

American oystercatcher

Haematopus palliatus

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DESCRIPTION

Taxonomy and Basic Description

The American Oystercatcher (*Haematopus palliatus*) is a large shorebird found only in coastal habitats. Five races are distributed in North, Central and South America on the Atlantic, Pacific and Gulf Coasts. On the Atlantic Coast of the United States, the eastern race of the American Oystercatcher (*Haematopus palliatus palliatus*) breeds from Massachusetts to Florida, with highest concentrations of wintering birds from Virginia to Florida (Humphrey 1990).

Oystercatchers have a long orange bill, specialized for prying open bivalves (oysters, mussels, clams, etc.). Yellow eyes and an orange eye ring contrast with a black head and dark brown back and wings. The abdomen and portions of the wings and tail are white while the legs are light pink. The juvenile oystercatcher's head and back are speckled brown and the tip of its bill is brown.

Status

The eastern race of the American Oystercatcher has been identified as an extremely high priority shorebird in the US Shorebird Conservation Plan (Brown et al. 2001). The rationale for this designation is based on population estimates that total less than 25,000 birds and on threats to the race posed by the degradation of beach nesting habitat.

POPULATION SIZE AND DISTRIBUTION

South Carolina supports just over one third (3,536) of the estimated Oystercatcher population that winters on the Atlantic and Gulf Coasts of the United States (approximately 10,000; Brown et al. 2003; Sanders et al. 2004). Statewide surveys by SCDNR in 2002 and 2003 averaged 394 breeding pairs (Sanders 2008). A statewide survey in 2008 documented 453 pairs, but this increase may be a result of increased effort. Additionally, South Carolina has nonbreeding flocks during the summer. In 2002, 378 nonbreeding Oystercatchers and 383 in 2003 were recorded during statewide breeding season surveys (Sanders et al 2008). The Cape Romain Region of the South Carolina coast includes the Cape Romain National Wildlife Refuge (CRNWR) south to Dewees Inlet. Between 50 and 60% of South Carolina's wintering Oystercatchers are in this



Photograph by Felicia Sanders



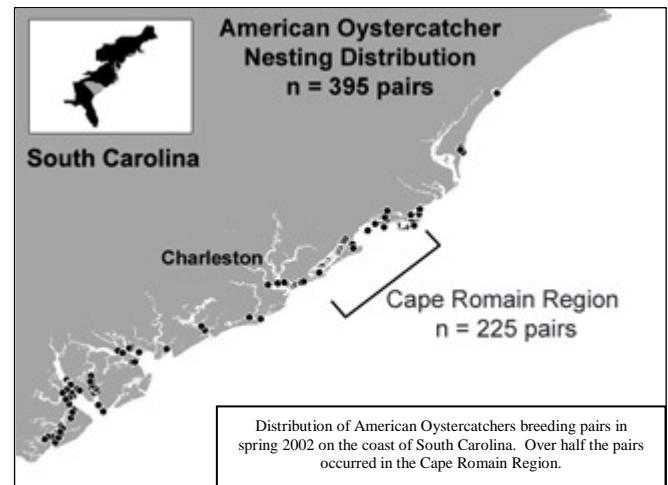
Photograph of oystercatcher chick by Felicia Sanders

region. Censuses in the winter of 1988 and 1989 and again in 2001, suggest a 21% decline in Oystercatchers in the Cape Romain region over 14 years (Marsh and Wilkinson 1991; Sanders et al. 2004).

In 2002, SCDNR estimated immature to adult ratios at all Oystercatcher roost sites in South Carolina. Of the birds examined, 9% had immature bill coloration. This suggests that breeding success may not be sufficient to maintain the population.

HABITAT AND NATURAL COMMUNITY REQUIREMENTS

Oystercatchers nest in coastal habitats with little vegetative cover. They lay their eggs in a shallow depression on sandy beaches, shell mounds and spoil islands. Although historically oystercatchers may have nested primarily on front beaches in South Carolina, statewide surveys documented only 28% of the breeding pairs on barrier island beaches, 27% on estuarine islands, and 45% on edge shell mounds. Out of all the pairs in South Carolina, 24% were on edge shell mounds adjacent to the Atlantic Intracoastal Waterway (AIWW) (Sanders et al. 2008). Oystercatchers are territorial and solitary or semi-colonial nesters. Nesting territory size is variable, but frequently only a few pairs will occupy a mile of beach or shell rake. Therefore, extensive coastal habitat is required to maintain the present nesting population.



During the winter, outer beaches are not used as much as in the breeding season. Statewide surveys during the winter documented 89% roosted at high tide on washed shell rakes, 6% on docks, 4% on barrier island beaches, and 1% on estuarine islands (Sanders et al 2004).

Oystercatchers feed on oyster bars, intertidal mud flats and sandbars. A study conducted in the Cape Romain Region during the winter found Eastern oysters comprised 95.4% of the items consumed by frequency while ribbed mussels and unidentifiable items comprised 3.8% and 0.8% of consumed prey, respectively (Hand et al. 2010). During the nesting season, they utilize a more diverse range of bivalves, mollusks and other invertebrates near their nest site.

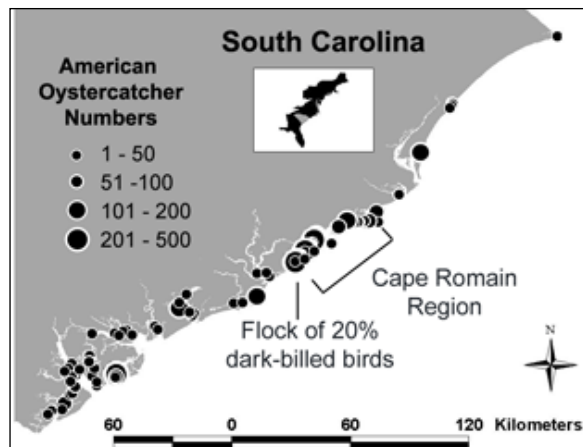
CHALLENGES

Oystercatchers in South Carolina concentrate for both breeding and wintering and are susceptible to catastrophic events such as hurricanes, oil spills, and harmful algal blooms.

Increased development of the South Carolina coast continues to reduce suitable Oystercatcher nesting habitat and may force breeding pairs into less suitable sites. Although actual nesting sites are rarely destroyed, suitability of the sites is greatly reduced when nearby development increases disturbance of nesting birds. Disturbance from sources such as humans, dogs and boats

negatively affects reproductive success by causing threatened oystercatchers to leave eggs and/or chicks unattended.

Oystercatcher nests are also at risk from native avian and mammalian predators. Recent studies in Cape Romain Region found chicks are also vulnerable to predation, and increases in American mink appear to be the primary cause of low chick survival. Human disturbance increases vulnerability to predation and can cause adults to abandon eggs. Nesting Oystercatchers are absent from areas with even moderate human disturbance. Nests can also be destroyed by high tides and boat wakes; climate change will increase the risk of nest wash-over. Studies in South Carolina found low chick production (0.25 chicks/nesting pair) suggesting this species may be in peril (Thibault 2008).



Distribution of wintering American oystercatchers for 2002

In South Carolina, most wintering Oystercatchers roost in flocks of over 100 birds on shell rakes along heavily traveled waterways. In the Cape Romain Region, 75% of the wintering birds roost along the Atlantic Intracoastal Waterway. Increased boat traffic will increase the frequency at which birds are flushed from roost sites.

Because Oystercatchers feed primarily on shellfish, degradation of this resource through either disease or over-harvesting negatively affects oystercatchers. Healthy oyster reefs adjacent to nesting sites may be important for successful reproduction. Oystercatcher parents

which had shellfish reefs adjacent to nest sites, spent more time at the nest site and fledged more chicks compared to parent oystercatchers nesting where shellfish reefs were not commonly adjacent to nest sites (Thibault et al. 2010).

CONSERVATION ACCOMPLISHMENTS

South Carolina over-winters the largest concentration of Oystercatchers on the Atlantic Coast of the United States. The winter population includes resident breeding birds as well as a large number of migratory Oystercatchers from all areas north. Statewide winter censuses have provided data on the abundance, age class partitioning, and distribution of Oystercatchers. Multi-year breeding season censuses provide data on abundance of nesting pairs and identify important nesting habitats. These surveys provide baseline numbers that are important for trend analysis. An American Oystercatcher working group was formed in 2001 to coordinate banding and survey efforts, prioritize conservation needs, and communicate evolving research techniques. The working group's web site is an important tool to disseminate information on the status, management, and natural history of Oystercatchers (<http://amoywg.org>). The working group wrote a conservation plan for the species, and this plan is a guide for managers and researchers. Some important nesting areas, primarily on federal and state lands, are regularly closed to the public to allow Oystercatchers to nest undisturbed. Private coastal communities are also protecting select nesting sites and the number of communities willing to close portions of their

beach for nesting birds continues to grow. Information about adult and juvenile survival rates, migratory patterns, and nest site fidelity has been collected from the color banding project. State wildlife grants funded research investigating nest success and causes and timing of nest loss in South Carolina (Thibault 2008). This research also piloted a head-starting program to test methods of increasing hatching success; research in this area is ongoing. Research on wintering foraging ecology identified prey items that are important for overwinter survival. A health assessment of Oystercatchers in the Cape Romain Region will serve as a baseline for future assessments (Carlson-Bremer et al 2010).

CONSERVATION RECOMMENDATIONS

- Protect American Oystercatchers during the nesting season, concentrating on public land. Adequate and timely posting and law enforcement may be required.
- Identify and protect important roost sites statewide. Identify important sites for protection during the permit review process.
- Continue cooperative efforts with the US Fish and Wildlife Service to census and manage nesting sites within Cape Romain National Wildlife Refuge (CRNWR). Control predators (especially raccoon and American mink) on important nesting areas, and prioritize beaches that will benefit both sea turtles and shorebirds.
- Cannon net wintering Oystercatchers at high tide roosts in order to document the natal source of wintering birds and to color band resident breeding birds.
- Capture breeding adult Oystercatchers at their nest sites to increase the number of banded breeding adults.
- Document adult mortality rates by annually monitoring color-banded adults on breeding territories. Adult mortality rates are required to evaluate the status of the species.
- Color band pre-flight chicks and monitor non-natal banded juveniles to determine movement and survivorship of juvenile Oystercatchers.
- Continue regionwide cooperative studies such as banding of wintering birds and resighting of color marked migratory birds.
- Develop standardized techniques to document nesting success and annual chick production because current estimates suggest that low reproductive success may be a limiting factor.
- Develop techniques to enhance chick production such as elevating nests to protect from over-wash, artificial incubation of eggs, and fostering chicks back to breeding adults.
- Document important foraging areas and nocturnal roost locations using radio instrumented oystercatchers. Protect these identified sites from disturbance.
- Evaluate possible state listing of the species to provide additional legal protection.
- Update and maintain the SCDNR Oystercatcher web page to educate the public on the importance and management needs of the species.
- Support conservation efforts to maintain a healthy marine environment, free of pollutants, and maintain or enhance shellfish populations.
- Conduct low tide observations of foraging oystercatchers to identify and quantify prey items taken during the nesting season.

MEASURES OF SUCCESS

As research and management needs are identified, we will initiate projects to address those needs. Factors leading to declines in Oystercatcher populations are poorly understood and the rate of decline is poorly documented. As current population trends are documented and limiting factors are identified, appropriate research and management actions will be initiated.

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