



# Wild Wise: Coexisting With Carnivores

Teacher Orientation  
2019-2020 School Year

WOODLAND PARK ZOO SAVES ANIMALS AND  
THEIR HABITATS THROUGH CONSERVATION  
LEADERSHIP AND ENGAGING EXPERIENCES,  
INSPIRING PEOPLE TO LEARN, CARE AND ACT.

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# Agenda



1. Introductions
2. Review Outcomes, Roles & Timeline
3. Updates to Elements
4. Beyond 2019-2020

# Wild Wise: Coexisting with Carnivores Team



Name	Title & Organization	Responsibilities	Email
Lena Jones	Grade 6-12 Science Curriculum Specialist, Issaquah School District	Overall Issaquah SD program oversight	JonesL@issaquah.wednet.edu
Logan Lauren (they/them)	Lead Learning Facilitator, Youth & Adult Engagement Woodland Park Zoo	Overall program coordination and logistics	Logan.Lauren@zoo.org
Josiah Downey	Supervisor, Youth & Adult Engagement Woodland Park Zoo	Program development, funding and evaluation	Josiah.Downey@zoo.org
Kelly Lindmark	Learning Facilitator, Woodland Park Zoo	Facilitation of zoo-guided program elements	Kelly.Lindmark@zoo.org

# What is Coexisting with Carnivores?



Coexisting with Carnivores (CWC) is a collaboration between Woodland Park Zoo and Issaquah School District. It gives students a chance to develop their science inquiry, civic literacy and leadership skills as they **investigate and share recommendations** for living with the carnivores in their communities.



# Program Outcomes



**Student Outcomes:** Students will demonstrate increased...

- understanding of carnivore ecology and the role of carnivores in ecosystems.
- understanding that scientific research plays a role in addressing community issues.
- appreciation for local carnivores.
- ability to successfully engage in the practices of scientific inquiry.
- understanding of peaceful coexistence with carnivores.

**Teacher Outcome:** Teachers will demonstrate increased...

- Increased level of comfort in facilitating student-driven scientific investigations that have no predetermined outcome.

# Role of Teachers

- Facilitators and mentors
- Student-driven inquiry
  - Can be messy and uncomfortable and that's okay!
- Experienced teachers in the room that can assist
- Zoo staff is here to help in the process





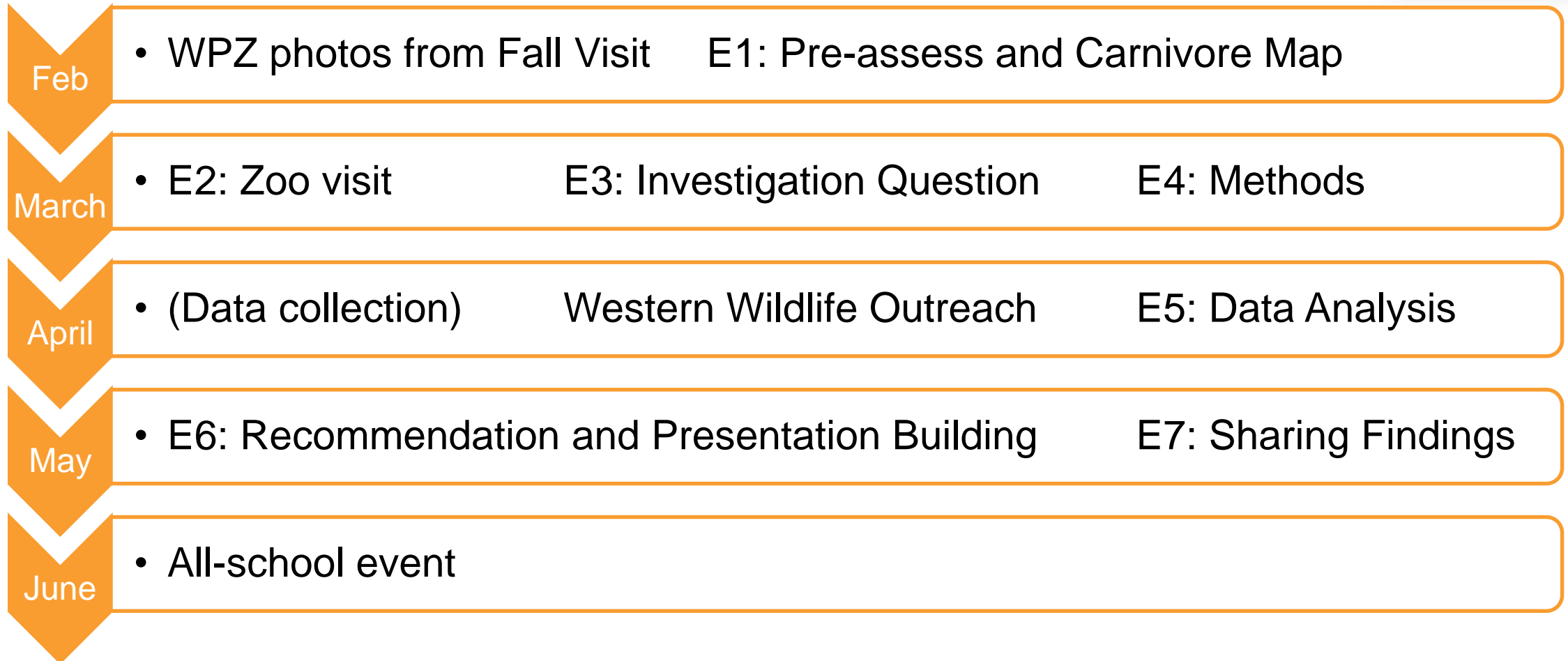
# Role of Zoo Staff



- Resource for teachers and students
- Lead some program elements
- Support teachers in using tools and resources
- Answer questions that arise along the way
- Coordinate logistics and operations



# Program Timeline





- **Elements**
  - Addition of Fall Visit
  - More support for Data Analysis
- **Teacher guide**
  - Explicit alignment to NGSS
  - Teacher notes
- **Student packet**
  - Make thinking visible
  - Better preparation for final products
  - Zoo will provide and collect/copy at end



# Program Updates

A Closer Look

WOODLAND PARK ZOO SAVES ANIMALS AND  
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## While we review



- This is a partnership
- Ask questions!
- What do you need for support this year?
- What was difficult last year?
- What worked well last year?
- Learning process for everyone 😊

# Driving Question



## Previous:

1. How are carnivores using the natural and human-made resources in the community to meet their needs?
2. How can humans meet their needs while allowing carnivores to meet their needs? (How can humans and carnivores successfully share the landscape?)

## Updated:

- How can humans and carnivores **peacefully coexist**—meet our needs while allowing carnivores to meet *their* needs?

# NEW! Fall Visit



- First week of November
- Zoo staff install field cameras on school grounds
- Photos will be collected for Element 1
- Teacher role:
  - Give field cameras and materials
  - Collect SD cards

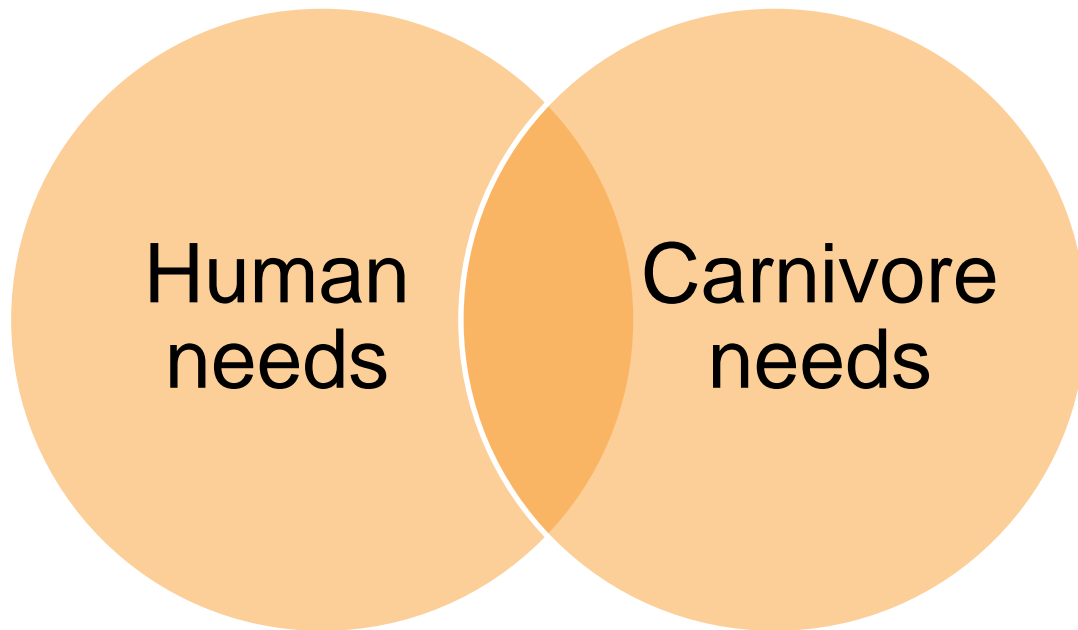


# Element 1: Pre-assessment and Carnivore Map



- Pre-assessment
- Engage with phenomena
  - Camera photos
  - Personal encounters
- Landscape features → needs, resources, and human impact
- Diagram model of human and carnivore needs
- Prior knowledge

# Element 1: Pre-assessment and Carnivore Map



## Initial Model

- “How can humans and carnivores **peacefully coexist**—meet our needs while carnivores meet *their* needs?”
- Making student thinking visible
- Help generate questions (E3)



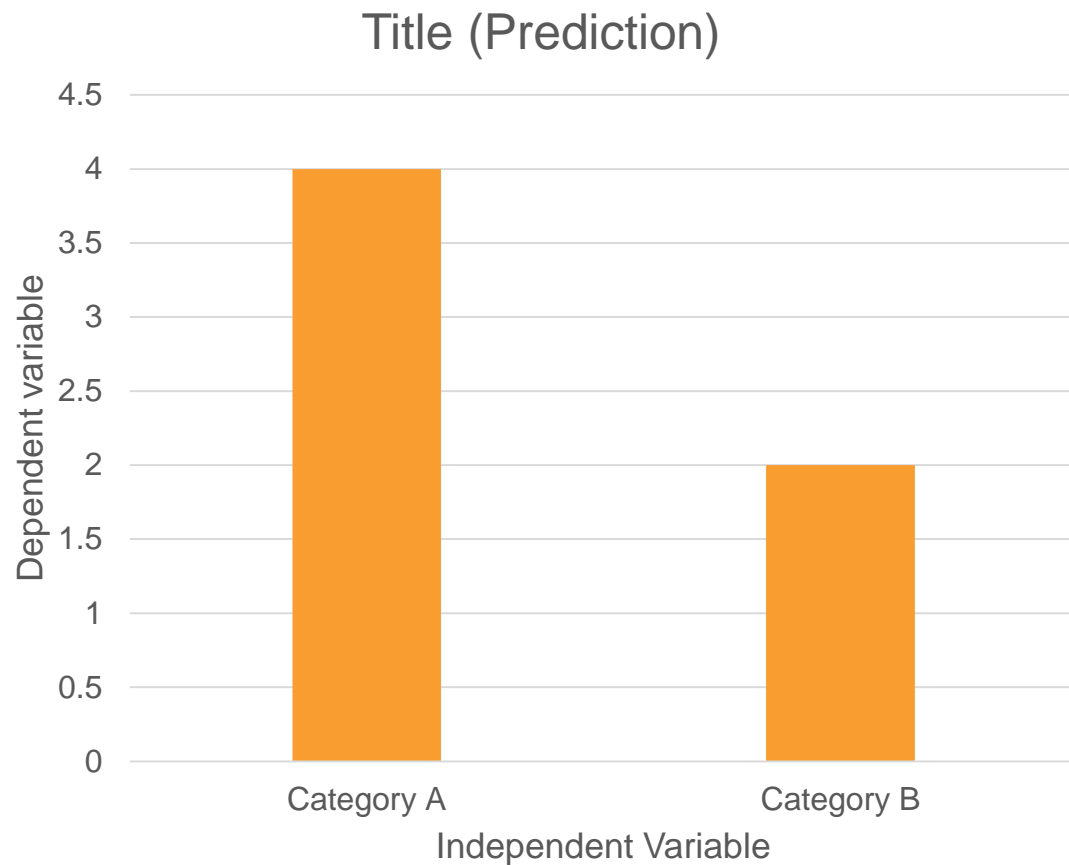
## Element 2: Zoo Visit



- Focus:
  - Why are carnivores are important?
  - Ecosystem context
- Northern Trail → Living Northwest

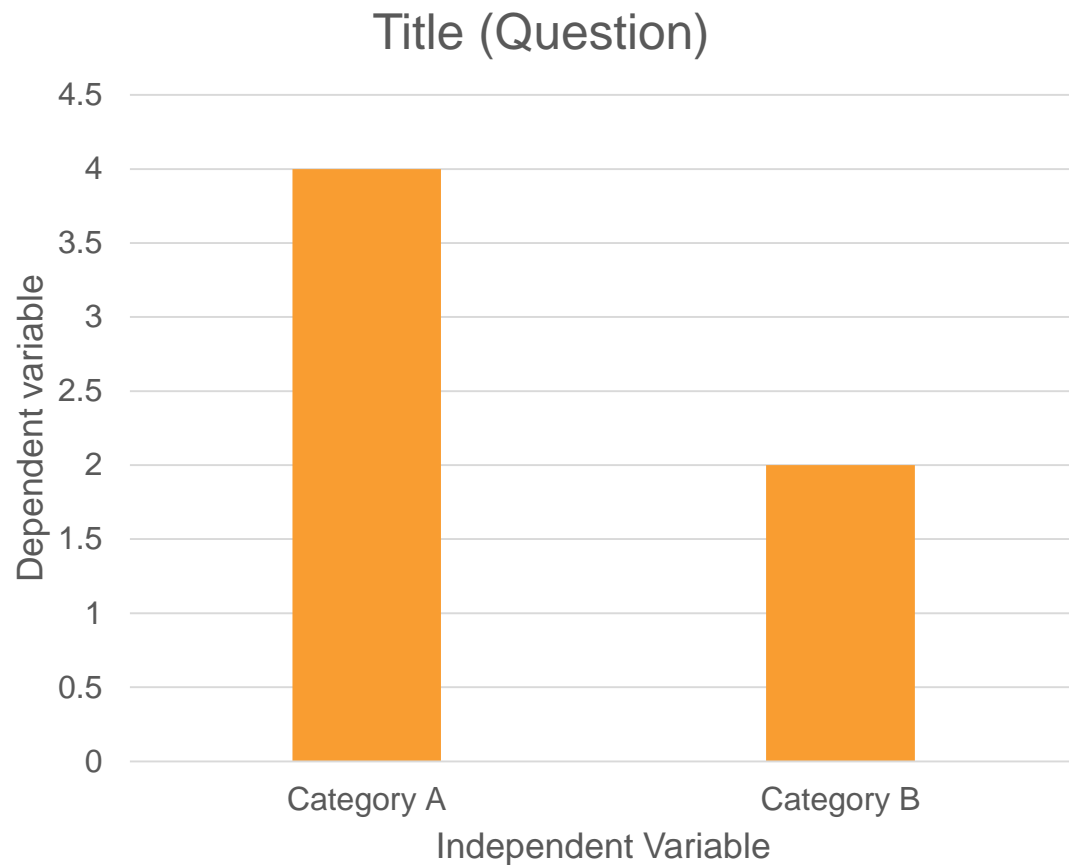


# Element 3: Investigative Question



- Focus on Cause and Effect
- NEW! Prediction graph
  - Makes student thinking visible
- Refine variables
- Reflection on connection to driving question
  - Recommendation
- Could be zoo-facilitated (instead of E4: Methods)

# Element 3: Investigative Question



- Do carnivores avoid roads?
- Cause and Effect
  - Does distance from a road **affect** how many carnivores there are?
- Independent variable
  - Distance from road
  - Categories: close, far
- Dependent variable
  - Carnivore sightings
- Title (Prediction)

# Element 4: Methods and Data Collection



- Brainstorm methods
- Evaluate (pro/cons)
- NEW! Student-driven surveys



# Western Wildlife Outreach Visit



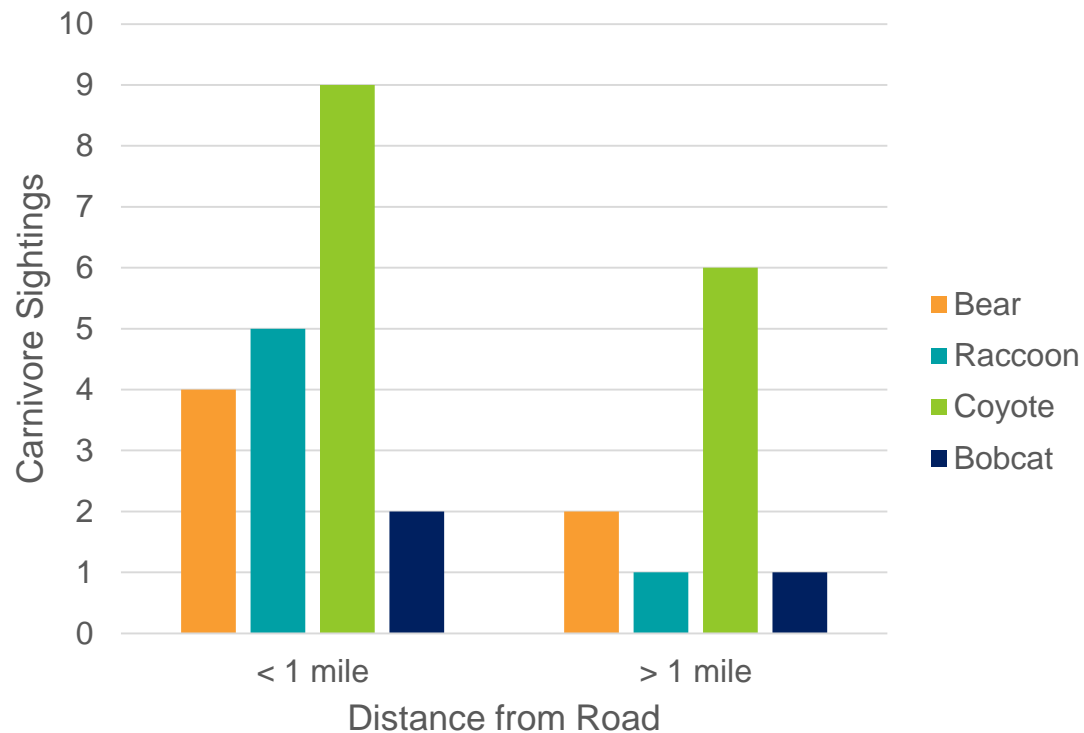
- Why are carnivores important?
- Why do we care about carnivores?
- Who are the carnivores in our local area?



# Element 5: Data Analysis



How does distance from road affect carnivore sightings?



Lots of NEW!

- Optional zoo-facilitation
- Revisit prediction graph
- More step-by-step support based on method(s)
- Whole-class inclusive



# Element 6: Recommendation & Presentation Building



- Recommendation Writing
  - Scientific argument or explanation
  - CER framework
- Streamlined presentation building with Student Packet



## Element 7: Sharing Findings & Post-assessment



- Emphasis on recommendations (scientific explanation/argument)
- Whole-class or student groups
- No longer a formal program assessment
- Will still be a post-assessment

# Element 8: All-school Event



- Wednesday June 10
- Format?
  - 10 Formal Presentations
  - Science fair style
- All students welcome to attend and present



# Future of CWC



- Extension 3-year grant
- Expansion outside of Issaquah school district
- Focus on teacher professional development
- Core teacher group co-develops curriculum
- Opt-in with stipend

# Wrap-up tasks



1. Preferred format of Teacher Guide and Student Packet
2. Request book or poster resources
3. Finalize dates





# Questions? Need support?

Logan Lauren

ph 206.548.2461

Logan.Lauren@zoo.org