

Do disturbances affect rare plants?

The case of *Lupinus aureonitens*

A beautiful and rare plant from the Pampas grasslands. Its future depends on how we manage disturbances like fire.

Lupinus aureonitens

is an endemic species of the Southern Sierras of Buenos Aires (Argentina) and is classified as **VULNERABLE** (IUCN).



WHAT IS A DISTURBANCE?

A sudden event that changes nature, such as fire, drought or strong winds.



WHY DOES IT MATTER?

For rare plants, disturbances can be a double-edged sword: too much or too little can put their survival at risk.



WHAT KEEPS THEM GOING?

A natural balance: some disturbance helps renew their habitat, but very intense or very frequent events can be harmful.

MEET OUR RARE PLANT



Perennial herb with silvery leaves and blue flowers.



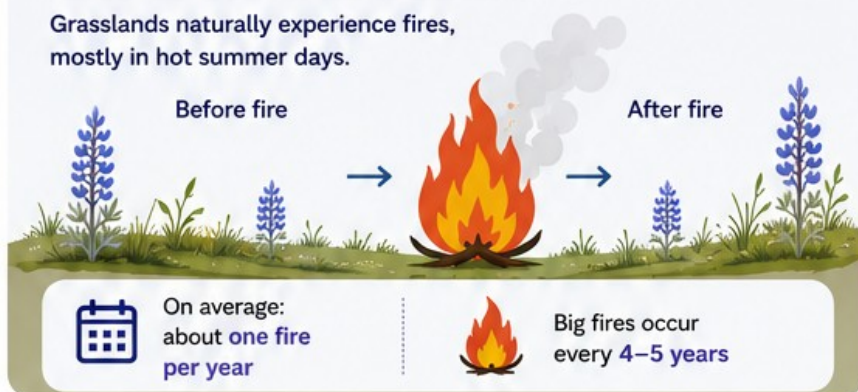
Grows in the southern sierras of Buenos Aires.



Few populations. Vulnerable species.

FIRE IS PART OF ITS HOME

Grasslands naturally experience fires, mostly in hot summer days.



WHAT WE OBSERVED



Plants in burned areas were smaller and had fewer flowers...



...but produced more fruits per plant.



Pollen quantity was similar, but germination was lower after fire.



This plant needs special soil fungi (mycorrhizae) to grow well.

WHY SOIL MATTERS



With native soil and its fungi: healthy plants, **more flowers and seeds.**

Without native soil and fungi: weaker plants, **fewer flowers and seeds.**

WHO VISITS ITS FLOWERS?

We found many insect visitors!



Bees



Butterflies



Beetles



Flies



These insects are essential for pollination and reproduction.



THE BIG PICTURE

Fire and other natural disturbances shape the life of this rare plant. Keeping a natural balance and protecting its habitat is key to its survival—and to the health of our grasslands.

Small plant. Big value. Let's protect our grasslands!



Protect natural areas



Appropriate fire management



Learn, value and care

SCIENCE HELPS US UNDERSTAND NATURE TO BETTER PROTECT IT.

