



Press Release

July 17, 2024

The Winner of the 2024 (31st) International Cosmos Prize is:

Dr. William James Sutherland CBE, FRS

Director of Research, Department of Zoology, The University of Cambridge

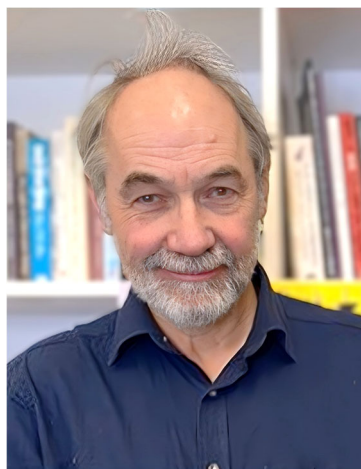
An advocate of the concept of “evidence-based conservation”, this year’s winner has transformed the face of biodiversity conservation with the development of a website that compiles information from an extensive range of research papers from around the world and other outstanding contributions.

On July 17, 2024, The Commemorative Foundation for the International Garden and Greenery Exposition, Osaka, Japan, 1990 (Expo '90 Foundation) (Chairperson: Mr. MITARAI Fujio) selected Dr. William James Sutherland (68), Director of Research, Department of Zoology, The University of Cambridge, as the winner of the 2024 (31st) International Cosmos Prize. The decision to award the prize to Dr. William James Sutherland was reached after considering the recommendations submitted by the International Cosmos Prize Committee (Chairperson: Dr. YAMAGIWA Juichi) and the Screening Committee of Experts (Chairperson: Dr. IKEYA Kazunobu).

Dr. Sutherland, a pioneer in the field of “conservation science”, has dedicated himself to a wide array of research and activities ranging from fundamental ecological studies to recommendations on environmental policy, and has championed the concept of “evidence-based conservation”, which has revolutionized the field of ecology. Dr. Sutherland has also been instrumental in the development of the open access website, Conservation Evidence, which carefully assesses and collects information from a vast number of research papers worldwide and is available for everyone to use as evidence.

A “horizon scanning” initiative spearheaded by Dr. Sutherland identifies early indicators of significant threats to humanity and is used in policy development and biodiversity conservation strategies.

The award ceremony is scheduled to take place later this year on Tuesday, November 12 in Osaka, Japan.



The photo is at the following URL:

<https://www.expo-cosmos.or.jp/main/cosmos/2024photo.html>

1. Focus and scope of research to be awarded

The prize will be awarded for research and work that has achieved excellence and is recognized as contributing to a significant understanding of the relationships among living organisms, the interdependence of life and the global environment, and the common nature integrating these interrelationships. It should be characterized by a global perspective which tries to illuminate the relationships between diverse phenomena, in keeping with the concepts and principle of “The Harmonious Coexistence between Nature and Humankind.”

The following points will be the standards by which the achievements will be evaluated.

- (1) The body of achievements should show an inclusive and integrated methodology and approach, in contrast to analytic and reductive methodologies.
- (2) The achievements must be based on a global perspective. If the focus is on a particular phenomenon or specific area, it must have universal significance and applicability.
- (3) The achievements should offer a long-term vision which leads to further developments, rather than solutions to limited problems.

2. Selection Process

(1) Selection Process

The International Cosmos Prize Screening Committee of Experts met four times between April and June of 2024 in order to evaluate candidates for the prize. After careful deliberations, the winner was selected at the International Cosmos Prize Committee on June 24.

(2) 2024 International Cosmos Prize Nominees

122 nominations (from 24 countries)

<Breakdown by Year>

Candidates since 2022: 37 Candidates since 2023: 39 Candidates since 2024: 46

<Breakdown by Country>

Japan (30), the United States (23), the United Kingdom (18), Germany (10), Thailand (8), Canada (5), Slovakia (5), Brazil (4), the Philippines (3), Italy (2), Australia (2), Austria (2), France (2), Belgium (2),

Peru (1), Israel (1), India (1), the Netherlands (2), Kenya (1), Sierra Leone (1), Sweden (1), Spain (1), Taiwan (1), Denmark (1)

※Dual citizenship nominees are counted twice

Others:

(1) Award ceremony

The award ceremony will be held at Sumitomolife Izumi Hall in Chuo-ku, Osaka, on Tuesday, November 12, 2024.

(2) Others

The prizewinner shall be awarded a certificate of merit, a medallion, and a monetary prize of 40 million Yen.

Attached documents:

- Curriculum Vitae
- Reason for Awarding the Prize
- Comments (on receiving the Prize) by the prizewinner
- Prizewinners 1993-2023
- The International Cosmos Prize Committee, the Screening Committee of Experts

For further information, please contact:

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Curriculum Vitae

Name: William James Sutherland

Date of Birth: 27 April 1956

Nationality: The United Kingdom

Current Position:

Director of Research, Department of Zoology, The University of Cambridge
Honorary Fellow, St Catharine's College, The University of Cambridge

Professional Preparation:

1974-1977 BSc: University of East Anglia
1977-1980 Ph. D: Liverpool Polytechnic

Appointments:

1980-1982 Natural Environment Research Council postdoctoral fellowship based at Zoology Department, The University of Oxford
1982-1983 Lecturer, The University of Liverpool
1983-1985 Lecturer, School of Environmental Sciences, The University of East Anglia
1985-2006 Lecturer, Reader then Professor, School of Biological Sciences, The University of East Anglia
2006-2023 Miriam Rothschild Chair in Conservation Biology, Department of Zoology, The University of Cambridge
2023 Chair, Cambridge Conservation Initiative
2023-Present Director of Research, Department of Zoology, The University of Cambridge

International awards and honours:

2008-2024 Professorial Fellow, St Catharine's College, The University of Cambridge
2013 The Distinguished Service Award, The Society for Conservation Biology
2015 'UEA Bill Sutherland Scholarship in Conservation Biology' established by the University of East Anglia in recognition of my numerous contributions to the university
2021 Commander of the Order of the British Empire for "services to evidence-based conservation"
2023 Awarded ECI Prize in Terrestrial Ecology
2023 Fellow of Royal Society
2024 Honorary Fellow, St. Catharine's College, The University of Cambridge
2024 CIEEM Medal, Chartered Institute of Ecology and Environmental Management

Books:

1. Sutherland, W.J. (2022) *Transforming Conservation: a practical guide to evidence and decision making*. Open Books
2. Sutherland, W.J., Brotherton, P.N.M., Davies, Z.G., Ockendon, N. Pettorelli, N. & Vickery J.A. (eds) (2020). *Conservation Research, Policy and Practice* Cambridge University Press
3. Sutherland, W.J. (2006) (ed). *Ecological census techniques: a handbook*. Cambridge University Press. Second edition.
4. Sutherland, W.J. (1996) *From Individual Behaviour to Population Ecology*. Oxford University Press.

Reasons for the Award

Dr. William James Sutherland, a pioneer in the interdisciplinary field of “conservation science” which is concerned with the conservation of biodiversity, is a renowned scientist with extensive accomplishments in research and other activities that range from fundamental ecological studies to recommendations on environmental policy. He has established, implemented and promoted the concept of “evidence-based conservation”, a term he coined to illustrate the innovative integration of knowledge supporting efforts to halt the ongoing global decline in biodiversity.

A naturalist with a passion for birds, Dr. Sutherland has been engaged in research on behavior and ecology from the very beginning of his career. His series of studies led him to formulate a rational theory to predict the decision-making of individuals within the context of the behavior of other individuals to subsequently predict the dynamics of populations, integrating the two previously distinct disciplines of behavioral ecology and population ecology.

In 2000, Dr. Sutherland created the aforementioned concept of “evidence-based conservation”, which has revolutionised the field of conservation ecology. The open website, Conservation Evidence, was launched in 2004, the result of a comprehensive review on a vast number of 1.6 million research papers written in 17 languages to identify and compile information on conservation success stories and failures (over 8,600) across all types of habitats (e.g., forests and grasslands) and taxa (e.g., birds and amphibians). This body of evidence is readily accessible to anyone interested in biodiversity conservation. Drawing inspiration from compilations of evidence on medical efficacy used by physicians, this website has enabled a shift away from earlier biodiversity conservation practices that relied solely on personal experience, knowledge and hearsay. With more than 15,000 regular users, including conservation organisations and funding agencies, Conservation Evidence is revolutionising decision-making processes on conservation around the world. Dr. Sutherland has achieved remarkable success in developing human resources through these activities, mentoring about 100 doctoral students and post-doctoral researchers and collaborating on research with around 3,000 people from over 60 countries.

Dr. Sutherland also conducts an annual “horizon scanning” in collaboration with other researchers, practitioners, and policymakers to reduce risk and aid in the formulation of policies by swiftly identifying early indicators of potential changes that may pose a significant threat to human society in the future. This assessment is used as a guide for biodiversity conservation strategies, sustainable food production, and financing.

Today, we are faced with an urgent challenge as biodiversity loss accelerates at an alarming rate due to impacts from human activity. Dr. Sutherland’s elegantly effective approach to conservation is a groundbreaking achievement that helps preserve numerous species, ecosystems, and ultimately the natural environment of the entire Earth, and is deserving of the International Cosmos Prize for the holistic and integrated strategies it embraces.

Comment by the prizewinner

I am delighted to receive the International Cosmos Prize for 2024. My lifelong aim matches that of the prize: the harmonious coexistence of humanity and the natural world.

As a child I started birdwatching then expanded to other areas of natural history. I was exceedingly lucky to be a student when the two areas of behavioural ecology and modern population ecology were breaking. I was hugely influenced by Charlie Krebs' textbook *Ecology*. I was camping in Turkey all summer vacation counting migrating birds with five other students so tore my copy in half so others could read it; it explained ideas simply and opened my eyes to how the natural world functioned. A few months later Robert May's book *Theoretical Ecology* came out and completely inspired me. This text had chapter after chapter of exciting ideas. In my spare time I did natural history and helped conservation. The love of information, especially from books, exploring ideas, natural history and working to conserve nature have been four consistent themes underpinning my life.

I saw serious gaps in how policy making operated. One was that we tended to look backwards rather than consider how to respond to likely future plans. We thus set up an annual process of horizon scanning to consider possibly future issues. The first one, published in 2007, included artificial meat, artificial light, microplastics and using mobile phones to collect environmental data. All of these we have shown were little known then. I was also struck that we did not ask policy makers or practitioners what questions they would most like answered. I then invented a process for asking such questions from communities. Finally, I was struck that the literature was difficult for practitioners to obtain and was massively underused. I then heard about evidence-based medicine and decided we needed the equivalent of evidence-based conservation. I have spent much of the last twenty years work on this with a team in Cambridge and an international team of 1,100 named collaborators. The website www.conservationevidence.com is key to this process. This reviews the evidence for the effectiveness of more than three thousand conservation actions.

I am keen to change the decision making process. I have advised government in a wide range of ways. With a wide range of collaborators we have created a toolkit of processes for making evidence-based decisions and embedding evidence into practice. This work is summarised in the open-access book *Transforming Conservation: a Practical Guide to Evidence and Decision Making* (2022).

Over the last few years I decided to start a YouTube Channel, Bill Sutherland's Conservation Concepts. <https://www.youtube.com/channel/UCTfEVkIZsJEUqFXj9Lokf3g>, as I appreciated that many, especially the next generation, learn largely from watching videos rather than reading. As I also place these on Twitter they have to be under 140 seconds long. I enjoy the challenge of taking complicated issues, such as extinction debt or shifting baselines, and trying to explain the idea with examples and consideration of the consequences. When filming I think of what I would have wanted to learn as a schoolboy who was interested in nature but knew little science; I also try to add something new for my friends who are experienced conservationists.

With my wish to keep exploring ideas I am working on artificial intelligence with a team including academics from the computing lab. This is remarkably fast moving and exciting. We have also carried out a horizon scanning exercise with a team to identify opportunities and challenges related to AI.

I am so honoured to receive the COSMOS Prize. I pledge to continue, to the best of my ability, the pursuit of our common goal.

PRIZEWINNERS 1993-2023

1993 Sir Ghillean Prance

Director, Royal Botanic Gardens, Kew, U.K.

An authority on tropical plants centering on those of the Amazon basin of South America, Dr. Prance advocates his Flora-on-the-Earth Project to establish a comprehensive record of the earth's vegetation in the form of a database.

1994 Dr. Jacques François Barrau (deceased)

Professor, Paris National Museum of Natural History, France

Dr. Barrau has conducted ethnobiological studies on nature and the life styles of people in the Pacific Ocean. His results have afforded unique insights into the relationship between human beings and food from a global perspective.

1995 Dr. KIRA Tatum (deceased)

Professor Emeritus, Osaka City University, Japan

On the basis of his quantitative research on plants' organic production, Dr. Kira has established "Production Ecology". He has also played a leading role in conducting field studies of the ecosystem in tropical rainforests in Southeast Asia.

1996 Dr. George Beals Schaller

Director of Science, the Wildlife Conservation Society, U.S.A.

Dr. Schaller has been conducting field research on the ecology and behavior of various wild animals in all parts of the world, and has written many books including "The Mountain Gorilla" and "The Last Panda."

1997 Dr. Richard Dawkins

Professor, Oxford University, U.K.

Dr. Dawkins totally reversed the conventional view of biology with a bold hypothesis he put forward in his 1976 book. He continues to present new views.

1998 Dr. Jared Mason Diamond

Professor, University of California at Los Angeles, U.S.A.

Dr. Diamond has made remarkable achievements in physiology. He has been organizing field expeditions to New Guinea and has employed the results of this fieldwork to restructure his unique studies of the evolution of human societies.

1999 Dr. Wu Zheng-Yi (deceased)

Professor and Director Emeritus, Kunming Institute of Botany, Chinese Academy of Sciences, China

Dr. Wu is a representative botanist of China. He edited "Flora of China" which describes all known plant species in China.

2000 Sir David Attenborough

Producer, Naturalist, Zoologist, U.K.

Sir David is a pioneer of wildlife documentary films. With his excellent films of various creatures or plants, he has told many people throughout the world about the nature of life for more than fifty years since joined the BBC.

2001 Prof. Anne Whiston Spirn

Professor, Massachusetts Institute of Technology, U.S.A.

Based on the principle, "Cities must not conflict with nature, it is possible to build cities that exist as part of nature", she proposes measures to develop cities while maintaining harmony with nature.

2002 The Charles Darwin Research Station

The Charles Darwin Research Station is a biological research center established in 1964 by the international NGO/NPO Charles Darwin Foundation in the Galapagos Islands of Ecuador.

The Station has made remarkable achievement in research and protection of the numerous indigenous species of the Island, including elephant tortoises and marine iguanas.

2003 Dr. Peter Hamilton Raven

Director, Missouri Botanical Garden, U.S.A.

Dr. Raven is a representative botanist of the U.S., and international pioneer in advocating for the conservation of global biodiversity. He has given his approach toward issues concerning life on earth from a global viewpoint and his significant contributions toward promoting the co-existence of nature and human beings in both academic and practical terms.

2004 Prof. Julia Carabias Lillo

Professor, National Autonomous University of Mexico, Mexico

Professor Carabias has always considered global environmental issues from the perspective of developing countries. She has achieved excellent results in resolving difficult challenges under different conditions, through the implementation of programs based on thorough fieldwork with a multidisciplinary approach.

2005 Dr. Daniel Pauly

Professor and Director, Fisheries Centre, University of British Columbia, Canada

Pursuing his comprehensive studies of the relationship between fishing and marine ecosystem, Dr. Pauly has made outstanding achievements in the field of research into marine ecosystems and resources, including the development of scientific models to enable both marine ecosystem conservation and sustainable resource use of fisheries.

2006 Dr. Raman Sukumar

Professor, Centre for Ecological Sciences, Indian Institute of Science, India

A strong advocate of preserving biodiversity and the environment, Dr. Sukumar has done pioneering research on the ecological relationship between elephants and humans, and on resolving the conflict between them, making him an internationally recognized expert on the coexistence of wildlife and humans.

2007 Dr. Georgina Mary Mace (deceased)

Professor of Conservation Science and Director of NERC Centre for Population Biology, Imperial College, London, U.K.

Dr. Mace played a significant role in the creation of scientific criteria for the identification and classification of threatened species. She has also contributed to the conservation of species and biodiversity.

2008 Dr. Phan Nguyen Hong

Professor Emeritus, Hanoi National University of Education, Vietnam

Dr. Phan has been involved in comprehensive scientific research in Vietnam, where war and overdevelopment have had a devastating impact on its mangrove ecosystem. He has made a major contribution to the restoration of the mangrove forests.

2009 Dr. Gretchen Cara Daily

Professor, Stanford University, U.S.A.

Dr. Daily has provided us with a comprehensive picture of the value of biodiversity-based ecosystem services, upon which human society is dependent. She has made a vital contribution to international initiatives such as the U.N. Millennium Ecosystem Assessment and played a leading role in launching the “Natural Capital Project,” which is a result of the fusion of ecology and economics, in order to promote the sustainable utilization of natural capital.

2010 Dr. Estella Bergere Leopold (deceased)

Professor Emeritus, University of Washington, U.S.A.

Dr. Leopold has made tremendous achievements by continuing and further developing the Land Ethic, which was initiated by her father, Aldo Leopold (1887-1948), as well as by disseminating the idea to many places in the United States. She is still pursuing activities that weave the Land Ethic into the fabric of people's lives and society.

2011 Scientific Steering Committee of the Census of Marine Life

The Scientific Steering Committee of the Census of Marine Life provided overall governance to the Census, a grand global project. The objective of the Census was to survey and analyze changes from past to present in marine life biodiversity, distribution and abundance, and to compile the resultant data into a comprehensive database called the "Ocean Biogeographic Information System" to be used in forecasting the future of marine life.

2012 Dr. Edward Osborne Wilson (deceased)

Pellegrino University Research Professor, Emeritus, Harvard University, U.S.A.

Dr. Wilson has accomplished outstanding achievements in his research into the natural history of ants and ethology. He has focused his scientific perspective and experience on helping to illuminate the human circumstance, including human origins, human nature and human interactions. Dr. Wilson has also been active in practicing biodiversity conservation and environmental education.

2013 Dr. Robert Treat Paine (deceased)

Professor emeritus of Zoology, University of Washington, U.S.A.

Dr. Paine has demonstrated, through explicit field experiments, that predators play essential roles in the stable maintenance of biotic communities. He proposed the concept of the keystone species, which plays a crucial role in maintaining the structure of an ecological community. He has had great impact not only on ecology, but also on conservation biology, as well as on the general public's understanding of biodiversity.

2014 Dr. Philippe Descola

Professor, the Collège de France, France

Dr. Descola, a distinguished anthropologist, has conducted rigorous fieldwork among the indigenous Achuar people living in Amazonia, South America, highlighting their view of nature and activities in interacting with the natural environment. On the basis of his findings, Dr. Descola has developed a philosophical concept and proposed the "anthropology of nature," which considers nature and culture in an integrated manner.

2015 Dr. Johan Rockström

Executive Director, Stockholm Resilience Center, Sweden

Dr. Rockström cautioned that we have reached a saturation point in terms of human pressures on the Earth. System, and that if we let these anthropogenic pressures continue increasing to cross the thresholds or tipping points defined as "planetary boundaries," there is a risk of irreversible and abrupt environmental change.

2016 Dr. IWATSUKI Kunio

Professor Emeritus, Tokyo University, Japan

Dr. IWATSUKI has continually pursued the goal of biodiversity, and developed plant systematics in an inclusive and multifaceted manner, by adopting not only traditional methodologies but also molecular phylogenetic techniques. He advocated the importance of an integrated understanding of biological classification including phylogenetic systematics. Dr. IWATSUKI has also clarified that this approach is the essential principle which supports the abundance of life forms and harmonious coexistence between people and nature.

2017 Dr. Jane Goodall

Founder, Jane Goodall Institute, UK

Dr. Goodall has been studying wild chimpanzees since 1960 so as to paint a fuller picture of chimpanzees. She has conducted afforestation programs to provide habitats for chimpanzees, and an environmental educational project. She began Roots & Shoots, environmental learning program by young people. More than 150,000 groups are actively working in 99 countries under this program.

2018 Dr. Augustin Berque

Director of studies at the EHESS (École des Hautes Études en Sciences Sociales), France

Profoundly inspired by Fūdo, authored by the Japanese philosopher WATSUJI Tetsurō, and by further elaborating, deepening and evolving WATSUJI's concept of Fūdo, Dr. Berque organized his own thinking about landscapes and scenery, so as to develop a new academic discipline called "mésologie." Moreover, based on the theoretical results of mésologie, he proposed a theory about the subjecthood of nature, which holds that nature has subjectivity, while critically overcoming anthropocentrism in the nature-culture dualism and environmental ethics.

2019 Prof. Stuart L. Pimm

Doris Duke Professor of Conservation Ecology Nicholas School of the Environment and Earth Science, Duke University, U.S.A.

Prof. Pimm has established the theoretical basis for understanding the complexities of food webs, the speed of species extinction and other such factors critical to the conservation of ecological habitats worldwide. He has established the non-profit foundation to take this work on conservation science into practical application in the field by supporting local groups in their habitat conservation activities and directing biodiversity conservation policy formulation based on scientific foundations. Prof. Pimm's contributions through this marriage of theory and practice in the field of habitat and species preservation are most impressive.

2021 Dr. Peter Bellwood

Emeritus Professor, Australian National University, Australia

He proposes the "early farming dispersal hypothesis" based on interdisciplinary research in archaeology, linguistics, and human physiology clarifying the agricultural origins and the process of early farmers' migration and dispersal. At the same time, through this research, he has investigated the history of "The Harmonious Coexistence between Nature and Humankind", from a holistic perspective.

2022 Dr. Felicia Keesing

Professor of Biology, Bard College, U.S.A

Dr. Keesing clarified the relationship between the biodiversity of natural ecosystems and the risk that zoonotic pathogens may be transmitted to human society through her practical research, and provided scientific suggestions for thinking about what The Harmonious Coexistence between Nature and Humankind should be like in the post-COVID-19 era.

2023 Dr. Kristin Shrader-Frechette

O'Neill Family Professor Emerita, University of Notre Dame, U.S.A

Dr. Shrader-Frechette has advanced ground-breaking work in quantitative risk assessment methodologies, all while framing her findings through the concept of environmental justice. In researching the world as it is, her research has helped to guide the creation of communities where all are offered the opportunity to live in healthy environments.

2024 International Cosmos Prize Committee

2024. 4

Position	Name	Specialty	Official Title
Chairperson	Dr. YAMAGIWA Juichi	Anthropology, Primatology	Director General, Research Institute for Humanity and Nature
Vice Chairperson	Dr. NAKANISHI Tomoko	Radioplant physiology	Professor Emeritus, The University of Tokyo
Member	Dr. AKIMICHI Tomoya	Ecological anthropology, Ethno-biology	Director General, Fujisan World Heritage Center
Member	Dr. ASASHIMA Makoto	Developmental biology	Research Professor, Teikyo University
Member	Dr. IKEUCHI Satoru	Astronomy	Professor Emeritus, The Graduate University for Advanced Studies
Member	Dr. IKEYA Kazunobu	Environmental anthropology	Professor Emeritus, National Museum of Ethnology
Member	Dr. SHIRAYAMA Yoshihisa	Marine biology	Professor Emeritus, Kyoto University
Member	Dr. NISHIZAWA Naoko	Plant molecular biology	President, Ishikawa Prefectural University
Member	Dr. HAYASHI Yoshihiro	Animal science and resource	Professor Emeritus, The University of Tokyo
Member	Dr. YOKOHARI Makoto	Landscape and environmental science	Project Professor, Organization for Interdisciplinary Research Projects, The University of Tokyo
Member	Dr. WASHITANI Izumi	Ecology, Conservation ecology	Professor Emeritus, The University of Tokyo
Member	Dr. WADA Eitaro	Biogeochemistry	Professor Emeritus, Kyoto University

Position	Name	Specialty	Official Title
Advisor	Dr. IWATSUKI Kunio	Systematic botany	Professor Emeritus, The University of Tokyo
Advisor	Dr. OIKE Kazuo	Geoscience	Professor Emeritus, Kyoto University
Advisor	Dr. KISHIMOTO Tadamitsu	Immunology	Project Professor, Immunology Frontier Research Center, Osaka University
Advisor	Dr. NAKAMURA Keiko	Biohistory	Honorary Director, Biohistory Research Hall

2024 International Cosmos Prize Screening Committee of Experts

2024. 4

Position	Name	Specialty	Official Title
Chairperson	Dr. IKEYA Kazunobu	Environmental anthropology	Professor Emeritus, National Museum of Ethnology
Vice Chairperson	Dr. SAKURA Osamu	Science and Technology studies	Professor, Interfaculty Initiative in Information Studies, The University of Tokyo
Member	Dr. OKI Taikan	Global Hydrological System	Professor, School of Engineering, The University of Tokyo
Member	Dr. Monte Cassim	Environmental science	President, Akita International University
Member	Dr. KAMEYAMA Yasuko	International relations	Graduate School of Frontier Sciences, The University of Tokyo
Member	Dr. FUKAMACHI Katsue	Landscape and Environmental science	Associate Professor, Graduate School of Global Environmental Studies (GSGES), Kyoto University
Member	Dr. Stefan Hotes	Landscape Ecology	Professor, Faculty of Science and Engineering, Chuo University
Member	Dr. MIYASHITA Tadashi	Science of Biological Diversity	Professor, Graduate School of Agricultural and Life Sciences, The University of Tokyo
Member	Dr. YUMOTO Takakazu	Plant Ecology	Professor Emeritus, Kyoto University
Member	Dr. YOKOYAMA Jun	Systematic botany	Professor, Faculty of Science, Yamagata University