Menagesha Medhane Alem

The Menagesha Medhane Alem Monastery forest is a relatively species rich stand in the close vicinity of Addis Ababa. Although it is not affected by herbivory, there is hardly any natural tree regeneration and the shrub layer is scarce whereas the herbaceous layer is dense. The spread of invasive species, regenerating profusely in the surrounding plantations and native scrub, is the main threat confronting this forest.



Name: Menagesha Medhane Alem

Status: monastery Site Code: SU07 Floristic Region: SU Region: 4 (West Shewa)

Altitude: 2900 m Latitude: 09° 02' N Longitude: 38° 35' E

Woodland/forest: Status: relict Size: 1 ha

Dominant species:

canopy: Buddleja polystachya, Juniperus procera, Olea europaea ssp cuspidata shrub/ground: Dovyalis abyssinica, Hypoestes triflora, Myrsine africana

No of woody species: 37

No of species with less than 5 individuals: 4 Threats: lack of regeneration, invasive species

Photograph: This statue was established in 2002 in the upper part of the woodland near the church. A bulldozer was used to delimit the area to establish the perimeter fence, in the process destroying much of the root system of a number of *Olea europaea* ssp *cuspidata* trees.

Menagesha Medhane Alem is situated on the top of an extinct volcano to the West of Addis Ababa. This small hill dominates the surrounding countryside and in places its slopes consist of sheer cliffs

On the gentler slopes most of the vegetation consist of forestry plantations mainly dominated by *Cupressus lusitanica*. On steeper slopes there is an *Erica arborea* dominated scrub. The native forest, that formerly dominated most of the hill, is now restricted to an area close to the summit. It is totally surrounded by exotic tree species some of which have also been planted across the native stand. The canopy of the native forest is open in places. The ground layer is dense and often dominated by grasses, whereas the shrub layer is scarce or totally absent.

On the slopes of the nearby and much larger Wuchacha Mountain there is a large block of forest dominated by native species. This forest was planted some centuries ago. However, in the vicinity of Menagesha hill the woody vegetation is dominated by plots of eucalypts with very few native trees remaining.

History

The establishment of the Menagesha Medhane Alem monastery is relatively recent. However, the site has been linked with a nearby church situated at the base of the hill. For the pasts three decades the area of natural woodland has been under the jurisdiction of the state and not the church. Forestry in the area has been essentially concerned with the establishment of exotic plantations. The

native stand is part of the State forestry plantations.

Conservation status

This site, considering its small size, is relatively species rich and has a few large native trees left. The stand could provide a good seed source for a number of local species.



A typical view of the woodland's vegetation structure. There is a dense ground layer but the shrub layer is nearly completely absent. The brightly-lit patches of ground

vegetation clearly indicate the semi-open nature of the canopy.

Threats

Unlike other investigated sites grazing by large herbivores is not a threat at Menagesha. Although not affected by grazing this woodland has very limited natural tree regeneration, probably in many parts of the wood because of the dense ground layer. The small size of the woodland is also a cause for concern.

Exotic species are regenerating freely in the surrounding plantations. Of particular concern is *Acacia decurrens*, this species is rapidly spreading into the remaining nearby natural stands of *Erica arborea* dominated scrub.

The use of a bulldozer to delimit of area to be fenced off around the statue erected in 2002 (see main photograph), and its destruction of part of the root system of canopy trees illustrate that trees may easily be damaged or even destroyed for religious purposes.

Management

Although the dense ground vegetation hinders natural regeneration of native trees it does, however, appear to prevent the spread of invasive species. Any reduction in the density of the ground layer, e.g. through grazing, would promote the establishment of invasive species and Acacia decurrens in particular. Unless invasive species are dealt with over the whole hill, all attempts at regenerating the natural woodland appropriate silvicultural techniques will favour exotics. The planting of the rarer canopy species, using seedling produced from local seed source, in canopy gaps should be envisaged.

As the natural stand is part of the Menagesha Forest the church has no ability to initiate and implement any management policies.