



# Becoming a naturalist: Interest development across the learning ecology

Marijke Hecht, M.S., Karen Knutson, Ph.D. & Kevin Crowley, Ph.D.  
University of Pittsburgh School of Education  
Learning Research & Development Center



## Project purpose

Solving local and global environmental issues requires 21<sup>st</sup> century naturalists – people engaged with the natural world, especially in cities, that use systems thinking and embrace diverse perspectives.

We worked with a local natural history museum to consider **how in school, out of school, and family experiences supported situational and individual interest development in nature across the lifespan.**

## Data collection

Research-practice partnership team developed categories for naturalist identities

Purposive sample for diversity across demographics and naturalist identities

Semi-structured life history interviews focused on nature experiences across learning ecology

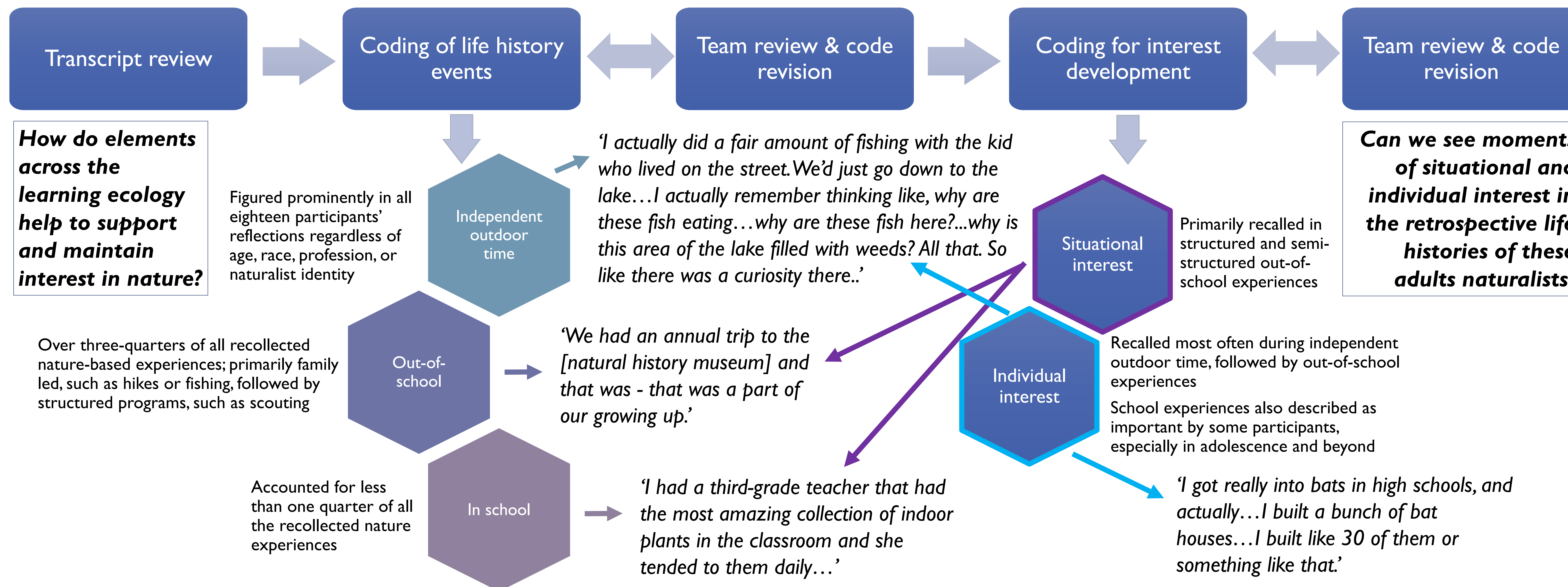
Follow-up survey for self identification of demographics & naturalist identities

## Participants

**18 adult naturalists**  
10 women | 8 men  
10 White | 5 Black | 1 Asian American/White | 1 Black/Latinx | 1 Latinx  
Age range: 24-68 (mean = 47)  
Educational attainment: HS – 18 | College – 15 | MS/MA – 9 | PhD – 3  
15 use naturalist practices professionally  
3 serious amateur naturalists

**Naturalist identities**  
Applied scientist | Community organizer  
Environmental artist | Environmental designer | Environmental educator  
Community garden manager | Research scientist | Serious amateur naturalist

## Analysis & findings



## A closer look at three cases

**How do adult naturalists perceive and describe their life-long connection with nature?**



## Conclusions

- Recollection of independent outdoor time was ubiquitous among participants.
- Participants recollected episodes of situational and individual interest throughout childhood and described these as occurring in a non-linear, layered sequence.
- Participants described elements across the learning ecology working in concert to support interest development.
- Many participants described obstacles to their interest development, and emphasized how adult support – from family, teachers or out-of-school educators – was critical for their growing interest.