Notes on an expedition to relocate the Madagascar Pochard *Aythya innotata* - a JWPT, WWF, WWT project

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The island of Madagascar lies off the east coast of Africa and is host to ten species of wildfowl of which three are full endemics (Johnsgard 1978). The three endemic ducks have been little studied but all have declined in recent years, two now being listed in the Red Data Book (Collar & Stuart 1985). One species, Bernier's Teal *Anas bernieri* from West Madagascar was the focus of a Wildfowl Trust field survey in 1973 (Scott & Lubbock 1974).

The Madagascar Pochard *Aythya innotata* is apparently restricted to the area around Lake Alaotra in the northeast (Dee 1986). This lake is the largest on the island and the duck was considered common in 1929 (Delacour 1932). In recent years, however, sightings have become increasingly fewer, the last reported on Alaotra was in 1960 (Dee 1986). Surveys in 1982 and 1987 failed to locate the Pochard (Langrand 1988). The lake is large and difficult to survey and it was in order to assess fully the situation at Alaotra that a thorough survey was considered necessary.

Delacour had described a lake well vegetated with water lilies and extensive beds of papyrus and *Phragmites*, broken by a network of pools and channels (Delacour 1966). Today, the lake area supports an escalating human population dependent upon rice-growing. Huge tracts of papyrus marsh are continuing to disappear to make new rice fields and grazing for Zebu cattle and pigs. The surrounding hillsides have been extensively deforested, resulting in rapid soil erosion and the silting up and increased turbidity of the lake. Sport hunting of wildfowl, a common practice during Madagascar's French colonial period, has been replaced by subsistence trapping of all aquatic birds. Intensive fishing throughout the lake, including the use of gillnets, has also affected bird populations.

The most significant recent ecological change has followed the introduction of exotic fish, particularly *Tilapia* in 1955 (Burgis & Symoens 1987). This fish's voracious appetite has de-



stroyed large areas of the aquatic vegetation, particularly the water lilies and with them the associated food chains, resulting in the loss of several species of bird. Notably absent was the Madagascan sub-species of the White-backed Duck *Thalassornis leuconotus insularis*.

The expedition to Alaotra was planned following discussions with Olivier Langrand of World Wide Fund for Nature (WWF) Aires Protégéés, Madagascar and Lucienne Wilmé. Permission to conduct fieldwork and the provision of local assistance was granted through the Accord signed between the Madagascan authorities and the Jersey Wildlife Preservation Trust (JWPT). Air tickets and the freighting of an outboard engine were provided by British Airways Assisting Nature Conservation. The Wildfowl & Wetlands Trust (WWT) also provided financial support.

Seven weeks were spent at the lake (1 October to 15 November 1989) concentrating on the extensive reedbeds at the lake's southern end. The open lake proved virtually useless for wildfowl. The north was being surveyed by Wilmé. Time was split between Ambatosoratra on the eastern shore and the fishing village of Anororo on the west. We worked, with our guides, by using a small motor boat for towing dug-out canoes across open water and then transferring to these to penetrate deep into the papyrus beds.

Discussions with local inhabitants were made each day, and to aid these, a questionnaire about the Pochard had been produced by Wilmé and written in Malgash. However, dialogue with local fishermen and hunters gave little ground for optimism that the duck still survived. People of middle age could provide good biological information on *A. innotata* but spoke of its disappearance some years before. The survey's findings support this view, since no Pochard were seen throughout the survey.

The Madagascar Pochard was kept in captivity before World War II and proved relatively

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easy to breed (Webb 1936, Delacour 1956), and a captive breeding programme following fieldwork has been considered essential. Although not sighted for several years the Pochard should not yet be considered extinct. Smaller lakes around Alaotra may not be under the same ecological pressures and their surveying must be planned. Flocks of duck (particularly Redbilled Pintail *Anas erythrorhyncha* and Fulvous Whistling Duck *Dendrocygna bicolor*) were observed at dawn each day flying off to the southeast to feed, and colonial herons are common, but the nesting colonies are not known.

In all, 78 species of bird were seen, including small numbers of the endangered Madagascar Heron Ardea humbloti. A reasonable population of the third endemic duck, Meller's Duck Anas melleri was found and data were collected on this species which is unfortunately heavily hunted by local people.

Work will continue in an attempt to find the Pochard, and will be incorporated into a larger project on the conservation of Madagascar's endemic wildfowl.

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