Tales from the Field

Forcing Mechanisms of Fieldwork in Yemen

Since 1995 our research group in Bern has been using stalagmites from Oman, Yemen and Saudi Arabia as paleoclimate archives. In 1999, we visited a cave in Hadramaut in Southern Yemen to drill a core out of a 3 meter long stalagmite (see photo). For tidy-minded scientists from Switzerland, Yemen is a strange and also fascinating country for many reasons. One peculiarity is the bureaucracy, which at times behaves much like the climate system. For Yemen this means that the paleoclimatologist must distinguish between an external (governmental) and an internal (tribal) forcing, where internal tribal forcing (ITF) shows a highly non-linear response to external governmental forcing (EGF). EGF and ITF were not in phase in the past (pers. communications) and fully coupled GBM's (General Bureaucracy Models) reveal that this relation will also not change in the near future. However, these facts were almost unknown to us when we arrived at the cave site. We felt safe for two reasons: (1) we were equipped with numerous official permissions from the ministry of interior and Sana'a University and (2) two soldiers, armed with the famous AK-47 (better known as Kalaschnikow) were guarding us. Because of these two facts we believed that EGF and ITF are indeed in phase. However, after three days of successful drilling we heard a loud discussion at the cave entrance and suddenly 10-15 angry persons, some armed with the AK-47s, entered the cave. They were accompanied by our two Yemeni colleagues (see photo), who told us what had happened at the surface 30 minutes before. They were sleeping outside, guarded by the two Yemeni soldiers (EGF), when they suddenly woke up and found themselves looking into several AK 47 barrels (ITF). Our two colleagues realised immediately that EGF was much weaker than we had assumed: the two Yemeni soldiers had disappeared. After 30 minutes of negotiation we convinced the people that we were neither digging for gold nor for diamonds but only for stalagmites. However, we were forced to immediately leave the cave and also our beautiful stalagmite. To be able to continue our work, we visited the local sheik (very strong ITF) the next day and tried to convince him of the necessity of our studies. At this point in time ETF was not strong enough to dampen the effects of ITF. However, after 2 hours of negotiation and hundreds of dollars (also known as bakschisch forcing BF) we finally received permission to continue our work. Over the next few days we drilled the stalagmite twice because the local people insisted on getting some of these obviously important and valuable samples. To summarize, ETF and ITF are dominated by BF. Additional studies from low and high-latitude countries are needed to better reveal the interaction between ETF, ITF and BF on a global scale.

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Fig. 1: Two Yemni helpers in front of the cored stalagmite. (Photo: D. Fleitmann)

Do you have an interesting and humorous story from your paleoenvironmental fieldwork? If you write it down in 500 words or less and send it to us, we will put it in PAGES news!

Inside PAGES

After several months maternity leave, **Selma Ghoneim**, the PAGES Office Administrator is back in the office. Congratulations on your son, Selma. **Antti Ojala**, a paleolimnologist and Quaternary geologist from the Geological Survey of Finland, was a visiting scientist at the PAGES office for a week in March. Antti was working on guest editing of the next issue of PAGES News, a special issue co-produced with the ESF HOLIVAR program. Starting in April **Olga Solomina** a dendrochronogist and glaciologist from the Russian Academy of Sciences Institute of Geography, and member of the PAGES Scientific Steering Committee, began a three month stint as guest scientist at the PAGES office. Her primary task will be editing a PAGES special issue of the Elsevier Journal Paleo –geography –climatology -ecology entitled "High Latitude Eurasian Paleoenvironments" – one outcome of a PAGES meeting held in Moscow last year.

Call for Contributions:

For the next issue of PAGES News science highlights relevant to the Holocene as well as the usual workshop reports and program news are welcome. If you are interested in contributing, contact **Christoph Kull** (kull@pages.unibe.ch). All submissions should follow the instructions for authors on our web-site (www.pages.unibe.ch/products/newsletters.html) and be submitted by May, 20th 2003.