Final Report:

NATIONAL WILDLIFE FEDERATION



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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

In this report we analyzed Earned, Owned, and Topic Datasets for the National Wildlife Federation (NWF) from January 1st, 2021 to January 1st, 2022. We used Brandwatch to examine the data and arrange twelve recommendations for the National Wildlife Federation. Most of our information and recommendations are in regards to Twitter, and some from Reddit, as data from Facebook and Instagram was little to none. We also used two other social media insight tools that included Brand24 and Social Bearing. Brand24 has a three month insights limit; however, we implemented it where applicable. With data collected from the various third party sites, we focused on crafting recommendations that are targeted towards increasing overall engagement, increase positive sentiment towards the organization, and lastly, increase the organization's participation with its followers

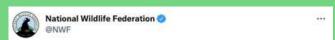
NWF's Business Problems:

- Low engagement across NWF accounts
- Little to no original content posted on platforms other than Twitter
- Little attention given to major political issues like climate change and only a small portion of audience is involved in this discussion
- Not enough funding to support movements, NWF needs higher engagement to increase donations



"I see this as a deeply sad vision for our future. But I also see it as a call to action. There's mitigation measures we can take to save the salmon, to cool our rivers." — Brett VandenHeuvel, the executive director of @ColumbiaRKeeper

Type of theme: scientific opinion



BREAKING: @SenatorBennet & @MartinHeinrich introduced a bill to address the significant backlog of water infrastructure projects in tribal communities & provide clean water to the overwhelming number of Native American households who currently lack access. ow.ly/chT150FAwI9



Type of image content: nature scene



BREAKING: @MartinHeinrich & @RoyBlunt introduce Recovering America's Wildlife Act in the Senate.

@NWF CEO @Collin_OMara called the proposal "by far the most important piece of wildlife legislation in the past half century" via @WSJ ow.ly/kp2u50FA6XU



Type of image content: land animals

What to do:

- Increase engagement on tweets that showcase photographs of nature scenes and various wildlife.

How to do it:

- Continue to share photographs in tweets, but supplement them with scientific opinions or research based on what is shown in the image.

- Most of NWF's tweets include photographs of either nature scenes (n=25), land animals (n=40), or aquatic species (n=12). Each of these categories average low levels of engagement, with nature scenes averaging 12.36 retweets, land animals averaging 11.43 retweets, and aquatic species averaging 11.42 retweets.
- NWF's tweets that include scientific opinions and research earn exceptionally high levels of engagement compared to their other tweets' themes, averaging 18.28 retweets.
- Owned Dataset



Did you know red-headed woodpeckers store their food and hide it under bark in trees? • •

Red-headed woodpeckers are medium-sized with fairly large, rounded heads, short, stiff tails, and powerful, spike-like bills.

: Jessica Bolser/USFWS



Type of theme: nature related holidays



"These investments, funded through the bipartisan Infrastructure Investment and Jobs Act, are an important step to supercharge our transition to electric vehicles & away from vehicles whose emissions threaten the environment." - @EJinAction

Read more 📲:



nwf.org

NWF | National Wildlife Federation

The Biden Administration's plan to invest nearly \$5 billion in electric vehicle charging stations and infrastructure will encourage Americans to go electric an...

Type of mention: associated experts

What to do:

- Increase engagement on tweets that mention associated NWF experts or intra organizational accounts.

How to do it:

- Continue to mention NWF experts and intra organizational accounts specifically on nature related holidays.

Supporting Insights:

- Posting more content from associated experts or intra organizational accounts would be beneficial for the National Wildlife Federation. Posts including any mention time are seemingly more interacted with in comparison to posts without a mention. Tweets posted with the mention of an associated expert average 14.30 retweets, and intra organizational accounts fall closely behind with 13.56 retweets.
- Using content in regards to associated experts is going to encompass trust in the viewers, as they will know that the content they are digesting is backed by professionals that are educated on the subjects. By tweet theme type, nature related holidays have a lower average retweet count than other tweet themes with an average of 8 retweets. So using associated and intra organizational experts in conjunction with nature related holidays will increase overall engagement.

- Owned Dataset

Engagement Comparison





NWF | National Wildlife Federation

Without swift action to curb emissions, climate change will continue to fuel the extreme weather events devastating people and wildlife alike, according to a ne...

Political Tweet Linking to NWF Website Retweets: 10



The Recovering America's Wildlife Act would be a game-changer for at-risk wildlife in every state, territory, and Tribal Nation.

@NPR covered the importance of this legislation, introduced by Senators @RoyBlunt & @MartinHeinrich.

#RecoverWildlife #ProtectOurWildlife



Political Tweet with Video Retweets: 127

What to do:

- Increase engagement levels for posts regarding politics and/or climate change.

How to do it:

- Include videos or nature scene images as supplemental media rather than only linking to the NWF website.

- Politics = 4th most retweeted theme with 9.33 on average
 - Most paired with a URL target of a specific page on the NWF website, - gets 10.42 retweets on average, consistent engagement
- Videos received the highest retweets on average at 24.68, roughly 12 higher than the next category
- Using a video related to the political campaign being tweeted about would draw more engagement for important campaigns
- Owned Dataset









What to do:

- Create more contests and interactive posts.

How to do it:

- Increase how frequently the organization has a photo contest, or implement new kinds of contests. For example, a short story or article contest where the winner will have their article featured on NWF's website.

- NWF's photo contest is one of the highest engaged post types on Twitter. Contests are highly interactive as people post their submissions and mention NWF. Several people participate in these contests so having more of them like their photo contest will increase the organization's mentions overall.
- Earned Dataset



Success story

I have recently completed a re-landscaping project around my home and I'm so frickin proud to post this sign out front!
* * * * * * * * * * * * * * * * * Because of the owner's conscientious planning, landscaping, and sustainable gardening, wildlife will find quality habitat here- food, water, cover, and places to raise their young" Shout out to the National Wildlife Federation and their Garden for Wildlife program!

https://imgur.com/a/nAcTXes

33 Comments

Award

Example of a Post from r/GardenWild



SolariaHues MOD 🦁 · 2 yr. ago · Stickied comment
SE England 📞

Where to certify

https://www.nwf.org/CertifiedWildlifeHabitat

Recent AMA with David Mizejewski National wildlife federation naturalist

https://www.reddit.com/r/GardenWild/comments/gbjq uv/im_david_mizejewski_ama_about_how_to_create_a/

Sticked Comment linking to NWF Website Application and recent content



What to do:

- Utilize the NWF Wildlife Habitat Certification Application as a way to draw more social media activity.

How to do it:

- Include the application URL link in every relevant tweet
- Publicize URL link on regional native plant resources for this same audience
- Engage with subreddit r/Garden Wild

- The URL link that produced the most social media activity was the application page for an NWF Certified Wildlife Habitat yard.
- The application is the most popular NWF topic of conversation of Reddit, and an entire subreddit (r/Garden Wild) is dedicated to the practice of native planting and becoming certified 45.9k members.
- Men and women alike are interested in native planting.
- Pollinators and manners in which to protect them cause spikes in discussion and social media activity.
- Earned Dataset







What to do:

- Engage in political news about environmental justice but avoid sharing controversial opinions.

How to do it:

- As current events surrounding national parks and political figures take place, share the stories in a news-like format.
- This allows audiences to engage with your content without the organization being held liable for opinions.

- Posts with neutral sentiment regarding political conversations are more likely to be shared and mentioned.
- This allows the audience to share your content because it is unbiased and they will likely form their own opinion on the matter by sharing the organizations post which is strictly factual.
- Earned Dataset









e360.yale.edu

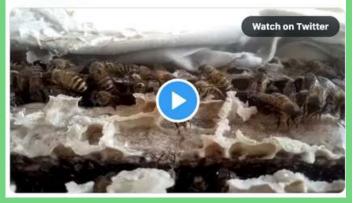
Amid Climate Pressures, a Call for a Plan to Move Endangered Species

The conservation community has fiercely debated whether to help
species move as climate change and habitat loss threaten more ...



Apis cerana inside wood hive. The indigenous honey bee of #Pakistan. Climate change and Habitat loss is mainly affecting the population.

#honey #bees #savethebees #climate #biodiversity #biodiversité #buzz #pollinations #nature #agriculture #conservation



What to do:

- Get more people to engage in the conversation about climate change.

How to do it:

- Post more content regarding climate change. This includes posting links to articles that report on the topic, and posting scientific data and statistics to grab the audience's attention and stir up conversation.

- As reported on page 19, the number of mentions within the climate change theme are on the low end compared to the other top themes. Many people are deeply concerned about climate change and are eager to learn more about the effects of climate change, and to learn about how we can reverse these effects.
- Topic Dataset







What to do:

- Talk more about conservation by using specific examples of real life events and places.

How to do it:

- Use subcategories like climate change and global warming in regards to actual examples of what is really happening and how it can effect people.

Supporting Insights:

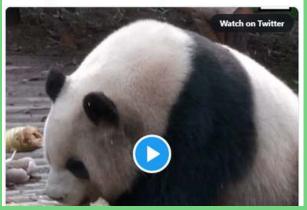
- Retweets and mentions are high when people are given real life scenarios. For example, when the poor air quality of New York is brought up in regards to climate change and rising greenhouse gases, tweets are much more impressionable in comparison to when topics are only vaguely talked about with no real life examples.

- Topic Dataset

3 popular tweets about Endangered Status



Here's some happy news: Giant pandas are no longer an endangered species! Thanks to conservation efforts, the vulnerable animal has seen its population rise to 1,800, according to Chinese officials 💀





BREAKING NEWS!

Red wolf Deven can no longer call the Wolf Conservation Center home - today, the critically endangered 3-year-old is a WILD WOLF! 7 other wolves were released too.

There are so many of us cheering for you, Deven!

Stay strong. Be wild.

bit.ly/2RLnDRt





Happy #PandaDay 💀 The #GiantPanda is a powerful symbol for nature conservation. Pandas were downgraded from 'Endangered' to 'Vulnerable' on the global list of species at risk of extinction in 2016. But there is still more work to be done to protect this iconic species



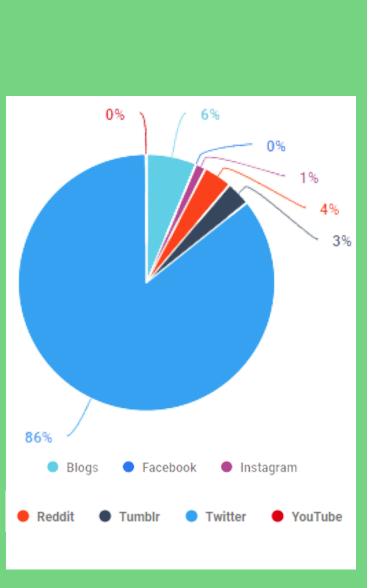
What to do:

- Increase general social media activity by engaging with Animal Conservation more heavily.

How to do it:

- Keep NWF audience updated about the extinction and endangerment status of animals. There is always an opportunity for engaging content because this subject is vast

- Many posts with the highest social media activity, within the Environmental Conservation and Endangered Animals themes, and the general Conservation data set, were about endangered animals' status
- The Giant Panda no longer being extinct was one of the most engaged topics and had several large news organizations utilizing links from organizations like NWF
- Audience is concerned both negatively and positively about the dangers and celebrations of success (page 20, 21)
- Competitors utilize endangerment + photos in this way successfully (left)
- Topic Dataset



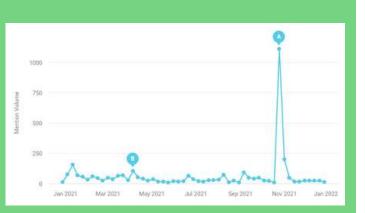
What to do:

- Reach more people and earn more mentions overall.

How to do it:

- Prioritize creating and sharing new content on multiple social media platforms. NWF's Twitter earns very high numbers of mentions and engagement overall, but their engagement across all other social media accounts are shockingly low.

- As reported on page 7, Twitter gets the most mentions at 86% of the total number of mentions in the dataset. If NWF could reach more people through various platforms, they would multiply the number of people who view their content and the number of people who engage with it.
- Topic Dataset



Spike Analysis showing increase activity in comparable organizations when K-Pop celebrity adopts from WWF (World Wildlife Fund)



Tweet of K-pop fans engaging in talk about the WWF adoption which increases WWF exposure

What to do:

Engage with pop culture celebrities to increase engagement across NWF platforms.

How to do it:

Develop relationships with pop culture celebrities to organize partnerships and giveaways that relate to the promotion of NWF campaigns.

Supporting Insights:

When looking at comparable organizations to NWF, most engaged posts that mention the comparable organizations are associated with K-pop stars.

Associating with pop culture celebrities will spread NWF to an audience it would not normally be exposed to.

-Competition Dataset



WWF Twitter account that has roughly 3.2 million more followers than NWF

Congrats to the Democratic Republic of Congo! Salonga National Park is removed from the World

Heritage in Danger list after progress in stopping oil concessions & rampant poaching threatening local



Potential topic from WWF that NWF could collaborate with, as it falls under NWF's mission, too.

What to do:

Partner with the World Wildlife Fund on issues that are relative to both organizations (NWF and WWF).

How to do it:

Contact WWF to see what issues they both advocate for and where some might overlap with both orgs, then create content on both of the organizations' accounts.

Supporting Insights:

In regards to comparable organizations, the World Wildlife Fund is by far the organizations with the most social media activity, with most of their sentiment being neutral. Gaining some of their audience on issues that relate to both organizations would be beneficial for NWF's overall exposure.

-Competition Dataset

NATIONAL WILDLIFE

FEDERATION'S

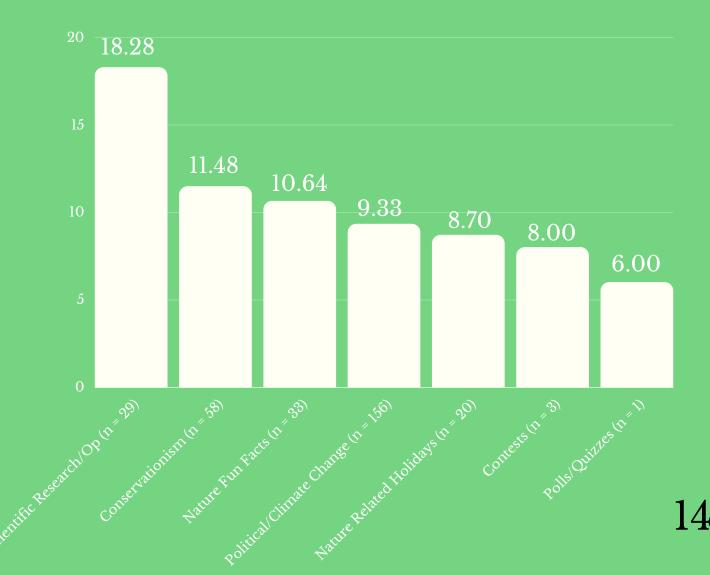
OWNED DATA

OWNED DATA: DESCRIPTION

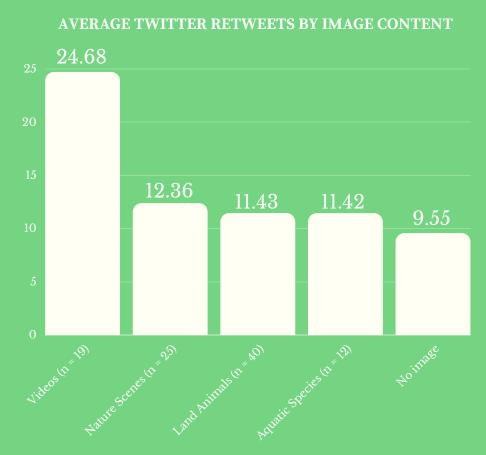
Total Number of Posts: 308 Dataset Time Period: June 01 2021-Sept 01 2022

NWF's original content on Twitter falls under the following themes: scientific research, conservation, nature fun facts, political content/climate change, nature related holidays, contests, and polls/quizzes. The graph shows the number of posts within each theme, and how many retweets each theme averaged.

AVERAGE TWITTER RETWEETS BY THEME TYPE



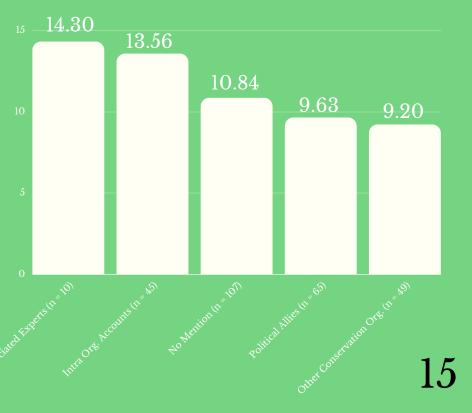
OWNED DATA: INSIGHTS



- Videos earn the highest number of retweets out of all image content.
- Photographs of nature scenes, land animals, and aquatic species earn low numbers of retweets.
- Posts without any image content earn the lowest number of retweets.

- Posts where NWF mention associated experts and intra organizational accounts earn the highest number of retweets.
- Mentions of political allies and other conservation organizations earn the lowest number of retweets, which is even lower than tweets with zero mentions.

AVERAGE TWITTER RETWEETS BY MENTION TYPE

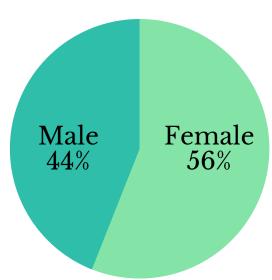


NATIONAL WILDLIFE FEDERATION'S EARNED ORGANIZATION DATA

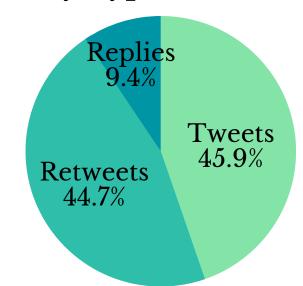
EARNED DATA: DESCRIPTION

Total Number of Posts: 59.83k Dataset Time Period: Jan 01 2021-Jan 01 2022

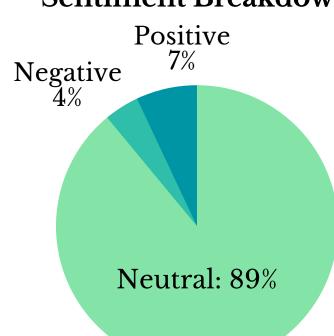
Gender Breakdown



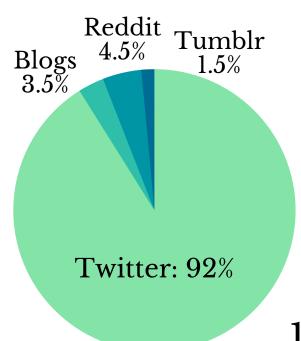
Tweets by Type ~ SocialBearing



Sentiment Breakdown



Platform Breakdown



EARNED DATA:

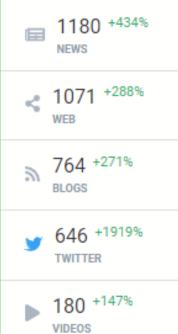
INSIGHTS

Top Items

- NPR link to an article on women finding health in hikes, but facing racism
- NWF Magazine article on gardening in bees' interest
- Most Active Sites [over last 3 months] - Brand24 36 646 Twitter YouTube Reddit
- YouTube link to NWF discussion on creating safe spaces
- NYT Article on saving the Tongass
- #WorldBeeDay, #ProtecttheArtic, #KeepitGrand (referring to the Grand Canyon), #wtpBLUE (a movement of Democratic voters to encourage political action on climate change)
- Influential User: @Dmizejewski Naturalist for NWF
 - 63k followers
 - very engaged with NWF and its website, has 3000+ engagements for each tweet

Content Sources -Brand24 [last 3 months]

Narratives



Positive: Many positive mentions are in discussion of K-pop star's involvement with NWF. Others celebrate pollinators and NWF's efforts against climate change.

Negative: A lot of the negative discussion is focused on the dangers of climate change and endangered animals. Others discuss environmental injustice and the Native Americans.

Male / Female

Platform: The conversation is vast on Twitter and includes all of the themes discussed, but primarily climate change and political conservationism. On Reddit, the most popular conversations are about 17native planting and yard certification.

EARNED DATA: CLIMATE CHANGE THEME

Number of Posts: n = 7758 (12.9%)

The majority of conversations discussed under NWF's climate change theme involve concerns with oil pipelines and carbon emissions. Many people also discuss restoration and policies that can be implemented to solve the climate change crisis.

Posts regarding the climate change theme are largely neutral in sentiment, consisting of factual discussions about the topic. There is a small spike in positive sentiment with excitement over President Biden's announcement of Civilian Climate Corps. A small spike in negative sentiment also exists when NWF published a quote in regards to "running out of time".

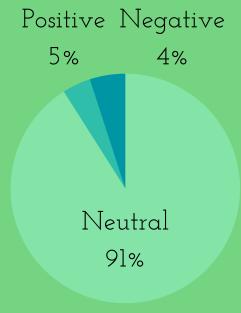
Demographics:

- 48% male
- o 52% female

• Top Unique Items:

- URL link to a petition on their website for infrastructure and restoration
- Build Back Better Act (trending topic)
- #ĀctonClimate, #BuildBackBetter,
 #ProtecttheArctic

Sentiment Breakdown:



EARNED DATA: CLIMATE CHANGE GENDER ANALYSIS

MALES (48%) Number of Posts: n = 193

Sentiment Breakdown:

- Positive (7%)
- Negative (5%)
- Neutral (88%)

Demographics: By Location

- United States (84%)
- UK (2.6%)
- Canada (1%)
- Columbia (<1%)
- Unidentified location (12%)

Top Unique Items:

- Build Back Better Act (trending topic)
- Climate Scientist (trending topic)

Similar to the overall analysis of this theme, males are mostly engaging in factual discussions about climate change with a neutral sentiment. Males have a slightly higher spike in positive sentiment in regards to President Biden's announcement of Civilian Climate Corps. Once again, males have a very slight spike in negative sentiment when NWF tweeted that we are running out of time to combat the effects of climate change.

FEMALES (52%)

Number of Posts: n = 401

Sentiment Breakdown:

- Positive (5%)
- Negative (5%)
- Neutral (90%)

Demographics: By Location

- United States (65%)
- Canada, Australia, Chile, UK, Columbia, Germany, Indonesia, Spain, Uruguay (<1% each)
- Unidentified location (31.4%)

Top Unique Items:

- URL link to petition for infrastructure & restoration
- URL link to The Olympian article about birds dying from climate change
- Build Back Better Act (trending topic)

The spike in neutral posts from females is involved with sharing petitions and online activism. They have an even spike in both positive and negative sentiment. The positive spike is a result of President Biden's announcement of Civilian Climate Corps, and the negative spike is in regards to climate change killing species of birds from heat stroke.

EARNED DATA: POLITICS AND JUSTICE THEME

Number of Posts: n = 5117 (8.5%)

The majority of conversations discussed under NWF's Political Activism and Justice Theme are associated with neutral talk about political figures who introduce policies about environmental justice. This theme has the least amount of activity, this could be due to the organization trying to stray away from controversial opinions which often generate negative connotation with the organization. Leaving conversation neutral and open-ended is done so by leaving opinions out of the conversation and only stating facts.

• Sentiment Breakdown:

- Positive (10%): Celebration in the diversity of bees (misplaced into category), celebrating Justice B. Nagarantha on success NWF India
- Negative (6%): Spike in negative sentiment when a racial injustice incident occurred in nature, NWF's discussion was spread
- Neutral (84%): Discussion of successful black figures in environmental justice, Ohio's progressive environmental justice measures, Discussion of NWF's presentation of New Years solutions for environmental justice crises

Demographics:

- Female 50%
- Male 50%

• Top Unique Items:

- URL link to press articles about racial injustice in US National Parks
- #BuildBackBetter

EARNED DATA: POLITICS AND JUSTICE GENDER ANALYSIS

MALES (51%)

Number of Posts: n = 108

• Sentiment Breakdown:

- Positive (16%)
- Negative (5%)
- Neutral (79%)

Demographics: By Location

- United States (50%)
- o Canada (.93%)
- UK (.93%)
- o India (.93)
- Unidentified location (33%)

• Top Unique Items:

- #BuildBackBetter Act
- Civilian Conservation Corps
- Conversation: The overall conversation associated with males is neutral conversation about the Build Back Better Act. This is an act that introduces incentives to combat greenhouse gases. Most conversation is neutral about all topics, negative connotation is associated with the Civilian Conservation Corps.

FEMALES (49%)

Number of Posts: n = 249

• Sentiment Breakdown:

- Positive (6%)
- Negative (22%)
- Neutral (72%)

• Demographics: By Location

- United States (61%)
- Canada(2.8%)
- UK, Spain, Mexico, Indonesia, Greece, Brazil (.4% each)
- Unidentified location (33%)

• Top Unique Items:

- #BuildBackBetter Act
- #Environmental Justice
- Conversation: Female conversation, in comparison to male, has slightly more negative connotation due to a controversial event that happened surrounding women in national parks. In addition, the Build Back Better act is talked about neutrally, as well as the broad topic of Environmental Justice.

EARNED DATA: SPECIFIC ANIMALS THEME

Number of Posts: n = 7052 (11.7%)

The most common conversations under NWF's specific animal theme include conservation of salmon as well as conservation of the Tongass National Forest which is home to many struggling species. Posts under this theme also include fun facts about animals and restoration of Snake River located in northwestern United States, which inhabits many aquatic species.

Sentiment under this theme is largely neutral, consisting of discussions of conservation. There is also a particularly large amount of positive sentiment associated with discussion about a K-pop star who adopted a panda. A very small spike in negative sentiment occurs when discussing species going extinct.

• Sentiment Breakdown:

- Positive (26%)
- Negative (6%)
- Neutral (69%)

Demographics:

- o 43% male
- 57% female

• Top Unique Items:

- o URL link to World Wetlands Day NWF Magazine post
 - beaver conservation

EARNED DATA: SPECIFIC ANIMALS GENDER ANALYSIS

MALES (43%)Number of Posts: n = 146

• Sentiment Breakdown:

- Positive (21%)
- Negative (10%)
- Neutral (69%)

• Demographics: By Location

- United States (58%)
- UK (3%)
- Philippines, Norway, Netherlands, Belize (<1% each)
- Unidentified location (37%)

• Top Unique Items:

- URL link to World Wetlands Day NWF Magazine post - beaver conservation
- Wild bison (trending topic)
- #nationalbisonday

Males mostly engage in neutral conversations about the conservation of specific animals and their habitats. They have a spike in positive sentiment when discussing conservations events and holidays like National Bison Day. Males also have a moderate spike in negative sentiment from the discussion of species that could potentially be dying off.

FEMALES (57%) Number of Posts: n = 325

Sentiment Breakdown:

- Positive (19%)
- Negative (4%)
- Neutral (77%)

• Demographics: By Location

- United States (50%)
- Canada (2%)
- UK, Australia, South Korea, Columbia, India, Lebanon, New Zealand, Philippines, Slovakia, Sweden, Vietnam (<1% each)
- Unidentified location (42%)

• Top Unique Items:

- URL link to news article regarding bird mortality
- Sick and dying birds (trending topic)

Women also have mostly neutral discussions about conserving species and their habitats. They have a spike in positive sentiment when discussing the K-pop star that adopted a panda, and when sharing fun facts about animals. Women have a small spike in negative sentiment when discussing bird mortality.

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EARNED DATA: NATIVE PLANTING THEME

Number of Posts: n = 6291 (10.5%)

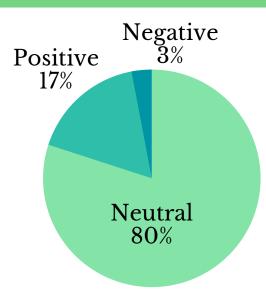
The conversation surrounding native planting is primarily due to the NWF's promotion of it in the interest of biodiversity and saving pollinators. Many people with environmentalist beliefs enjoy learning new ways to support our ecosystem, and the NWF has cornered this market well. Residential yards with native pollinator plants can become certified as a wildlife habitat and are not subject to neighborhood rules/laws about yards, so this draws a lot of social media activity to them and towards the application on their website. The specific regional native plant options become a big topic of discussion through this opportunity. Other portions of the discussion focus on the endangered status of bees, referencing the NWF's blog and social media posts about this topic.

Top Items:

- #Garden4Wildlife
- URL link to NWF certification application
- URL link to NWF magazine about protection of bees
- URL link to NWF photo contest
- Top post Reddit post on how to certify your yard with NWF

Influential User: @Dmizejewski - a naturalist for NWF that discusses the current events and key topics of NWF

- Personality following of 6.3k
- Featured in Reddit conversation as expert
- Mentioned often by @NWF twitter account



Sentiment Breakdown

Positive (17%): People celebrate pollinators on bee related holidays and admire butterflies and bees for their part in the ecosystem.

Negative (3%): The endangered status of

Negative (3%): The endangered status of pollinators is discussed here.

Neutral (80%): World Turtle Day, pollinator biodiversity discussion

EARNED DATA: NATIVE PLANTING GENDER ANALYSIS

\overline{MALES} (44%) Number of Posts: n = 211

FEMALES (56%)

Number of Posts: n = 377

Sentiment Breakdown:

- Positive (17%)
- Negative (3%)
- Neutral (80%)

• Demographics: By Location

- United States (96%)
- Canada (2%)
- UK (2%)
- Costa Rica (1%)

• Top Unique Items:

- URL link to Natural Sciences article on saving pollinators
- #actforgrasslands
- #nativeplants
- Certified Wildlife Habitat discussion (trending)

Positive Conversation:

Women celebrate the accomplishments of women at NWF, admire pollinators, and discussion NWF Wildlife Habitat Certification for their yards.

Negative Conversation:

Users discuss endangered pollinators and negative sentiment towards hunting.

Sentiment Breakdown:

- Positive (17%)
- Negative (2%)
- Neutral (81%)

Demographics: By Profession

- Artists
- Teachers & Lecturers

• Top Unique Items:

- *Certified Wildlife Habitat' trending
- #Garden4Wildlife
- URL link to NWF Photo Contest for Garden for Wildlife

Positive Conversation:

Men discuss bees scientifically and native plant resources.

Negative Conversation: Males discuss the loss of regulations for wolves and endangered pollinators.

INFLUENTIAL USERS



Earned Data Influential Users

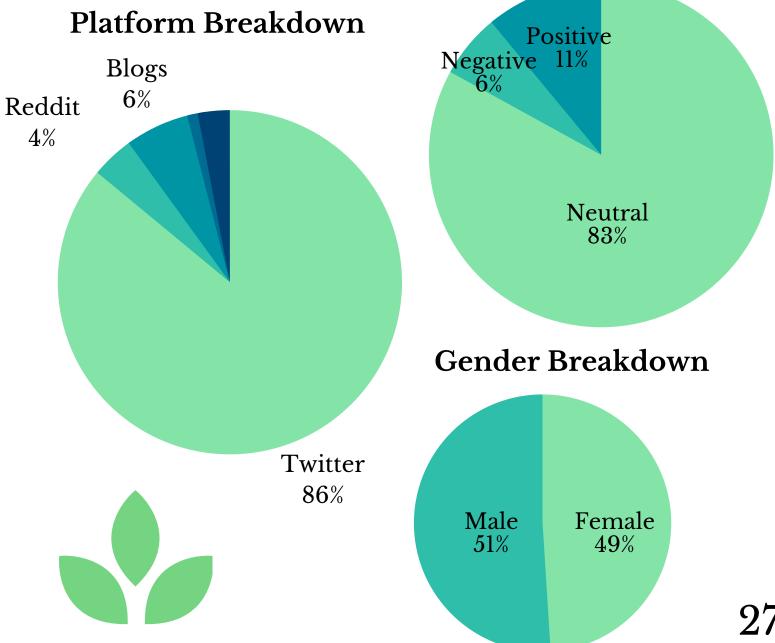
- 1) @hood_naturalist
 - Environmental Justice + Wildlife
 Conservation | #PhillyJawn | Isaiah 58:6
 | #BlackBirder | she/her
 - Associate Conservation Scientist for NWF, high engagement
 - Followers: 85.9k
 - 10.9k likes on her tweet about being hired
 - Shares updates about NWF projects, responds to naturalist fans that have questions
- 2) @Interior
 - Stewarding conservation and powering our future.
 - US Department of interior that
 - Followers: 4.9M
- 3) @Dmizejewski
 - @NWF Naturalist TV/Media
 Appearances Author Tweeting about
 #wildlife #nature #animals #scicomm
 #conservation he/him/his
 - Followers: 6.3k
 - Featured in Reddit conversation as expert
 - Mentioned often by @NWF twitter account, links to website and @NWF often

NATIONAL WILDLIFE FEDERATION'S EARNED TOPIC DATA: CONSERVATION

EARNED CONSERVATION DATA

Total Number of Posts: n = 1,081,749 Dataset Time Period: Jan 01 2021-Jan 01 2022

Sentiment Breakdown



EARNED CONSERVATION INSIGHTS

Top Shared URLs (all platforms):

- cryptocurrency Dolphcoin Google form
- National Geographic article on the cloning of the black footed ferret
- PNAS paper on 'invasive predators and global biodiversity loss'
- MOJA Axolotl Conservation web page home
- NY Wolf Conservation Center's live stream web cams of wolves

Top Tweeters:

- @CNN
- @NY Times
- @VP Harris
- @insan_honey
- @googleafrica
- @adzman86
- @rashtrapatibhvn
- @NatGeo
- @TheEconomist

Sentiment Narratives:

- 11% Positive: Many conversations with positive sentiment discuss Kenya's conservation movement where they will be counting every animal and marine life in each national forest across the country. Most other positive conversations involve the success of conserving certain species and habitats.
- 6% Negative: Most mentions with negative sentiment discuss threats and fatalities of endangered species.
- 83% Neutral: There are many neutral discussions around farming methods that are intended to increase sustainability, along with discussions of animals that are no longer endangered.

EARNED CONSERVATION INSIGHTS CONT'

Top Posts



just dont buy axolotls at all. They're a critically endangered species (nearly extinct) and are banned as pets in several places for good reason. If you care about axolotls consider donating the money you'd spend buying one to local conservation efforts in Xochimilco (link below)

niks @dreamingniks - Jul 23, 2021

okay i am fucking pissed off at how people are impulse buying and actually mistreating axolotis because of the minecraft update. irl axolotis are very delicate aquatic creatures and the minecraft depiction is no where near accurate on axoloti care! PLEASE DO YOUR RESEARCH!!!

Show this thread

4:33 PM · Jul 23, 2021 · Twitter for Android

9,455 Retweets 93 Quote Tweets 21.1K Likes



Here is a list of 36 #birds, 21 #mammals, and 2 #lizards that have gone extinct due to feral or pet #cats

#invasivespecies #conservation #ornithology #BiodiversityCrisis

pnas.org/content/pnas/1...



12:28 AM - Sep 25, 2021 - Twitter Web App

2,197 Retweets 376 Quote Tweets 3,891 Likes

Themes:

- Political Action
- Climate Change
- Endangered Animals
- Environmental Conservation

Using the Brandwatch custom classifier software, the year's worth of mentions are sorted into these 4 categories.



Breaking news: Researchers have cloned a long-dead black-footed ferret, offering hope for this endangered species.

My latest for @NatGeo. (Also a thread coming...)



nationalgeographic.com

A black-footed ferret has been cloned, a first for a U.S. endangered species. A black-footed ferret that died more than 30 years ago has been cloned using preserved cells, which could help inject diversity into the inbred, endangered ...

12:32 PM - Feb 18, 2021 - Twitter Web App

4,600 Retweets 1,292 Quote Tweets 15.1K Likes

29

EARNED CONSERVATION DATA: THEMES I

Political Action Theme Number of posts: n = 7545

Breakdown by sentiment:

- positive- 4%
- negative- 10%
- neutral- 86%

Demographics:

- male- 56%
- female- 44%

Top Unique Items:

- Topic: Endangered Species Act
- Topic: Bear Protection Act

The conversation about this topic includes all of the political action regarding conservation. Users ask their followers to join petitions and celebrate the passing of acts that protect the environment and endangered animals.

The negative conversation is primarily about the extinction of different species. The positive conversations are generally about successfully passed political action about conservation.

Climate Change Theme Number of posts: n = 146,850

Breakdown by sentiment:

- positive- 12%
- negative- 6%
- neutral- 82%

Demographics:

- male- 51%
- female- 49%

Top Unique Items:

• Trending Topic: plant more trees

Within the climate change theme, people discuss the various effects of climate change. This includes loss of habitats, the endangerment of affected species, and the state of our planet long-term.

Positive conversations revolve around the actions being taken to reverse climate change as people celebrate small steps.

Negative conversations about climate change include discussion about pollution, carbon emissions, and coral bleaching.

EARNED CONSERVATION DATA: THEMES II

Endangered Animals Theme theme is mostly about animals across Number of posts: n = 439,760 the world that are endangered and

Breakdown by sentiment:

- positive- 12%
- negative- 6%
- neutral- 82%

Demographics:

- male- 49%
- female- 51%

Top unique Items:

 URL link to donate to the conservation of endangered species in Kenya

Environmental Conservation Theme

Number of posts: n = 245,090

Breakdown by sentiment:

- positive- 10%
- negative- 4%
- neutral- 85%

Demographics:

- male- 52%
- female- 48%

Top Unique Items:

- Topic: Forest Conservation
- Topic: Giant panda endangerment

The conversation associated with this theme is mostly about animals across the world that are endangered and the threats they face. Several people are discussing what can be done to conserve these species and sharing information about fundraising to help the cause.

The positive conversations under this theme discuss cases where endangered species have been protected and measures that have been taken to support the endangered pollinators. Negative conversations under this theme discuss fear of entering the sixth mass extinction, trophy hunting, and how zoos are harmful to species.

The conversation in this theme is focused on ecology and the impact of climate change in the landscape we live in. This includes forest, land, and ocean conservation, and also use of resources within these.

The negative conversations surround pollution from fishing and taking action against deforestation. This also includes extinction of animals. The positive conversations celebrate different species of animals, successful efforts against deforestation, NFT fundraisers with conservation goals, and animals declared no longer 31 extinct.

EARNED CONSERVATION DATA: GENDER - MALE

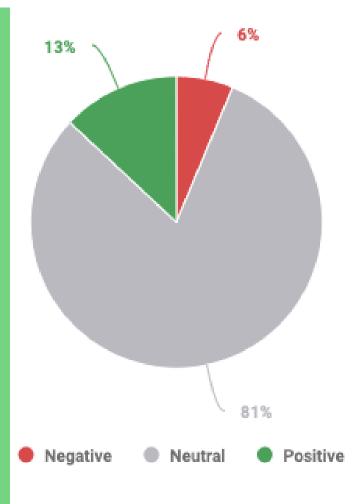
• **Number of posts:** n = 21,590 **Demographics by Location:**

- United States- 34%
- o UK-11%
- Canada- 7%
- o India-3%
- Australia 3%
- Kenya- 2%
- · Unidentified location- 40

Top Unique Items:

- Bird deterrents on buildings (trending topic)
- URL link to an article about scientists cloning the black-footed ferret to save the endangered species

Sentiment Breakdown





Eduardo Jegenio (Eduardo Eugenio) @Eduardo Jegenio

28 Feb

RT @Douglas Main Breaking news: Researchers have cloned a long-dead black-footed ferret, offering hope for this endangered species. My latest for @NatGeo. (Also a thread coming...) https://t.co/tgOkNNmNEc

Conversation: Saving Black-footed Ferret



EARNED CONSERVATION DATA: GENDER - MALE

Influential User:

- @Ecology_Tweets is an influential user in the male category
 - Most posts are retweeting tweets that spread awareness about specific organisms and facts about them.



 Passionate about biodiversity and the significance of conservation for the success of biodiversity.

Sentiment Narratives:

- Most positive male conversation is surrounded around the applause and praise of ecologist's research and politicians advancing conservation laws in society.
- Negative connotation is associated with climate change and the lack of awareness surrounding the subject. Another negative topic of conversation is holding politicians accountable that are not voluble of conservation topics.
- With most of the conversation being neutral, much of the male conversation is focused on general talk about biodiversity and facts about conservationism. A pattern with overall male conversation is the lack of opinions in most of the conversation.

EARNED CONSERVATION DATA: GENDER - FEMALE

Number of posts: n = 37,090

Breakdown by Sentiment:

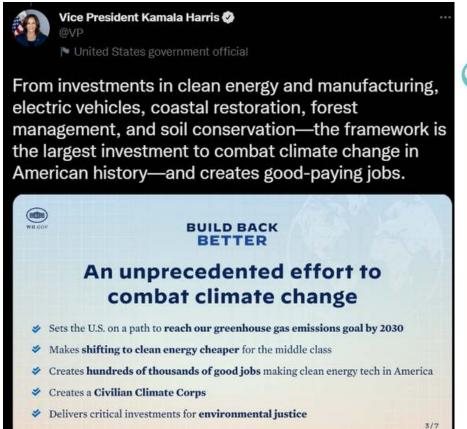
- o positive 13%
- o negative 8%
- neutral 79%

Top Unique Items:

- · #Indigenous-led
- Topic: Blue Wave

Demographics by Location:

- United States 83%
- United Kingdom 6%
- Australia 3%
- Chile 6%
- Others New Zealand, India, Kenya



Top Posts:



Hi! I'm Rew and I'm a illustrator/merch designer thats heavily inspired by the ocean. #ArtsOfVibrancy #GetYourArtUnderwater

I love making art portraying sharks in a positive way! I use my art to educate and emphasize the importance of animals & ocean conservation.



12:19 PM - Mar 4, 2021

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EARNED CONSERVATION DATA: GENDER - FEMALE

Influential User:

• @Jane_Eden: This account claims to be a bot made by a conservation organization but given a female persona with the name "Jane." The purpose of the account is to retweet tweets that spread awareness of conservationism.



Sentiment Narratives:

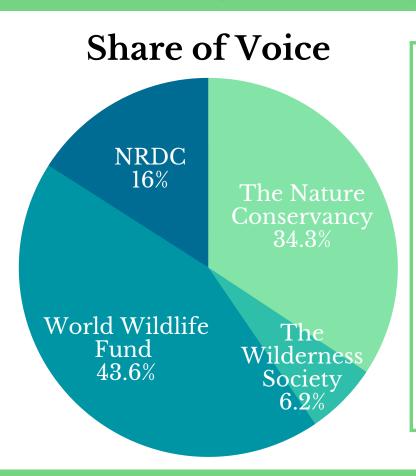
- Most positive conservation with females is associated with the praise of the University of Toronto's and their initiative of hiring a chairman that will implement conservation strategies for the university.
- Negative connotation is associated with the process of overfishing in the oceans and the lack of strategies to stop it.
 Specifically, how ocean cleanup projects contribute to overfishing because of their techniques to pick up plastic.
- Much like males, most of the female conversation is neutral.
 The majority of conversation is centered around strictly around research. There was a spike in conversation in females specifically regarding research about Australian wildlife conservation organizations.

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NATIONAL WILDLIFE FEDERATION'S EARNED COMPETITION DATA

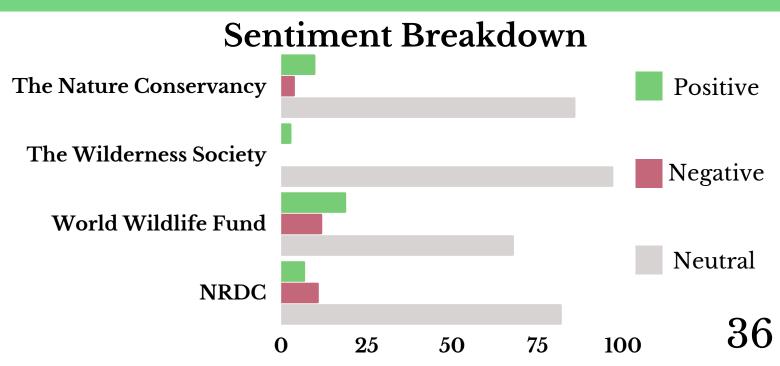
EARNED COMP. DATA

Volume: n = 3342 Jan 01, 2021 - Jan 01, 2022



Top Items

- Protect the Arctic National Wildlife Refuge (trending topic)
 - Many users share their concern and support for indigenous tribes and their preserved land
- Forest plans (trending topic)
 - Users discuss deforestation and plans to reverse its negative effects
- Top URL: link to Grist article
 - explains how an 18 year-old girl is defending her tribe's land



EARNED COMP. DATA:

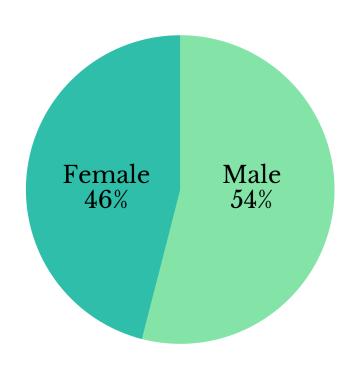
Number of Posts: n = 3342

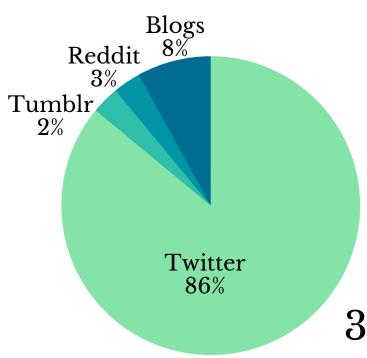
Volume over Time (Spike Analysis)



Gender Breakdown

Platform Breakdown





APPENDIX

APPENDIX



Organization Boolean: @NWF OR "National Wildlife Federation" OR #Garden4Wildlife OR @nationalwildlife OR @NationalWildlife OR @nwfpins OR NWF OR #NWF or #NationalWildlifeFederation

Climate Change Theme: "Climate change" OR "#climatechange" OR "carbon" OR "oil" OR "emissions" OR "#actonclimate" OR "climate crisis" OR "#climatecrisis" OR "climate action" OR "greenhouse gas" OR "environment" OR "#environmental" OR "climate" OR "#climate"

Environmental Justice & Political Activism Theme:
"Environmental justice" OR "#environmentaljustice" OR "justice" OR "#justice" OR "injustice" OR "#injustice" OR "diversity" OR "#diversity" OR "#inclusive" OR "#inclusivity" OR "inclusive" OR "inclusivity" OR "#BlackHistoryMonth" OR "Black History Month" OR "BHM" OR "#BHM" OR "racist" OR "racist" OR "racism" OR "#racism" OR "racial" OR "equity" OR "dequity" OR "advocate" OR "#advocate" OR "activism" OR "#activism" OR "Build Back Better" OR "#BuildBackBetter" OR "Joe Biden" OR "Civilian Conservation"

Specific Animals Theme:

"animal" OR "fox" OR "owl" OR "salmon" OR "bird" OR "flamingo" OR "eagle" OR "whale" OR "bear" OR "octopus" OR "deer" OR "elk" OR "tongass" OR "caribou" OR "seal" OR "bison" OR "lynx" OR "opossum" OR "ferret" OR "beaver" OR "mammal" OR "fish" OR "aquatic life" OR "marine life" OR "sea life"

Native Planting Theme: "#Garden4Wildlife" OR "Garden4Wildlife" OR "#GardenForWildlife" OR "Garden For Wildlife" OR "bees" OR "#bees" OR "butterflies" OR "#butterflies" OR "pollinators" OR "#pollinators" OR "native plants" OR "#nativeplants" OR "yard" OR "#yard" OR "backyard" OR "#backyard" OR "certify" OR "certified" OR "diversity" OR "biodiversity"

APPENDIX II



Topic Search: ("Conservation" OR #conservation OR "wildlife conservation" OR "forest conservation" OR "animal conservation" OR "plant conservation" OR "environmental conservation" OR "habitat conservation")

AND

("extinct" OR "endangered species" OR "endangered animals" OR "habitat preservation" OR "wildlife preservation" OR #SaveOurSalmon OR #ProtectTheTongass OR "conservationist" OR "conservationism" OR #conservation OR "save the bees" OR #savethebees OR "deforestation" OR "preservation" OR "endangered" OR "endangerment" OR "pollinators" OR "animals" OR "plants" OR "trees" OR "ecosystem" OR "biome" OR "forest" OR "national parks" OR "pollution" OR "mammals" OR "aquatic species" OR "poaching" OR "greenhouse gas" OR "greenhouse gasses")

Comparable Orgs Boolean: "The Nature Conservancy" OR @nature_org OR "The Wilderness Society" OR @wilderness OR @wildernesssociety OR "World Wildlife Fund" OR @World_Wildlife OR "National Resources Defense Council" OR "NRDC" OR @NRDC OR @nrdc_org

