

A METHOD OF ARRIVING AT NESTING SUCCESS AMONG  
COLONIAL SPECIES USING TREE NESTING SITES

By T.A. Beckett III

How many workers have felt like throwing up their hands in disgust when working in large colonies of Ibis, Herons and Egrets when it appeared that their carefully planned work was all in vain? Many rather small trees may have numerous nests tiered in some instances so the nest sites may tabulate as many as 20 nests to an area of less than ten feet square.

Many problems are created in attempting to determine incubation periods and fledgling success. I have found that the use of wired survey marker flags dated and fastened closely under the nest excellent for identifying individual nests. It is important that they be out of reach of the adults or the plastic portions will be pulled off by the nesting adults as they incubate the eggs. A special grease pencil must be used in placing needed data on the plastic flags.

In general a given species starts most egg laying in a rather short period of time within the interior of a colony. The late comers usually fan out around the perimeters. Other species may move in but they do not create a problem when we desire information on a single species in a given area of a colony. Some species, such as the White Ibis, may lay their first eggs in a large percentage of the nests on a single day. This may seem impossible but nevertheless has proved true in many instances with which I am familiar. This is an aid in determining incubation but creates problems when we try to check for fledgling success, unless we abandon the single nest as a unit.

I have found that the simplest way to get around the intermingling of the nestlings within a given tree is to work in units of about 100 nests in the case of abundant species; or units, or multiples, of ten nests in less abundant species. The fact that other species do build within a given nesting tree is of no importance.

A good example to illustrate the above might be given as follows:

6 nesting trees containing a total of 102 nests  
102 nests containing 357 eggs (Average 3.50)  
2 nests destroyed  
100 nests hatch 320 young (Average 3.20)  
100 nests (in 6 nesting trees) contain 280 pre-flight young  
Fledgling success average: 2.8 per nest

It is necessary that we deal with tree sites rather than individual young or nests. It is true that a fraction of a percent of the young may fall from the nests and be fed somewhere in the colony, but this ceases to be a factor if we do not wait too long to make our last count. It is not necessary to flag nests where fledgling success alone is the aim. It

is quite possible that other workers have other methods of arriving at conclusive figures, but I have found no other method as simple.

To date I have found no method of accomplishing the same end in the ground nesting species, unless the entire colony of young was fairly uniformly banded. A system that I have used in the Terns is to count the number of banded young in several catches, say 1,000 birds banded. If we assume that 200 previously banded young were handled in order to band 1,000 birds and they were representative of the entire colony, we can then have a fairly close estimate of the fledgling success of the entire breeding population. I do not consider this nearly as accurate a method but have found no other means to date. Perhaps other banders have previously conquered this problem in some other manner. If so, I would appreciate their help regarding any easier and more accurate method.

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#### TRIALS & TRIBULATIONS OF IBOR

Four days before the start of Island Beach Operation Recovery, its director Mabel Warburton was rushed to the hospital for an emergency operation. Then, the day she was discharged from the hospital, her sub-permittee and indispensable IBOR assistant Fran Hornick was admitted for surgery.

Both are recovering now, and we understand that Mabel will soon be at Island Beach, at least to direct and assist - but IBOR will suffer with both Mabel and Fran out of the running for active participation. Meanwhile, IBOR got off to a nice start with Dorothy & Blanche Bordner, Hazel & Jim Gorman, Tom Dougherty, John Miller, Bruce Adams and Ken Prescott on hand; later, with Frank Frazier Sr. and Terry Frazier (and FF Jr. for a while - which is why this issue will be somewhat late. - Ed.).

We sympathize with Mabel and Fran for their ill-timed illnesses, and wish them both a speedy and complete recovery.