

have we just begun to notice them? Are birds emigrating from natural areas to find more food and fewer predators? Has the urban landscape matured, and become more attractive for roosting and nesting?

This survey, limited in scope, can only raise such questions, not answer them. However, our results indicate that the role of urban spaces as a wildlife resource should be reconsidered, especially given the well documented decline of birds in natural areas. We encourage wildlife biologists, ornithologists and environmental studies experts to rise to that challenge.

For 1995

We received many suggestions to improve the survey in 1995, including: counting fewer species (for greater precision); counting more species (to get a better handle on utilization); counting more times per year; using both experts and amateurs, perhaps for parallel counts; including homeowner lakes and drainage canals; and adding mammals (and perhaps fish!) to the list.

We thank our participants for their pioneering effort, and encourage everyone to join them for the 1995 survey.

Editor's Note: Participation is a must! It is your duty! This kind of information is exactly the type of unbiased information we need to share with the general public so they can fairly judge the issues! Do it!

Birds In Natural Areas

We constantly hear that the environment (or what's left of it) is degradating. Our time is characterized by "no net loss" of wetlands, mitigation projects and environmental restorations, including such big ticket items as restoring the Kissimmee River flood plan and the Everglades.

Ornithologists are concerned because bird populations (particularly wading birds) are dropping. Wading birds are seen as an indicator of the health of a wetland system. If the food supply drops, the birds simply move.

*Everglades, the Ecosystem and Its Restoration*¹ states "Most conspicuous and alarming among the biological changes have been the plummeting of the Everglades wading bird populations to less than one-fifth of their abundance during the 1930s."

An Audubon Society publication gave the bird population of the water conservation areas, some 878,000 acres of wetlands in south Florida, as 31,814 wading birds in January, 1993 and 15,132 in February, 1993.

FOOTNOTES

1. *Everglades, the Ecosystem and Its Restoration* Steven M. Davis and John C. Ogden, Ed. St. Lucie Press, 1994
2. *Wading Bird Population and Distribution in the Water Conservation of the Everglades: the 1993 Season*, G. Thomas Bancroft and Richard J. Sawicki, National Audubon Society.
3. *Palm Beach Post*, June 13, 1994
4. *Bird abundance and species richness on Florida lakes; influence of trophic status, lake morphology and aquatic macrophytes*, Mark V. Hoyer and Daniel E. Canfield, Jr. *Hydrobiologia*, 297/280; 107-119, 1994
5. *Florida's Birds, A Handbook and Reference*, Herbert W. Kale, II and David S. Maehr, Pineapple Press, 1990

Table 2
Golf Course Utilization By Species
Birds Per Acre of Water

Species	AmerAquatic	Hoyer& Canfield
White Ibis	0.93	0.035
Gulls & Terns	0.92	0.102
Cormorant	0.69	0.039
Common Moorhen	0.47	0.106
Anhinga	0.47	0.044
Great Egret	0.36	0.024
Wood Stork	0.21	0.007
Snowy Egret	0.19	0.001
Green Heron	0.15	0.017
Blue Heron	0.14	0.010
Tricolored Heron	0.12	0.009
Great Blue Heron	0.10	0.023
Great White Heron	0.05	0.000
Limpkin	0.04	0.003
Total	4.84	0.042

Study says lake area and trophic status principal influences on bird populations

The *Palm Beach Post* recently reported that 5,000 egrets, herons and white ibis nested at the North Palm Beach Solid Waste Authority complex, an urban landfill/resource recovery facility, compared with only 500 in Everglades National Park (1,077,760 acres). It quoted biologist Steve Davis as saying in regards to the Everglades, "Nearly 250,000 birds nested in there in the 1930s. The figure fell to 50,000 by 1976, and its steady drop is continuing. Several species are now considered endangered or threatened."

Recently, Hoyer and Canfield at the University of Florida published a pioneering study of bird populations on 46 Florida lakes totalling 8,408 acres. Bird counts were taken three times (one each in winter, spring and summer) between 1988 and 1990. All bird species (not just water and wading birds) were counted. The average population (for all counting periods) was 0.7 birds per water acre and the highest population was 3.2 birds per acre.

In a statistical analysis, the authors concluded that lake area and trophic status were the principal influences on bird populations. Trophic status (general nutrient level) determined total bird population. Lake size determined species richness (more individual species inhabit larger lakes) but not total population. Lake morphology and aquatic vegetation had no correlation with either species richness or total population even though most birds were observed utilizing near-shore areas where food and cover are most abundant.