

Spider evolution

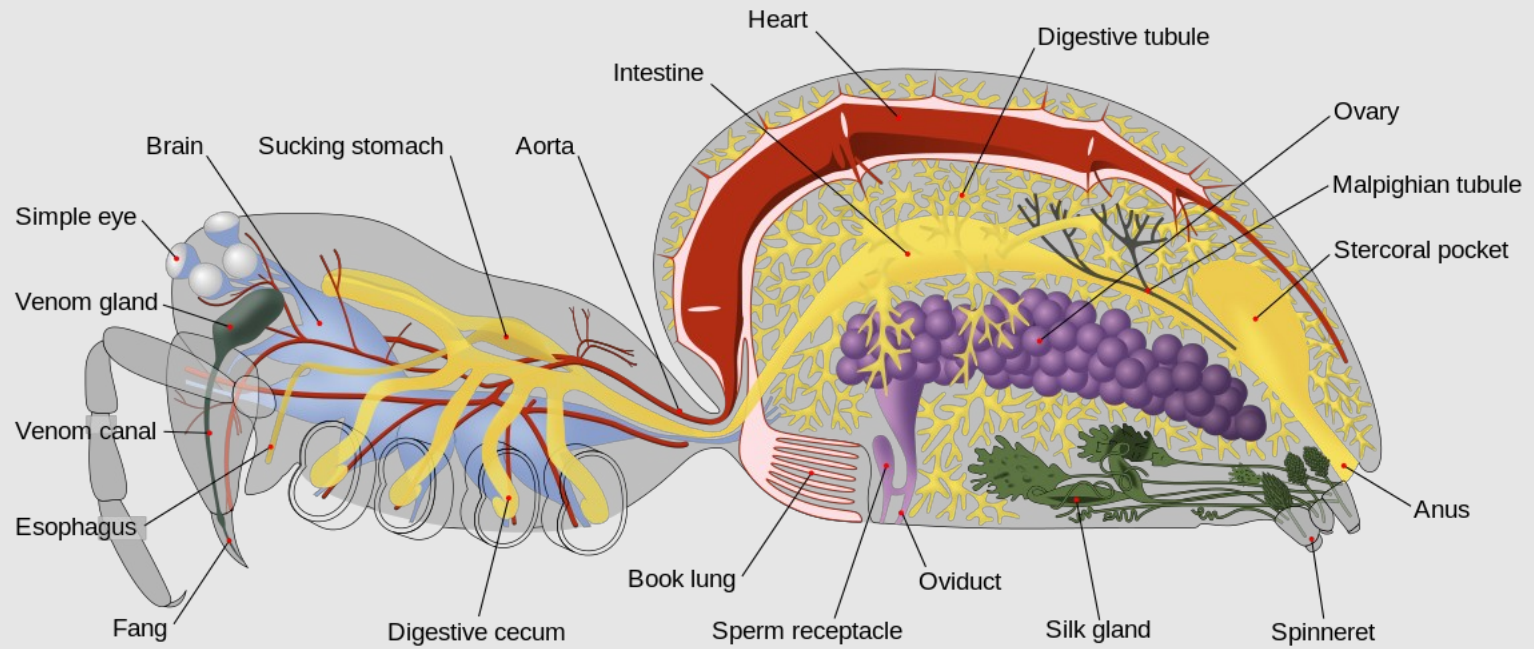
Brian O'Meara
EEB464 Fall 2018

Learning objectives

- Learn about spider diversity
- Learn how this diversity evolved, applying our knowledge of macroevolution



[Termininja Marshal Hedin \(](#)
[File:Aptostichus female.jpg](#)
) [Dr. David Midgley \(](#)
[File:Supunna sp.jpg\)](#)
[James Gathany \(](#)
[File:Black widow spider 985](#)
[4 lores.jpg](#)
) [Thomas Shahan \(](#)
[File:Phidippus putnami mal](#)
[e.jpg](#)
) [Viridiflavus \(](#)
[File:EresusSandaliatusHog](#)
[eVeluwe.JPG](#)
) [Mkullen \(](#)
[File:Gasteracantha cancrifo](#)
[rmis 2.jpg](#)
) [George Chernilevsky \(](#)
[File:Brachypelma smithi 20](#)
[09 G09.jpg](#)
) [JJ Harrison \(](#)
[File:Thomisidae sp.jpg\)](#)
[Luis Miguel Bugallo Sánche](#)
[z](#)
 (File:Segestria florentina.jpg
) [Marshal Hedin \(](#)
[File:Female Calisoga sp. \(M](#)
[arshall Hedin\).jpg](#)
) [Fir0002 \(](#)
[File:Victorian funnelweb sid](#)
[e.jpg](#)
) [Akio Tanikawa\(](#)
[File:Pandava.laminata.fema](#)
[le.-.tanikawa.jpg](#)
) [André Karwath \(](#)
[File:Metellina mendei \(aka\).](#)
[jpg](#)
) [Fritz Geller-Grimm \(](#)
[File:Linothele fg01.jpg\)](#)
[Marshal Hedin \(](#)
[File:Titiotus.sp.\(Marshal.He](#)
[din\).jpg](#)
) [OpenCage \(](#)
[File:Atypus karachi.jpg\)](#)



John Henry Comstock, converted by Ryan Wilson



Pholcidae 1



Pholcidae 2



Linyphiidae



Dysderidae



Dictynidae



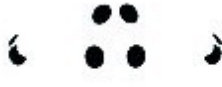
Cybaeidae



Ctenizidae



Clubionidae



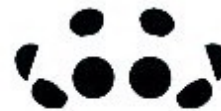
Araneidae



Anyphaenidae



Amaurobiidae



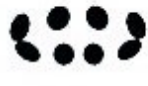
Agelenidae 2



Agelenidae 1



Thomisidae 1



Theridiidae 2



Gnaphosidae



Theridiidae 1



Tetragnathidae



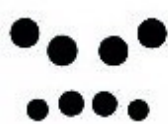
Sicariidae



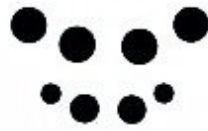
Scytodidae



Salticidae



Pisauridae 2



Pisauridae 1



Philodromidae



Oxyopidae



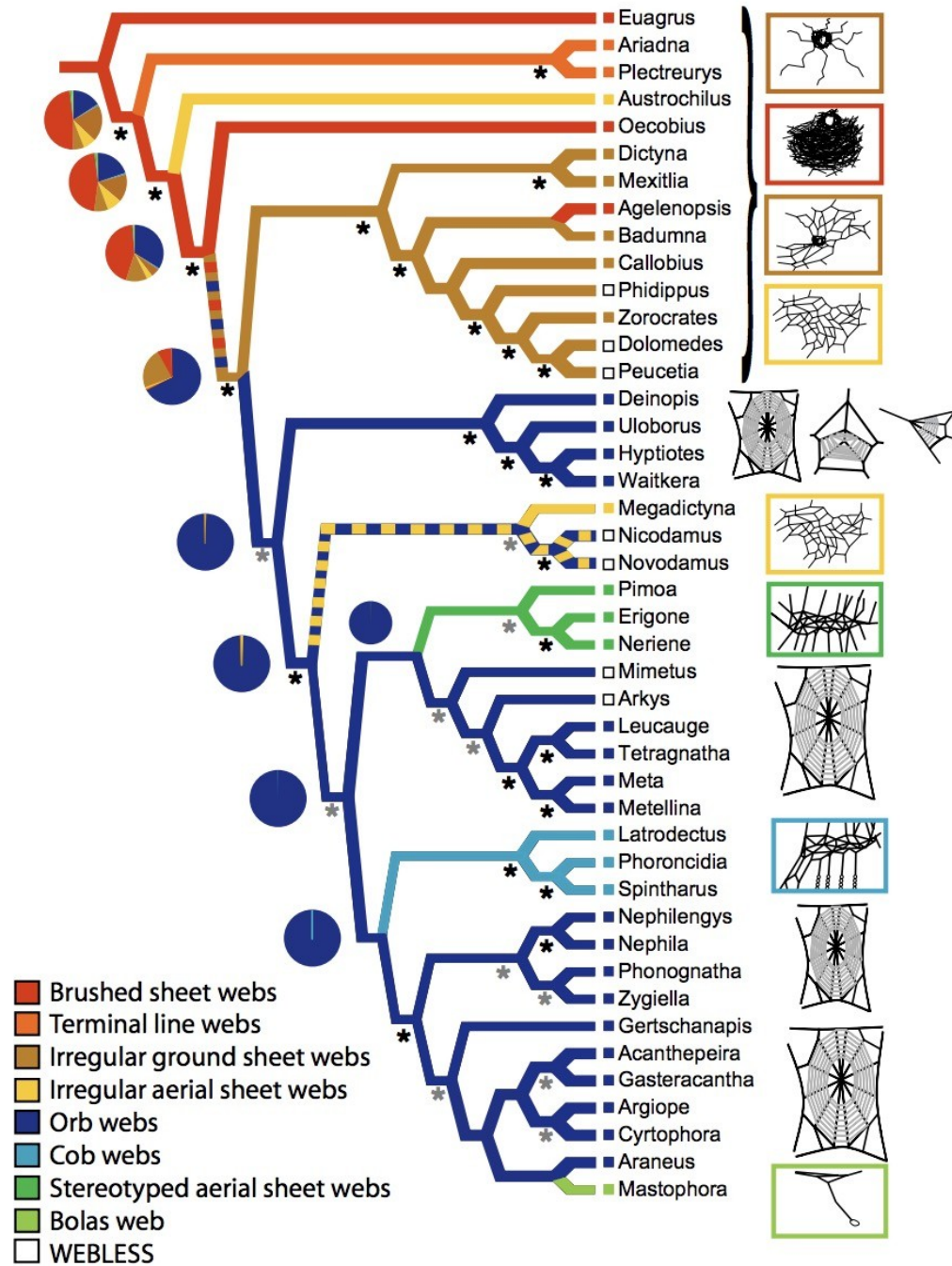
Oecobiidae



Miturgidae

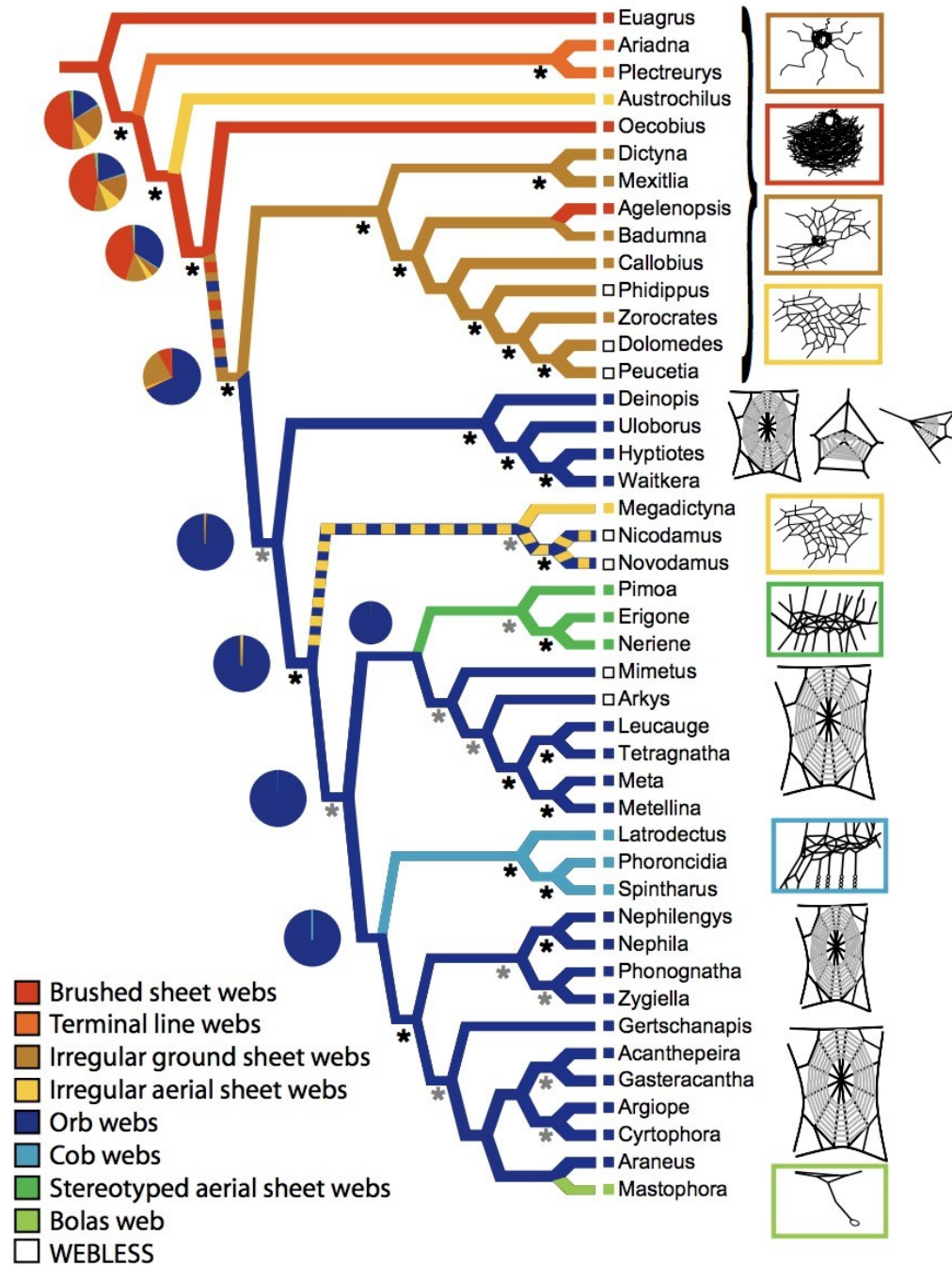


Lycosidae 2





BBC Earth, *The Hunt* <https://www.youtube.com/watch?v=nIRkwuAcUd4>. Orb web



BBC

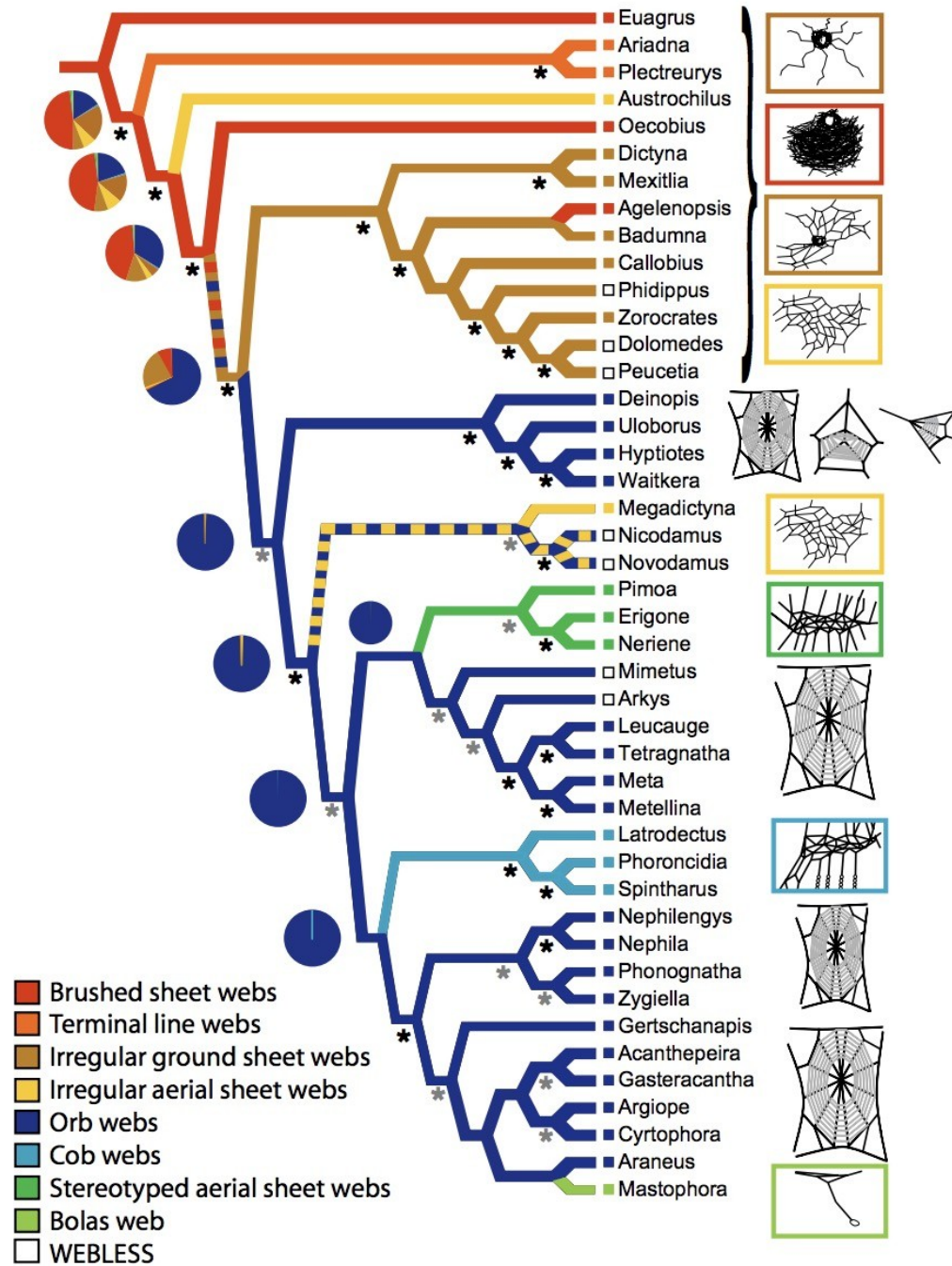


BBC Earth, *The Hunt* <https://www.youtube.com/watch?v=UDtlvZGmHYk>. Jumping spider

Do you agree with the narrator that this shows intelligence?

How could this have evolved?

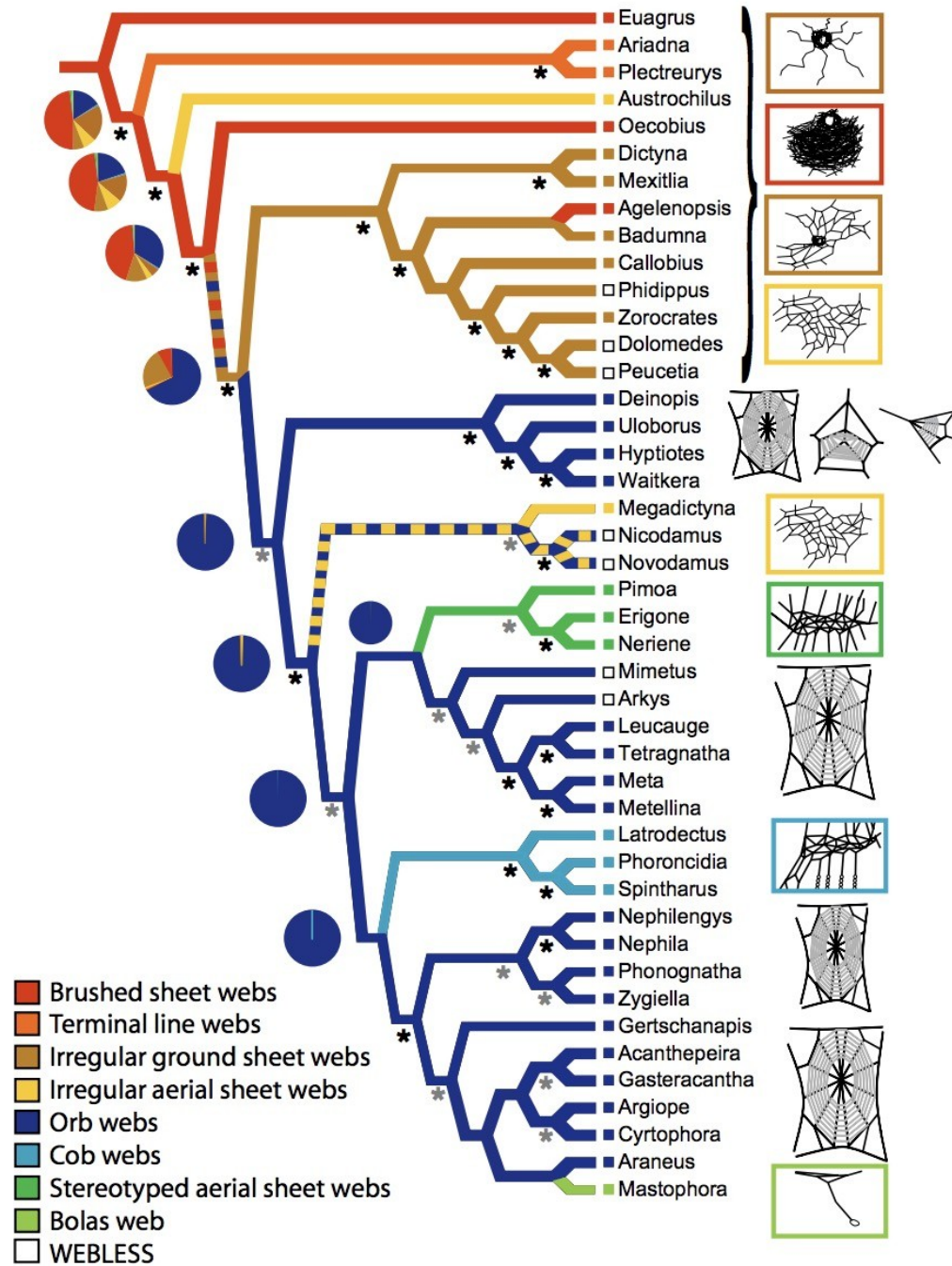
How could you test these ideas?





How could this foraging strategy have evolved?

How could you test these ideas?





Why might this courtship dance have evolved?

How could you test these ideas?