EXPERIMENTS IN THE HUSBANDRY OF THE PEREGRINE

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The purpose of this paper is to outline the progress that has been made, to date, toward the goal of the domestication of the Peregrine (<u>Falco peregrinus</u>). As a wild species, the Peregrine seems to be greatly menaced by certain aspects of modern civilization. The exact nature of the combination of forces that have brought entire populations in widely separated parts of the world to near extinction are not completely known and will probably never be known unless a domestic-bred population can be produced for controlled research.

The almost simultaneous decline of such widely separated and distinct populations as that of the eastern North American race known as the Duck Hawk; the ground-nesting population of the Finland bogs; the tree-nesting population of the countries bordering the southern Baltic, and both the inland and coastal populations of Great Britain, was documented at the International Conference on the Population Biology of the Peregrine Falcon held at Madison, Wisconsin in August and September of 1965. At that time circumstantial evidence was presented that the widespread use of agricultural and silvicultural poisons of the chlorinated hydrocarbon group was responsible for the decline in some areas. This evidence was par-ticularly strong in relation to the British, Finnish, and Baltic populations but less convincing in relation to the Alpine population of central Europe, the population of coastal Scandinavia, the eastern North American population, the canyon-breeding Peregrines of the western United States, and the riverine population of western The British studies (Ratcliffe, D.A., Bird Study, 12:66-82, Canada. 1965) do however show that the Peregrine is a very good indicator species of environmental contamination and as such is eminently suited to research in this field, especially in studies relative to the possible effects of accumulated contaminants on reproduction (Moore, N.W., <u>Bird Study</u>, <u>12</u>:222-252, 1965).

However, the type of intimate studies relative to reproduction that are most needed are also the most difficult to undertake if based on wild populations under field conditions. Studies of what are apparently already weakened or dying populations are likely to be rather meaningless for the above purpose, especially when the interference factor inherent in such field studies of disturbancesensitive species is taken into consideration. Field studies of the two large and apparently healthy North American populations of the arctic and northwest coast are extremely difficult and expensive due to the remote and climatically hostile regions in which these populations are located. The availability of healthy Peregrines of domestic origin could be of great value in studies aimed at accurate evaluation of contamination levels if such stock could be produced. The main orientation of the author, however, is not in the foregoing direction. Regardless of the cause or causes of the decline of the Peregrine, it is quite possible that in the future birds directly from the wild will not be available for falconry. For this reason the author initiated his work on the domestication of the Peregrine in cooperation with other interested individuals.

Acknowledgments

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Egg-laving by Captive Raptors

Although falconers have handled and flown Peregrines for some two thousand years, the husbandry of the species does not seem to have been attempted until modern times. Most of the traditional procedures of handling and caring for hawks and falcons have mitigated against any attempt by the birds to reproduce once removed from the wild population. Possibly foremost among these is the traditional concept of capturing birds for falconry only after they can fly well and have learned to hunt. Such birds, while they can be trained rather easily and tamed to a limited degree, are yet never entirely relaxed in the semi-captive situation. Similarly, when nestlings (known to falconers as eyasses) were taken, the traditional methods of keeping these were no better oriented toward reproduction than were those of the wild-caught birds. They were always taken when nearly ready to fly and then made as much like the wild-caught birds as possible by a period of free-flying known as "hack." These traditions have led to a further tradition that a high incidence of loss is to be expected, and comparatively few eyas birds have been kept long enough to reach reproductive age. Fewer yet of these have had any access to natural mates. Traditional falconry has been strongly oriented toward the use of the The males, mostly because of their smaller size, received females. comparatively little attention and were seldom taken if females were available.