

Hawk Mountain Sanctuary Association 10th Annual Award for Raptor Research - The Hawk Mountain Sanctuary Association is accepting applications for its 10th annual award for raptor research. To apply for the \$750 award, students should submit a brief description of their research program (5 pages maximum), a curriculum vitae, and 2 letters of recommendation by **15 October 1986 to Stanley E. Senner, Executive Director, Hawk Mountain Sanctuary Association, Route 2, Kempton, Pennsylvania 19529**. The Association's Board of Directors will make a final decision early in 1987. Only students enrolled in a degree-granting institution are eligible. The award will be granted on the basis of a project's potential to improve understanding of raptor biology and its ultimate relevance to the conservation of North American raptor populations.

Leslie Brown Memorial Grant (Deadline Extended) — The Raptor Research Foundation, Inc., announces the availability of a \$500 grant to provide financial assistance to promote the research, or the dissemination of information, on birds of prey. Applicants must send a resume (vitae), specific study objectives, an account of how funds will be spent, and a statement indicating how the proposed work would relate to other work by the applicant and to other sources of funds. Proposals concerning African raptors will receive highest priority between proposals of otherwise equal merit.

Application material must be received by **7 November 1986**. Proposals, donations and inquiries about tax-exempt contributions to the fund should be sent to: **Dr. Jeff Lincer, Chairman, RRF Leslie Brown Memorial Fund, 4718 Dunn Drive, Sarasota, FL 33583, U.S.A.**

THESIS ABSTRACTS

THE BIOGEOCHEMISTRY OF PEREGRINE FALCON FEATHERS

Secondary remiges were collected from 92 Peregrine Falcon (*Falco peregrines*) nestlings in the summer of 1979 and 1980 at 1 West Greenland and 4 North American breeding localities. This study's purpose has been to determine if natal origin of peregrines could be identified using feather trace element quantities obtained by instrumental neutron activation analysis (INAA). Gamma-ray spectra analysis of irradiated feather samples identified 14 trace element quantities present in the distal most feather portion. Multivariate discriminant function analysis of spectral data provided a means of separating Peregrine Falcons from 5 breeding localities into groups of similar natal origin.

Twenty-two additional feather samples were collected from migrant peregrines at South Padre Island, Texas and Mobile Point, Alabama during autumnal migration periods. Trace element analysis of migrant peregrine feather samples and comparison with nestling peregrine feather sample analyses provided a method potentially useful in predicting natal origin of North American migrant peregrines with substantial accuracy. Variation in prediction capability results when groupings of selected traced element quantities are utilized in formulating predictive multivariate discriminant functions.

Trace element analysis of feathers using INAA provided an effective means of identifying levels of environmentally harmful elements such as Mercury which could adversely affect population densities in remote regions of the peregrine's range. As peregrine wintering locality studies by others expand in Latin America, similar "ground truth" data from feathers grown by peregrines in these regions will enhance isolating discrete wintering localities of remote northern breeding populations, information vital to overall management of this endangered species. **Parrish, J.R., M.S. Thesis, Univ. of Alabama, Tuscaloosa. Thesis directed by D.T. Rogers, Jr., 1983.**

SOME ASPECTS OF THE REPRODUCTIVE BIOLOGY OF TUNDRA PEREGRINE FALCONS

A dense, productive population of tundra peregrine falcons (*Falco peregrinus tundrius*) was studied over five years on a 450 km² study area located along the northwest coast of Hudson Bay. The number of territorial pairs varied over the years from 17 to 26. A mean internest distance of 3.3 km represents a nesting density for the population that is among the highest on record for the species. Morphometric and plumage characteristics of adults in the study population