

Amphibian Conservation Under a Changing Climate



Carolyn Eckrich
Acting Strategy Species Coordinator

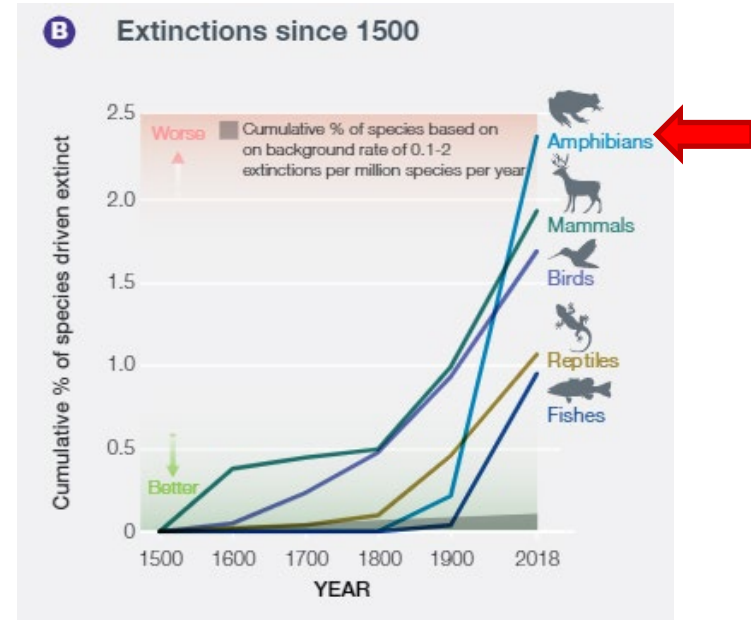
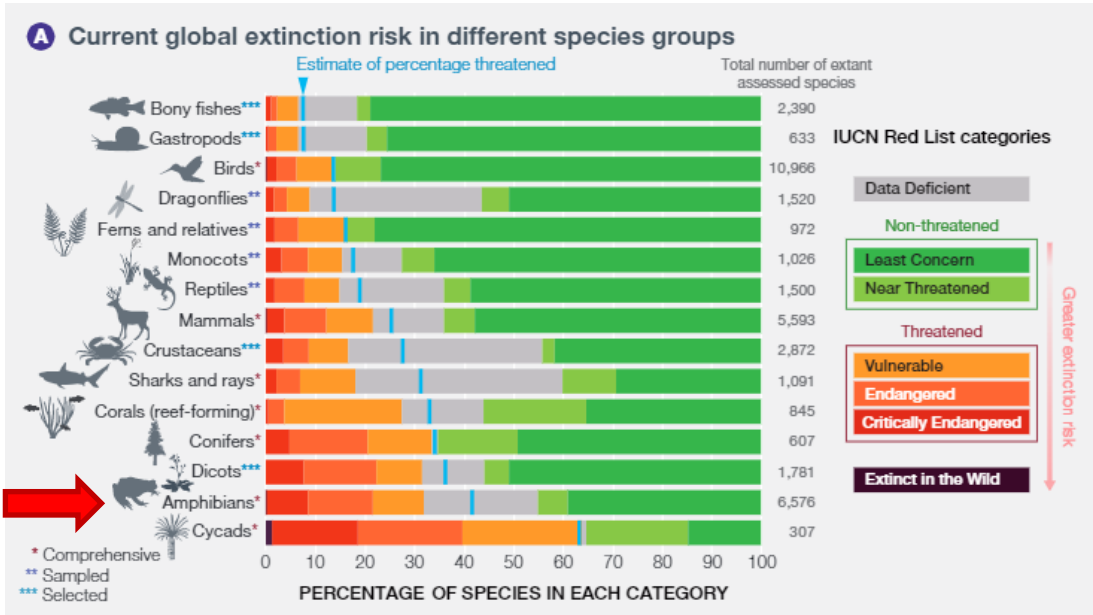
Emily VanWyk
Acting Conservation Strategy Coordinator

Presentation Overview

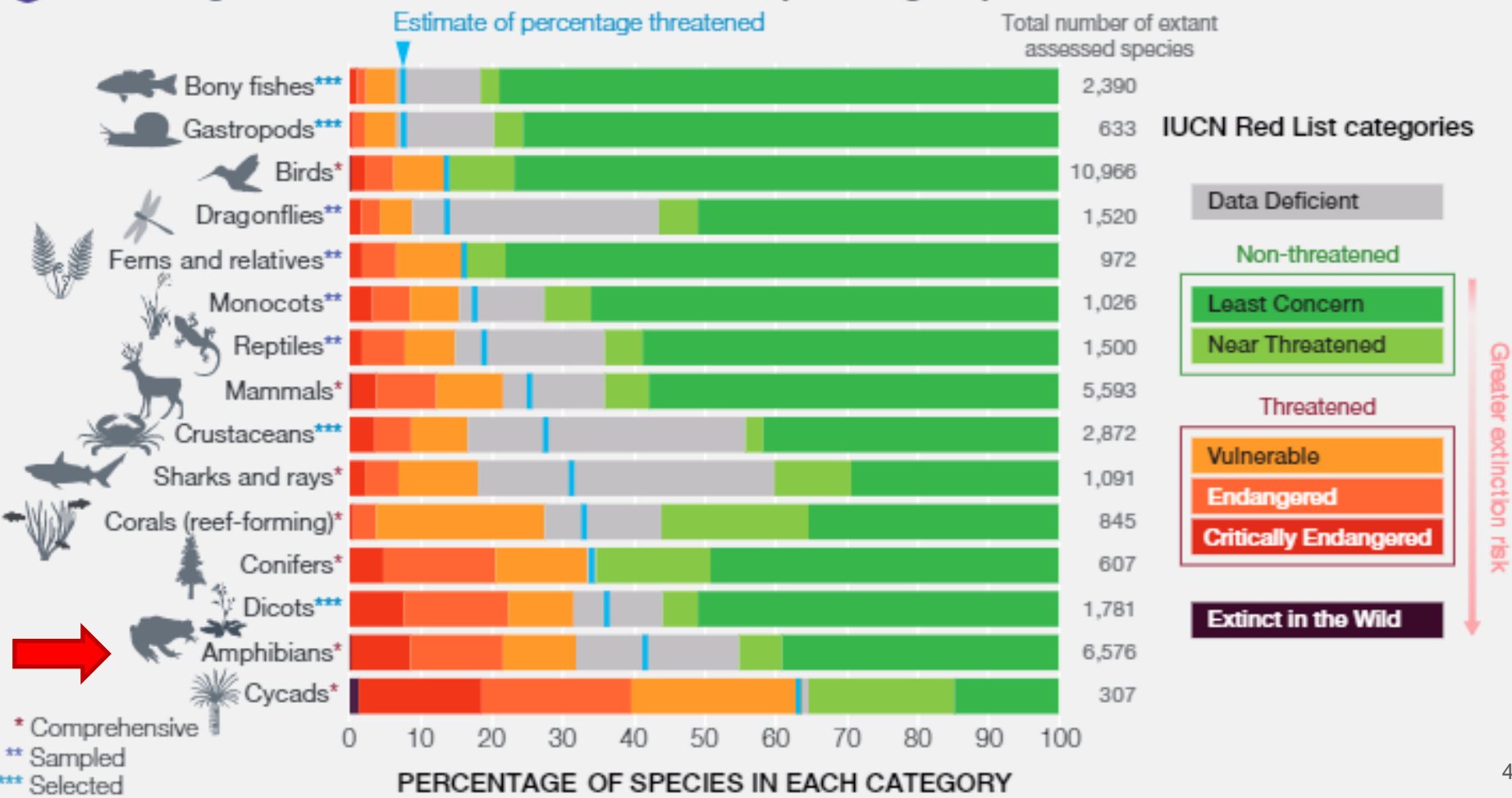
1. Status and trends
2. Amphibian diversity in Oregon
3. Climate vulnerability
4. Challenges and limitations
5. Engagement



Global Amphibian Population Decline

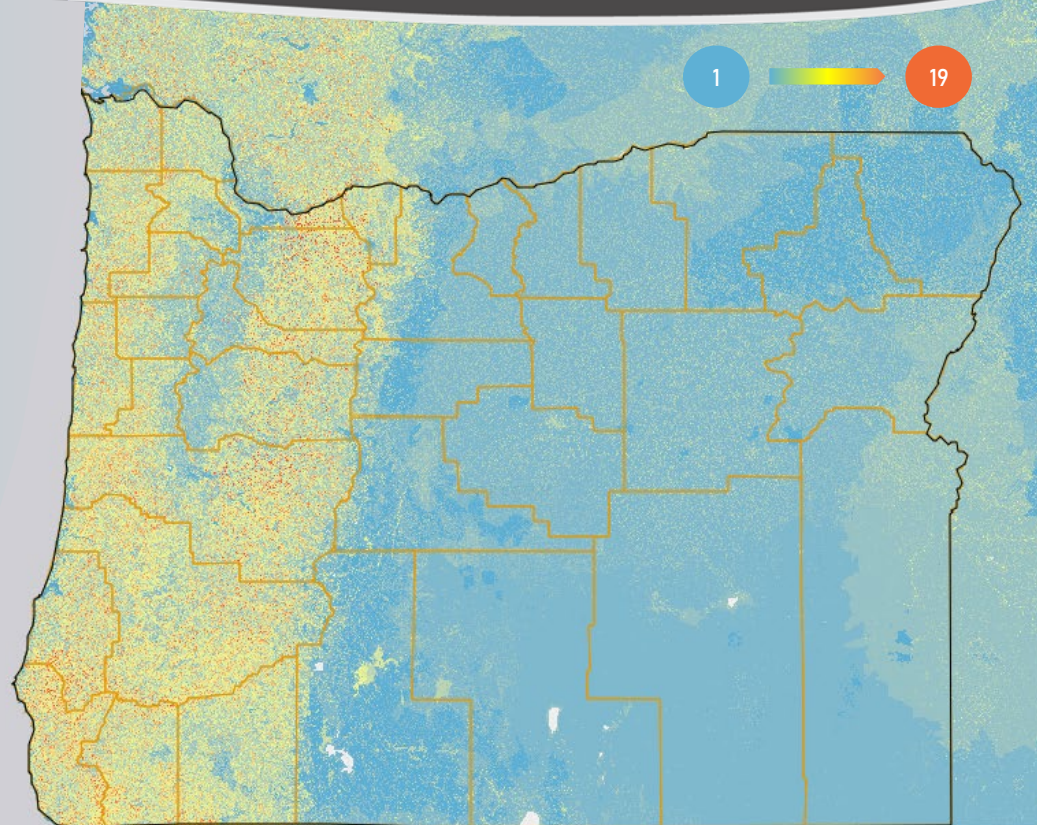


A Current global extinction risk in different species groups



Amphibian Diversity

- 13 native frogs and toads
- 19 native salamander



Oregon Status and Trends

- 32 native amphibians
 - 17 species (53%) are Strategy Species
 - 6 Strategy Data Gap species
 - 1 federally listed species
 - 3 species under review for federal listing



Foothill yellow-legged frog
(c) Seawoof (CC BY-NC)

Conservation Issues

- Habitat Loss
- Introduced Species
- Barriers to Movement
- Lack of Data
- Climate Change



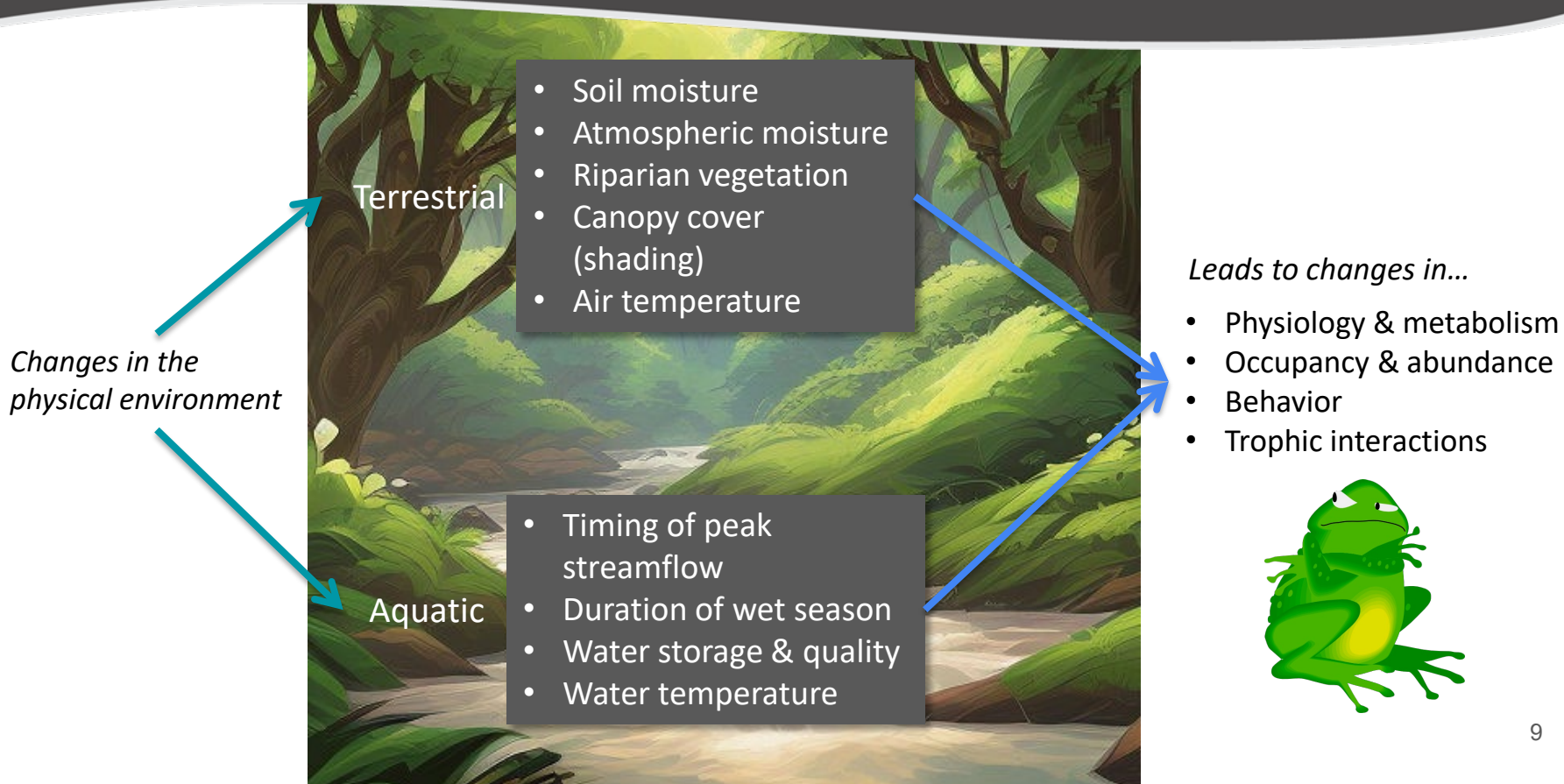
Northern red-legged frog
(c) Lindsey Thurman

Climate Vulnerability

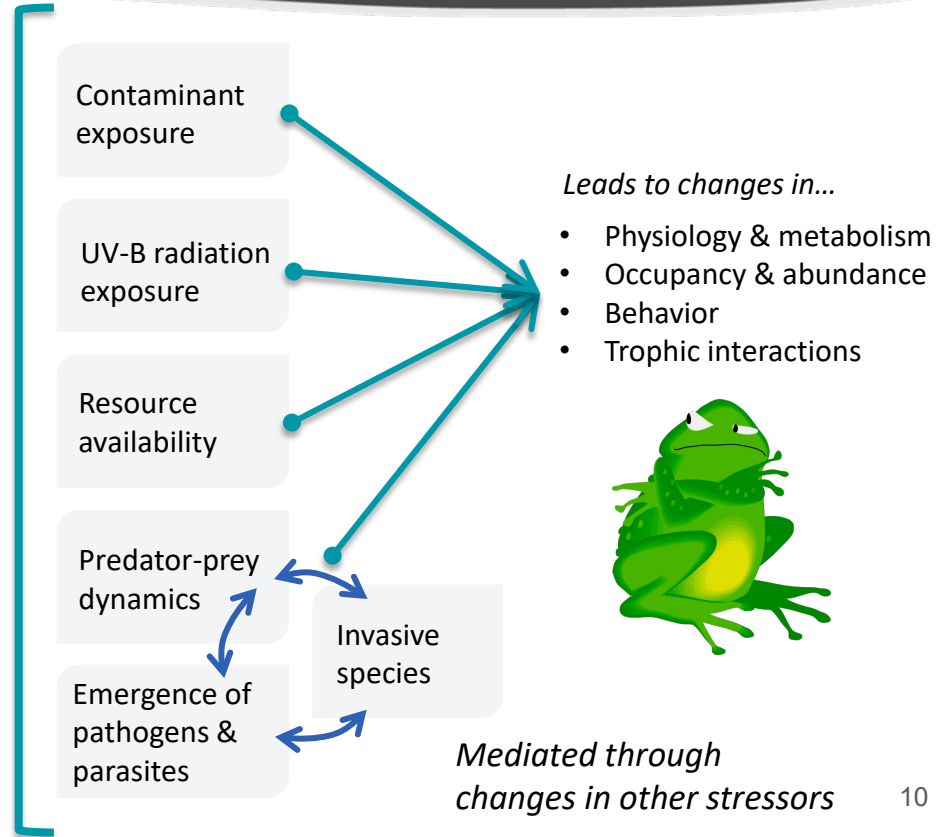
- Sensitivity to changes in temperature and moisture
- Vulnerability to contamination and sedimentation
- Complex life history
- Reliance on both terrestrial and aquatic habitats
- Limited dispersal ability



Direct Impacts of Climate Change to Amphibians



Indirect Impacts of Climate Change to Amphibians



Challenges and Limitations



Coastal giant salamander, ODFW



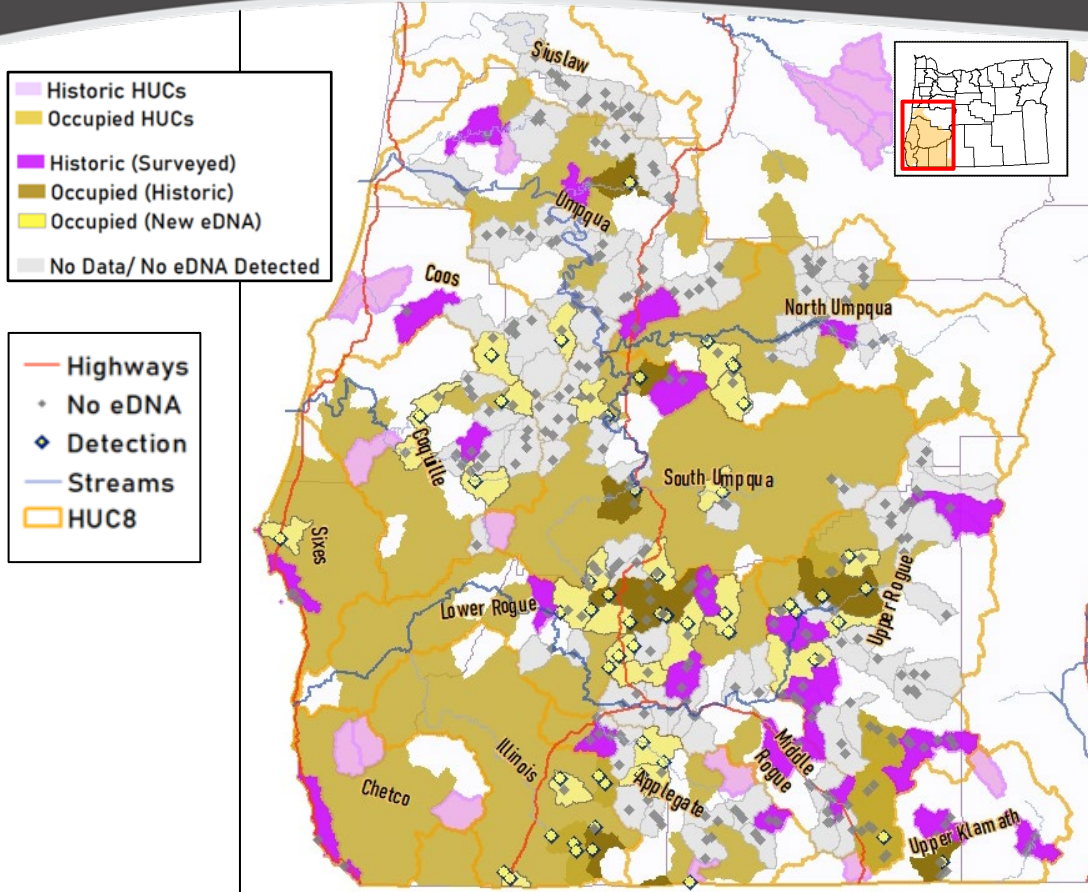
Great Basin spadefoot, © Ray Van Court

Challenges and Limitations

- Resource availability
- Limited data availability
- Cryptic life history
- Low densities



Foothill Yellow-legged Frog Research



- Life history tied to hydrologic conditions
- Vulnerable to changes to water flow quantity, timing, and quality
- Information on occupancy spotty, outdated

High Lakes Amphibians and Stocked Fish

- Lacking data on interactions between native amphibians and stocked fish
- Aquatic systems impacted by drought, wildfire
- Need baseline information to evaluate impacts of climate stressors



Big Lake, © Kirt Edblom



Cascades frog, © kylaschmitt

Species Status Assessments

- Review of available research and biological information
- Provide information on direct climate impacts and climate vulnerability
- Single source for management and planning

Questions?

