

NAVARINO ENVIRONMENTAL OBSERVATORY

NEO Management

Monday, 25 May 2015

NEO NEA #16 (January - March, 2015)

NEO stands for Navarino Environmental Observatory. But NEO in Greek (νέο) means news as well and NEA is its plural. So this is our news!

Foreword

The first 5-year cooperation agreement between the three partners, TEMES, Academy of Athens and Stockholm University ended by 3 March 2015 and our new agreement came into force on 4 March. The general aim of the new agreement is to continue developing the collaboration between the partners to promote front line research and education on the climate and environment in the Mediterranean region. Specific emphases are put on the need for transdisciplinary research projects and projects with a focus on the Peloponnese region.

The organization of NEO will be the same, with the Steering Committee (SC), consisting of a chairperson and 2 members from each party, and a NEO Management consisting of the NEO Director and the NEO Station Manager. Stefan Nordlund will continue as the chairperson for the SC and Christos Zerefos, Vangelis Gerasopoulos, Marina Papatsoni, Vasilis Karakousis and Gia Destouni will continue as SC members. We would like to express our sincere thanks to Johan Kleman, who is leaving the SC, and a warm welcome to Alasdair Skelton who will be his successor.

Reviewing the activities that have been carried out during the first three months 2015, make us both happy and we are grateful to have been entrusted to continue manage Navarino Environmental Observatory and its activities. Happy Reading!

Karin and Giorgos

Activities

Research

- **Analysis of wetland sediments**

PhD student Christos Katrantsiotis and Associate Professor Jan Risberg, SU, together with Dr Pavlos Avramides, University of Patras performed field work 7-14 February as part of the VR-funded paleoclimate project, led by Karin Holmgren. A long sediment core of 8 m was retrieved from the eastern shore of Gialova lagoon, using a vibra-corer. The core was examined for general lithology, color, boundaries as well as internal structure and, subsequently, sub-sampled every 1 cm at the Laboratory of Sedimentology at the University of Patras. The subsamples were sealed in plastic bags and transported to Stockholm University for geochemical and microfossil analysis. Within this project, another sediment core, which was previously retrieved from the central part of the lagoon, will be further analysed. The results from both cores will be combined to decipher the palaeogeographical changes as well as the climate variability in this area of the Peloponnese, which has undergone transformation processes, intensified by human intervention and repeated periods of sea level transgression and regression during the Holocene epoch.



Figure 1: NEO Researchers during fieldwork in Gialova lagoon

Education

Courses

- *“Physical Geography course”*
Bachelor students’ course, Stockholm University (February 24-28)

The fifth Physical Geography course took place at NEO. Sara Cousins, Ingmar Borgström and Martin Finné were the instructors of the field course and 14 students from Stockholm University attended the course. Topics that were covered were how different processes like tectonics, erosion, humans, etcetera shape the landscape and how climate change and land use processes might shape the landscape in the future. The course participants visited several places in Messinia.



Figure 2: Students during fieldwork under the framework of the Physical Geography course at NEO.

Events

Workshops

- *“FLEUR network” , March 2-5*

The tenth annual workshop within the FLEUR network was held at NEO and organized by Professor Sara Cousins, SU.. The FLEUR network meets on a regular basis to discuss progress and ideas for future research. FLEUR is a European network of researchers interested in the dynamics of forest plant species in a changing environment. The scientists use observational and experimental approaches as well as large databases to answer questions in connection to forest plant population biology and ecology and global change themes.



Figure 3: Participants at the FLEUR network workshop.

Dissemination

- ***Scientific Publications***

Klein, J., Ekstedt, K., Walter, M.T., **Lyon, S.W.** (2015), Modeling potential water resource impacts of Mediterranean tourism in a changing climate, *Environmental Modeling and Assessment*, 20(2), 117-128.

Finné M., Kylander M., **Boyd M.,** Sundqvist H.S. and Löwemark L., 2015. Can XRF scanning of speleothems be used as a non-destructive method to identify paleoflood events in caves? *International Journal of Speleology*, 44 (1), 17-23. Tampa, FL (USA) ISSN 0392-6672, <http://dx.doi.org/10.5038/1827-806X.44.1.2>

- ***Cafe-NEO***

'Observing climate change from Messinia',

Kalamata, February 16

'How to adapt to climate change',

Kalamata, March 30

Two more 'cafe-NEO' meetings, took place at Vino-Banco Tapas bar in Kalamata in February and March. At the first meeting, the attendees had the opportunity to discuss with Mr. Giorgos Maneas, NEO Station Manager, general topics regarding climate change as well as the research that is conducted at NEO. The second meeting with Professor Christos Zerefos was aiming to raise awareness on climate change adaptation and it was a real joy; a journey from climate change to art and from Homer to Spielberg!



Figure 6: Cafe-NEO at Vino-banco Tapas bar in Kalamata

[NEO management](#)

NEO management met with Stefan Nyman, Strategic Partnerships, Stockholm University, Marina Papatsoni and Vasilis Karakousis, TEMES S.A. in Athens for discussing fund raising issues. During the meeting, among others, the organization of an event in Athens for the promotion of NEO was decided.

Upcoming

Research

- Johan Kleman and Ingmar Borgström will finalise the Taygetos paper in the spring and are planning a new field visit in the mountains in early autumn
- Barbara Kleine will defend her Ph.D. thesis on April 28, 2015 and Ruben Fritzon will defend his Ph. Lic. thesis on June 5, 2015.

Education

- A Geochemistry course, held by the Department of Geological Sciences, SU and a course in Ecohydrology, held by Department of Physical Geography, SU, will take place at NEO in early May and mid-June respectively
- Alice Guittard, master student at Department of Physical Geography, Stockholm University, will do an internship course at NEO during the period April – June. Alice will work on a GIS data management setup.
- Two bachelor science students, Dep of Physical Geography, SU, will do their theses on NEO related themes. The students will be at NEO during the period May 27 – June 6.

Events

- The **Global Wetland Ecohydrology Network** workshop will be held at NEO at the end of April 2015. The workshop is organized by Gia Destouni, Professor in Physical Geography, Stockholm University.
- A large official event documenting the first 5 successful years of collaboration and marketing the 5 coming years of continued collaboration will take place will be held in Athens on 18 May.

Dissemination

- The *Café-NEO* meetings, organized by Navarino Environmental Observatory, will take place at several coffee shops in the Peloponnese as well as at University canteens, with a range of topics such as “Why Messinia? From Homer to Spielberg” or “How to educate your kids to respect nature

NEO Steering Committee

The next NEO Steering Committee meeting will take place in Athens in May 19. Professor Johan Kleman has left the committee and Professor Alasdair Skelton is replacing him.