## The Niau Kingfisher-A conservation opportunity for the AFA

The Niau kingfisher Todiramphus gambieri, also known as the Tuamotu kingfisher, is a critically endangered species from the small island of Niau in French Polynesia. One of hundreds in the Tuamotu Archipelago, the island of Niau is located approximately 600 km's north-east of Tahiti.

Very little is known about the Niau kingfisher, as it has been the subject of ornithological and conservation neglect for many years. Until 1974, it was considered locally common when the estimated population size at the time was more than 400 birds. Surveys in 2004 and 2005, however, found that the population could be as low as 30-50 individuals; it has since been upgraded to critically endangered by the IUCN.

Dr. Dylan Kesler of the Pacific Islands Conservation Research Association (PICRA) is currently working on a study of the birds' biology, with the hope that the investigation will provide information useful to designing a translocation of the Niau kingfisher to another nearby island. As with many island groups, habitat changes and introduced black rats and domestic cats are threatening Niau's wild species, which evolved in the absence of humans mammalian predators. The extinction of avifauna of Hawaii, New Zealand and Guam are prime examples of the impact these introduced species can have, it is hoped that a translocation effort can help ensure the survival of this highly vulnerable kingfisher.

The work of Dr. Kesler and PICRA is substantial in that it represents the first detailed population survey and ecological investigation of this kingfisher, which will prove to be paramount to preventing this species extinction. Currently, almost nothing is known about the natural history of Niau Kingfishers, other than the fact that it is facing increasing pressures from habitat degradation, human disturbance, introduced predators and is undergoing a drastic population decline. It is especially vulnerable since its entire breeding range is only 22 square kilometers (9 sq miles) in size and is quite susceptible to tropical cyclones.



Dr. Dylan Kesler and Anne Gouni attaching telemetry equipment to a kingfisher

The relevance this has to the avicultural and zoological communities is that the very closely related Micronesian kingfisher has proven to do well in the captive state. The captive population of Micronesian kingfishers now provides a 'population safety net', which is one of the recommendations of the IUCN for any threatened species. Unlike the Micronesian kingfisher, which resides on a US territory, and is therefore provided with funding from the USFWS, the Niau is not so blessed. With funding for international work becoming increasingly difficult to obtain, much of the Niau kingfisher support is coming directly out of the pocket of this recent doctoral graduate. As one might imagine, travel expenses alone are extremely burdensome on the financial feasibility of this program.

Should translocation efforts prove less fruitful then anticipated, or if a captive breeding program is deemed necessary, various avicultural techniques will be required to ensure a successful ex-situ reproduction program. Dr. Kesler has been heavily involved with the Micronesian kingfisher program by studying both captive and wild birds and his knowledge and experiences will undoubtedly be of great benefit to the projects PICRA is involved in. Currently, funding is needed to obtain basic field equipment, namely a spotting scope to read leg bands of marked birds and a notebook computer for extensive data analysis obtained from recent telemetry records and habitat analysis.

Those interested in further information on this field project, please contact the author at:

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If you are interested in supporting this project, please make checks payable to the AFA Conservation and Research Grants Program, while noting that you would like your donation to go towards the Niau kingfisher project. Checks can be mailed to the American Federation of Aviculture, Inc., AFA Conservation and Research Grants, PO Box 7312, N. Kansas City MO 64116. ◆



A Niau Kingfisher carrying a telemetry pack



Local school children getting involved in surveys



A head study of a Niau Kingfisher