

ARABIAN BUSTARD CONSERVATION IN YEMEN: PUBLIC AWARENESS PERSPECTIVE**Yassir Hamdan Al Kharusi ^{1,2}, Mohammed Ali Al Wahedi ¹ & Ali Mubarak Al Shamsi ¹**

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¹ International Fund for Houbara Conservation, P.O Box 129555 Abu Dhabi, UAE² Coordination Committee for the Conservation of Arabian oryx, Environment Agency- Abu Dhabi, P.O Box 45553 Abu Dhabi, UAEE-mail: yalkharusi@ead.aeKeywords: Arabian bustard, *Ardeotis arabs*, International Fund for Houbara Conservation, Yemen, Public awareness**Introduction**

Arabian bustard *Ardeotis arabs* is considered an endangered bird species in Yemen where its current presence is confined into scattered pockets in Tehama at the western part of the country (Figure 1). Poaching, illegal egg collection and large-scale commercial farming are key threats contributing to the species' remarkable decline in Tehama where agricultural plains, particularly with the common presence of traditional cereal fields, represent an ideal habitat for Arabian bustard. Since 2002 the National Avian research Centre (NARC), one of the research centers of the International Fund for Houbara Conservation (IFHC), has been conducting field expeditions to Tehama plains to study the species ecology with particular focus on the population status, abundance, movements through satellite tracking, threats and breeding success (Judas et al. 2006). A main goal of Arabian bustard conservation plan is to establish an *ex-situ* conservation breeding programme for future population re-inforcement. One important conclusion of the field studies was that local people lack environmental awareness on the implications of their unsustainable practices which significantly affect the species long-term survival. In response, a conservation education campaign was developed with a straightforward goal to address the plight and related problems facing the Arabian bustard, locally called *Louwam*, amongst villagers and other decision-makers in Tehama by which sustainable conservation-oriented behaviours can be achieved. In this respect, security officers and school students were identified to be the primary target group for the campaign. This snapshot article describes the outline of the campaign and set up future directions for public awareness campaigns dealing with Arabian bustard conservation in Yemen.

Illegal trade issues

During the last decade Arabian bustard population has been heavily poached mostly for illegal cross-border trade. The most common capture method involves using locally designed traps which are placed in cereal fields where the bustards are commonly found. This capture method is considered by poachers to be the most cost-effective by ensuring that individuals stay alive and healthy. Once caught, the birds are transported and sold outside the country for private collections and falcon-training purposes. This illegal off-take has been accelerated by several factors including increasing level of poverty in rural areas in Tehama, the high monetary value of Arabian bustard in the market and law enforcement issues. Although Yemen is a member Party of the Convention on International Trade in Endangered Species (CITES), several issues of illegal trade of wild birds in this southern Arabian country have been addressed (e.g. Stanton 2010). In the context of Arabian bustard fate in Yemen, it was thought that informing and involving security officers is an urgent anti-poaching action. Consequently, NARC in collaboration with the Environment Protection Authority (EPA) of Yemen organized an environmental workshop in February 2009 which was attended by many security officers throughout Tehama. The goal of the workshop was to introduce the Arabian bustard conservation programme to security officers and other senior government officials in Tehama. Several presentations were given in this environmental gathering covering a wide range of species conservation issues in Tehama including ecology of Arabian bustard, national wildlife law and protected area system in Yemen. The workshop concluded by stressing the importance of implementing necessary measures against ongoing poaching of Arabian bustard population in Yemen.

School campaign

Many school students in Tehama go to farms to help their families. They usually do this after school times or during days-off and public holidays. Fortunately, Tehama has a good network of public schools which can be targeted by the Arabian bustard public awareness campaign and hence address the species issues amongst the younger generation. Although these schools lacked some facilities to optimally present the public awareness programme (e.g. electricity, appropriate lecture hall to accommodate more students), these logistic obstacles were overcome through providing a portable generator and sub-selection of students from each class by teachers to attend the presentation. The presentation covered all aspects related to Arabian bustard including population status, threats and what is required to protect it from extinction (Figure 2). In fact some students could recognize the species as they opportunistically encountered it in their farms. However, the majority of students were unaware of its declining status. At the end of the presentation, students were asked questions related to Arabian bustard and its habitat. Students answering correctly were rewarded by some giveaways (e.g. t-shirts with Arabian bustard picture, hats, and pencils). The campaign was attended by 532 students representing 13% of the total students in the public schools of important Arabian bustard areas in Al Hodeidah governorate (Table 1).

Future directions

- Strengthen relationship with security departments in Tehama and provide them with periodic updates about the status of the Arabian bustard as indicated by annual population surveys.
- Educating local farmers on the strategic importance of the conservation programme of Arabian bustard should be part-and-parcel of the scientific component of the species' conservation measures. This is most likely to be effective if the conservation education activities are based on marketing Arabian bustard amongst villagers as a flagship species for bird conservation in Tehama considering its

economic incentives, as well as the cultural value of Arabian bustard amongst old farmers as a species bringing good omen (i.e. rain). In a classic paper by Bowen-Jones & Entwistle (2002) they stress the cultural and local significance for identifying flagship species for conservation. As a cost-effective approach to ensure that the educational message of the Arabian bustard conservation programme reaches as many locals as possible across rural areas of Tehama, then school-based activities (games, plays, quizzes...etc) should be prioritized in future public awareness campaigns. By adopting this approach, enthusiastic students can act as eco-ambassadors of the programme in their villages which in turn adds more credibility and conviction to the conservation message amongst local farmers to persuade them on using natural resources in sustainable manners.

- Secure sufficient financial resources to implement future public awareness campaigns.
- Periodically evaluate the impact of the public awareness campaign on perception and behaviour of target groups and adapt the activities of the campaign accordingly.



Figure 1. A displaying male of Arabian bustard in Tehama, Yemen (©IFHC)



Figure 2. Students attending a presentation about Arabian bustard (©IFHC)

Table 1. List of public schools targeted by the public awareness campaign for Arabian bustard conservation in Al Hodeidah governorate.

Date of event	School location	Number of attendees	Total number of students in
01/11/2009	Dithyabi	70	281
01/11/2009	Qetif Zumeila	67	450
02/11/2009	Al Qarar	60	750
02/11/2009	Al Jar	60	400
02/11/2009	Qamariya	55	550
03/11/2009	Dir Bani Ahmed	55	432
03/11/2009	Al Mkebah	50	372
03/11/2009	Al Gwader	55	95
03/11/2009	Dir Al Moudawar	60	650
Total		532	3980

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