LONG TERM MONITORING
FROM A STUDENT’S POINT OF VIEW

Timmy Nassar, Jacob Orlandi, Jessica Williamson
Who are we?

Timmy Nassar
ERS, 2nd Year Co-op Students
Aspiring Environmentalists, Ecologists and Policy Makers

Jacob Orlandi

Jessica Williamson
Course Development

Course Components

➢ Indicator species (birds, insects, wildflowers)
➢ Sampling and monitoring
➢ Restoration enforcement

Guidelines

➢ Student oriented
➢ Lab and field components
➢ Transferable skills
➢ Student experience
Species Selection

Jessica Williamson
» Insect Research

Jacob Orlandi
» Wildflower Research

Timmy Nassar
» Bird Research
Site Selection

Village 1 Marsh
Sampling Methods

➢ BACIPS
➢ Stratified random
➢ Transect sampling

➢ Observation
➢ Taxonomic classification
➢ Collection
Long Term Monitoring

- Starting 2015

<table>
<thead>
<tr>
<th>Coordinates/Quadrant</th>
<th>Class</th>
<th>Species</th>
<th>Habitat Description of Location</th>
<th>Count</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
</table>

- 10+ years later
- Identification of current state
- Solutions
- Limitations
- Restoration?
Abundance Sampling

➢ Multivariate and univariate analyses

➢ Attention to species diversity
  ○ Shannon Index

\[ H' = -\sum_{i=1}^{s} p_i \ln(p_i) \]
End Results