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## Goals & Hypotheses

- Evaluate the efficacy of autonomous recording units (ARUs) to monitor herpetofaunal calls in vernal pools.
- We hypothesized that the beaver pond would have the greatest amphibian biodiversity because beaver ponds are structurally complex microhabitats.

## Study Area

Clinton County, New York



Oxbow Vernal Pool



Beaver Pond



Urban Vernal Pool

## Methods



eBird



- AudioMoths were set at two vernal pool sites and a beaver pond in July 2024
- Programmed to record continuously 20:00 to 8:00 for five consecutive days
- Analyzed audio files with BirdNet-Analyzer soundscape software

## Results

Sites	Sorensen Similarity
Oxbow/Urban	66.7%
Oxbow/Beaver Pond	85.7%
Beaver Pond/Urban	80.0%

## Take Homes

- AudioMoths are an inexpensive and effect means of recording herpetofauna presence and call phenology at the landscape level.
- BirdNet-Analyzer accurately identified anuran calls.
- Species richness was similar across sites. The oxbow vernal pool had the highest species richness and call frequency.
- All herpetofaunal communities were between 10-20% similar.
- Listen to some frogs

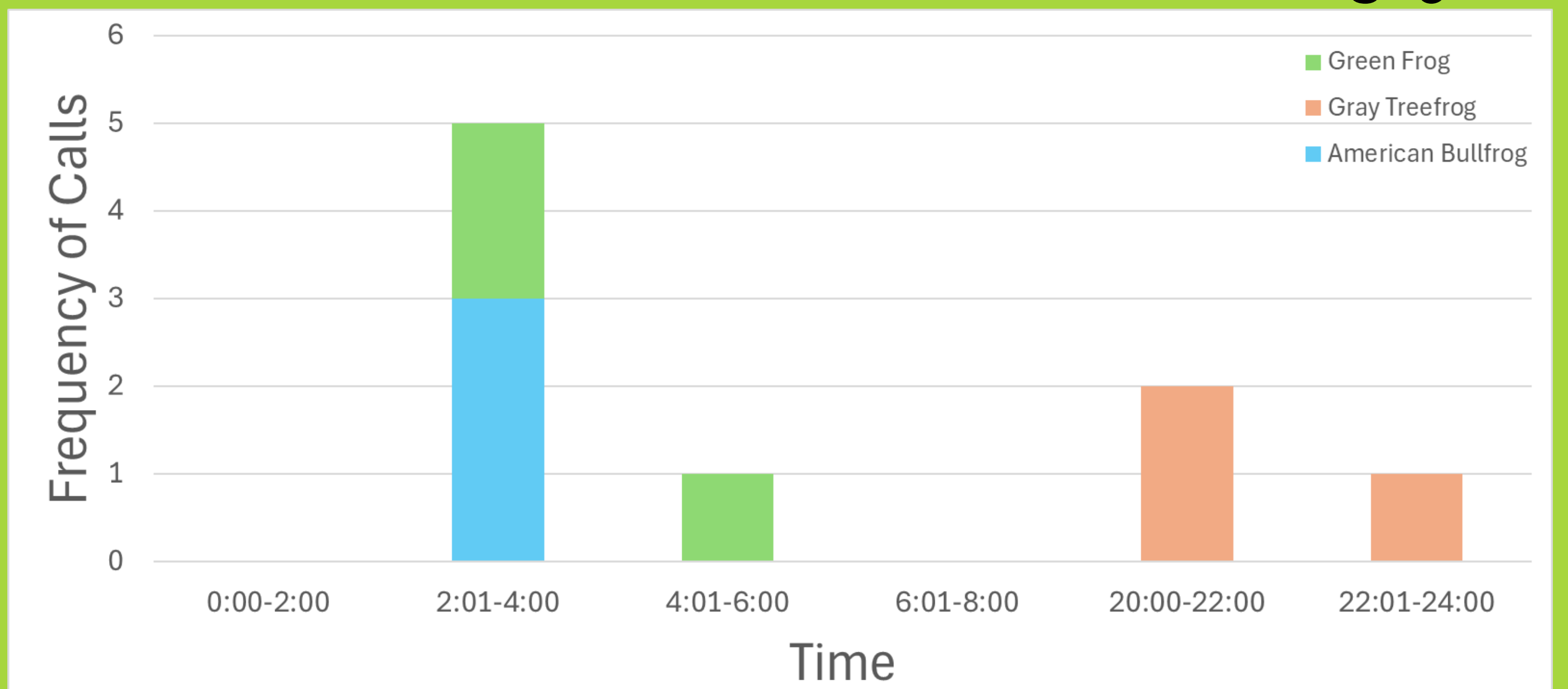
## Scan Here!



Thank you to Diane and Kevin Rock for use of their Riley Brook property.

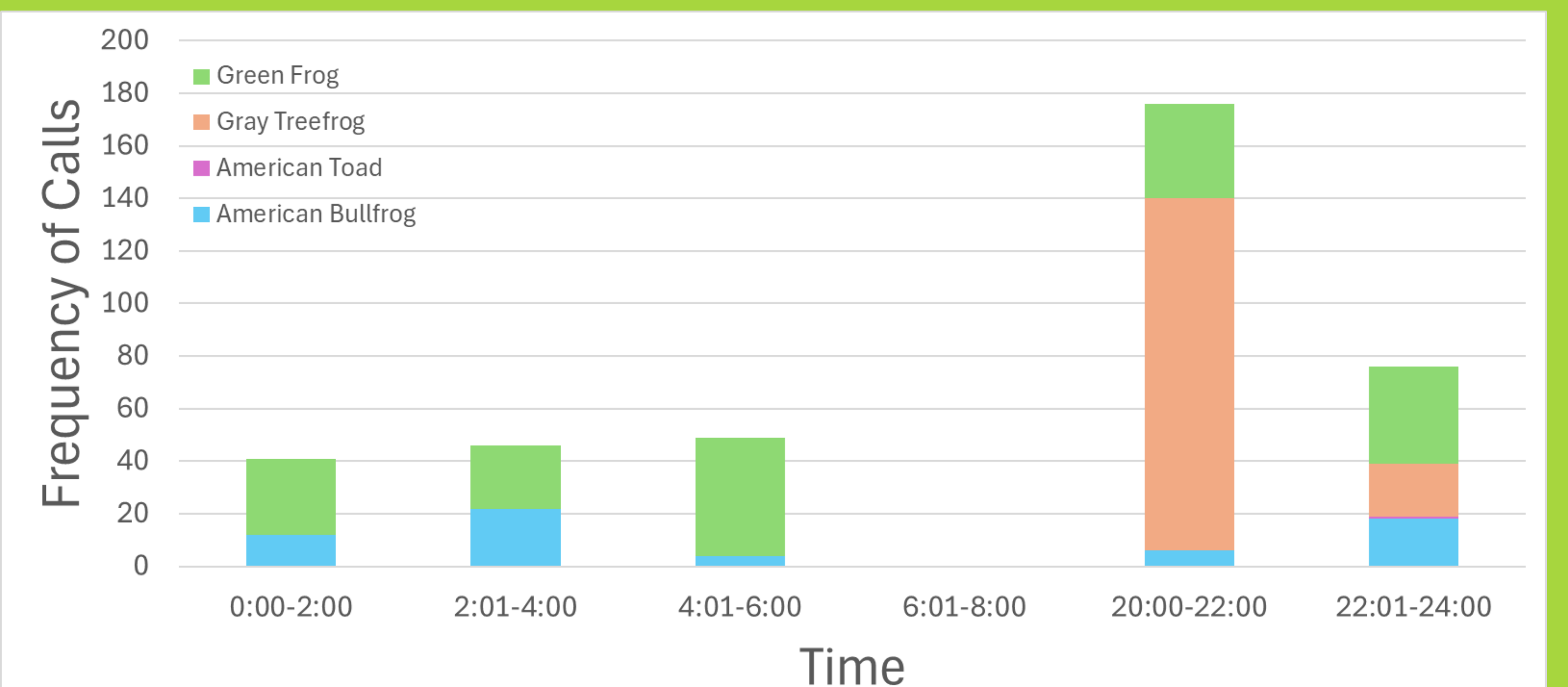
## Beaver Pond

S=3



## Oxbow Vernal Pool

S=4



## Urban Vernal Pool

S=2

