

## ABOUT THE COVER: CATTLE EGRET

The Cattle Egret (*Bubulcus ibis*) is the most gregarious and terrestrial of the North American herons. It is a relative newcomer, however, having colonized our continent since about midcentury. Cattle Egrets are medium sized, short-legged, thick-necked white herons. They have yellow bills, lores, and irises that during the height of breeding season turn bright yellow, and for short periods, red. Their legs, which are usually dark, also turn yellow or reddish while in breeding condition. In Europe they are called buff-backed herons because during breeding season their crown and back feathers, and often their breast feathers, take on a rich buff-orange color.

Their habitat and foraging behavior are as distinctive as their plumage. Cattle Egrets, as their name implies, are usually seen associated with cows, horses and other large grazing animals. In Africa, their continent of origin, they have local names including elephant bird, hippopotamus bird, or rhinoceros heron, indicating their large-mammal associations. They frequently follow a particular cow or horse, using these large mammals as "beaters" to stir up the grasshoppers and other invertebrates that constitute the principal food of these largely terrestrial birds. When not foraging they often hitch a ride atop the back of their beater.

The Cattle Egret is in the monotypic genus *Bubulcus*, but is taxonomically controversial, having been placed at one time or another in the genera *Ardeola* and *Egretta*. Three subspecies are recognized worldwide. The Cattle Egret is an enormously successful species that has undergone an explosive range expansion in historic times. From its African origins it has spread throughout the tropical and temperate regions of the world, following and exploiting the massive habitat destruction and deforestation that have inevitably accompanied the range expansion of mankind. Cattle Egrets apparently colonized South America via transatlantic flights in the nineteenth century, then spread through the Caribbean Islands and finally to the U.S. by midcentury. Their rapid and sporadic dispersal resembles a forest fire that, driven by high winds, "spots" ahead. The extensive and sometimes long-distance postbreeding dispersal that characterizes this species has been influential in its range expansion.

First reported in Florida in the 1940s, the Cattle Egret was recorded breeding in the mid-1950s, and was well established in the southeastern United States by the end of that decade. Cattle Egrets have established widely scattered colonies in most of the rest of the contiguous United States. They winter in the southeastern and southwestern U.S., the Caribbean, and south through Central America to northern South America.

The first Cattle Egret collected in the United States was in 1953 in Wayland Massachusetts, by three Nuttall Ornithological Club members, Allen Morgan, Richard Stackpole, and William Drury. The first breeding record for

Massachusetts was in 1974 on House Island off Manchester, and a maximum of ten pairs was recorded in this colony. The number of Cattle Egrets sighted in Massachusetts in spring migration fluctuates from year to year but has reached over 100 birds. An influx of birds during postbreeding dispersal tapers off in fall, with a few stragglers recorded in November and December.

Cattle Egrets are monogamous, producing a single brood, but will re-nest after nest failure. They tend to nest in heronries established by native heron species, frequenting swamps, islands, and other places where they gain some protection against mammalian predators and human disturbance. They have a broad repertoire of aggressive and nuptial displays. The aggressive "forward display" employs an upright stance with crown, neck, and back hackles raised, and sometimes ends in stabbing and counterstabbing with bills. Nuptial displays include the "stretch display" that shows off the highly colored soft parts and plumes, and exaggerated flapping-flight displays. These nuptial displays are frequently accompanied by a variety of vocalizations: *Ow-roow*, *rick-rack*, *rooo*, and at nest relief a deafening *kakakakakaka*.

Nests are platforms of sticks, twigs, and vines, located in shrubs or trees, often above water. Both sexes build the nest, with the male doing most of the stick collection and the female most of the actual construction. They often reuse and refurbish the nest of the previous year. The usual clutch is three or four light blue eggs. Both parents incubate, usually beginning with the first egg. Thus, young hatch asynchronously, and the youngest chick may starve if food is scarce — thought to be a reproductive strategy to maximize the number of young produced in years of abundant food. Adults may stand in the nest and shade the eggs or chicks with partially open wings on hot days. The eggs hatch in 3-4 weeks, and at about three weeks the chicks become "branchers," leaving the nest but staying nearby. They fledge in about six weeks.

Both parents feed the chicks — a very demanding job — with chicks constantly uttering begging calls and, when older, harassing parent birds unmercifully. It has been calculated that each parent Cattle Egret must capture more than 1500 grasshoppers per day to feed itself and a brood of three nestlings! Although grasshoppers are the preferred prey, Cattle Egrets take crickets and a wide variety of other invertebrate animals, and sometimes frogs. They tend to feed in loose flocks and will often "leapfrog," with birds in the rear of the flock flying over foraging birds and landing in the front of the flock so that everyone gets a turn at stirring up prey.

Despite being preyed upon by accipiters, owls, raccoons, and Peregrines, among others, Cattle Egrets have been steadily increasing in numbers. Breeding Bird Survey data indicate a 2.4 percent annual increase from 1966 to 1992. They have become a nuisance species in some areas where thousands of pairs of nesting birds have caused environmental damage and successfully competed for nest sites with native herons. Because of its exploitation of habitats disturbed by

cattle grazing, farming, and high pesticide use, the Cattle Egret has become a virtual "reverse" bioindicator — its presence indicates human disturbance and habitat degradation! Whatever we might think of this recent immigrant, it is most certainly a highly successful, remarkable, and ecologically fascinating bird.

--William E. Davis, Jr.

### ABOUT THE COVER ARTIST

**Richard Salvucci**, of Brighton, Massachusetts, began his career as an artist by illustrating books, book covers, and even a children's book. But a visit seven years ago to an exhibit coordinated by the Society of Animal Artists opened a door to a new world: since then, Richard remarks, he has "only wanted to paint or draw animals, particularly birds." His greatest satisfaction comes in attempting to capture the personality of any animal he paints or draws, and this approach has earned him a number of awards in juried wildlife art shows. Richard's work has appeared in publications as diverse as the Manomet Observatory newsletter and *The New York Times*, and he has shown his art at numerous museums, galleries, and conventions. The National Alliance for Animal Legislation commissioned him to create a drawing of two chimpanzees, which was presented to Dr. Jane Goodall as an award for the eminent primatologist's life's work. Richard will be the guest artist at the Wildlife Art and Carving Expo in Byfield, Massachusetts, in November, and his originals are exhibited at the Francesca Anderson gallery in Lexington, Massachusetts.

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### KESTREL STUDY SEEKS VOLUNTEERS

In order to assess the current status of American Kestrel breeding and wintering populations in southern New England, I am looking for volunteers to collect information, share data on kestrel nest boxes, and conduct roadside surveys of raptors in open areas of Connecticut, Massachusetts, and Rhode Island. All birders who enjoy watching kestrels are urged to participate in this study. If you are interested in participating, please contact: Tom Harrington, 30 South Windham Road, Willimantic, CT 06226, (860) 423-2041, e-mail: [tomh@neca.com](mailto:tomh@neca.com)

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### ERRATUM: BIRD OBSERVER TIDE CHART

The tide chart published in the December issue of *Bird Observer* is off by one hour for the period of daylight savings time. In order to correct, please **subtract** one hour from the listings. We blame it entirely on *El Nino*.