was seen from a distance in the mangroves on Mangrove Island. Heavy oil was seen off the beach at South Pass from the air (see photo 16 above). Sporadic heavy oil and sheen were seen at sea between the Mississippi Delta and the Deepwater Horizon site from the air. Oil appears at the surface as a light reflective sheen, reddish streaky slicks, or as brown patches that appear to be just below the surface.

The general sense is that the effect on birds is not yet as bad as it could be, that heavy oil is sporadic on beaches, and that oil and oiled birds are not as easy to locate as one would imagine (this unpredictability is also one of the main problems hampering cleanup). However, the affected area is vast, much of the boom is inadequate, and skimmers and cleanup equipment are totally insufficient. Major coastline oiling with significant bird impacts could also happen at *any time* across an extensive area, and this could continue for a long period (in fact, new pelican oiling reports have just surfaced from Raccoon Island). ABC staff also surveyed only a small part of the potentially affected area (see map p. 12) and due to the sporadic nature of the oil it is highly likely that other sites are more significantly oiled than those we visited.

Bird cleaning efforts appear to be working well, and we saw a number of cleaned healthy-looking birds ready for re-release at distant sites. As stated above, the difficulty of capturing birds can be a significant problem for rescue efforts, however, and rescue personnel appear to be limited in number. If additional heavy oil reaches beaches used by the migrant shorebirds that will begin to arrive in the Gulf shortly, or if oiling continues into fall waterfowl migration season, the direct bird impacts will grow significantly. Birds such as Common Loons, Northern Gannets, and Double-crested Cormorants can also be expected to be heavily affected as they arrive to winter in the Gulf since these species alight on the sea for long periods and range offshore (especially gannets). Waterfowl such as the Common Goldeneye, Bufflehead, and Red-breasted Merganser would be most vulnerable due to their use of marine bays. Wintering Ring-billed and Herring Gulls, as well as migrant Common Terns are also at risk, along with some less common species such as the Sooty Tern (which typically remains far offshore). The map on the following page indicates some of the most sensitive sites for birds in the region.



Oil sheen at Elmer's Island.



Overlay of spill area interpreted from NOAA data

Thank You

We would like to thank the following individuals and organizations for their cooperation and advice. We would also like to state that federal and local government officers were nothing short of exemplary in their conduct and treatment of ABC staff. We congratulate them on their transparency and helpfulness under these difficult conditions.

David French: U.S. Coast Guard; Bruce Miller, Paul Schmidt, Jerome Ford, Jeff Fleming, Diana Weaver, and Felix Lopez: U.S. Fish and Wildlife Service; Richard DeMay: Barataria-Terrebonne National Estuary Program; Wayne Keller: Grand Isle Port Commission; Rebecca Dmytryk: International Bird Rescue Research Center; Keith Kennedy and Peace Marvel: local boat captains; Billy Nungesser: President of Plaquemines Parish.



APPENDIX 1: ABC SURVEY ROUTES IN GULF SPILL AREA

Boat travel in red. Car or foot in light blue. Over-flight in yellow.