

## **Press Release**

# The Natural Systems Primer is Published

**SAN DIEGO (24 February 2023)** – The International Council on Systems Engineering (INCOSE) Natural Systems Working Group is pleased to announce the publication of the Natural Systems Primer.

With the publication of the Primer, the Natural Systems Working Group has provided a simple entry point to a complex subject, enabling systems engineers to quickly appreciate the incredible value of studying systems in nature. An hour with the primer gives a solid foundation for how to leverage nature's frameworks as systems models, and the various appendices and bibliography are additional resources for those ready to dig in a little further.





Within the Primer's pages readers will learn:

- 1. What natural systems are and the benefits of using them for inspiration,
- 2. Where natural systems knowledge and tools can be used in systems engineering,
- 3. How to use natural systems knowledge and tools.

Curt McNamara, Chair of the Natural Systems Working Group said, "I would encourage Engineers to have a look at this Primer which highlights: How does nature solve problems, and how can systems engineers mimic them to enhance their work? By studying Natural Systems, engineers can learn about optimal design, patterns, complexity, resilience, and sustainability. "

The working group believes that this primer provides:

- o new pathways for project success,
- the value of taking inspiration from nature to solve engineering problems,
- o the process of learning from natural systems to everyday engineering,
- o resources and examples to make billions of years of innovation more accessible,
- o a foundation to learn about patterns, complicity, resilience, and sustainability in natural systems.

Curt went on to say "As a working group we have found creating this primer to be a fascinating project. I would like to thank my fellow authors Randy Anway, Kai Costantini, Marjan Eggermont, Margo Farnsworth, PJ McGoey, Jacquelyn Nagel PhD, George Studor, Dennis Tuckowski and Alex Wolf for the hard work in getting this primer to publication"

The INCOSE Natural Systems Primer is available to download free of charge from the <u>Natural Systems Primer</u> page of the INCOSE website or in <u>INCOSE Online Store</u>.



## **Press Release**

## **Suggested Social Media Posts**

If you would like to share this news on your social media platforms, we encourage you to use the social media post below:



The INCOSE Natural Systems Working Group has launched Natural Systems and the Systems Engineering Process: A Primer. Get your copy at www.incose.org/naturalsystemsprimer

#SystemsEngineering #INCOSE #NaturalSystems

### **Notes to Editors:**

### **About the International Council on Systems Engineering**

The International Council on Systems Engineering (INCOSE) is a not-for-profit membership organization that promotes international collaboration in systems engineering practice, education, and research. INCOSE's mission is to "address complex societal and technical challenges by enabling, promoting and advancing systems engineering and systems approaches." Founded in 1990, INCOSE has more than 65 chapters and over 21,000 members and associates worldwide. For additional information about INCOSE visit www.incose.org.

#### **About the Natural Systems Engineering Working Group**

The Natural Systems Engineering Working Group was established to improve Systems Engineering processes and practices with the application of natural systems knowledge and approaches. The goal is for System Engineers to take full advantage of natural systems, including both biological systems and the elements and forces of nature. For additional information about Natural Systems Engineering Working Group visit <a href="https://www.incose.org/incose-member-resources/working-groups/analytic/natural-systems">https://www.incose.org/incose-member-resources/working-groups/analytic/natural-systems</a>