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Stockholm 9 September 2011

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To Whom it may concern

First International Summer School for Students and Young Scientists:

"Natural environment of Arctic and Alpine areas: relief, soils, permafrost, glaciers and biota as indicators of climatic changes"

04-19 July 2011, Tomsk-Aktru

Assessment by Prof T.V. Callaghan

Assessment

This summer school was a great innovation and success from many perspectives:

- Foreign students and young researchers were welcomed to a remote and unique environment that would be almost impossible to access without help and support from Russian colleagues.
- Foreign and Russian young researchers met to discuss science and to learn about the natural environment and this will have legacy for future collaborations.
- All of the participants were exposed to leading international experts in various fields and had unusual quality time with them for the duration of the Summer School
- The locations were stunning and varied - southern taiga, steppes and alpine regions. Also, the environmental history of the Altai area, particularly the great flood some 25,000 years ago, was unique and fascinating, offering text-book clear phenomena in the landscape.
- The venues were excellent, from the initial lectures at the National Research Tomsk State University to the Aktru Field Station but also including the stop-over locations and the various excursions.
- The programme was interesting and was presented by experts from Russia and beyond.
- The schedule and the logistics were appropriate: travel and over-night stops were comfortable, food was very good and the mix between travel and the stay at the final destination worked well.

- The programme in terms of content was extremely strong on geomorphology
- The students were from several countries but most were from Curtin University, Australia. Their levels of behaviour, interest and involvement were excellent and each was an exemplary ambassador for his/her country.
- Language barriers were minimal as several Russian scientists acted as very efficient interpreters
- There was important spin-off, particularly in that my field visit to Aktru has helped me to understand the excellent contributions that Tomsk State University and Aktru can make to the international network of research stations INTERACT. Aktru is already, therefore, beginning to receive greater international visibility.
- Finally, I must emphasise that the whole Summer School was conducted by the Russian organizers and participants in an extremely friendly and supportive manner. There were two unforeseen personal problems that arose on the Summer School and these were handled with great support and compassion.
- Finally, all the ingredients were present to generate important legacy, that is, bringing together good teachers with interested and able young researchers in a unique and fascinating environment within a good infrastructure with good logistics and a friendly environment.

Recommendations

Hopefully, this Summer School will be the start of many. As the first, it has been excellent but there are a few ways in which small refinements could be made for subsequent Summer Schools. The following points are NOT criticisms but are intended to be constructive suggestions for future refinements.

Scope: the scope of the Summer School was wide including arctic and alpine environments and geo- and biosciences. However, the balance of the programme and teachers tended towards the geosciences. I would have liked to have seen more ecological presentations and excursions on the journey and at Aktru.

Scientific level: the teachers were international experts in their fields whereas the students were from mixed levels – undergraduates to post docs. Furthermore, many had little background in the natural sciences. This resulted in some miss-match between the levels of presentations (often aimed at experts) and the comprehension of the students. Fortunately, this could be re-dressed at Aktru where terms and concepts were explained. However, in the future, teachers should be aware of the levels of understanding and scientific backgrounds of the students and pitch their talks accordingly.

Programme: I would suggest that the initial period in Tomsk be dedicated to general talks that set the scene for the journey so that participants know what they will experience

and can learn more en route. The detailed disciplinary talks by the experts could then be given at Aktru. On the journey, it would be good to have more information about ecology, anthropology, history and land use. A short guide to the journey and Aktru would be helpful.

Overall Assessment

This Summer School was an excellent opportunity and experience and was highly successful. Although some small refinements could be made, I sincerely hope that this innovation and unique opportunity will be offered to the Russian and international natural science communities in the future. The organizers should be thanked and congratulated.

Please do not hesitate to contact me should you require further information.



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