

筑波大学

山岳科学センター・自然保護寄附講座共催

山と人とのつながりを考える国際シンポジウム

Nature people linkage in the mountains

Abstract

日時： 2020.2/9（日） 10:00-17:30

場所： つくば国際会議場 ホール 200

問い合わせ先 msc-cpnc@ml.cc.tsukuba.ac.jp



<プログラム>

10:00 開場 進行：上野健一（筑波大）

10:30 開催趣旨 *Prof. K. Ishida (MSC)*

10:45-11:15 *Prof. Fausto Sarmient (U. Georgia, USA)*

Applied montology: Critical biogeography of Andean treelines and the humboldtian paradigm （アンデスの森林限界の競争的標高ゾーニングにおける生物地理学的応答）

11:15-11:45 *Dr. Syunichi Teranishi (Prof. Emeritus of Hitotsubashi University, Japan)*

A comparative study on conservation policies for the mountainous areas in Japan and Austria （山岳地域の保全政策に関する日本・オーストリア比較研究）

13:00-13:30 *Prof. Undarmaa Jamsran (Mongolian University of Life Sciences, Mongol)*

Ecosystem conservation in Hustai mountainous area （フスタイ山脈の生態系保全）

13:30-14:00 *Prof. Kaoru Sugihara (U. Tsukuba, Japan)*

Mt. Tsukuba, the Geo Heritage of Mt. Tsukuba Area Geopark （筑波山－筑波山地域ジオパークの大地の遺産）

14:00-14:30 *Prof. Mohammad Na'iem (U. Gadjam Mada, Indonesia)*

A strategy in increasing productivity of low land and mountain forest in Java, Indonesia （インドネシア、ジャワ島の低地及び山岳地域森林の生産性向上の戦略）

14:30-15:00 *Dr. Shigemitsu Shibasaki (National Museum of Japanese History, Japan)*

Conservation of culture related with outstanding nature （傑出した自然の中の文化を守るために）

15:30-16:00 *Dr. Chakraborty Abhik (Wakayama University, Japan)*

Mountains as vulnerable systems: A landscape-based appraisal of pervasive change in physical and human dimensions （脆弱なシステムとしての世界の山岳地域の分析）

16:00-16:30 *Mr. Takashi, Kawashima (Japan Workers' Alpine Federation)*

Climb Now, Work Later: Creating New Values in Lifestyles through Yatsugatake Experiences （八ヶ岳生活、－中山間地の価値を考える－）

16:30-17:15 総合討論

17:15-17:30 閉会の挨拶 *Prof. M. Yoshida (CPNC)*

Name with title:

Prof. Fausto O. Sarmient, Ph.D.

Position and institution:

Professor of Mountain Science, Director of the Neotropical Montology Collaboratory. Department of Geography, The University of Georgia, Athens, Ga, USA.



Title of presentation:

Applied Montology: Critical Biogeography of Andean Treelines and the Humboldtian Paradigm.

アンデスの森林限界の競争的標高ゾーニングにおける生物地理学的応答

Abstract:

I introduce the notion of critical biogeography to seek acceptance of the transdisciplinary science of mountain studies as applied to understanding the problematized Andean treeline, with the lenses of the contested Humboldtian paradigm of mountain altitudinal zonation. By using examples from the tropical Andes, I posit the need to do integrative conservation by using Montology tenants for knowledge sharing, WEK and TEK, to fully grasp the meaningful mountainscapes and their protection as socioecological production landscapes. I affirm the need of further research incorporating the changing narratives of conservation and suggest a way forward for the regenerative development of the tropandean landscapes.

Name with title:

Dr. Shunichi TERANISHI

Position and institution:

Professor Emeritus of Hitotsubashi University

Title of presentation:

A Comparative Study on Conservation Policies for the Mountainous Areas in Japan and Austria

山岳地域の保全政策に関する日本・オーストリア比較研究

Abstract:

Since fiscal year 2009, I have continued a joint research project at Hitotsubashi University on “Natural Resource-based Economies” (NREs) sponsored by the Norinchukin Bank.

In the concept of NREs, especially the mountainous areas have various functions and roles, not only in economical aspect but also ecological aspect. Recently, how to conserve the mountainous areas became one of the very important issues in the world.

In my presentation, I would like to explain the concept of NREs, and will give a comparative study on conservation policies for the mountainous areas in Japan and Austria.

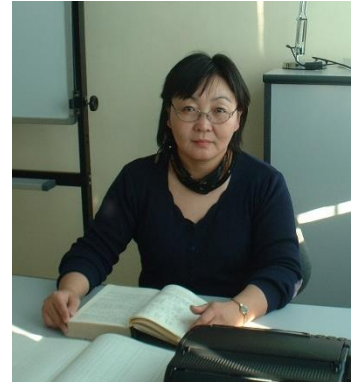
Name with title:

Undarmaa Jamsran¹, Takashi Kamijo², Kenji Tamura²

Position and institution:

1 Center for Ecosystem Studies, Mongolian University of Life Sciences

2 Graduate School of Environment, University of Tsukuba



Title of presentation:

ECOSYSTEM CONSERVATION IN HUSTAI MOUNTAINOUS AREA

フスタイ山脈の生態系保全

Abstract:

Mongolia has a unique landscape, and approximately 80% of the territory is occupied by mountains and highlands with elevations above 1000 m a.s.l., especially in the northern, central, and western parts. Environments of the mountainous area in Mongolia are different not only within the mountain range depending on a wide range of the change in reliefs, altitude, aspect and degree of slopes, and also quite different from the north to south due to the latitudinal change. Such features of the mountainous area are influenced on vegetation and fauna directly and indirectly, and allowed existing of the rich biodiversity. The mountain ecosystems provide provisioning services, including fresh water, forage, genetic, biochemical and ornamental resources, etc, and regulating, supporting and cultural services. Thus, more than 80% of the Mongolian population lives in the mountainous area using their ecosystem services, and approximately 75% of the livestock are existed in this region. One of the features of Mongolian mountainous region is sustaining very specific ecosystem, which is named as a mountain forest steppe. This ecosystem is the relatively well conserved part of the Euroasian steppe, characterized by a unique combination of forests in the northern slopes, and mountain steppes in southern and other slopes. However, mountain forest steppe ecosystems are greatly influenced by human activities from the late 20th century, and large numbers of native plants and wildlife are considered at risk or endangered. Therefore was established Hustai national park in 1992 to conserve this unique ecosystem and reintroduce the world wide endangered wild horse. The park is served one of the good models for mountain ecosystem conservation and sustainable ecosystem management. Nowadays, the park is home range of the biggest population of the wild horses in the world, and habitat for many other species of endangered wildlife. The feature of the vegetation, fauna and other components of the mountain ecosystems in Mongolia, and their conservation efforts will be discussed using the of Hustai national park case.

Name with title:

Kaoru SUGIHARA, Ph. D.

Position and institution:

Professor, University of Tsukuba

Graduate School of Life and Environmental Sciences, Division of Earth Evolution Sciences

Certificate Programme on Nature Conservation



Title of presentation:

Mt. Tsukuba, the Geo Heritage of Mt. Tsukuba Area Geopark

筑波山 – 筑波山地域ジオパークの大地の遺産

Abstract:

The Geopark is a natural park able to offer a view of the beautiful natural landscape formed from the previous topography and geology. A visit to the Geopark not only provides the beautiful land formations and priceless geology known as the Geo Heritage but also teaches about the life and biodiversity inhabiting the land as well as the history, culture and industry of the people who lived there. This also allows everyone to experience the importance of the protection and conservation of this Geo Heritage at the same time as they learn the intimate relationship of the life and land.

In this presentation, I will introduce Mt. Tsukuba, the representative Geo Heritage of Mt. Tsukuba Area Geopark that is one of Japanese National Geoparks.

Name with title:

Prof. Dr. Mohammad Na'iem



Position and institution:

Prof. in Tree Improvement, Faculty of Forestry, University of Gadjah Mada, Yogyakarta, Indonesia

Title of presentation:

A strategy in increasing productivity of low land and mountain forest in Java, Indonesia

インドネシア、ジャワ島の低地及び山岳地域森林の生産性向上の戦略

Abstract:

Teak (*Tectona grandis* L.f) is one of the most important tropical timber species in Indonesia because it is not only due to its role for supplying raw materials for wood industry but also its silvicultural characteristics has been well understood.

Since 2015, population of Indonesia was 252 millions people where Java island is the most crowded island. Due to that, it faced very big social problem in wood supply and food security. A field research of selected teak clones and rice varieties combination (IFFS program) was set using Split-Split Plot design, in order to solve the problems.

The results indicated that Among upland rice varieties tested, Situ Patenggang, Inpago 4, and Inpari 6 Jete varieties grow better in both for Randublatung and Ngawi locations and produce higher yield (around 10 ton/ha dry rice). This result is higher even compared to wet rice production. By this IFFS program, both teak productivity and rice security can also be achieved.

Name with title:

Shigemitsu SHIBASAKI, PhD (Agriculture)

柴崎茂光 博士（農学）

Position and institution:

Associate Professor

The National Museum of Japanese History

国立歴史民俗博物館 准教授

Title of presentation:

Conservation of culture related with outstanding nature

傑出した自然の中の文化を守るために

Abstract:

This study focuses on how cultures related with protected areas has been treated (gazed at) in Japan. In particular the history of mountain worship, local livelihood such as hunting and collecting mushrooms, and forestry heritages including timber railway system will be discussed. Introduction of the protected-area-system contributed to protection of nature, but on the other hand, it led to deterioration or disappearance of related cultures by imposing tight regulations. This may be caused by simplification of “protected” values by public authorities and mass media as well as a lack of system for protecting culture in protected areas.

Our political recommendations for keeping various values of protected areas would be suggested

Name with title:

Abhik CHKARABORTY, PhD

Position and institution:

Lecturer, Faculty of Tourism, Wakayama University, 930 Sakaedani Wakayama
640-8510, Japan



Title of presentation:

*Mountains as Vulnerable Systems: A Landscape-based Appraisal of Pervasive Change in Physical
and Human Dimensions*

脆弱なシステムとしての世界の山岳地域の分布

Abstract:

Globally mountains feature some of the most diverse aspects of the terrestrial environment owing to their rich geodiversity, high endemism (of species), ecosystem services and cultural sustenance. Mountains drive ecological heterogeneity and influence climate and drainage from regional to planetary scales. However, in the contemporary period of pervasive and accelerating anthropogenic change in all major global ecosystems, mountains are also highly vulnerable. Many mountain landscapes have witnessed rapid population growth, intensification of development, and tourism pressure—making them theaters of intense change. This situation calls for understanding mountains as complex evolving systems and the conservation of their integrity: mountains currently feature prominently on the IUCN's Connectivity Conservation initiative. This paper first provides a global overview of mountain conditions and subsequently introduces insights from the author's ongoing research in the North Japan Alps area.

Name with title:

Takashi KAWASHIMA 川嶋 高志

Position and institution:

Japan Workers Alpine Federation Secretary General 日本勤労者山岳連盟 事務局長



Title of presentation:

***Yatsugatake Life: CLIMB NOW WORK LATER* 八ヶ岳生活 ～中山間地の価値を考える～**

Abstract:

“Climb now, work later” is a catchword of a mountaineering gear company BMM, which well represents a mountaineer’s spirit; I believe that this is not a mere catchy phrase of a commercial company, but we need this phrase to be our slogan in recovering a culturally-rich lifestyle full of enjoyments as a human being since pursuit of such a lifestyle may lead to solving modern society’s various complicated problems. In order to perform such an idea, I will propose creating new values in the lifestyles for Japanese people who rather do not make importance on development of cultural aspects in their everyday life.

As a part of this proposal, I will introduce a life in Yatsugatake mountain foot located in the height of around 1200 meters above sea level. In this area, we can appreciate clear air, long sunny days and pure water so that locals are devoted to dairy and agriculture, which promote safe and nutritious local dietary; and, this environment enhances unique restaurant culture using vegetables of highland and recycled old farmhouses. Based on such a healthy conditions, we can also enjoy not only mountaineering such as climbing, ice-climbing, skiing and sky running, but also other cultural activities such as pottery, woodworking, creation of various artworks and music; by experiencing these, people get rejuvenated and enlightened by invisible effects of cultural activities.

However, we must pay attention to several problems embedded in this culturally rich lifestyle in the highland of mountain foot; for example, we witness exploitive development plans such as constructions of solar plants without proper consideration to the environment and unarranged installment of electric poles. These are ongoing issues since policy makers usually prioritize their voters’ convenience ignoring the preservation of nature.

This tendency is very dangerous because we are confronted with worldwide serious climate changes; the natural conditions have been changing in the last several decades and thus people in the mountainous areas notice false effects of the climate changes as they are tormented by vermin damages to cultivated fields, trees and forests by deer and mass generation of hornet and other harmful insects. In addition to co-habiting with wild animals and insects, we need to consider and invent the third way to solve these problems. Likewise, from the point of view as a mountaineer, I have to point out that recent climate change accelerates the difficulties in maintaining trails in Japanese mountains since original Japanese climate as it is has been still problematic to keep trails in good conditions because of high-temperature and humidity. On top of such basic natural conditions, Japanese people’s tendency to make light of cultural aspects of life generates access problems for mountaineers.

Therefore, in my presentation, as a part of efforts to solve entangled issues surrounding modern Japanese society, I will also touch my own activity as a member of Mountain Day Establishment Committee to develop and refine awareness towards the multiple values of living in/with the nature.