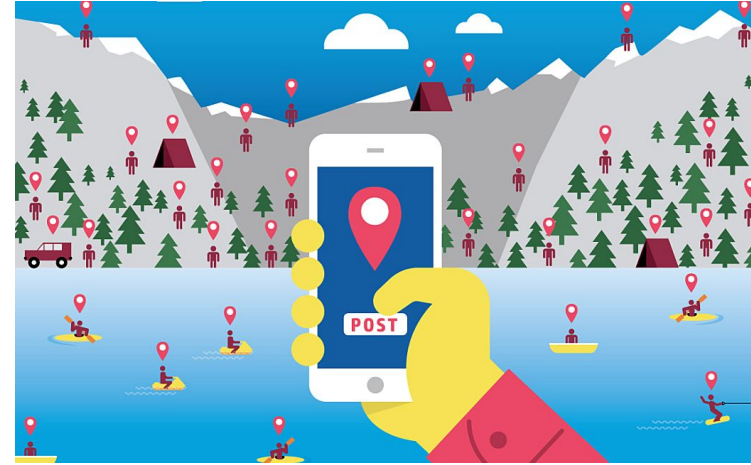


Social Media + Public Land

Dan Filler

Background

- *Geotagging* posts is a widespread feature among social media apps
- Allows user to add a specific location to their post
- Through geotagging, others who interact with the post can see where the photo was taken, spreading the word about an interesting location
- Works very well for free publicity for businesses, vacation destinations, etc.
- But...



Source: Gordon, 2017

<https://www8.hp.com/us/en/tektonika/index.php/2017/03/17/geotagging-when-really-cool-tech-is-actually-a-huge-bummer/>

Background

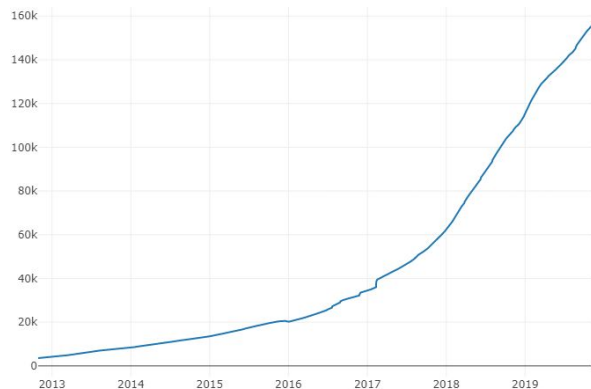
- National Parks are experiencing a swift increase in visitors
 - 2016-2018 are the three highest years for attendance of all time
- The department of the interior has funded several studies into correlation between social media and visitor rates
- Online communities for outdoor recreation are growing



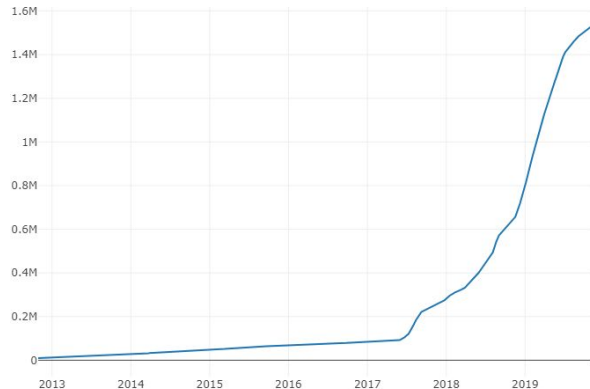
Source: Eller, 2017
<<https://Int.org/national-parks-overcrowding-in-the-news/>>

Background

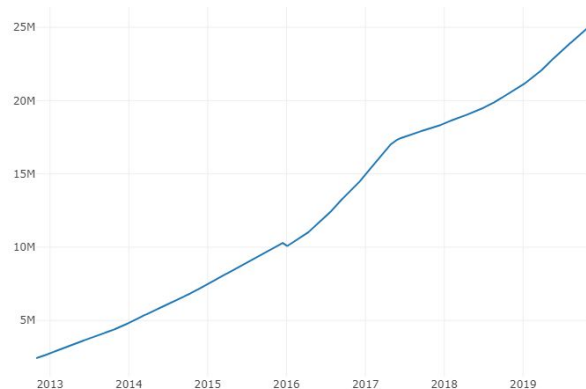
/r/Ultralight



/r/Backpacking



/r/AskReddit



Source: SubredditStats, 2019
<<https://subredditstats.com/>>

The Ethical Question:

Is it permissible for software engineers to build Geotagging into social media sites with specific location information about conservational, publicly-owned land?

Competing Answer 1: Yes, it is permissible.

- Geotagging supports the economy, parks funding, etc.
- Disabling geotagging for certain obscure areas is elitist
 - gatekeeping
- May even be that more visitation improves quality of parks
 - Inspires more conservation efforts, more funding, etc.
- Popularizing lesser-known recreation areas allows the load to be distributed

Competing Answer 2: No, it is not permissible.

- Natural conservation areas are different than other places of interest
 - Far more susceptible to destruction, particularly from crowds
- Some studies have found higher visitation is in fact worse for parks
 - (Grau and Freemund, 2007), (Wood et al. 2013), (Fan, 2019)
- Higher risk presented by overcrowding than losing protected status
- More public interest does not equal *quality* public involvement
 - E.g. Hiking Groups breaking rules



Source: Hughs, 2017
<<https://e360.yale.edu/features/greenlock-a-visitor-crush-is-overwhelming-americas-national-parks>>

My Answer

It is permissible for software engineers to build Geotagging into social media sites with specific location information about conservational, publicly-owned land.

Ethical Support

- From Utilitarianism an act is morally required given it provides the greatest net balance of good
- Limiting access to knowledge means fewer people get to experience naturally important places
 - Generally, visiting beautiful natural sites is very pleasurable
 - Disproportionately affects little-known areas - everyone already knows about Zion NP
 - Maps are already available through the internet for basically every wilderness area
- In fact, it is entirely possible that this wave of new visitors will increase protections, funding, and conservation efforts
- Therefore: Implementing geotagging is a net higher benefit and is morally permissible (and required)

Code of Ethics Support

- Somewhat ambiguous in this case - but a few applicable guidelines:
- Section 3.03 requires software engineers to identify issues relating to their work, including environmental issues
- Section 1.03 requires that software not invade privacy or harm the environment
- Section 3.14 requires that data should be held up to date and accurate, a task made possible through collecting geotagged information
- Section 3.01 requires that engineers strive for high-quality products, which considers the desires of the user

Implications

- The best case scenario is that an increasingly interested population correlates to increased funding and conservation efforts
 - Works if the public is both educated about LNT, conservation, etc. and engaged
- More lesser-known public recreation areas get the attention and funding they deserve



Source: National Forest Service

Conclusion

- Social Media use has a positive correlation with the number of visitors to our protected land
 - Geotagging may be a significant factor in this correlation
- While Geotagging may have adverse effects such as overcrowding, banning it from use with public land is elitist and unfair
- Increased visitation may improve funding and conservation, ultimately improving the quality of our parks

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Questions?