

DON'T MOVE FIREWOOD SOCIAL MEDIA MESSAGE FRAME TESTING

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ABOUT DON'T MOVE FIREWOOD

Firewood is a broad pathway for invasive forest insects and diseases.

- Forest pests can and do move when people move firewood
- Regulations are not comprehensive nor consistent
- New pest outbreaks come to light every year




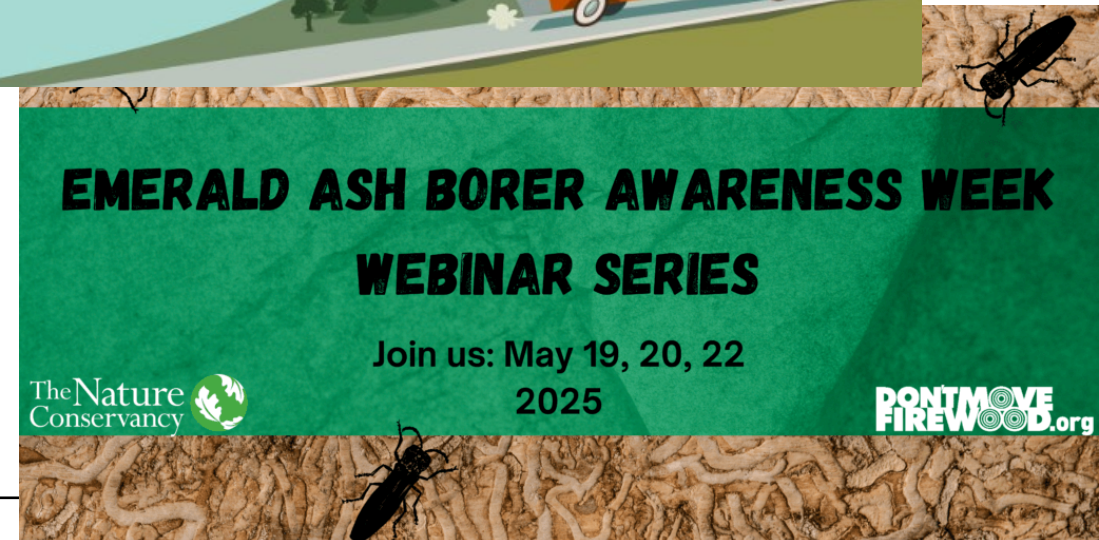
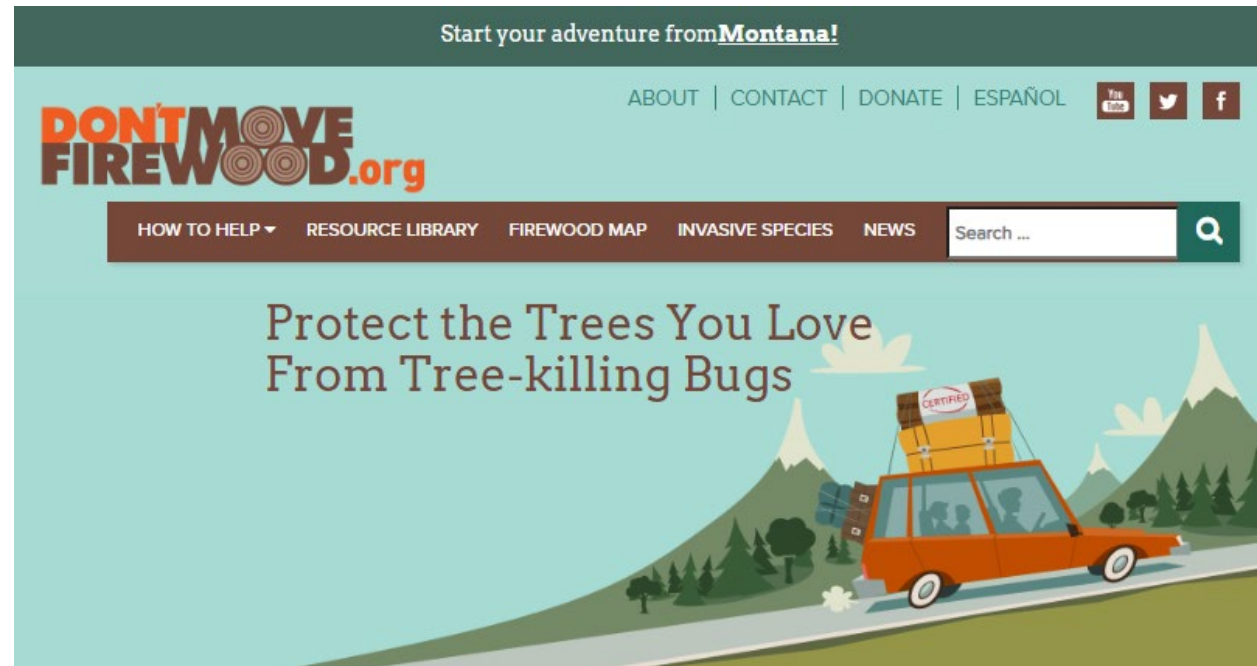


ABOUT DON'T MOVE FIREWOOD

- **GOAL:** Protect trees
 - **TACTIC:** Slow the spread of invasive forest pests via the firewood pathway
 - **TARGET:** Firewood users **and** stakeholder group educators
 - **MESSAGES:** Don't move firewood; **buy it where you burn it, gather on site, or buy certified, heat-treated firewood**
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WE MAKE OUTREACH TOOLS CONSISTENT AND WIDELY AVAILABLE

- Resource Library
- Firewood Map
- Invasive Species profiles
- News; Newsletter
- Spanish language microsite
- Resources for Outreach Professionals
 - [Firewood Comparison Report](#)
 - **This webinar!** 



ACHIEVING THE GOAL TO PROTECT TREES

- “Information-deficit model” of awareness equals action **is not effective alone**
- Awareness must be coupled with an **achievable call to action (CTA)**
- Online CTAs you already know:
 - Subscribe
 - Buy Now
 - Sign Up
 - Click here
 - **Learn More**

https://ssir.org/articles/entry/stop_raising_awareness_already



ACHIEVING THE GOAL TO PROTECT TREES

- Less than half of the public (39%) have heard/seen firewood messaging
 - Even less (19%) are aware of state laws or regulations
- Forestry-related public agencies most trusted messengers
- Effective messaging should generate **encouraging, empowering, and social norming (e.g. positive peer pressure) feelings around the desired behavior change**

ACHIEVING THE GOAL TO PROTECT TREES

- Figurative language (e.g. metaphors) are common in science communication
- Some can cause misunderstandings, distract, and be counterproductive.
 - **War, battle, military**
 - Can cause unwanted outcomes (e.g. spraying/killing native insects)
 - Distracts from desired behaviors
 - Can reduce palatability of message to audiences
 - **Nativist, reductionist, fear- or scare- based**
 - Can fuel argumentative discourse, social tension, and discomfort
 - This undermines positive peer norming and therefore does not serve the outreach conservation intent

ACHIEVING THE GOAL TO PROTECT TREES

We avoid these problematic figurative language choices and instead strive for effective message frames supported by social science research:

- Protective frames
 - Based on valued resource
 - Empowering or encouraging
- Objective frames
 - Fact-based
 - Instructive or educational
 - Clear call to action

Protect the places you love...

You can help save trees...

Your firewood choices matter...

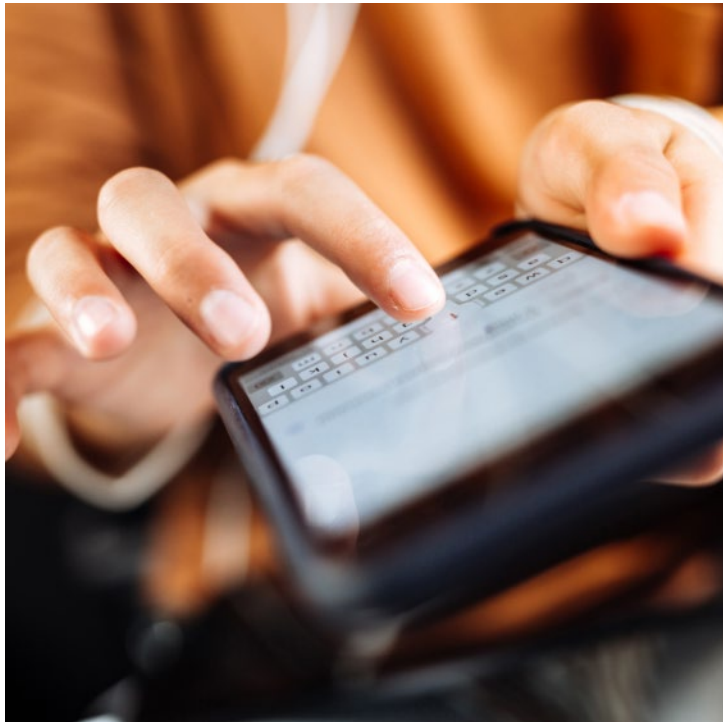
Forest pests can damage ...

Learn more about how you can help

DMF ON SOCIAL MEDIA

- Facebook and Instagram: Most posts are “organic” (i.e., unpaid posts).
- Some years budget includes paid advertising
 - Boosted posts or Advertisements
- A/B testing compares two posts to see which performs better.
- We decided to A/B test a wide variety of posts over time, controlling everything except the message framing – comparing protective language with objective language

PROTECTIVE VS OBJECTIVE LANGUAGE – IS THERE A DIFFERENCE IN ENGAGEMENT?



Protective; descriptive,
ruining the fruit and
your backyard

 **Don't Move Firewood**
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✕ ⋮



Don't be dazzled by the beauty — spotted lanternflies ruin apples, grapes, and backyards.



dontmovefirewood.org
Protect your trees.
Don't move firewood.

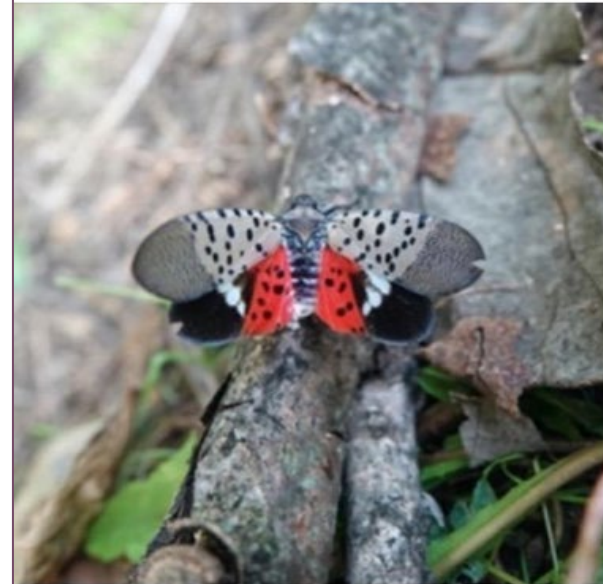
Learn more

Objective; more general
and scientific- infest,
prevent, contaminated

 **Don't Move Firewood**
Sponsored · 

✕ ⋮

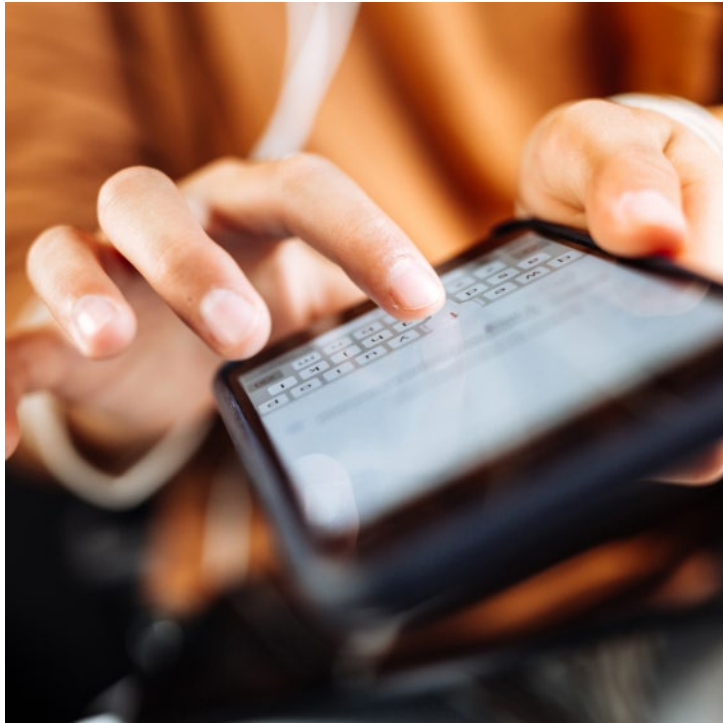
Spotted lanternfly infests trees, grapes, and habitats near you. Prevent the movement of pests on contaminated firewood.



dontmovefirewood.org
Keep invasive pests away
Don't move firewood

Learn more

PROTECTIVE VS OBJECTIVE LANGUAGE – IS THERE A DIFFERENCE IN ENGAGEMENT?



30 Facebook ads (15 pairs) across 5 “flights”; each pair had the same photo, audience, spend.

\$\$ spent and running time were the same within flights and similar between flights (ave. 28 days)

Compared Link Clicks, Clicks (all), Click Through Rate (link), Click Through Rate (all), Cost Per Click (link), Cost Per Click (all), Shares, and Page Views

DATA ANALYSIS

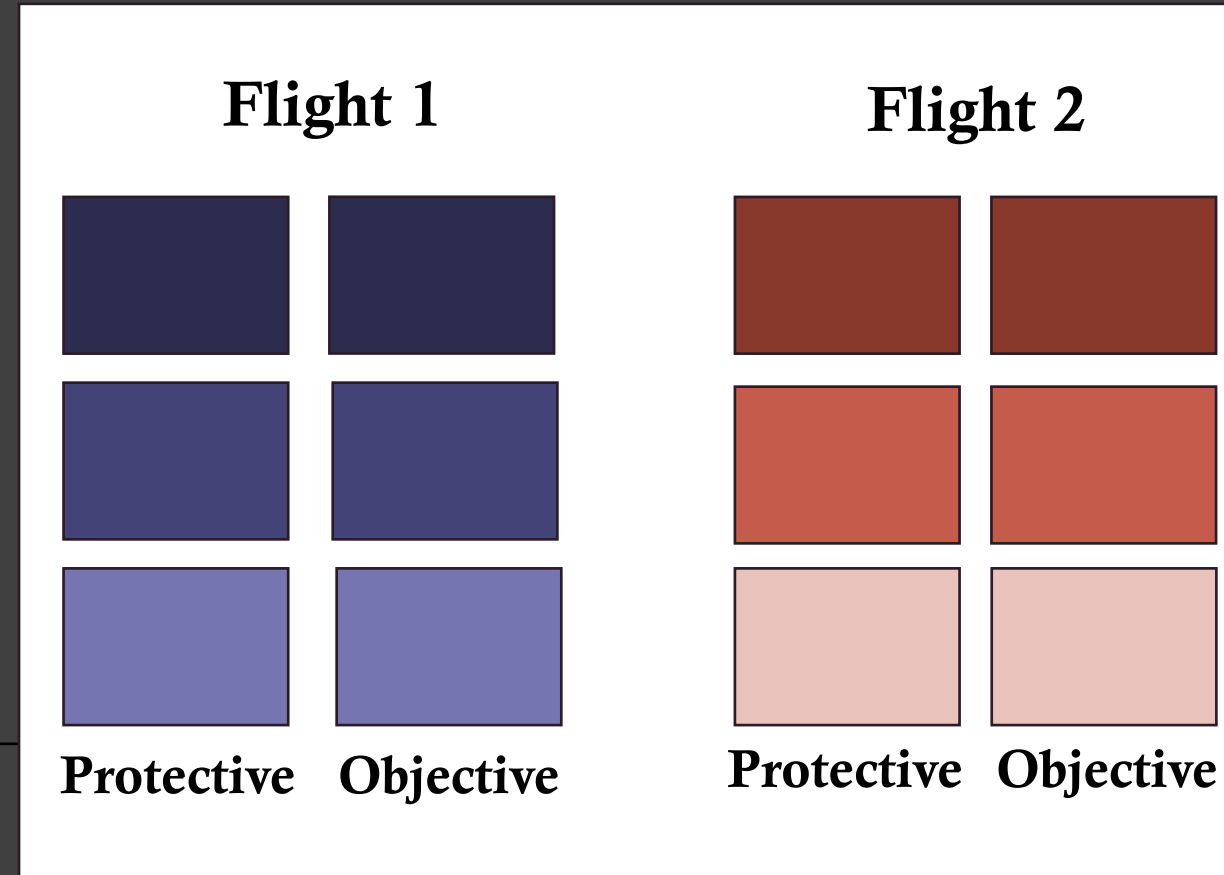
Conditional Logistic Regression

Compared key metrics between protective vs objective ads of the same type (i.e., each pairing), while accounting for correlations in pairings within the same flight (e.g., duration that ads were active)

A stratum included each protective ad and its paired objective ad (i.e., 15 ads = 15 strata)

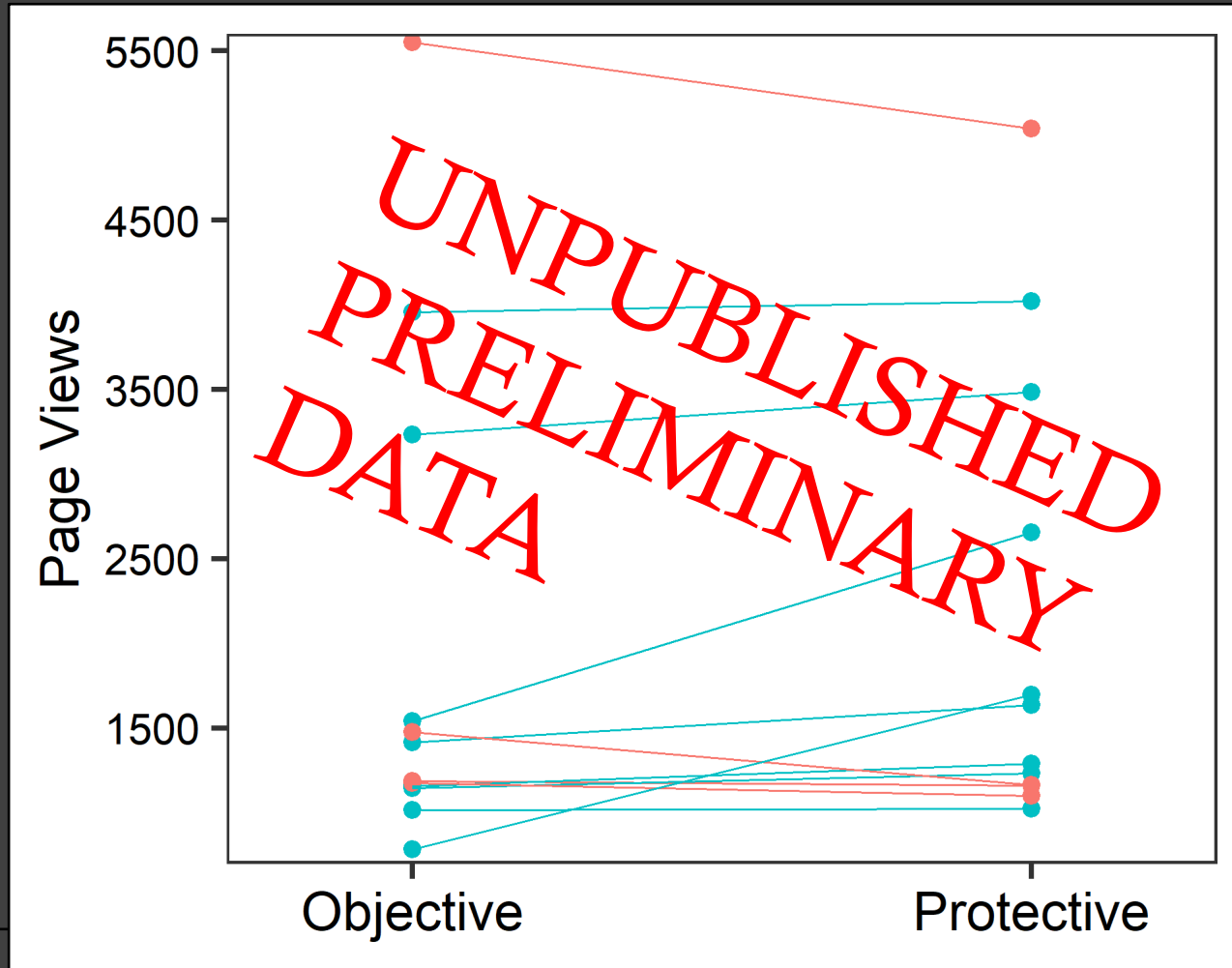
All strata in each flight were assigned a unique cluster (i.e., 5 flights = 5 clusters)

Model parameters estimated using survival package (*clogit* function) in Program R



RESULTS


Protective language generally elicited more page views



Odds Ratio = 1.02, $p = 0.06$

Don't Move Firewood
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Don't be dazzled by the beauty — spotted lanternflies ruin apples, grapes, and backyards.

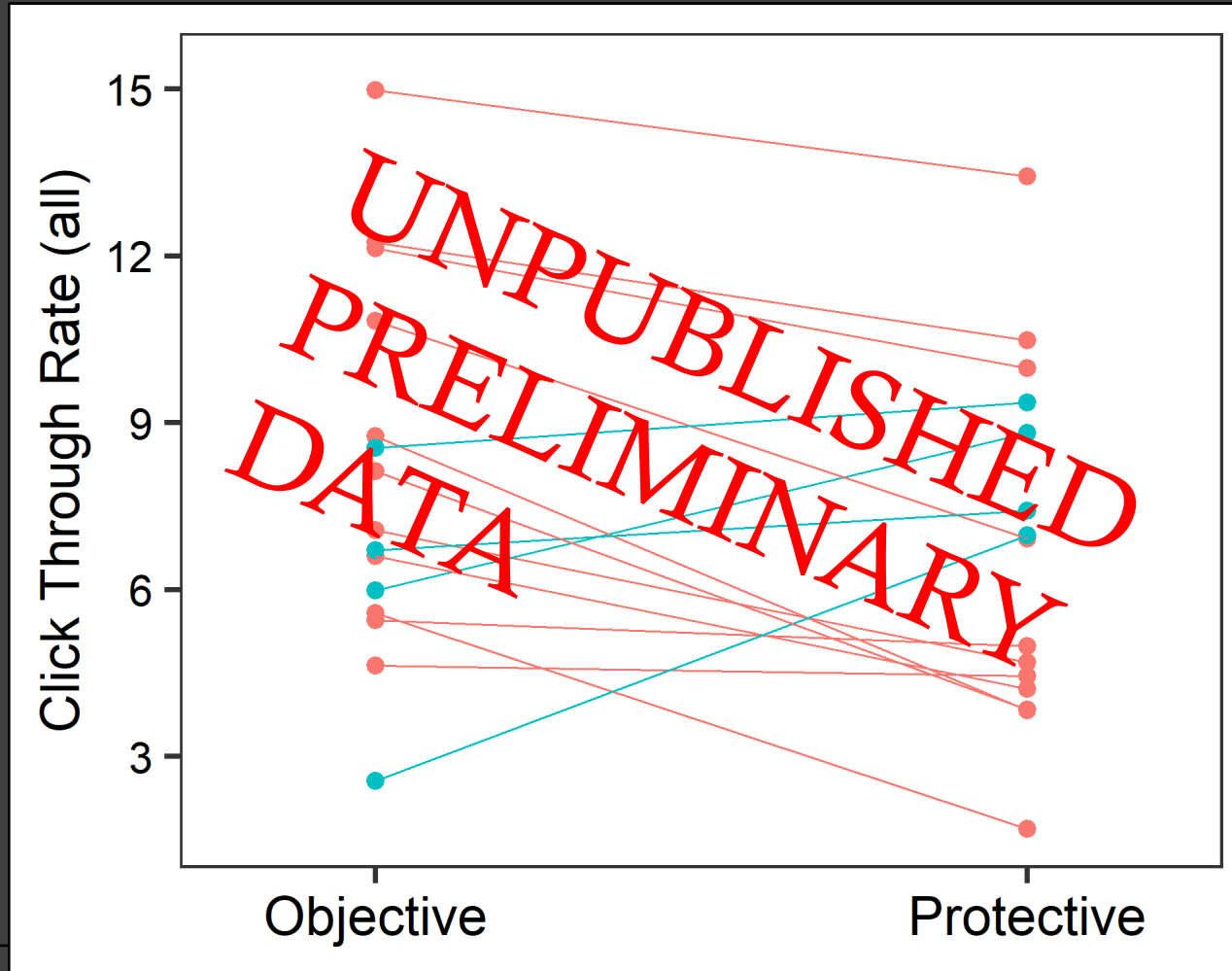


dontmovefirewood.org
Protect your trees.
Don't move firewood.



[Learn more](#)

RESULTS


Objective language generally had a higher click through rate



Odds Ratio = 0.69, $p = 0.07$

 **Don't Move Firewood**
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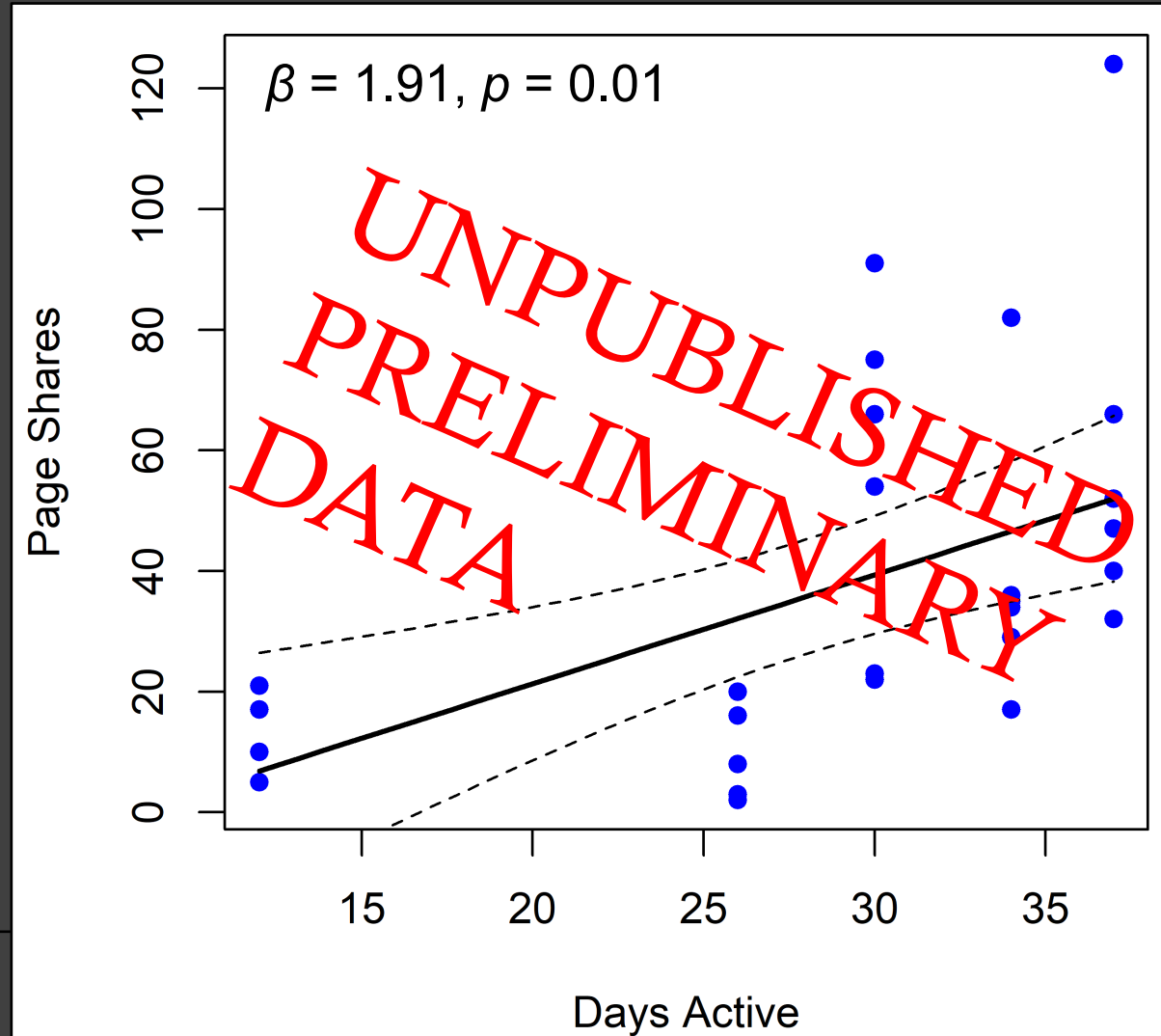


dontmovefirewood.org
Keep invasive pests away
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[Learn more](#)

RESULTS

Shares increased if ads were active for longer



TO SUMMARIZE

Both Protective and Objective frames had **similar overall performance**, with slightly more DMF content engagement (i.e., link clicks and page views) coming from Protective ads, whereas Objective ads drove more engagement within the ads (e.g. enlarging a photo within Facebook, or hitting “Like”).



Protective frames drew more users to navigate to DMF (website) resources, whereas Objective ads drove more engagement within Facebook itself

BONUS! PHOTOS VS CARTOON GRAPHICS

Text: Don't give spongy moths (or their eggs) a free ride...keep firewood local!

Headline: Help protect forest health.

Link description: Buy it where you burn it.

Call to action: Learn More.



ANY QUESTIONS?

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