

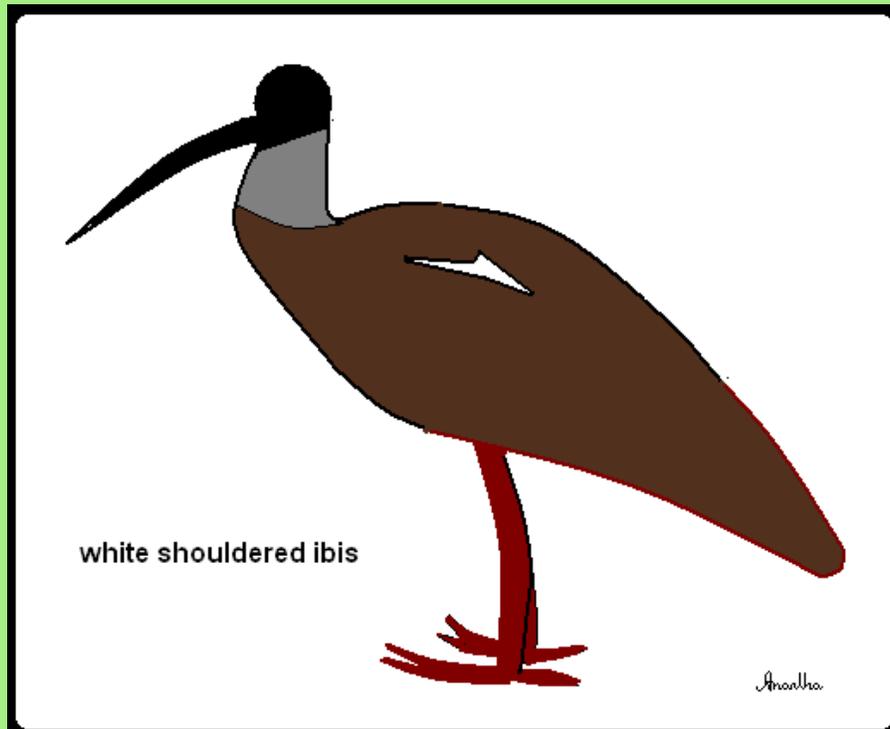
# Unwitting help to species in trouble

Destruction of vegetation by humans may save an endangered bird from extinction, says S.Ananthanarayanan.

It needs no explaining that human activity is a threat to countless living species. One of the earliest acts of civilized humans was the clearing of land for cultivation. This started the process of habitat destruction, which is still the main threat to survival of biodiversity. The rapid invasion, by humans, of natural habitats during the last century has led to migration and partial extinction of larger animals and widespread extinction of smaller species and microbes that thickly vegetated areas supported. In recent times, people have become sensitive to what humans are doing to the environment and success in saving endangered species has become a measure of how effective the drive to save habitats has been.

In this context, the report by the University of East Anglia UK, in the journal *Animal Conservation*, that human activity has had a beneficial effect on the population of a critically endangered bird of northern Cambodia is greeted with pleasant surprise.

## The white shouldered ibis



Ibises are long legged, wading birds, with pointed bills that curve downwards. They inhabit lakes, marshes or slow flowing streams, sparsely wooded lowland forests, wet grasslands or sand-bars in wide rivers. They graze in groups, turning the mud for snails or

slugs and usually nest in trees, often along with other bird species. The white shouldered ibis is a large bird, at 75-85 cms tall, has dark plumage, pale neck and a black, bald head. It also has a white patch on the inner forewing and hence its name. Of late its population has been drastically dwindling – perhaps mainly because its living spaces are being drained for cultivation or for livestock grazing or for construction. Loss of secure feeding and breeding spaces and disturbance are considered the main reasons for falling numbers but the exact reasons are yet not known. The great part of the surviving birds are now found in Cambodia. There are a few in Indonesian Borneo but the species is extinct in Thailand and Vietnam. It may just be found in southern Laos and perhaps in Myanmar, but the fall in numbers has been *drastic* and in 2001, *Birdlife International*, a global partnership of conservation organizations, has estimated the total population to be as low as 250!

Such a low population is considered by many to be below the critical number needed for a species to survive, except with elaborate, but challenging conservation strategies. Conservation of the tiger, for instance, has large funding and extensive protected forests, but this is in the context of population of 3,400 to 4,500. Numbers of the African lion are over 30,000 while the Asian lion, with about 350 in the Gir National Park in Gujarat, India, is considered highly threatened. The tiger is considered ‘endangered’ and the African lion is ‘vulnerable’. But the white shouldered ibis is ‘*critically endangered*’, or ‘facing extremely high risk of extinction in the immediate future’, and is in the ‘Red List’ of endangered species of the International Union for the Conservation of Nature (IUCN).

### Welcome discovery



In Nov 2005, staff of Birdlife International and Cambodia’s Wildlife Protection Office made a sensational discovery of a flock of seventy white shouldered ibis, the largest number seen together since the conservation programme had started, in the Siem Pang district in Cambodia. A year later, BirdLife and WPO staff recorded a staggering 108 White-shouldered Ibis at two sites in western Siem Pang District. At the first site twenty eight birds were recorded in trees at a forest wetland of the kind that sustain these birds. Later the same day, another eighty White-shouldered ibis were counted coming into roost in the evening, some distance away.

That such good numbers of the birds could be found in Siem Pang, while the bird was practically not seen anywhere else has put the spotlight on this district, as important for conservation, lest the fragile ecology of the area be destroyed, at the cost of the birds and also the human inhabitants, whose lives depend on the forest and the wetlands. In the

meantime the University of East Anglia undertook a study, funded by the Royal Society for the Protection of Birds and the Natural Environment Research Council, into the reasons for the decline of the birds' numbers.

The UEA researchers made the counter-intuitive discovery that apart from preserved wetlands, it was the traditional farming methods of the native inhabitants of the area that helped the white shouldered ibis multiply and thrive! The researchers found that the birds preferred to graze in open and accessible areas with low vegetation and bare soil. This could be because it makes it easier to find food, is convenient for take-off and landing, and provides no cover for predators. In areas that are overgrown with vegetation, the traditional farming method is to practice a method of burning the part of the forest that is covered by the canopy of trees (called the understory), to create land for grazing. This is what also creates the habitat that is suitable for the birds.

"Our findings show that this critically endangered species is largely dependent on the local farmers for their survival," said lead author Hugh Wright, of UEA's School of Environmental Sciences. "This is a fascinating outcome as we tend to assume that human activity always has a negative impact on the natural world."

Western Siem Pang, where these populations of ibis have been found, is as yet an unprotected site and is under threat of forms of development that would wipe out both the birds as well as the indigenous inhabitants. The UEA team is hopeful that their intervention would result in Government action to save the region.

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