



# Expedition Snapshot: Sahara

## Field Study: Conservation

**Expedition Summary:** In 2013 Helen Thayer, accompanied by her husband Bill, walked 900 miles leading their four camels and carrying WINGS Flag # 8 across the Sahara from Morocco to Mali in the company of a twelve-member Berber tribe, searching for an improved water supply. Previously in 1996-97 the team had walked 4,000 miles across the Sahara from Morocco to the Nile River. The 2013 expedition compared the ongoing water supply and related desertification problems to those discovered in 1996-97.

### WATER SUPPLY

Periodic droughts and hot, dry, dusty harmattan winds continue to cause a lack of potable water and an increase in desertification. Lack of water for humans and animals causes an increasing number of nomads to leave the desert to find refuge in the cities, which in turn, causes unemployment and hardship. In 1996-97 the water tables in many areas



were reported by desert nomads to be lower than in previous years. Drought was reported to be the significant cause. Many wells that had been previously adequate had dried up and many others contained lowering water tables. In 2013 a few wells that we had used in 1996-97 were dry and others contained vastly lowered water tables. In several wells the salinity content had risen dramatically. It was obvious from discussions with Nomads and from our own observations that availability of potable water was a continuing problem that continues to worsen.

### DESERTIFICATION

Along with drought, over grazing of areas of vegetation by poorly managed traditional herding is one of the primary causes of desertification. As vegetation



decreases due to overgrazing, the rate of erosion vastly increases. Unprotected surfaces of dry soil blow away in the frequent strong winds characteristic of the desert environment. This leaves infertile lower soil layers to bake and harden in the sun and eventually become unproductive sterile hardpan. Eventually these affected areas are unable to support the Nomad populations that previously lived there. Consequently nomads give up their herds and migrate to the cities in search of employment, but more often find no work, and end up living in city slum conditions.

### EXPEDITION RESULTS

Historical evidence shows that the Sahara once sustained river animals such as crocodiles. Fossils of dinosaurs have also been discovered in the Desert. Prehistoric rock paintings prove that giraffes, elephants and lions roamed and thrived in a once fertile and luxuriant Sahara. Today, there is little water or vegetation to sustain life in most of the Sahara. The landscape is mostly made up of rocky hammada, a category of desert landscape that contains little sand and mainly consists of barren, rocky, wind swept plateaus.

Due to ongoing drought conditions that deplete animal food and water for humans and animals, it is difficult to find a lasting solution. Global warming is an ongoing problem and Nomad herd grazing practices are not going to change. The Sahara as a whole continues to increase in size both north and south. Areas that were



### WHO

2014 Women of  
Discovery Awardee  
Helen Thayer

### WHEN

2013

### WHERE

Sahara Desert

### WHY

Study of  
Desertification  
and Water Supply  
Routes

once sparsely populated are now empty of humans and their herds. Even wildlife has fled the stark, barren wastelands. The Sahara's unforgiving and dangerous environment continues to escalate.

### ABOUT THE FELLOW

- First woman to travel alone to any of the world's Poles when she skied at age fifty to the Magnetic North Pole without dog sled, snowmobile, resupply or support.
- First woman to walk 4,000 miles across the Sahara from Morocco to the Nile River.
- In another world's first, Helen walked 1,600 miles across the Gobi Desert at age sixty-three.
- Kayaked 2,200 miles of the Amazon River at age 70.
- In a unique study in the wild, Helen lived near a wolf den above the Arctic Circle for a year.
- Helen won the American national luge championship and represented three countries in international track and field.
- She has climbed some the world's highest mountains.
- The Explorer's Club awarded Helen the Vancouver Award for Excellence in Exploration.
- At age 75 Helen walked, leading her camels across 900 miles and four countries of the Sahara to study water availability and desertification.

Helen continues to plan future expeditions and continues to expand Adventure Classroom programs for students kindergarten through grade 12. Her books are published in nine languages.



### EXPEDITION TEAM

Helen Thayer

Bill Thayer

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