What don’t we know?
Thinking about the missing information

Jonathan Baillie Zoological Society of London
Global fuel mix by decade

Population Growth

Population in billions

2000 BC 0 2012
Cultivated systems now cover one quarter of Earth’s terrestrial surface
Climate change
Vertebrate species richness
Living Planet Index

Key
- Global Living Planet Index
- Confidence limits

Index Value (1970 = 1)

Year


WWF / ZSL, 2012
Temperate VS Tropical

Index Value (1970 = 1)

Year


+31%

-61%
13 million hectares lost globally p/a between 2000 and 2010

Accounting for re-growth/restoration, an area the size of Costa Rica is lost each year.
Future extinction rates estimated to be 10 to 100 times higher
modified from Rockström et al. (2009).
Manis crassicaudata
Indian Pangolin

Found in 5 classifications

- Taxon recognized by IUCN Red List:
  - Animalia +
  - Chordata +
  - Mammalia +
  - Pholidota +
  - Manidae +
  - Manis +
    - Manis crassicaudata
    - Manis culionensis
    - Manis javanica
    - Manis pentadactyla

Reviewed by 0 curators
3D modeling
Real-time data
Marine monitoring
Tracking
Drones
Monitoring from space
NDVI

German Remote Sensing Data Center
Natural capital: carbon

289 Gigatonns of carbon
Conservation sector
Baseline data

- How many
- How much
- Where
- Why threatened
- Change through time
Measuring success
Dependence
Space for nature
Energy for nature
Government
Informed cost benefit analysis

Valuing nature

? $4,500,000,000,000 $23,000,000,000

$375,000,000,000 $200,000,000,000 $70,000,000,000
Redefining economic growth

![Graph showing the relationship between Value and Time, with lines labeled Natural Capital and Economic growth GDP. The Natural Capital line decreases, while the Economic growth GDP line increases.]
Sustainable growth

Value

Time

Natural Capital

Economic growth
Industry
Quarterly reports
Global Forest Watch 2.0 Fights Deforestation With Google Technology

by Mike Hower  
April 11, 2013

Find out what is happening in forests right now

A new initiative unveiled this week at the United Nations Forum on Forests will use Google technology to provide real-time information to help governments, companies and communities prevent deforestation.
Oil palm
Oil palm
Public
Help identify some of the rarest and threatened species on the planet.
Welcome to Expedition White Shark, the world's very first app that allows anyone to track adult white sharks from a special satellite array orbiting the earth. To make this possible, scientists at the Marine Conservation Science Institute (MCSI) fitted Great White Sharks with custom built satellite transmitters.
Bringing protected areas to life
Oil and Gas
Red Lines

Conservation Synthesis, Center for Applied Biodiversity Science at Conservation International