





SESYNC Feedbacks

News from the National Socio-Environmental Synthesis Center



ECOSYSTEM SERVICES | Considering Nature's Benefits

Translating How We Benefit from Nature into Conservation Measures

When thinking about ecosystems, it's important to consider the ecosystem services—or benefits—that these natural systems provide to us humans.

From the recreational activities we enjoy, such as hiking or fishing, to the natural resources we consume each day, such as fresh drinking water—these services play a vital function in the quality of our lives.

As a result, the value we place on these services plays a critical role in how we approach conservation. Below are several SESYNC resources that explore:

- The different kinds of services that healthy ecosystems can provide
- The economic methods used to place a tangible, monetary value on these services
- The role that ecosystem services play in solving common socio-environmental problems.

Ecosystem Services Lesson, Part 1: Defining and Valuing Nature

This lesson explores what ecosystem services are and are not; methods used by economists to place value on them; and why the concept of ecosystem services has become popular, including its use by policy makers and natural

resource managers. Learn more.



Ecosystem Services Lesson, Part 2: Linking Ecosystems & Their Processes to What People Value and to Human Actions

This lesson takes the next step in exploring how we can connect what scientists typically measure when studying nature to intermediate measures that economists can work with. These measures, in turn, can then support evidence-based policies and natural resource management decisions. Learn more.



Ecosystem Services Lesson, Part 3: Intrinsic and Relational Values of Nature

This lesson focuses on the concept of the intrinsic value of nature, which is much more difficult to link to policy actions. It also focuses on arguments against traditional economic approaches to valuation. Learn more.



Economic Valuation of Natural Resources and Ecosystem Services Lesson

This lesson explores how environmental benefits and costs are often expressed in monetary terms and how economic valuation methods are used to derive monetary values. It is useful for environmental researchers to understand these methods, the data they use, their limitations, and how monetary values should be interpreted and applied. Learn more.



Valuation of Natural Resources and Ecosystem Services: Economic Methods Explainer

This explainer provides an overview of the valuation of ecosystem services as a way to measure individual and social preferences including:

Why it is difficult to apply dollar values



- Non-market methods, including revealed and stated preference methods, and their limitations
- Examples of non-market valuation research questions
- Why value estimates often do not represent the total value of an ecosystem service.

Learn more.

Exploring Novel Ecosystems Lesson: Field Trip to an Urban Forest Patch

This lesson defines urban forest patches as novel ecosystems that support a unique community, including native and non-native species. Learners will go on a local field trip to explore elements that challenge the resilience of small forest patches. They will be asked to consider the unrealized potential and value of UFPs, including their ecosystem services. Learn more.



Socio-Environmental Services & Management of a Novel Ecosystem Lesson: Urban Forest Patch

This lesson explores the socio-environmental dynamics of urban forest patches by immersing participants in a role playing experience. Learners simulate being ecosystem managers tasked with selecting management strategies that produce the greatest net benefits relative to particular ecosystem services. Learn more.



Integrating Spatial Ecology and Resilience Theory to Understand Ecosystem Service Flows Lesson

Ecosystem services are increasingly being considered in natural resource management, but they requires an understanding of where they are produced and who benefits from them. As a result, socio-environmental researchers have begun to integrate spatial ecology with resilience theory. This lesson is a guide to understanding



the basics of spatial resilience and applying its insights to a city in your region. Learn more.



What Do We Value Related to the Environment and Natural Resources?

This lecture discusses the array of services individuals value related to ecosystems: provisioning (food, fuel, etc.) regulating (climate regulation, water purification, etc.), and cultural (spiritual, educational, etc.). It also covers how people value these services influences how economists measure them. Watch here.

NEW PUBLICATIONS | SESYNC in the Journals

"The Forest Conservation Evaluation Tool: Accessible impact evaluation for Latin America." Published in *SoftwareX* by Allen Blackman. This paper resulted from the Pursuit, Policy Evaluation Tool.

"Why so many Hemiptera invasions?" Published in *Diversity and Distributions* by Andrew M. Liebhold, Rebecca M. Turner, Charles R. Bartlett, Cleo Bertelsmeier, Rachael E. Blake, Eckehard G. Brockerhoff, Charlotte E. Causton, Janis N. Matsunaga, Stuart H. McKamey, Helen F. Nahrung, Christopher L. Owen, Deepa S. Pureswaran, Alain Roques, Scott A. Schneider, Allen F. Sanborn, and Takehiko Yamanaka. This paper resulted from the Pursuit, Insect Invasions.

PREVIEW | New Science Communications Video Coming Soon!



Keep an eye out for SESYNC's new video on science communications out soon! Watch the trailer above now.

CONTACT US | We Want To Hear From You!

We'd like to hear from you! Do you have updates or outcomes tied to your SESYNC research that would make for an interesting research spotlight? Are you looking for a

resource on a topic that we haven't covered yet? Do you want to share an idea? Contact us at communications@sesync.org.

www.sesync.org









SESYNC | 1 Park Place Suite 300 | Annapolis, MD 21401 US

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