



Interpreters and Scientists Working on Our Parks iSwoop Pathways Project and iSwoop2.0, Innovations

Revealing the science behind the scenery • Using scientists' visualizations to bridge boundaries between scientists, park rangers, and visitors

Led by TERC and Winston-Salem State University

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iSwoop is Going Places

Reaching Millions



Millions of visitors travel to national parks annually, exploring tidepools, wetlands, caves, lakeshore, and coastlines. With iSwoop visitors will see and hear about scientists' efforts to understand the natural world.

At 6 national parks, project partners ...

- Recruit scientists to be part of professional development for park rangers
- Create a visual library to support STEM learning
- Bring park rangers up to speed on the scientific research
- Research the impact of iSwoop on programs for visitors
- Investigate how iSwoop fuels or sparks visitors' interest

Park rangers use discourse strategies to foster observation, prediction, and speculation



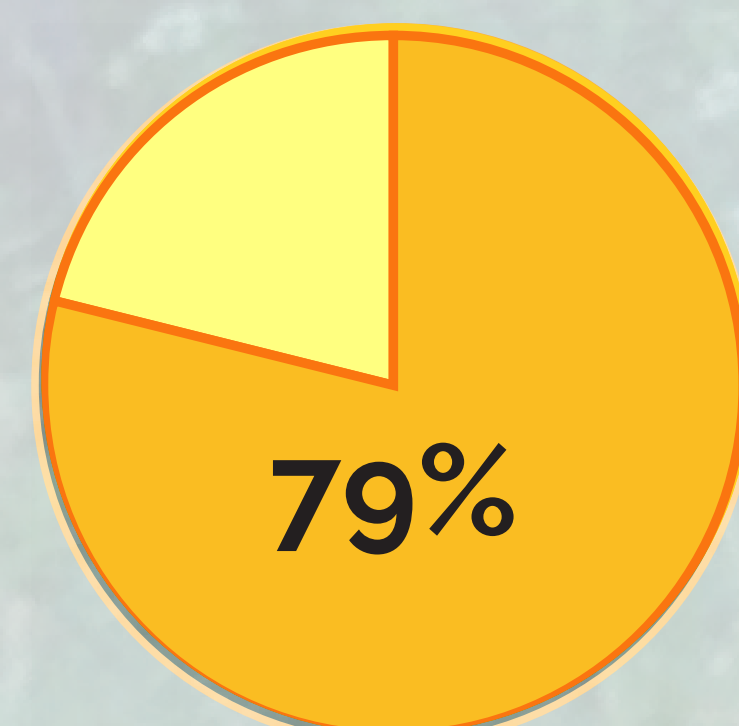
What do you notice?
What do you predict?

How do we know?
How do we know for sure?

Professional Development • A Library of Scientists' Visualizations • Programs for the Public

Conducting Research

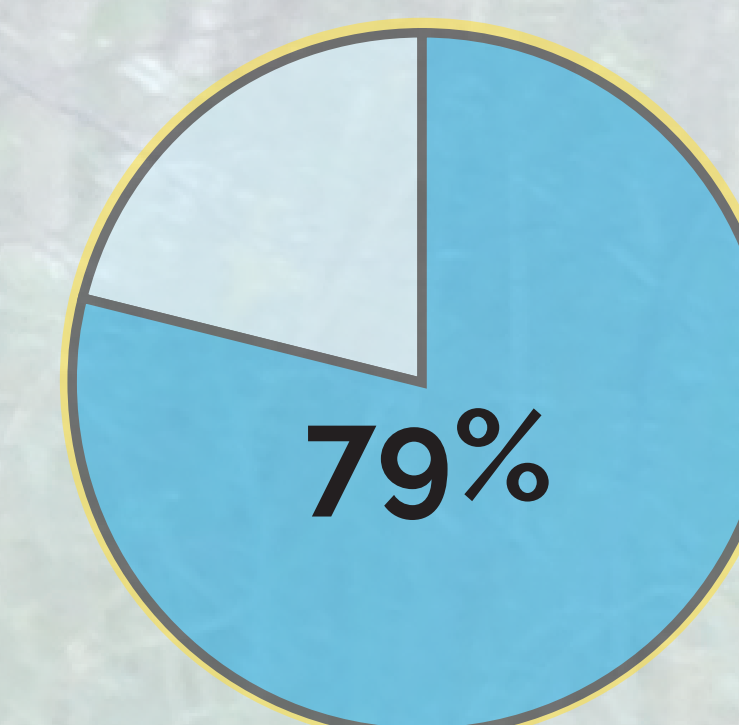
- To determine:
- The components of professional development most valued by interpreters and scientists
 - Which features of the visual library most often spark dialogue, short- and long-term interest in STEM, such as:
 - Visuals of charismatic species
 - Media that scaffold understanding of complex graphics
 - Juxtapositions that highlight comparisons
 - Revelations of processes or phenomena not obvious at first



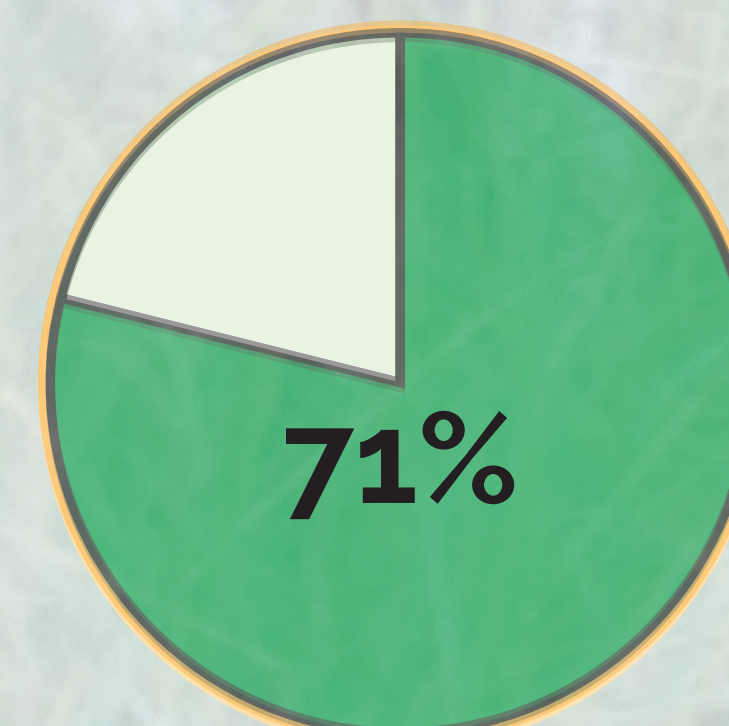
Participating rangers improved their ability to make sense of scientists' visualizations*



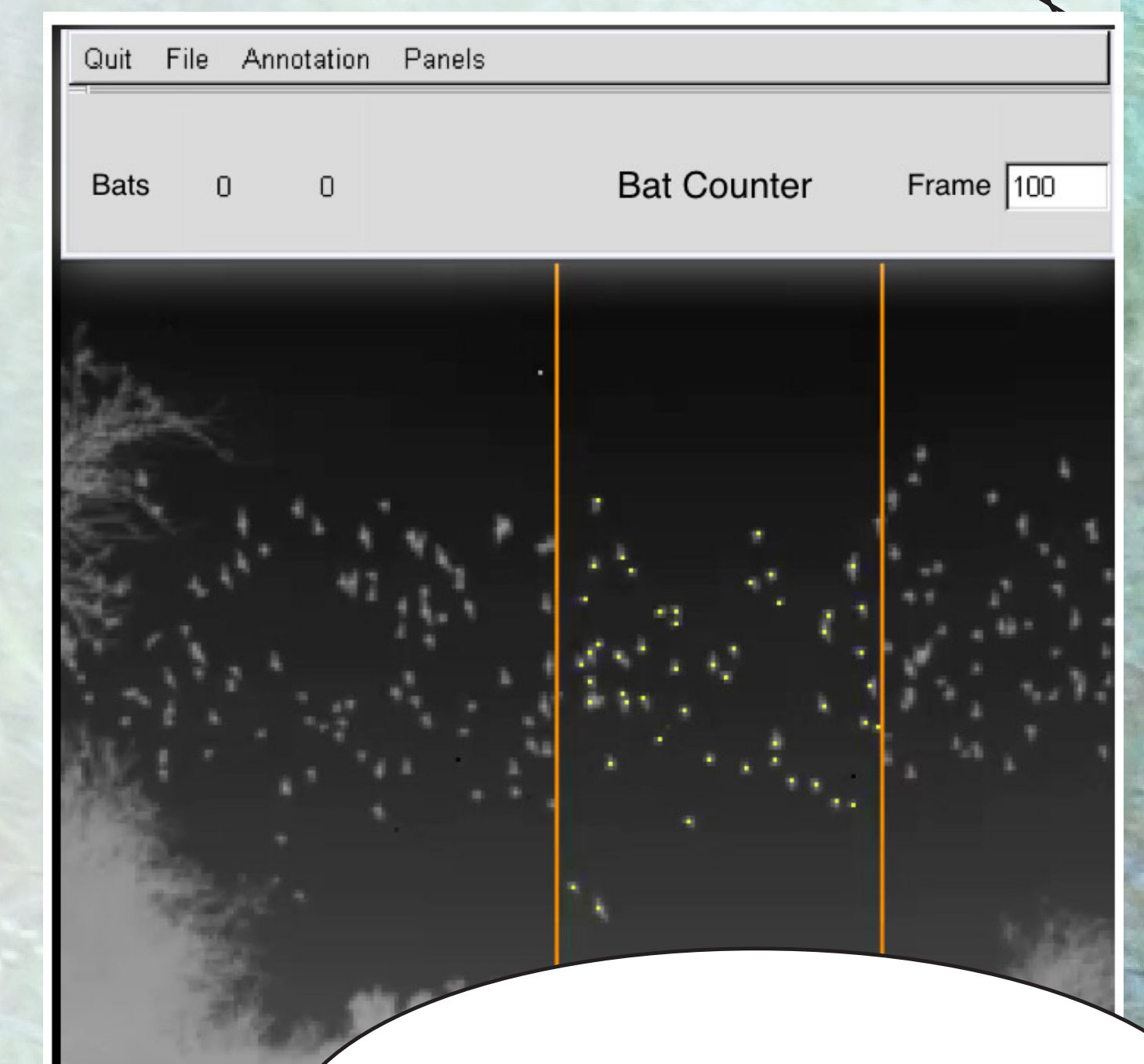
Findings from the pilot at Carlsbad Caverns National Park



Participating rangers incorporated explanations of scientific research being conducted at the park into programs for the public



Ranger-led programs for the public generated excitement about park-based research



What is the relevance?

* 14 park rangers participated in the first two rounds of iSwoop professional developments.
 100% completed surveys pre- and post- professional development.
 Rangers conducted 102 programs January 2014-September 2014 for 683 visitors.
 54% of the sessions observed (14 of 26) used a range of interactive techniques.
 89 roves August 2014-March 2015 reached over 1,600 contacts.
 9 of the 14 interpreters reported that iSwoop had enabled them to look at visitor engagement differently.

—Char Associates



The comment that stood out most to me ... the visitor didn't even know the park was being used for research. —iSwoop Interpretive Ranger