4.1.1 Why sample larvae?

How to sample (Schieler et al. 1994, Olien et al. 1997).

The reasons to sample amphibian larvae are many, but most emphasize either...
### 4.1. Sampling Effort

**Table 4.1:** Estimated amphibian sampling methods and resulting response variables

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grid</td>
<td>Sites sampled within a grid</td>
</tr>
<tr>
<td>Line transect</td>
<td>Sites sampled along a line transect</td>
</tr>
<tr>
<td>Plot</td>
<td>Sites sampled within a plot</td>
</tr>
</tbody>
</table>

### 4.2. Target Response

**Systematics:**

- **DNA barcoding:**
  - DNA barcoding is a powerful tool for identifying species and understanding biodiversity.
  - DNA barcoding can be performed on tissue samples or DNA extracted directly from environmental samples.

**Population Dynamics:**

- **Population turnover:**
  - The number of individuals in a population can fluctuate over time due to factors such as environmental changes, predation, and disease.
  - Monitoring population turnover is crucial for understanding species conservation and management strategies.

**Ecological Interactions:**

- **Interactions with other species:**
  - Amphibians often interact with other species, such as predators and resource competitors, which can affect their population dynamics.
  - Understanding these interactions is essential for developing effective conservation strategies.
4.2 Sampling Techniques

4.2.1 Description

4.2.1.1 Box/Pipe Sampler

The range of species and levels you intend to study.

If you are new to a species plan to cement your initial sampling.
4.2.2 Description

4.2.3 Currents

The same time-consuming experiments can be performed in a much shorter time using a variety of techniques such as microfluidics. These methods allow for the study of local, short-term processes that can only be observed using techniques that provide real-time imaging. This is particularly useful in situations where rapid changes in the system need to be monitored. Additionally, these techniques can be used to study the effects of specific environmental conditions on the behavior of the organisms being studied. Overall, these methods provide a powerful tool for understanding the complex interactions that occur in natural environments.
on the surrounding habitat cover...
4.2.6 Description

Larval sampling

4.2.5 Tagging

Ambush predation is a serious problem for many larval amphibians. To keep part of the larval period to allow the researcher to collect critical data, such as predation rates, larval amphibians can be exposed to larval predation. This can be achieved by exposing the larval amphibians to a high predation rate for a short period of time.
4.3 Other Techniques

...