

## **Project Update: May 2011**

### **Specific sub-projects relevant to the trip were:**

Radio-tracking Birds will be live-trapped using a combination of cage/tunnel traps and mist-netting and then fitted with necklace type radio-transmitters. They will then be radio-tracked for up to a year (until the transmitter batteries expire) using triangulated fixes and GPS to record their position.

Population monitoring the francolin population in the Goda Massif will be monitored using systematically placed transects. Birds will be surveyed at the same time every day, between 06:00 and 09:00, when they are most likely to be visible and calling.

Further research on aspects of francolin biology, such as diet and condition (eg parasite loads), will also be carried out.

## **Methods**

### **Radio-tracking**

Three cage traps approximately 75x75x125cm in dimension were constructed from locally bought medium gauge 'chicken' wire. The construction type was a walk-in funnel type catcher, which folds flat when not in use, making transportation and storage easy. The entrance funnel was left flexible allowing it to be reshaped according to trapping circumstances. Traps were placed in cover in an area known to hold active francolins and were covered with *Buxus* branches. Bait (whole maize, wheat and sorghum) was placed in the middle of the trap with some spread around the trap to attract birds in. Observers were positioned within easy viewing distance of the traps so that birds could be secured and processed quickly when caught. Active trapping was undertaken for the periods a few hours after dawn and before dusk when birds were most active in the area.

### **Results**

22 hours of active trapping (approximately 60 man hours) were undertaken during the period 23<sup>rd</sup> -28<sup>th</sup> Feb. Although birds came close to entering traps on two occasions, it was clear that local birds were not attracted to the bait due to the wide availability of natural food following rains over the previous weeks. Birds were closely observed foraging on freshly emerged leaves of broad-leaved herbs on numerous occasions. Consequently, no birds were caught in the cage traps.

Due to the close proximity of observers to the birds during trapping periods, it was possible to make some useful observations on adult and juvenile behaviour, including interactions and calling.

### **General records**

It was estimated that up to 12 territorial males were present in the area encompassed by the Garab plateau and the wadi marked Ourano and Airolaf on the map below.

## Map of Study Area



This was approximately 0.5 km<sup>2</sup> in area giving an approximate density of 24 males km<sup>-2</sup> which equates well with the highest densities (if the addition of females effectively doubles the density) calculated by previous studies (Cartwright 2007, Fisher *et al* 2009).

### Population Monitoring

No standardized population monitoring was carried out during the trip. A programme of monitoring using fixed transects throughout the Forêt du Day is planned to start in May 2010. Between 30 and 40 transect locations will be selected to represent a range of altitude, habitats and physical features.

### Comments on the Juniper Restoration and Agriculture Project (IFAD/Dept. of Agriculture)

The project has elements which include Juniper nurseries for forest restoration and areas of agricultural improvement to relieve grazing pressure on the forest. I have concerns about the following sub-projects:

**Stock forage provision:** The idea is to provide forage to draw the stock away from the forest. The problem with this is that it will give the villagers an incentive to keep cattle and probably add to their herds and flocks in order to maximize the profits. If this happens and the system fails, the feed crop fails or the provisioning system collapses due to local politics/money stops, then there will be a large herd suddenly dependant on the forest herbs. Also, what's stopping people using the wider area anyway?

**Forest wood products (crafts and charcoal):** I have concerns similar to the above in that this project will potentially form a large number of local artisans producing crafts and art products from the dead juniper wood plus a profitable charcoal industry. However, the quantity of dead wood is limited and would therefore run out as a local source within a number of years. The established industries will suddenly look to living trees to maintain itself and suddenly compromise any forest recovery.

As a general comment, it is vital that the project is steered intelligently and monitored closely for its lifetime and for a period beyond to prevent the forest conservation and restoration programme being compromised.