
Zena Markos

The Zena Markos monastery woodland is small and is one of the few relict patches of trees in this highland region. Situated below a small cliff at the end of a narrow promontory, it overlooks a deep and wide cultivated canyon largely denuded of trees but for a few scattered stands of eucalypts. The woodland is a mixture of medium-size trees and dense scrub, and natural regeneration of trees is lacking.



Name: **Zena Markos**

Status: monastery

Site Code: SU01

Floristic Region: SU

Region: 4 (North Shewa)

Altitude: 2460 m

Latitude: 09° 52' N

Longitude: 39° 04' E

Woodland/forest:

Status: relict

Size: <1 ha

Dominant species:

canopy: *Bersama abyssinica*, *Olea europaea* ssp *cuspidata*

shrub/ground: *Hypoestes forskalii*,
Inula conferiflora, *Solanecio gigas*

No of woody species: 48

No of species with less than 5 individuals: 3

Threats: lack of regeneration

Photograph: Zena Markos is situated below the promontory's top cliff. Note that there is another church woodland on the summit. The trees in the centre foreground are eucalypts.

Zena Markos monastery is situated at the edge of the highland plateau on the eastern side of a narrow ridge overlooking two large and deep canyons (tributaries of the Blue Nile). The woodland stretches at the base of a cliff just below the summit. Part of the area is littered with many large blocks of rocks.

The woodland is small and restricted to the slopes right below the cliff. There are a number of medium-sized trees, *Olea europaea* ssp *cuspidata* in particular. However, tree canopy cover is patchy and many large gaps, dominated by shrubby vegetation, occur. Below tree canopy the vegetation is largely exempt of shrub and the ground vegetation is mainly dominated by the sub-shrub *Hypoestes forskalii*. Tree regeneration is scarce and pole size trees are uncommon. Much of the monastery ground is now either open or dominated by exotic tree species.

The region is heavily cultivated with many fields nearly devoid of soil as a result of widespread erosion. The only other patch of native trees is located on the top of the ridge around an Orthodox church. There are a few patches of scrub dotted here and there in the surrounding landscape however the region is largely denuded of woody vegetation. In places there are groups of eucalypts.

History

Zena Markos is a relatively old monastery that was clearly established prior to the deforestation of the region.

Conservation status

This site, considering its small size, is relatively species rich and has a few large native trees left.



There is a mixture of large trees, shrub, ground flora and open spaces in this woodland, however natural regeneration is scarce.

Threats

Although not affected by grazing, this woodland has very limited natural tree regeneration, probably in many parts of the wood, because of the dense shrubby layer. The small size of the woodland, and related small population size of several native woody plant species, is also a cause for concern, especially as native tree vegetation in the surrounding countryside is so scarce.

Currently tree harvesting is not a problem but the scarcity of timber in the area makes this limited resource a highly desirable commodity.

With the nearby church woodland, this is the only stand of trees left on either side of the headland. From the edge of the promontory no other woodland could be seen in the surrounding landscape highlighting the scarcity of native stands.



The holy water (natural permanent well) is situated at the base of the cliff and is sheltered by the natural woodland. The old church is adjacent to the cliff whilst the modern church is located nearby on flatter ground.

Management

The lack of tree regeneration needs to be addressed. Planting of most species using local seed sources is probably the best option. In areas where the scrub vegetation is dense slashing of the vegetation, to allow the growth of planted seedlings, will be required. Expansion of the woodland at the expense of scrubby vegetation and/or eucalypts is also desirable.