

BUTTERFLIES AND BEES IN THE INDIAN HIMALAYAS

UK STUDENT EXPENDITION PROGRAMME (16-19)

WHO ARE EARTHWATCH?

Earthwatch engages people worldwide in scientific field research and education to promote the understanding and action necessary for a sustainable environment.

WHERE?

The project takes place in the Kullu Valley of the Indian Himalayas, an area that is famous for its apple orchards and farms as well as its temples and beauty. Kullu, the highest mountain, is 4,000 feet tall and the region has a population of just over 18,000. Winter temperatures range from 4 to 20°C and summer temperatures range from 25 to 37°C with a monsoon season in July and August.

WHAT'S THE PROBLEM?

Climate change is having noticeable effects in this region of the Himalayas. The growing range for apples has moved 35km north because of warming temperatures and the growing ranges of other plants have also shifted allowing invasive non-native species to spread. The wildlife is under threat because of the use of pesticides in agriculture which is causing a decline in bee population. Bees are important pollinators in the region and farmers have to 'hire' bees to pollinate their crops. Apple production has declined by up to 50% since 1989 mainly due to the lack of pollination.

HOW WILL I HELP?

You will help by working with a team of research scientists, assisting them with their data collection. The research that the scientists are conducting will be used to advise national authorities on introducing and implementing new policies to manage and reduce the effects of climate change in the Indian Himalayas.





WHAT WORK WOULD I ACTUALLY BE DOING?

You will help the scientists with their data collection. This could involve assessing pollinator diversity by net capture or scan sampling; tracking phenology and pollination by monitoring the budding, fruiting and flowering of apple trees; assessing plant diversity by identifying, counting and collecting plant species; and soil sampling, by collecting soil samples from different field sites and conducting laboratory analysis.

ALL WORK NO PLAY?

Nope! In the mornings you will do your fieldwork but in the evenings you will have free time and have visits to local places of interest such as Naggar castle, Karis Monastery, the Kullu market or local temples. On one day you will visit Manali, a small village 20km away.

WHAT WILL I GET OUT OF IT?

You will get hands-on experience of working with a research scientist. Your understanding and awareness of climate change and its effects will deepen as well as gaining a greater understanding of the area. It is valuable work experience and references will be available upon request. For those applying to university it can give you something different to write about in your personal statement or to talk about in interviews.

WILL I SURVIVE?!

All teams will be accompanied by experienced facilitators throughout the trip and guides when in the field. A thorough safety briefing will be given before you go into the field. The work is of a physical nature and sometimes walking up to the site can be quite a trek and the terrain can be very slippery so you will need to be reasonably fit. However, as long as you follow instructions you will always be safe. There will be staff trained in first aid in the field with you at all times.



GOT ANY QUESTIONS?

COST: £2250 (approx.) + FLIGHTS

DATES: 17 – 30 August 2015

FIND OUT MORE AT: <http://eu.earthwatch.org/>

OR E-MAIL THE STUDENT EXPEDITIONS TEAM

AT: ukstudentexped@earthwatch.org.uk

OR CALL: 01865 318 857

MEET THE STAFF



DR. S.S. SAMANT

Dr. Samant is the head scientist for biodiversity conservation and management at the G.B. Pant Institute of Himalayan Environment and Development. He has a PhD in botany and specialized conservation management and has conducted research in the Indian Himalayas for over 29 years.



PRADEEP MEHTA

He is the research and program manager at Earthwatch India. He has over 12 years of experience in natural resource management and sustainable livelihoods.



DR. AMAN SHARMA

Dr. Sharma has a PhD in botany and over 6 years of research experience in biodiversity conservation and management and environmental impact analysis in the Himalayas. He specializes in assessment of plant diversity and resource utilisation and the endemic and rare plants in the region.

