

>> My name is Justin Runyon and I'm an Entomologist
with the Rocky Mountain Research Station in Bozeman, Montana.
I'm interested in interactions between insects and plants.
And especially plant insect chemical ecology.
Which is just how chemistry mediates or guides plants and insects.
You know, us humans, we largely use visual cues to navigate the world.
But for insects and especially for plants, it's mostly chemical.
You know that's how they see the world.
And I'm applying plant insect chemical ecology into a number of different areas.
Take drought for instance, Laura Burkle, at Montana State University,
and I just finished a study looking at how drought effects plants and pollen acres.
And we found that drought reduced pollinator attraction to some plants,
but surprisingly we found that drought increased pollinator visitation to other plants.
So, to try and explain this, we went in and measured a bunch of different plant traits
from flower size to flower number.
Plant height.
And we found that drought effected all these traits the same way.
Drought reduced flower size, flower number,
but we found species specific effects on floral scent.
You may have heard about the decline in pollinators, pollinator populations,
and we know some of the reasons the pollinators have declined,
but we don't know all the reasons.
But it's regardless, it's imperative and there's a great need
to restore these plant pollinator sort of communities.
So, if we want to try to understand how plants and pollinators are going to be affected
by climate change and especially drought in this case,
looks like we're going to need to look at floral scent.

