

Project Update: July 2021

The first step: Dong Van Karst Plateau Geopark, Ha Giang Province

Step 1. The preparation

During the field work at Dong Van Karst Plateau Geopark, we had meetings with Boards of Management of Bat Dai Son Nature Reserve and the leader of Bat Dai Son

Commune for creating and planning (discussion about:

- Date and time – when will the meeting take place?
- Place – where will the meeting take place?
- Participants – who needs to attend the meeting for it to be successful? who are forest-dependent people? What are their attitudes toward wildlife and forest?
- Results: what to achieve through the training programmes?

Step 2. The training courses

Pai Chu Phin Hamlet was chosen for the training course due to the type of habitat in its surrounding and the local people here still rely heavily on forests for their livelihood. Furthermore, of the whole population, Hmong and Dao ethnic groups are near 100%.

A brief description:

- Trainers/conservationists presented about biodiversity and its importance; factors contributing to biodiversity loss; IUCN Red List of Threatened Species; introduction about current endemic, rare, threatened, and endangered species in Hagiang Province; conservation ways and models, pollen and spore banks; increase participants' belief that they could effect change; habitats of ferns and fern allies; how to grow them, etc.
- Using questionnaire and semi-structured interviews to examine the aims of a training programme: I designed a list of 20 questions for each participant and they had to answer these questions after the course completed, after due to knowledge and awareness.
- For the IUCN Red List of Threatened Species *Cyrtomium hemionitis* (EN): Showing the habitat photos, how to recognise it in the field, and what is the best way to protect this species, etc.

A short field trip was conducted at Bai Chu Phin for the course participants so that they learned how to mark the locations, habitats of rare species, avoid factors that can prevent fertilisation and teaching how to collect spores without damaging the whole plant and tried to grow by those spores.

- Boards of Management of Bat Dai Son Nature Reserve and the leader of Bat Dai Son Commune translated some academic words for those who not understanding well the national language (TIẾNG VIỆT) and asked the participants about raising the questions (if have) and their positive attitude and awareness towards environmental conservation.
- We all believed that dealing both with theoretical and practical questions about plant conservation, i.e., researchers will provide the theoretical knowledge and background of plant conservation, local people and national

parks and nature reserves dealing with concrete actions, such as habitat restoration, create well protected areas, forest zone, etc. will cover the practical aspects of plant conservation and by spores we hope will plant some more of the threatened *Cyrtomium hemionitis* in neighborhood areas of Quan Ba District, Ha Giang Province.



Left: A long road to the Pai Chu Phin Hamlet where the training course will take place. Right: Pai Chu Phin meeting house.



Left: Participants represented the Pai Chu Phin village. Right: Director of Bat Dai Son Nature Reserve introduction about the program.



Left: Growing *Cyrtomium hemionitis* by spores. Right: Field works for collecting specimens.



Left: *Cyrtomium hemionitis* (EN), this time collection. Right: A potential new species.