# Field research involving reptiles and amphibians, remote study sites, and undergraduate students





Heather L. Bateman, Associate Professor





#### **Applied Research**

Nonnative species: alters habitat structure and relate to wildlife abundance

#### **Stream protection:**

Wilderness, W&S rivers act requires document natural resource value tied to stream

Long-term data: markrecapture project of 12+ yrs





## **Live-trapping Methods**

When open: traps must be checked daily

#### **Animal handling:**

morphometrics, lizards have individual marks (toe-clip)

#### Refinements over time:

not all taxa are marked, lidocaine to reduce pain, reduce predation



#### Unexpected

Wildfire, road-closures: can't check open traps

Record heat: close arrays,

modify shade

Record rain: toad

recruitment after monsoon

#### Communication

IACUC: notified when not able to follow protocol

**Training:** Hands-on, typically first field position for most students









Independent Projects: scientific inquiry, belonging, career trajectory



A. tigris
Mite load 8%



A. sonorae Mite load 11%



Mite loads greatest in native forests ...and during humid seasons

Class Trips: spark enthusiasm for nature, career paths, and pandemic precautions





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#### **Field Safety**

Protocol: animal handling and

safety in the field

**Outdoors:** first-time

**Inclusive:** field fashion show



#### **Field Safety**

Protocol: animal handling and

social media

**Outdoors:** first-time

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Barber et al. (2020) Science

Chaudhary & Berhe (2020) PLOS

Cronin et al. (2021) Nature

Demery & Pipkin (2020) Nature



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