## **BFA SEMINAR SERIES NO. 17**

## The Biodiversity and Ecology of Chirinda Forest Jonathan Timberlake

Held at the Bulawayo Club, Wednesday 6 November 2002.

Chirinda Forest is a medium altitude forest in southeastern Zimbabwe, 606 ha in extent, possibly the southernmost patch of subtropical rainforest in Africa. Phytogeographically it is classed as Afromontane forest, but with elements of lowland and Guineo-Congolian types. The distribution of Afromontane forest across Africa, and particularly the Eastern parts, was shown. A brief outline of its history and management aspects was given, including mention of Charles Swynnerton and the early history under the Forest Department (Kelly Edwards, logging, etc.).

The forest is on two hill tops on dolerite-derived soils, and it is the soil type that determines its extent. The use of old airphotos shows that its extent has not changed significantly over the years. The importance of year-round moisture, from rain or mist or dew, was stressed. The major trees - *Chrysophyllum gorungosanum*, *Trichilia dregeana* and *Craibia brevicaudata* - were described, along with some of the other important or interesting trees. A good and intact moist litter layer is of major significance in keeping the forest ecological processes functional. Most decomposition in forests is fungal, not by termites or similar insects as in the drier woodlands around.

Many tree species bear fleshy fruits, so the forest fauna (birds and mammals) has good representation of frugivores. The major animal species (mammal, birds, herps, butterflies), and those of conservation interest owing to limited distribution or rarity, were mentioned. Much of the fauna shows affinities to forests elsewhere, particularly those at lower altitudes along the East Africa coastal plains. A subspecies of Red Squirrel may be endemic, and there is one endemic butterfly - Neokoton's Acraea Mimic.

The recent conservation history of the forest was outlined. The forest is unique, not just to Zimbabwe, and is a priority for conservation action. The present strategy of encouraging visitors through provision of facilities and interpretative material - including a visitor's guide - was explained. Publicity is seen to be one of the best lines of conservation defence for such areas, at least those with much charisma.