CLIMATE DATA HELPING FARMERS?

Evaluating usability and adoption of Decision Support Tools

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THE PROJECT

U2U useful to usable

AgClimate4U.org

U2U incorporates climate data into useful tools to help farmers and advisors make informed decisions.

GOAL:
Improve the resilience and profitability of farms amid a changing climate

DETAILS:
- 5-year, $5 million United States Department of Agriculture grant
- 12-state, interdisciplinary team
- Creating, promoting & evaluating online decision support tools for farmers and farm advisors
- Tools incorporate climate information to aid decision making
- More than 50 team members from 9 universities, Regional Climate Centers and National Drought Mitigation Center

TEAM FUNCTIONING

Interviews

EVALUATION QUESTION:
How is the team functioning?

What might need to be addressed to ensure project success?

EVALUATION METHOD:
Bi-annual team member interviews

Interview findings acted upon by PI, Project Manager and Leadership Team

Results inform the project's annual meeting agenda

DATA COLLECTED
- Status of grant deliverables (on-track, behind)
- Perceptions of existing products, overall project functioning
- Opinions on future directions
- Dependencies (what are you dependent on others for and what are others dependent on you for?)

TIPS
- Interview all levels of team (major/minor roles, students/leadership)
- Understand technical detail of project enough to make appropriate recommendations
- Build trust among team members so that they respond and give honest feedback
- Set goals and revisit during next round of interviews

TOOL DEVELOPMENT, OUTREACH & PROMOTION

User Testing

EVALUATION QUESTION:
How might the tool need to be updated to ensure usability?

EVALUATION METHOD:

UserTesting.com

BENEFITS
- Watch videos of participants using your site. Hear them describe where they get stuck or confused.
- Receive written answers to your personalized questionnaire
- Affordable and essential for a project that has a web or app component
- Can provide your own testers or use theirs
- Results used by Project Manager & Programmers to improve tools before they are released

TIPS
- Be strategic while creating user test questions (what do you need to know/test?)
- Keep questions clear and focused

Outreach Event Post-Surveys

EVALUATION QUESTION:
What are immediate intentions of audience?

How can we improve the way we do outreach in the future?
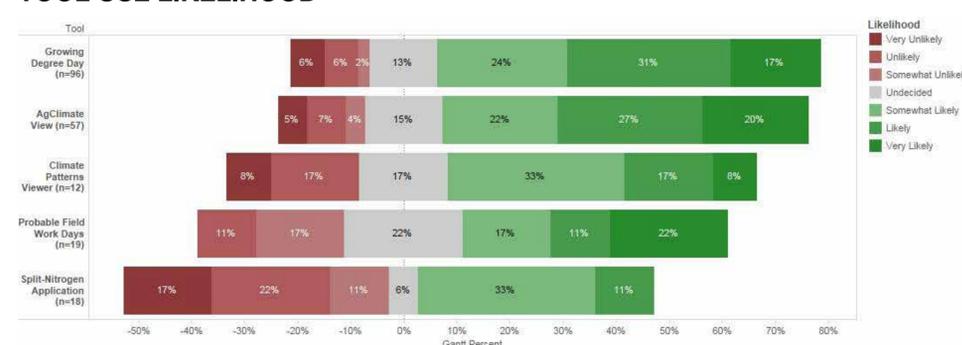
Who wants more information?

EVALUATION METHOD:
1-page surveys customized for each event's content and audience

TIPS
- Can compare behavioral intention with actual behavior as measured on follow-up survey
- Ask about the relevance of each tool to their work (not everyone is the exact target)
- Test the project's theory of change (we expect advisors to further spread the message…will they?—ask on survey)
- Gather attendance lists to use for follow-up surveys

TOOL USE LIKELIHOOD

Tool use likelihood diverging bar chart. Likelihood categories: Very Unlikely, Unlikely, Somewhat Unlikely, Undecided, Somewhat Likely, Likely, Very Likely.

- Growing Degree Day (n=96): 6%, 6%, 2%, 13%, 24%, 31%, 17%
- AgClimate View (n=57): 5%, 7%, 4%, 15%, 22%, 27%, 20%
- Climate Patterns Viewer (n=12): 8%, 17%, 17%, 33%, 17%, 8%
- Probable Field Work Days (n=19): 11%, 17%, 22%, 17%, 11%, 22%
- Split-Nitrogen Application (n=18): 17%, 22%, 11%, 6%, 33%, 11%

Media Campaign

EVALUATION QUESTION:
Was the money spent worth it?
What percentage went to website?
What percentage used a tool?
What percentage used a tool to inform a decision?

EVALUATION METHOD:
Mail and email promotional materials sent to target lists via media company
- Surveying contact lists after or with last send-out
- Monitoring Google Analytics after send-outs

BENEFITS
- Will inform whether and to what extent a subsequent media campaign will be done in the final, 5th year of project

TIPS
- Be sure the media company understands your project (both the products and your audiences)
- Build evaluation into initial plan with company

OUTCOME EVALUATION

EVALUATION QUESTION:

What, if any, difference did our tools make?

EVALUATION METHOD:

1. Follow-Up Survey
Follow-up with those we've directly reached via outreach events after an appropriate amount of time (6-12 months) for them to have used tools to inform various agricultural decisions

2. Online Survey
End-of-project farm advisor survey

3. Paper Survey
End-of-project random sample farmer survey

2 & 3 will assess overall project reach in addition to visiting the project website, using tools, using tools to inform decisions, and any changes in conditions as a result of more informed decision-making

HOW TO DRIVE TRAFFIC TO AN OUTREACH WEBSITE
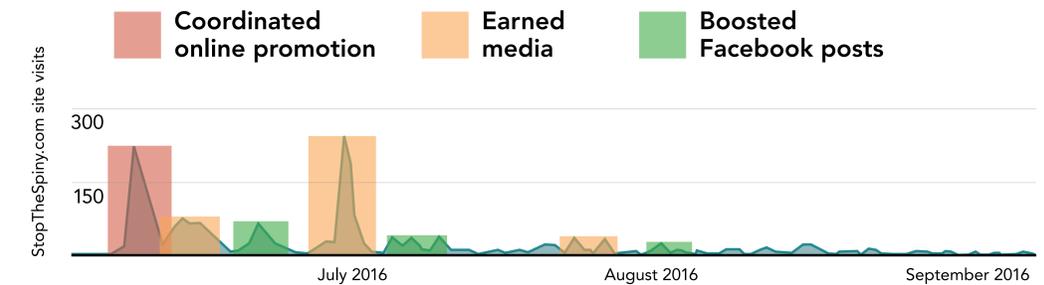## Evaluating the use of promotional efforts in driving traffic to StopTheSpiny.com

StopTheSpiny.com

StopTheSpiny.com is a website that features a video that combines the arts, natural sciences, and social sciences that aims to inspire boaters to take action to prevent the spread of aquatic invasive species.
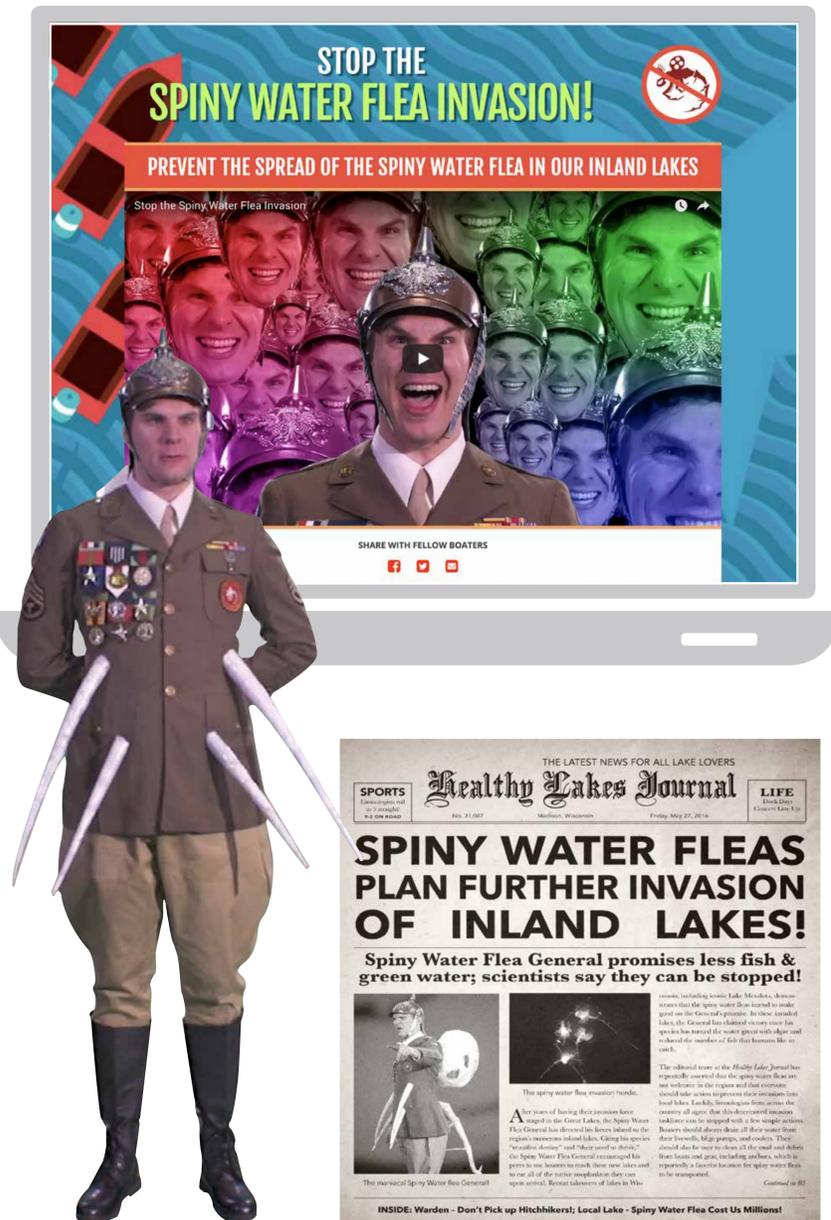
WHAT DID WE DO?

In order to better understand the factors that drive visitors to a website that features extension content, we engaged in a number of promotional efforts and tracked website visits using Google Analytics.

Coordinated online promotion — **Earned media** — **Boosted Facebook posts**

StopTheSpiny.com site visits

300

150

July 2016 · August 2016 · September 2016

PROMOTIONAL EFFORTS USED

1 Coordinated online promotion

Sharing press releases with partners via personal communication, email lists, social media, and newsletter

Approximate number of site visits: **585**
Estimated cost per site view: **Staff time**

- Low cost
- Creates a big initial surge of visitors, but visitors taper off after a few days as partners stop sharing
- Reached people within our sphere of influence and not our target audience

2 Earned media

Sharing press releases with media outlets that then place a story in their publication

Approximate number of site visits: **499**
Estimated cost per site view: **Staff time**

- Low cost
- Produced biggest spike in website visitors and likely reached our target audience
- Having an atypical educational video likely helped our work earn media attention. If it isn't breaking news, novelty or timeliness will help earn media spots

3 Boosted Facebook posts

Paid advertisement to a pre-determined audience targeted by age, gender, interests, and geographic location

Approximate number of site visits: **38**
Estimated cost per site view: **$3.21**

- Good for displaying a message that is within the post itself
- Viewers clicked through to the website, but it was costly per visitor
- Posts had high viewership, but few engaged with the content

4 Google AdWords

Displays text advertisements to websites within search results on specified keywords

Approximate number of site visits: **945**
Estimated cost per site view: **$0.45**

- Only pay for the number of people that click on the ad, not the number of people that see it
- Reaches active information seekers looking for related content
- This is a relatively inexpensive way to keep your target audience visiting a website after the initial interest generated by coordinated promotion

WHAT WE SUGGEST YOU DO

- Anything you do will help people discover your content
- Use multiple approaches to promoting your content based on your available resources

- Be strategic in using these approaches and others; pick the right approaches so you can be certain that your target audience is finding and engaging with your content
- These approaches will allow us all to be more efficient with our time and resources

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