

GREEN ALGA

LICHEN

THE  
**CRYPTOBIOTIC**  
SOIL  
OF  
GRAND STAIRCASE-ESCALANTE

TARDIGRADES

CYANOBACTERIA

NITROGEN FIXING  
BACTERIA



## WHAT'S CRYPTOBOTIC SOIL?

A crust-like dirt mound that you might spot on your next hike in Grand Staircase-Escalante.

## WHY SHOULD I CARE?

These dirt mounds literally hold the ground together so you can walk on it. They protect against things like erosion, flooding, and recreation. Without them, places like Grand Staircase-Escalante would turn into Death-Valley like environments.

## HOW DOES IT FORM?

Over thousands of years, millions of living microorganisms like bacteria, algae, lichens, mosses, and fungi bind together to create a shield for the desert and a nourishing soil for plant life.

## WHERE IS IT FOUND?

It covers only 12% of Earth's surface and we are lucky enough to find it in arid regions like the Colorado Plateaus, the Sonoran Desert, the Great Basin, and Moab.

## WHAT CAN I DO?

A single footprint can disturb cryptobiotic soil, taking thousands of years to recover—if it ever does. Here's how you can help protect it:

- Stay on designated pathways and follow official sign directions.
- Stick to rock surfaces when possible and avoid disturbing any crusts you see.
- Keep pets leashed to prevent them from damaging the soil, and always pack out pet waste.
- Do not overland in undesignated areas.
- Educate others about cryptobiotic soil and encourage them to protect it too.

Learn more

