



Soluk Lab  
University of South Dakota

# Captive Rearing Hine's Emerald Dragonfly at the Urban Stream Research Center

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# What are Hine's Emerald dragonflies?

- The only federally endangered dragonfly
- Discovered in Ohio in 1900, thought extinct by mid-1900's
- 1988: (Re)Discovered in Des Plaines River Valley



# Habitat Specialists

## Larvae

- 4-5 years!
- Very specific habitat
  - Seeps and springs
  - Dolomite bedrock
  - Streamlets
  - Great Plains mudbug

## Adults

- 3-6 weeks
- Usually found near breeding habitat

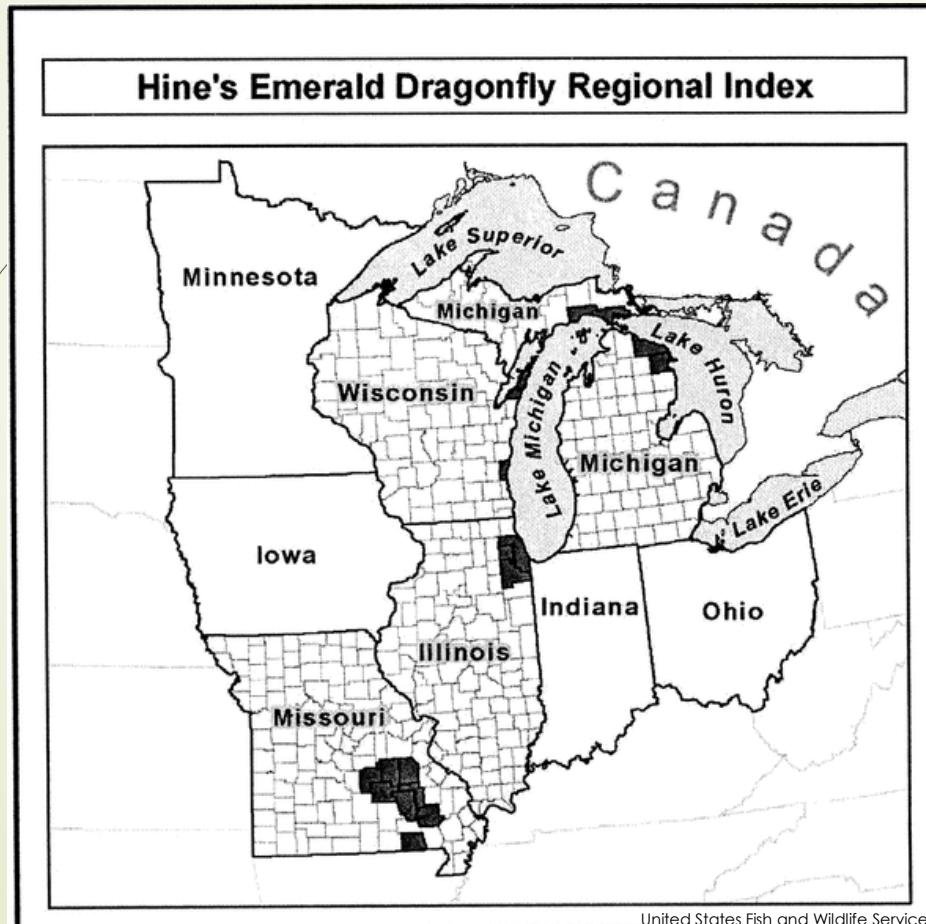


5 years later...



# Current Status

- Populations in Illinois, Wisconsin, Missouri, Michigan



- Illinois population is critically endangered (200/year)
- Need to step in – habitat restoration, habitat creation, captive rearing program(s)

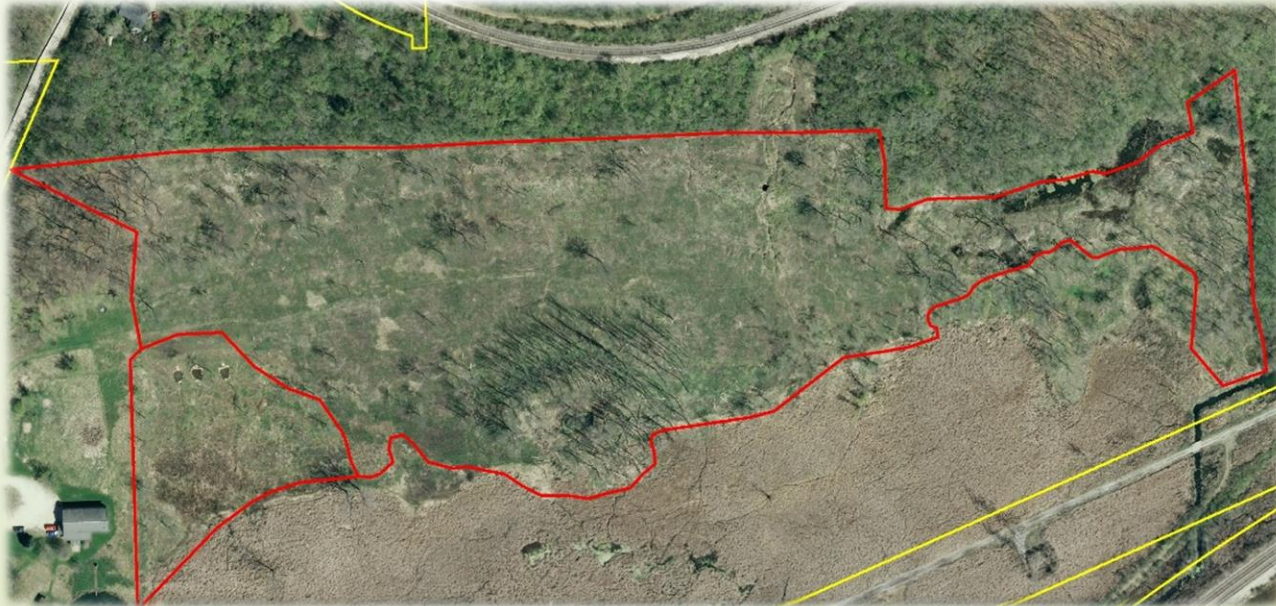
# Current Conservation Actions

- Habitat restoration
- Habitat creation
- Captive rearing



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# Captive Rearing: How it Works



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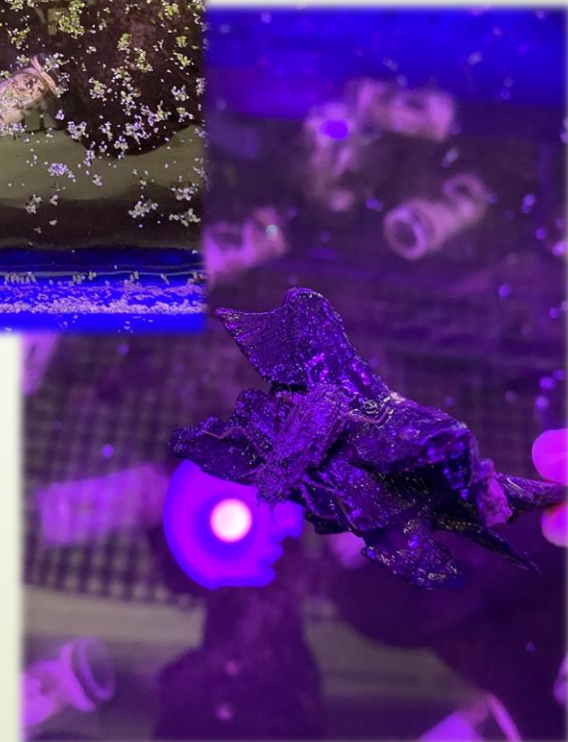




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# USRC at Blackwell



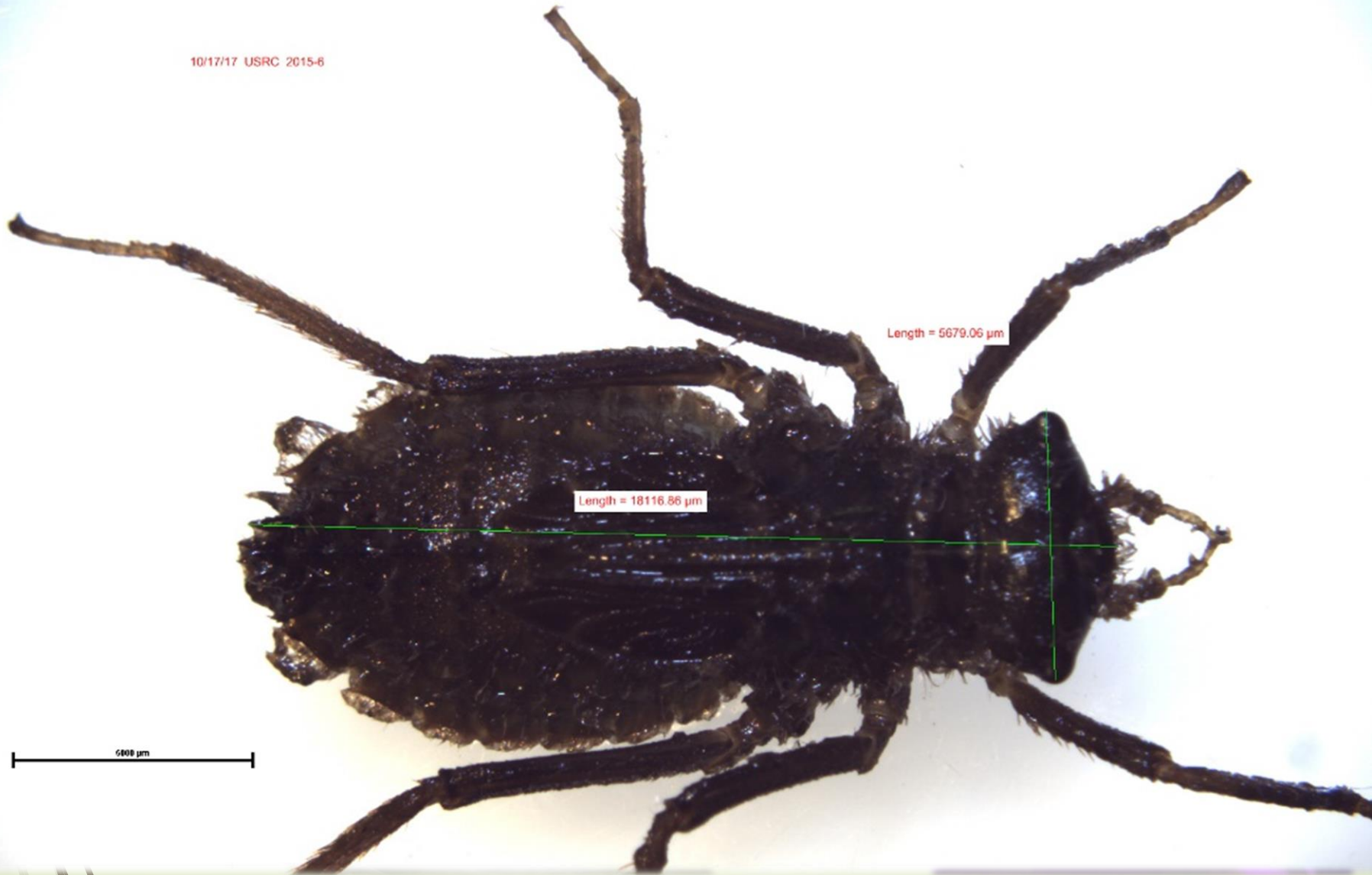


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# USRC at Blackwell

10/17/17 USRC 2015-6



Length = 5679.06 μm

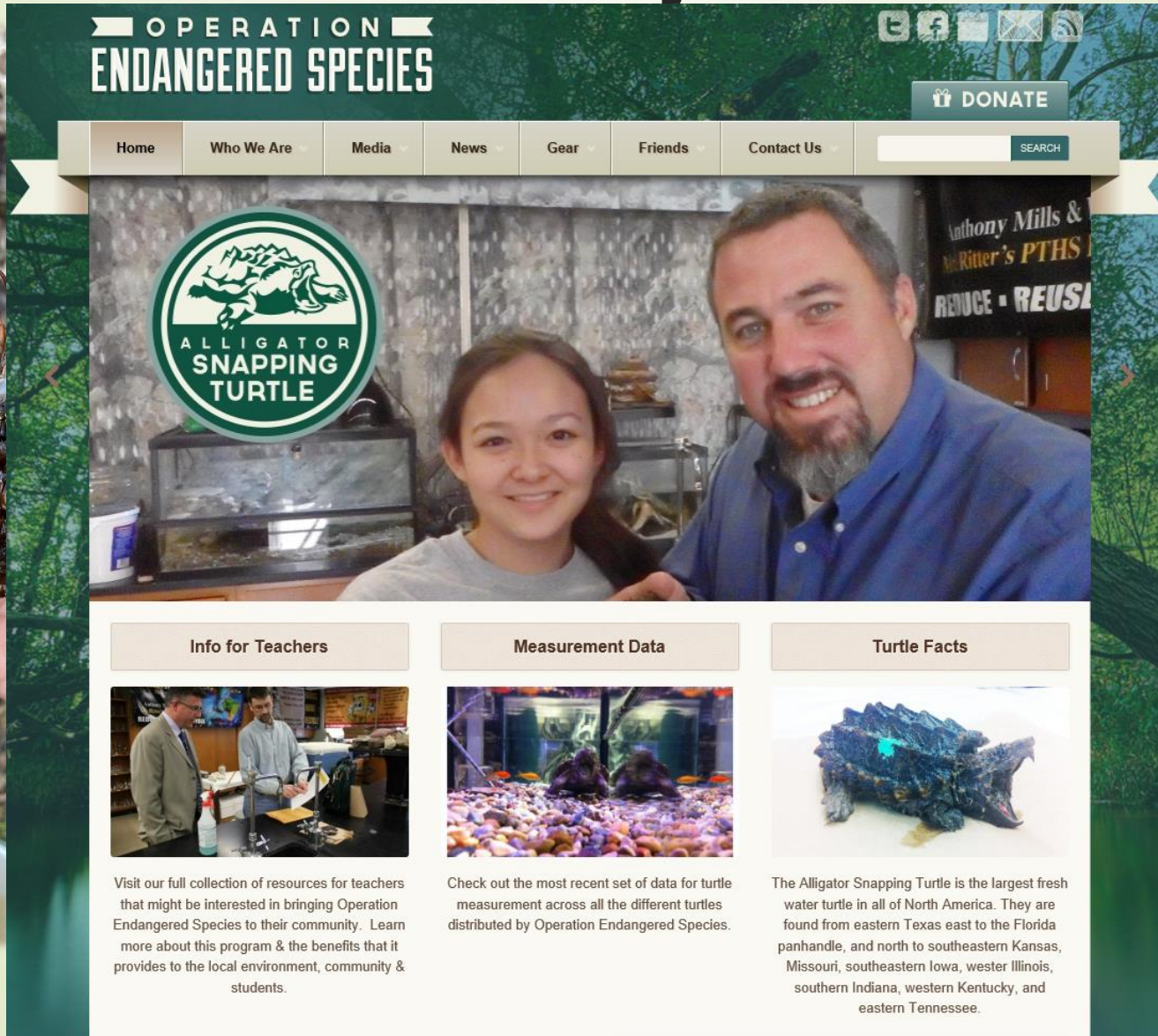
Length = 18116.86 μm

6000 μm

# 2022 New Project Goals





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**Info for Teachers**




Visit our full collection of resources for teachers that might be interested in bringing Operation Endangered Species to their community. Learn more about this program & the benefits that it provides to the local environment, community & students.

**Measurement Data**



Check out the most recent set of data for turtle measurement across all the different turtles distributed by Operation Endangered Species.

**Turtle Facts**



The Alligator Snapping Turtle is the largest fresh water turtle in all of North America. They are found from eastern Texas east to the Florida panhandle, and north to southeastern Kansas, Missouri, southeastern Iowa, western Illinois, southern Indiana, western Kentucky, and eastern Tennessee.



**Thank You!**

