

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
NORTHERN DIVISION

No. 02:07-CV-0045-BO

DEFENDERS OF WILDLIFE and)
 THE NATIONAL AUDUBON SOCIETY,)
)
 Plaintiffs,)
 v.)
)
 NATIONAL PARK SERVICE; UNITED)
 STATES DEPARTMENT OF THE)
 INTERIOR; DIRK KEMPTHORNE,)
 SECRETARY OF THE INTERIOR; MARY)
 A. BOMAR, DIRECTOR OF THE)
 NATIONAL PARK SERVICE; and)
 MICHAEL B. MURRAY,)
 SUPERINTENDENT OF THE CAPE)
 HATTERAS NATIONAL SEASHORE,)
)
 Defendants,)
 and)
)
 DARE COUNTY, NORTH CAROLINA;)
 HYDE COUNTY, NORTH CAROLINA; and)
 THE CAPE HATTERAS ACCESS)
 PRESERVATION ALLIANCE,)
)
 Defendant- Intervenors.)

DECLARATION OF
FRANCESCA CUTHBERT

I, Francesca Cuthbert, under penalty of perjury, depose and state as follows:

1. My name is Francesca Cuthbert. I reside in St. Paul, Minnesota. I am a Full Professor and Interim Head for the Department of Fisheries, Wildlife and Conservation Biology at the University of Minnesota. In this position, I teach undergraduate courses in avian biology and conservation, and among other things, advise and supervise graduate students, and conduct my own research. I hold a Visiting Professor appointment at the University of Michigan Biological Station where I teach Biology of birds and conduct my research on piping plovers and colonial waterbirds. I developed and lead the Great Lakes Waterbird Research Program, a research and conservation effort at the University of Minnesota

that focuses on studies of the conservation and biology of waterbirds, with a special emphasis on piping plovers and 15 species of colonially nesting waterbirds such as gulls, terns, herons and cormorants. Currently I am President of the Waterbird Society, an international professional organization dedicated to research and conservation of waterbirds globally. I am also an invited member of the Waterbird Council of the Americas which is a group that facilitates conservation of waterbirds in North, Central and South America. Currently I am also a member of the International Piping Plover Recovery Coordinating Team. This group provides guidance on the conservation of this species throughout its range. Finally I am an Elected Member and Fellow of the American Ornithologists' Union. These honors are awarded to individuals who have made significant contributions to the study of avian biology. I earned my Ph.D. in Ecology from the University of Minnesota, an M.S. in Biology from the Northern Illinois University and a B.S. in Conservation from the University of Michigan. My dissertation was on Colony Site Selection in Caspian Terns in the Great Lakes. I have attached my *curriculum vitae* as Exhibit 1, which more fully discloses my credentials.

2. I have studied most aspects of the biology of waterbirds, both on their breeding grounds and in their wintering range. My current research focuses on recovery of the endangered Great Lakes Piping Plover population including wintering and breeding ecology within the context of coastal shore ecosystems. (A number of the plovers that winter at Cape Hatteras National Seashore ("CAHA") are from this Great Lakes breeding population.) Currently I am coordinating the 4th binational colonial waterbird survey in the U.S. Great Lakes. This work is conducted for U.S. Fish and Wildlife Service and is a cooperative effort with the Canadian government (Canadian Wildlife Service). My curriculum vitae contains a list of selected publications.

3. I have reviewed the following materials relevant to this case as they pertain to piping plovers, American oystercatchers, gull-billed terns, common terns, least terns, and black skimmers:

- a. The USGS's Management, Monitoring, and Protection Protocols for American Oystercatchers at Cape Hatteras National Seashore, North Carolina;
- b. The USGS's Management and Protection Protocols for the Threatened Piping Plover on Cape Hatteras National Seashore, North Carolina;
- c. The USGS's Management, Monitoring, and Protection Protocols for Colonially Nesting Waterbirds at Cape Hatteras National Seashore, North Carolina;
- d. The USGS's Synthesis of Management, Monitoring, and Protection Protocols for Threatened and Endangered Species and Species of Special Concern at Cape Hatteras National Seashore, North Carolina;
- e. The Fish and Wildlife Service's Biological Opinion for Cape Hatteras National Seashore's Interim Protected Species Management Strategy, dated August 14, 2006;
- f. The Fish and Wildlife Service's Amendment to the Biological Opinion for Cape Hatteras National Seashore's Interim Protected Species Management Strategy, dated April 24, 2007;
- g. The summary, Chapter 2, and Chapter 4 of the Environmental Assessment for the Interim Protected Species Management Strategy;
- h. The National Park Service's Finding of No Significant Impact for the Interim Protected Species Management Strategy/Environmental Assessment, dated July 2007;
- i. The Cape Hatteras National Seashore Resource Management Field Summary reports and Beach Access Reports for the 2007 nesting season at Cape Hatteras National Seashore;
- j. The complaint in the lawsuit Defenders of Wildlife et al. v. National Park Service et al., 2:07-CV-00045-BO;

4. The opinions expressed in this Declaration are based, in part, on my review of the foregoing documents and, in part, on the knowledge, experience, and expertise regarding shorebirds, including piping plovers, American oystercatchers, gull-billed terns, common terns, least terns, and black skimmers, that I have gained during my professional career.

5. Habitat requirements for piping plovers typically include wide sandy beaches with small stones and sparse vegetation. These sites can be mainland or on islands and often are on points of land. American oystercatchers, gull-billed terns, common terns, least terns, and black skimmers have very similar requirements to piping plovers and in many parts of their range there is overlap in habitat use; they can be found nesting very close to each other. Breeding and wintering sites are very similar for all species and in some cases locations can be used as breeding and wintering locations but not by the same individual birds. When possible plovers and the other waterbirds select sites free from human disturbance and predator activities. Both of these disturbance factors can greatly reduce the ability of nesting birds to raise young to independence.

6. Ideal habitat for piping plovers, American oystercatchers gull-billed terns, common terns, least terns and black skimmers occurs on the Atlantic Coast of the U.S. and a number of sites have been identified at Cape Hatteras National Seashore (“CAHA”). One of the best measures of the importance of these sites is that birds return to the same locations in consecutive years, which is the case at CAHA. This is a signal that the habitat is special and appears to meet their winter and/or breeding needs.

7. Piping plovers, American oystercatchers, gull-billed terns, common terns, least terns and black skimmers are extremely vulnerable to recreational impacts that occur on the habitat they use for breeding and during the winter. In particular, these impacts include ORV, pedestrian, and pet disturbances. ORVs impact all species by running over nests/eggs, flushing adults from their nest or causing young birds to run from ORVs (thus exposing young/eggs to predators and/or temperature extremes). Repeated disturbance also reduces time for foraging for both adults and young. Disturbance by pets can flush birds from the nest and allow dogs or

cats to eat eggs or chicks. This has occurred in the Great Lakes region where I work. Dogs chase adults and young keeping adults from the nest or causing young to become disoriented and separated from their parents. Young flightless birds also become vulnerable to other predators (e.g. gulls, crows) when chased by dogs. Human disturbance can take many forms including kite flying, beach volleyball, fireworks, fishing, and picnicking. Often people do not realize they are disturbing birds on a beach but any activity that causes birds to flush from their nests or exposes young to weather extremes or predators can reduce reproduction. Human disturbance during the winter is not as great a threat as during the breeding season but high density human activity or any actions (i.e. ORV use in a specific area) that repeatedly interrupt feeding can be viewed as having a very negative impact on all of the species mentioned above.

8. I have reviewed in detail the interim management plan that was in effect during the summer breeding season of 2007 (hereinafter referred to as the “2007 Interim Plan”), which was described and approved in the document entitled National Park Service’s Finding of No Significant Impact for the Interim Protected Species Management Strategy/Environmental Assessment, dated July 2007 (or “FONSI”). In my opinion, the 2007 Interim Plan is inadequate in its ability to provide the type of protection required by piping plovers and colonial ground nesting waterbirds at CAHA. I found several important weaknesses in the plan that likely resulted in low reproductive success and decreases in numbers for several species. The first problem I identified is that resource closures started too late in the season (1 April). At this time, birds are in the process of choosing a nest territory and also their mate. Given the once weekly monitoring effort, much information was not obtained by monitors. Beach closures should be done at historic nesting sites prior to arrival of the birds simply because history has shown that they will repeatedly return to habitat used in previous years. When birds

first arrive, they are assessing the habitat for its suitability for nesting and this includes level of disturbance. In the Great Lakes, we have found that this time is absolutely key for pairs to remain and nest. If closures are put off until after more evidence is obtained on their breeding status, it is often too late. Another problem with the 2007 plan is that it did not keep ORVs from the intertidal area. In other words, the vehicles were permitted at the waterline which is one component of the habitat that is critical for feeding. Therefore, allowing vehicles along the waterline prevented birds from eating. The level of disruption, of course, depends on the amount of traffic. Another very important issue is the use of only the past 3 years as a measure of where to protect plover habitat. Others have recommended 10 years. In the Great Lakes region we have found birds returning to the exact location to breed after being absent for more than 30 years. There is a signature on the land that attracts birds. They will not necessarily use it every year due to various reasons but any strong conservation plan will recognize the importance of historic sites and include them in a land protection strategy.

9. I have also reviewed in detail the alternative management protocols described in the USGS's Management, Monitoring, and Protection Protocols for [species] at Cape Hatteras National Seashore (hereinafter, the "USGS Protocols") and in the Environmental Assessment for the Interim Protected Species Management Strategy (hereinafter, the "EA Alternatives"). The USGS Protocols described alternative management protocols of varying degrees of protectiveness, which the author labeled the "highest degree of protection", "moderate protection" and "minimum protection." The EA described four different alternative management protocols of varying degrees of protectiveness, labeled Alternative A (the "no-action alternative, continuation of 2004 management"), Alternative B (the "environmentally

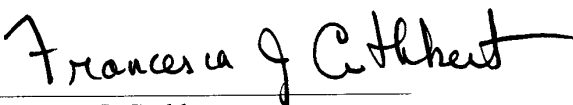
preferred alternative, undisturbed area focus”), Alternative C (the “tailored management focus”), and Alternative D (the “access/research component focus/preferred alternative”).

10. In my opinion, I found the protocol entitled “Option A” (Highest Degree of Protection) to be the preferred choice. Details for different species are found on pages 15-16 of the USGS protocol for American oystercatchers, pages 27-30 of the USGS protocol for piping plovers, and pages 12-13 of the USGS protocol for colonially nesting waterbirds. The protocols for each species that result in highest degree of protection address the weaknesses in the 2007 Interim Plan by ensuring that each species has habitat protected at time of arrival in the breeding habitat and that they are not disrupted by regular ORV traffic.

11. Information presented in the environmental documents (that is, the USGS Protocols, FONSI, and EA) demonstrates that piping plovers, oystercatchers and other colonial waterbirds are declining and have low or no reproductive success. Use of the 2007 Interim Plan is not appropriate given the declining status of these birds at CAHA. The response from the Seashore should be an all out effort to reverse the population trends for all species. A problem has been identified but the action is too weak to correct it. Without adoption of management at the highest level of protection it is likely that piping plovers and the other shoreline inhabiting waterbird species will not continue to breed at Cape Hattaras for much longer in the future.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge.

Executed this the 13th day of December, 2007.



Francesca J. Cuthbert