







Content:

Aerobiology, aerodynamics and pollen sampling. Pollen structure and morphology.
Pollen development, biology and function
Moulds. Production and release of fungal spores
Health impacts of pollen and mould.
Sampling of aeroallergens
Meteorological aspects of particle dispersal.
Seasonal and short-term forecasting; modelling.
Analysis of long distance dispersal with trajectory models.

Identification of pollen and moulds Practical plant identification and taxonomy Scanning and counting of slides EAN database, EPI and pollen info. Preparation of drums and traps.

Basic statistics applied to aerobiology Aerobiology, health and global change



Welcome to Sweden and the 13th European Basic Course in Aerobiology!

We are happy to invite you to the 13th European Basic Course in Aerobiology, which will take place at the research station of Kristineberg, W of Fiskebäckskil, ca 110 km N of Gothenburg. The course is aimed at students and young researchers, who are in the beginning of their research in aerobiology and in their cooperation and communication with stakeholders; e.g. health care and the public. It intends to provide a basic understanding as to the production, dispersal, deposition and impacts of airborne pollen and spores, as well as skills to sample and identify these bioaerosols.

Aerobiology is a transscientific subject, involving i.a., botany, mycology, ecology, meteorology and other atmospheric sciences, modelling, and medicine. Therefore, the course will touch on all these subjects, with leading experts from different parts of Europe, to teach about the latest knowledge concerning our field. There will be a theoretical part concerning the production, dispersal and impact of pollen and fungal spores, sampling techniques and quality control in bioaerosol monitoring, relevant meteorology, atmospheric science, forecasting and modelling, databases, statistics used in aerobiological research and consequences of Global Change. There is also a practical part on pollen and fungal spore identification, as well as operation of volumetric traps and sampling. The course will end with a theoretical and practical examination. When approved, participants will receive a diploma.

The course will be arranged in a joint collaboration between the European Aerobiology Society (EAS), University of Gothenburg, and Gothenburg Centre of Air and Climate (GAC).

The course will combine lectures and practical sessions. One day (in the middle of the course) will be set aside to a tour in the beautiful province of Bohuslän, with a world-heritage of Bronze Age rock carvings, and Nordens Ark, a zoological park focusing on the preservation of species under the threat of extinction, and aiming at reintroducing animals to the wild.

The province of Bohuslän has a bedrock of ancient granites and gneiss. The rocks were abraded to smoothness by Pleistocene glaciers. Between them, there is an amiable landscape, which was beneath sea level only one to a few millennia ago. It is characterised by small-scale agriculture, green pastures and meadows, and oak forest groves on shell rich ground

The course venue, the marine research station Kristineberg, is part of Sven Lovén Centre for Marine Infrastructure. It is situated in the western outskirts of the picturesque fishing village of Fiskebäckskil, on the island of Skaftö by the Gullmar Fjord. A fjord is a narrow inlet from the sea. The Gullmar Fjord, or "Gullmarn" in the local language, is a threshold fjord with a mean depth of 20-40 metres at the orifice and a maximum depth of 118,5 metres further in. It has a length of 25 km, a width of 1–3 km, and is a marine nature reserve comprising 16 499 hectares.

We are looking forward to welcoming you to Bohuslän and to Fiskebäckskil, at the West Coast of Sweden: aka the Best Coast. Please visit http://www.vastsverige.com/en/lysekil/b/112231/Fiskebackskil-on-Skafto for more information on Fiskebäckskil, and http://www.vastsverige.com/en/ for information on West Sweden in general.

On behalf of the Local Organising Committee, Åslög Dahl

Registration

The course will start on 17th of July 2017 and ends 24th of July 2017.

The participation fee does NOT cover travel expenses. Course fee

The full participation fee is 650 EURO and will include: All course materials (hand-outs, certificates and consumables), Accommodation

Meals (breakfasts, lunches, dinners, "fika" Excursion / social event.

The <u>half board participation fee</u> is 480 EURO and will include: All course materials (hand-outs, certificates and consumables), Meals (breakfasts, lunches, dinners, "fika" Excursion / social event.



Accompanying person participation fee is 270 EAR and will include:

Meals (breakfasts, lunches, dinners, "fika"),

Excursion / social event. There is unfortunately no available room for accommodation for accompanying persons at the research centre (see nearby hotel tips).

Registration for the course should be at May 20th by the latest at http://bioenv.gu.se/forskning/aerobiology-basic-course (webside launched in Mid-March). The course fee should be paid by 1st June 2017 to account no. SWEDSESS SE0580000810599134654509.

(Account holder: Botaniska Analysgruppen i Göteborg AB). Add "EAS Aerobiology Course", your name and affiliation, and a VAT number). If you prefer to have an invoice, please contact Åslög Dahl, aslog.dahl@bioenv.gu.se.

Accommodation

Students will share 2-bed rooms at the research station Kristineberg, which is part of Sven Lovén Centre for Marine Infrastructure. Teachers are also accommodated there.

For other accommodations, please visit

http://www.vastsverige.com/en/lysekil/boenden---eng/.

http://www.hotellkartan.se/Lysekil/Fiskeb%C3%A4ckskil/

The latter website is in Swedish, but it is possible to find information in English for most of the hotels listed when you click on their respective links. Minimum price and (in many cases) a rating with stars for each hotel is given, as well as the distance from Fiskebäckskil in metres.

As an alternative to accommodation in Fiskebäckskil, Lysekil would be an option. This is a small and nice town across the fjord from Fiskebäckskil, 22 km away by car. There is also a pedestrian ferry with a 15 minutes trip across the water. The <u>timetable for the summer is not vet</u> available.

Getting to Kristineberg

By plane. The nearest airport is Gothenburg Landvetter Airport. From there, there is a bus to the Gothenburg Central railway station, where it is possible to take train or bus to Kristineberg. The bus schedules are not available yet, but will be published on our web site as soon as possible.

By train. The nearest railway station is in Uddevalla, 38 km from Kristineberg. From there, there is a bus to Fiskebäckskil.

By car. Drive E6 northwards from Gothenburg, in the direction of Oslo. Turn into road 161 (direction Lysekil) at Exit 96, N of Uddevalla. Turn left towards Fiskebäckskil after ca 20 km, and after driving through Bokenäs. From the church in Fiskebäckskil there are signs towards the Lovén center at Kristineberg.

Passport and Visa

Sweden is a member of the European Union, but please always bring your passport, even if you are an EU citizen. A visa is required for citizens of countries that do not have visa-exempt agreements with Sweden. For more information, please visit http://www.government.se/government-policy/migration/information-on-visas/

Insurance

The Organizing Committee recommends all attendees to take out personal travel and health insurance for their trip.

Additionally we encourage you to come back to this website, where you will be able to find additional and updated information.

Also visit the official website of West Sweden.

Currency

Although being a member of the EU, Sweden still has its own currency, the Swedish krona (SEK). At present (March 2017), 1 € is 9,54 SEK

