

Threatened and Endangered Species in WV

Listings, Life Histories, and Potential
Protective Measures



Overview

- Currently listed species
- Settlement Agreements
- Newly listed species
 - Mammals: NLEB
 - Mussels: many species
 - Fish: diamond darter
- Proposed Species
 - Crayfish: Big Sandy / Guyandotte River
- Future listings (examples)
 - eastern hellbender
 - candy darter



Currently Listed

- Indiana bat
- 9 freshwater mussel species



Settlement Agreements

- Center for Biological Diversity
- Wild Earth Guardians



# Package names	Common name	Scientific name	States or Territories within the Historical Range	## Action	### Date	Lead USFWS Region
Massasauga Rattlesnake	Massasauga (=rattlesnake), Eastern	<i>Sistrurus catenatus catenatus</i>	IA, IL, IN, MI, MN, MO, NY, OH, PA, WI	PLPCH	FY15	R3
Big Sandy crayfish	Big Sandy Crayfish	<i>Cambarus veteranus</i>	KY, VA, WV	12 M	FY15 (4/1/2015)	R5
Eastern Hellbender	Hellbender	<i>Cryptobranchus alleganiensis</i>	AL, AK, GA, IL, IN, IA, KS, KY, MD, MN, MS, MO, NY, NC, OH, PA, SC, TN, VA, WV	12 M	FY18 (9/30/2018)	R3

Newly Listed

- Northern long-eared bat
 - Changes in consultation
 - Acoustic monitoring
 - Species particulars
- Diamond darter



Proposed Species

- Big Sandy Crayfish
- Guyandotte River Crayfish



Casey D. Swecker

Future Listing Proposals

- Fish
 - Candy darter
 - Longhead darter
 - Ashy darter
- Mussels
 - Potentially many species
- Amphibians
 - Eastern hellbender
 - Smallmouth salamander
 - Green salamander
- Birds
 - Mostly raptors and warblers
- Reptiles
 - Wood turtle



Recent USFWS Actions

- Changes in bat survey methods and minimum requirements
 - Acoustic monitoring
 - Increased intensity in areas impacted by White-Nose Syndrome
- Special considerations for mussels and fish
 - Potential impacts due to increasing salinity
- Memorandum of Understanding (MOU) with OSMRE
 - Purported as clarification of flaws in '96 BO
- Increasing request for additional provisions of listed species
 - Offsite mitigation
 - Wildlife preservation areas
 - Adjacent areas



©MATT BUCKINGHAM 2013

Problematic Considerations

- Unreliable monitoring techniques
- Need for continuous, uninterrupted forest canopy
- Unreasonable reclamation requirements
- Climate change considerations
- Salinity considerations for aquatic life



QUESTIONS?

