

Finding Good Information:

Understanding how to research a topic using credible, authoritative, accurate sources

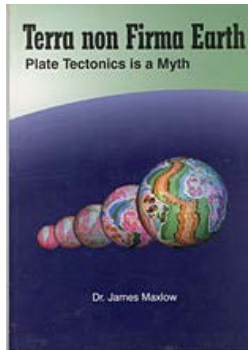
Barry Brown, Science Librarian
Megan Stark, Undergraduate Services Librarian
The University of Montana; Feb. 2009

Not all information sources should be treated as equal.

They may differ in: quality, accuracy, credibility, significance, authoritativeness, relevance, date published, audience level, etc.

How would you compare the two information sources below that both discuss plate tectonics?

1

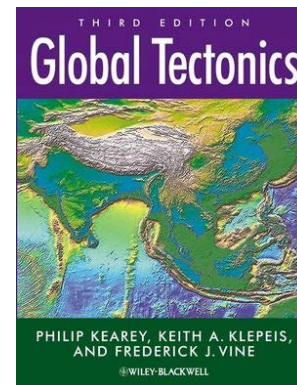


Format: eBook
ISBN: 0 952 2603 28
Publisher: Oneoff Publishing.com
Pages: 255
Figures: 74



The [Web site](#) of Dr. James Maxlow disputing plate tectonics and proposing an alternative theory of an expanding earth. Note: The author published an online [book](#) and has [lectures](#) on YouTube.

2



Global Tectonics, 3rd Edition
Philip Kearey, Keith A. Klepeis,
Frederick J. Vine
ISBN: 978-1-4051-0777-8
Paperback
496 pages
January 2009, Wiley-Blackwell

A Scholarly book by several scientists published by one of the top science publishers, and widely used as a university textbook for teaching the current knowledge of plate tectonics.

Questions to Ask:

- **What kind of information is it?**

- Book
- Government Document
- Journal or Magazine
- Website
- Others?

- **Is it scholarly or popular?**

- Who wrote it?
- Who is the intended audience?
- Who published it?
- Does it cite authentic research?



More Questions:



- **Is it peer reviewed?**
 - Was it examined by other experts before publication?
 - Was the author required to include the research method?
 - Is there a bias?
 - Was the author paid for the research?
- **Is it worth retrieving and reading?**
 - Is it current?
 - Is it relevant to the topic at a specific level?
 - Is the source trustworthy?

Accuracy & credibility of information is important.

One type of information source is not always

better

than another type...

Rather some information is

more ***appropriate, authoritative, and/or effective***

when used in some discussion or publication venues

Topic 1:

The health effects of
spraying tordon to kill
weeds...

Scholarly

Topic 2:

Cycles of nature for
elementary school
students...

Popular

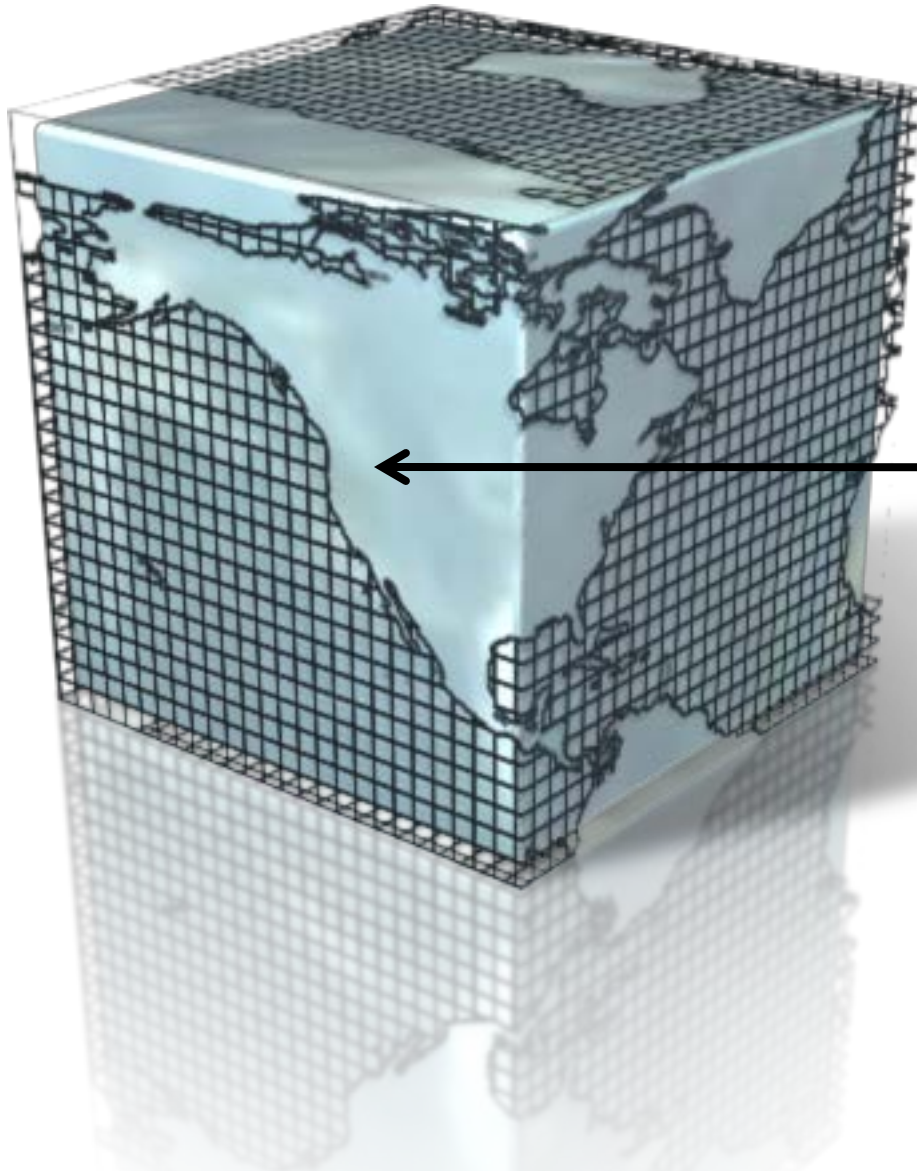
Topic 3:

Environmental history of a
particular river...

Both



An Example



Class Topic:
Climate Change in
Montana

A Simple Google Search: What do you notice?

Web [Images](#) [Maps](#) [News](#) [Shopping](#) [Gmail](#) [more](#) ▼

Google

Web

[Glaciers Melting In Montana Park, U.N. Is Asked To Declare Park An ...](#)
Mar 13, 2006 ... Lake McDonald, in Glacier National Park, **Montana** (AP Photo) ... "T
glaciers respond [to **global warming**] by having less snow in the winter ...
[www.cbsnews.com/stories/2006/03/13/tech/ma](#) [Cached](#) - [Similar pages](#)

[Missoulian: Report details **global warming's** role in wildfire risk](#)
Report details **global warming's** role in wildfire risk ... Of all the Western states, **Montana's**
wildfire season could be most affected by the warmer ...
[www.missoulian.com/articles/2004/09/01/news/mtregional/news07.txt](#) - 78k -
[Cached](#) - [Similar pages](#)

[Global Warming Pollution — Montana Environmental Information](#)
NATURE'S TRUST: A Legal, Political, Economic, and Moral Frame for **Global Warming** —A
lecture by University of Oregon Law Professor Mary Christina Wood, ...
[www.meic.org/energy/global_warming_pollution](#) - 44k - [Cached](#) - [Similar pages](#)

[Global Warming Update: Snow Blocks Key Road in Montana Park ...](#)
Jul 3, 2008 ... Of course, one year's worth of record snowfalls doesn't disprove the **global**
warming myth. However, as drought conditions in this region ease ...
[newsbusters.org/blogs/noel-sheppard/2008/07/03/global-warming-update-snow-blocks-](#)
[key-road-montana-park](#) - 95k - [Cached](#) - [Similar pages](#)

[Disney's New Hannah Montana Album Features 'Global Warming Anthem ...](#)
Aug 26, 2008 ... Disney's New Hannah **Montana** Album Features '**Global Warming Anthem**'.
Teen pop star sings 'Wake Up America,' warns the 'earth is calling out,' ...
[www.topix.com/news/global-warming/2008/08/disneys-new-hannah-montana-album-](#)
[features-global-warming-anthem](#) - 46k - [Cached](#) - [Similar pages](#)

Global Warming Update: Snow Blocks Key Road in Montana Park

By Noel Sheppard (Bio) (Archive)
July 3, 2008 - 09:58 ET

Due to record snowfalls in Montana this year, Glacier National Park's famous Going-to-the-Sun Road was finally opened to tourists Wednesday -- much later than normal.

With the exception of 1943 when park officials chose to let the white stuff thaw naturally due to the nation being in the middle of World War II, this is the latest opening in the history of this thoroughfare which connects both sides of the park.

As reported by the Missoulian Wednesday (emphasis added, picture courtesy Missoulian via AP and NYT)



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NewsBusted
Ep. 233, January 27

America, We Can Provide
Real Alternatives to Abortion!

Aug 26, 2008

Disney's New Hannah Montana Album Features 'Global Warming Anthem'

Teen pop star sings 'Wake Up America,' warns the 'earth is calling out,' but admits she doesn't know 'what all this means.'

Democratic presidential candidate Sen. Barack Obama's two daughters, Malia, 9, and Sasha, 6, are big fans of Hannah Montana - and maybe there's a reason why.

Teen star Miley Cyrus, known as Hannah Montana in the Disney Channel TV series television of the same name, is now crusading for global warming alarmism. But she admits she isn't really sure what it means. Disney also owns ABC, a network that often hypes climate change alarmism.

On the 15-year-old singer's recently released album "Breakout," she sings that she wants America to wake up and deal with global warming. The song, "Wake Up America" is about taking care of the earth:

Who sponsors the info?

Is it relevant?

The Same Search in Web of Science:

What differences do you notice?

The screenshot shows the ISI Web of Knowledge interface. At the top, it says 'ISI Web of Knowledge SM Take the next step'. Below that are navigation tabs for 'All Databases', 'Select a Database', and 'Web of Science'. A search bar is visible with the query: 'Topic=(global warming or climat* change*) AND Title=(Montana) Timespan=All Years. Databases=SCIEXPANDED, SSCI, A&HCI'. The results section shows 'Results: 38'. On the left, there is a 'Refine Results' sidebar with sections for 'Subject Areas', 'Document Types', 'Source Titles', 'Publication Years', 'Institutions', 'Languages', and 'Countries/Territories'. The main results list includes several entries. A large blue callout bubble is overlaid on the right side of the page, containing three questions: 'Is it current?', 'Who published it?', and 'Is it peer-reviewed?'. Arrows point from these questions to specific parts of the search results. The callout bubble also contains a detailed view of a specific article: 'Climate change effects on historical range and variability of two large landscapes in western Montana, USA'. This view includes the author list (Keane RE, Holsinger LM, Parsons RA, Gray K), source information (FOREST ECOLOGY AND MANAGEMENT, Volume: 254, Issue: 3, Pages: 375-389, Published: FEB 10 2008), citation information (Times Cited: 2, References: 68), and an abstract. To the right of this article view is a 'Cited by: 2' section listing two citing articles. At the bottom right, there is a 'References: 68' section with a link to view the bibliography.

Is it current?

Who published it?

Is it peer-reviewed?

Climate change effects on historical range and variability of two large landscapes in western Montana, USA

Author(s): Keane RE (Keane, Robert E.)¹, Holsinger LM (Holsinger, Lisa M.)¹, Parsons RA (Parsons, Russell A.)¹, Gray K (Gray, Kathy)¹

Source: FOREST ECOLOGY AND MANAGEMENT Volume: 254 Issue: 3 Pages: 375-389 Published: FEB 10 2008

Times Cited: 2 References: 68 Citation Map beta

Abstract: Quantifying the historical range and variability of landscape composition and structure using Simulation modeling is becoming an important means of assessing current landscape condition and prioritizing landscapes for ecosystem restoration. However, most simulated time series are generated using static climate conditions which fail to account for the predicted major changes in future climate. This paper presents a simulation study that generates reference landscape compositions for all combinations of three climate scenarios (warm-wet, hot-dry, and current) and three fire regime scenarios (half historical, historical, and double historical fire frequencies) to determine if future climate change has an effect on landscape dynamics. We applied the spatially explicit, state-and-transition, landscape fire succession model LANDSUM to two large landscapes in west-central Montana, USA. LANDSUM was parameterized and initialized using spatial data generated from the LANDFIRE prototype project. Biophysical settings, critical spatial inputs to LANDSUM, were empirically modeled across the landscape using environmental gradients created from historical and modeled future climate daily weather data summaries. Successional pathways and disturbance probabilities were assigned to these biophysical settings based on existing field data and extensive literature reviews. To assess the impact of changes in climate and fire regime, we compared simulated area burned and landscape composition over time among the different simulation scenario combinations using response variables of Sorenson's index (a global measure of similarity) and area occupied by the dominant vegetation class (simple indicator of change in landscape composition). Results show that simulated time series using future predicted climate scenarios are significantly different from the simulated historical time series and any changes in the fire regime tend to create more dissimilar and more variable simulated time series. Our study results indicate that historical time series should be used in conjunction with simulated future time series as references for managing landscapes. Published by Elsevier B.V.

Document Type: Proceedings Paper

Cited by: 2

This article has been cited 2 times (from Web of Science).

Reinhardt ED, Keane RE, Calkin DE, et al. Objectives and considerations for wildland fuel treatment in forested ecosystems of the interior western United States. FOREST ECOLOGY AND MANAGEMENT 12 1997-2006 DEC 10

He HS, Keane RE, Iverson LR. Forest landscape models, a tool for understanding the effect of the large-scale and long-term landscape processes. FOREST ECOLOGY AND MANAGEMENT 3 371-374 FEB 10

[view all 2 citing articles]

Create Citation Alert

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[view related records]

References: 68

View the bibliography of this record (from ...)

Remember:

Where you search determines what you find.

General web searches may produce mixed & uncertain results.

Searching the best databases with precise search statements usually produces more relevant and authoritative results.

A skeptical researcher is a good researcher.

If you need further assistance with searching, ask a librarian.

ISI Web of KnowledgeSM

All Databases Select a Database Web of Science

Search Cited Reference Search Advanced Search Search

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