Wooing widows

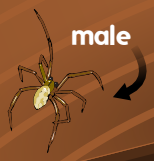
Choosing a mate is one of life's most important choices. Some species are very **particular**– and while waiting for a male with desirable characteristics can help ensure high-quality offspring, females who are too picky risk **not reproducing at all!**

By being so choosy, females are actually affecting the **evolution of males**: only a select few males send their DNA off into the next generation. But, females can only afford to be picky if there are **plenty** of males around.

Drs. Catherine Scott, Sean McCann, and Maydianne Andrade studied whether **social information affected choosiness** in female western black widow spiders.

The team set up their experiment in the widow's natural habitat. They kept some female black widows **isolated**, and others in **groups**.

WESTERN BLACK WIDOW SPIDER
Latrodectus hesperus



They predicted more males would visit grouped females, and because of this, **isolated females would be less choosy** to ensure that they reproduce.

İsolated females were more likely to reproduce **at least once**. Female black widows exercise choice by either mating with males, or killing and eating them. Grouped females were choosier, and more likely to **cannibalize** males!

Population density affects female choosiness in nature.

So it also changes the intensity of sexual selection on males!

Reference
Scott, C.E., McCann, S. & Andrade, M.C.B. Black widows as plastic wallflowers: female choosiness increases with indicators of high mate availability in a natural population. Sci Rep 10, 8981 (2020). https://doi.org/10.1038/s41598-020-65985-z