



---

## Forum on Biodiversity and Global Forest Restoration Summary Report and Plan of Action

February 19, 2018

---

Forum Hosted by:

Society for Ecological Restoration and IUCN Commission on  
Ecosystem Management Thematic Group on Ecosystem Restoration

27 August 2017, Iguassu Falls, Brazil



Institute for  
Regional  
Conservation



## Introduction

Ecological restoration is now a primary tool for biodiversity conservation, sustainable development, and improving human wellbeing, with over three trillion dollars invested annually across the globe. Forest ecosystems are a central focus for many countries working to contribute to ambitious restoration targets. With increasing investment in forest restoration, entities charged with implementation have significant needs for additional guidance for planning and prioritizing restoration activities; standards against which restoration achievements can be assessed; and policies and governance structures that encourage consideration of biodiversity in forest restoration from the local to the international level. Without such guidance, restoration actions may focus on a limited set of ecosystem services, which could lead to decreased ecosystem complexity, resilience, and intrinsic value. To address these needs, the Society for Ecological Restoration (SER) and the IUCN Commission on Ecosystem Management's Ecosystem Restoration Thematic Group convened a group of experts to develop a collaborative action plan. The *Forum on Biodiversity and Global Forest Restoration* was held on 27 August 2017, the day before the opening of the 7<sup>th</sup> World Conference on Ecological Restoration hosted by SER, the Brazilian Society for Restoration Ecology (SOBRE) and the Iberoamerican and Caribbean Society for Ecological Restoration (SIACRE).

This report summarizes key conclusions of the Forum based on facilitated discussions on issues and challenges, solutions, and priority actions. In addition, pertinent information from three symposia and two Knowledge Café roundtable discussions (held during the SER Conference) are incorporated to augment and broaden understanding of points made during the Forum.

## Summary of Event

The Forum brought together 52 experts in ecological restoration from 15 countries with representatives from Africa, Asia, Australia, Europe, North America, and South America. Participants worked in small groups to develop ideas related to three broad themes: **Assessing and Prioritizing Restoration Actions; Promotion of International Standards for Ecological Restoration;** and **Policy and Governance Needs for Inclusion of Biodiversity in Restoration.**

Forum participants identified 18 Priority Actions designed to increase the delivery of biodiversity outcomes of global forest restoration, while still delivering essential ecosystem services. This Summary Record serves as a framework for all who would

like to contribute to addressing the priority actions, which will require the coordinated contributions from specialists in a variety of fields over the next two to three years.

In the following, we summarize the needs assessment and solutions for each of the three themes. We conclude with consideration of the key action items that were suggested across the three themes.



## **Assessing and Prioritizing Issues**

In order to meet global targets for forest restoration, including those set through the Bonn Challenge, nations are rapidly moving forward with Forest Landscape Restoration (FLR) initiatives and assessments of opportunities. Participants generally agreed that there is a lack of clear guidance within FLR initiatives about factors that must be considered in assessing and prioritizing areas for restoration. Specifically, biodiversity has not received adequate attention in restoration planning. There is a clear need to expand the decision space for FLR to include a wider array of ecosystem components and potential ecosystem services in the evaluation of restoration needs. This will allow stakeholders, communities, and governments, who ultimately are responsible for making decisions about land management priorities, to better identify synergies and tradeoffs between biodiversity and other ecosystem conservation goals, and the delivery of ecosystem goods and services.

Participants also broadly agreed about the need for greater attention to spatial and temporal scales in prioritizing areas for FLR. This includes consideration of how

ecosystem components are affected at these different scales. Scale is also an important consideration for identifying and communicating with stakeholder groups, as people with different backgrounds and interests will be operating from diverse perspectives at different scales of reference.

How we communicate the value of biodiversity in FLR is an issue because of the diversity of audiences and their understanding of the concept. We need to simplify terminology in lay communications and to consider alternate ways to communicate our message to be meaningful to different audiences.

National policies and associated incentives combined with the need to measure progress in meeting forest restoration targets favor non-biodiversity-oriented outcomes. For instance, initiatives may focus on the number of hectares of trees planted, not on the broader scope of benefits that can be achieved if non-timber biodiversity is included as a component of the restoration. Further, market-based incentives, such as efficiency in planting and harvesting, reinforce mono-specific plantations. We need to be conscious of these risks from the planning process to implementation of activities.

## Solutions

Recognizing that stakeholder groups may not have adequate information about synergies and tradeoffs between biodiversity conservation and delivery of ecosystem goods and services that may result from landscape-scale restoration plans, guidance should be provided on a minimum set of variables to be evaluated to understand the ecosystem and social impacts of restoration. Although several reviews suggest the types of variables that may be included (Table 1), no guidance currently exists for the minimum that must be used for an adequate safety net for biodiversity considerations. Any approach, including the possibility of a short guidance document, must allow discretion to accommodate variation in environmental and landscape conditions, as well as availability of data, while still clearly communicating minimum thresholds for restoration assessment.

Table 1: Examples of potential categories and assessment variables generated during a very brief discussion at the Forum.

<b>Assessment Category</b>	<b>Variable</b>
Feasibility	Extent, type, degree, location and drivers of land degradation at multiple spatial scales
	Cost-effectiveness of restoration strategies
	Incentives for people to participate in restoration
Biodiversity	Distribution, population size, and genetics of rare or endemic species
	Reduction of threats from invasive species

	Connectivity among habitats and populations
	Keystone species
	Habitat availability and populations size for native species assemblages
	Red listed ecosystems
	Cultural and economic values of biodiversity
Ecosystem services	Soil erosion
	Carbon sequestration
	Reduction of natural hazards (e.g., flooding, fire)
	Water quality and quantity
Social considerations	Employment and income
	Cultural values
	Willingness of people to displace their homes or economic activities
	Institutional considerations

Guidance documents must specifically address temporal and spatial scales related to each category and variable.

To develop best practice guidance, there is a need to break down silos among fields and specifically to collaborate with experts in landscape ecology (e.g., the International Association for Landscape Ecology), conservation biology (e.g., Society for Conservation Biology) and large-landscape conservation (e.g., IUCN WPAC). These fields have been addressing prioritization for land management since the late 1980s and have advanced technologies that can improve biodiversity outcomes in planning for FLR.

Any guidance document for prioritizing and assessing areas for restoration should include:

- **Capacity building for rural stakeholders** so they understand what restoration means and its benefits.
- **Assessment of landscape-scale baseline conditions that can inform monitoring.**
- **Development of biodiversity safeguards such as those established for REDD+ programs.**

## International Standards

### Issues

In December 2016, SER launched the first [International Standards for the Practice of Ecological Restoration](#). The Forum participants agreed that the SER International Standards were a positive start and that they could be used to improve biodiversity outputs of FLR and other global forest restoration projects. They also generally agreed that work was needed to operationalize the Standards to achieve real-world results. In

general, the view was that standards for ecological restoration must be clear, simple, and consistent so that restoration would be desirable, practical, and useful to a variety of audiences ranging from rural stakeholders and restoration practitioners to policy makers. In this context, there is need to consider if the International Standards alone (which are generic to be applicable to any restoration action) are sufficient or if it would be more effective if there were also Standards for specific biomes or ecosystem types (e.g., forests, wetlands, and arid lands). Another option would be to consider promotion of 'National' standards (e.g., Australian Standards) to promote greater buy in and use. Clearly defining who the International Standards are for, and how to distribute them to the right people so that they can be disseminated as widely as possible, was seen as key.

Considerable effort by SER has focused on defining ecological restoration and distinguishing it from other activities that are currently characterized as restoration. However, even in the narrow sense ecological restoration covers a very wide range of activities, making universal Standards seemingly difficult to apply. As in other Forum themes, scale was identified as a challenge in terms of operationalizing the International Standards, especially when moving from projects to landscapes. Furthermore, a disparity exists between the "reference ecosystem" described in the International Standards and its current use in planning of some restoration projects. Greater effort is required in promoting use of a reference model and applying it in development of restoration projects.

Some discussion of naming conventions arose, with some confusion with calling the SER document Standards, when they also include overarching Principles that provide a framework for the Standards themselves. In addition, it was pointed out that the current International Standards do not adequately address the abuse of the term "restoration" or provide examples of projects that produce collateral damage to biodiversity under the guise of restoration.

Case studies can showcase the value of standards in achieving successful restoration efforts through effective on-the-ground actions. As cases will vary for different biomes and timescales, they should be compiled, analyzed and shared among practitioners and policy makers. Lessons learned should be used to improve them over time.

There is need to build capacity to understand methodologies to restore landscape ecosystem structure and function; as part of this process we need to make restoration expertise available to those who need assistance. In the same light, how to communicate the Standards to different audiences (e.g., policy-makers, field-based practitioners, rural stakeholders) must be considered. The overall impression was that the language of the International Standards was too technical for most people and different tools would be needed to widen the audience.

There was a discussion about how the International Standards intersect with other landscape management efforts (e.g., conservation or use/extraction activities) in adjacent landscapes. Would there be value in showing how the Standards could be better integrated with other ecosystem-based activities, including other “restorative” or conservation activities?

Overall, a variety of tools would need to be developed from the application of globally agreed International Standards to increase relevancy among diverse target audiences, and thus improve restoration outcomes for both biodiversity and ecosystem services.



## Solutions

Building on SER’s International Standards, the Forum discussions identified several issues/challenges to be addressed in the process of achieving global acceptance of the International Standards and other tools that might flow from them. Following the discussion on issues and challenges the following solutions were forwarded, which fall into four broad categories:

- 1) Based on feedback from practitioners and policy makers, the following actions would improve the International Standards while making them more acceptable to a broad international audience:
  - Clearly articulate what is/is not restoration (e.g., substantial progress on restoring X number of functional biological attributes).
  - Clearly articulate benefits (social, economic, and environmental) and returns on investment in restoration.

- Ensure that the Standards are flexible across spatial and temporal scales; note tension between clarity and flexibility.
  - Use the Standards as a tool to establish the decision-space for restoration projects.
  - Provide creative and friendly examples of important points.
- 2) To mainstream the standards at the global level the following is required:
- Reach out to international entities and weave into project pipelines (turn projects into restoration).
  - Integrate standards with other entities (e.g., Restoration Opportunities Assessment Methodology [ROAM]).
  - Assist in the development of standards for FLR; especially for ROAM and define what FLR activities count toward restoration.
- 3) Regarding communication and capacity building in the application and interpretation of the standards, the following solutions should be addressed:
- Assess the relevance and applicability of the Standards among different audiences, including the possibility to develop a streamlined version of the standards that would be more accessible to a general audience; consider country, biome and intent of the restoration. Translate the Standards into other languages. Consider the value of providing different, audience specific editions of the Standards (e.g., by biome, by professional perspective). Use national histories of regulatory development (e.g., wetlands, clean water) to guide the production of precise thematic or geographic standards.
  - Use international vehicles such as the IUCN and Convention on Biological Diversity (CBD) to communicate importance of the standards to aid agencies, private donors and development banks; the development of post-Aichi CBD targets presents an opportunity.
  - Organize workshops to teach how to apply and interpret the standards and to evaluate progress in a restoration project; utilize universities and other educational institutions as scalability engines for restoration.
  - Demonstrate that the Standards are a recipe for success; identify triggers, protocols, and rewards for successful restoration; bridge gap between science and government.
- 4) Establish protocols to:
- Monitor progress and timeliness in reaching milestones and/or benchmarks that show progress in restoration projects or programs.
  - Assess the role and value of incentives to achieve successful restoration.



# Policy and Governance

## Issues

Forests are generally viewed as a supplier of commodities and, therefore, restoration is often tied to desired outcomes related to income, carbon sequestration, and increased tree production efficiencies. Blended restoration that provides space for economic returns, but also considers the values of inclusion of non-timber biodiversity in the planning stages, is not widely considered. One current difficulty with using a blended approach is selection of biodiversity components to be considered in the planning process, when the functions of the individual biodiversity elements affected are largely unknown. While the concept of “ecosystem services” is widely accepted, the ecological processes that are needed to deliver those services are not always understood. This underscores the importance of communication about the breadth and importance of the services provided by bio-diverse restorations.

There is often a disjunction between communities and local practitioners and the policy makers and the governance structures that have authority over restoration. Procedures for rural land managers to successfully convey their perspectives to policy makers are required. This is particularly urgent where governments lack capacity to enforce regulations, and where there is competition or lack of cooperation and coordination between different ministries that are relevant to landscape and natural resource management.

Mechanisms to engage stakeholders throughout the planning and execution phases of a restoration project should be provided to achieve equitable outcomes and long-term local “ownership” of the forest restoration process. Approaches for reconciliation of conflicting interests of diverse stakeholders need to be developed to ensure restoration activities are successfully implemented. Another dimension of this issue is variability of cultural practices across diverse stakeholder communities.

Obstacles to engagement with local people must be identified (e.g., existing laws and regulations). For many nations, land tenure or resource rights need to be clarified to ensure that rural resource managers have the authority/accountability to restore ecosystems. For most restoration to succeed, land tenure at the community level must be secured to ensure ownership of the project. Further, sub-surface rights often belong to nations, which can nullify surface rights (e.g., for mining). Finding ways to make available lessons from community managed forests may be useful in providing guidance to policy makers.

At the global level, understanding of the value of biodiversity in forest restoration needs improvement. New approaches for quantifying the added value of biodiversity in

forest restoration and communicating them to government policy-makers are essential. Further, our approach and understanding of restoration processes are often constrained by disciplinary silo-based perspectives. How can we create incentives to promote needed cross-sectoral dialogues?

Another issue is that government agencies are mandated to regulate sustainability in harvests – most often based on calculated levels of “sustained yield” or product values. Understanding the role that harvested species may play in the ecosystem, however, may be of greater importance in determining long-term sustainability of harvests. Because state and local government cycles may not be in sync with national cycles, development and adoption of relevant policies and regulations may be more difficult. Different interests at national, provincial/state/department, and local levels exacerbate this problem.

Political and economic forces may trump all other perspectives in resource management and restoration initiatives. Often an economic perspective is the central argument in promoting development. Policy makers and funding agencies need to be informed about the inherent social values, as well as economic benefits, that are potentially available from inclusion of non-timber biodiversity elements in forest restoration.

We must provide information to relevant government departments (e.g., Ministries for Environment) to convey to other departments (e.g., Ministries of Finance or Development), who could be helpful in setting national priorities. Our arguments must be framed in language understood by the appropriate audiences.

The importance of restoring the resilience of target ecosystems must be transmitted clearly. Monoculture systems are much more vulnerable to collapse. Policy makers and local practitioners must be made aware of the danger of finding fast and cheap solutions through monocultures, especially when exotic species are used that may drastically endanger native ecosystems.

At the national level regulations and incentives rarely favor consideration of biodiversity in restoration. At the same time, several tools (e.g., ROAM, The Economics of Ecosystems and Biodiversity [TEEB]) are relevant and would be helpful in promoting inclusion of biodiversity considerations in restoration.

Forest restoration involves a broad spectrum of disciplines and skills, including, for example, social science, economics, and business, because at the national level societal needs typically have priority (e.g., poverty reduction, ending armed conflicts, and human health).

The economics of “taking no action” as an option in restoration planning – especially when climate change is considered – must be examined and openly discussed in

function of resilience and vulnerabilities for the communities that may be impacted. What is the cost of inaction on loss of biodiversity?



## Solutions

### *Communications and knowledge sharing*

Mechanisms are needed to enhance communication, including identifying priority audiences and sharing stories that reinforce understanding of the values added to restoration by inclusion of non-timber biodiversity in forest restoration, including lessons learned and successes. Communication and active participation of main actors are of importance to co-construct objectives and plans of actions at the landscape level.

Such a communication strategy should be developed to not only enhance participation but also to promote a more comprehensive and nuanced understanding of biodiversity in forest restoration, which:

- Provides a lay-based meaningful description of what biodiversity is and how it benefits people.
- Promotes successes (with an emphasis on meeting water requirements).
- Underscores nature's contributions to human wellbeing.
- Conveys FLR core values and priorities.

The strategy should consider the focal audiences. The highest priorities are decision-makers in departments of environment, finance, and development; the donor community; and international and national policy makers. Communications should be

designed to facilitate connections across the spectrum from local practitioners and communities to global policy makers. In this context, there is need to develop donor-relevant information about:

- Tools and metrics (and values) to evaluate the contributions of native timber and non-timber biodiversity in forest restoration, including examples of projects that have successfully addressed these components.
- Improved administrative procedures for the commercial use of non-timber products.

Foster and support a platform (e.g., SER's Restoration Resource Center at [www.ser-rrc.org](http://www.ser-rrc.org)) to acquire and share knowledge products related to biodiversity in forest restoration. This platform would facilitate sharing multi-disciplinary knowledge amongst the forest restoration community, including forest managers, ecologists, landscape planners, natural resource economists and other relevant disciplines. Simple mechanisms are needed for contributing information with an emphasis on sharing lessons and solutions and not scholarship. The resource should be accessible to anyone interested in forest restoration and FLR and the knowledge resources should range from local to global and reflect different perspectives based on culture, language, and biome.

In developing the platform, information should be integrated to make the case for biodiversity in forest restoration, thus building an understanding of the “role of biodiversity producers” at the national level by linking the promotion of ecosystem services as supporting local income. Such instruments should identify other values delivered by biodiversity that are not usually recognized.

Consider possible incentives, like a “state of restoration” system along the lines of Moody's Rating System<sup>1</sup> in finance and investment which is an “opinion ... of the credit quality of individual obligations or of an issuer's general creditworthiness.” The environmental rating system would assess the relative quality of restoration actions to incorporate non-timber biodiversity in forest restoration.

Additional publications that would promote greater understanding of the value of biodiversity in FLR were mentioned such as:

- A chapter on the role of biodiversity for inclusion in the ROAM.
- Compilation of business-oriented case studies that showcase values and benefits of inclusion of non-timber biodiversity consideration in forest landscape restoration – along the lines of the Harvard Business Review Case Studies<sup>2</sup>.

Risk assessment tools and methodologies relevant to and in support of biodiversity in forest restoration, such as IUCN's Red List of Ecosystems and Red List of Species,

---

<sup>1</sup> See: <https://www.moodys.com/sites/products/ProductAttachments/Moody%27s%20Rating%20System.pdf>

<sup>2</sup> See: <https://hbr.org/store/case-studies>

Resilience Alliance Assessment tools, ROAM, and SER International Standards should also be integrated into tools and publications.

### *Assessments and research*

Assessments are needed to:

- Promote consideration of ecosystem services and biodiversity in FLR.
- Inform and provide assessment tools to decision-makers at the international, national and local levels that gauge risks associated with loss of biodiversity.

Research is needed to:

- Identify, or possibly develop, incentive systems that promote inclusion of biodiversity in forest restoration.
- Document the impacts of perverse incentives on restoration.
- Better understand the relationships between poverty, human wellbeing and the contributions of timber and non-timber biodiversity in economies.
- Develop means and methods to aggregate data on the roles biodiversity play in delivering ecosystem services that can be used to develop underpinning arguments for relevant policies.
- Evaluate the TEEB initiative and possibly consider how the SER/CEM partnership could support/ contribute to the TEEB projects.
- Develop alternative governance options at different scales.

### *Addressing subsidiarity.*

Promote engagement in local, regional and national political processes to guide/move an agenda directed at promoting governance needs related to non-timber biodiversity in forest landscape restoration at different scales. And, invest in enhancing local understanding of the role biodiversity plays in:

- Supporting human wellbeing.
- Empowering local voices in forest landscape restoration to includes consideration of non-timber biodiversity.

## **Priority Actions**

During the Forum, participants discussed priority actions that could address issues related to improving biodiversity outcomes in forest restoration activities.

## Assessing and Prioritizing

- Action 1:** *Conduct a critical review of how existing landscape assessments of priorities for restoration areas have informed the development and implementation of national and subnational restoration plans.*
- Action 2:** *Develop a compendium of tools and integrate scientific guidance on the best-practice approaches for restoration planning, implementation, and assessment/monitoring that considers restoration needs and priorities at the landscape scale. Note: including linkages between objectives used in prioritizing restoration and landscape-level monitoring.*
- Action 3:** *Provide a list of international experts who would be willing to review national plans or success of CBD, Bonn Challenge, and other restoration commitments.*
- Action 4:** *Support the development, promotion, and distribution of educational materials and incentives for landowners to participate in restoration that benefits biodiversity.*

## International Standards

- Action 5:** *Revise the International Standards and include a prefatory synopsis with a one-page brief and 10-page “overview” preceding the main document.*
- Action 6:** *Undertake field testing of the International Standards to validate their effectiveness and use under different conditions and in different biomes and socio-cultural contexts. Note that this action will require funding.*
- Action 7:** *Seek adoption/endorsement of the International Standards at the international and national levels (to act as early adopters).*
- Action 8:** *Promote incentives or rewards for adoption and use of the International Standards.*
- Action 9:** *Assess, and where necessary develop and test the efficacy of project score cards for ecological outcomes from forest restoration projects. This could include the development of a “state of restoration” rating system along the lines of Moody’s Rating System in the finance sector that would report the quality of restoration actions to incorporate biodiversity in forest restoration.*

**Action 10:** *Engage with the Bonn Challenge and relevant international funding mechanisms (e.g., GEF, World Bank, regional development banks, national overseas development agencies) to promote use of International Standards.*

**Action 11:** *Identify, or where necessary develop, and implement a communication strategy to promote consensus building around the benefits of inclusion of biodiversity in forest restoration. **Note:** this action flows to # 6 & # 7 above and should include preparation of regional, biome, and country-based versions of the standards methodology, and be linked to capacity building workshops, training modules, “minute earth” and social media.*

**Action 12:** *Consider development of similar complimentary standards for other, broader ecosystem management activities (e.g., agroforestry).*

## **Policy and Governance**

**Action 13:** *Facilitate national-level inter-ministerial discussions designed to enhance understanding of the importance of biodiversity considerations in forest restoration. These discussions should explore the relationship between the array of services delivered and the biodiversity in the ecosystem and how those services contribute to development in both urban and rural settings.*

**Action 14:** *Foster and support a platform (e.g., SER’s Restoration Resource Center) to acquire and share knowledge products related to biodiversity in forest restoration.*

**Action 15:** *Promote alliances and partnerships among institutions who share the vision to broaden support for policies that encourage consideration of biodiversity in forest restoration.*

**Action 16:** *Promote capacity building in national policies that encourage: (1) Participatory processes in development and execution of forest restoration projects that consider the role of biodiversity, (2) Capacity building and training of restoration-related tools.*

**Action 17:** *Develop a communication strategy designed to build cross-sectoral awareness around the concept of “Biodiversity in Forest Restoration.” This strategy should include (1) producing a series of brochures as a joint public-private venture, (2) documenting business cases for supporting inclusion of biodiversity in restoration projects, (3) ensuring*

*communications are culturally and linguistically sensitive, and (4) addressing key issues, such as land tenure security, upon which project success relies.*

## **Research**

**Action 18:** *Encourage research and scholarship that underpins policy and enhances understanding about the relationship between biodiversity and the delivery of ecosystem services. Specific areas recommended for study are (1) assessment of techniques to model restoration outcomes including impacts on biodiversity and ecosystem services, (2) identification of approaches for incorporating “payments for ecosystem services” in restoration-oriented policy and governance, and (3) development of knowledge management tools and methods to acquire and share knowledge relevant to biodiversity and ecosystem services in forest landscape restoration.*

## **Moving forward**

The 18 Priority Actions provide a rich framework for collaborative work by the organizations represented at the Forum as well as other partner organizations that were unable to participate. To ensure that biodiversity outcomes are improved through restorative management activities, the impacts on biodiversity must be evaluated during planning and implementation. Moreover, objectives for biodiversity outcomes must be clearly defined and subsequently evaluated. As organizations and individuals, we need to ensure clear communication to ensure that efforts are not duplicated and that our message is understood.

**For more information: [SER\\_IUCN-CEM@ser.org](mailto:SER_IUCN-CEM@ser.org)**

## **On behalf of the organizing committee:**

### **[Society for Ecological Restoration](#)**

George Gann, Chair, Science and Policy Committee  
James G. Hallett, Vice Chair  
Bethanie Walder, Executive Director

### **[IUCN Commission on Ecosystem Management](#)**

Stephen Edwards, Advisor to the Chair  
Cara Nelson, Chair, Thematic Group on Ecosystem Restoration  
Liette Vasseur, Vice Chair



## Attendees

Angela Andrade	IUCN Commission on Ecosystem Management
James Aronson	SER / Missouri Botanical Garden
Rafael Avila	Instituto Nacional de Bosques, Guatemala
Brigitte Baptiste	Instituto de Investigación de Recursos Biológicos Alexander von Humboldt
Craig Beatty	IUCN
Rubens de Miranda Benini	The Nature Conservancy, Brazil
Rachel Biderman	World Resources Institute, Brazil
Blaise Bodin	Secretariat of the Convention on Biological Diversity
Consuelo Bonfil	Universidad Nacional Autónoma de México / SIACRE
Magda Bou Dagher Kharrat	Saint Joseph University, Lebanon
MiHee Cho	Korea Forest Service
Youngtae Choi	Korea Forest Service
Jordi Cortina	SER-Europe / University of Alicante
Kingsley Dixon	SER / SER-Australasia / Curtin University
Giselda Durigan	Instituto Florestal do Estado de São Paulo
Cristian Echeverría	University of Concepción / IALE / SIACRE
Steve Edwards	IUCN Commission on Ecosystem Management
George Gann	SER / Institute for Regional Conservation
Manuel Guariguata	Center for International Forestry Research
Yoly Gutierrez	Center for International Forestry Research
James Hallett	SER / Eastern Washington University
Ric Hauer	University of Montana
Karen Holl	University of California, Santa Cruz
Fangyuan Hua	University of Cambridge
Paola Isaacs	Instituto de Investigación de Recursos Biológicos Alexander von Humboldt
Justin Jonson	SER-Australasia / Threshold Environmental

Won-Seok Kang	Korea Forest Service
Agnieszka Latawiec	International Institute for Sustainability
Harvey Locke	Yellowstone to Yukon
James McBreen	IUCN Regional Office for South America
Tein McDonald	SER-Australasia
Paula Meli	Universidade de São Paulo
Jean Paul Metzger	Universidade de São Paulo
Miguel A. Moraes	IUCN Brazil
Ciro Moura	Instituto Estadual do Ambiente, Brazil
Cara Nelson	SER / IUCN Commission on Ecosystem Management
Margaret A. O'Connell	Eastern Washington University
Aurelio Padovezi	World Resources Institute, Brazil
Hernán Saavedra	Corporación Nacional Forestal, Chile
Catalina Santamaria	Secretariat of the Convention on Biological Diversity
Gerardo Segura Warnholtz	The World Bank Group
Kirsty Shaw	Botanic Gardens Conservation International
Nancy Shaw	USDA Forest Service
Bernardo Strassburg	International Institute for Sustainability
Evert Thomas	Bioversity
José Marcelo Torezan	Londrina State University
Alan Unwin	Niagara College
Liette Vasseur	Brock University / IUCN Commission on Ecosystem Management
Joseph Veldman	University of Iowa
Bethanie Walder	SER
Jorge Watanabe	Centro de Conservación, Investigación y Manejo de Áreas Naturales, Peru