



# NATIONAL GEOGRAPHIC

## ADPR 5750: SOCIAL MEDIA ANALYTICS FINAL REPORT

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# EXECUTIVE SUMMARY

## BUSINESS PROBLEMS

National Geographic is not the only organization focusing on topics such as science, history, and animals.

There is not enough positive sentiment regarding the organization. Most engagement is neutral which does not give incentive to donate or subscribe to the organization.

## OUR GOALS

Increase awareness and show that the organization stands for more than just animals.

Increase positive engagement.

Highlight which posts perform the best, so the organization can utilize those topics

# DATA OVERVIEW

## Owned Data

The organization's Twitter page was analyzed using Brandwatch from January 1, 2020 - September 13, 2020. In total, there were 58,268 posts.

## Earned Data

Twitter, Tumblr, and Reddit were analyzed. In total, there were 618,989 mentions.

## Competition Data

Posts from National Geographic's top competitors, Travel Channel and New Scientist, were analyzed.

# EXECUTIVE SUMMARY

## KPIS

Engagement on Twitter was used to assess the organization and its performance. Specifically, likes, retweets, and other interactions with the post were analyzed.

## KPI Goals

To determine the optimal post length and hashtag use that spike engagement

To increase the use of content that spikes user engagement

# EXECUTIVE SUMMARY

## KEY INSIGHTS & RECOMMENDATIONS

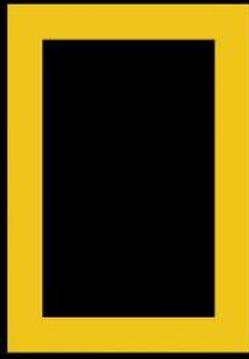
Continue **utilizing Twitter**, as this is the platform that receives the most engagement.

Continue tweeting about **animals**, particularly those featured in a video medium.

Eliminate or **lessen the use of hashtags**.

Take advantage of **political turmoil** to attract new audiences but remain as neutral as possible.

Consistent **COVID-19** coverage will keep engagement rates high.



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# **OWNED DATA: Twitter**

**JANUARY 1, 2020 -  
SEPTEMBER 13, 2020  
@NatGeo**

# QUESTIONS ADDRESSED

- What type of **content** generates the most engagement?
- What type of **media** generates the most engagement?
- Do **hashtags** play a role in engagement?

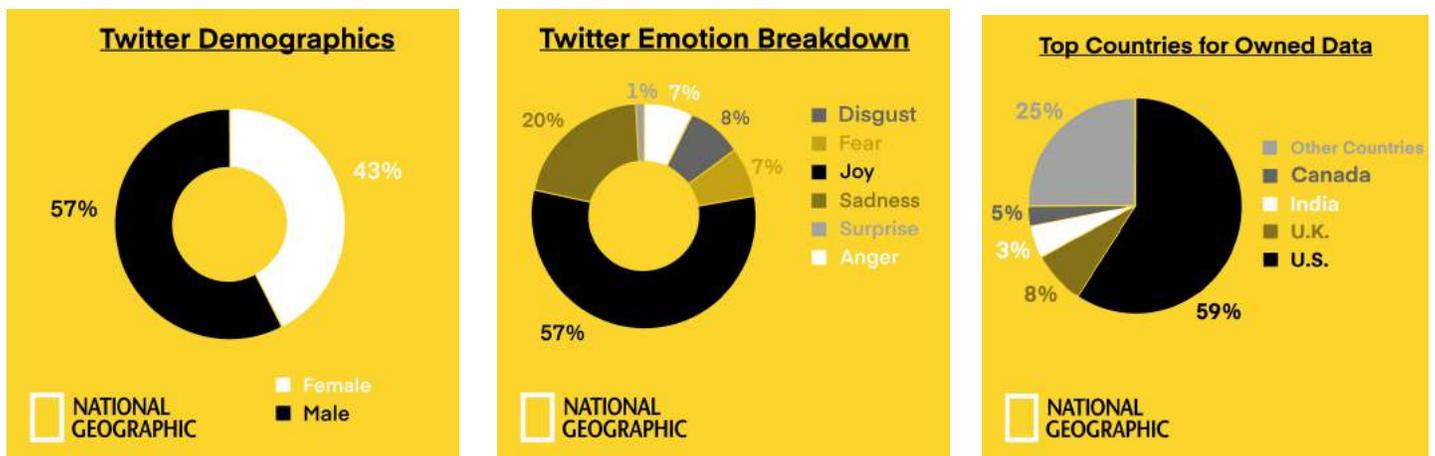
# TWITTER ENGAGEMENT

## DESCRIPTIVE ANALYTICS

Twitter Handle: @NatGeo

Dates Analyzed: Jan 1, 2020 - Sept 13, 2020

Total volume: 58,268 posts



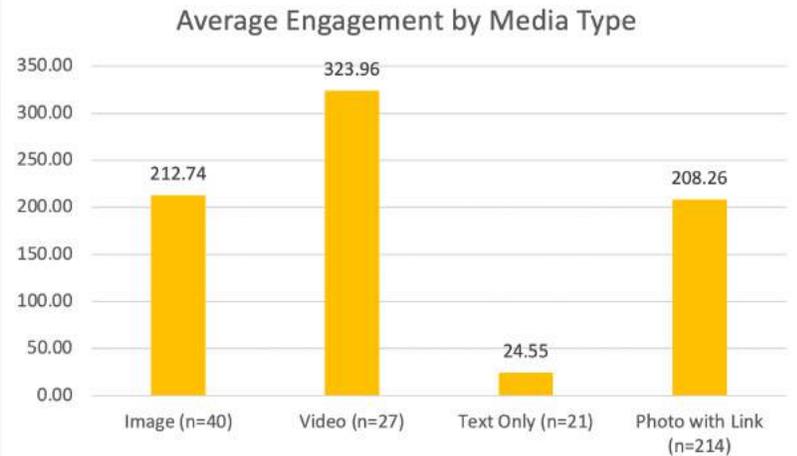
### Key Insights

**Media Engagement:** While photos with an embedded link make up the majority of National Geographic's twitter feed, videos receive a much higher engagement.

**Content Engagement:** It is evident that animal and environment related content receive the most engagement.

**Hashtag Engagement:** Hashtags have similar engagement rates. Prioritizing one hashtag over another has little to no effect on follower reactions.

# TWITTER ENGAGEMENT: MEDIA TYPE



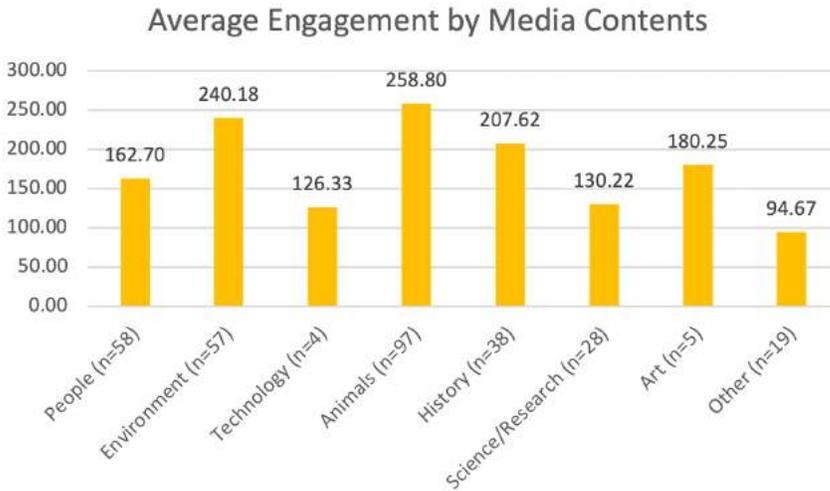
## ACTIONABLE INSIGHT:

Video posts received more engagement than posts with images, photo embedded links, and text-only posts. Video posts received 43.48% more engagements than photos with an embedded link.

## RECOMMENDATION:

Scale back the number of photo-embedded link posts and focus more on video posts in order to increase overall engagement.

# TWITTER ENGAGEMENT: MEDIA CONTENTS



## ACTIONABLE INSIGHT:

Posts containing animals and the environment received the most engagement out of all other media contents. On average, tweets with animals got 68.79% more engagements than tweets with technology.

## RECOMMENDATION:

Continue creating animal content and environment content in order to maintain the same levels of engagement.

# TWITTER ENGAGEMENT: HASHTAG TYPE

## ACTIONABLE INSIGHT:

#sponsored posts receive the most engagement, due to an outlier post about Disney's Mulan. Branded content received the second most engagement (ex: #BigCatWeek). "Other" hashtags included #mfnfp (Murchison Falls National Park) and #makereruniversity.



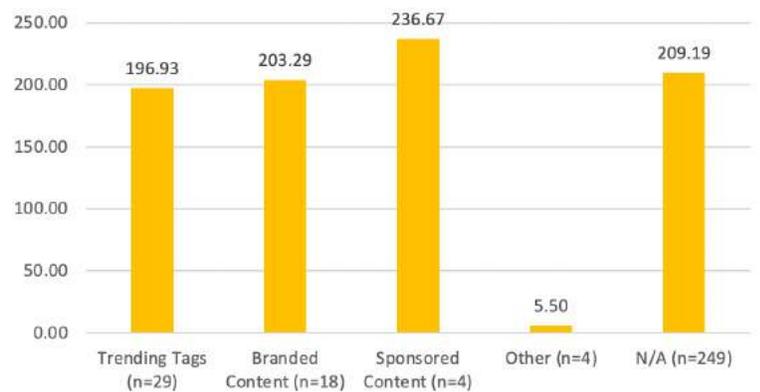
A remote camera captures a mountain lion, Puma councilor. Learn more about how Nat Geo is working to save big cats here: [on.natgeo.com/2DpimbB](https://on.natgeo.com/2DpimbB) #BigCatWeek



## RECOMMENDATION:

Use hashtags sparingly. Limit hashtags to trending tags only in order to insert Nat Geo into trending conversation. Creating more sponsored posts could help increase overall engagement.

Average Engagement by Hashtag Type



# OWNED DATA: RECOMMENDATIONS

Continue to utilize posts focusing on **animals.**

Partner with brands like Disney to create **sponsored posts and hashtags.**

Increase the number of **video posts.**



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**NAT GEO EARNED DATA:  
CROSS-PLATFORM  
CONVERSATION**

**JANUARY 1, 2020 -  
SEPTEMBER 13, 2020**

# QUESTIONS ADDRESSED

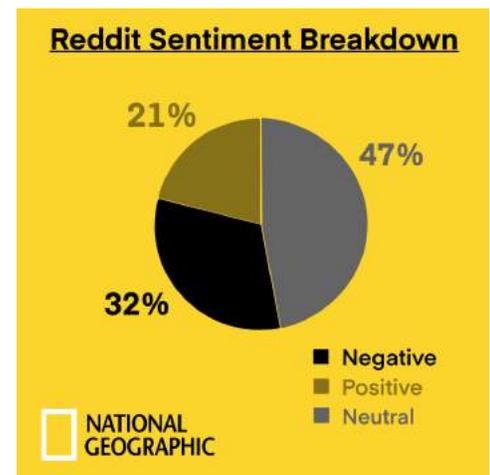
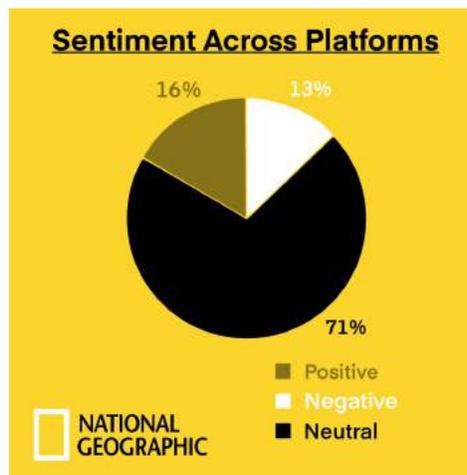
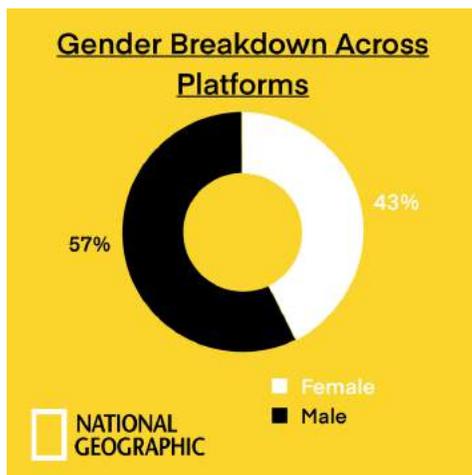
- **When** do users typically talk about the organization?
- **What topics** are users discussing?
- **How** is the conversation different across platforms?

# NAT GEO CONVERSATION: ORGANIZATION DATA

Dates Analyzed: Jan 1, 2020 - Sept 13, 2020

Mention Volume: 618,989

Platforms Used: Twitter (89.9%), Reddit: (9.5%), Tumblr (4.5%)



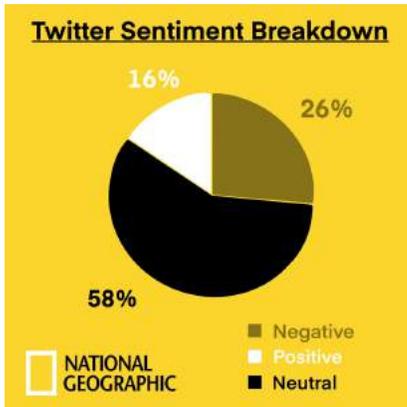
## ACTIONABLE INSIGHT:

Most of the conversations across platforms are “neutral.” However, positive and negative mentions predominantly focus on climate change and Covid-19. For example, some people believe the government should listen to scientists while others do not, resulting in charged opinions across platforms.

## RECOMMENDATION:

The organization should post about political and environmental issues as long as they keep its opinion neutral and let users fuel opinionated commentary.

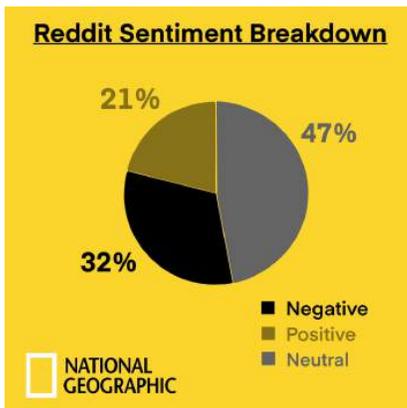
# NAT GEO CONVERSATION: ANALYSIS OF ORGANIZATION EARNED DATA BY PLATFORM



Total Mentions: 415,379

Gender Breakdown: 46% Female, 54% Male

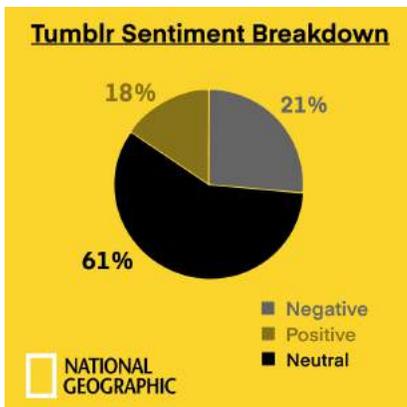
Highest Volume: Monday & Tuesday at 6pm



Total Mentions: 45,636

Gender Breakdown: 45% Female, 55% Male

Highest Volume: Saturdays at 1pm



Total Mentions: 21,658

Gender Breakdown: 45% Female, 55% Male

Highest Volume: Thursday & Friday at 3pm

Across all platforms, more negative sentiment appears when compared to positive sentiment. This is most likely due to the fact certain topics like Covid19 and BLM are negatively charged subjects.

# NAT GEO CONVERSATION: KEY INFLUENCERS

## Twitter

 mmpadellan	twitter.com	1
 shailjapatel	twitter.com	2
 JustinBrannan	twitter.com	1
 adli_deli	twitter.com	1
 RaheemKassam	twitter.com	3



Twitter's key influencers reach way more users.

## Reddit

 -en-	reddit.com	17	0
 -paul-	reddit.com	8	0
 -P-M-A-	reddit.com	4	0
 -Bush-Wookiee-	reddit.com	3	0
 -jsm-	reddit.com	3	0
 --Yami_Marik--	reddit.com	2	0

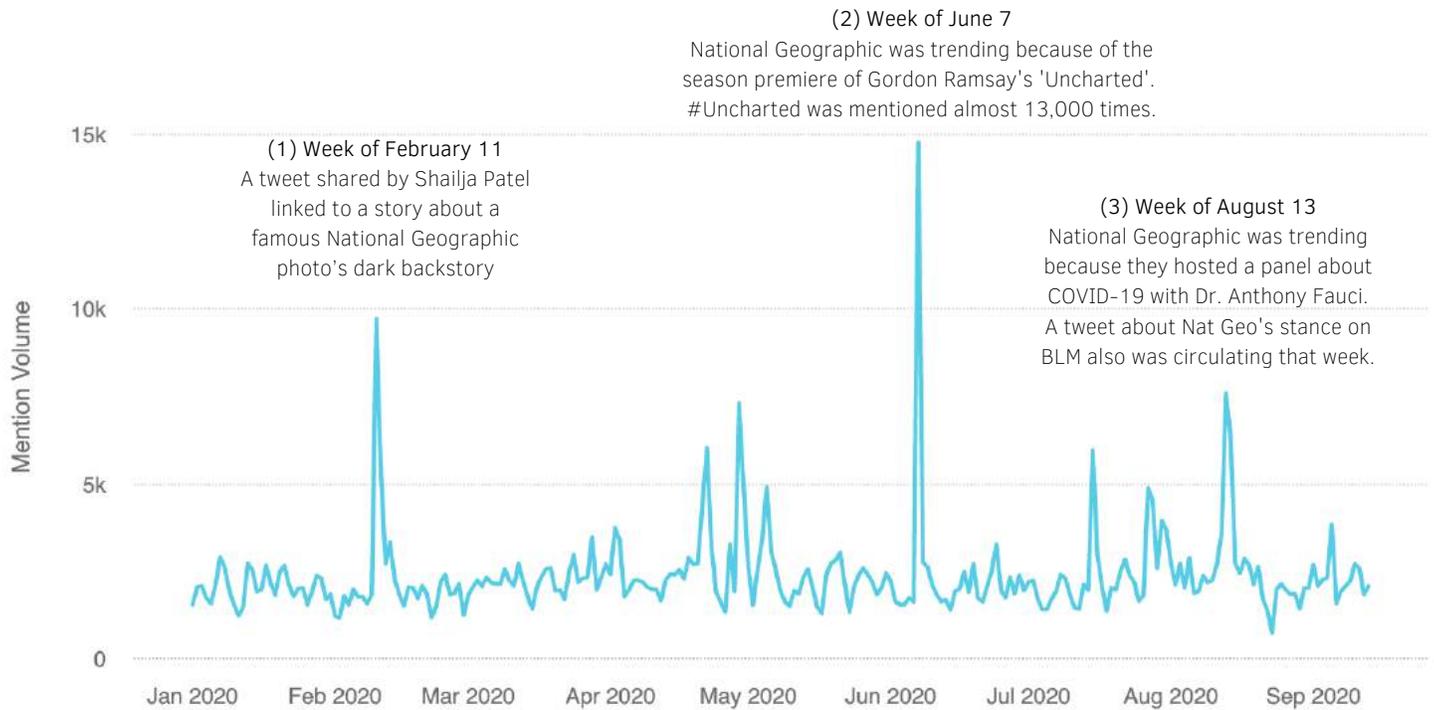


The influencers are involved in the political conversations.

## Tumblr

 3cinematographe	tumblr.com	22	0
 2020tech	tumblr.com	13	0
 24newsorder	tumblr.com	11	0
 100pdf	tumblr.com	9	0
 1canadienconfidence3	tumblr.com	8	0
 121kiwi	tumblr.com	6	0

# NAT GEO CONVERSATION: ORGANIZATION SPIKE ANALYSIS



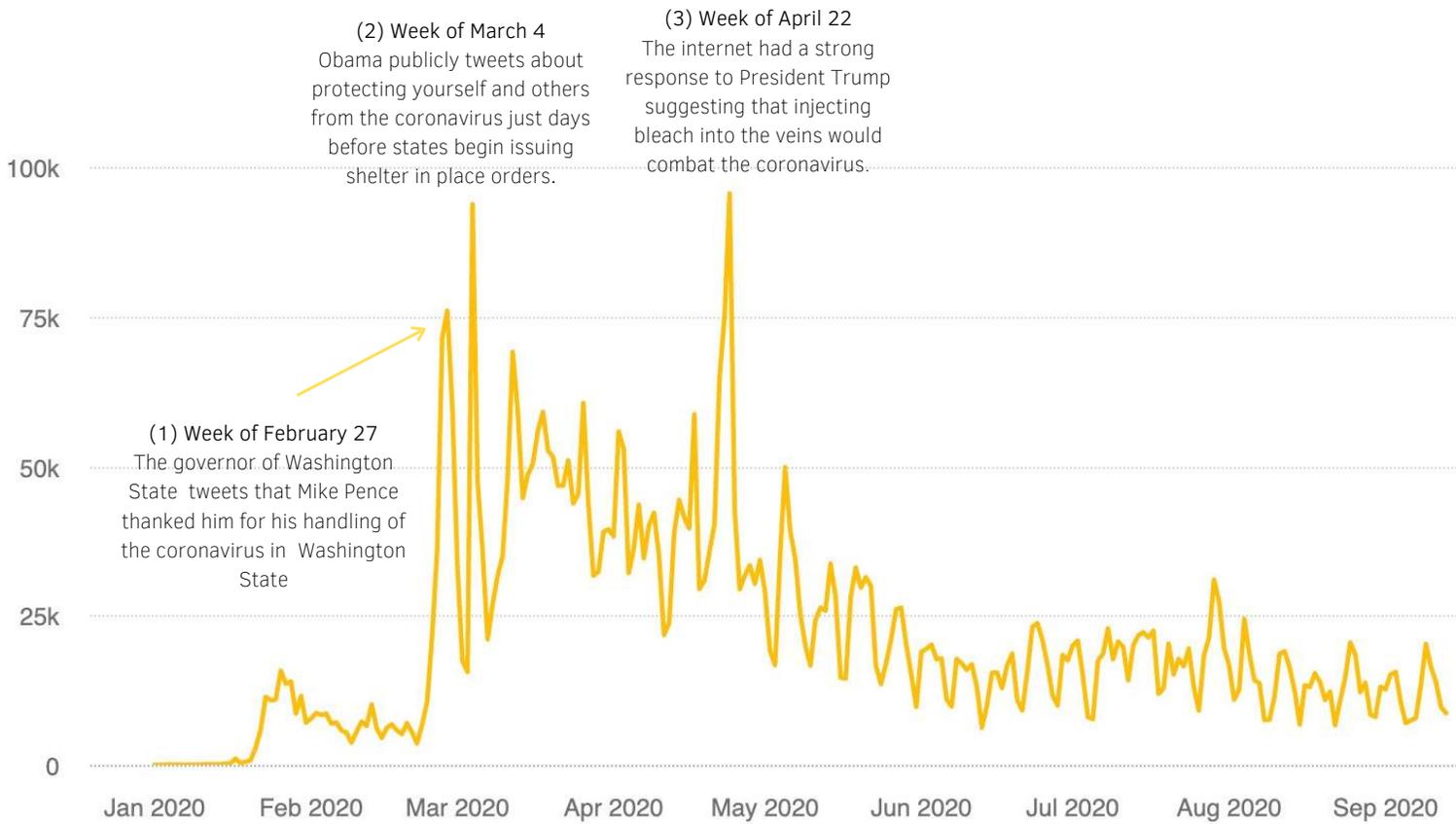
## ACTIONABLE INSIGHT:

Spikes in the conversation regarding National Geographic occur and are triggered by the political atmosphere, historical events, and celebrities.

## RECOMMENDATION:

The organization needs to take advantage of worldly issues and topics when relevant to its cause and mission statement.

# CONVERSATION ACROSS PLATFORMS: COVID-19



(1) **Jay Inslee** @JayInslee

I just received a call from @VP Mike Pence, thanking Washington state for our efforts to combat the coronavirus.

I told him our work would be more successful if the Trump administration stuck to the science and told the truth.

11:09 PM · Feb 27, 2020

300.2K See the latest COVID-19 information on Twitter

(2) **Barack Obama** @BarackObama

Protect yourself and your community from coronavirus with common sense precautions: wash your hands, stay home when sick and listen to the @CDCgov and local health authorities. Save the masks for health care workers. Let's stay calm, listen to the experts, and follow the science.

11:52 AM · Mar 4, 2020

596.6K See the latest COVID-19 information on Twitter

Posted by u/DonnyMoscow1 9 months ago

69.0k

**Ocasio-Cortez Says Putting Pence in Charge of Coronavirus Effort Is 'Irresponsible' Because He 'Literally Does Not Believe in Science' — "This decision could cost people their lives. Pence's past decisions already have."**

commentdreams.org/news/2...

4272 Comments Share Save Hide Report 84% Upvoted

(DonnyMoscow19)

## Trump's rot (Karadin)

Trump-appointed officials at the US Department of Health and Human Services sought to change language within weekly science reports released by the US Centers for Disease Control and Prevention.

political appointees in the Department of Homeland Security instructed career officials to **modify intelligence assessments to downplay Russia's efforts to interfere in the US election and the threat of White supremacists**

Trump and his Postmaster General Louis DeJoy, a major Trump donor, to **undercut the operations of the post office at a time when an unprecedented number of Americans hope to vote by mail to avoid exposure to the coronavirus at the polls.**

# CONVERSATION ACROSS PLATFORMS: COVID-19 (cont.)

(3)



I'm 16 years old.

According to this, my chances of even going out and getting exposed to the virus are about 1 in 7,452.

After that, when I test positive, my chances of dying are about 1 in 127,628.

So you multiply the 2 numbers... the overall chance of me actually catching this virus and dying is about 1 in 951,099,677. Nearly 1 in a billion.

Now of course the math might be different because I live in a different area, but according to this statistic, for reference, I am almost 4x as likely to win the Powerball.

I'm about to go buy a lottery ticket and lick the fucking cash register now.



(YeahItsKamran)

**ACTIONABLE INSIGHT:** Many COVID-19 related posts across platforms are opinionated and politically charged. These types of posts make up many of the negative and positive topic posts.

**RECOMMENDATION:** National Geographic should continue to cover COVID-19 in a factual, non-biased way in order to prevent contributing to the polarizing social landscape.

borkthegee 91 points · 9 months ago

I live in Atlanta near the CDC and my SO works at the CDC -- there isn't a lot of people on the infectious disease team right now and they've pulled in a few more but they're terribly understaffed and working dangerously long shifts, early as possible until midnight over and over...

How sadistic that Republicans fire the National Security pandemic team, then drop funding for global infectious disease response by 80% including dropping China from our coverage, then over-work the few poor bastards who are left serving our country, and finally throw them under the bus for not being loyal enough

This is what bad government looks like. This is a complete and total failure by Trump. He fired the response team. He slashed the budget for response. And now that there is a disaster, he's weirdly downplaying it for short term political points while putting a science denying radical in charge of the scientists and doctors who are trying to help.

When Covid-19 hits America like a fucking curb stomp, we'll have Donald J Trump to blame for the deaths. This is his Katrina, and it'll very likely be far worse for America than Katrina.



(borkthegee)

## China, Home of COVID-19, Turns to 'Mask Diplomacy' to Burnish Image

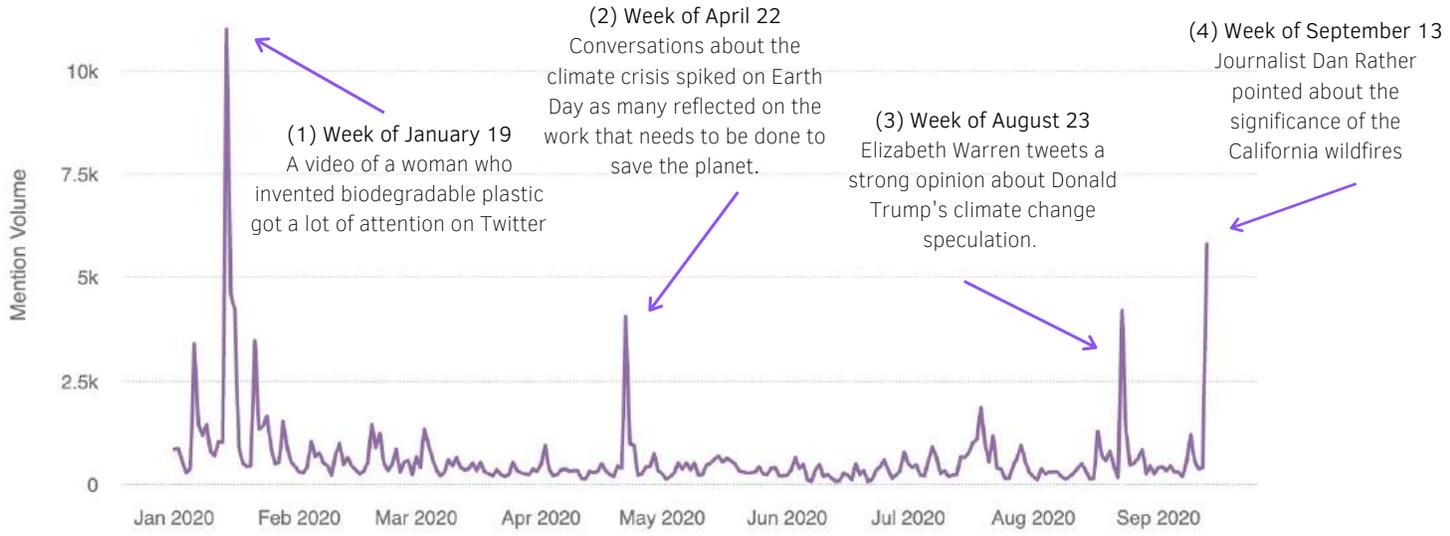
In an effort to overcome its image as the home of two 21st-century pandemics, China has launched a humanitarian aid blitz by donating face masks, gloves and other medical supplies to countries hit hard by the coronavirus.

With the aid, China is looking to recast itself as "a responsible power," according to experts, some of whom doubt Beijing's so-called "mask diplomacy" will restore an image clouded by suspicions of a government cover-up. A [British study](#) suggested that if China had acted sooner, the number of coronavirus cases could have been reduced by 95% and its geographic spread limited.



(omgstupendousbouquetbasement)

# CONVERSATION ACROSS PLATFORMS: CLIMATE CHANGE



**Dan Rather** (4)  
@DanRather

California and the West are aflame. The climate crisis is real, and it's here. Devastation, hardship, and uncertainty. We need a future built on science, resilience, ingenuity and grit. If anybody can lead on this, it's our Western states. America needs you, and we're with you.

10:30 AM · Sep 13, 2020

34.4K 7.2K people are Tweeting about this

**GEORGIA BROWN** (1)  
@jadoregeorgia

FUND THIS.

FUND HER.

FUND INITIATIVES THAT AIM TO TACKLE CLIMATE CHANGE.

FUND WOMEN IN SCIENCE

Joe Biden is passing up a chance to make fighting climate change the centerpiece of his campaign, environmentalists say, at time when wildfires have incinerated an unprecedented 3 million-plus acres in California, a record hurricane season is battering the Southeast and one of the worst windstorms ever to hit Iowa caused \$4 billion in damage.

The reason he hasn't, they say, is political.

Elevating climate change into a top priority doesn't help the Democratic presidential nominee in states that are competitive in the November election — and those don't include California or Oregon, a state where 40,000 people were under evacuation orders Friday because of wildfires. In some swing states, including Pennsylvania, where support for fracking is solid because thousands of jobs depend on it, going too green could damage Biden's slim lead.

**t** (Not-JoeBiden)

**This UK student has created a bioplastic that breaks down in just 6 weeks**

# CONVERSATION ACROSS PLATFORMS: CLIMATE CHANGE (cont.)



natasharxmanov

i don't think people get what these fires mean for California.

the fight against climate change is not "for the future" or "coming up"

no. it is now. for california, for me, for the 37 fucking million of us who live here, it is now. it is now. it is fucking now. there is smoke blanketing my entire city. the other day there was ASH FALLING FROM THE SKY. there are people who are living with red, terrifying smoke, right outside their front doors. i can't open a window because it all smells like a fucking fire. the sky is entirely grey, because it's all fucking smoke. my entire fucking STATE is affected by this shit. my STATE.



(natasharxmanov)



Dan Rather (2)

@DanRather



Earth needs far more than just a day. It needs us to change our mindset. Remember that many of those calling the climate crisis a hoax said the same thing about the coronavirus. Let's ignore them and listen to science. Let's open our minds on how to protect the only home we have.

2:55 PM · Apr 22, 2020



6.2K



See the latest COVID-19 information on Twitter

Webimpulse 1 point · 2 months ago

Okay, so I should've led off with "scientists" instead of "science," but my point still stands. Most Redditors would rather watch humanity go extinct instead of trying to add anything constructive. They don't want scientists to solve anything. They're waving the collective "give up" flag.

I don't know about you, but I'm not giving up on humanity and the planet that easily. To that end, I've gone completely car-less. Don't own a car, never intend to. I rely almost completely on public transport in my area. I'm not completely vegan (yet) but I'm also eating more vegetarian and vegan meals than I used to.

Just because things look bleak doesn't mean we should automatically give up. That's doing your fellow human a disservice.



(Webimpulse)



Elizabeth Warren (3)

@ewarren



Donald Trump is the most anti-science and anti-environment president our nation has ever known. It's destroying our climate and destroying our communities.

The climate crisis is an existential threat—and we can't afford four more years of denial and sabotage.

12:04 PM · Aug 23, 2020



29.4K



6.1K people are Tweeting about this

**ACTIONABLE INSIGHT:** Many conversations about climate change have a negative tone and posts have the tendency to cause anxiety.

**RECOMMENDATION:** National Geographic should highlight their efforts to combat and educate others about climate change in order to provide a sense of calm.

# NAT GEO CONVERSATION: KEY ACTIONABLE INSIGHTS

**Twitter** generates the most engagement out of these 3 platforms: Twitter, Tumblr, Reddit.

**More negative sentiment appears when compared to positive sentiment.** This is most likely due to the fact certain topics like Covid19, BLM, and climate change are negatively charged subjects.

The content mentioning the organization receives the most engagement if posted about on **Monday and Tuesday at 6pm.**

# NAT GEO CONVERSATION: RECOMMENDATIONS

Because it is the platform that generates the most engagement, the organization should continue to **utilize Twitter.**

The organization should post on **Mondays and Tuesdays at 6pm.**

Make sure the organization has **engaging, relevant content** to post even in times when society is not politically and socially charged.

**Use caution** when getting "involved" in the political conversation.



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**NAT GEO  
COMPETITION  
ANALYSIS**

**JANUARY 1, 2020 -  
SEPTEMBER 13, 2020**

# QUESTIONS ADDRESSED

- **When** are our competitors predominantly **posting**?
- What are our **competitors talking about** that we are not?
- **What** are our competitors posting about that receives a spike in engagement?

# COMPETITIVE ANALYSIS

## New Scientist

**Volume:** 77,981 posts  
**Average RTs Per Post:** 20  
**Average Likes Per Post:** 97  
**Optimal Post Time:** Tuesday at 6 am  
**Top Hashtag by Engagement:** covid19  
**Most Engaging Post Type:** Text  
**Most Frequent Post Type:** Text (88%)



## Travel Channel

**Volume:** 24,897 posts  
**Average RTs Per Post:** 16  
**Average Likes Per Post:** 122  
**Optimal Post Time:** Friday at 10 am  
**Top Hashtag by Engagement:** destinationfear, mostterrifying, trvlbigfoot  
**Most Engaging Post Type:** Text  
**Most Frequent Post Type:** Text (69%)



## Nat Geo

**Volume:** 58,268 posts  
**Average RTs Per Post:** 89  
**Average Likes Per Post:** 593  
**Optimal Post Time:** Friday at 10pm  
**Top Hashtag by Engagement:** covid19, wildlifeconservationday, pearlharbor79  
**Most Engaging Post Type:** Text  
**Most Frequent Post Type:** Text (61%)



# ACTIONALABLE INSIGHTS



NatGeo's followers engage with **its content** the most, when compared to its competitors.



Top hashtags engaged with pertain to **specific events and days.**



NatGeo tweets about **worldly issues** while competition focuses more so on their programming.

## RECOMMENDATION



NatGeo should continue to **utilize Twitter and post on the weekends** about content that pertains to specific events and **worldly topics** like Covid19.

# APPENDIX

## Organization Data

@nationalgeographic OR "National Geographic" OR  
"National Geographic Channel" OR "Nat Geo"

## Topic Data

"science magazine" OR "science article" OR geography OR  
geology OR wildlife OR oceans OR "climate change" OR ((Climate  
Change") AND "national geographic") OR (exploration AND  
travel) OR "history & culture" OR science OR "wildlife watch" OR  
"pet stories" OR "weird & wild stories" OR "animal facts &  
pictures" OR "race in america" OR "support our mission" OR  
((covid OR covid-19 OR #COVID19 OR coronavirus OR  
#coronavirus) AND "national geographic")

## Competition Data

@newscientist OR "new scientist" OR @travelchannel OR  
"travel channel" OR @discovery OR "discovery channel"