

Content Analysis:
Smithsonian Natural History Museum

Prepared by
Kimberly Kozeniewski

Executive Summary

Presented is an analysis of website content for the Smithsonian Natural History Museum website. The purpose of the analysis is to evaluate if our content is reaching our audience, in terms of how well we've attended to utilizing effective titles and metadata description for optimum search engine optimization.

Our analysis has found that the titles on the museum's webpage are appropriate, descriptive, and effective. In contrast, meta description is virtually non-existent on the site.

Our conclusion is that search engine optimization is hindered by the lack of meta description, resulting in an audience that is not getting information from the Natural History Museum when conducting an online search. Once the audience reaches the page – through external links or directly typing in the URL – their search becomes more fruitful.

Therefore, we recommend revisiting the content strategy and adding meta description to the webpages that is on par with the page titles and links, allowing for our audience to find the information it is searching for more effectively.

Introduction

Purpose

The Museum of Natural History has discovered that many of its programs, exhibits, and events have not been “hitting” on online searches via search engines. As a result, we have been asked to conduct a content audit of the museum's website to analyze how effective the site is in getting its content to the intended audience.

Scope

Using appropriate analytic tools, we have crawled through the museum's webpages. We focused on the site's page title length in relation to hyperlink title length, description included in the titles, use of meta description in the site's code, and the length of meta description (when present) in the code.

Terminology

Title

The <title> tag is required in all HTML documents and it defines the title of the document.

The <title> element:

- defines a title in the browser toolbar

- provides a title for the page when it is added to favorites
- displays a title for the page in search-engine results

Source: "HTML <title> Tag." W3school.com.

Meta Description

A meta description is an HTML attribute that provides a brief summary of a web page. Meta descriptions are typically up to 160 characters long. Search engines such as Google often display the meta description in search results where they can highly influence user click-through rates.

Source: "Meta Description." Moz.com.

Content Strategy

Internal guidelines and governance of content produced

Source: "Content Strategy." Moz.com.

Analysis

Methodology

Using Screaming Frog SEO Spider, I conducted a crawl through the Smithsonian Natural History Museum website. This crawl compiled information about the site in a number of categories; however, for our purposes I focused on three key areas: html pages, titles, and meta description.

Findings: Titles

Naturalhistory.si.edu contains 3386 html pages, and 1104 images. The crawl revealed that all (100%) of the webpages that could have titles do have titles. The shortest title is 53 characters; the longest is 172 characters.

Link-to-Title view, Naturalhistory.si.edu:

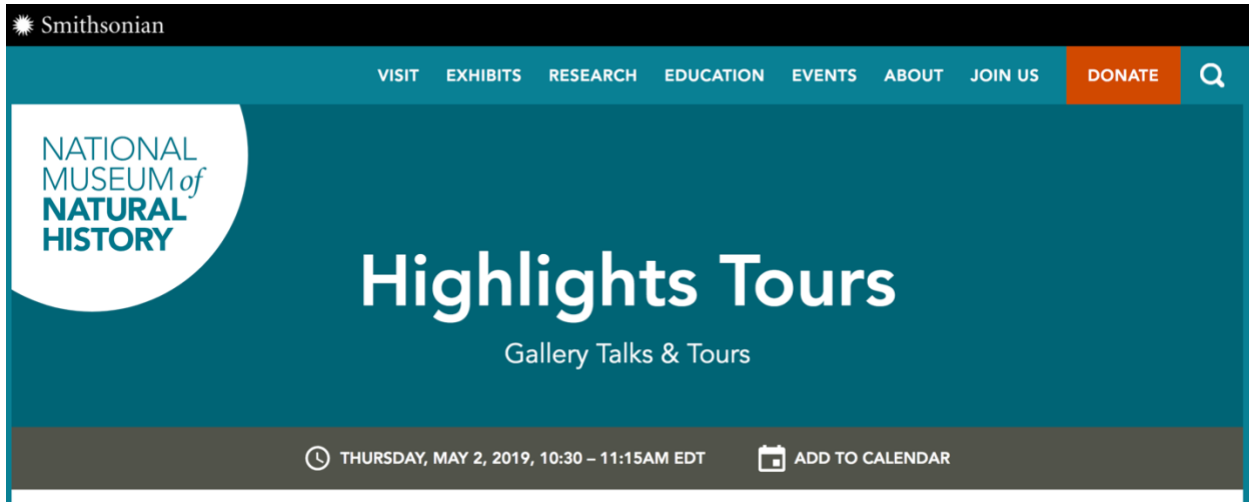
1649	https://naturalhistory.si.edu/staff/paul-taylor	Taylor, Paul Michael Smithsonian National Museum of Natural H...	1	69
1650	https://naturalhistory.si.edu/staff/kassandra-brockington	Kassandra Brockington Smithsonian National Museum of Natural ...	1	69
1651	https://naturalhistory.si.edu/staff/christina-gebhard	Christina A. Gebhard Smithsonian National Museum of Natural ...	1	69
1652	https://naturalhistory.si.edu/research/botany/collections-access/wood-collection/acq...	Acquisitions History Smithsonian National Museum of Natural Hi...	1	69
1653	https://naturalhistory.si.edu/research/invertebrate-zoology/collections-overview	Collections Overview Smithsonian National Museum of Natural ...	1	69
1654	https://naturalhistory.si.edu/join-us/corporate-engagement	Corporate Engagement Smithsonian National Museum of Natura...	1	69
1655	https://naturalhistory.si.edu/research/vertebrate-zoology/fishes/collections-overview	Collections Overview Smithsonian National Museum of Natural ...	1	69
1656	https://naturalhistory.si.edu/education/teaching-resources/earth-science/when-volc...	When Volcanoes Erupt Smithsonian National Museum of Natural...	1	69
1657	https://naturalhistory.si.edu/research/entomology/collections-overview	Collections Overview Smithsonian National Museum of Natural ...	1	69
1658	https://naturalhistory.si.edu/staff/onathan-coddington	Coddington, Jonathan Smithsonian National Museum of Natural ...	1	69
1659	https://naturalhistory.si.edu/research/mineral-sciences/collections-overview	Collections Overview Smithsonian National Museum of Natural ...	1	69
1660	https://naturalhistory.si.edu/research/eol	Encyclopedia of Life Smithsonian National Museum of Natural Hi...	1	69
1661	https://naturalhistory.si.edu/research/botany/research/algae/algae-classification	Algae Classification Smithsonian National Museum of Natural Hi...	1	69
1662	https://naturalhistory.si.edu/staff/oliver-flint	Oliver S. Flint, Jr. Smithsonian National Museum of Natural History	1	69
1663	https://naturalhistory.si.edu/research/vertebrate-zoology/birds/collections-overview	Collections Overview Smithsonian National Museum of Natural ...	1	69
1664	https://naturalhistory.si.edu/research/invertebrate-zoology/collections-access/speci...	Destructive Sampling Smithsonian National Museum of Natural ...	1	69
1665	https://naturalhistory.si.edu/research/botany/collections-access/collections-overview	Collections Overview Smithsonian National Museum of Natural ...	1	69
1666	https://naturalhistory.si.edu/research/vertebrate-zoology/amphibians-reptiles/collect...	Collections Overview Smithsonian National Museum of Natural ...	1	69
1667	https://naturalhistory.si.edu/staff/jamie-baldwin-fergus	Jamie Baldwin-Fergus Smithsonian National Museum of Natural ...	1	69
1668	https://naturalhistory.si.edu/research/vertebrate-zoology/amphibians-reptiles/collect...	Destructive Analysis Smithsonian National Museum of Natural Hi...	1	69
1669	https://naturalhistory.si.edu/research/paleobiology/collections-overview	Collections Overview Smithsonian National Museum of Natural ...	1	69
1670	https://naturalhistory.si.edu/research/vertebrate-zoology/birds/collections-access/de...	Destructive Analysis Smithsonian National Museum of Natural Hi...	1	69
1671	https://naturalhistory.si.edu/research/mineral-sciences/research-support-facilities/la...	Cold-Seal Laboratory Smithsonian National Museum of Natural ...	1	69
1672	https://naturalhistory.si.edu/research/invertebrate-zoology	Invertebrate Zoology Smithsonian National Museum of Natural H...	1	69
1673	https://naturalhistory.si.edu/404-page-not-found	404 - Page Not Found Smithsonian National Museum of Natural ...	1	69
1674	https://naturalhistory.si.edu/research/vertebrate-zoology/mammals/collections-acce...	Destructive Analysis Smithsonian National Museum of Natural Hi...	1	69
1675	https://naturalhistory.si.edu/research/vertebrate-zoology/mammals/collections-over...	Collections Overview Smithsonian National Museum of Natural ...	1	69

The page titles are the same as the page links themselves, and are overall descriptive. The only repetition seen is in pages of the same category with different subdivisions (Feedings [different times], Tours [different times])

Link-to-Title view, same title (Naturalhistory.si.edu):

1152	https://naturalhistory.si.edu/events/highlights-tours-660	Highlights Tours Smithsonian National Museum of Natural History	1	65
1153	https://naturalhistory.si.edu/events/highlights-tours-661	Highlights Tours Smithsonian National Museum of Natural History	1	65
1154	https://naturalhistory.si.edu/events/highlights-tours-662	Highlights Tours Smithsonian National Museum of Natural History	1	65
1155	https://naturalhistory.si.edu/events/highlights-tours-667	Highlights Tours Smithsonian National Museum of Natural History	1	65
1156	https://naturalhistory.si.edu/events/highlights-tours-668	Highlights Tours Smithsonian National Museum of Natural History	1	65
1157	https://naturalhistory.si.edu/events/highlights-tours-669	Highlights Tours Smithsonian National Museum of Natural History	1	65
1158	https://naturalhistory.si.edu/events/highlights-tours-674	Highlights Tours Smithsonian National Museum of Natural History	1	65
1159	https://naturalhistory.si.edu/events/highlights-tours-670	Highlights Tours Smithsonian National Museum of Natural History	1	65
1160	https://naturalhistory.si.edu/events/highlights-tours-671	Highlights Tours Smithsonian National Museum of Natural History	1	65
1161	https://naturalhistory.si.edu/events/highlights-tours-672	Highlights Tours Smithsonian National Museum of Natural History	1	65
1162	https://naturalhistory.si.edu/events/highlights-tours-673	Highlights Tours Smithsonian National Museum of Natural History	1	65
1163	https://naturalhistory.si.edu/events/highlights-tours-600	Highlights Tours Smithsonian National Museum of Natural History	1	65
1164	https://naturalhistory.si.edu/events/highlights-tours-605	Highlights Tours Smithsonian National Museum of Natural History	1	65
1165	https://naturalhistory.si.edu/events/highlights-tours-606	Highlights Tours Smithsonian National Museum of Natural History	1	65
1166	https://naturalhistory.si.edu/events/highlights-tours-607	Highlights Tours Smithsonian National Museum of Natural History	1	65
1167	https://naturalhistory.si.edu/events/highlights-tours-608	Highlights Tours Smithsonian National Museum of Natural History	1	65
1168	https://naturalhistory.si.edu/events/highlights-tours-601	Highlights Tours Smithsonian National Museum of Natural History	1	65
1169	https://naturalhistory.si.edu/events/highlights-tours-602	Highlights Tours Smithsonian National Museum of Natural History	1	65
1170	https://naturalhistory.si.edu/events/highlights-tours-603	Highlights Tours Smithsonian National Museum of Natural History	1	65
1171	https://naturalhistory.si.edu/events/highlights-tours-604	Highlights Tours Smithsonian National Museum of Natural History	1	65
1172	https://naturalhistory.si.edu/events/highlights-tours-609	Highlights Tours Smithsonian National Museum of Natural History	1	65
1173	https://naturalhistory.si.edu/events/highlights-tours-610	Highlights Tours Smithsonian National Museum of Natural History	1	65
1174	https://naturalhistory.si.edu/events/highlights-tours-611	Highlights Tours Smithsonian National Museum of Natural History	1	65
1175	https://naturalhistory.si.edu/events/highlights-tours-616	Highlights Tours Smithsonian National Museum of Natural History	1	65
1176	https://naturalhistory.si.edu/events/highlights-tours-617	Highlights Tours Smithsonian National Museum of Natural History	1	65
1177	https://naturalhistory.si.edu/events/highlights-tours-618	Highlights Tours Smithsonian National Museum of Natural History	1	65
1178	https://naturalhistory.si.edu/events/highlights-tours-619	Highlights Tours Smithsonian National Museum of Natural History	1	65
1179	https://naturalhistory.si.edu/events/highlights-tours-612	Highlights Tours Smithsonian National Museum of Natural History	1	65
1180	https://naturalhistory.si.edu/events/highlights-tours-613	Highlights Tours Smithsonian National Museum of Natural History	1	65

Same title (different date, as displayed on page), Naturalhistory.si.edu:



Findings: Meta Description

The crawl of *Naturalhistory.si.edu* reveals that 98% of the meta descriptions are missing from the site. The only items that contain meta description are videos embedded on a webpage. The shortest description is 77 character; the longest is 174 characters.

The descriptions that are included are very descriptive, specifically crafted to fit the video they are attached to.

Link-to-Meta Description, Naturalhistory.si.edu:

38	https://naturalhistory.si.edu/education/teaching-resources/earth-science/astrogeolo...	In this video, geologist Tim McCoy explains how meteorites compl...	1	150
39	https://naturalhistory.si.edu/education/teaching-resources/earth-science/mineral-de...	In this video, geologist Michael Wise explains the incredible qualit...	1	140
40	https://naturalhistory.si.edu/education/teaching-resources/earth-science/mineral-tra...	In this video, geologist Cara Santelli explains how microbes transf...	1	146
41	https://naturalhistory.si.edu/education/teaching-resources/life-science/ecosystem-c...	In this video, former botany collections manager Rusty Russell dis...	1	149
42	https://naturalhistory.si.edu/education/teaching-resources/social-studies/forensic-an...	In this video, forensic anthropologist Kari Bruwelheide explains w...	1	148
43	https://naturalhistory.si.edu/education/teaching-resources/life-science/butterfly-ada...	In this video, experts Eric Wenzel and Juan Pablo Hurtado Padilla...	1	143
44	https://naturalhistory.si.edu/education/teaching-resources/life-science/forensic-ornit...	In this video, Carla Dove shows how her lab uses evidence of bird...	1	143
45	https://naturalhistory.si.edu/education/teaching-resources/social-studies/culture-an...	In this video, Bill Fitzhugh shares how Arctic cultures have respon...	1	145
46	https://naturalhistory.si.edu/education/teaching-resources/social-studies/island-biod...	In this video, Archaeologist Torben Rick discusses archaeology, i...	1	149
47	https://naturalhistory.si.edu/education/teaching-resources/life-science/century-disco...	In this Smithsonian Science How video, Zoologist Dave Pawson s...	1	144
48	https://naturalhistory.si.edu/education/teaching-resources/paleontology/mass-extinc...	Get teaching resources about the extinction event that wiped out t...	1	174
49	https://naturalhistory.si.edu/education/teaching-resources/paleontology/fossilization...	Get teaching resources, including videos, lessons, and posters ab...	1	102
50	https://naturalhistory.si.edu/education/teaching-resources	Get science teaching resources created and curated by Smithsoni...	1	147
51	https://naturalhistory.si.edu/education/teaching-resources/earth-science/volcanoes-...	Get printable lessons, worksheets, and other resources about vol...	1	141
52	https://naturalhistory.si.edu/visit/accessibility	Get information about accessibility services for all visitors, includin...	1	150
53	https://naturalhistory.si.edu/education/professional-development	Get details about professional development offered by the museu...	1	86
54	https://naturalhistory.si.edu/education/family-programs	Get details about family programs and events, including The Worl...	1	147
55	https://naturalhistory.si.edu/education/youth-programs	Get an overview of youth programs offered at the museum. Youth...	1	149
56	https://naturalhistory.si.edu/education/school-programs	Browse science school programs offered at the museum. The sch...	1	127
57	https://naturalhistory.si.edu/education/distance-learning/smithsonian-science-how-...	Browse a video archive of Smithsonian Science How webcasts. T...	1	138
58	https://naturalhistory.si.edu/visit/visitor-tips	Before you visit the museum, find out which items are permitted in...	1	131
59	https://naturalhistory.si.edu/education/distance-learning/unlocking-hidden-worlds-th...	Archivist Molly Kamph uses archaeological artifacts to reveal insig...	1	140

Comparative Analysis

I've compared this Natural History Museum site (*Naturalhistory.si.edu*) with another educational museum site, The Franklin Institute (*Fi.edu*), looking specifically at how that site utilizes meta description. Unlike our target site, *Fi.edu* uses meta description for over 50% of its

pages. The description ranges from 7 characters to 658 characters. There is some repetition in meta description (in lists of awards, for example), but overall the meta descriptions are more detailed than the page titles. This is in stark contrast to *Naturalhistory.si.edu*, which has detailed titles but no meta description.

Link-to-Meta Description, FI.edu:

https://www.fi.edu/hipsterben/travel	Over his nine years in Paris, Benjamin Franklin became an extre...
https://www.fi.edu/laureates/ingrid-daubechies	Benjamin Franklin Medal (2011): For fundamental discoveries in t...
https://www.fi.edu/blog/creating-teslas-dream	FI's own Traveling Science Show educator, David Wrigley, takes ...
https://www.fi.edu/blog/will-concussion-blood-test-be-game-changer	The Food & Drug Administration (FDA) recently announced its ap...
https://www.fi.edu/blog/solstice-equinox	Astronomically, our planet's seasons change on four particular da...
https://www.fi.edu/educators/exhibit-resources	A trip to The Franklin Institute provides a wide variety of learning ...
https://www.fi.edu/educator-guides	A trip to The Franklin Institute provides a wide variety of learning ...
https://www.fi.edu/case-files/orville-wright-franklin-medal	Aviation pioneer Orville Wright was recognized by The Franklin In...
https://www.fi.edu/laureates/ahmed-h-zewail	Benjamin Franklin Medal (1998): For his application of ultrafast la...
https://www.fi.edu/laureates/ralph-l-brinster	Bower Award and Prize for Achievement in Science (1997): For w...
https://www.fi.edu/blog/games-in-game-masters	"Game Masters: The Exhibition," open at The Franklin Institute in ...
https://www.fi.edu/exhibit/game-masters/game-list	From the trailblazing arcade era through today's web and console...
https://www.fi.edu/laureates/ali-hasan-nayfeh	Benjamin Franklin Medal (2014): For the development of novel m...
https://www.fi.edu/laureates/kenichi-iga	Bower Award and Prize for Achievement in Science (2013): For th...
https://www.fi.edu/what-is-augmented-reality	Augmented reality (AR) is one of the biggest technology trends of ...

SEO

SEO relies not only on information in title text, but also on meta description tags. Because *Naturalhistory.si.edu* contains an extremely low amount of meta description, it cannot reach its full potential in SEO.

Conclusion and Recommendations

Naturalhistory.si.edu is woefully lacking in meta description. It's 2% meta description rate is disappointing, especially knowing that sites from comparable educational museums have a meta description rate of 50% and higher. The lack of meta description is detrimental to the organization's content strategy and marketing goals. Without the meta description, the museum's products and services are not being optimized in search engine results. Therefore, the museum is losing out on reaching potential audience and key demographics.

The next step for the Natural History Museum should be to revise the content created for the website, with a focus on meta description. The Content Team needs to set reasonable, manageable benchmarks for meta description updates. The Team should meet weekly in small groups to coordinate content updates.