

The GEO Biodiversity Observation Network:

Better systems for improved decision making

**EU BON Stakeholder Roundtable, Granada, Spain
10-11 December 2015**

**Gary Geller
Group on Earth Observations**



**To improve the acquisition, delivery
and application of information
on biodiversity change
for decision-makers**



Stef Maruch Wikimedia commons

GEO BON Approach

- **Facilitate, coordinate, convene**
- **Work with partners and users to help meet their needs**
- **Build social and physical networks**
- **Identify and fill gaps**



Martin Wegmann

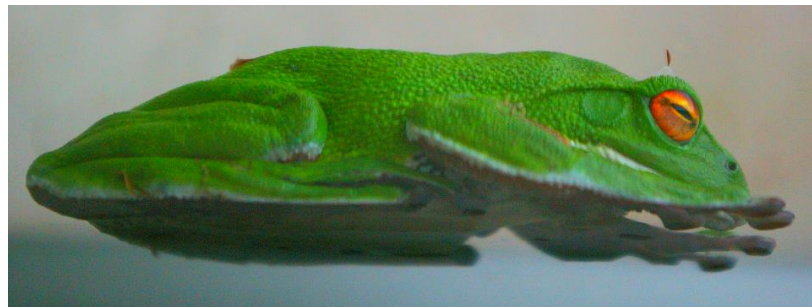
End to End Continuity



1) Essential Biodiversity Variables

- **Gap: Missing observations**
- **EBVs: Key variables for monitoring change**

- 1. How is biodiversity changing?**
- 2. Why is it changing?**
- 3. What are the impacts?**



2) BON in a Box

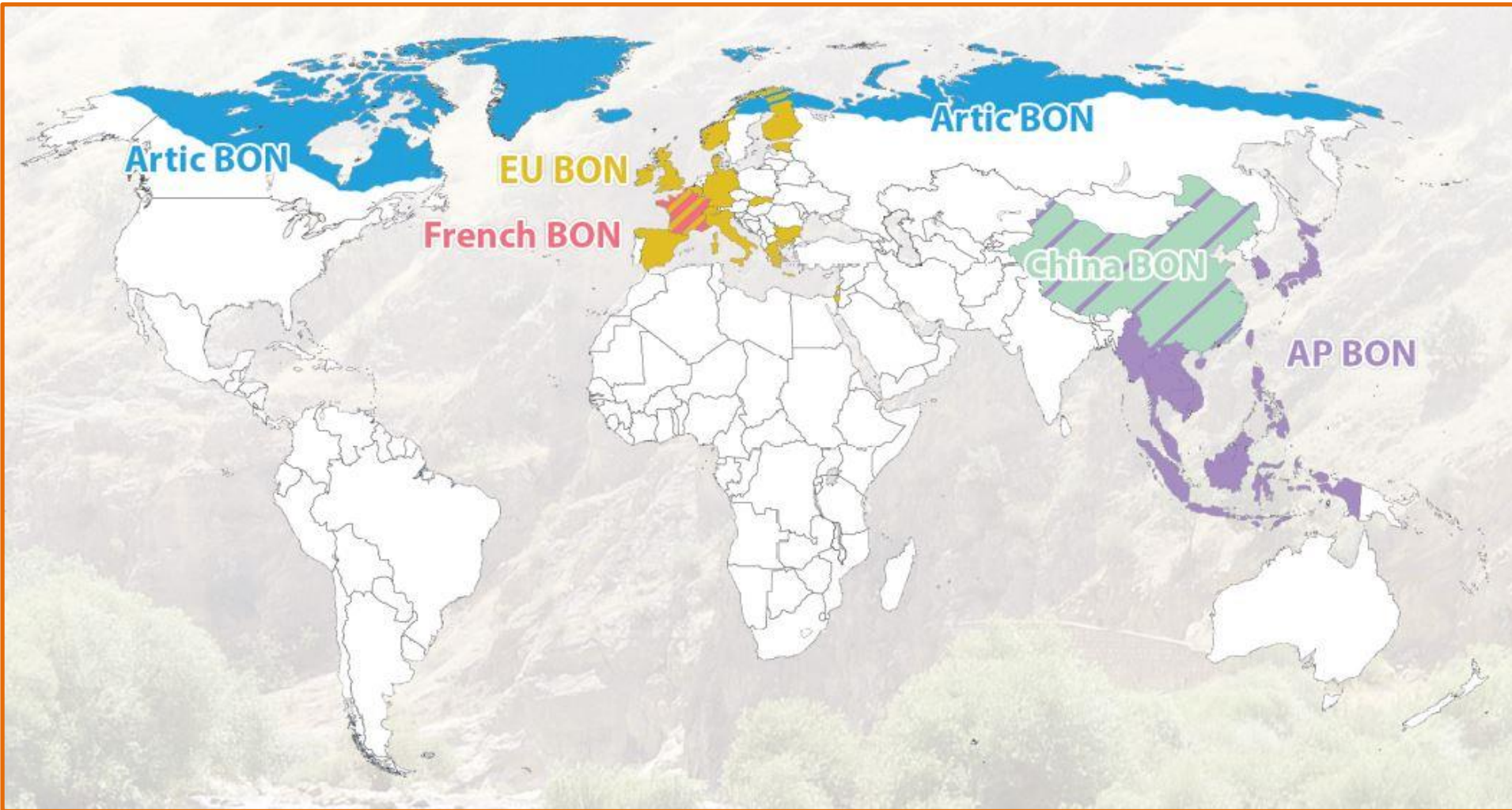
- **Gap: Capacity to develop observation system**
- **BON in a Box: A box of tools**



- **Purpose: Make it easier to set up an observation system**

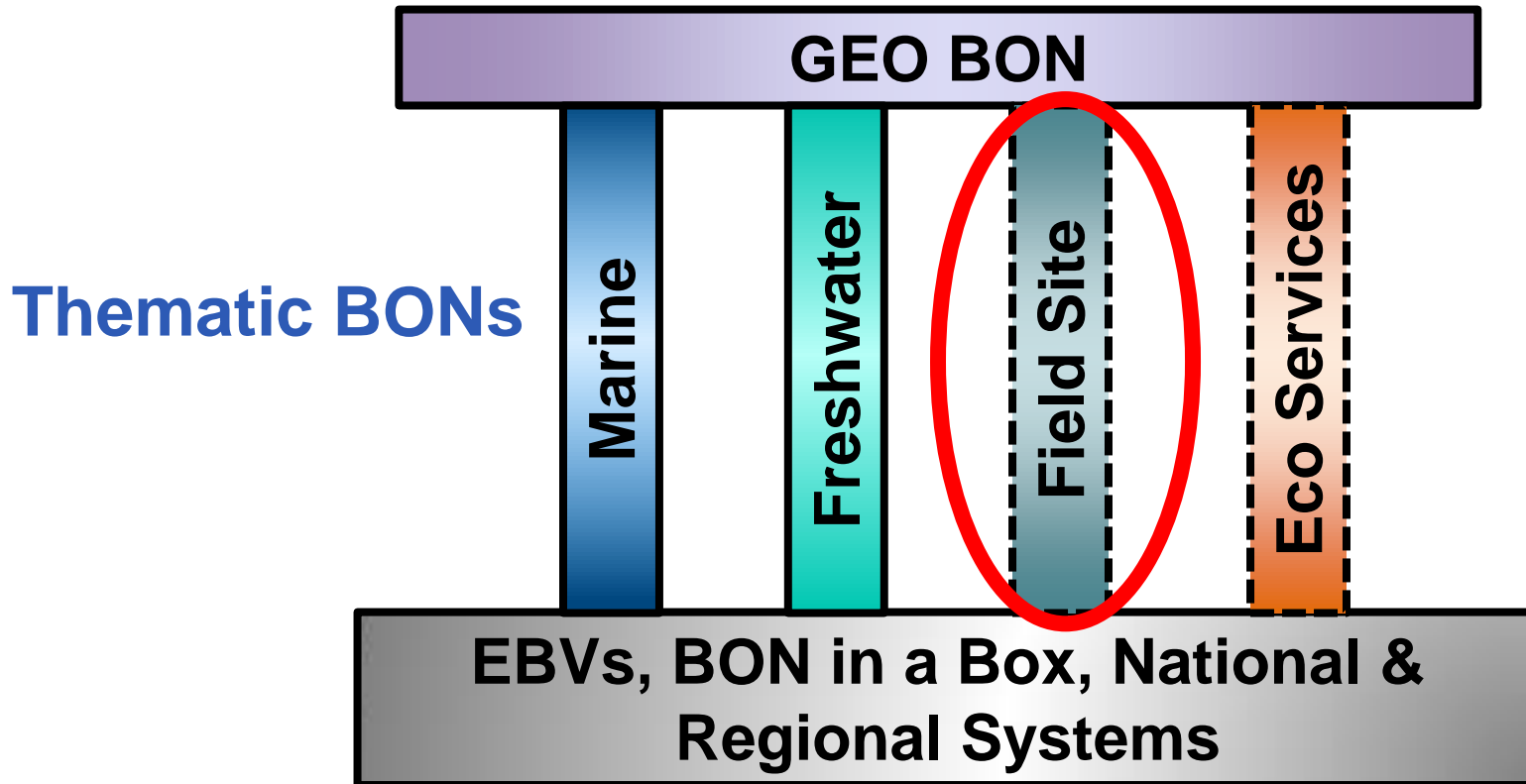
3) National & Regional BONs

Gap: Missing networks



4) Thematic BONs

Gap: Missing networks



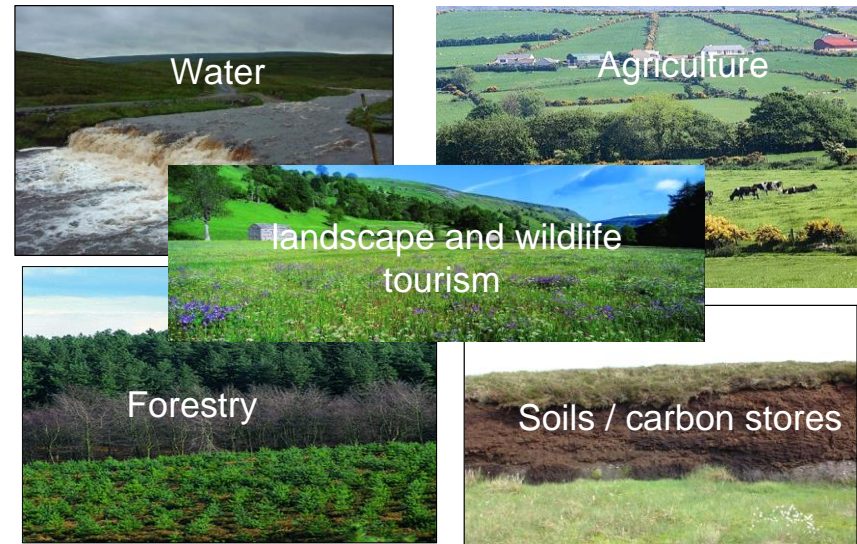
Marine Biodiversity Observation Network
Global Wetland Observing System
Global System of Ecological Observatories
Global Framework for Ecosystem Services

Global System of Ecosystem Observatories

A network of ecosystem observatories undertaking long-term, co-located measurements, linking drivers, states, and impacts



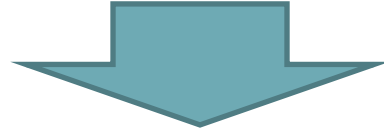
..... on natural capital, ecosystem health, and delivery of ecosystem services



Global System of Ecosystem Observatories: Why Needed

- 1) Currently, no systematic global access to data on ecosystem health
- 2) Currently, no global network of *in situ* observatories providing consistent data on ecosystem change and its causes and consequences
- 3) Well-distributed system of “Ecosystem Observatories” needed to integrate biodiversity into the modelling of ecosystem processes and services

The Roadmap



Step 1: Establish global community of common interest, agree scope and aims



Step 2: Establish top level directory of sites

Step 3: Establish data sharing principles and practice.



Step 4: Develop use cases to promote development of a functioning network and products



Step 5: Develop analytical framework and engagement mechanism (virtual laboratories) to deliver products

Thank You



US Fish and Wildlife Service