The Importance of Understanding Data Collection Windows and Their Influence on Project Success:

Wildlife and Fisheries

Data Collection Windows & Project Success

Purpose of this Presentation Today is

to improve data quality and increase the potential for acceptance of any EA or Class EA by reducing the likelihood of challenges due to data / knowledge gaps.

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- Why the Need for this Discussion and Key Terms
- Key Data Collection Windows
  - Migratory Birds
  - Amphibians
  - Reptiles
  - Fish
  - Headwater Drainage Features
  - Small Mammals
  - Flora
  - Bats
- Project Planning and Scheduling Considerations

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Data Collection Windows:

Optimal *Periods of Time* (Windows) for the Collection of Field Data about

- **The Presence / Absence of a Species**
- **Population Size and,**
- **Habitat Use**

for a Variety of Species and Groups of Species

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Why the Need for this Discussion

- **Project Schedule and Completion Dates are Important**
- **Species' Life Histories Influence Data Availability**
- **Government and Conservation Protocols**

And,

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Good information leads to good decision making – good decision making leads to responsible use and protection of our resources

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Project Example

Peer review of a study submitted under the *Planning Act*

The study area contained a large wetland, well established woodland and a pond

Project Ecologist / author reported no detection of sensitive breeding birds or use by amphibians at the site

Although the statement was likely true, the conclusions were easily challenged because according to the methods section, a single site visit was performed in February

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It is not always about what you find or how you address issues of concern, it can be as simple as how or *When* you compiled the data that becomes the Achilles heal of a project.

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Recent Project Example:

December 2015 - Road Improvements MEA, Schedule C Study –Southern Ontario

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So, how do we

improve data quality and increase the potential for project success and acceptance of any EA / Class EA and reduce the likelihood of challenges?

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Answer: ***Improve our understanding of data collection windows***

- ***What are they***
- ***Who do they apply to***
- ***Why the exist***
- ***How can we integrate them into project schedules***

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What are they:

- **Optimal *Periods of Time* (Windows) for the Collection of Field Data about**
  - **The Presence / Absence of a Species**
  - **Population Size and,**
  - **Habitat Use**

for a Variety of Species and Groups of Species

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Who do they apply to:

- Migratory Birds
- Amphibians
- Reptiles
- Fisheries
- Headwater Drainage
- Small Mammals
- Bats
- Flora

And many more…

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Migratory Breeding Birds

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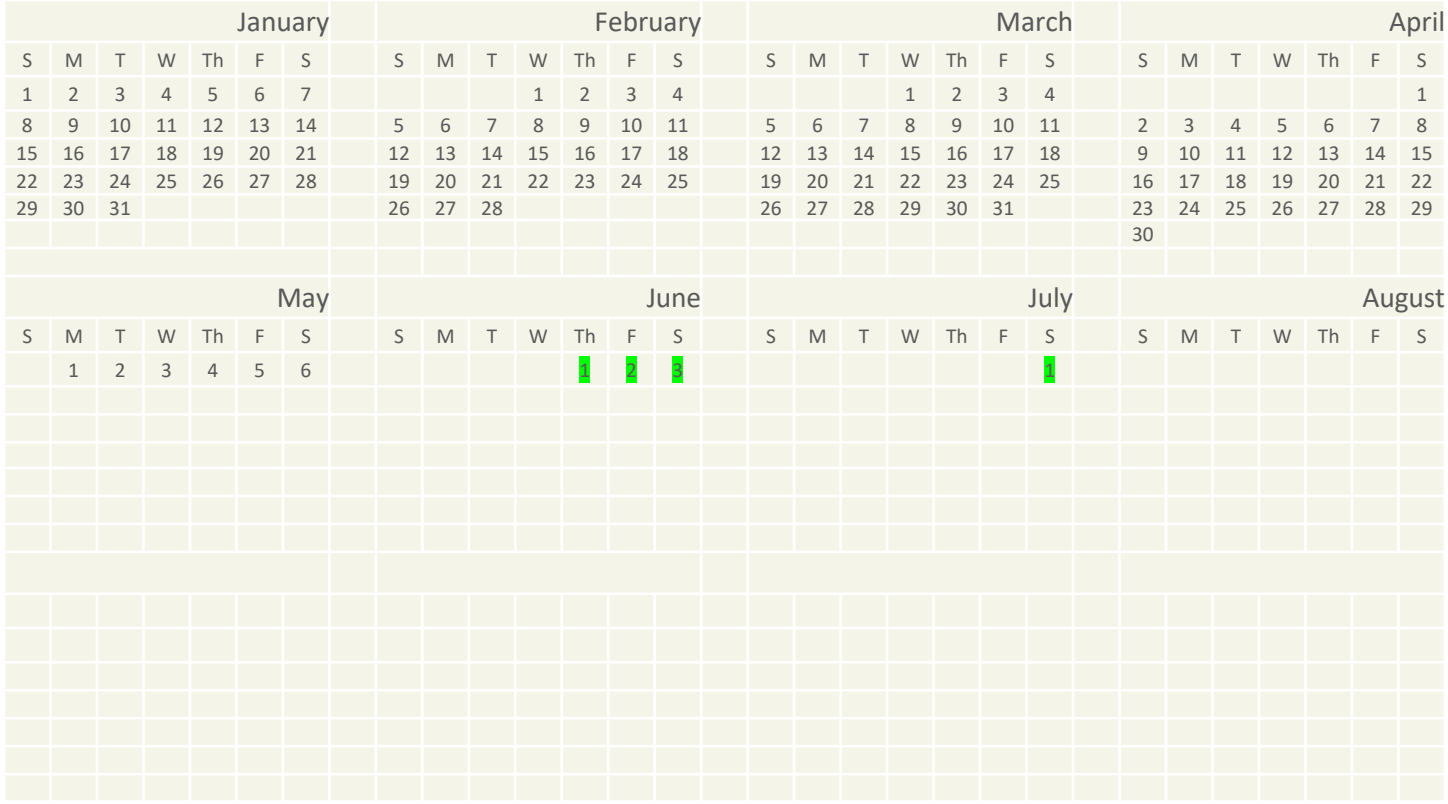
Migratory Breeding Birds – Six Weeks (Two Visits)



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Breeding Amphibians – Three Visits

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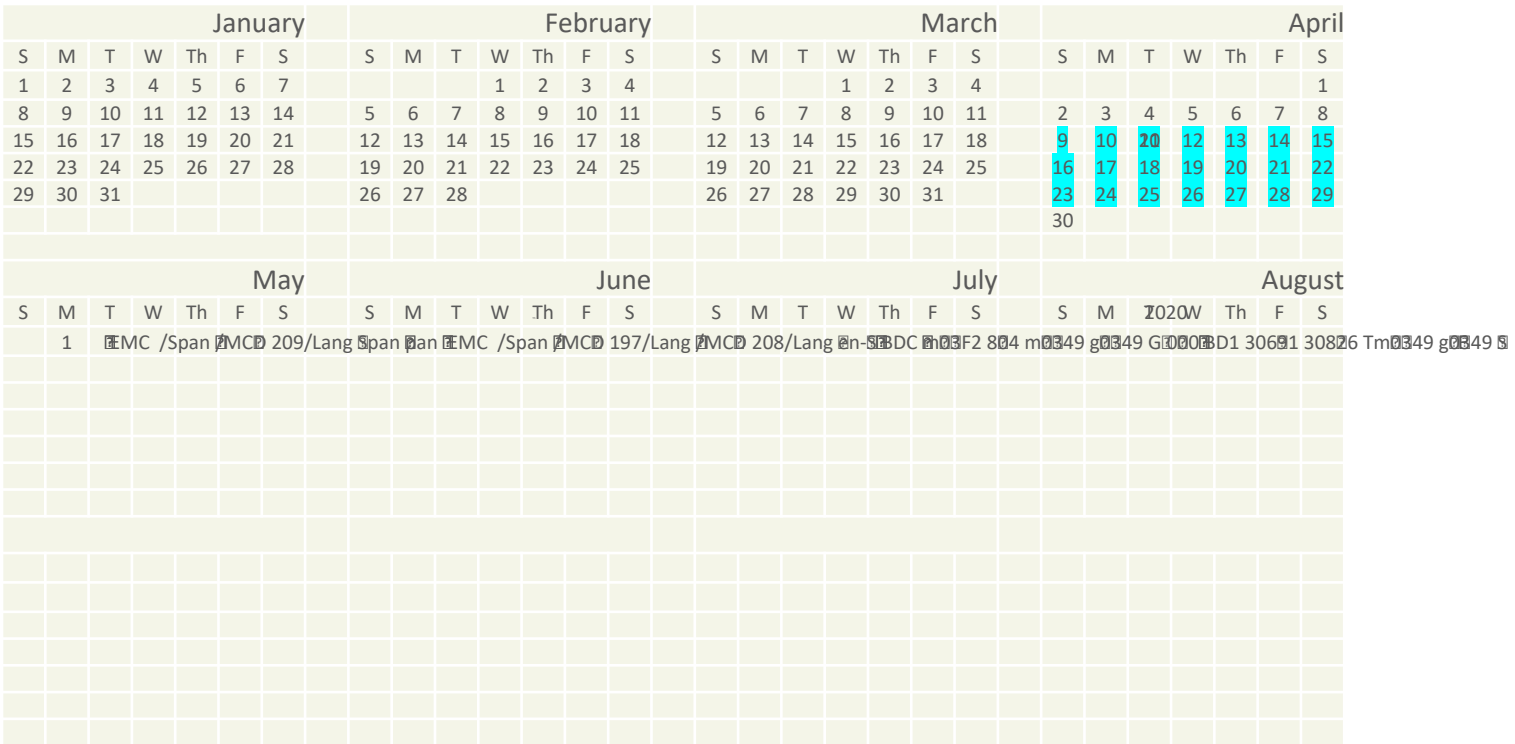
Breeding Amphibians - Frogs and Toads



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Reptiles – Turtles

Photo Credit: Dale Leadbeater

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Reptiles – Turtles (Five Weeks)

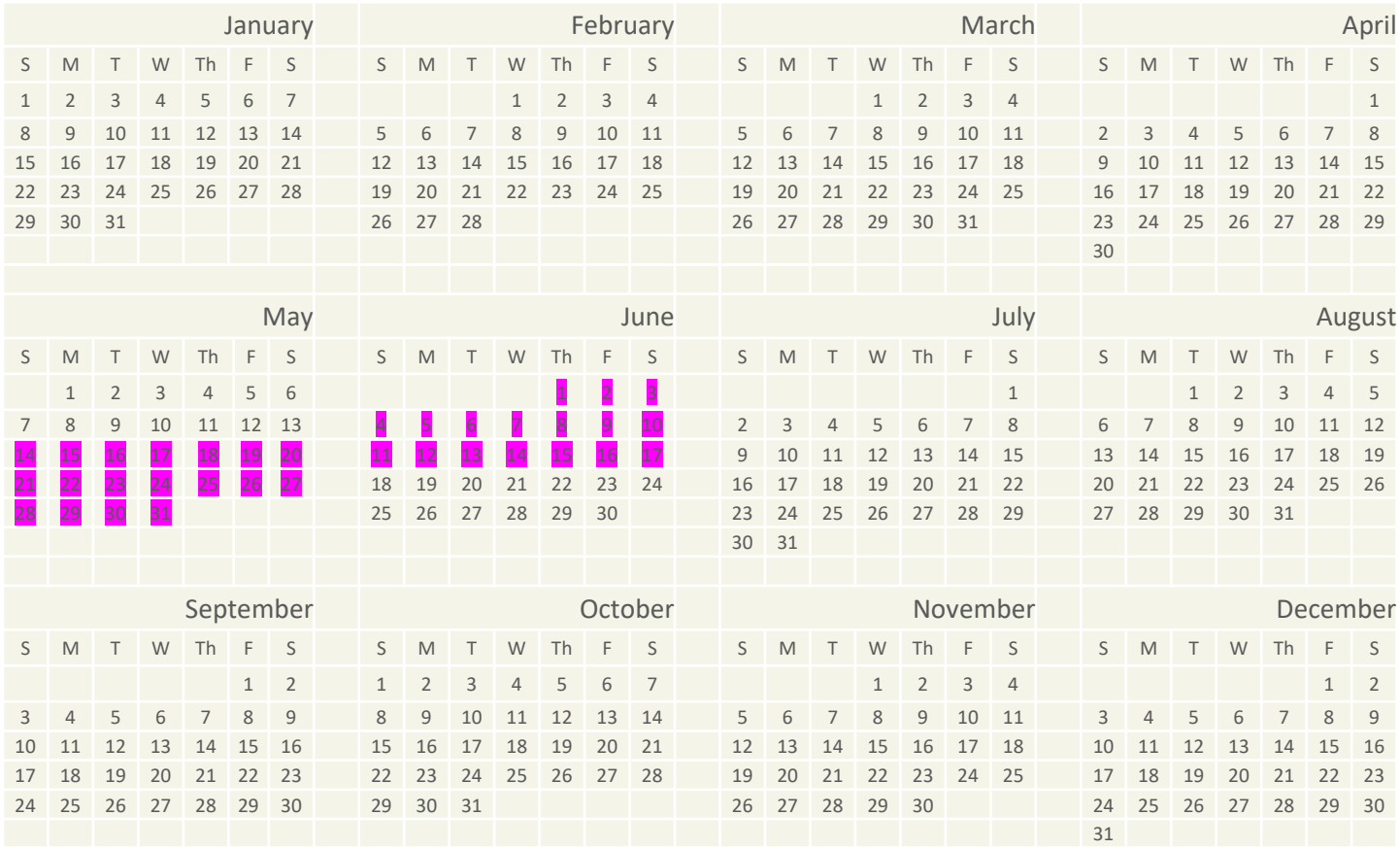

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Photo Credit: Dale Leadbeater

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Reptiles – Snakes

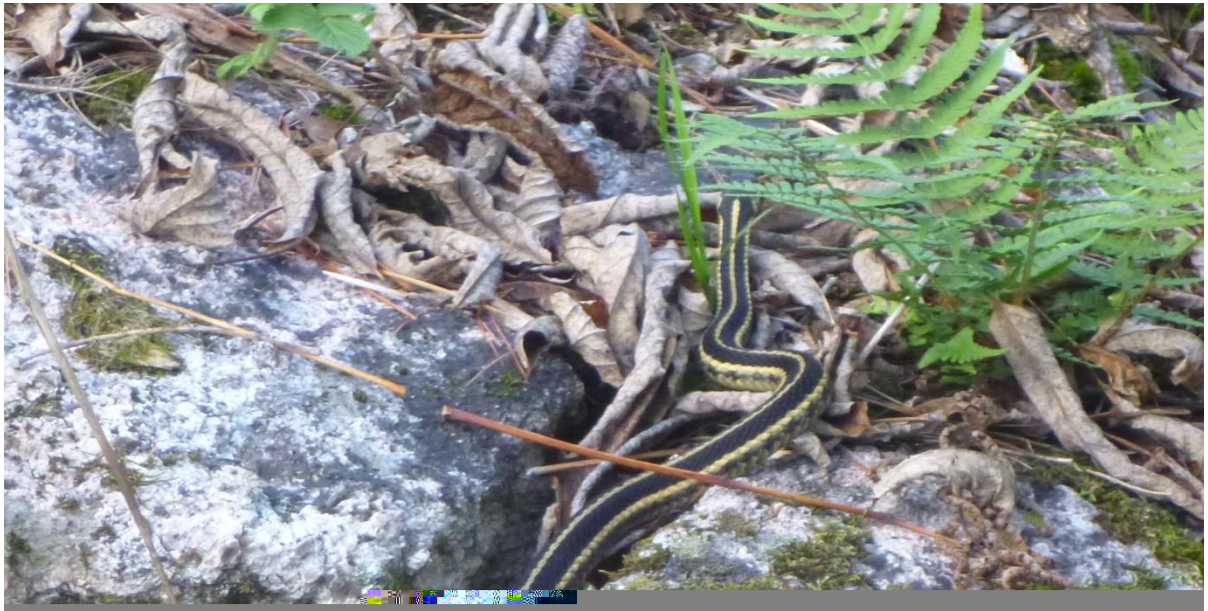

Photo Credit: Dale Leadbeater

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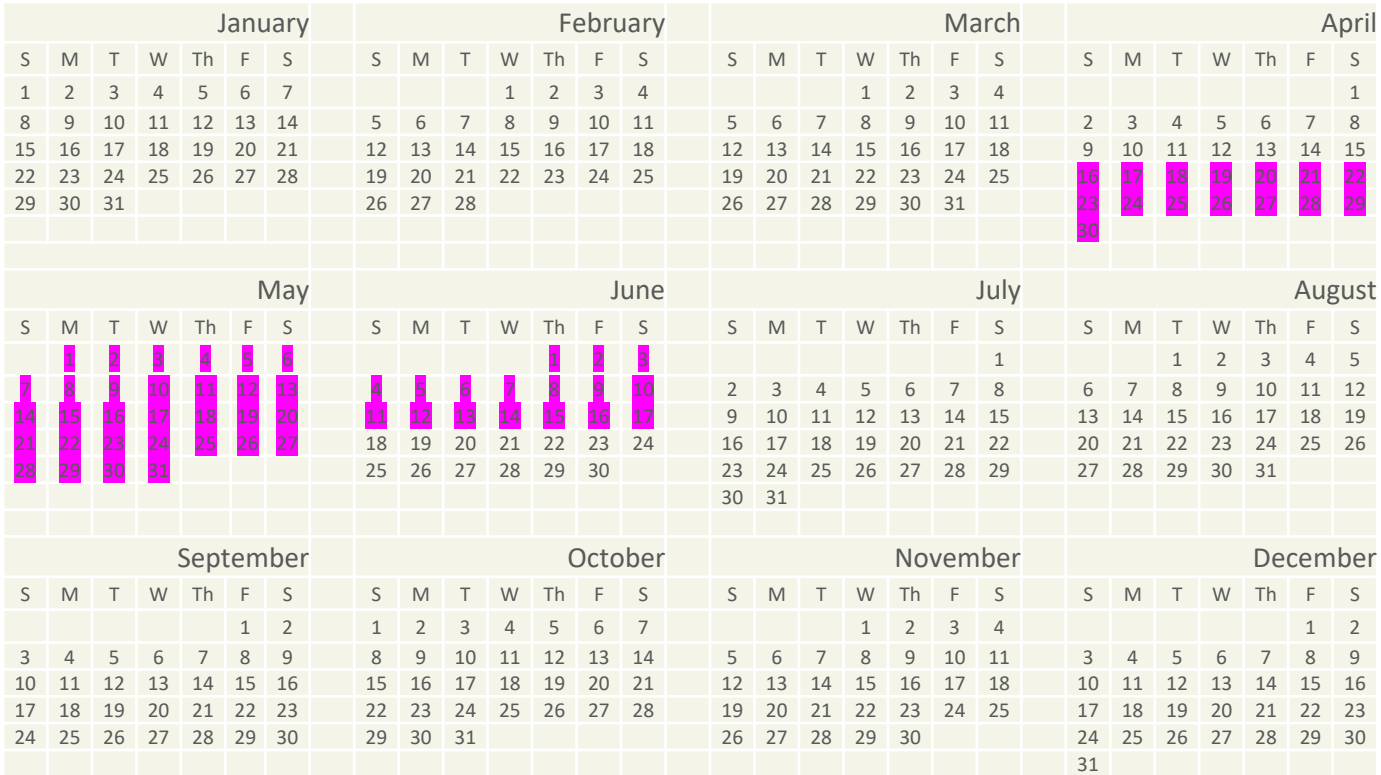
Reptiles – Snakes



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Reptiles – Snakes

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Fish and Fish Habitat

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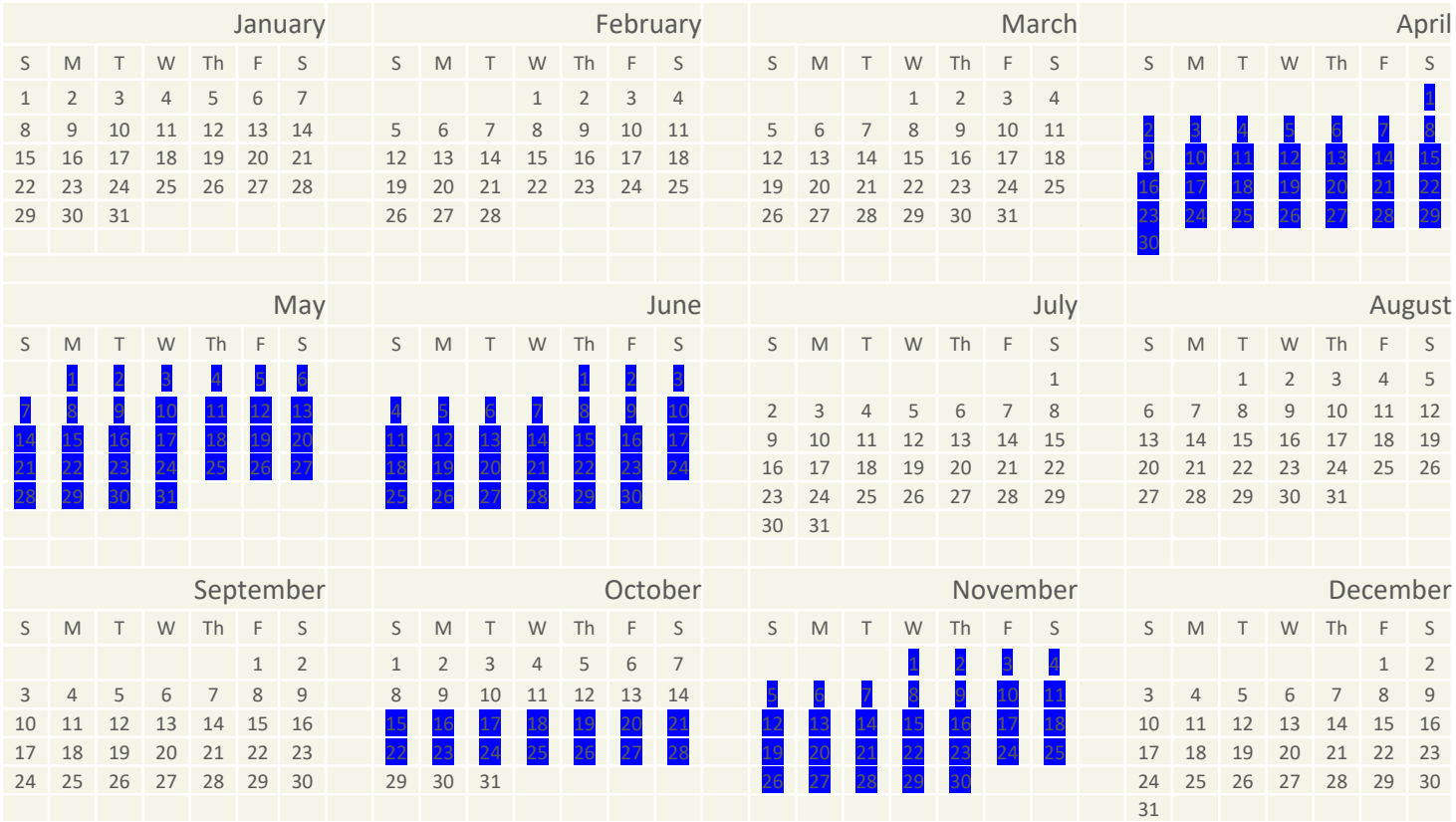
Fish and Fish Habitat



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Fish and Fish Habitat – Spawning Surveys

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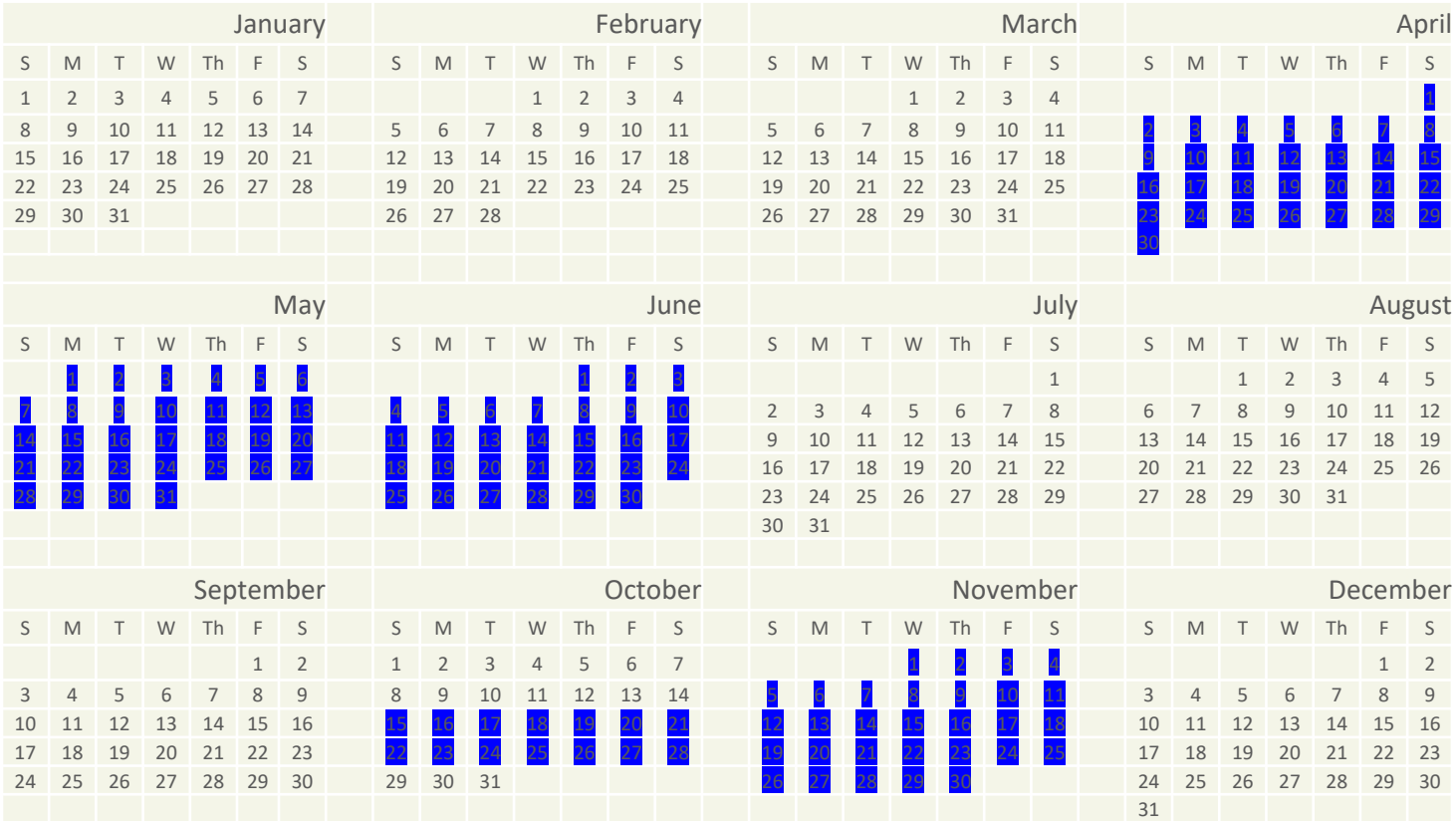
Fisheries



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Headwater Drainage Features

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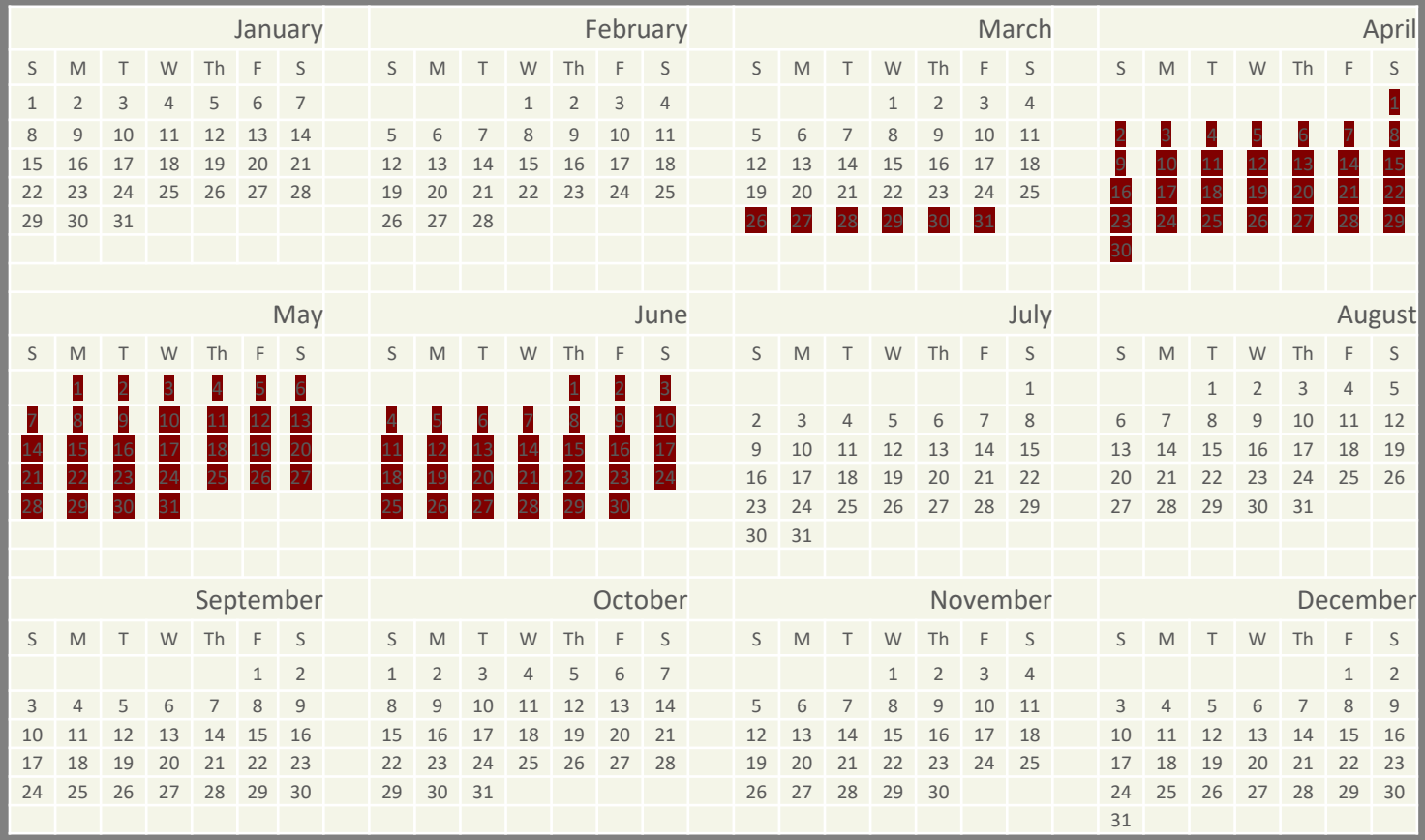
Headwater Drainage Features



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Small Mammal Surveys

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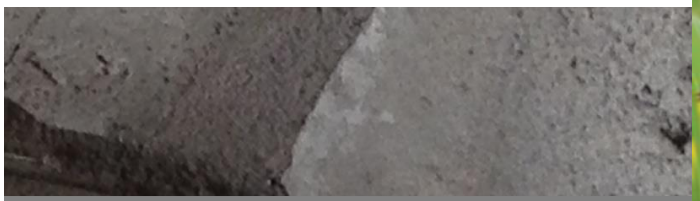
Small Mammal Surveys

Special Concern



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Bats

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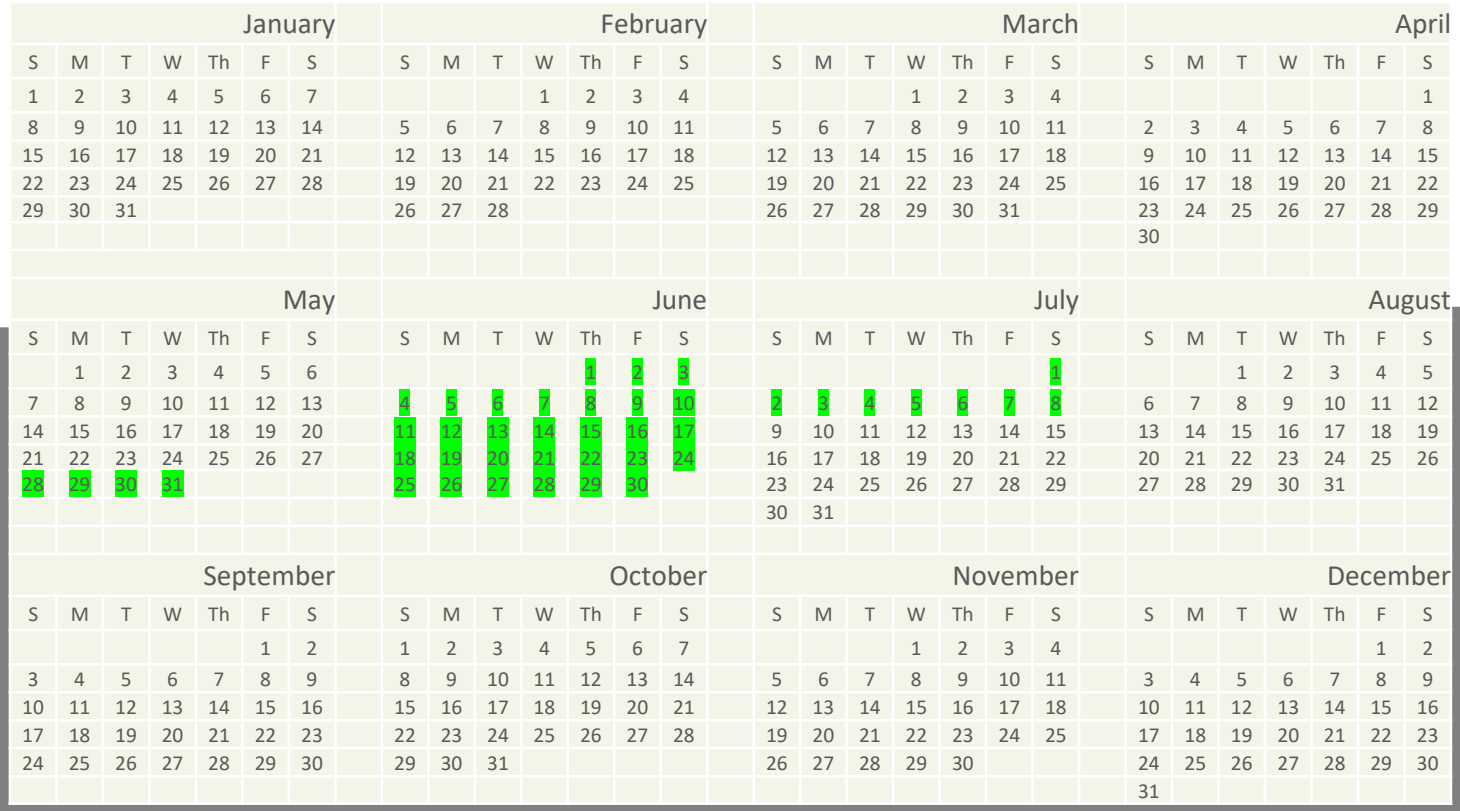
Breeding Birds



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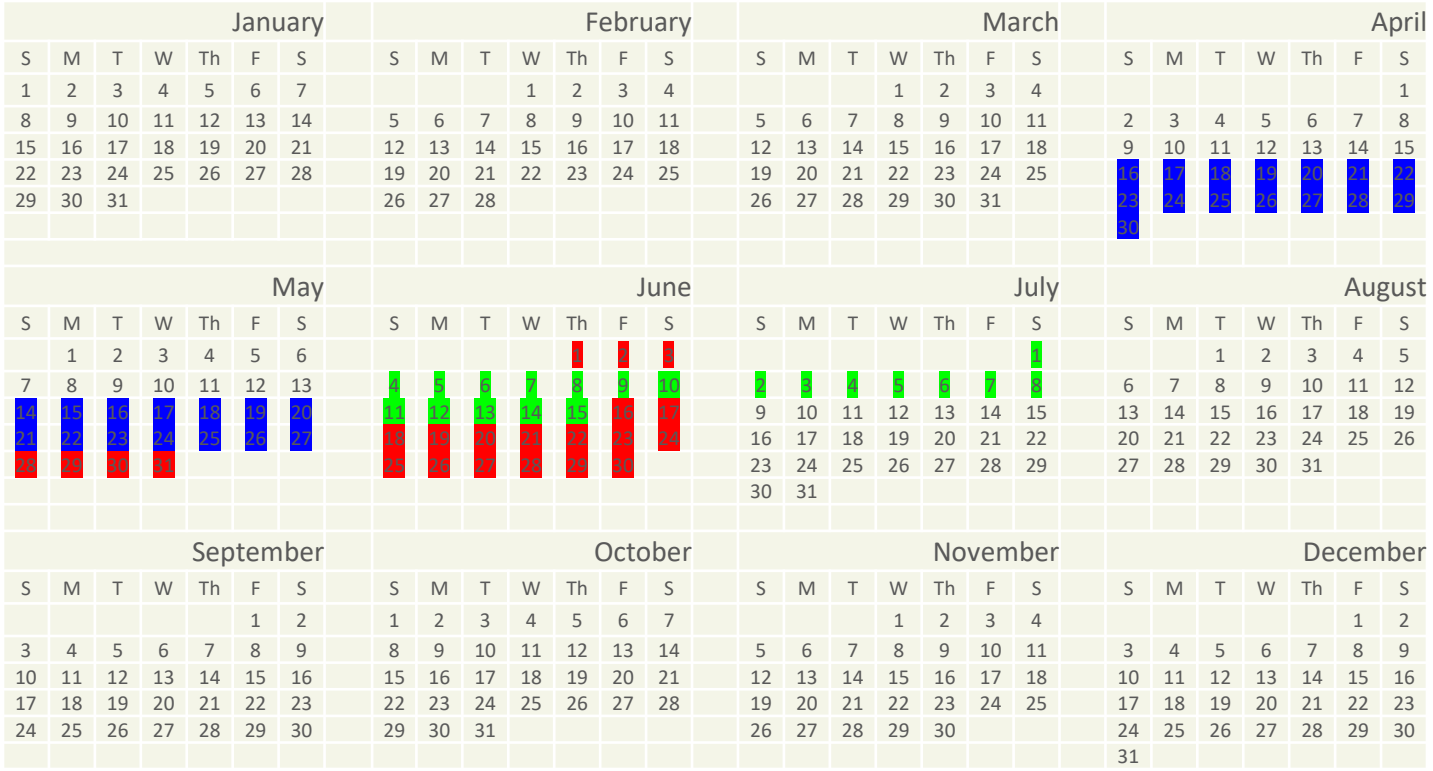
Breeding Birds + Amphibians



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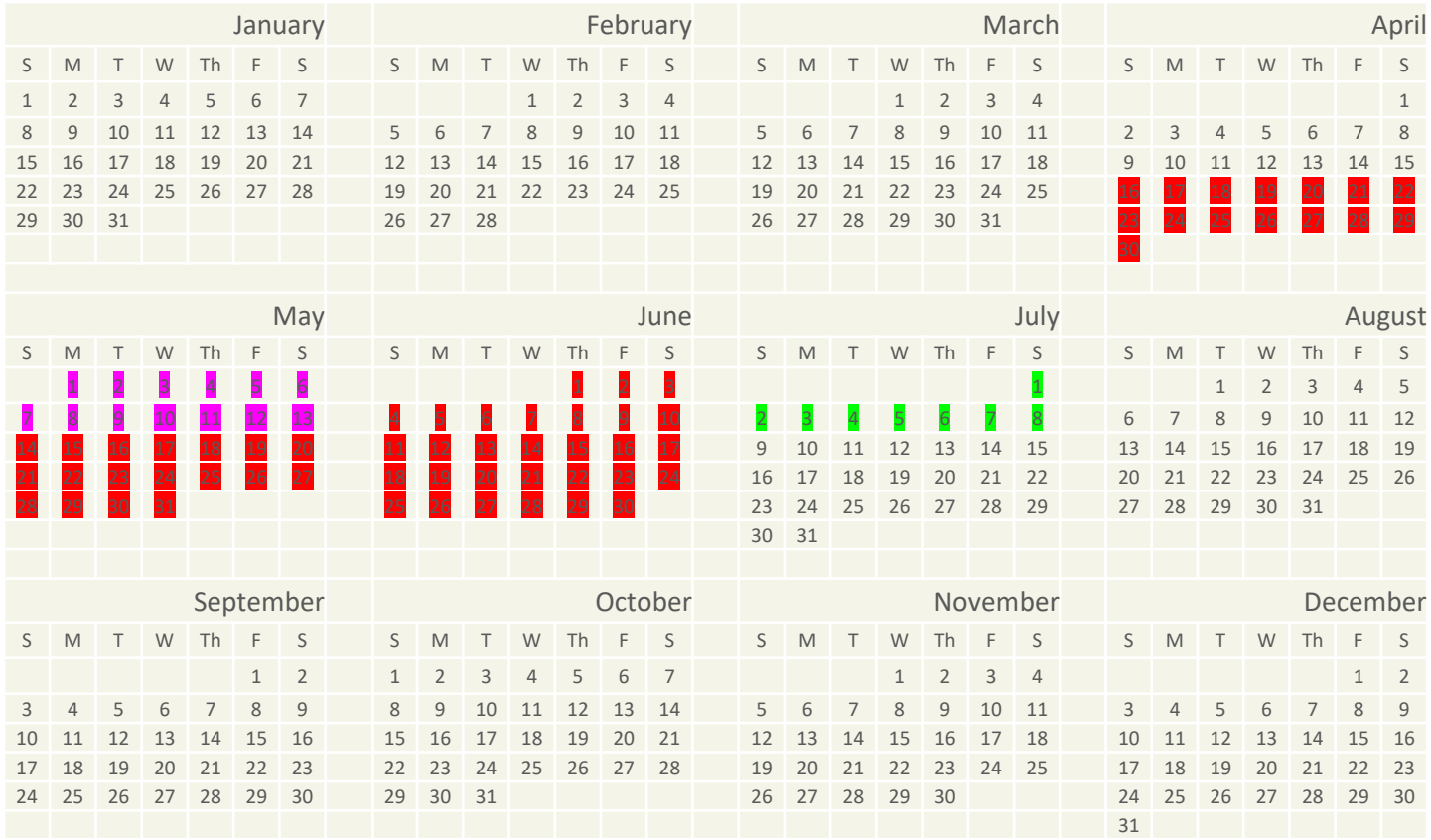
Breeding Birds + Amphibians + Reptiles



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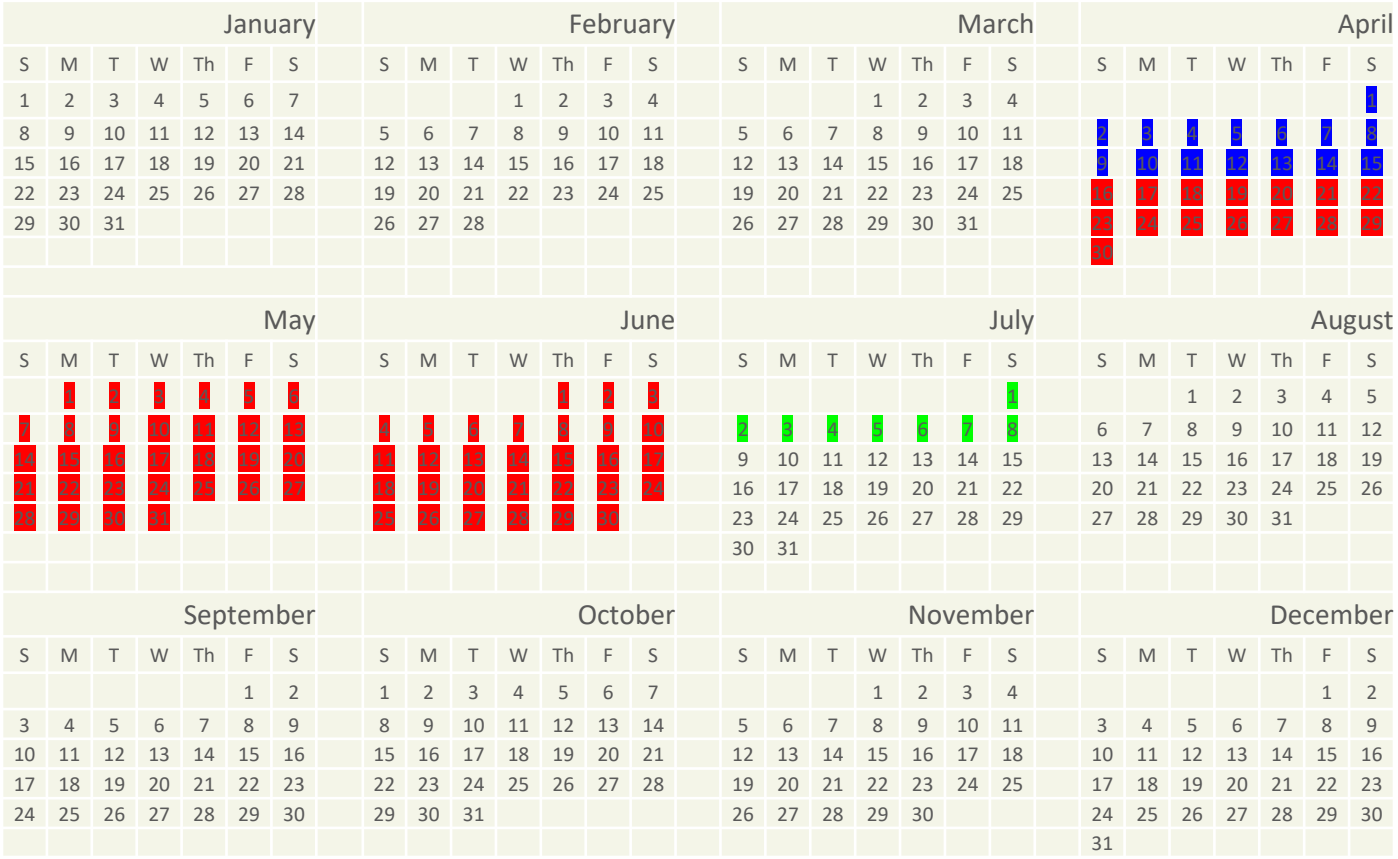
Breeding Birds + Amphibians + Reptiles + Fish



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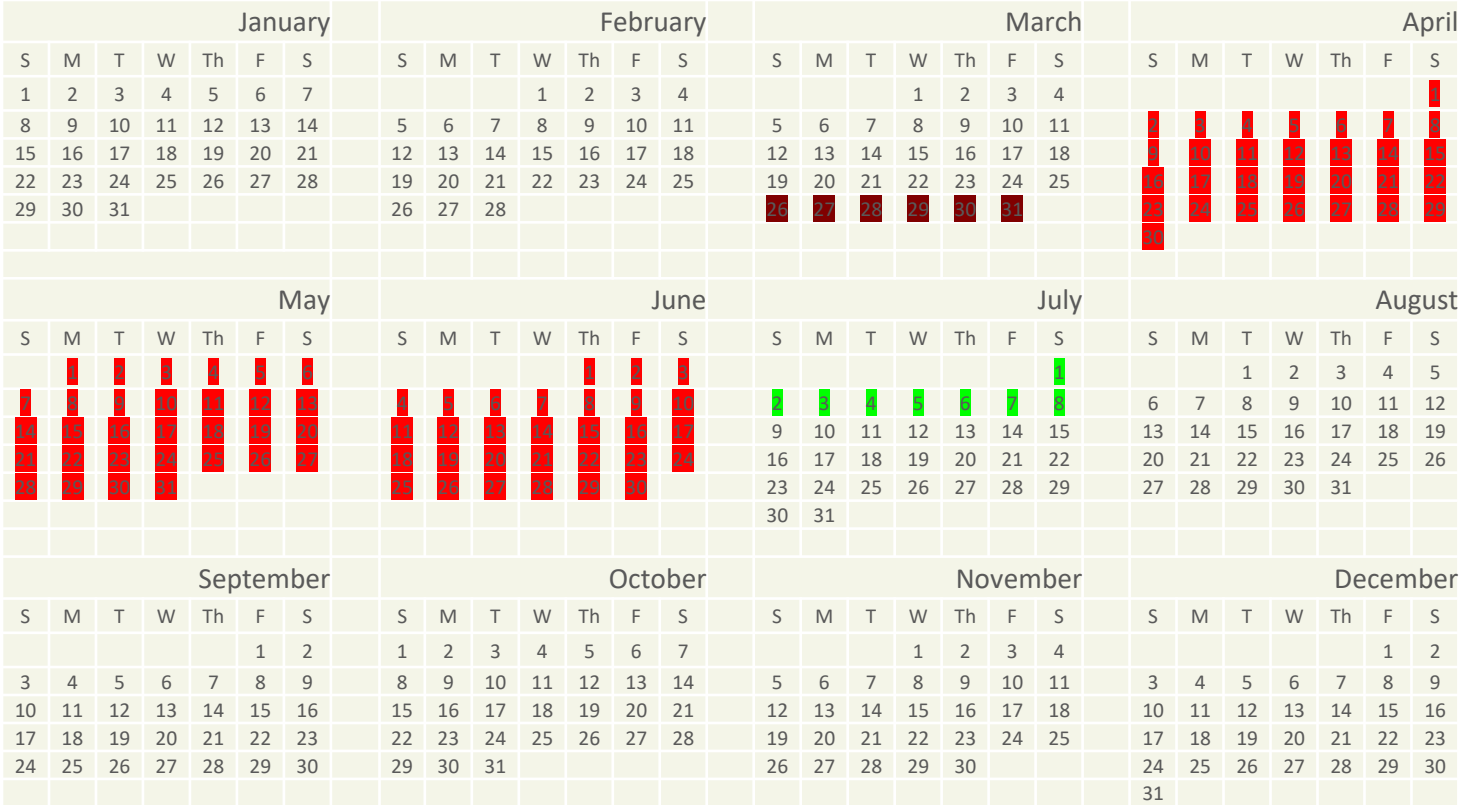
Breeding Birds + Amphibians + Reptiles + Fish + HDF



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How to Align Project Schedule with Data Needs and Collection Windows?

1. **Understand the primary natural features within your study area**
2. **Reflect on the potential to interfere or overlap with these features**
3. **Consider the likelihood of these features providing habitat for groups of wildlife or plant species, especially SAR**
4. **Overlay the primary collection windows presented today for each of the wildlife groups potentially in harms way, and**
5. **Create a schedule that sets key points of data needs to following the applicable data collection windows**