INSECTS: INVENTORY AND IDENTIFICATION

12th - 30th of August 2019

Teachers: DK = Dave Karlsson (Station Linné)

MF = Mattias Forshage (NRM)

EH = Emily Hartop (Station Linné)

FR = Fredrik Ronquist (NRM)

JR = Jadranka Rota (LU)

NW = Niklas Wahlberg (LU)

TR = Tomas Roslin (SLU)

SS = Scarlett Szpryngiel (Station Linné, lab. assistant)



Days: AM = 09:00 to 12:00 (coffee break 10:15 - 10:45)

Lunch break 12:00 - 13:00

PM = 13:00 - 16:00 (coffee break 14:15 - 14:45)

FIRST WEEK

Monday, August, 12

AM Introduction and welcome to Öland, Station Linné and SMTP // DK, MF and other Students' project planning // DK, MF

PM Diversity and phylogeny of insects // MF

Evening (optional...) social hour/welcome party

Tuesday, August, 13

AM Inventory methodology //MF Setting out traps (field session)// DK, MF (Neighborhood around Station Linné)

PM Preparation techniques // DK, MF Construction and use of keys //MF

Evening (optional...) Basic key exercise for those who want and/or need //SS

Wednesday, August, 14

AM Comparative insect morphology and terminology //DK

PM Lab session; insect morphology and terminology //DK (individual lab session // SS)

Evening Night excursion // DK, MF



Thursday, August, 15

AM Diversity, phylogeny and evolution of insects: Hymenoptera // MF

Diversity, phylogeny and evolution of insects: Ichneumonoidea and Chalcidoidea // DK, MF

Diversity, phylogeny and evolution of insects: Hemiptera // SS

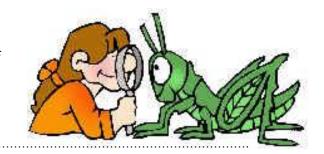
PM Field session, collecting insects //MF, SS

Friday, August, 16

AM Diversity, phylogeny and evolution of insects: Coleoptera // MF

PM Diversity, phylogeny and evolution of insects: Diptera // EH

Evening Night excursion (yet uncertain, optional...)



SECOND WEEK

Monday, August, 19

AM Field session, collecting insects //MF, DK, SS

PM Lab session; determination and preparation //MF (individual lab session // MF, DK or SS)

Tuesday, August, 20

AM Field session, collecting insects //MF, SS

PM Lab session; determination and preparation //MF (individual lab session // MF, DK or SS)

Wednesday, August, 21

AM Field session, collecting insects //MF

PM Lab session; determination and preparation //MF (individual lab session // MF, DK or SS)

Thursday, August, 22

 $\pmb{\mathsf{AM}}\ \ \mathsf{Field}\ \mathsf{session},\ \mathsf{collecting}\ \mathsf{insects}\ \mathsf{/\!MF}\ \mathsf{and}\ \mathsf{other}$

PM Lab session; determination and preparation //MF and other

Friday, August, 23

AM Taxon quiz //DK, SS, MF

PM Own project/field/lab (individual lab session // MF, DK or SS)





THIRD WEEK

Monday, August, 26

AM Own project/field/lab

PM1 The importance of biological collections and why we need to keep collecting //JR

PM1 The successful evolutionary history of insects //NW

Tuesday, August, 27

AM Going full out: All taxon biodiversity inventories //TR

PM Practices about research and the world of funding //FR

Evening Night excursion (optional...)

Wednesday, August, 28

AM Own project/field/lab

PM Own project/field/lab

Thursday, August, 29

AM Oral presentations and course closing (alternative 1)

PM Own project/field/lab (optional)

Friday, August, 30

AM Oral presentations and course closing (alternative 2)

PM -



Course literature:

Gullan, PJ & Cranston, P S: Insects: An outline of Entomology, Chapman & Hall (appr. 600 SEK) (Academic standard textbook) OR <u>as a free pdf!</u>

Or:

Grimaldi, D & Engel, M S: Evolution of the Insects, Cambridge University Press (big, beautiful and up-to-date book, contains far more than the present course is able to cover, but strongly recommended for anyone with an interest in insects. Out of print, but might be available as a pdf or used for appr. 1600 SEK.)

And:

Various on-line identification keys and handouts.

