FOSSIL—A national network of amateur and professional paleontologists in the U.S.

Bruce J. MacFadden, Kent Crippen, Betty Dunckel, Shari Ellis, Austin Hendy, Katherine Hendy, and Claudia Grant

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Millions involved in lifelong learning activities—associations, clubs, societies, etc.

Astronomy (Stargazers)

Birdwatchers

Many of these common-interest groups are networked via the web.

ASTRONOMY from the GROUND UP

• ASTC Connect • AFGU General Information

The Crab Nebula as seen from the Hubble Space Telescope.

You are not logged in. (Login)

Welcome to AFGU Online!

This community-based site is where all of us as Astronomy from the Ground Up participants can connect and strengthen our astronomy skills. Astronomy from the Ground Up provides informal science educators at parks, nature centers, science centers, and museums with new ways to communicate the excitement of modern astronomy.

www.flickr.com

- AFGU main forum
- [Note -You must be logged in to view this forum]

Featured Activity - Pocket Sun Clock

The Sun is the star this June, first with the Transit of Venus and later with the Summer Solstice. Use this simple pocket sundial to get your visitors more in tune with the rhythms of the Sun.

Pocket Sun Clock

Educator of the Month - Anne Wilson

Our new Educator of the Month is Anne Wilson, a Park Ranger at Agate Fossil Beds National Monument, NE.

Anne's Profile

Along with participating in the Sky Rangers Yosemite Workshop in 2010, Anne completed the Interpreting Our Magnetic Sun Workshop earlier this year.

Click here to learn about the many ways that Anne fosters educational partnerships with her local astronomy club and other organizations.

Main menu

- About AFGU
- Upcoming Workshops
- Educator of the Month

Upcoming Events

Skynet Junior Scholars Online Workshop

Monday, January 20, 12:00 AM

» *Friday, February 28, 12:00 AM*

Go to calendar...

Calendar

◄ February 2014 ►

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

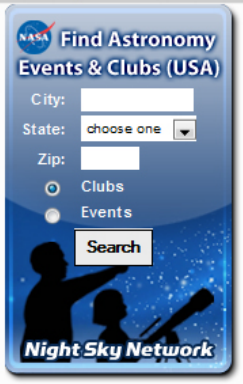
Find Us On Facebook!

facebook

Name: Astronomical Society of the Pacific

Fans: 4237

Night Sky Network - Find Astronomy Events & Clubs



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Shawn Langston, January 2014 eBirder of the Month
10 February 2014

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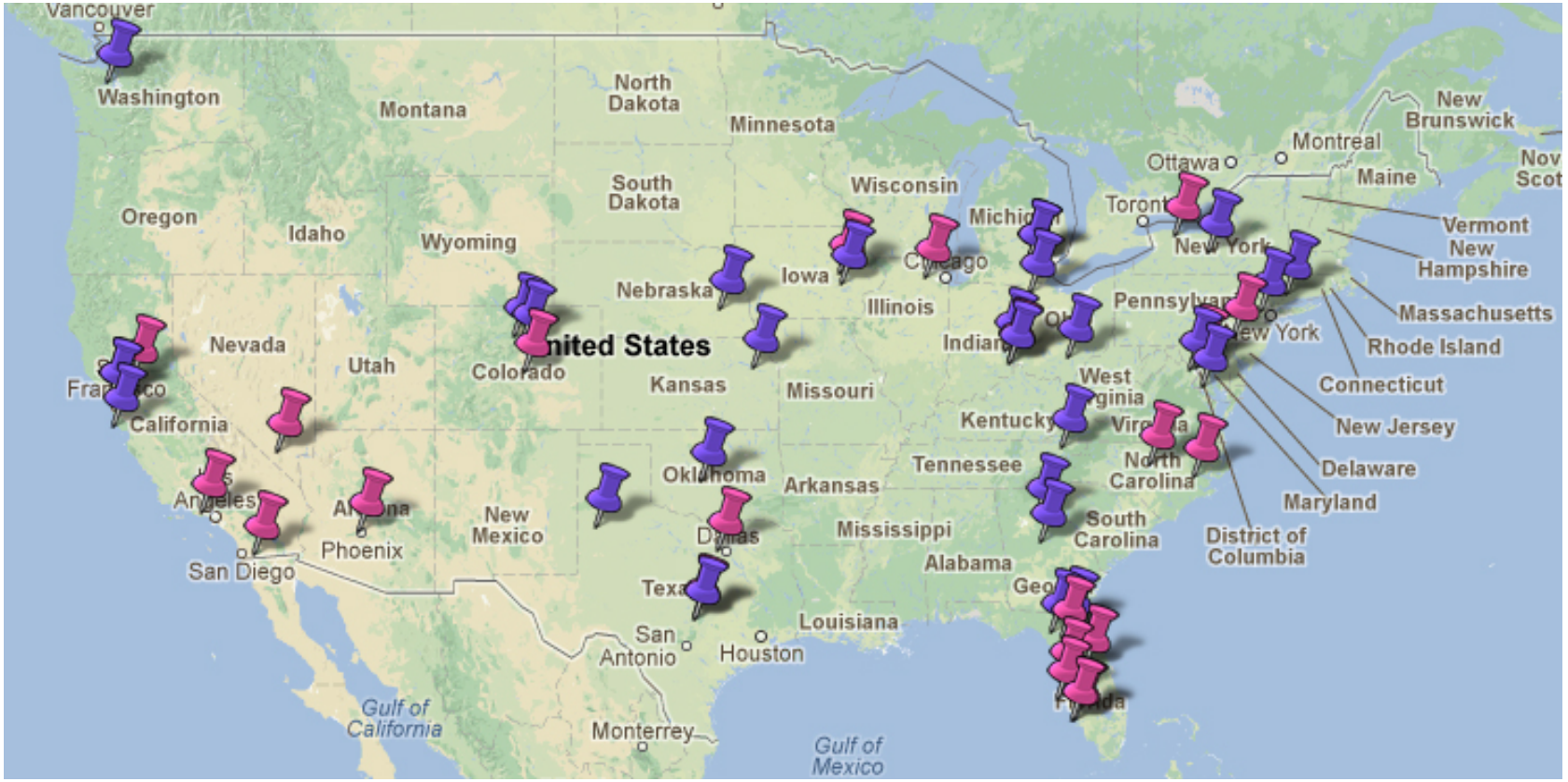
U.S. fossil groups are not networked

- We recently surveyed two audiences interested in fossils and paleontology
  - Amateur clubs, societies, etc.
  - Interested professional paleontologists
- Some things we determined
  - Who are they?
  - What do they like to do?
  - How do they learn together, etc?

Our survey results: 2012-2013



Red pins = amateur paleontology groups that initially responded
Purple pins = interested professional paleontologists

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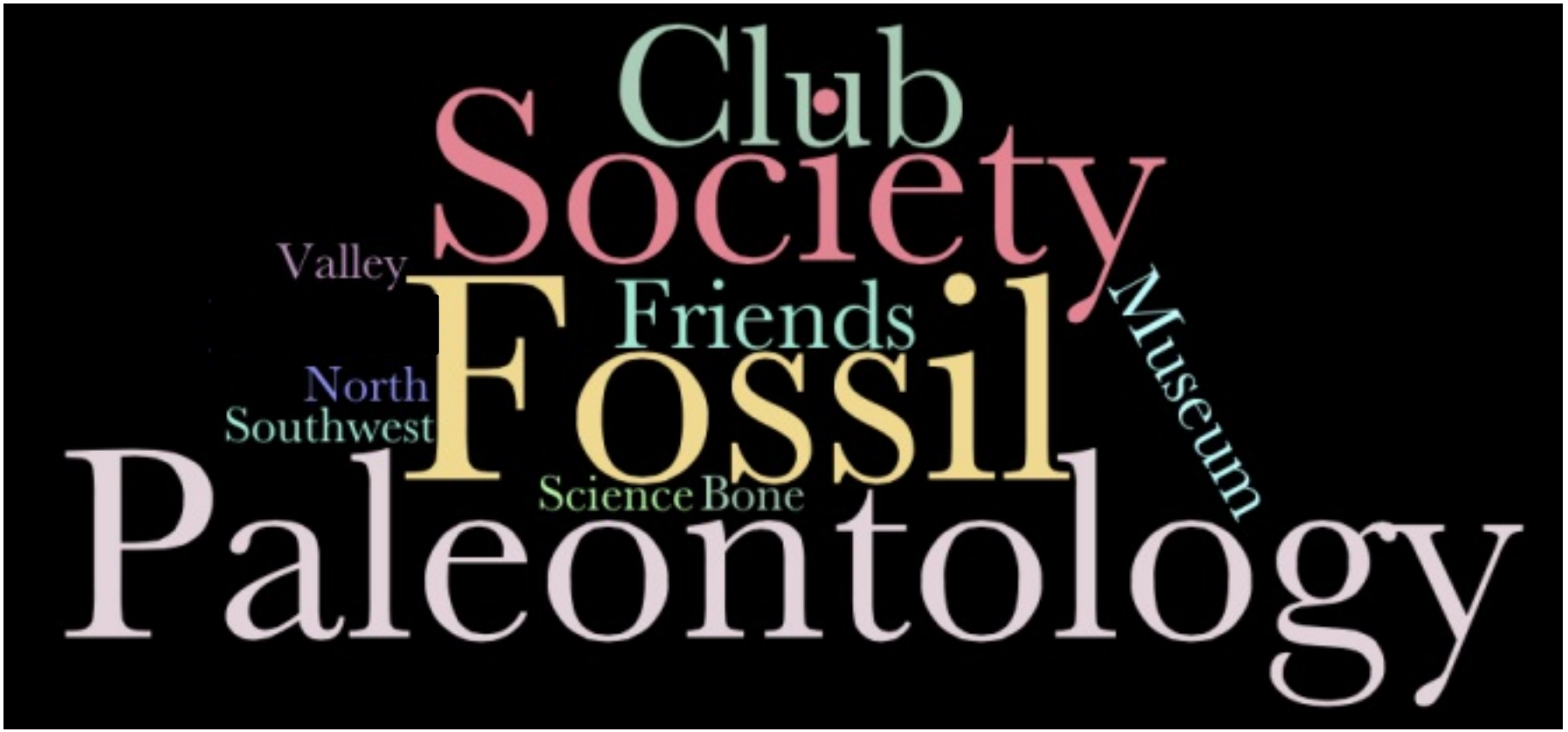
Results for Amateur groups

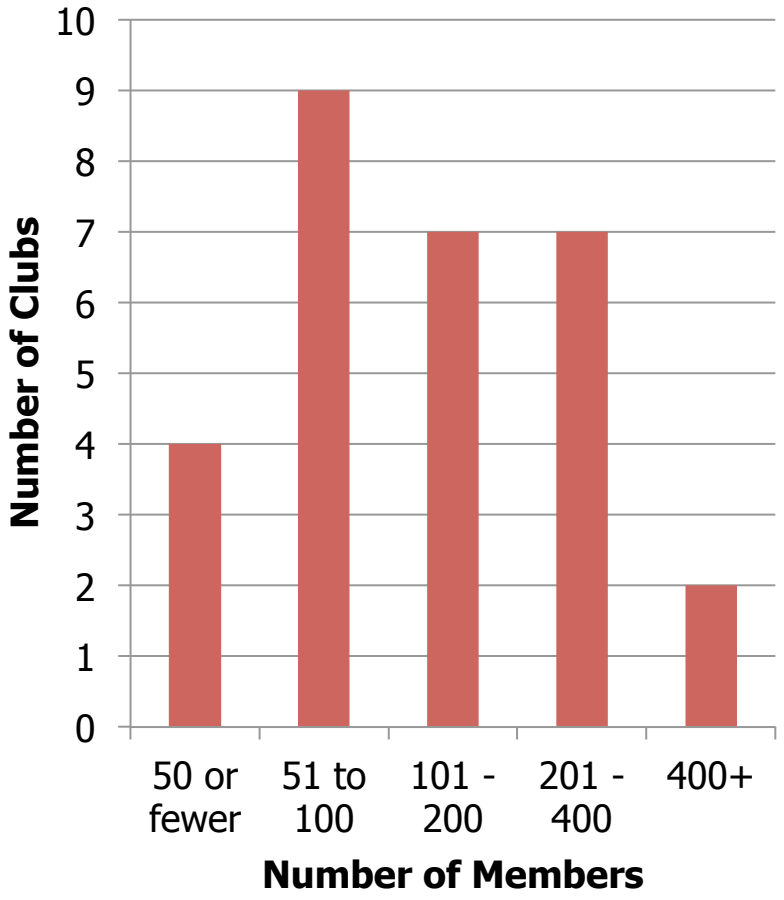


Preferred “Title”

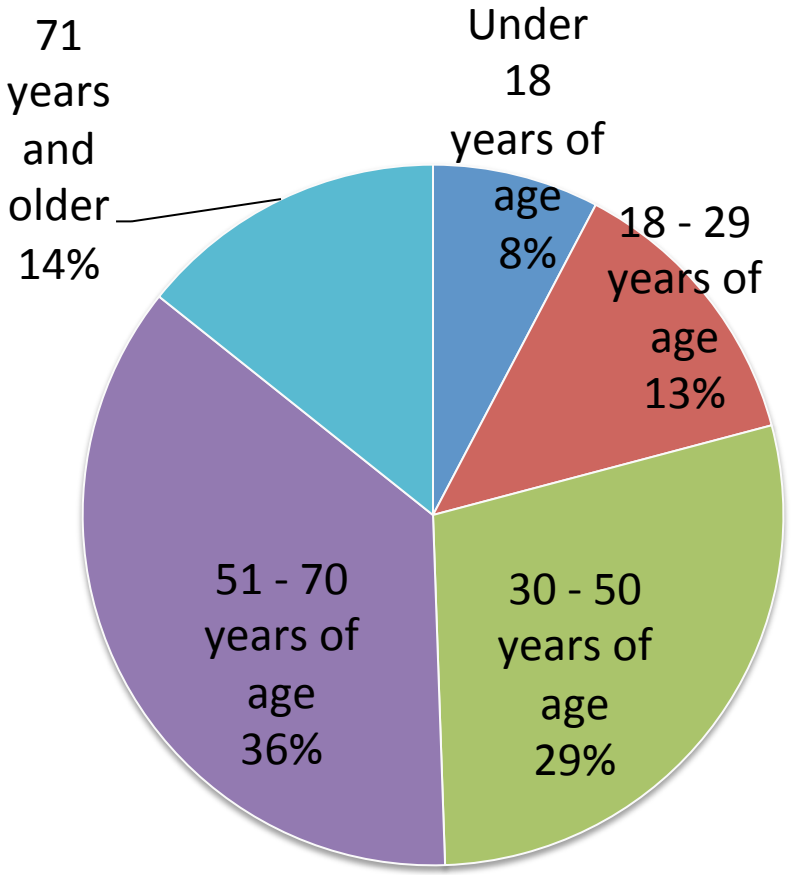
Amateur paleontologists	17	57%
Avocational paleontologists	5	17%
Citizen paleontologists	3	10%
Hobbyist paleontologists	3	10%
Other	2	7%

Number of members

- Average ~165
- Range = 30 to 600+

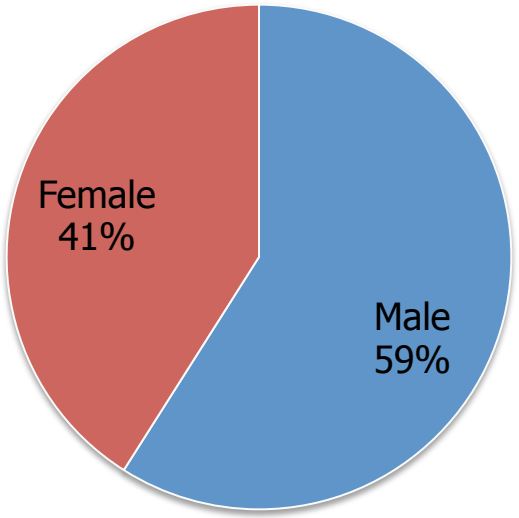


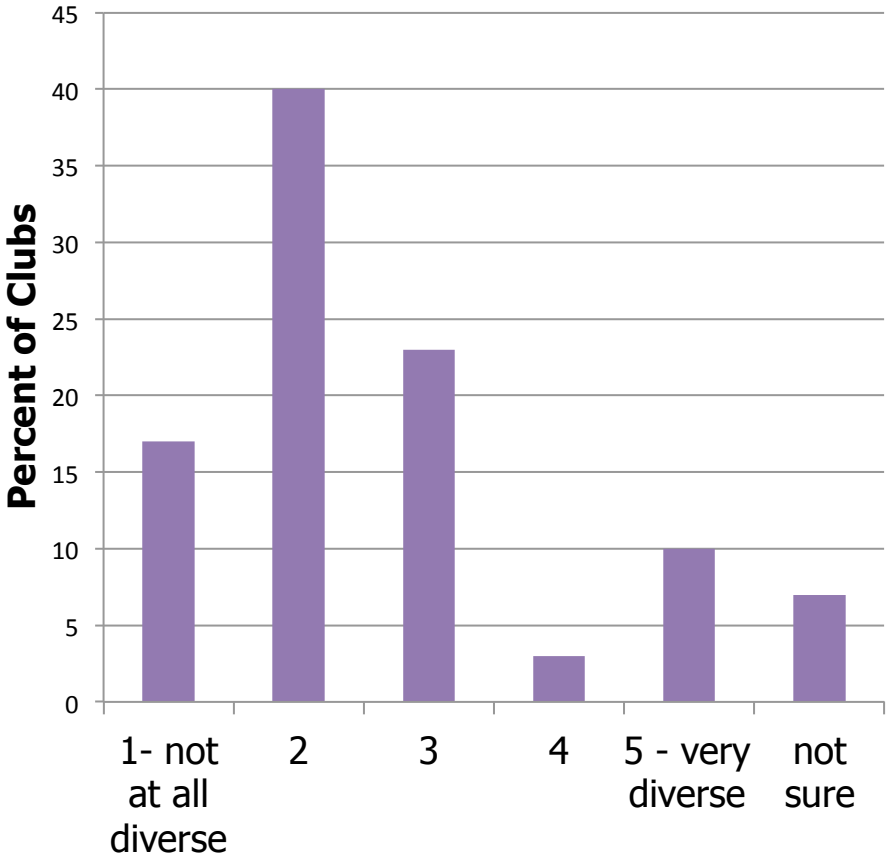
Age of members



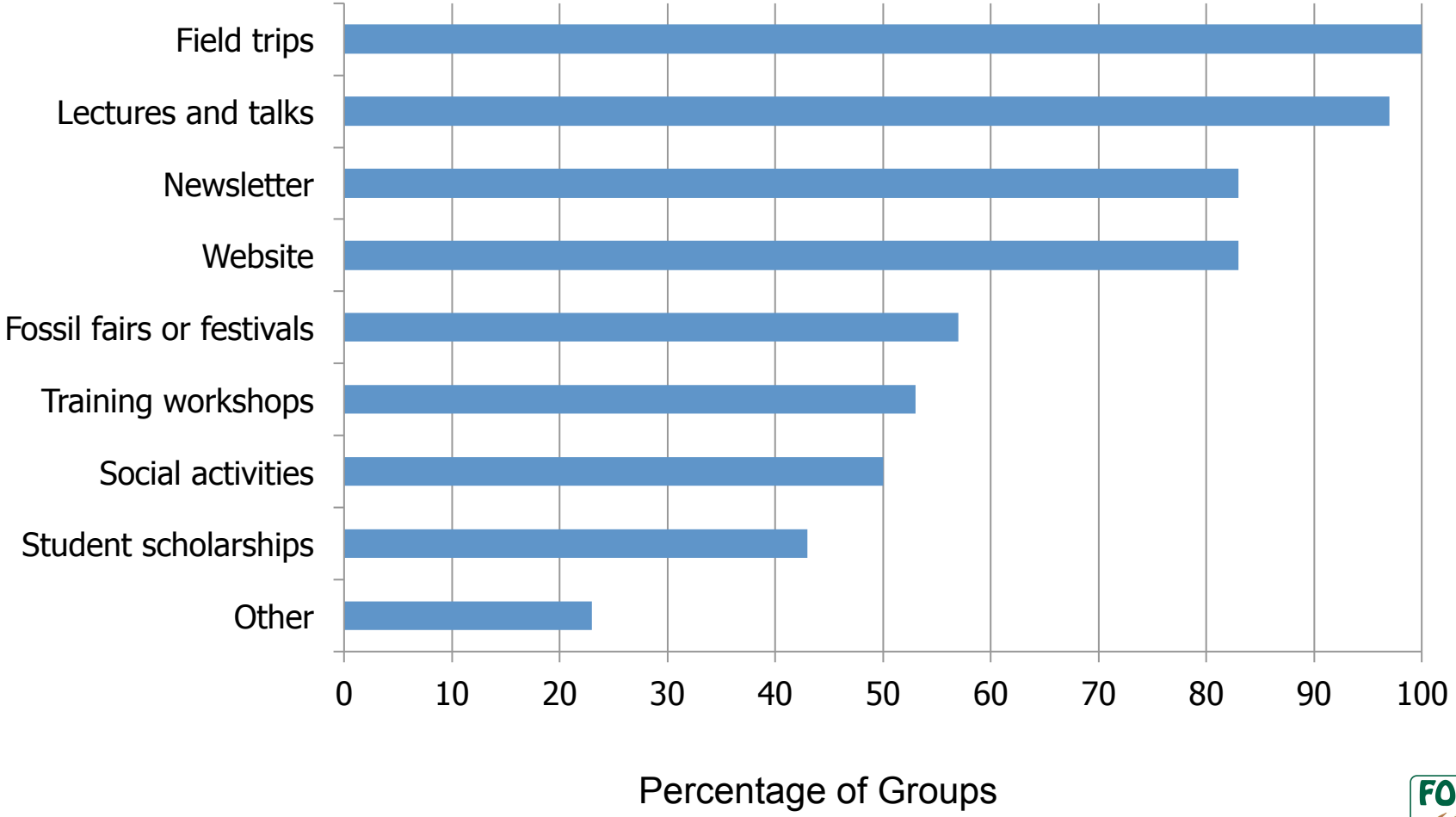
- Fit model of “K to gray” lifelong learners
- “8 to 80” years old
- Half > 50 years old

Gender and diversity

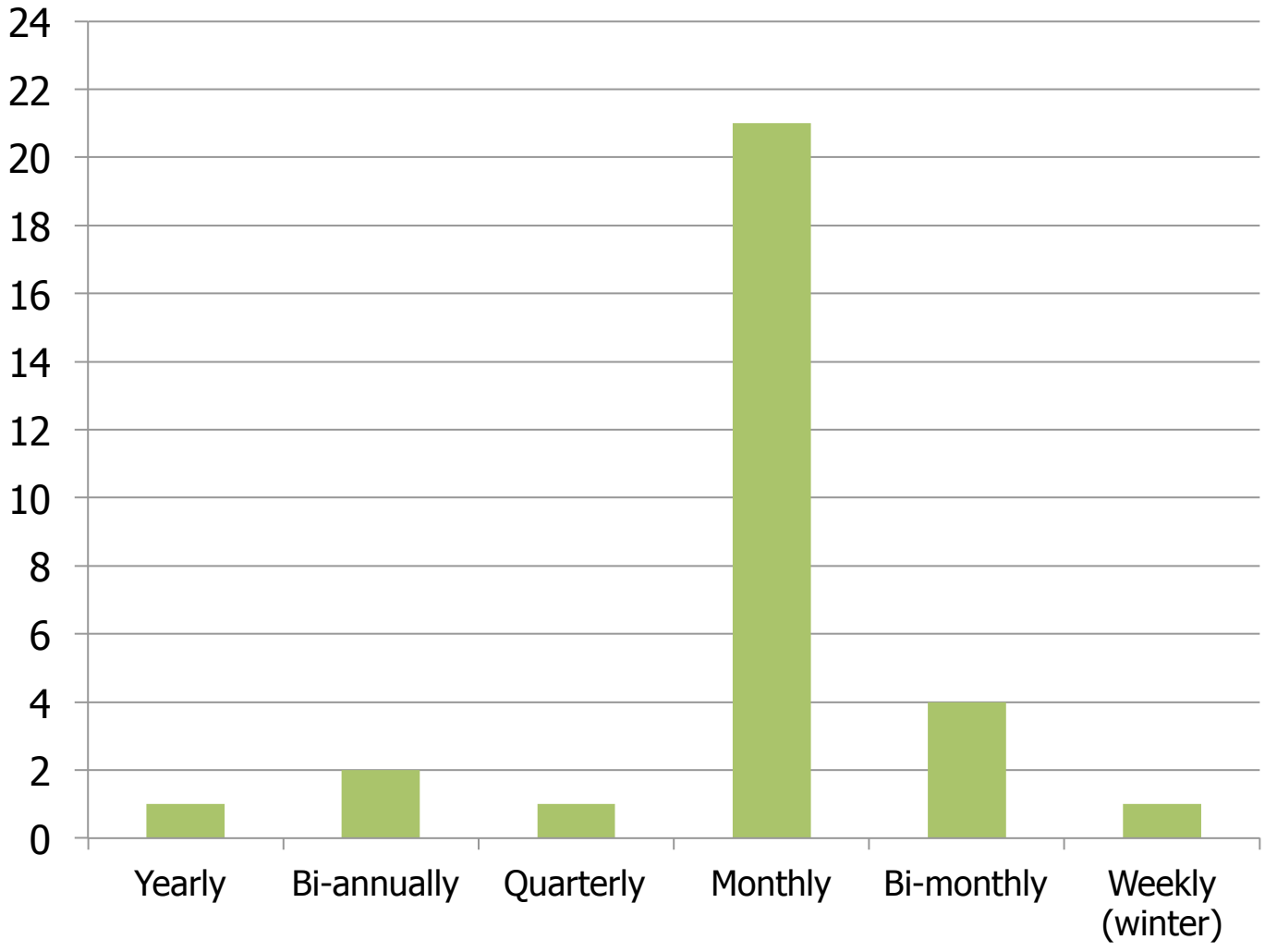




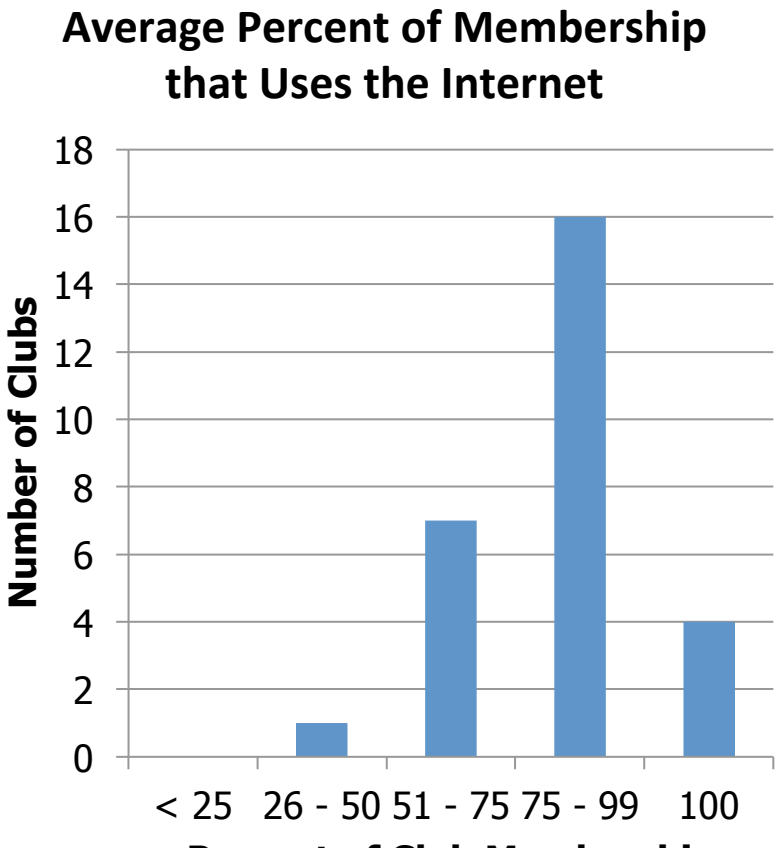
Common activities

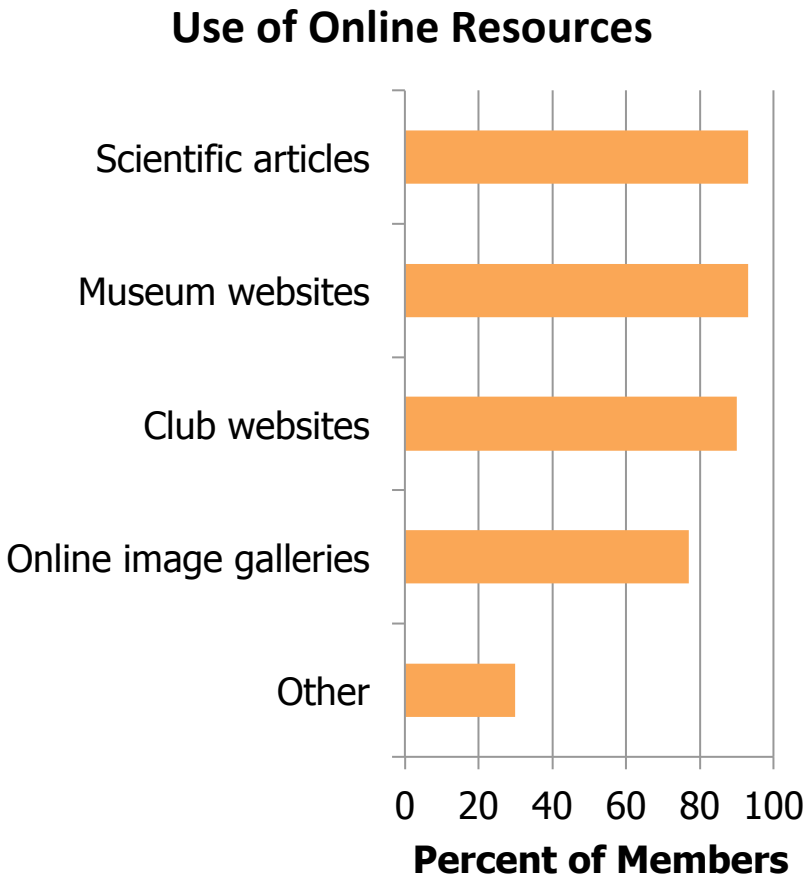


Meeting frequency

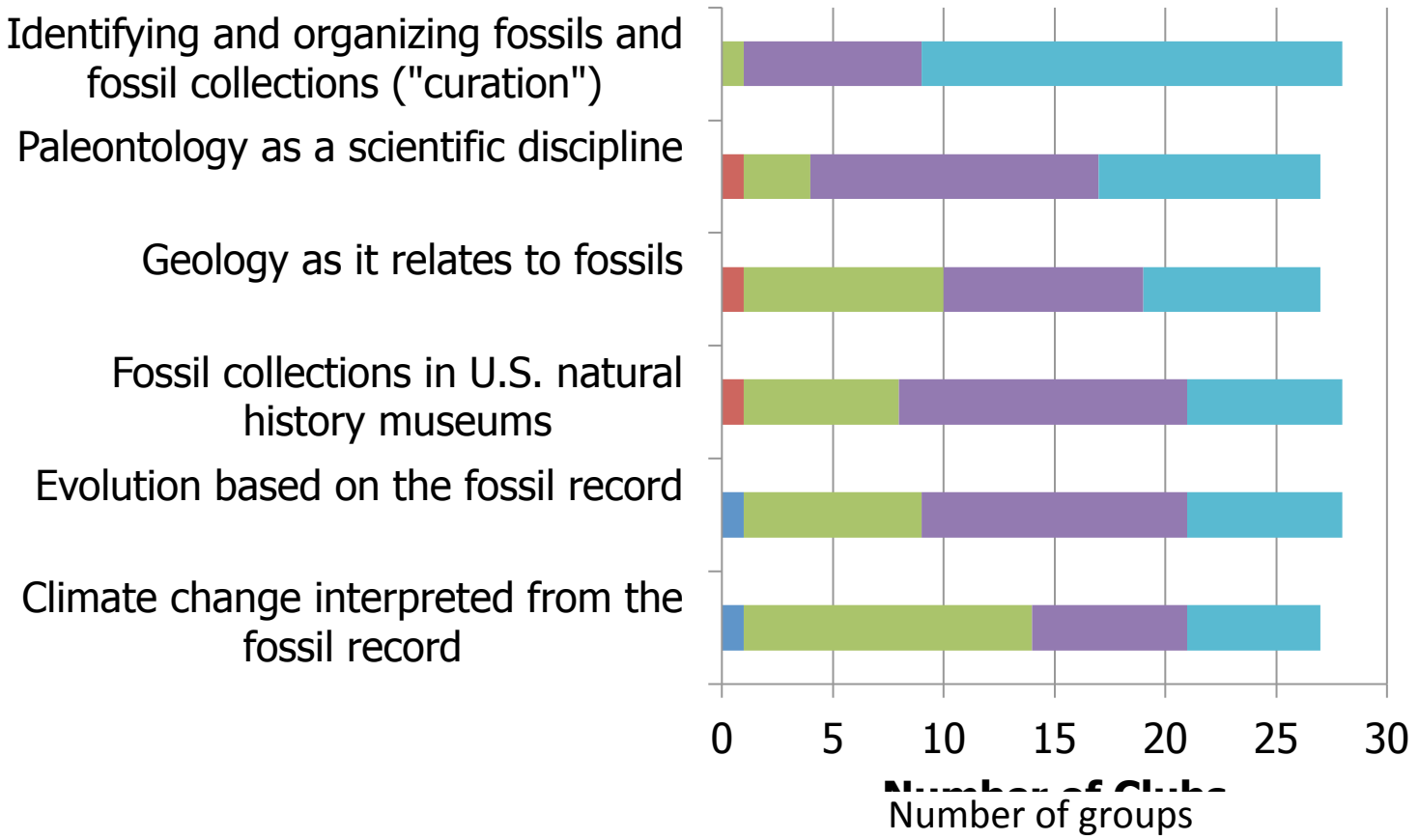


Internet use by members





Interest in Science Topics



The FOSSIL project

- Started in October 2013
- 4-year project supported by
  National Science Foundation

- Links two audiences in US with web-learning network (Community of Practice)
  - Amateur fossil & paleo groups
  - Professional paleontologists
- FOSSIL project kickoff here at NAPC
  - More than 30 clubs and societies represented
  - Many interested professionals
  - Kickoff Theme "**Building Connections**"

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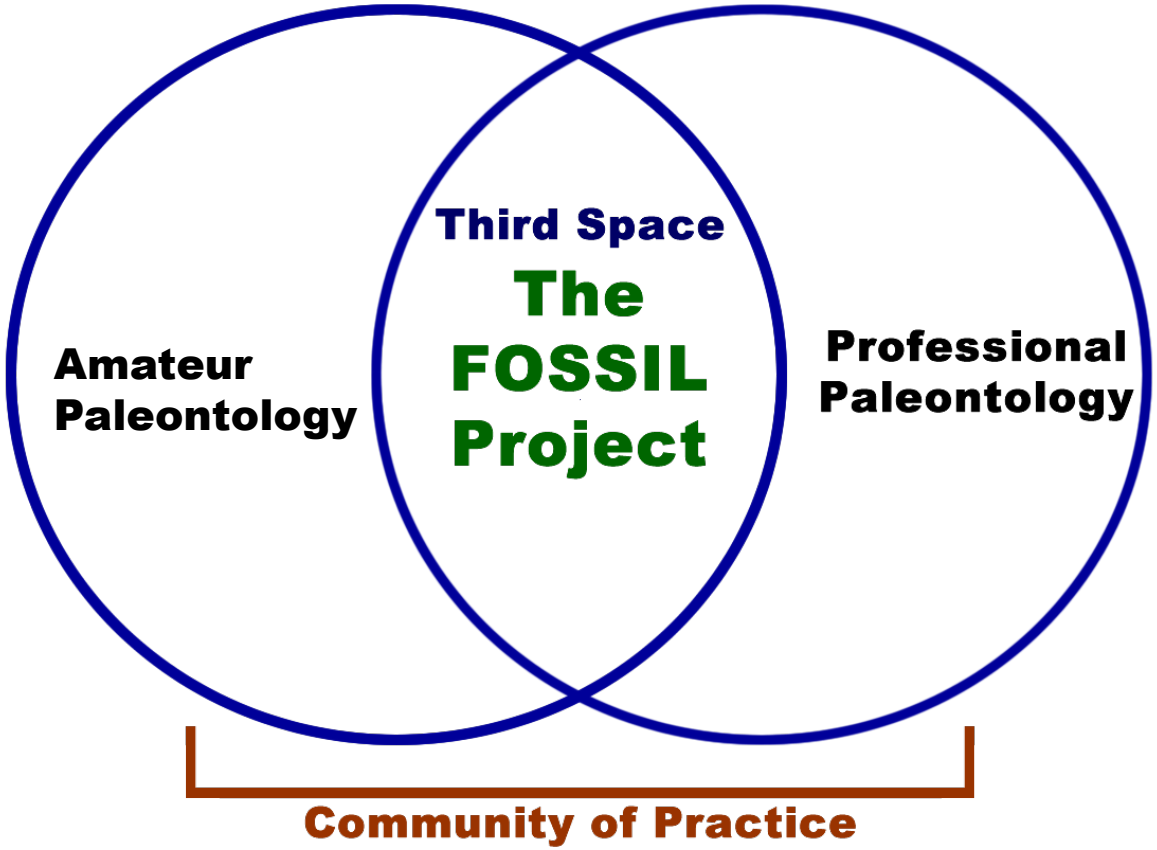
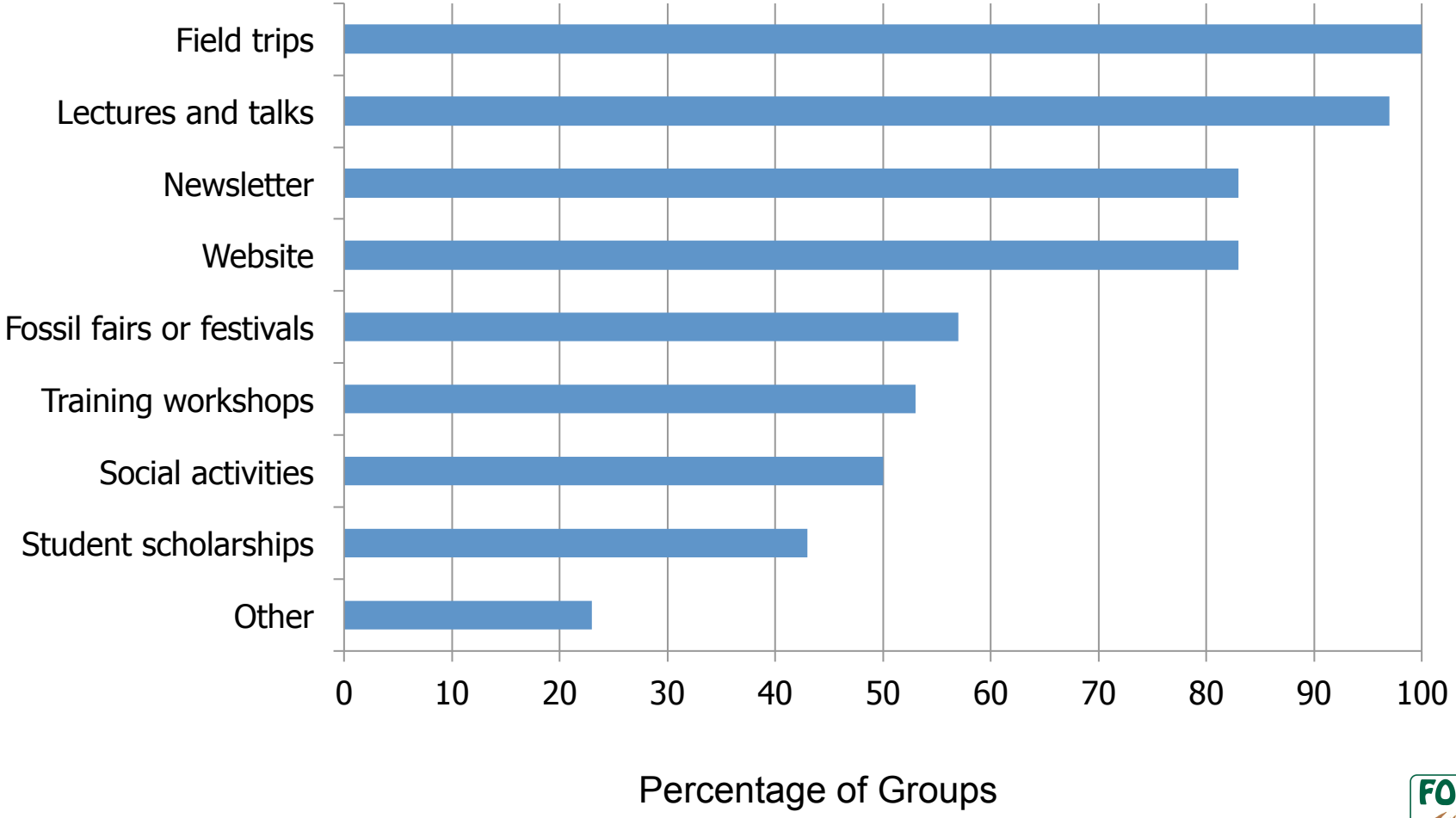
FOSSIL: Core project elements

- Amateurs and professionals
  - Equal partners
  - Breaking down barriers
  - Learning for mutual benefit
- Cybertechnology, 21st-century learning theory, and social media
- Participatory learning & development
  - Not teacher (authority)—student (learner) model
  - Interactive learning, design FOSSIL together

FOSSIL is grounded in learning theory



FOSSIL is informed by our background research



Don’t need to re-invent the wheel
We will be informed by best practices

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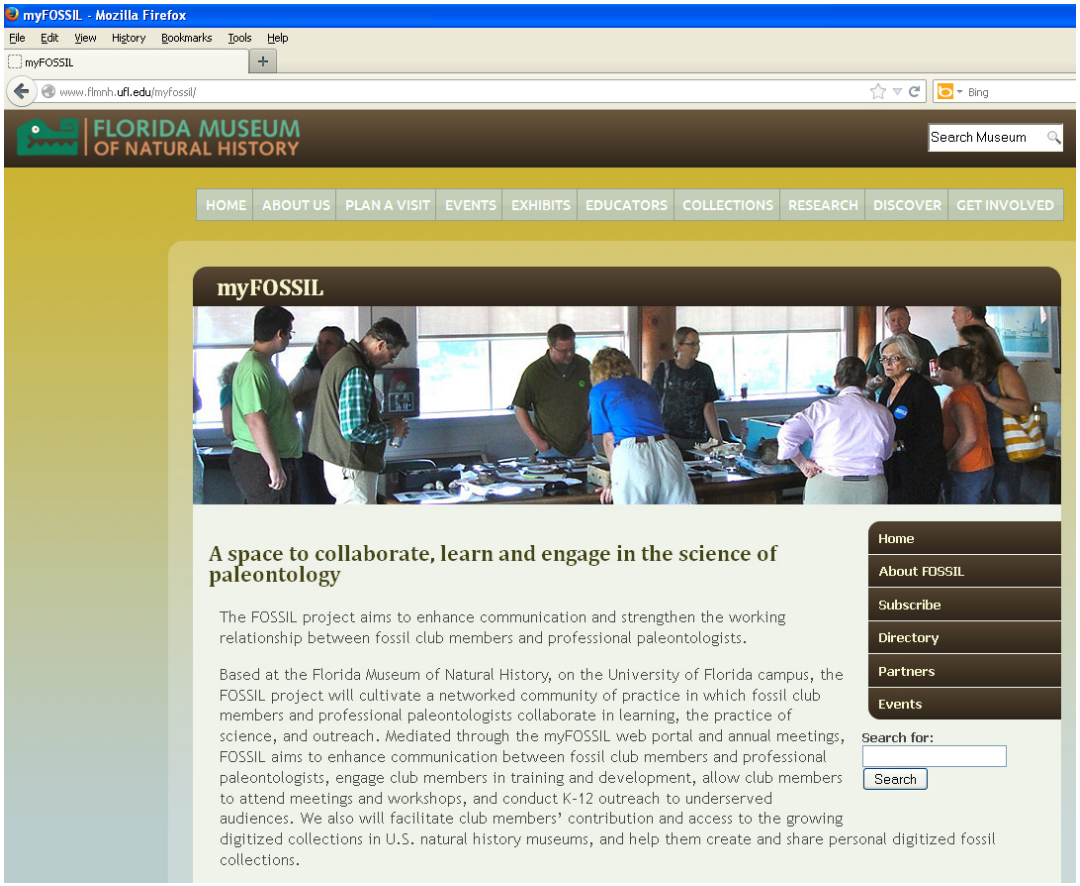
myFossil.org--The FOSSIL engine



- Not just a web-site, but a highly interactive, collaboration portal
- In the initial stages of design; Need community input
- Will continue to evolve throughout the 4 years

FOSSIL: “Big Data” innovation

- 100 million fossil specimens are conserved in US natural history museums
- For years these have been behind the scenes and largely not accessible
- A new national initiative is working towards digitizing these specimens into a single web portal Cloud

- FOSSIL plans to help with this national initiative

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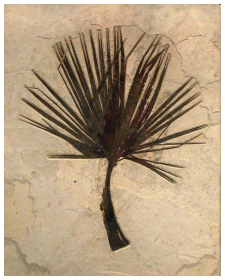
Fossil Specimen Digitization

- Some (not all) club members are interested in helping professional paleontologists digitize museum fossil collections



- FOSSIL will provide training
- FOSSIL will help match collections needs with volunteer opportunities ("digitiz-thons")
- Participants will receive recognition
- Public participation an important part of FOSSIL

K12 outreach
Our challenge to Broaden Diversity

The next generation of
Amateur paleontologists!

FOSSIL Take-home message: Where will we be in 4 years?

A cyberenabled network of U.S. fossil clubs and societies and interested professionals will—

- Develop a novel learning community of practice (CoP)
- Model of best practice for ISE (Informal Science Education)
- Share ideas and resources
- Engage diverse learners, e.g., K12
- Help to digitize US fossil museum collections
- Increase public awareness of fossils and paleontology
- Build a place—myFOSSIL--where you will visit often!

Acknowledgments
FOSSIL participants & stakeholders

- FOSSIL core project team

Bruce J. MacFadden, Kent Crippen, Betty Dunckel, Shari Ellis, Austin Hendy, Katherine Hendy, and Claudia Grant

- More than 30 US fossil clubs and societies
  - Hopefully more will join, if interested
- Interested professional paleontologists, PS, SVP
- External advisors—
  - Tiffany Adrain, Gail Jones, Peg Yacobucci
- Evaluators—Audience Viewpoints

Project 1322725 (DRL)