Terrestrial Spider Response to Logjam Mediated Influences
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Background/Hypothesis
Spiders in riparian zones, or the areas adjacent to streams, are known to increase in population density with increased aquatic insect emergence (Kato et al. 2003).

We hypothesized that increased aquatic insect emergence found at a logjam will increase nearby spider density.

Methods
- Webs sought out around a logjam in Cabin Creek in Northern Minnesota in May & August 2011.
- Each web measured to a reference point.
- Each reference point given an estimate of nearby web-building structure (Web Space Index).

Results

May

August

Conclusions
- Web spiders cluster around the logjam in May, but not in August (Fig. 2).
- Web Space Index becomes a significant predictor of web count in August (Fig. 3).
- This suggests a temporal shift in limiting factor to spiders: prey is limiting in May, while space is limiting in August.
- Alternatively, the higher population observed in August may lead to some spiders being forced to choose sub-optimal habitat.

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Literature Cited