



Indiana University 9.28.09



## Maps



# Maps Mission **Action**

Cause-related cartography at National Geographic



## **Networks and Complex Systems**

This talk series is open to all Indiana University faculty and students interested in network analysis, modeling, visualization, and complex systems research.

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Visualization —————> Communication —————> Action  
Organizing information      Storytelling



## MAPS, MISSION...

### 20th Century

history of mapping at National Geographic

### ...ACTION

### 21st Century

tradition + technology



## National Geographic founded in 1888



Cartographic division established in 1915



## ...in the waning days of the Age of Exploration



Arctic Regions,  
November 1925



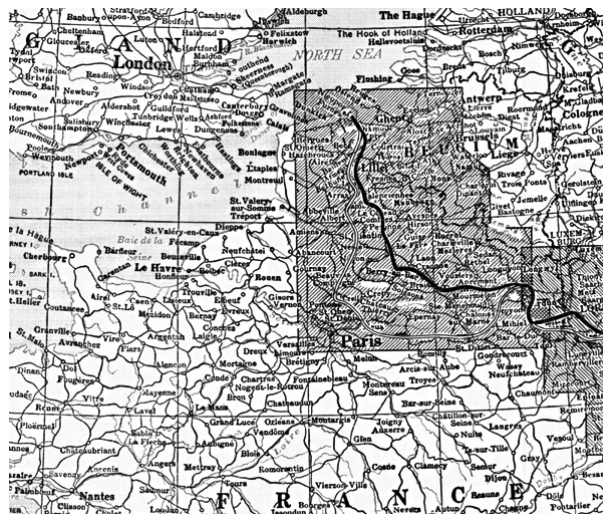
## ...in the waning days of the Age of Exploration



Albert Bumstead, first Chief Cartographer



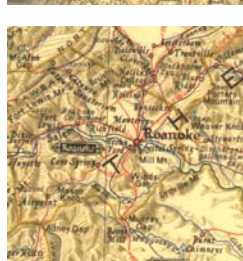
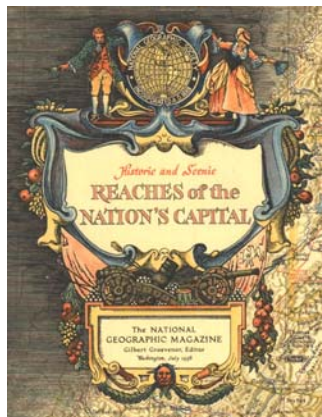
1918



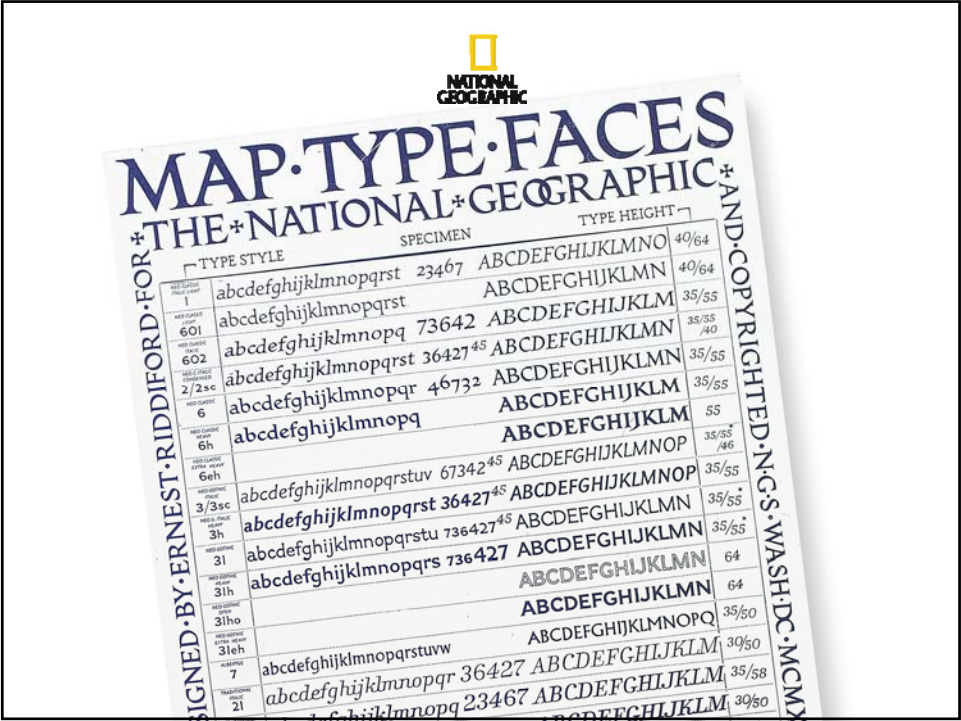
Western  
Theater of  
War



1939



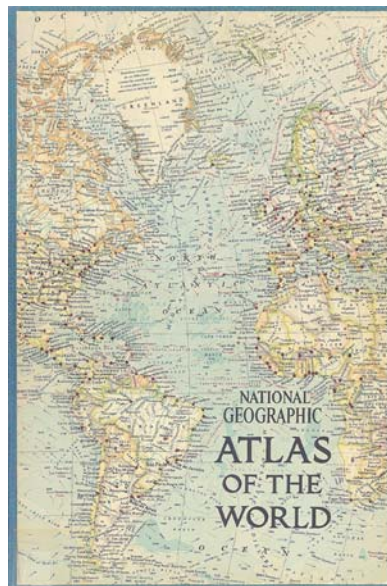








## World War II



First Edition,  
National Geographic  
Atlas of the World

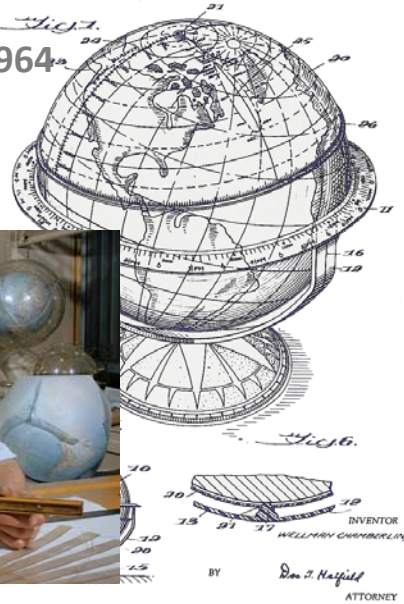
Aug. 13, 1963  
NATIONAL  
GEOGRAPHIC

W. CHAMBERLIN  
GLOBE SUPPORT AND MEASURING DEVICE  
17, 1961

3,100,353  
3 Sheets-Sheet 1

1964

Wellman Chamberlin,  
chief cartographer  
1964-1971



NATIONAL  
GEOGRAPHIC

1983







## **21st Century Accelerating change**

**Technology:** Remote sensing, GIS, GPS, networked computing

**Visualization Platforms:** Google Earth, Virtual Earth (Bing)

**The GeoWeb:** Volunteered geographic information, Mashups, Open Street Map, Wikimapia, location-enabled smart phones

**Geography:** From observational to analytical; from qualitative to quantitative; from noun to active verb

**The World:** Globalization, climate change, endangered species, ecosystems and cultures



## **21st Century Change at National Geographic**

Mission, articulated in 1888:

*to increase and diffuse geographic knowledge*

21st century:

National Geographic's global reach: 32 local language magazines, worldwide distribution via television

*inspiring people to care about the planet*



## What role does cartography play?

<b>MAPS</b>	accuracy
	authority
	curated (structured) content
	map-based storytelling
<b>MISSION</b>	inspiration
	education
	sustainability
<b>ACTION</b>	learn
	share
	participate



## Four new platforms

LandScope

FieldScope

Geotourism MapGuides

Global Action Atlas



# 1



## MAP

The conservation guide to America's natural places

## MISSION

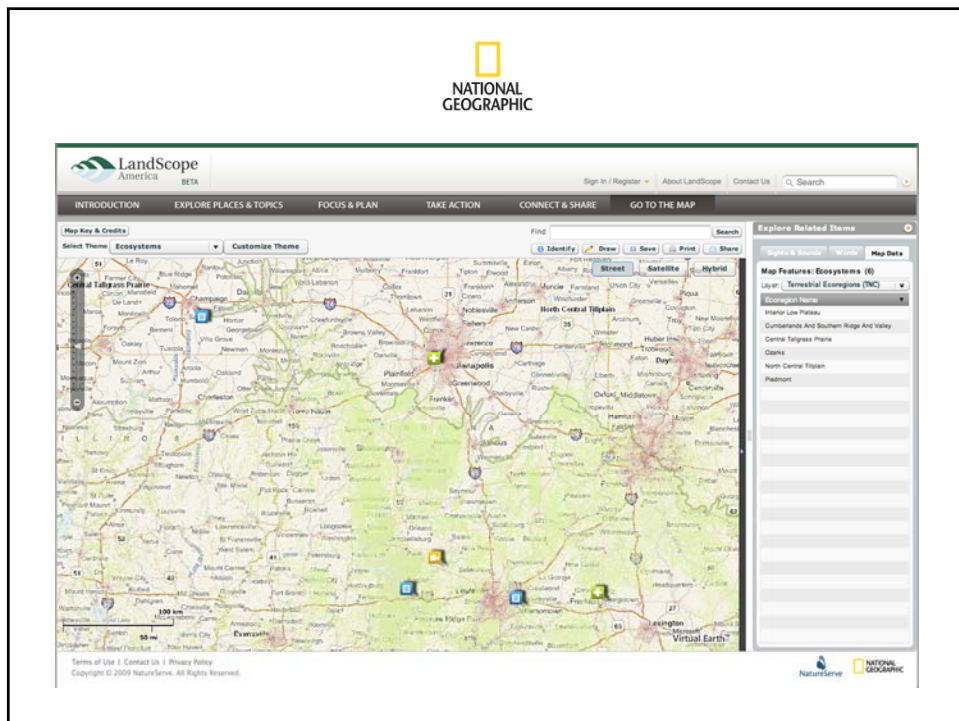
Inspire and inform place-based conservation action

## ACTION

Increase the pace and effectiveness of land protection









**LandScope America**

[www.landscape.org](http://www.landscape.org)



2



## MAP

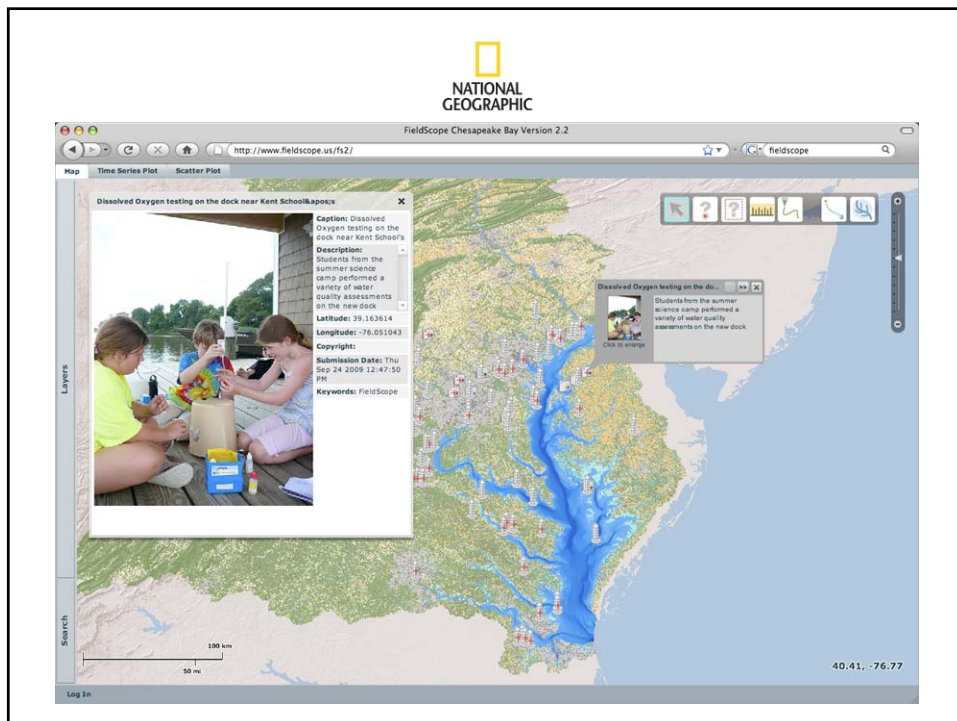
Prototype mapping and analysis tool for K-12

## MISSION

Get schoolkids excited about geography through technology

## ACTION

Get schoolkids into the field, collecting real data  
Enable them to do real spatial analysis in a user-friendly  
web environment





**Fieldscope**

[www.fieldscope.us](http://www.fieldscope.us)



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## MAP

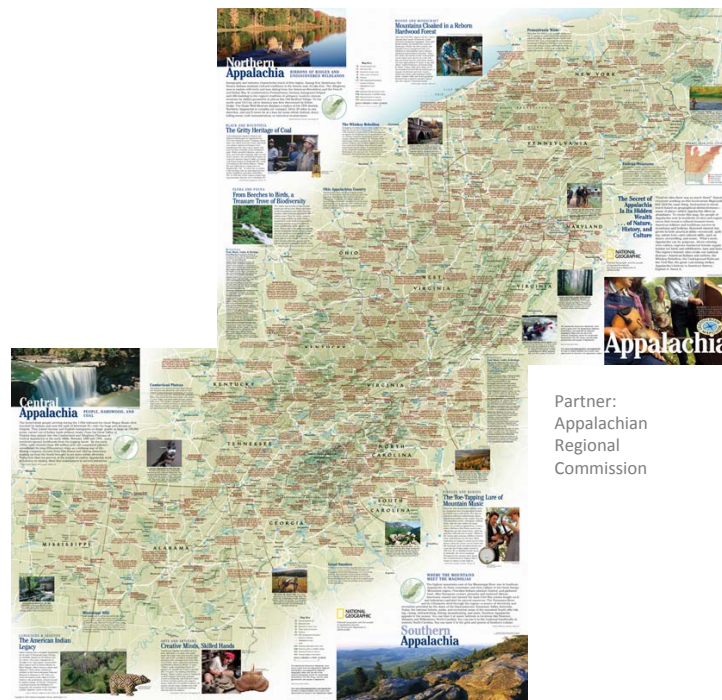
Tourist destinations: Greater Yellowstone, etc.

## MISSION

Promote tourism that sustains or enhances the geographical character of a place—its environment, culture, aesthetics, heritage, and the well-being of its residents.

## ACTION

Travel sustainably



Partner:  
Appalachian  
Regional  
Commission



## Geotourism

Vermont's Northeast Kingdom

Baja California

Crown of the Continent

Arizona-Sonora

Peru's Vilcanota Valley

Greater Yellowstone



Green River Lakes

http://www.yellowstonegeotourism.org/yellowstone\_content.php?uid=yello548199f56562662&... fieldscope

Greater Yellowstone

HOME MAP EVENTS PARTICIPATE MY FAVORITES ABOUT

Lake, River, or Waterfall

Green River Lakes

BACK




Photo © Rhin Crab / Wyoming Travel & Tourism

the Highline Trail, a day hike to Clear Creek Falls and Natural Bridge.

**Recreational Opportunities**  
Camping at 39 individual camp units, plus three large group camping areas, and backcountry camping is allowed. There are also trails for hiking, biking and horseback riding. The lakes allow for swimming, boating and fishing opportunities. Great place to view the regions diverse wildlife.

**Seasons Accessible**  
Typically operational between June 15 and September 15.

★ ADD TO MY FAVORITES

**About this Natural Area**  
The upper of these two glacier-made lakes is designated wilderness where boating is restricted to paddle power. The Green River Campground is at the end of the rough road from Pinedale and is reputed by backcountry enthusiasts to be one of the Forest Service's most scenic.

The Green River Lakes are the headwaters of the historic Green River, and boast amazing views of Squeatop Mountain (one of the most photographed peaks in Wyoming). The Green River Lakes also host a Bridger-Teton National Forest Campground and serve as a major trailhead into the northern Wind River Mountains. The area also provides access to

**Interactive MapGuide**  
Search the map

Map controls: + - Home Full Screen




Map layers: ☒ Map ☐ Terrain ☐ Aerial ☐ Hybrid

Map data: © 2008 Microsoft Corporation. © 2008 National Geographic Society.

Boundaries and names shown do not necessarily reflect the map policy of the National Geographic Society.

LONGITUDE: -109.8304939  
LATITUDE: 43.2847035  
ELEVATION: 7984 FT (2434 M)

PHOTOS



Photos by: [unclear] Photo by: [unclear]





## **Geotourism**

[www.yellowstonegeotourism.org](http://www.yellowstonegeotourism.org)

<http://www.nationalgeographic.com/travel/sustainable/>



(cue drum roll)

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inspiring  
people to care  
about the planet



**inspiration**



**action**

**You**



**connecting people and planet**





## What is the Global Action Atlas?

An online resource that will expose thousands of local, **cause-related projects** around the world to a large audience of concerned citizens

...giving individuals opportunities to **take action** by donating, volunteering, advocating, and sharing information.



## What is our mission?

Engage people to discover and support a planet-spanning array of local efforts to solve the major challenges facing society and nature.



## **What is our vision?**

Tap the worldwide reach and convening power of  
the National Geographic brand...

to mobilize a vast corps of concerned world citizens...

to support thousands of local projects that  
will collectively change the world



## **Where are we now?**

"Alpha" site up and running

About 200 projects exposed across all theme areas

Rapidly growing list of partnership and funding opportunities

November 2009: beta; February 2010: launch



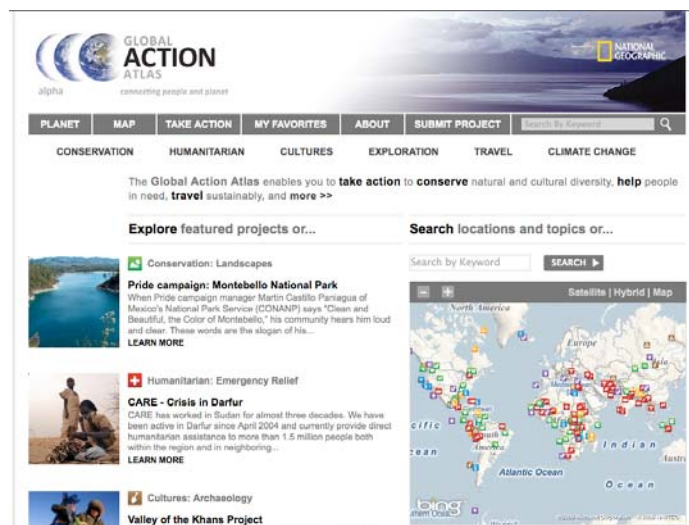
## Who is participating?

Action Against Hunger	Mercy Corps
African Medical and Research Foundation	National Audubon Society
Agua Para La Vida	New Forests
American Bird Conservancy	NG Enduring Voices initiative
American Prairie Foundation	NG Geotourism initiatives
AMREF	NG Mission Programs/research grantees
Basecamp Explorer	New Forests Project
CARE	Planet Action
Catholic Relief Services	RARE
Cheetah Conservation Fund	Save the Children
Conservation International	The Nature Conservancy
EarthWatch Institute	Volunteers for International Partnership
El Porvenir	Water Advocates
Freedom to Roam	WaterAid
Global Viral Forecasting Initiative	Water for People
Great Plains Conservation	WaterPartners International
HandsOn New Orleans	WILD Foundation
Helen Keller International	Wildlife Conservation Society
Lifewater International	World Vision
Lindblad Expeditions	World Wildlife Fund

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## Demo







actionatlas.org



### Some key ideas

organizing	information
aggregation	distribution
macrocosm	microcosm
inspiration	action
people	planet



## organizing information

L	A	T	C	H
location	alphabet	time	category	hierarchy

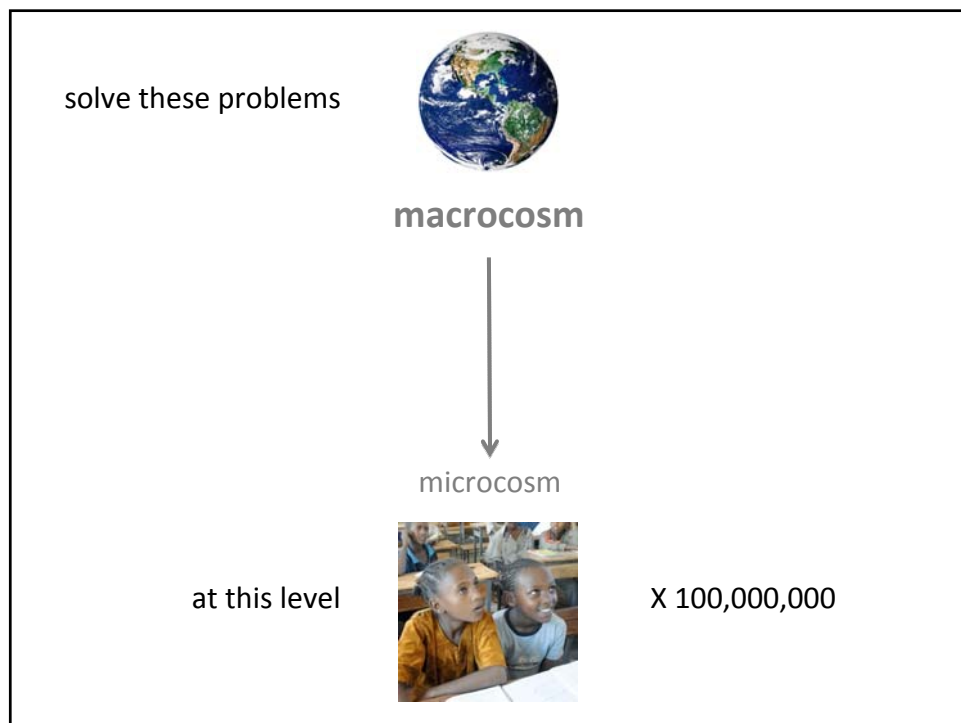
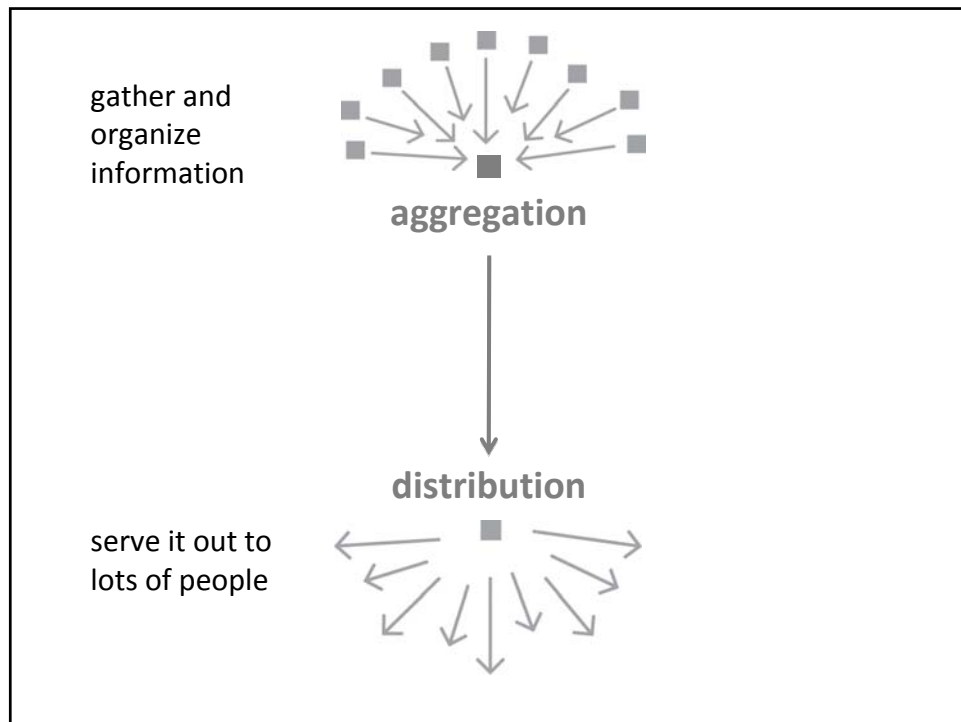
Richard Saul Wurman, *Information Anxiety 2*

## organizing information

L	A	T	C	H
location!	alphabet	time	category	hierarchy



our place:  
authoritative, curated content



get people excited **inspiration**



urge them to participate **action**

**people**



**planet**

