



# Expedition: Saving the Forests of Ethiopia

## Field Study: Conservation

**Summary:** Margaret “Canopy Meg” Lowman spent two weeks in Ethiopia in order to expand her Church Forest Project, an effort to conserve the country’s remaining forests, most of which have been depleted during the 20th century. Many of the forests that still remain exist around Orthodox Christian Churches, which have preserved them as sacred sites. The Church Forest Project is a partnership between conservation and the local churches, and provides local communities the resources they need to build stone walls around their forests, thereby protecting the forests from stray cattle and plowing while simultaneously improving the agricultural yield in their fields.

### THE EXPEDITION

Nearly 95 percent of northern Ethiopia’s forests have been degraded due to subsistence farming, timber harvesting and the need for firewood. Alongside a colleague who is based in Ethiopia, Meg Lowman has been involved in the Church Forest Project for ten years. She makes frequent trips to new regions of Ethiopia to conduct workshops with local priests in an effort to expand the Project. Lowman’s conservation success depends on creating trust with the church leadership. Though no one knows the exact number of churches that are surrounded by forests, estimates put the number at above 15,000. While the priests value their forests, they do not have access to western technology, such as Google Earth, and are unaware of how much of the forests have been depleted.

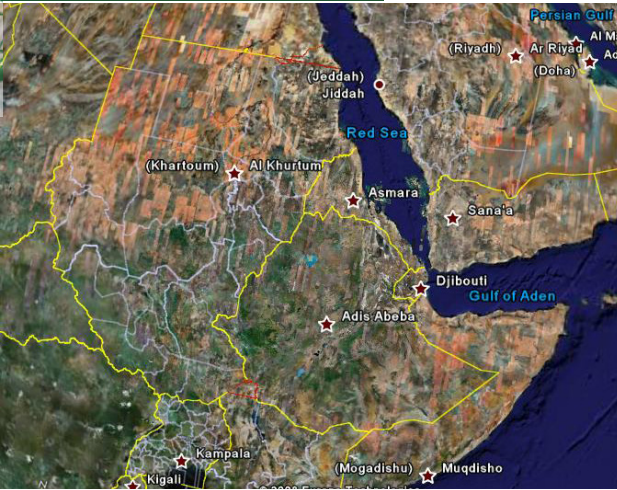


Meg Lowman with the Coptic Priests of Ethiopia.

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A simple and elegant solution to the problem – a solution which was devised by members of these communities – is to build walls made of stone harvested from their crop fields. This solution offers several benefits: it protects the forests, it removes stones that cause problem during harvesting, and it is an attractive addition to the local landscape, according to Lowman.

Lowman also worked with a local women’s monastery and helped them purchase



## WHO

Margaret "Canopy Meg"  
Lowman

## WHAT

Work with Ethiopia's Coptic Priests  
to conserve Ethiopia's Church  
Forests

## WHEN

April 30 - May 13, 2017

## WHERE

Ethiopia

## WHY

Because of subsistence farming  
and timber harvesting, Ethiopia's  
forests have degraded during the  
20th Century

knitting machines in order to make a sustainable income. She also dedicates part of every trip to working with children, who, she says, will be the next generation of priests. She distributed copies of BEZA, a book she authored about a girl who learns the value of local trees, to four different rural schools.

## EXPEDITION GOALS

The key goals of the expedition were to:

- Educate the local priests about the value of their forests, since the last remaining forests in northern Ethiopia reside in the church-yards (called church forests).
- Distribute BEZA, a children's book Lowman wrote (in Amharic) about the value of trees, giving local kids their first-ever book to own and one that messages about local forest conservation.
- Work with the local women's monastery to help them become sustainable with both income and nature conservation.
- Create videos for girls-in-science back in USA, working with Untamed Science (videographers).

## EXPEDITION RESULTS

The new group of priests with whom Lowman



worked were very receptive and agreed to work to preserve their local forests.

Lowman distributed over 200 copies of BEZA, a children's book about a girl who learns the value of her local trees (written in Amharic) to four rural schools. Lowman said it was humbling to know that this is the first book they have ever owned. Their schools do not have paper, pencils, or much less a library. So giving them a book, where a girl is the heroine and the theme is inspiring forest conservation, was truly a life-changing part of this expedition. She made sure that all the girls got books before the boys were lined up, which is quite a different hierarchy than they are used to.

She also worked with the women's monastery, helping them purchase knitting machines to make shawls for sustainable income. With some pre-orders from Americans, they were thrilled to launch their business and now can be sure of having enough funds for food, water, and keeping their native landscape healthy. There is only one woman's monastery amidst hundreds of male monasteries around Bahir Dar, Ethiopia, so they are very under-served but truly grateful to create a sustainable profession on their campus.



Meg Lowman distributed over 200 copies of a children's book to local students.

Haley Chamberlin of Untamed Science made videos of the priest workshop, the meetings with the women's monastery, the book distributions, and the conservation story of building walls to conserve the forests surrounding church yards. These will be distributed on Lowman's websites ([www.canopymeg.com](http://www.canopymeg.com) and [www.treefoundation.org](http://www.treefoundation.org)) as well as YouTube, so that students can admire the bottom-up conservation that was successful on this expedition. In short, by engaging the locals and empowering them to be the decision-makers, we have inspired a culture for forest conservation and also a unique partnership of church and science.

### CHALLENGES AND LESSONS LEARNED

Lowman's expedition actually had to be postponed due to civil unrest in Ethiopia. There had been a number of violent clashes during protests by rural population's against the country's executive leadership.

Lessons learned from the expedition include:

- Be humble and sensitive to local cultures.
- Be open minded. Even two subjects as disparate as religion and science have a

common ground: that we are all committed to stewardship of God's creatures (i.e. biodiversity).

- Establish local trust. Nothing is successful without that "secret sauce."
- Prioritize the next generation -- it is not good enough to just have the elders at the decision-making table.

### EXPEDITION FUNDING

This expedition, which cost about \$11,000, was self-funded. The National Science Foundation funded a videographer and the videos will become part of Lowman's Research Experience for Undergraduates training. WINGS WorldQuest also provided a small grant.

### ABOUT THE FLAG CARRIER

Nicknamed the "real-life Lorax" by National Geographic and "Einstein of the treetops" by Wall Street Journal, Margaret "Canopy Meg" Lowman pioneered forest canopy exploration. For over 30 years, she has designed hot-air balloons and walkways to solve mysteries in the world's treetops, ranging from medicinal compounds in leaves to insect pests to sloth behavior. Meg is affectionately called the mother of canopy research as one of the first scientists to explore this eighth continent. She is also passionate about inspiring youth, especially girls, in science. She has worn many hats: research scientist, author, explorer, educator, small-business owner, and government advisor. She has explored not only forest canopies, but also coral reefs, Antarctic ice, mangroves, rocky shores, human microbiomes, and arid landscapes in over 15 countries, to better understand the complexities of biodiversity and how nature operates our planet. She won the WINGS WorldQuest Woman of Discovery Award in 2009.



#### CONTACT INFORMATION:

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Meg Lowman

Supporting Members:

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Priests from the Coptic Diocese of the Gondor religion

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