

## American oystercatcher

*Haematopus palliatus*

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### DESCRIPTION

#### Taxonomy and Basic Description

The American oystercatcher (*Haematopus palliatus*) is a large shorebird, weighing approximately 590grams (20.8 ounces). Five races are distributed in North, Central and South America on the Atlantic, Pacific and Gulf coasts (Nol and Humphrey 1994). 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 from Virginia to Georgia (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 on the U.S. 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. The American oystercatcher is considered stable globally (G5) and is not ranked in South Carolina (NatureServe 2005).

#### POPULATION DISTRIBUTION AND SIZE

Although population estimates of the eastern race of the American oystercatcher have been assembled from censuses of breeding pairs (1,624 pairs), large wintering flocks suggest these estimates are low (Nol et al. 2000; Davis et al. 2001). 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; Sanders et al. 2004; Brown et al. 2003). Statewide surveys by SCDNR in 2002 and 2003 averaged 394 breeding pairs.

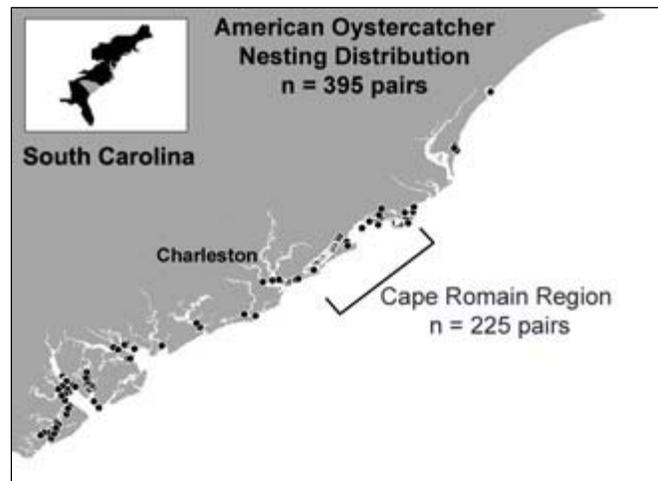
The Cape Romain Region of the South Carolina coast includes the Cape Romain National Wildlife Refuge (CRNWR) south to Dewees Inlet. Between 50 and 60 percent of South Carolina's wintering oystercatchers are in this region. Censuses in the winter of 1988 and 1989 and again in 2001, suggest a 21 percent 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. Nine percent of birds examined 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. 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.

Oystercatchers feed on oyster bars, intertidal mud flats and sandbars. Large winter flocks feed primarily on oysters, mussels, clams and other invertebrates found on oyster bars. During the nesting season they utilize a more diverse range of bivalves, mollusks and other invertebrates near their nest site.

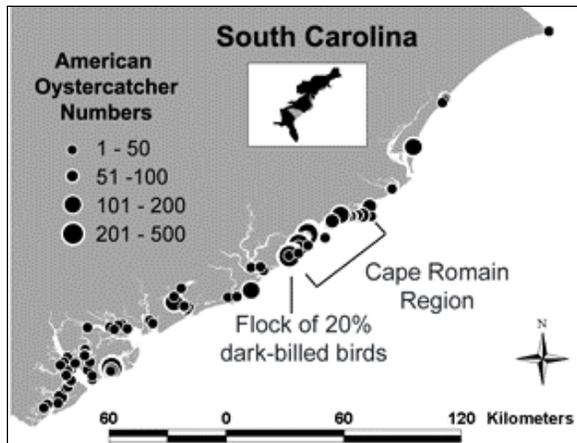


## CHALLENGES

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. Human disturbance increases vulnerability to predation. Nests can also be destroyed by high tides and boat wakes. Studies in South Carolina and North Carolina report low chick production suggesting this species may be in peril.



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 percent 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. Unsustainable harvest of oysters, the oystercatcher's principal food item in South Carolina, can reduce the available prey base

and may contribute to the decline of this species.

## 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. South Carolina averages 3,536 oystercatchers during the winter. Statewide winter censuses have provided data on the abundance, age class partitioning and distribution of oystercatchers. Multiyear breeding season censuses provided data on abundance of nesting pairs and identified important nesting habitats. An American oystercatcher working group has been formed to coordinate banding and survey efforts, prioritize conservation needs and communicate evolving research techniques. Important nesting areas, primarily on federal and state lands, have been closed to the public and signs posted. Adult survival rates, migratory patterns and nest site fidelity have begun to be documented from the color-banding project. Finally, an oystercatcher web site has been developed with information on the status, management and natural history of oystercatchers in South Carolina.

## 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 USFWS to census and manage nesting sites within Cape Romain National Wildlife Refuge (CRNWR). Control predators 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 and 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 and during the winter

#### 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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