

Scientists As Media Sources for Wildlife & Fisheries Issues in Florida

**J. Stuart Carlton
Susan K. Jacobson
Cynthia Langin**

**Wildlife Ecology & Conservation/
Natural Resources & Environment
University of Florida**

Problem

85%

of scientists think **public knowledge is a major problem.**

76%

of scientists think news media doesn't distinguish between well-founded and unfounded science.

48%

of scientists think **news media oversimplifies science.**

49%

of the public believes in **anthropogenic climate change.**

32%

of the public believes in **human evolution.**

41%

of the public believes in **ESP**.

**How do media (ab)use
scientists?**

Framing Theory

Framing:

A process of **selection & salience**



Photo: Olibac



**How do media (ab)use
scientists?**

3

- Net Ban

- Reef Fishery

**- Florida Panther
Recovery**

The Net Ban:



Photo: Ricky David

Save our Sealife?

The Net Ban:



Photo: Ricky David

Save our Seafood?

**There was very little scientific
evidence for the net ban**

74%

 VOTE HERE



VOTE AQUI

Florida's Reef Fishery

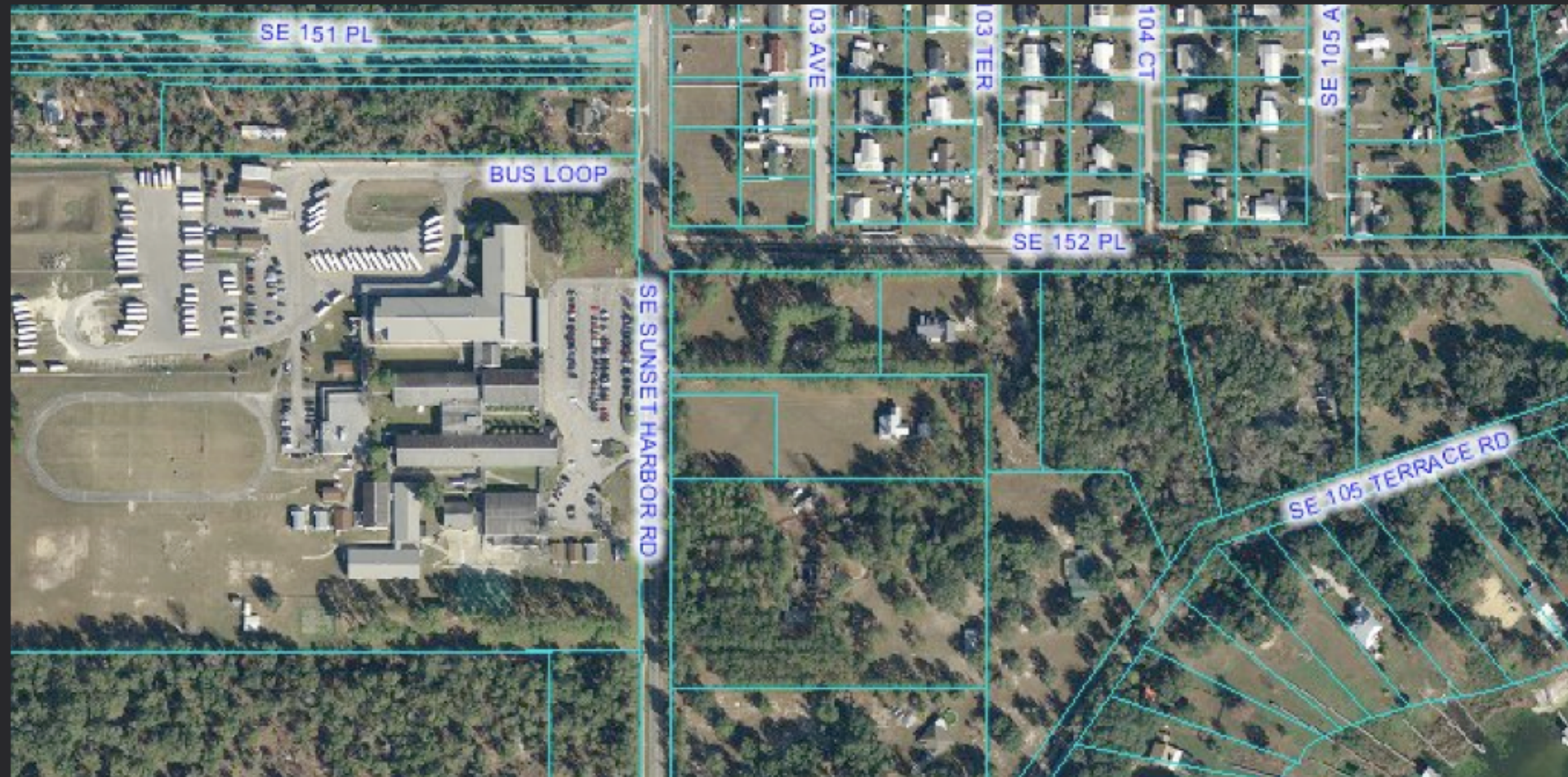


"Some of the ugliest data I've ever seen..."

Florida Panther Recovery



Florida Panther Recovery



Changing land use, changing habitat

- Politically contentious**
- Multi-stakeholder**
- Scientifically uncertain**

Methods

Content Analysis:

“Systematic and replicable examination of the symbols of communication” (Riffe & Lacey)

Sample

- Net Ban

*Orlando Sentinel, St. Pete Times,
Tampa Tribune 1992-1994*

- Reef Fishery

*St. Pete Times, Tampa Tribune 2004-
2006*

- Florida Panther Recovery

*Florida Times Union, St. Pete
Times, Tampa Tribune 2004-
2006*

3 Research Questions

1. Were scientists a significant source of information?

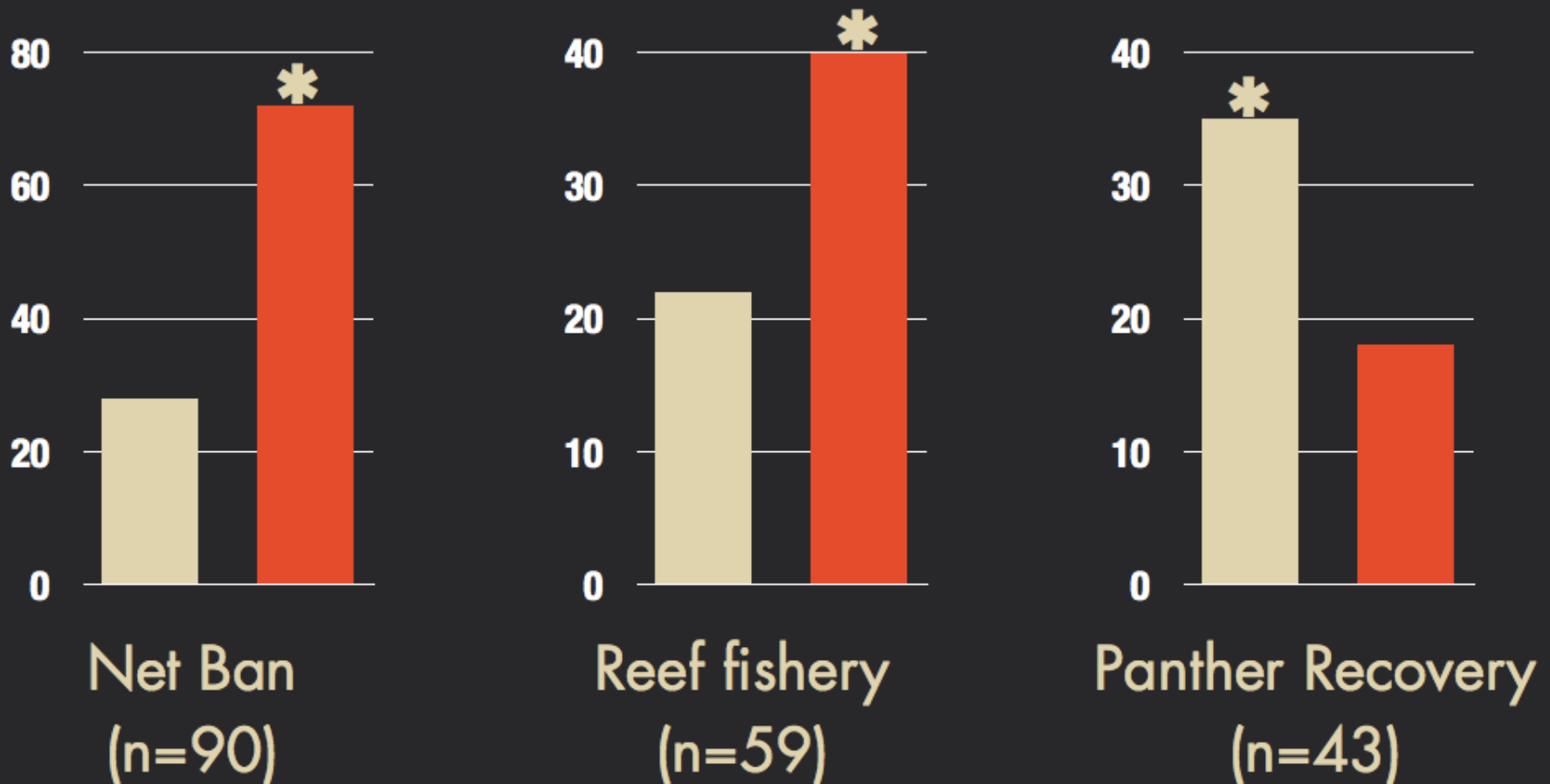
2. Were scientists' quotes more hedged than nonscientists'?

3. Were scientists' quotes significantly harder to read than nonscientists'?

Q1: Were scientists a significant source of information?



No. articles quoting scientists & nonscientists

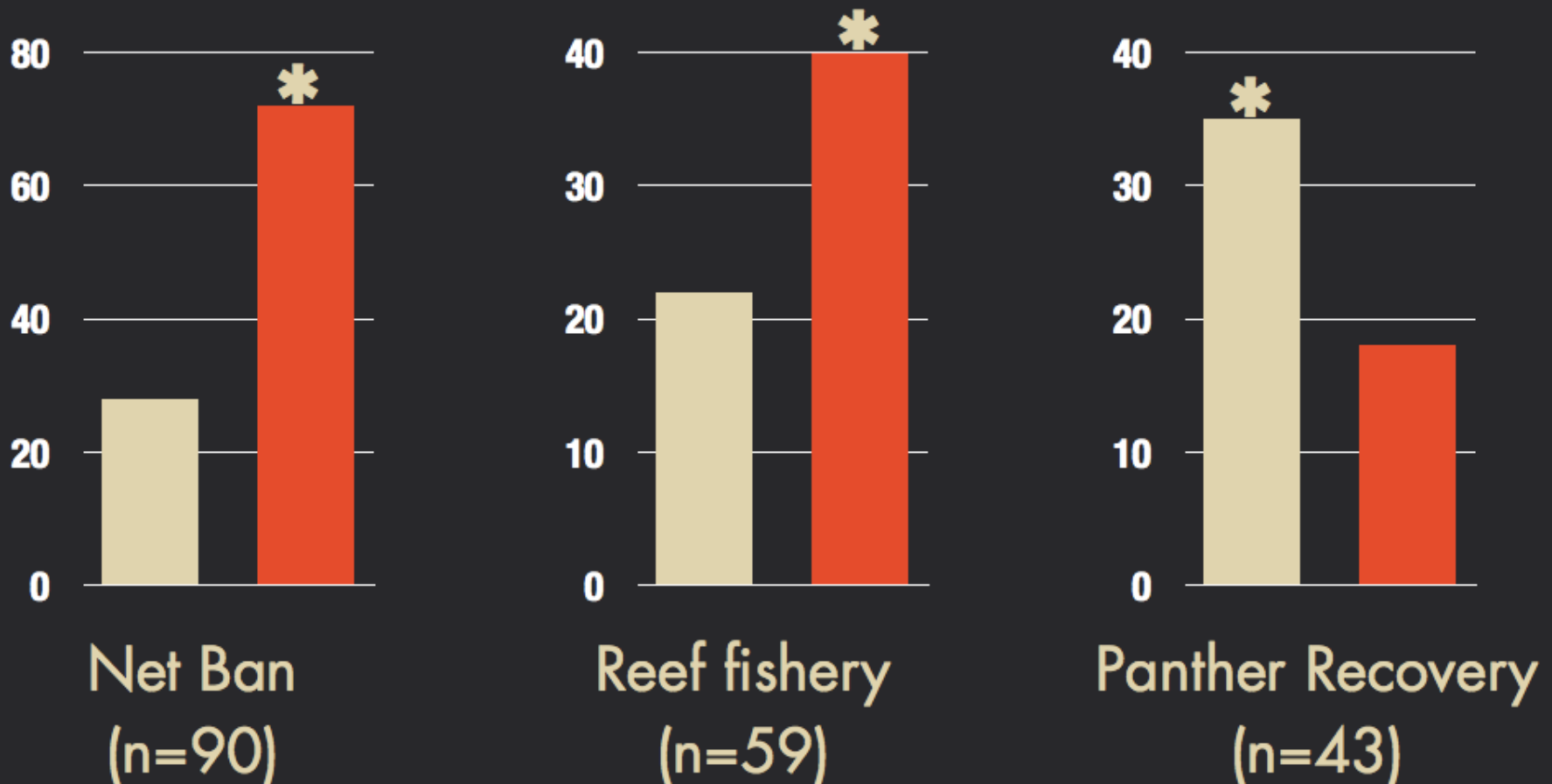


*Significantly higher (Fisher's exact $p < 0.05$)

Explanation?

Scientists decline as news sources as an issue becomes increasingly politicized

No. articles quoting scientists & nonscientists



*Significantly higher (Fisher's exact $p < 0.05$)

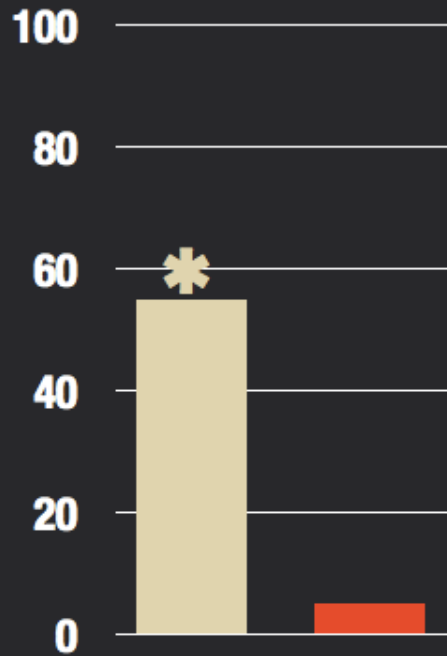
Q2: Were scientists' quotes more hedged than nonscientists'?



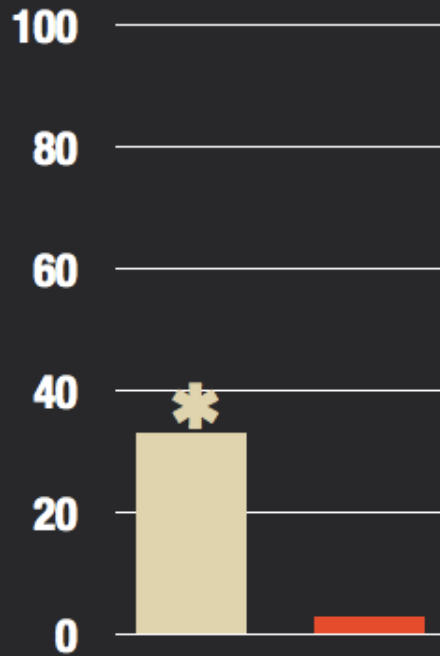
**Uncertain
Might
Could
Seem
Suggest**



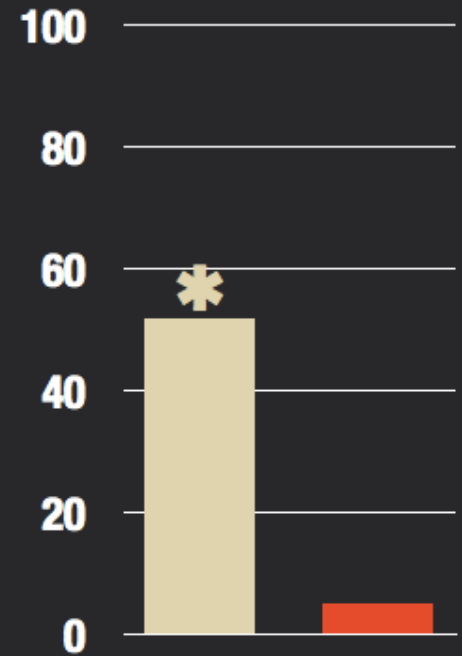
% hedged quotes from scientists & nonscientists



Net Ban
(n=35, 118)



Reef fishery
(n=27, 124)



Panther Recovery
(n=66, 26)

*Significantly higher (Fisher's exact $p < 0.05$)

Q3: Were scientists' quotes significantly harder to read than nonscientists'?



Photo: Flickr user san_drino

Quotes' Readability

Source	# Sentences	Reading Ease (higher=easier)	Grade Level (higher=harder)
Scientist	83	70.11	7.19*
Non-scientist	341	74.30*	5.94

*(Reef fishery data only, *= $p < 0.01$)*

Results

Scientists were quoted less in the fishery issues, but more in the panther issue



Results



Scientists' quotes were significantly more hedged than nonscientists'

Results

**Scientists' quotes
were significantly
harder to read
than nonscientists'**



Lessons Learned



When newspapers focus on the fight, science can lose.



Scientists' quotes have a tendency to be hedged & technical.



Scientists could do a better job of presenting information in a media-friendly manner



Contact:
Stuart Carlton

stuart.carlton@ufl.edu
(352) 388-1234