

**[00:00]** RL: So when I was collecting these wild species I was taken aback at just the different kinds of environments they could survive in. The species I worked on as a grad student survived on these serpentine outcrops in California. So highly serpentine soils, these are heavy metal soils, and it was thriving where most other species couldn't survive. And I found sunflowers growing on super hostile environments like sand dunes where—so sand dunes, they aren't water-limited they are actually nutrient-limited and yet there were, the sunflowers growing on the sand dunes were pretty much the biggest thing there. They were kind of the keystone species on the sand dune providing resources for many other organisms that live on the sand dunes.

I also found them, you know, on, in sort of saline salt marshes and also inland in Texas and the one surprising thing about the ones that were growing in the southern coastal plain is that they actually were woody annuals, that means they're annual trees, which is a really bizarre thing. Since then we've been focusing more on how new species arise, but also collecting sunflowers from these many different places. And in the last decade or so we have become more interested in determining how the species are surviving in these places, and moving those genes into cultivated sunflowers.