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Status of Reintroduced Houbara Bustard Chlamydotis macqueeni in Saudi Arabia

Authors: Mohammad Zafar-ul Islam

Abstract: The breeding programme of Houbara bustard was started in Saudi Arabia in 1986 to undertake the restoration of native species such as Houbara through a programme of re-introduction, involving the release of captive-bred birds in the wild. Two sites were selected for houbara re-introduction, i.e., Mahazat as-Sayd and Saja Umm Ar-Rimth protected areas in 1988 and 1998 respectively. Both the areas are fenced fairly level, sandy plain with a few rock outcrops. Captive bred houbara have been released in Mahazat since 1992 by NWRC and those birds have been successfully breeding since then. The nesting season of the houbara at Mahazat recorded from February to May and on an average 20-25 nests are located each year but no nesting recorded in Saja. Houbara are monitored using radio transmitters through aerial tracking technique and also a vehicle for terrestrial tracking. Total population of houbara in Mahazat is roughly estimated around 300-400 birds, using the following: N = n1+n2+n3+n4+n5 (n1 = released or wild-born, radio, regularly monitored/checked; n2 = radio tagged missing; n3 = wild born chicks not recorded; n4 = wild born chicks, recorded but not tagged; n5 = immigrants). However, in Saja only 4-7 individuals of houbara have been survived since 2001 because most of the birds are predated immediately after the release. The mean annual home was also calculated using Kernel and Convex polygons methods with Range VII software. The minimum density of houbara was also calculated. In order to know the houbara movement or their migration to other regions, two captive-reared male houbara that were released into the wild and one wild born female were fitted with Platform Transmitter Terminals (PTT). The home range shows that wild-born female has larger movement than two males. More areas need to be selected for reintroduction programme to establish the network of sites to provide easy access to move these birds and mingle with the wild houbara. Some potential sites have been proposed which require more surveys to check the habitat suitability.

Keywords: re-introduction, survival rate, home range, Saudi Arabia

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