UCAM Field visit June 2025

UCAM Staffing: EB - Eustace Barnes, JF – John Forrest, HL – Hugo Lepage, DR – Daria Radu, DA – Darina Andriychenko, ML - Miguel Lezama, JPO - Julia Porturas.

Fieldwork plans for each of the visiting research staff.

Green = Biodiversity/bioacoustics

Brown = Soils

Orange = Dry Forest

Purple = Water, sediment & soil samples collection

Blue = Glaciers (remote sensing)

NB: To visit glacial sites acclimatisation is required.

Schedule. (Arrive/fly to Cusco together) (Flight and transport availability plus research objectives make this the most practical)

7th June: Arrive Lima - EB, HL, JF, DR, DA, JPO.

8th June: Fly Cusco. Acclimatization. EB, HL, JF, DR, DA, JPO.

9th June. Acclimatization & Salkantay visit preparation. HL, JF, DA, DR, JPO. Acclimatization, Biodiversity & Dry forest taxa research planning. EB, ML.

10th June. Acclimatization & Salkantay visit preparation. HL, JF, DA, DR, JPO, Acclimatization, Biodiversity & Dry forest taxa research planning. EB, ML.

Group 1: Biodiversity. EB, ML & UNMSM participants (Grace Servat Valenzuela & Matias Laynes Espino)

Objective: to survey biodiversity is to document and assess the unique species composition and ecological dynamics within isolated and understudied ecosystems. Due to their complex topography and climatic variation, inter-Andean valleys often harbour high levels of endemism and distinct biotic communities. Conducting field surveys in these areas helps identify conservation priorities, detect potential new or range-restricted species, and understand biogeographic patterns critical for informing sustainable land management and biodiversity protection strategies.

11th June. Biodiversity, Dry forest taxa. En route Cusco to Huanta. EB, ML + UNMSM.

12th June. Biodiversity, Dry forest taxa. En route Cusco to Huanta. EB, ML + UNMSM.

13th June. Biodiversity, Dry forest taxa. En route Cusco to Huanta. EB, ML + UNMSM.

14th June. Biodiversity, Dry forest taxa. En route Cusco to Huanta. EB, ML + UNMSM.

15th June. Biodiversity, Dry forest taxa. En route Cusco to Huanta. EB, ML + UNMSM.

16th June. Biodiversity, Dry forest taxa. Arrive Huanta. EB, ML + UNMSM.

Objective: to provide UNAH students and staff hands-on training in biodiversity survey techniques within a unique and often underrepresented ecosystem. Dry forests are characterized by distinct seasonal dynamics and host a specialized range of flora and fauna adapted to arid conditions. Through field-based learning, participants gain practical experience in species identification, ecological monitoring, and data collection methods, while also developing a deeper understanding of the conservation value and ecological challenges facing these threatened habitats.

17th June. Biodiversity, Dry valley taxa. Huanta area. EB, ML + UNMSM + UNAH staff & students.

18th June. Biodiversity, Dry valley taxa. Huanta area. EB, ML + UNMSM + UNAH staff & students.

19th June. Biodiversity, Dry valley taxa. Huanta area. EB, ML + UNMSM + UNAH staff & students.

20th June. Biodiversity, Dry valley taxa. Huanta area. EB, ML + UNMSM + UNAH staff & students.

21st June. Biodiversity, Dry valley taxa. Huanta area. EB, ML + UNMSM + UNAH staff & students.

22nd June. Biodiversity, Dry valley taxa. Huanta area. EB, ML + UNMSM + UNAH staff & students.

23rd June. Biodiversity, Dry valley taxa. Huanta area. EB, ML + UNMSM + UNAH staff & students.

Huanta area: Luricocha, Marcas, upper Cangari, La Vega, etc.

Seminars were made on several occasions on several days both in the field and in the late afternoons in the laboratory. An evening field seminar was also given one day.

24th June. Fly Lima. EB. (ML & vehicle 1 returns to Cusco).

25th June. EB flight to UK.

Group 2 : Glaciers. HL, DR, DA, JF & JPO.

Objective: to improve our understanding of deglaciation in the Peruvian Andes by collecting a detailed current dataset of glacier extent from two sites one of which is the Salkantay glacier. (See the separate detailed document outlining the objectives).

11th June. Drive Mollepata. HL, DR, DA, JF y JPO.

12th June. Salkantay cordillera visit. HL, DR, DA, JF y JPO.

13th June. Salkantay cordillera visit. HL, DR, DA, JF y JPO.

14th June. Drive Chincheros. HL, DR, DA, JF y JPO.

15th June. Arrive Huanta. HL, DR, DA, JF y JPO.

16th June. UNAH staff & student meetings. Meeting INAGEM (virtual). Presentations. Media interviews. Field equipment maintenance & calibration. JF, HL, DR, DA y JPO.

17th June. Drive Huancayo. HL, DR, DA, JF y JPO plus UNAH staff & students.

18th June. Huaytaypallana cordillera visit1. HL, DR, DA, JF y JPO plus UNAH staff & students.

19th June. Huaytaypallana cordillera visit2. HL, DR, DA, JF y JPO plus UNAH staff & students.

20th June. Drive Huanta. HL, DR, JF y JPO plus UNAH staff & students. DA to Lima.

Objective: to improve our understanding of deglaciation in the Peruvian Andes by collecting a detailed current dataset of glacier extent from two sites one of which is the Huaytaypallana glacier. (See the separate detailed document outlining the objectives).

21st June. **Water workshop.** HL, JF.

Objective: to provide training to UNAH staff & students in extracting data from Excel databases and using statistical techniques to analyse the data.

22nd June. **Soils analysis workshop I** in lab. HL, DR, JF + UNAH staff & students.

23rd June. **Soils analysis workshop II** in lab. HL, DR, JF + UNAH staff & students.

Objective: to process and analyse the soil samples (40+) collected from the Huanta area and in doing so to train UNAH staff & students in relevant techniques.

24th June. Flights to Lima. HL, DR.

25th June. Flights to UK.

Group 3: JF + UNAH staff & students. Water, Sediments & Soils site visits.

Objective: to collect water quality related data and samples from across the water study site network plus sediment samples where appropriate and soil samples to complement those already collected. To train UNAH staff and students in field techniques accordingly.

24th June. Water and sediment sample sites (RC01). JF

25th June. Water and sediment sample sites (Q1.1). JF.

26th June Water sample sites (Q1.2N.U1). JF.

27th June Water and sediment sample sites (Q3.1 & RC02). JF.

28th June **Soils analysis workshop** III in lab. JF + UNAH staff & students.

Objective: see above.

29th June Water sample & soil sites (Q3.2 & Q3.3M). JF.

30th June Water sample & soil sites (Q1.3N & Q1.3S.L). JF.

1st July Water and sediment sample sites (Q2.1U & Q2.2L1). JF.

2nd July Water sample & soil sites (Q2.3L). JF.

3rd July Water sample sites (MAN02+). JF.

4th July **Workshop (Discord & Water data analysis).** Lab. preparation of water samples. Equipment maintenance & storage. Stock check. JF.

Workshop objectives: to inform UNAH staff of the opportunities offered by the Discord platform, including a practical demonstration. To undertake a practical workshop in which UNAH staff undertake a basic analysis of water quality data from the Huanta area (in groups) to begin to determine the significance of the data and how the UNAH might wish to make use of it in future.

5th July Fly Lima. SGS lab. water samples drop off. JF y JPO.