

Meet a Scientist

Catalina Pimiento

I am a colombian biologist. My research investigates the paleoecology of sharks. I am particularly interested in their nursery habitats, long-term diversity dynamics, environmental constraints, biogeography, body size and extinction. I am also interested in science education and public outreach.

My Education:

PhD: Biology, UF [in progress]

Advisor: Bruce MacFadden

Minor: Educational
Technology

Advisor: Swapna Kumar

MSc: Biology, UF 2010.

Advisor: Bruce MacFadden

Minor: Science Education

Advisor: Rose Pringle

BS: Biology, UJ 2006

Advisor: Fabio Gomez

My Research:

My PhD research studies the habitat of ancient neotropical sharks from fossil sites that provide important information on the effects of the closure of the Central American Seaway in sharks' evolutionary ecology. From all the shark species I studied, I am mostly interested in Megalodon (*Carcharocles megalodon*). I try to understand the extinction of this top predator, to use this information to interpret trophic cascades from a paleobiological approach, and to provide insight for the conservation of modern sharks facing extinction.

Graduate Advisor: Bruce MacFadden

Smithsonian Advisor: Carlos Jaramillo

Check out this video that show all the people I have worked with in only one year! A big part of science is collaborating and working with other people!

<http://vimeo.com/78102646>



Catalina Pimiento's Megalodon Research Notes (simplified)

FINDING THE NURGERY

① FINDING FOSSIL TEETH

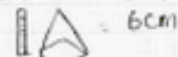
1a. Field: → pictures / videos of the field localities (with methods and instrumentation)
→ cartoon (?) representation of how it looked like 40 million years ago.
→ i.e. shallow-water environment.

2b. Fossil teeth: → Pictures of teeth that they may find in the field
→ Big teeth
→ Small teeth.

② STUDING TEETH IN THE LAB

2a. Catalogue: Organize teeth in cabinets with numbers


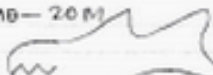
2b. Measure the teeth: → Choose some teeth and measure them

 6cm

→ Then do a table with the measurements

Specimen	tooth size
1	6cm
2	15cm
3	2cm

3b. Determine if you have babies / adults: → Compare table with data provided

Teeth size	Oral size	Babies	Adults
6cm	4m	0 - 10m	10 - 20m
15cm	20m		
2cm	1m		

③ CONCLUDING → With the data collected and the info provided organize the info in this table

How many teeth were:

Babies	Adults
5	1

And conclude that in this locality, most of the individuals were babies.