

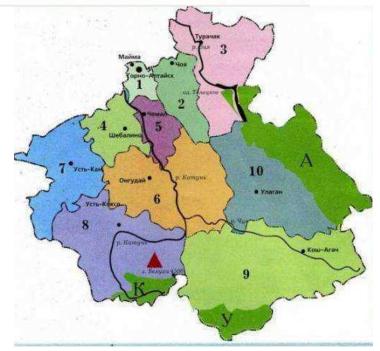
# SPECIFIC FEATURES OF NATURE MANAGEMENT IN THE HIGH MOUNTAINOUS ARID TERRITORIES IN THE SOUTH OF WESTERN SIBERIA

Altai July 11-16, 2019



Location of the Altai Republic and Kosh-Agach region (No.9)

Mountain system of Altai unites four countries and is an important drainage and climate forming territory of Central Asia.



**School objective:** Understanding the basics and the specificity of nature management in high mountainous territories



#### The school participants will have the opportunity:

- To learn about specific features of nature management under high mountainous arid conditions using the example of Kosh-Agach region in the Altai Republic;
- To become familiar with methods of identifying indicators of natural processes that determine the specificity of nature management in mountainous territories;
- To estimate the ecological state of natural complexes in the surveyed territory;
- To develop recommendations for improving the ecological state of natural complexes;
- To propose measures and forms of adaptation of local economy to changing environmental conditions.



**DAY 1** (July 11, Thursday)



- 8-00 17-00 Transfer from your hotel to Beltir village (470 km).
- 13-00 13-30 Lunch.
- 13-30 14-15 Lecture "Problems of nature management in the mountain territory of Siberia."
- Homestay with local families in Beltir village.
- 17-00 –18-00 Dinner.
- 18-00 19-00 Banya (Russian sauna).
- 19-00 21-00 Free time (sightseeing of Beltir village, excursion to the wellspring).

# Chuya Highway







(July 12, Friday)

8-00 - 9-00 Breakfast.

- 9-00 10-30 Lecture "Manifestation of endogenous processes: their harbingers and consequences." Drive along the Taltura River Valley to the landslide site. Studying the impact of the powerful earthquake of 2003.
  - 10-30 14-00 Lecture "Conditions for farmland distribution in the surveyed territory."
  - Drive to the summer farm in the Dzhelo River Valley (from Beltir to Dzhelo 45 km).

14-00 – 15-00 Lunch.

15-00 – 18-00 Lecture "Specific features of livestock breeding in the valleys of Taltura and Dzhelo Rivers." Walking tour in the surroundings of the farm (high-mountain pastures).

18-00 – 19-00 Dinner.

19-00 – 21-00 Free time and informal communication with local pastoralists.



(July 13, Saturday)

- 8-00 9-00 Breakfast.
- 9-00 18-00 Lecture "Alpine and subalpine meadows. Natural objects of the valley. The specificities of the soil temperature regime." Walking tour to the terminal (end) moraine in the Dzhelo River Valley and back. Lunch (packed lunch boxes).
- 18-00 19-00 Dinner.
- 19-00 21-00 Free time and informal communication with local pastoralists.

Pastures and grazing lands









# Fauna and flora













Anemone





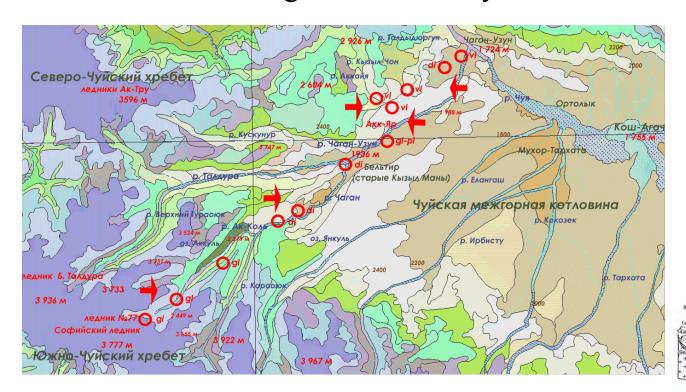
Rhodiola



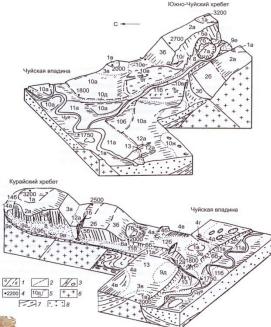
# Educational and research activities of GASU students



# Location of educational tourism objects along the Chagan River Valley

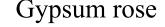


Block diagrams showing the specificity of the relief





"Area-based" coloring of the chip of stone



## (July 14, Sunday)

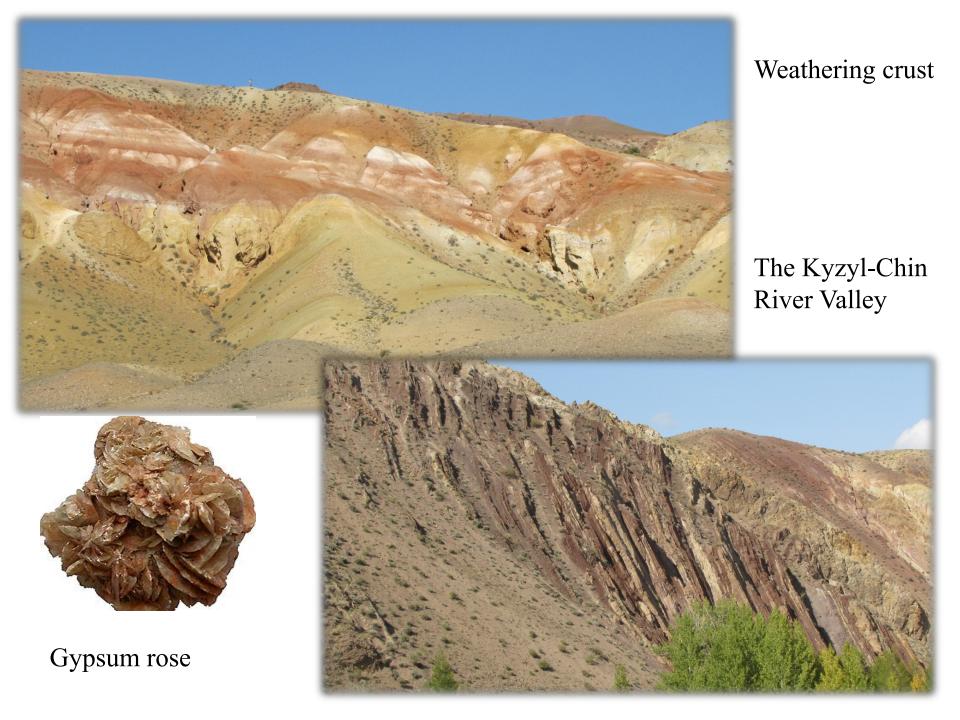
- 8-00 9-00 Breakfast.
- 9-00 13-00 Practical exercise "Exogenous processes and their influence on the conditions of livestock fodder collection."
- 13-00 14-00 Drive back to Beltir village. Lecture "Water supply system for farmlands."
- 14-00-15-00 Lunch in Beltir village.
- 15-00 18-00 Drive to the tourist camp Mars. Lecture "Arid conditions of high mountainous territory."
- 18-00 19-00 Dinner at the tourist camp Mars.
- 19-00 20-00 Discussion.
- 20-00-22-00 Banya (Russian sauna). Free time.





## (July 15, Monday)

- 8-00 9-00 Breakfast.
- 9-00 13-00 Walking tour to the weathering crust or Mars, as local people call it. Lecture "Peculiarities of geological structure and formation of modern landscapes."
- 13-00-14-00 Lunch at the tourist camp.
- 14-00 17-00 Walking tour to the brown coal surface mines and archaeological site Chaltulak.
- 17-00 18-00 Free time.
- 18-00 19-00 Dinner.
- 19-00 21-00 Presentation of the School participants' recommendations for improving the ecological state of natural complexes and the proposals concerning the measures and forms that would help local economy to adapt to changing environmental conditions. Discussion.





Weathering crust

The Kurai Ridge (in the background)

Kurgans (burial mounds) on the right bank of the Ak-Kaya River



**DAY 6** (July16, Tuesday)

- 8-00 9-00 Breakfast.
- 9-00 17-00 Trip back to your hotel or to Gorno-Altaisk. Lunch on the way



The School participants should be ready for very simple field (camping) conditions, changeable weather, absence of running water and laundry facilities, and, in some places, electricity. At the same time, they will have a perfect opportunity to rest from big noisy cities, to live a life of an ordinary nomadic herder, to sit by the fire, and to enjoy the starry sky.

