

THE LIFE OF A HERON COLONY IN ALABAMA

Julian L. Dusi

Most heron colonies have a limited life that depends on a number of factors. Foremost among these are: the nest supporting substrate, predators, weather effects and man's intervention.

The Nest Supporting Substrate:

The nests in most heron colonies, in Alabama, are supported by vegetation, in the form of shrubs or trees. It is possible that a colony, like the Avery Island colony of Snowy Egrets (Egretta thula) in Louisiana, be supported by man-made structures (McIlhenny 1934).

The tolerance of the vegetation to the lethal effects of the herons fecal droppings, determines the life of the support. Pine trees (Pinus sp.) are very intolerant to overfertilization and die in one or two nesting seasons (Dusi 1977). Redcedars (Juniperus sp.), which are present in most of the Faunsdale/Uniontown colony sites (Dusi and Dusi 1988), were slightly more resistant, but lasted only an additional year or two. The unique Great Blue Heron (Ardea herodias) colony, located in a single, dead, Osage-orange tree (Maclura pomifera), along Interstate-65, just south of Montgomery, has been present from before 1985. Unlike most trees, Osage-orange wood is very decay resistant and lasts for many years, after the tree dies.

When the colony site is large, like the one at Millbrook (1973-1983), the colony does not use the whole area and can move around as vegetation is eliminated and regenerated. This reduces the need to abandon a site. When the site is small, like most of the Faunsdale/Uniontown sites, the colony moves much more frequently (Dusi and Dusi 1988).

Predators:

Predators are another reason for colony movement. In the colony sites near Opp and Pansey (Dusi and Dusi 1988), gray rat snakes (Elaphe obsoleta spiloides) appeared in nests, eating eggs and nestlings (Dusi and Dusi 1968). Both colonies subsequently abandoned these sites. In a colony of Black-

## ALABAMA BIRDLIFE

crowned Night-Herons (Nycticorax nycticorax), Little Blue Herons (Egretta caerulea) and Cattle Egrets (Bubulcus ibis) located on the Wheeler National Wildlife Refuge (1963-1966), near Decatur, Blue Jays (Cyanocitta cristata) became so abundant that they were the probable reason for colony abandonment. Fish crows (Corvus ossifragus) are often abundant around heron colonies and eat many eggs and nestlings.

Man is the worst predator. Almost all colony sites have empty rifle and shotgun cartridges present. The worst case of human predation recorded in Alabama occurred on 12 July 1979, in Tuskegee. With a U.S. Fish and Wildlife Service harassment permit, Tuskegee policemen shot at least 2,163 Cattle Egrets, 2 Little Blue Herons and 4 White Ibis (Eudocimus albus). The colony did not leave the site then, but moved to another site the following year (Dusi and Dusi 1988). In at least one instance, Cattle Egrets were shot for food by local persons.

### Weather Effects:

Many colony sites in the flood plains of major rivers and in the Mobile Delta move when spring floods cover their nesting sites. While not in Alabama, Quay (1963) reported on the destruction of a heron colony in North Carolina, when a hail storm killed the adults and destroyed eggs and nests in a colony of Little Blue Herons. He also reported, that within a few weeks another group of herons built nests in the colony site and completely replaced the destroyed colony.

### Man's Intervention:

Man's intervention is the greatest cause of heron colony movement, in Alabama. Some heron colonies choose a nesting site within cities, or at least, adjacent to homes. Colonies in Tuskegee, Montgomery and Millbrook are good examples of that (Dusi and Dusi 1988).

The Tuskegee colony, where so many birds were shot, was located in a wooded area between two streets of houses. Another site was adjacent to a Holiday Inn. In Montgomery, a Black-crowned Night-Heron colony was located in large oak trees in the Normandale subdivision. One nest, located

## ALABAMA BIRDLIFE

over a swimming pool, was not appreciated. In Millbrook, the colony was located adjacent to houses and a school. In all of these cases, the author believes that the birds made poor choices in regard to their proximity to humans. Since nesting sites were not limited, it was appropriate to properly cause the birds to stop nesting there. In Tuskegee, they harassed the birds when they first started nesting in a bad site and caused them to move. In Millbrook, the trees in the school neighborhood were removed and the colony moved. The residents of the Normandale Subdivision in Montgomery, appear to be putting up with the slight problem of the night-herons.

In Alabama there are many good sites where herons can nest and be appreciated by man. In other parts of North America, where numerous wooded nesting sites are not available, the use of artificial nest supports is being tried for Great Blue Herons. At the present time, this has not been necessary for any of the other wading birds. **Julian L. Dusi**, Department of Zoology and Wildlife Science, Auburn University, AL 36849-5414.

### Literature Cited

- Dusi, J. L. 1977. Impact of Cattle Egrets on an upland colony area. Proc. Colonial Waterbird Group Conf., N. III. Univ.
- Dusi, J. L. and R. T. Dusi 1968. Ecological factors contributing to nesting failure in a heron colony. Wilson Bulletin 80(4): 458-466.
- Dusi, J. L. and R. D. Dusi 1988. Thirty-five-year summary of the status of heron colony sites in Alabama. Alabama Birdlife (35(1): 1-11.
- McIlhenny, E. A. 1934. Bird city. Boston, Mass. The Christopher Pub. House.
- Quay, T. L. 1963. Hailstorm destruction of a heron colony. Paper given at the A.O.U. meeting, Gainesville, FL, 1963.