FALL 2022–SPRING 2023
AFRI SAS SOIL TO SOCIETY: SOCIAL MEDIA ANALYSIS

twitter

Insta-gram

facebook

Twitter tweets (posts) have led to 4,989 impressions, 507 media views, 318 engagements with an average engagement rate per post of 7.1%, 77 total clicks, 63 likes, and 41 retweets.

Instagram posts have reached 1,584 accounts, led to 1,848 impressions, 46 profile visits, 13 link taps, 246 likes, and 11 shares.

Reels reached 676 accounts, 786 views/impressions, 101 likes, and 8 shares.

Facebook posts have reached: 1,372 people, led to 111 engagements, 1,610 impressions, 80 total clicks, 95 likes, and 7 shares.

GLOBAL REACH OF TWEETS X

SOCIAL MEDIA PLATFORM SUMMARY BY METRIC
*Average Metric Unit per Post

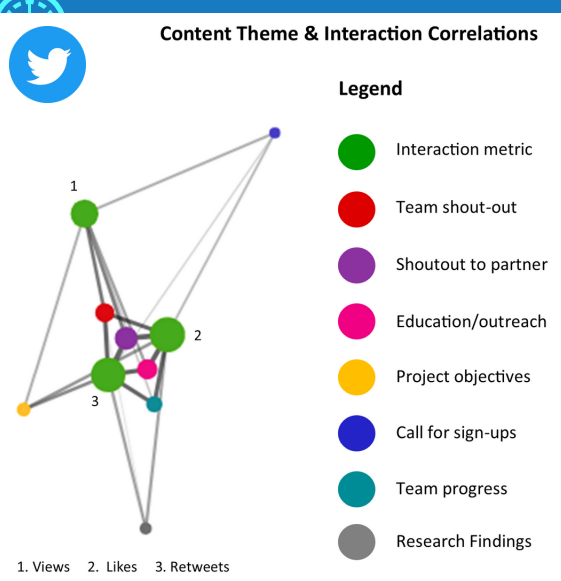| Platform Averages	Impressions (views)	Engagement	Likes	Accounts Reached	Top Content Theme	Top Media Type	Top Hashtag
Facebook	51.94	3.58	3.06	44.26	Shout out to team	Informational images	#wholegrain, #regenerativeagriculture, #sustainableagriculture
Twitter	138.58	9.09	2.33	-	Shout out to team	Informational images	#soilhealth
Instagram	88	-	11.71	75.43	Education/ outreach	Informational images	#regenerativeagriculture
Instagram Reels	71.45	-	9.18	61.45	Shout out to team	Informational videos	#sustainableagriculture; #wholegrain

ACROSS ALL PLATFORMS, MONDAYS AND THURSDAYS TEND TO BE THE IDEAL DAYS TO POST WHILE FRIDAYS SHOULD BE GENERALLY AVOIDED TO OPTIMIZE INTERACTIONS.

Social media posts for each platform (Twitter, Instagram, and Facebook) were read and coded for naturally occurring themes. These themes were collected with respect to the content of the post's message itself, the type of media that was used in the post (i.e., image, URL link, video) if at all, and the hashtags used. To see if there was a relationship between these components and post interactions (i.e., if utilizing images in posts garnered more attention than a URL link), OEIE used Atlas.ti23 to run correlations (relative frequencies only; not a significance test) between themes and interaction metrics respective to the platform being analyzed, then visualized the results in Atlas's force-directed graphs. Force-directed graphs utilize algorithms that impose similar physics as van der Waal's forces onto the network, based on the correlations between the codes (nodes). Please refer to Appendix A for more details regarding the methodology and Appendix B for a summary of results.

- The **size of the node is** a function of **integration** - the larger the node, the more relationships that node has with other nodes.
- The **length of the 'edges'**, or lines between nodes, is a function of **how strong the correlation is** (a shorter length indicates those two nodes occur more frequently together than with others).
- The **thickness of the edges is** a function of **density** - the more frequently those nodes occur simultaneously, the thicker the edge.
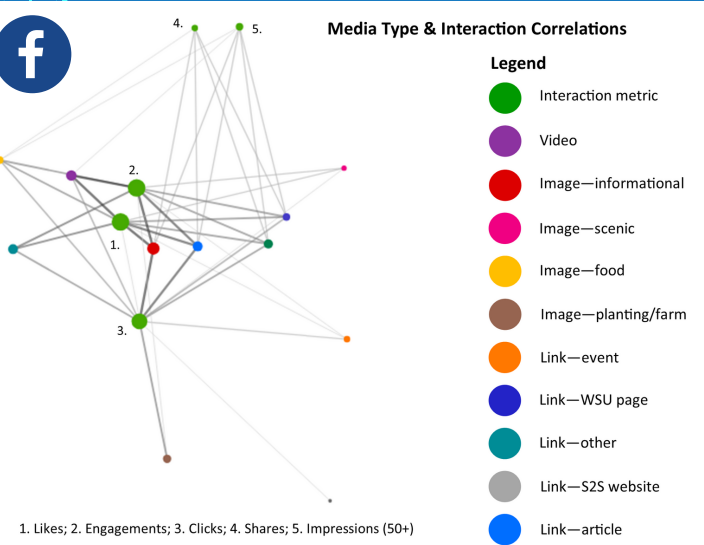
CONTENT THEMES

Content Theme & Interaction Correlations

Legend
- 🟢 Interaction metric
- 🔴 Team shout-out
- 🟣 Shoutout to partner
- 🩷 Education/outreach
- 🟡 Project objectives
- 🔵 Call for sign-ups
- 🟦 Team progress
- ⚫ Research Findings

1. Views   2. Likes   3. Retweets

The message content of the posts from all platforms were coded for naturally occurring themes. Many themes were found (i.e., seven Twitter themes emerged in as demonstrated to the left; see Appendix B for more details). Themes were then graphed against the respective interaction metrics for each platform. In the case here with Twitter, interaction metrics included Views, Likes, and Retweets.

In the Twitter example to the left, **interaction metrics** most strongly correlated with **shout outs to team members, shout out to partners**, and **education/outreach** posts. This is visibly indicated by the larger size of these nodes and the short, thick edges between the respective thematic nodes and interaction metrics (particularly likes and retweets).
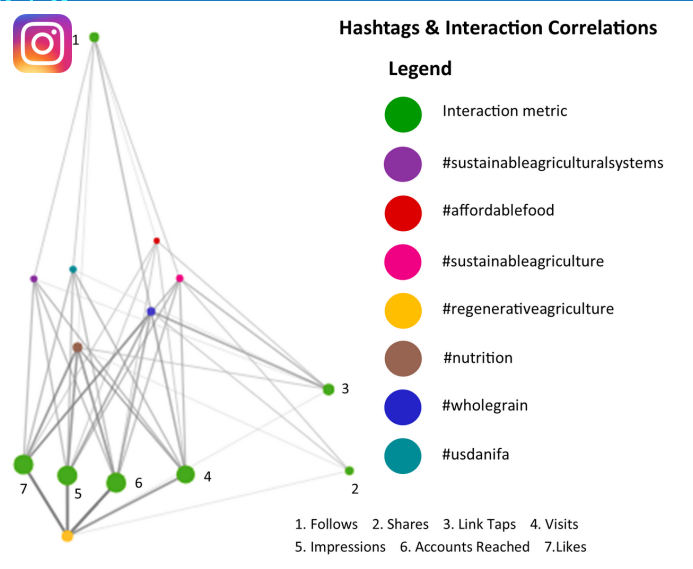
MEDIA TYPE THEMES

Media Type & Interaction Correlations

Legend
- 🟢 Interaction metric
- 🟣 Video
- 🔴 Image—informational
- 🩷 Image—scenic
- 🟡 Image—food
- 🟤 Image—planting/farm
- 🟠 Link—event
- 🔵 Link—WSU page
- 🟦 Link—other
- ⚪ Link—S2S website
- 🔵 Link—article

1. Likes; 2. Engagements; 3. Clicks; 4. Shares; 5. Impressions (50+)

The media used in posts from all platforms were coded for naturally occurring themes (i.e., videos, images, links). Many themes were found (i.e., ten media themes emerged in Facebook posts as demonstrated to the left). Themes were graphed against the respective interaction metrics for each platform. In the case here with Facebook, interaction metrics included likes, engagements, clicks, shares, and impressions (views of 50+).

In the example to the left, **interaction metrics** most strongly correlated with **informational images, videos**, and **links to articles** (i.e., journal or magazine article). This is visibly indicated predominately by the shorter, thicker edges between the respective thematic nodes and interaction metrics (particularly likes and engagements)

HASHTAGS

Hashtags & Interaction Correlations

Legend
- 🟢 Interaction metric
- 🟣 #sustainableagriculturalsystems
- 🔴 #affordablefood
- 🩷 #sustainableagriculture
- 🟡 #regenerativeagriculture
- 🟤 #nutrition
- 🔵 #wholegrain
- 🟦 #usdanifa

1. Follows   2. Shares   3. Link Taps   4. Visits
5. Impressions   6. Accounts Reached   7. Likes

The hashtags used in posts from all platforms were coded for naturally occurring themes. These hashtags were graphed against the respective interaction metrics for each platform. Only the highest correlated hashtags were included in graphs due to the volume of hashtags employed. In the case here with Instagram, interaction metrics included follows, shares, link taps, visits, impressions, accounts reached, and likes.

In the example to the left, **interaction metrics** most strongly correlated with the hashtags **#regenerativeagriculture, #nutrition**, and **#wholegrain**. This is visibly indicated predominately by the shorter, thicker edges between the respective thematic nodes and interaction metrics (particularly likes, impressions, accounts reached, and visits).

Facebook Posts & Engagements by Month

— Engagement   — total posts
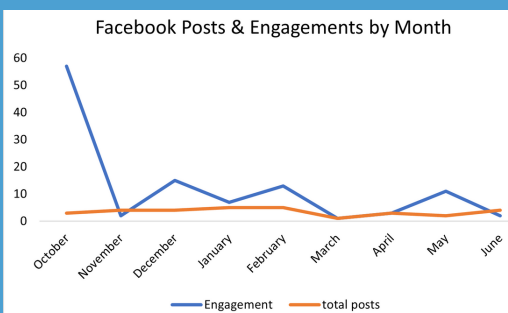
Overall, engagements or impressions (depending on the metrics available by platform) as average frequency per post or day within a month were graphed over the course of data collection to see if there was a relationship between time/months and the collected metrics.
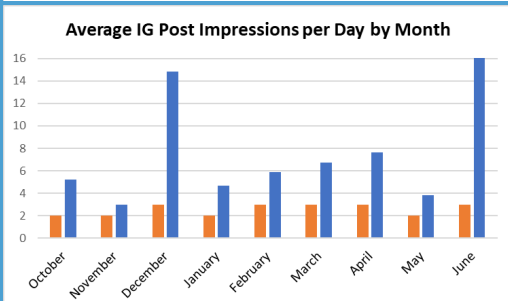
Unfortunately, no pattern has thus emerged across any platforms as exemplified by the results to the left. Such patterns may emerge as data collections continue and platforms gain more followers and activity.

Average IG Post Impressions per Day by Month

DEFINITIONS

- **Impressions:** number of times content is displayed/viewed
- **Engagements:** number of actions your content received from users (likes, comments, shares, saves, etc.)
- **Clicks or "total clicks":** includes link clicks, post reactions, comments, shares, clicks to expand images to full screen, clicks to homepage, etc.
- **link taps (external):** number of taps on any of the links on your Instagram profile, excluding taps on your connected Facebook profile.
- **Accounts reached:** number of accounts that have viewed the post at least once.
- **Visits:** number of profile visits.